

National Watershed Program Manual



Acknowledgments

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National Watershed Program Manual

Preface

A. The National Watershed Program Manual (NWPM) is revised to reflect changes in legislation since 1992. It also takes into account changes in the organizational structure of the Natural Resources Conservation Service (NRCS) since that time.

B. As policy, the NWPM is not a guidance document. Guidance and procedures for delivering technical and financial assistance are provided in a companion document, the National Watershed Program Handbook (NWPH). References to related information in the NWPH, as well as other related guidance and policy documents, are provided throughout the NWPM.

C. This manual sets forth the policy for all watershed plans developed under the Watershed Program. No project will be funded for planning or implementation under the Public Law 83-566 or Public Law 78-534 authority unless it meets all requirements set forth in this manual.

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Part 500 – Watershed Program Management

Subpart A – Program Criteria

500.0 Authority, Purpose, and Scope

A. Authority

The National Watershed Program Manual (NWPM) provides policy for the delivery of technical and financial assistance authorized by either of the following:

- (1) Public Law 83-566, the Watershed Protection and Flood Prevention Act of 1954, as amended
- (2) Public Law 78-534, the Flood Control Act of 1944

B. Purpose

The purpose of this manual is to set forth the policy for delivering the Watershed Program authorized by the Watershed Protection and Flood Prevention Act (Public Law 83-566, as amended; see exhibit in Title 390, National Watershed Program Manual (NWPM), Part 506, Subpart A, Section 506.0, of this manual) and the Flood Control Act of 1944 (Public Law 78-534, as amended; see exhibit in 390-NWPM, Part 506, Subpart A, Section 506.1, of this manual). General policies for planning and carrying out watershed projects under Public Law 83-566 and flood prevention projects under Public Law 78-534 are set forth in 7 CFR Part 622. Programmatic requirements for activities authorized by the two laws are identical unless noted otherwise. Hereafter, activities carried out under the authority of these two laws are referred to as “the Watershed Program.”

C. Scope

- (1) This manual sets forth the policy for all watershed plans developed under the Watershed Program. No project will be funded for planning or implementation under the Public Law 83-566 or Public Law 78-534 authority unless it meets all requirements set fourth in this manual.
- (2) The Watershed Program plans and implements watershed project actions. A project action is a formally planned undertaking that is carried out within a specified area by sponsors for the benefit of the general public (7 CFR Section 650.4). Project sponsors are local organizations (as defined in Public Law 83-566 Section 2), that have the legal authority and resources to install, operate, and maintain works of improvement.
- (3) Watershed Program planning and implementation must comply with applicable federal, State and local laws, regulations and Executive orders. A list of many of the related Federal laws, regulations and Executive orders is found in 390-NWPM, Part 500, Subpart D, Section 500.32 (of this manual).

500.1 Watershed Program Overview

A. Public Law 83-566 Watersheds

- (1) Public Law 83-566, the Watershed Protection and Flood Prevention Act, as amended, authorizes the Secretary of Agriculture to “cooperate with States and local agencies in planning and carrying out works of improvement for soil conservation and for other

purposes.” It provides for technical, financial, and credit assistance by the U.S. Department of Agriculture (USDA) to local organizations representing the people living in watersheds. It also provides for needed additional treatment and protection of federally owned lands within such watersheds.

(2) The Watershed Program requires the development of physically, environmentally, socially, and economically sound Watershed Project Plans with actions scheduled for implementation over a specified period of years. Watershed Project Plans contain project actions, which are formally planned undertakings carried out within a specified geographic area by sponsors for the benefit of the general public. Project sponsors must have the legal authority and resources to carry out, operate, and maintain works of improvement (Public Law 83-566 Section 2).

B. Public Law 78-534 Watersheds

Public Law 78-534, as amended, gives USDA responsibility in 11 selected watersheds for watershed planning and for installing measures to reduce runoff and erosion. NRCS and the Forest Service (FS) carry out this responsibility with assistance from other agencies. The following 11 watersheds were individually authorized in Public Law 78-534 Section 13:

- (1) Buffalo Creek (New York)
- (2) Coosa River (Georgia and Tennessee)
- (3) Little Sioux River (Iowa and Minnesota)
- (4) Little Tallahatchie River (Mississippi)
- (5) Los Angeles River (California)
- (6) Middle Colorado River (Texas)
- (7) Potomac River (Virginia, West Virginia, Maryland, and Pennsylvania)
- (8) Santa Ynez River (California)
- (9) Trinity River (Texas)
- (10) Washita River (Oklahoma and Texas)
- (11) Yazoo River (Mississippi)

C. Notification for Special Designated Areas

(1) Special commissions have been established with statutory authority to coordinate resource planning and development activities specific to the Water Resources Programs in several special designated areas. NRCS has formal and informal agreements with officials in these areas to coordinate and keep them informed of progress during planning and operations. The special designated areas are all of the following:

- (a) Appalachia
- (b) Delaware River Basin
- (c) Susquehanna River Basin
- (d) Tennessee Valley Authority Area

(2) See 390-NWPM, Part 500, Subpart E, Section 502.41 through 502.44 (of this manual) for more information on coordination regarding these special designated areas.

500.2 Relationship to Other Programs

Watershed Program funds may be used in a complementary manner with other USDA natural resource conservation programs to reach project objectives, except as noted in cost-share policy provided in 390-NWPM, Part 500, Subpart E, Section 500.41 (of this manual). Watershed Program assistance may not be used when the project can be installed by individual landowners or the collective action of multiple landowners under alternative financial assistance (7 CFR 622.11 (a)(6)).

500.3 Eligible Purposes

A. General Purposes

- (1) Section 1 of Public Law 83-566 sets forth three general purposes:
 - (a) Preventing damage from erosion, floodwater, and sediment
 - (b) Furthering the conservation, development, utilization, and disposal of water
 - (c) Furthering the conservation and proper utilization of land
- (2) Other resources not specifically mentioned in Public Law 83-566 may also be considered as appropriate, including air, cultural and historic resources, aesthetic resources, and others.
- (3) To achieve these purposes, Section 3 of Public Law 83-566 authorizes NRCS to provide technical assistance to sponsoring local organizations (SLOs) as may be necessary to prepare and implement Watershed Project Plans. NRCS technical assistance includes the following:
 - (a) Conduct investigations and surveys as necessary to prepare plans for works of improvement.
 - (b) Prepare plans and estimates required for adequate planning and engineering evaluation.
 - (c) Make allocations of costs to the various purposes to show the basis of such allocations and to determine whether benefits exceed costs.
 - (d) Cooperate and enter into agreements with and to furnish financial and other assistance to one or more SLO.
 - (e) Obtain the cooperation and assistance of other Federal agencies in carrying out the purposes of this section.
 - (f) Enter into agreements with landowners and operators, based on conservation plans that are developed in cooperation with and approved by the local soil and water conservation district, for the installation of soil and water conservation practices and measures needed to conserve and develop the soil, water, woodland, wildlife, energy, recreation and scenic resources, and water quality.

B. Authorized Project Purposes

Sections 3 and 4 of Public Law 83-566 provide for Federal assistance for the following authorized project purposes.

(1) Flood Prevention (Flood Damage Reduction)

Flood prevention or flood damage reduction measures are installed to prevent or reduce damages caused by floodwater. Flood damage reduction is further defined as the control and disposal of surface water caused by abnormally high direct precipitation, stream overflow, or floods aggravated or caused by wind or tidal effects. Flood damage reduction and mitigation measures reduce or prevent floodwater damages by reducing runoff, erosion, and sediment; modifying the susceptibility of improvements in the floodplain to damage; removing damageable property from the floodplain; or reducing the frequency, depth, or velocity of flooding. Measures may also include actions that prevent encroachment into the floodplain.

(2) Watershed Protection

(a) Watershed protection consists of onsite treatment of watershed natural resources concerns for the primary purpose of reducing offsite floodwater, erosion, sediment, and agriculture-related pollutants. Watershed protection plans may include ecosystem restoration type activities. Any practice or combination of practices listed in Title 450, National Handbook of Conservation Practices (NHCP), may be considered for inclusion in the systems of practices included in a watershed protection project plan. Project measures for watershed protection include land treatment practices installed by land users to conserve and develop any of the following:

- Soil
- Water quality and quantity
- Woodland
- Fish and wildlife habitats
- Energy
- Recreation and scenic resources

(b) Public Law 83-566 requires that the SLO must “obtain agreements to carry out recommended soil conservation measures and proper farm (conservation) plans from owners of not less than 50 percent of the lands situated in the drainage area above each retention reservoir to be installed with Federal assistance.” USDA policy requires installation of land treatment practices necessary to ensure that at least 50 percent of the land upstream from any retention reservoir is adequately protected before beginning construction of the retention reservoir.

(3) Public Recreation

Public recreation developments may be included in a watershed project plan when the SLO agrees to operate and maintain a reservoir or other area for public recreation. Project measures must include only minimum basic facilities needed for public health and safety and access to, and use of the area. Minimum basic facilities may include picnic areas, sanitary facilities, fishing piers, shelters, cooking grills, parking areas, swimming beaches, access roads, water, and trails. Also included are practices to provide needed access, water, and power.

(4) Public Fish and Wildlife

Fish and wildlife development areas may be included in a Watershed Project Plan when the SLO agrees to operate and maintain a reservoir or other area for public fish and wildlife access. Measures installed for public use of areas developed to improve the habitat or the environment for the breeding, growth, and development of fish and wildlife may be included in a Watershed Project Plan.

(5) Agricultural Water Management

Agricultural water management includes drainage, ground water recharge, irrigation, water conservation, water quality improvement, and agricultural (including rural communities) water supply. Measures planned for these purposes are installed on non-Federal land by the SLO to benefit groups of landowners and communities. Measures on Federal land will be installed and maintained in accordance with mutually satisfactory arrangements among the SLO, the land administering agency, and NRCS.

(6) Municipal and Industrial Water Supply

Municipal and industrial (M&I) water supply includes measures necessary to provide storage capacity in reservoirs to increase the availability of water for present and future municipal and industrial use. Needed outlet works and pipelines to convey water from the reservoir to the existing or proposed treatment facilities or water system are also considered project measures. The planning, design and installation of municipal and industrial water wells, water treatment plants, distribution systems, and electric distribution facilities fall outside the scope of the Watershed Program.

(7) Water Quality Management

Water quality management measures provide water storage capacity in reservoirs for regulation of stream flow to improve water quality in streams.

(8) Watershed Structure Rehabilitation

Watershed structure rehabilitation is covered in Public Law 83-566 Section 14, which authorizes financial assistance to local organizations to cover a portion of the costs of rehabilitating dams originally constructed as part of a project carried out under any of the following four authorities—Public Law 83-566, Public Law 78-534, the pilot watershed program authorized under the Department of Agriculture Appropriation Act of 1954, or the Resource Conservation and Development Program authorized by the Agriculture and Food Act of 1981.

500.4 Project Scope

Section 2 of Public Law 83-566 defines the maximum watershed and structure size for works of improvement.

A. Maximum Watershed Size

The maximum watershed or subwatershed area cannot exceed 250,000 acres. This limitation does not apply to Public Law 78-534 subwatershed plans.

B. Maximum Structure Size

No structure providing more than 12,500 acre-feet of floodwater detention capacity or more than 25,000 acre-feet of total capacity may be included in the plan. Total capacity is defined as the total volume of space available for water and sediment upstream of a dam below the elevation at which discharge begins in the primary auxiliary spillway. This limitation does not apply to Public Law 78-534 subwatershed plans.

C. Economic Analysis

(1) Water resource plans will include allocations of installation costs to the various purposes and will show the basis of such allocations and whether National Economic Development (NED) benefits exceed NED costs. Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies, 1983 (P&G) procedures will

be used to identify alternative project NED benefits and NED costs, using viable alternative solutions consistent with local, regional, and national objectives. All works of improvement must maximize the net NED benefits, consistent with protecting the nation's environment, unless an exception is granted by the Chief of NRCS.

(2) Benefits and costs may be expressed in monetary and nonmonetary terms (P&G Section 1.7.1).

(3) Each project must contain benefits directly related to agriculture, including rural communities. Agriculture and rural communities must account for at least 20 percent of the total benefits of the project (Public Law 83-566 Section 2(3)). This requirement does not apply to Public Law 78-534 subwatershed plans.

(4) Non-water-resource plans and land treatment components of water resource plans are to be formulated to address public (offsite) water and related land resource problems. The recommended plan is to be the least costly, environmentally acceptable method of achieving the agreed-on level of resource protection. All costs, including operation, maintenance, and replacement, expected to be incurred over the period of analysis are to be included. Economic analysis of non-water-resource plans and land treatment components of water resource plans does not require the development, identification, or selection of the NED plan.

D. Recreational Development Limitations

(1) The number of recreation developments within a watershed must be limited by the size of the watershed: one development in a watershed project of less than 75,000 acres, two developments in a project of between 75,000 and 150,000 acres, or three developments (the maximum number allowed) in a project of more than 150,000 acres (Public Law 83-566 Section 4(1)). Need must be demonstrated, taking into account the anticipated day use of the projected recreational development and considering the availability within the region of existing water-based outdoor recreational developments.

(2) Private development within land rights acquired with Federal cost-share funds for the purpose of public fish and wildlife or public recreation is prohibited. The exception to this is for facilities that are constructed or operated by private concessionaires on a controlled permit basis to serve the planned use of the improvement or development approved by the SLO and NRCS.

E. Water Quality Management Reservoir Storage Limitations

Works of improvement for water quality management that consist of water storage capacity in reservoirs for regulation of stream flow must not be provided as a substitute for adequate treatment or other methods of controlling waste at the source (Public Law 83-566 Section 4(2)). Works of improvement for water quality management must be consistent with State water quality standards developed in accordance with Public Law 92-500 Sections 208 and 319, as amended.

Part 500 – Watershed Program Management

Subpart B – Responsible Parties

500.10 NRCS Responsibilities

A. NRCS State Responsibilities

The State Conservationist (STC) is responsible for the overall management of the Watershed Program in his or her State and is to provide for the coordination, organization, and management of program activities to ensure that all phases of the program are carried out effectively and efficiently.

(1) Adherence to State and Federal Requirements

The STC of the State in which the watershed or major portion thereof is located will provide overall guidance and ensure that the watershed project plan adheres to all statutory, regulatory and policy requirements of the State.

(a) Plans on Federal Lands—Project measures planned for installation on Federal lands must conform to the standards and specifications of NRCS, as well as those of land-administering agencies involved. Where differences in standards exist, conform to the highest standard.

(b) Fish and Wildlife Service Notification—The STC must notify the U.S. Fish and Wildlife Service (USFWS) in order that it may provide recommendations for fish and wildlife resources, in accordance with the provisions of Public Law 83-566 Section 12.

(2) Watershed Program Information Assistance

NRCS will provide information to interested parties on the potential for and type of assistance available through the Watershed Program. NRCS will also provide guidance in making preliminary investigations to determine if assistance is warranted and help in preparing the necessary applications.

(3) Preparation of the Watershed Project Plan

NRCS will assist the SLO in preparing a Watershed Project Plan environmental assessment (Plan-EA) or environmental impact statement (Plan-EIS) with the cooperation and assistance of State, local, and other Federal agencies. The environmental document (Plan-EA or Plan-EIS) evaluates and assesses all reasonable alternatives and their impacts. The Watershed Project Plan and the environmental document will be combined into a single document, called the “Watershed Project Plan-EA” or “Watershed Project Plan-EIS.” When the entirety of the proposed actions is covered by one or more categorical exclusions (CE), the plan will include documentation of the applicability of the CE and the environmental evaluation in the “Watershed Project Plan-EE.” NRCS is responsible for the content and quality of the Plan-EIS, Plan-EA, or Plan-EE for the purposes of National Environmental Policy Act (NEPA) compliance. NRCS and the SLO will each bear responsibility for funding their own costs incurred for watershed project planning and public participation.

(4) Implementation Assistance

NRCS will provide technical assistance, financial assistance, or both to install measures for projects that include approved Watershed Program implementation assistance.

(5) Real Property Rights Work Maps

Real property rights work maps will be provided by NRCS to the SLO. Further land rights responsibilities are provided in this manual in Title 390, National Watershed Program Manual (NWPM), Part 504, Subpart A, Section 504.3.

(6) Operation and Maintenance Assistance

NRCS will provide technical assistance to the SLO in the operation and maintenance (O&M) of projects and replacement of installed measures as defined in the O&M agreement.

(7) Soil and Water Conservation District or Natural Resource District Involvement

NRCS will encourage the SLO to invite each Soil and Water Conservation District (SWCD) and / or Natural Resource District (NRD) in the project area to participate in watershed project activities as an official project sponsor.

B. NRCS National Headquarters Responsibilities

(1) The Deputy Chief for Programs is responsible for coordinating the development of national policy, standards, and procedures for project planning, installation, operation and maintenance, and allocation of program funds. The Conservation Planning and Technical Assistance Division (CPTAD) director provides staff leadership to support this and confers with the other divisions, as well as with appropriate Federal agencies and congressional committees to deliver the program.

(2) The Watershed Surveys and Planning Program national program manager will review all Watershed Program plans for programmatic compliance. This programmatic review is conducted after the National Water Management Center review and before the final plan is sent to the Chief.

(3) The Watershed Operations Program national program manager will review all Watershed Project Plan modifications, including revisions and supplements for programmatic compliance.

(4) The Watershed Rehabilitation Program national program manager will review all Watershed Rehabilitation Plans for programmatic compliance.

(5) By exchange of correspondence, the Chief approves Watershed Project Plans for funding authorization, subject to appropriations, after all reviews and comments are addressed.

500.11 Sponsor Responsibilities

Watershed projects are sponsored by one or more local organizations. The STC must require that at least one SLO of each project provide for the functions listed below:

(1) Power of Eminent Domain—At least one SLO must have the power of eminent domain so that it may acquire real property, water, mineral, and other rights needed for the project (Public Law 83-566 Section 4(4)). This is not required for projects where all works of improvement are to be installed by land treatment long-term contracts.

(2) Permits and Licenses—The SLO must acquire needed permits, and licenses in accordance with local, State, and Federal laws.

(3) Authority to Levy Taxes—At least one SLO must have and exercise the authority to levy taxes or provide another adequate means of financing the local share of the cost of the project as well as operation and maintenance expenses.

(4) Land Treatment above Reservoirs—The SLO must obtain agreements from landowners to implement soil conservation plans that meet NRCS Field Office Technical Guide (FOTG) criteria on not less than 50 percent of the lands situated in the drainage area above each retention reservoir to be installed with Watershed Program funds (Public Law 83-566 Sec 4(5)). Projects that include land treatment practices must, at a

minimum, have an SLO that has soil and water conservation responsibilities organized under State law.

(5) Public Participation—The SLO must arrange for and carry out activities that encourage the public to participate in the watershed project planning process.

(6) Financial—The SLO must show evidence of commitment for funding, installing, operating, and maintaining the project. The SLO will perform all contracting for construction of any structure, except that NRCS may perform contracting upon request.

(7) Watershed Management—The SLO must implement needed watershed management features such as permitting, zoning, land use regulations, easements, or upstream watershed protection.

(8) Municipal and Industrial Water—The SLO must provide evidence that any proposed municipal and industrial water supply use will be acceptable in quantity and quality to meet the anticipated needs. The SLO must provide all technical services to implement M&I water supply. The SLO must provide adequate assurances prior to initiation of construction that USDA will be reimbursed for at least one-half of the cost of M&I storage for current demand and all of the cost of M&I storage for future demand.

(9) Operation and Maintenance—The SLO must use its powers and authority to ensure the installation, operation, and maintenance of the project as planned (Public Law 83-566 Section 4(3)).

(10) Storm and Sanitary Sewers—New storm and sanitary sewers, or relocations and changes to existing sewer facilities, in urban or built-up areas are the sole responsibility of the SLO.

Part 500 – Watershed Program Management

Subpart C – Application for Assistance

500.20 Request for NRCS Planning Assistance

A. Sponsoring Local Organization Request Planning Assistance

It is the responsibility of the SLO to request NRCS planning assistance and authorization to develop either a watershed project plan under Public Law 83-566 or a subwatershed plan under Public Law 78-534, including an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). The following items are needed to support a request for planning authorization:

- (1) Preliminary investigation report, indicating project feasibility
- (2) Valid application – Standard Form (SF) 424

B. Preapplication Requirements

(1) The SLO must request Watershed Program planning assistance in writing. NRCS will assist the SLO in conducting the preliminary investigation and report for determining the feasibility of a proposed action and its potential eligibility for the program. The preliminary investigation report can be a brief report using existing data (refer to Title 390, National Watershed Program Manual (NWPM), Part 501, Subpart C, Section 501.20, and Title 390, National Watershed Program Handbook (NWPH), Part 606, Subpart B, Section 606.11).

(2) If a preapplication study is undertaken, the STC must notify in writing the Governors concerned, the U.S. Fish and Wildlife Service, the National Oceanic Atmospheric Administration National Marine Fisheries Service, the U.S. Army Corps of Engineers, and all other Federal agencies concerned with a decision to initiate any survey or field investigation involving water-resources development work, and furnish them with appropriate information regarding the scope, nature, status, and results of such survey or investigation (Executive Order 10584 Section 3).

C. Application Requirements

(1) Standard Form 424, “Application for Federal Assistance,” will be used. This form is available online at: http://www.grants.gov/techlib/424_20090131.doc. The start and end dates and funding information can be omitted. An original signature is required. The application is submitted by the SLO to the Governor or supervisory State agency of each participating State.

(2) Applications must comply with all of the following:

- Have sponsorship by qualified local organizations (7 CFR Section 622.10)
- Conform with Federal policies on nondiscrimination (7 CFR Part 15)
- Comply with the requirements of Public Law 83-566 (7 CFR Section 622.11)
- Include documentation of compliance with Executive Order 12372

(3) Executive Order 12372, Intergovernmental Review of Federal Programs, requires Federal agencies to utilize State processes to obtain the views of State and local officials on proposed Federal financial assistance. In addition, Public Law 83-566 Section 3 requires applications to be submitted by the SLO to the State agency having supervisory responsibility (referred to in this manual as “supervisory State agency”), or the Governor if there is no supervisory State agency. If the application is not disapproved by the State agency within 45 days then NRCS will continue with assistance to the SLO. For watershed structure rehabilitation applications, a copy will also be furnished to the State dam safety agency if State permits and approvals are required.

(4) The SLO must follow State-developed procedures (based on Executive Order 12372) for coordination of proposed Federal financial assistance. USDA and NRCS regulations envision a State single point of contact that will provide State process recommendations (7 CFR Sections 3015.308, 622.7, and 622.20). The STC must allow State, area, regional, and local officials and entities 60 days for comment, starting from the date of submission of the application to the State single point of contact. Federally recognized Native American Tribes are not required to use the State process.

(5) The Governor or supervisory State agency will approve or disapprove the application. If disapproved, no further action is required of NRCS. If approved or not disapproved within 45 days, the application must be sent to the STC. After the STC has determined that an application is legally valid, he or she will notify the SLO of the receipt of the application. If the application is found to be legally invalid, the STC will return it to the originator with an opinion (7 CFR Section 622.21).

500.21 Planning Authorization

A. Planning authorization must be requested when the STC is ready to commit technical resources to the planning effort. The Chief is responsible for authorizing planning assistance to develop a watershed plan. The authorization will specify the purposes that can be included

in the plan. The plan status will become “active” in the Program Operations Information Tracking System (POINTS) database once authorization for planning assistance is granted.

B. The planning authorization will be limited to 5 years when appropriate funding is available. The planning authorization will be cancelled if the watershed plan is not in interagency review within the 5-year time period. At that time, the planning status will become “deauthorized” in POINTS.

C. Requests for a planning authorization will include all of the following items:

- A copy of the preliminary investigation report and a plan of work
- The designated State agency’s current priority rating for the watershed application
- An estimate of the cost of plan development for NRCS, contracted expertise outside of NRCS, or both
- A list of the SLOs, the name and address of the current chair, and the name of the person designated as the contact for all the SLOs
- Statements by the SLO confirming its understanding of the commitments it has made, a self-evaluation of the depth and likely commitment of support for the project being planned, its authority and willingness to obtain real property rights, and its willingness to use the power of eminent domain

D. If the application fits one of the situations described in section 4(a) of Executive Order 10584 (see exhibit in 390-NWPM, Part 506, Subpart A, Section 506.3, of this manual), the STC must coordinate as needed with the Bureau of Reclamation, Corps of Engineers, and the Tennessee Valley Authority, as applicable, before requesting a planning authorization.

E. The STC must notify the following, in writing, of all approvals or disapprovals of applications for planning assistance: the SLO, the State Governors, and other concerned Federal agencies (Executive Order 10584 Section 3(a)(2)).

500.22 Amendment to an Application

A. Amendments

(1) The STC must have prior approval of the Chief to amend a planning authorization in order to add or change a purpose. Requests for approval will include a revised preliminary investigation report that clearly identifies watershed problems, proposed alternatives, and the revised plan of work. There will also be an explanation of why the original proposal should be changed.

(2) If an amendment to an application is needed, the STC will require that the SLO notify each supervisory State agency (or the Governor if there is no supervisory State agency) in writing, of the nature of and need for any changes, with a copy to the STC.

B. Withdrawal of Application

If, at any time, NRCS and the SLO determine that there is no possibility of developing a feasible or acceptable project plan, the SLO will be encouraged to withdraw the application in writing. The STC will return the withdrawn application to the supervisory State agency or Governor. Where the application is considered invalid or infeasible, but the SLO does not withdraw it, the STC will return the application to the supervisory State agency or Governor with a letter explaining why the project is not feasible. The plan status will become “terminated” in POINTS once the application is withdrawn or determined to be unfeasible and returned.

C. Termination of Planning

(1) If at any stage of plan development it becomes apparent that a feasible plan cannot be developed, the STC will terminate planning assistance and the plan status will become “terminated” in POINTS. This termination will be accomplished by notifying the SLO in writing that planning assistance is terminated and will specify the reasons for this action. Concurrently, those notified pursuant to Executive Order 12372 of the receipt of a valid watershed project application must be provided written notification of planning termination accompanied by a copy of the letter sent to the SLO. If a Notice of Intent (NOI) to prepare a Plan-EIS has been published in the Federal Register, then a notice of termination of development of a Plan-EIS must be published.

(2) Once planning is terminated by either the STC or the automatic provisions of 390-NWPM, Part 500, Subpart C, Section 500.20 (of this manual), no further funds may be expended on the project and the project may not be reactivated. If conditions change and it becomes possible to develop a feasible plan, the SLO must start over and submit an amendment to the application; a new planning authorization must be given by the Chief before work can be resumed.

Part 500 – Watershed Program Management

Subpart D – Program Administrative Requirements

500.30 Civil Rights

Program activities will be conducted in accordance with the Secretary’s equal opportunity initiatives. This ensures elimination of any program practices that result in inequitable treatment of groups protected by the Civil Rights Act and equal access to the benefits of the Watershed Program.

500.31 Administrative Record Requirement

An administrative record containing data used in project development must be established by the State at the onset of project planning and maintained throughout the life of the project. This file is a vital part of watershed project documentation and NEPA compliance; it is used throughout the development, review, installation, and operation and maintenance phases of a project.

500.32 Federal Laws, Regulations, Executive Orders, Other Authorities

In addition to Public Law 83-566 (see exhibit in Title 390, National Watershed Program Manual (NWPM), Part 506, Subpart A, Section 506.0), several Federal laws, rules, regulations, Executive orders, and NRCS policies are directly related to the administration of the Watershed Program. This is a partial listing of the laws, regulations, and Executive orders that apply to all Watershed Program projects. All work undertaken and performed under Public Law 83-566 is to be in compliance with all applicable Federal, State, and local laws, orders, and policy.

Public Laws

Public Law 96-95, the Archaeological Resources Protection Act of 1979

The Clean Air Act (42 U.S.C. Sections 7401 to 7671q)
Public Law 92-500, the Clean Water Act, as amended
Public Law 101-508, the Coastal Zone Management Act of 1972
Public Law 104-231, the Electronic Freedom of Information Act Amendments of 1996
Public Law 93-205, the Endangered Species Act of 1973
Public Law 97-98, the Farmland Protection Policy Act of 1981, as Amended (FPPA) (7 U.S.C. Section 4201 et seq.)
Public Law 104-127, the Federal Agriculture Improvement and Reform Act of 1996
33 U.S.C. Section 701b-11, “Flood protection projects navigation and navigable waters”
Public Law 101-624, the Food, Agriculture, Conservation, and Trade Act of 1990 (FACTA)
Public Law 99-198, the Food Security Act of 1985 (FSA)
Public Law 89-487, the Freedom of Information Act of 1966
Public Law 99-570, the Freedom of Information Reform Act of 1986
Public Law 95-265, the Magnuson-Stevens Fishery Conservation and Management Act
The Migratory Bird Treaty Act of 1918 (16 U.S.C. Sections 703 to 712, 40 Stat. Section 755)
Public Law 91-190, the National Environmental Policy Act of 1969 (NEPA)
Public Law 89-665, the National Historic Preservation Act of 1966 (NHPA), as amended
Public Law 93-502, the Freedom of Information Act, as amended in 1974
The Protection of Bald and Golden Eagles Act of 1990 (16 U.S.C. Sections 668a to d, 54 Stat. Section 250)
Public Law 86-523, the Reservoir Salvage Act of 1960
The Rivers and Harbors Act of 1899 (33 U.S.C. Section 403, 30 Stat. Section 1121)
Public Law 95-192, the Soil and Water Resources Conservation Act of 1977
Public Law 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. Section 4601 et seq.)
Public Law 90-542, the Wild and Scenic Rivers Act of 1968
Public Law 101-601, the Native American Graves Protection and Repatriation Act

Code of Federal Regulations

7 CFR Part 622, “Watershed Projects”
7 CFR Part 650, “Compliance with NEPA”
7 CFR Part 3015, “Uniform Federal Assistance Regulations”
36 CFR Part 800, “Protection of Historic Properties”

Executive Orders, Secretarial Orders, and Presidential Memoranda

Executive Order 10584, Prescribing rules and regulations relating to the administration of the Watershed Protection and Flood Prevention Act
Executive Order 11514, Protection and Enhancement of Environmental Quality
Executive Order 11747, Delegating Certain Authority of the President Under the Water Resources Planning Act, as amended
Executive Order 11988, Floodplain Management
Executive Order 11990, Protection of Wetlands
Executive Order 12322, Water Resources Projects
Executive Order 12372, Intergovernmental Review of Federal Programs
Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
Executive Order 12962, Recreational Fisheries
Executive Order 13007, Indian Sacred Sites

Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks
Executive Order 13089, Coral Reef Protection
Executive Order 13112, Invasive Species
Executive Order 13175, Consultation and Coordination with Tribal Governments
Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds
Executive Order 13287, Preserve America
Secretarial Order 3206, American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act
Presidential Memorandum, Government-to-Government Relations with Native American Tribal Governments (April 29, 1994)
Presidential Memorandum, Tribal Consultation, (November 5, 2009)

NRCS Policy

Title 120, General Manual (GM), Part 404, “Land Treatment Long-Term Contracting”
180-GM, “Conservation Planning Policy”
190-GM, Part 410, “Compliance with NEPA”
400-GM, Part 400, “Public Participation”
410-GM, Part 405, “American Indians and Alaska Natives”
420-GM, Part 401, “Cultural Resources (Historic and Archaeological Properties)”
440-GM, Part 402, “Grants and Agreements”

USDA Regulations

Departmental Regulation 5600-002, “Environmental Justice”
Departmental Regulation 1350-001, “Tribal Consultation” (2008)
Departmental Regulation 1340-007, “Policies on American Indians and Alaska Natives”

Part 500 – Watershed Program Management

Subpart E – Program Cost Sharing

500.40 Cost-Share Authority

A. Cost Sharing Authorized by Public Law 83-566

(1) Public Law 83-566 authorizes financial assistance to the SLO and to individual land users. Cost sharing with the SLO is implemented through project agreements, contribution agreements or other agreements as specified in Title 390, National Watershed Program Manual (NWPM), Part 504, Subpart A, Section 504.2A, “Project Agreements.” Cost sharing with individuals is through long-term land treatment contracts.

(2) Section 3(6) of Public Law 83-566 authorizes cost sharing with landowners and operators for the installation of watershed protection measures. A cost sharing agreement must be based on a conservation plan. Federal assistance must not exceed the rate of assistance for similar practices and measures under existing NRCS programs.

(3) Section 3a of Public Law 83-566 authorizes cost-share assistance to the SLO for the acquisition of perpetual wetland or floodplain conservation easements. The statute requires the SLO to provide up to 50 percent of the easement cost.

(4) Section 4 of Public Law 83-566 sets forth the conditions the SLO must meet to receive cost sharing. These conditions include paying a portion of certain costs. For some items, specific percentages are given and for others the SLO must assume a proportion of the cost determined by NRCS to be equitable. Section 4(1) sets forth requirements for real property rights costs and section 4(2) sets forth requirements for costs of constructing or installing works of improvement and for engineering costs. Section 4(1) limits cost sharing for real property rights to those acquired for public fish and wildlife, recreation development, and mitigation of fish and wildlife habitat losses.

(5) Section 14 of Public Law 83-566 authorizes cost sharing for the rehabilitation of structures constructed under certain NRCS programs. The statute sets the Federal cost-share at 65 percent of the total rehabilitation cost (excluding certain items), with a limit of 100 percent of the actual construction cost.

B. Cost Sharing Required by Other Federal Laws

Public Law 91-646 requires agencies receiving Federal financial assistance to provide relocation payments and assistance to displaced persons. It also states that the displacing agency must be eligible for Federal financial assistance for these costs in the same manner and to the same extent as other program or project costs.

500.41 Cost-Share Policy

A. Watershed projects will be developed for one or more of the purposes authorized by Public Law 83-566. Eligibility for cost-share and rates of cost-share are determined based on the purposes for which a project is formulated. Program purposes are listed in 390-NWPM, Part 500, Subpart A, Section 500.3, of this manual.

B. The STC is responsible for setting cost-share rates for measures to be included in each project, provided such Federal assistance is within the policy limits set forth in this manual. Watershed Program cost-share rates depend on the project purposes to which project costs are allocated and the type of measures to be applied. Tables 500.1 and 500.2 (in this manual) summarize the cost sharing provisions.

C. No cost sharing will be provided for watershed protection measures or easements on Federal land, except for Public Law 78-534 projects (7 CFR Section 622.3(c)).

D. NRCS will require as a condition of providing Federal assistance for the installation of works of improvement that the SLO make arrangements satisfactory to NRCS for paying the costs of operating and maintaining works of improvement.

E. NRCS will require as a condition of providing Federal assistance for the installation of works of improvement that the SLO acquire, without cost to the Federal Government from funds appropriated for the purposes of Public Law 83-566, all land, easements, and rights-of-way needed for the works of improvement. Exceptions to this requirement are described in 390-NWPM, Part 500, Subpart E, Section 500.42, of this manual.

F. Project administration costs are not cost-shared. Each participating agency is to bear its own administration costs.

500.42 Cost-Share Rates for Watershed Program Projects

The following is a summary of cost sharing authorized for the Watershed Program. The cost-share rates are also displayed in tables 500.1 and 500.2 in this manual.

A. Wetland and Floodplain Conservation Easements

Watershed Program funds may be used for cost sharing in an amount not less than 50 percent of the cost of acquiring perpetual wetland and floodplain conservation easements. The easements to be acquired by the SLO will be used to perpetuate, restore and enhance the natural capacity of wetlands and floodplains to retain excessive floodwaters, improve water quality and quantity, and provide habitat for fish and wildlife (Public Law 83-566 Section 3a). Financial assistance for conservation easements will be based upon the appraised market value of the land and the associated acquisition costs.

B. Mitigation for Fish and Wildlife Habitat Losses

Public Law 83-566 authorizes the use of Watershed Program funds to pay up to 50 percent of the cost of real property rights acquired by the SLO for mitigation of fish and wildlife habitat losses. The rights must be acquired by either fee title or perpetual easement. The acquisition is not limited to the confines of the watershed boundary.

C. Flood Prevention (Flood Damage Reduction)

(1) Watershed Program funds must provide 100 percent of construction and engineering costs for works of improvement for flood damage reduction. No cost sharing is available to acquire land, easements, or rights of way needed in connection with works of improvement for this purpose, except for acquisition of wetland or floodplain conservation easements (390-NWPM, Part 500, Subpart E, Section 500.42A, of this manual, above) and, in some cases, acquisition associated with 390-NWPM, Part 500, Subpart E, Section 500.42C (3), of this manual, below (100-percent cost-share).

(2) Watershed Program assistance involving nonstructural flood protection in floodplains may be used to move or reposition residential, commercial, industrial, and farm buildings to flood-free areas or to floodproof or otherwise protect such buildings from flood damage. Actual movement or repositioning and related costs eligible for assistance must include replacement of comparable facilities or features such as basements, driveways, heating systems, and decks. The cost of additional improvements beyond the decent, safe, and sanitary requirements is a nonproject cost ineligible for program assistance.

(3) Watershed Program assistance may include funds necessary to acquire and demolish residential, commercial, industrial, and farm buildings and similar installations, including other associated costs of site restoration where it is more cost effective than moving, repositioning, or floodproofing the facilities and features. Watershed Program assistance will be based upon the appraised market value of the facilities and associated acquisition and site restoration costs.

D. Watershed Protection

(1) Watershed Program funds may be used for contracts with the SLOs, landowners, and operators, individually or collectively, to install measures needed to develop and conserve the soil, water, woodland, wildlife, energy, and recreational resources of the land, and to enhance water quality.

(2) Federal funding assistance must not exceed the rate of assistance or funding limits to program participants for similar practices under other existing national programs at the time the long-term contract (LTC) or project agreement is signed by the contracting officer. Changes in the rate of assistance or funding limits are subject to an exchange of correspondence with the project sponsor. The participant's share of the cost of installing practices may come from any source other than Federal funds without a reduction in NRCS funding as long as the total financial assistance to be received does not exceed 100

percent of the cost. If other Federal funds are used, the NRCS share will be reduced by the amount of the other Federal funding (Title 120, General Manual (GM), Part 404, Subpart D, Section 404.33). Watershed Program funds may pay up to 100 percent of technical assistance costs to plan and apply land treatment practices.

(3) Watershed Program cost sharing may only be used when other NRCS conservation programs fall short of reducing severe problems and meeting the major land treatment needs within a reasonable timeframe. Watershed Program cost-share for land treatment is not available for implementation of a practice or measure that is cost-shared under another Federal program, or for real property rights.

(4) Watershed Program cost sharing on cropland in land capability classes VI through VIII is limited to permanent conversion to grass or trees. This does not apply to unique lands used to produce specialty crops that are not surplus and for which commodity payments are not available.

(5) Watershed Program funds may not be used to pay the cost of installing, operating, and maintaining land treatment on Federal land. This restriction does not apply to the use of Public Law 78-534 funds on National Forest System lands.

E. Public Fish and Wildlife or Public Recreation Development

(1) Fish and Wildlife — Watershed Program funds may provide up to 50 percent of real property rights costs, up to 50 percent of installation costs, and up to 100 percent of engineering or technical assistance costs for works of improvement.

(2) Recreation — Watershed Program funds may provide up to 50 percent of real property rights costs, up to 50 percent of installation costs, and up to 100 percent of engineering and technical assistance costs for works of improvement. For minimum basic facilities, Watershed Program funds may provide up to 50 percent of real property rights costs, up to 50 percent of installation costs, and 100 percent of engineering and technical assistance costs. The limitations set forth in 390-NWPM, Part 500, Subpart A, Section 500.4D (of this manual), apply to recreation developments that include minimum basic facilities.

F. Agricultural Water Management

Financial assistance will not exceed the rate of assistance for measures installed for similar purposes through other available Federal programs; where rates are identified for similar purposes under other available programs, Watershed Program funds may provide up to a maximum of 75 percent of installation costs and up to 100 percent of engineering or technical assistance costs. No cost sharing is available for real property rights for this purpose. Wells, water treatment facilities, pipelines, and similar practices listed in the Title 450, National Handbook of Conservation Practices (NHCP) are eligible for Watershed Program assistance.

G. Municipal and Industrial Water Supply

(1) Watershed Program funds may be used for cost sharing up to 50 percent of the construction costs for municipal and industrial water supply reservoir storage to meet current water supply demands. The SLO will bear all costs for engineering, technical assistance, and real property rights for this purpose.

(2) Watershed Program municipal and industrial water supply projects may be funded by loans through the USDA Rural Utilities Service (RUS). Repayment of these loans must be within a 50-year time period.

(3) Watershed Program funds may be advanced to the SLO to pay for storage capacity in reservoirs to meet anticipated future needs. The amount of advance is limited to 30 percent of the total cost of the structure. The advance must be repaid in full with interest within 50 years after the retention reservoir is constructed, or in a shorter period if required by law. Interest will not be charged until the water supply is first used or until 10 years after the date of completion of the structure, whichever is earlier. Outlet works are eligible for advances when such works are a part of the structure.

(4) Prior to Watershed Program funds being advanced or loaned for costs associated with additional storage for anticipated future demands, the STC must require reasonable assurances and evidence from the SLO that demands will be made for the additional storage within a period of time that will allow for repayment of the advanced or loaned amount within the life of the structure (Public Law 83-566 Section 4(2)).

H. Water Quality Management

Watershed Program cost sharing will provide a rate to be set at the discretion of the Secretary. Consultation with the national program manager of the Watershed Surveys and Planning Program and the director of CPTAD will be necessary during the planning phase of the project to obtain guidance for determining the cost-share rate for construction. Cost sharing may cover up to 100 percent of engineering or technical assistance costs. There is no cost sharing for real property rights for this purpose.

I. Watershed Structure Rehabilitation

Watershed Rehabilitation Program funds that may be made available must be equal to 65 percent of the total costs of the rehabilitation project, but must not exceed 100 percent of the actual construction costs. Construction costs must include the reconstruction or decommissioning of the dam and the relocation or floodproofing of downstream property. NRCS will also assume up to 100 percent of engineering and technical assistance costs, but these costs will not be a part of the cost-share calculation. See 390-NWPM, Part 505 (of this manual), for further discussion of the Watershed Rehabilitation Program.

500.43 Relocation Payments

Relocation payments will be cost-shared in the same manner and to the same extent as other program or project costs in accordance with cost-share rates of assistance established for the purpose of the project measure that would cause the displacement. These payments are authorized by Public Law 91-646.

Table 500.1 Federal Cost sharing Percentage Provisions for Conservation Easements and Mitigation of Fish and Wildlife Habitat Losses

| Purpose | Engineering / Technical Assistance | Real Property Rights |
|---|------------------------------------|--------------------------|
| Conservation Easements Wetland or Floodplain | Not less than 50 percent | Not less than 50 percent |
| Mitigation of Fish and Wildlife Habitat Losses | No more than 50 percent | No more than 50 percent |

The above provisions apply to acquisition of real property rights by purchase or easements. Measures that will be installed on the land acquired or placed under easements must be cost-shared at rates determined by the measure purpose, as shown in table 500.2.

Table 500.2 Federal Cost sharing Percentage Provisions by Purpose

| Purpose | Installation / Construction | Engineering / Technical Assistance | Real Property Rights |
|---|--|---|--|
| Flood Prevention <ul style="list-style-type: none"> • Works of Improvement | 100 ¹ percent | 100 ¹ percent | 0 |
| Watershed Protection <ul style="list-style-type: none"> • Flood Control • Erosion and Sedimentation Reduction • Water Quality • Water Conservation • Wildlife Habitat • Woodland • Energy • Recreation Resources | Variable ² | 100 percent | 0 |
| Public Fish and Wildlife or Public Recreational Development <ul style="list-style-type: none"> • Works of Improvement • Recreation Minimum Basic Facilities | No more than 50 ¹ percent No more than 50 ¹ percent | 100 ¹ percent | No more than 50 ¹ percent No more than 50 ¹ percent |
| Agricultural Water Management <ul style="list-style-type: none"> • Drainage • Irrigation • Ground Water Recharge • Agricultural Water Supply Structure • Water Conservation • Water Quality | Up to 75 ³ percent | Up to 100 percent | 0 |
| Municipal and Industrial Water Supply <ul style="list-style-type: none"> • Reservoir Structure | No more than 50 ^{1,4,6} percent | 0 | 0 |

| | | | |
|--|---|---------------------------------------|---|
| Water Quality Management <ul style="list-style-type: none"> • Reservoir Storage | To be determined ⁶ | Up to 100 percent | 0 |
| Rehabilitation <ul style="list-style-type: none"> • Dams | No more than 100 ^{1,5} percent | No more than 100 ¹ percent | 0 |

- 1 Specific rate established in the statute.
- 2 Federal funding assistance must not exceed the rate of assistance or funding limitations to program participants for similar practices under other existing NRCS conservation programs at the time the long term contract is signed by the contracting officer.
- 3 Federal funding assistance must not exceed the rate of assistance for measures installed for similar purposes under other existing Federal programs.
- 4 For cost of storage for current water supply demands. Assistance for storage for future demands is limited to loans.
- 5 Cost-share must be up to 65 percent of total eligible dam rehabilitation costs or up to 100 percent of construction costs (including required (in-kind or decent/safe/sanitary) relocation costs), whichever is less.
- 6 Rate must be set at the discretion of the Secretary.

Part 501 – Development of Watershed Project Plans

Subpart A – Background

501.0 Preparation of the Watershed Project Plan

A. Part 501 provides policy for the development of Watershed Project Plans under the Watershed Program. Watershed projects are local projects installed with Federal assistance. Preparation of a Watershed Project Plan is the responsibility of the sponsoring local organizations (SLO). This includes the responsibility for choosing a proposed plan from a group of viable alternatives. The NRCS responsibility in plan selection is to decide (using Watershed Program criteria) whether to approve NRCS assistance for installing the alternative selected by the SLO.

B. NRCS has leadership responsibility for providing technical assistance to the SLO (see Title 390, National Watershed Program Manual (NWPM), Part 500, Subpart B, Section 500.10). NRCS will use the watershed approach and the conservation planning process, as described in Title 180, National Planning Procedures Handbook (NPPH), Part 600 to assist the SLO in developing a Watershed Project Plan.

C. As part of its responsibility to provide technical assistance, NRCS may coordinate input from other agencies and groups in the formulation of the plan. The Forest Service (FS) has coordination responsibility for the national forest portion of a Watershed Project Plan. However, the SLO may choose to obtain technical assistance and coordination from sources other than NRCS and FS. The Forest Service and NRCS, formerly the Soil Conservation Service, entered into a memorandum of understanding (MOU) in 1992. The “Memorandum of Understanding Between The Soil Conservation Service and the Forest Service” is included in exhibits at Title 390, National Watershed Program Handbook (NWPH), Part 606, Subpart B, Section 606.10.

D. NRCS uses an interdisciplinary environmental planning approach in which specialists having different technical expertise act as a team to jointly evaluate existing and future environmental quality. The interdisciplinary group considers structure and function of natural resource systems, complexity of problems, and the economic, social, and environmental effects of alternative actions. Watershed project planning and implementation process will include consideration of ecological functions by use of appropriate technical experts such as an ecologist, landscape architect, restoration specialist, or other experts.

501.1 Compliance with the National Environmental Policy Act

A. National Environmental Policy Act (NEPA) procedures will be followed to develop an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) as a part of all Watershed Project Plans, unless the planned actions have been categorically excluded in accordance with NEPA requirements in Title 190, General Manual, Part 410. If the actions are categorically excluded, the environmental evaluation and applicability of the categorical exclusion will be documented in the plan.

B. NRCS funding or required approval of a project plan is a Federal action that is subject to NEPA. Compliance with NEPA is the responsibility of NRCS when NRCS has responsibility for technical and financial assistance, even if the SLO obtains assistance from other sources. The only exception to this is when another Federal agency involved with the project has NEPA compliance responsibilities and is designated as the lead Federal agency for the project. In this case, NRCS must become a cooperating agency on the lead agency's document so that NRCS can adopt the EA or EIS for NRCS's use in compliance with NEPA. If NRCS does adopt another agency's document, NRCS is still required to prepare and issue a Finding of No Significant Impact (FONSI) for an EA or Record of Decision (ROD) for an EIS. If NRCS is not a cooperating agency, then it can only adopt the Watershed Project Plan EA or EIS after recirculating the document to the public for the required public review specified in this manual for a Watershed Project Plan-EA or Plan-EIS. The State Conservationist (STC) is the Responsible Federal Official (RFO) who ensures that the Watershed Project Plan-EA or Plan-EIS complies with NEPA when NRCS has lead NEPA compliance responsibilities.

501.2 Consultation

NRCS must consult with Federal, State, or Tribal governments, and other agencies and entities, as applicable and required by the following laws and policies in this non-inclusive list:

- (1) Public Law 92-500, the Clean Water Act, as amended
- (2) Public Law 101-508, the Coastal Zone Management Act
- (3) Public Law 93-205, the Endangered Species Act of 1973
- (4) Public Law 95-265, the Magnuson-Stevens Fishery Conservation and Management Act
- (5) Public Law 89-665, the National Historic Preservation Act of 1966 (NHPA)
- (6) Public Law 90-542, the Wild and Scenic Rivers Act of 1968
- (7) Executive Order 11990, Protection of Wetlands
- (8) Executive Order 12898, Environmental Justice
- (9) Title 410, General Manual (GM), Part 405, "American Indians and Alaska Natives"
- (10) Executive Order 13007, Indian Sacred Sites
- (11) Executive Order 13175, Consultation and Coordination with Tribal Governments
- (12) Secretarial Order 3206, American Indian Tribal Rights, Federal-Tribal Trust

Responsibilities and the Endangered Species Act

- (13) Presidential Memorandum, Government-to-Government Relations with Native American Tribal Governments (April 29, 1994)
- (14) Presidential Memorandum, Tribal Consultation, (November 5, 2009)

501.3 Cooperating Agencies

A. NRCS must coordinate with other Federal, State, or Tribal Governments during the development of an NRCS Plan-EA or Plan-EIS. Agencies that have specific expertise or jurisdiction by law (such as permitting authority) over an action being proposed will be invited in writing to be cooperating agencies in the planning process and preparation of the NEPA document (see an example letter in exhibit 390-NWPH, Part 606, Subpart B, Section 606.12, “Cooperating Agencies Invitation Letter”). An agency may request that NRCS designate it as a cooperating agency if NRCS does not request it to, but such designation is not required for NRCS to coordinate efforts. NRCS should request the participation of cooperating agencies as early in the process as possible, and may request that cooperating agencies prepare sections or provide input into the development of the Plan-EA or Plan-EIS. NRCS may also request that cooperating agencies provide any relevant environmental analyses or information pertinent to the development of the Watershed Project Plan-EA or Plan-EIS.

B. NRCS may also become a cooperating agency on other Federal agency NEPA documents. The advantages for NRCS in becoming a cooperating agency include the ability to have the lead agency incorporate NRCS watershed planning actions into its NEPA document, adopt the analysis prepared by the lead agency for NRCS NEPA compliance purposes, and meet the intent of NEPA by reducing duplication of effort in environmental compliance.

Part 501 – Development of Watershed Project Plans

Subpart B – Project Plan Requirements

501.10 Planning Standards and Criteria

Watershed Program planning will be conducted in accordance with all of the following guidance documents, regulations, and Executive orders:

- (1) Title 390, National Watershed Program Handbook (NWPH)
- (2) Title 180, National Planning Procedures Handbook (NPPH), Part 600
http://policy.nrcs.usda.gov/scripts/lpsiis.dll/H/H_180_600.htm
- (3) Title 190, National Environmental Compliance Handbook (NECH), Part 610
- (4) NRCS Field Office Technical Guide (FOTG) and Conservation Practice Physical Effects (CPPE)
- (5) Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G)
- (6) National Environmental Policy Act (NEPA)
- (7) 40 CFR Parts 1500 to 1508, “NEPA Regulations”
- (8) 7 CFR Part 650, “Compliance with NEPA”
http://www.access.gpo.gov/nara/cfr/waisidx_05/7cfr650_05.html
- (9) Title 190, General Manual (GM), Part 410, Subpart B, Section 410.27, “Channel Modification Guidelines”

- (10) Executive Order 12372, Intergovernmental Review of Federal Programs
<http://www.archives.gov/federal-register/codification/executive-order/12372.html>
- (11) Executive Order 10584, Administration of Public Law 83-566
- (12) Section 106 of Public Law 89-665, National Historic Preservation Act
- (13) Section 7 of Public Law 93-205, Endangered Species Act
- (14) Executive Order 11988, Floodplain Management
<http://www.usda.gov/rus/water/ees/pdf/eo-11988.pdf>
- (15) Council on Environmental Quality – NEPA’s Forty Most Asked Questions
<http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm>
- (16) For other applicable laws, regulations, and Executive orders see 390-NWPM, Part 500, Subpart D, Section 500.32, (in this manual)

501.11 Water Resource Projects

Watershed Program project plans must be designed to accomplish one or more of the purposes described in 390-NWPM, Part 500, Subpart A, Section 500.3, (of this manual). The watershed planning process must identify the most economically, socially, and environmentally acceptable means of achieving the selected purposes. Watershed Program project plans are either “water resource projects” or “non-water-resource projects.”

A. Water Resource Projects

(1) For the purposes of this manual, a “water resource project” includes projects meeting all of the following criteria:

- Projects having one or more of the following purposes: flood damage reduction, water supply, water-based recreation, water quality management (as defined in the Public Law 83-566 Section 4), and large scale irrigation or drainage projects.
- Is implemented by one or more “local organizations” (that is SLO as defined by Public Law 83-566 Section 2).

(2) Water resource project plans must be formulated in accordance with all requirements of the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G). Formulation will be based on the stated purpose and the need for action. The National Economic Development (NED) alternative will be developed and is the alternative that reasonably maximizes net economic benefits consistent with protecting the nation’s environment.

B. Non-Water-Resource Projects

(1) Watershed projects that do not meet both criteria of a water resource project (for example, address one of the five identified purposes above **and** are implemented by an SLO), and locally implemented projects (implemented without NRCS watershed program financial assistance), are considered for the purposes of the manual to be “non-water-resource projects.” Non-water-resource projects include watershed protection, land treatment, habitat restoration, and ecosystem restoration projects.

(2) Non-water-resource project plans must be formulated in accordance with P&G procedures, but development of the NED alternative is not required. The recommended alternative plan must be the least costly, socially and environmentally acceptable method of achieving the agreed-upon level of resource protection.

501.12 Plan Formulation

A. Alternatives

(1) All reasonable alternatives that address the purpose and need for action must be presented in the Watershed Project Plan, including those not within the program authorities of the NRCS and those not preferred by sponsors. The future-without-project (FWOP) conditions or no-action alternative must also be presented in each Watershed Project Plan.

(2) For alternatives that were eliminated from detailed study, the rationale for this elimination will be provided. All alternatives developed or considered will be documented as part of the administrative record.

(3) All relevant public and NRCS identified resource concerns noted during scoping must be addressed by one or more alternatives and analyzed in the Plan-EA or Plan-EIS.

(4) For a Watershed Project Plan involving flood protection, consideration must be given to alternative measures to prevent or reduce flood damage, including but not limited to the following:

- Floodproofing of structures
- Floodplain regulation
- Acquisition of floodplain lands for recreational, fish and wildlife, and other public purposes
- Moving buildings and facilities
- Conversion of land use to forest

(5) Project land treatment measures will not be formulated to address onsite economic benefits such as reducing production costs or increasing yields. However, onsite benefits should be included in the documentation and evaluation of the alternative plans. All costs, including operation, maintenance, and replacement costs, expected to be incurred over the period of analysis must be included.

B. Future-Without-Project or No Action Alternative

The proposed action and alternatives will be formulated to meet the objectives of the project. The impacts of the proposed action and alternatives are to be measured from the projected future-without-project (FWOP) conditions. The projected FWOP conditions must be forecast in order to provide the basis for comparison among alternatives. The projected FWOP condition is known as the no-action alternative under NEPA. The effects of other programs and compliance with existing laws will be considered in projecting FWOP conditions.

C. Evaluation Period

The evaluation period (evaluated life, project life, or design life) must not exceed 100 years after the completion of installation. The period of analysis (installation period plus project life) must be the same for all alternatives (P&G Section 2.1.2). Measures in a plan may have different design lives, depending on the design features and materials used in construction. Replacement costs must be included if the evaluation period exceeds the life of a measure.

D. Enhancement and Mitigation of Environmental Values

(1) Enhancement—For purposes of this manual, the word “enhancement” is defined as environmentally beneficial activities undertaken by the sponsor or others that are beyond the “appropriate mitigation” requirements of NEPA.

- (a) NRCS will encourage the SLO to include features in Watershed Project Plans that will preserve, create, or otherwise enhance wetlands, fish and wildlife habitats, landscape resources, cultural resources, important farmland and forest land, prime rangeland, and other important resources where feasible. These enhancement measures must be sponsored by the SLO. Watershed Program funds may not be utilized for enhancement features.
 - (b) Fish and wildlife enhancement measures proposed by Federal or State fish and wildlife agencies will be included if they are technically feasible and are acceptable to the SLO and NRCS. If additional sponsors are needed to fund and carry out the recommended fish and wildlife measures, NRCS will assist in obtaining their participation. Costs for fish and wildlife enhancement measures will be allocated to the fish and wildlife purpose.
- (2) Mitigation—Appropriate mitigation will be included in all plans.
- (a) Mitigation measures to offset or reduce adverse environmental, visual, scenic, and social effects of alternatives will be determined in consultation with the appropriate Federal and State agencies and disclosed in the Watershed Project Plan-EA or Plan-EIS. Mitigation measures will preferably be established in the watershed but may be established outside the watershed if no other alternative exists. Costs for mitigation measures will be allocated to the purposes of the work that produces the need for mitigation. The Plan-EA or Plan-EIS is to address and evaluate the effects and significance of any proposed mitigation measures.
 - (b) The STC must ensure that the planned mitigation measures are properly installed, operated, and maintained by the sponsor. The Watershed Project Plan-EA/FONSI or Plan-EIS/ROD must specify how all mitigation addressed in the document will be implemented. If appropriate, a monitoring plan for mitigation effectiveness must be addressed in the ROD as required by NEPA.

Part 501 – Development of Watershed Project Plans

Subpart C – Planning Procedures

501.20 Preliminary Investigation

A. A preliminary investigation will be conducted when inquiries are received concerning a potential watershed project. The preliminary investigation is a brief study, using existing data and field information. The purpose of the investigation is to provide reasonable assurance that a feasible plan can be developed that addresses a Public Law 83-566 purpose and that there are no apparent insurmountable obstacles. For further guidance see Title 390, National Watershed Program Handbook (NWPH), and Title 180, National Planning Procedures Handbook (NPPH), Part 600.

B. An Environmental Evaluation (EE) using an interdisciplinary science-based approach will be conducted as a part of the preliminary investigation (7 CFR Section 650.5). The EE will assist the RFO to determine whether a Plan-EA or Plan-EIS should be prepared or whether the proposed actions are covered by categorical exclusions.

C. A preliminary investigation report, based on the findings of the preliminary investigation, will be prepared by the STC and submitted to the SLO (see “Feasibility Report - Outline” in 390-NWPH, Part 606, Subpart B, Section 606.11).

501.21 Plan of Work

A plan of work (POW) will be prepared and use as a management tool by the STC and planning team during plan development. It will summarize the studies done to date and describe the remaining work needed. It will also show the interdisciplinary technical procedures to be used in the plan development study and the timeframe for accomplishing each task. (See “Plan of Work - Example” in 390-NWPH, Part 606, Subpart B, Section 606.13.)

- (1) It must include the scope, affected resources, planning detail, public participation, estimated cost, and schedule for completing the Plan-EA, or Plan-EIS.
- (2) The POW will represent the scope and detail of the study and the study time needed. It will also contain an estimate of the minimum amount and kind of supporting data needed.
- (3) All the input of NRCS, other Federal and State agencies, and the local SLO will be included in the plan of work.
- (4) Technical procedures to be used must be spelled out. These must indicate compliance with NEPA, P&G, and other applicable laws, Executive orders, and policies. Selection of technical procedures must be based on existing rules, regulations, and guidelines and on the nature of the watershed problems, project objectives, and the anticipated complexity of potential solutions and their effects as established by the scoping process.

501.22 NEPA Documentation

A. NEPA requires that an environmental impact statement be prepared for any major Federal action significantly affecting the quality of the human environment. If an EIS is not required, NRCS must prepare an EA and publish a FONSI or determine that the proposed action falls into a class of actions that are categorically excluded.

- (1) Watershed Project Plans involving activities that have not been categorically excluded require either an EA and FONSI or an EIS and ROD. For NRCS programs, actions that are categorically excluded may be found in 7 CFR Section 650.6.
- (2) When one or more categorical exclusions apply to the entire project, the plan will include the environmental evaluation (EE) documentation (Form NRCS-CPA-52, “Environmental Evaluation Worksheet.”). In such cases, the “Environmental Consequences” section of the watershed plan will be replaced by the EE documenting the applicability of the categorical exclusions.
- (3) If any part of the proposed action is not covered by a categorical exclusion, the watershed plan must include an EA or EIS (Plan-EA or Plan-EIS, or Supplemental Plan-EA or EIS) that discusses the entire proposal and the impacts.

B. For project activities, a Plan-EIS is required for any of the following (7 CFR Section 650.7):

- (1) Projects that include stream channel realignment or work to modify channel capacity by deepening or widening where significant aquatic or wildlife habitat exists. The EE will determine if the channel supports significant aquatic or wildlife habitat.
- (2) Projects requiring congressional action (see Title 390, National Watershed Program Manual (NWPM), Table 502.1).
- (3) Projects determined through the EE to significantly affect the quality of the human environment. If it is difficult to determine whether there is a significant impact on

the human environment, it may be necessary to complete an EA in order to decide whether an EIS is required.

501.23 Notice of Intent

Once it is determined that a Plan-EIS is required, the STC will publish a Notice of Intent (NOI) to prepare a Plan-EIS in the Federal Register; circulate it interested agencies, groups and individuals; and publish it in one or more newspapers serving the area of the proposed action. The notice of intent must include all of the following:

- (1) A description of the proposed action and any initial alternatives and resource issues considered
- (2) A description of the proposed scoping process with a description of the date and time for any scoping meetings to be held before preparation of the Plan-EIS
- (3) The name and address of the agency's project contact

501.24 Public Participation

A. Public Participation

The STC will work with the SLO to ensure that any interested or affected individuals, groups, and local governmental agencies have opportunities to participate in development of the watershed project plan. The STC will also announce or have the SLO announce these opportunities to the general public through local newspapers and other media (Executive Orders 12372 and 10584). A public participation plan will be developed for each Watershed Project Plan in accordance with Title 400, General Manual (GM), Part 400.

B. Scoping

Scoping procedures during the early stages of plan development, described in P&G Chapter I, Section IV 1.4.8, will be followed in order to involve affected Federal, State, and local agencies and other interested groups or persons. Scoping must consider, but is not limited to, the following concerns:

- (1) National Economic Development (NED) P&G
- (2) Air quality
- (3) Coral reefs
- (4) Cultural resources
- (5) Ecologically critical areas
- (6) Endangered and threatened species
- (7) Environmental justice and civil rights
- (8) Essential fish habitat
- (9) Fish and wildlife (including coordination requirements)
- (10) Floodplain management
- (11) Forest resources
- (12) Invasive species
- (13) Land use
- (14) Migratory birds
- (15) Natural areas
- (16) Parklands
- (17) Prime and unique farmland, and farmland of statewide significance
- (18) Public health and safety
- (19) Regional water resource plans (including coastal zone plans)

- (20) Riparian areas
- (21) Scenic beauty
- (22) Scientific resources
- (23) Sole source aquifers
- (24) Social issues
- (25) Soil resources
- (26) Water quality
- (27) Water resources
- (28) Waters of the United States, including special aquatic sites
- (29) Wetlands
- (30) Wild and scenic rivers
- (31) Other concerns identified by SLO, agencies, and the public

501.25 Pre-NEPA Plans

A. Some plans approved before the passage of NEPA may include work that has not yet been installed and for which an EA and FONSI, or an EIS and ROD has not been filed.

Environmental evaluations will be conducted for all the remaining works of improvement to be installed on such projects. Either an EA and FONSI or an EIS and ROD, as appropriate, will be prepared for these projects. If the remaining works include only actions that have been categorically excluded, documentation of the environmental evaluation and applicability of the categorical exclusion and will be prepared.

B. If a pre-NEPA plan is revised, the EA or EIS and revised plan will be one document. The revised Plan-EA or Plan-EIS replaces the original pre-NEPA plan. If work is proposed to be conducted on any component of a pre-NEPA plan that is not revised, a new EA or EIS must be prepared.

501.26 Status

A. Designations of Watershed Project Plan-EA and Plan-EE

The status of a Watershed Project Plan Plan-EA will be identified as a Draft Plan-EA and Final Plan-EA at different stages. If an EA is the appropriate NEPA document for a supplemental plan, the plan will be identified as Draft and Final Supplemental Plan-EA. For projects that would not have any bearing on environmental effects, or where the actions are covered by categorical exclusions, plans will be identified as a Draft Plan-EE, Final Plan-EE, Draft Supplemental Plan-EE, or Final Supplemental Plan-EE. Working copies developed during the planning process for internal use and informal review by others must be clearly labeled as “Preliminary – Subject to Revision,” and dated.

B. Designations of Watershed Project Plan-EIS

The only recognized official status designations that are recognized are as follows:

- (1) Draft Plan-EIS (DEIS)—A Draft Plan-EIS becomes official when it is distributed for interagency review and made available to the general public for comment. Working copies developed during the planning process for internal use and informal review by others must be clearly labeled as “Preliminary – Subject to Revision” and dated.
- (2) Final Plan-EIS (FEIS)—A Final Plan-EIS is the result of the consideration and response to all comments received on the Draft Plan following the interagency review and public comment period.

- (3) Draft Supplemental Plan-EIS (DSEIS)—A draft supplemental plan is one for which a Plan-EIS was prepared for the original plan and a Plan-EIS is identified as the appropriate NEPA document for the supplemental plan. (For supplemental plans for which the original plan included an EA and the supplemental requires a Plan-EIS, the official designation will be “Draft Supplemental Plan-DEIS”). See item (1), “Draft Plan-EIS (DEIS),” above, for further information.
- (4) Final Supplemental Plan-EIS (FSEIS)—This document is the result of the consideration and response to all comments received on the draft supplemental plan following the interagency review and public comment period.

Part 501 – Development of Watershed Project Plans

Subpart D – Watershed Project Plan Content and Format

501.30 Project Plan Content

A. The Watershed Project Plan-EIS, Plan-EA, or Plan-EE documents the decisions made by the SLO and NRCS for providing the technical and financial assistance. The environmental document (Plan-EA or Plan-EIS) evaluates and assesses all reasonable alternatives and their impacts. The watershed project plan and the environmental documentation will be combined into a single document, titled the “Watershed Project Plan-EIS,” “Watershed Project Plan-EA,” or “Watershed Project Plan-EE.” The combined document will be referred to in this manual as the “Watershed Project Plan.”

B. Watershed Project Plans involving an EA or EIS must, in a consistent qualitative or quantitative method document all of the following:

- (1) Quantify social, cultural, economic, and environmental conditions
- (2) Describe all alternative solutions considered
- (3) Describe and assess the environmental impacts of all alternatives in comparative form
- (4) Describe the extent to which each alternative achieves the stated purpose and need
- (5) Set forth the arrangements and responsibilities for financing, installation, and operation and maintenance

501.31 Plan Format Outline

A. This subpart sets forth format and content required for Watershed Project Plans, watershed agreements, Watershed Project Plan environmental impact statements (Plan-EIS), and Watershed Project Plan environmental assessments (Plan-EA). This policy specifies information needed to comply with NEPA and treats all alternatives (including no-action and the preferred plan) in substantially similar detail. Modifications for plans whose actions are covered by categorical exclusions are noted in the table.

B. Table 501.1 provides the format outline that must be followed in all Watershed Project Plans. Items shown in bold are meant to be major headings within the plan document. All content listed under the major headings must be addressed in the plan. Narrative explanation for each of the major headings follows the outline. Examples can be found in the exhibits in Title 390, National Watershed Program Manual (NWPM), Part 506 and Title 390, National Watershed Program Handbook (NWPH), Part 606.

Table 501.1 Format for Watershed Project Plan-EA / Plan-EIS

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|---|
| <p>Cover [Content Requirements Defined at 40 CFR Part 1502.11]</p> <p>Abstract (Fly Sheet)</p> <p>Watershed Agreement [excluded from draft for external distribution]. See 390-NWPM, Part 506, Subpart C, Sections 506.30 and 506.31.</p> <p>Table of Contents</p> <p>Summary (OMB Fact Sheet)</p> <p>Purpose and Need for Action</p> <p>Scope of the EA/EIS [for projects covered by categorical exclusions (CEs) entitle section “Scope of the Plan”]</p> <p>Affected Environment</p> <p>Alternatives</p> <ul style="list-style-type: none">• Formulation process, including section addressing alternatives considered but eliminated from detailed study• Description of all reasonable alternatives including all of the following (and a discussion of mitigation measures as appropriate):<ul style="list-style-type: none">• No-action alternative• Agency preferred alternative• Other reasonable alternatives, including those not within NRCS authority• NED alternative or most cost-effective alternative• Summary and Comparison of Alternative Plans Table<ul style="list-style-type: none">• NED account• Relevant issues and concerns identified through scoping, including direct, indirect, and cumulative actions and impacts <p>Environmental Consequences [for projects covered by categorical exclusions (CEs) replace section with EE/CPA-52]</p> <ul style="list-style-type: none">• Effects of each alternative (include context and intensity) on the relevant issues and concerns identified through scoping:<ul style="list-style-type: none">• Direct, indirect, and cumulative impacts and an assessment of the significance of the impacts (beneficial and adverse)• Compliance with Federal, State, and local laws (including any permit requirements)• Possible conflicts with land use plans, regional water resource management plans, policies, and controls for the area• Risk and uncertainty• The relationship between short-term use and long-term productivity• Adverse effects that cannot be avoided• Precedent for future actions with significant impacts• Controversy |
|---|

- Irreversible or irretrievable commitments of resources
- Energy and natural or depletable resource requirements (conservation potential of various alternatives and mitigation measures)
- Urban quality, the design of the built environment

Consultation, Coordination, and Public Participation

The Preferred Alternative

- Rationale for alternative preference
- Measures to be installed
- Mitigation
- Permits and compliance
- Costs and cost sharing
- Installation and financing
- Operation, maintenance, and replacement
- Economic Tables
- Structural Tables

References

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- Appendix A — Comments and Responses
- Appendix B — Project Map
- Appendix C — Support Maps (as applicable)
- Appendix D — Investigation and Analysis Report
- Appendix E — Other Supporting Information

501.32 Abstract (Fly Sheet)

The abstract or fly sheet page may not exceed one page and must include the following: document status (Draft Plan-EA or DEIS; or Final Plan-EA; or FEIS, draft or final supplement), title of proposed action, location (State, county), lead and cooperating agencies, authority, abstract (1 paragraph), due date for comments, contact information, and nondiscrimination statement (see exhibit “Fly Sheet containing an Abstract—Example” in 390-NWPH, Part 606, Subpart B, Section 606.16).

501.33 Summary (OMB Fact Sheet)

The “Summary (Office of Management and Budget Fact Sheet)” section of the Watershed Project Plan is a brief version of the plan. Do not include anything that is not described in the body of the plan. The summary must be written to stand on its own if circulated without the rest of the document and must include the following: title of proposed action, location (State, county), congressional district, sponsors, authority, purpose and need for action, description

of the preferred alternative, resource information, alternative plans considered, project costs by purpose and funding source, project benefits, net economic benefits, period of analysis, project life, environmental impacts, major conclusions, areas of controversy and issues to be resolved (see exhibit “Summary (Office of Management and Budget Fact Sheet)” in 390-NWPH, Part 606, Subpart B, Section 606.17).

501.34 Purpose and Need for Action

The “Purpose and Need for Action” section of the watershed plan explains the underlying problems and opportunities and the goals to be achieved by NRCS and the SLO. This section begins with a clear and concise summary statement of the purpose and need for the proposed action. A discussion will then follow providing sufficient information to adequately demonstrate the underlying need and purpose for the proposed action.

501.35 Scope of the EA/EIS

A. The “Scope of the EA/EIS” section includes results documented in accordance with P&G and 40 CFR Section 1501.7. The Council on Environmental Quality (CEQ) defines scope as the range of actions, alternatives, and impacts to be considered in an EIS (40 CFR Section 1508.25). Scoping is used to identify the significant issues to be analyzed in detail and to eliminate from detailed study the issues that are not significant (40 CFR Section 1501.7). In defining the scope of issues to be addressed in the Plan-EA or Plan-EIS, detail and attention must be focused on connected and cumulative actions associated with the proposed action. For projects with actions entirely covered by categorical exclusions, this section will be entitled “Scope of the Plan” and document concerns associated with, and the issues to be addressed in the proposed plan.

B. The issues relevant in defining the problems and formulating and evaluating alternative solutions are to be identified. The scoping section must include a record of the issues considered. For issues not relevant to the action, the scoping section must address why those issues are not further evaluated. When a resource concern is found to be not relevant, and sufficient rationale is provided, the concern can be eliminated from further consideration. Documentation, such as letters of concurrence from regulatory agencies or citations of published technical papers, must be maintained as part of the administrative record and included in the appendix of the plan. (See exhibit “Resource Concerns for Scoping” in 390-NWPH, Part 606, Subpart B, Section 606.18 and “Summary of Scoping—Example” in section 606.19)

501.36 Affected Environment

The “Affected Environment” section describes the current physical, biological, ecological, economic, and social environment for the watershed and other areas of project impact. This provides the context for determining the effects of alternatives. Some conditions will be constant throughout the evaluated life of the project, while others will be subject to change because of social, economic, and political influences. The information must be adequate to forecast the conditions expected to exist in the future with and without the project.

501.37 Alternatives

A. General

The “Alternatives” section describes the rationale of plan formulation from the development and comparison of alternatives to the identification of the preferred alternative. The P&G and NEPA require all reasonable alternatives to be developed and analyzed

B. Formulation Process

The formulation process is the basis for selecting combinations of measures to include as alternatives. In the formulation of alternative plans, include only increments that provide combined beneficial effects outweighing combined adverse effects.

C. Alternatives Eliminated From Detailed Study

Any alternative that does not meet the stated purpose and need for action does not need to be considered in detail. Alternatives that meet the need for action but do not achieve the purposes may be eliminated from detailed study. “[F]or alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated” (40 CFR Section 1502.14(a)). Alternatives that may appear reasonable but clearly become unreasonable because of cost, logistics, existing technology, or environmental reasons must be included in this section and the reasons for elimination discussed.

D. Alternatives Description

(1) The alternatives to be studied must be described and compared in substantial and equal detail. Each alternative plan, including any mitigation, must be clearly described regarding its components, their functions, and costs. The future-without-project (FWOP) conditions or no-action alternative is required in all plans. Reasonable alternatives outside the jurisdiction of NRCS must also be developed.

(2) Where applicable, a description of the hazard potential of each alternative must be included, such as an explanation of the rationale for dam classification and the risk of dam failure from overtopping or from other causes is to be addressed and evaluated. Any damages and flood hazards expected after the project is installed must be described.

E. Summary and Comparison of Alternative Plans Table

In addition to the comparison made in the text, alternatives will also be displayed in the “Summary and Comparison of Alternative Plans” table in order to help the reader discern the relative merits and disadvantages of competing alternatives (see exhibit “Summary and Comparison of Alternative Plans” in 390-NWPH, Part 606, Subpart B, Section 606.21). The FWOP or no-action alternative must be included to allow a complete comparison. The alternative plans must be summarized in comparative form, in substantially equal detail. The table must include major items used in the decisionmaking process. Those concerns determined to be relevant from the “Summary of Scoping—Example” (see exhibit in 390-NWPH, Part 606, Subpart B, Section 606.19) must be included. Significant differences between the alternative plans must be shown and discussed in the text of this section. Estimated installation costs, O&M costs, cost sharing, and the NED account information must also be included in this section of the text.

501.38 Environmental Consequences

A. The intent of the “Environmental Consequences section is to provide the analytical basis for the comparisons of effects presented in the alternatives (for projects covered by categorical exclusions this section will be replaced with the EE/CPA-52). This section must describe the economic, environmental, and social effects of each alternative.

- (1) Discuss the significance of all effects and disclose the measures to reduce or eliminate adverse impacts in the Plan-EA or Plan-EIS. The results of the scoping process must be used to determine which factors should be addressed and in how much detail (40 CFR Section 1501.7). The type and kind of information depend on the location, type, scope, and complexity of the planned action. All alternatives including the FWOP alternative must be treated and discussed in substantially equal detail.
- (2) The description of impacts (context and intensity) must be by resource or environmental concern. All relevant concerns must be addressed. All direct, indirect (connected actions), and cumulative effects are to be addressed for each alternative in this section. Guidance on cumulative effects analysis is available at the following website: <http://www.nepa.gov/nepa/ccenepa/ccenepa.htm>.

B. Information identifying any approved regional plans for water resource management in the study area (40 CFR Section 1506.2(d)) and a statement as to whether the proposed project is consistent with such plans (7 CFR Section 650.11(b)(3)(iii)) must also be discussed in this section.

501.39 Consultation, Coordination, and Public Participation

In this section, the opportunities provided for public participation throughout the process are documented, from the initial request for NRCS assistance to preparation of the final plan. The section also summarizes the consultation and coordination with other agencies.

- (1) The section must include the date, type, and purpose of the activity, as well as the names of participating organizations and the public.
- (2) Special note must be made of the required consultation with the State Historic Preservation Officer and nation-to-nation consultation with appropriate federally recognized Tribal governments regarding cultural resources and sacred and cultural sites and with Tribal governments regarding other resource and economic concerns, and coordination with the Fish and Wildlife Service and the National Marine Fisheries Service regarding endangered and threatened species.
- (3) Coordination and discussion on the permitting process with the U.S. Army Corps of Engineers must be included as well.

501.40 The Preferred Alternative

A. In this section, the preferred alternative is described along with the rationale for the preference. If the NED plan is selected, the rationale must be provided to support that the primary objective of maximizing net economic benefits is being achieved. Key factors that influenced the decision on the preferred alternative must be described. If the NED plan is not selected, the status of the exception to the NED plan requirement must be documented.

B. This section describes the measures to be installed including the mitigation features, permits and compliance requirements, costs, installation sequence and responsibilities, and financing of the project. Operation, maintenance, and replacement responsibilities are described.

C. Economic and structural tables must be included for the preferred alternative. Economic tables must include information relevant to the costs and benefits of the project plan. Structural tables must include information relevant to the design of the measure. The economic and structural tables (“Tables 1-6”) are found in the exhibits in 390-NWPM, Part 506, Subpart B.

501.41 References

This section provides the sources of the information contained in the document. If supporting data are incorporated by reference, then the material being referenced must be briefly summarized for the reader to understand the context of the material being incorporated. This section also includes information on how the reader can arrange to obtain and review the material being referenced. Material based on proprietary data that are not available for review may not be incorporated by reference (40 CFR Section 1502.21).

501.42 List of Preparers

The list of preparers includes the key NRCS State, area, and field office personnel who were directly responsible for significant input in preparing the Watershed Project Plan. Consultants, individuals, and personnel from other agencies are included if they made significant input. The list must include the person's name, current title, education, experience, employer, and other pertinent qualifications, publications, and professional licenses (see exhibit "List of Preparers—Example" in 390-NWPH, Part 606, Subpart B, Section 606.22).

501.43 Distribution List

This is a listing of the agencies, organizations, and persons to whom the Watershed Project Plan-EA or Plan-EIS is sent.

501.44 Index

This section lists key words, phrases, or subheadings along with appropriate page numbers. Examples of entries include alternatives, archeological resources, installation costs, land treatment, mitigation, National Economic Development Plan, operation, maintenance, replacement, plan elements, sedimentation, and water quality. If other agencies or organizations are mentioned in the document, they must be included in the index.

501.45 Appendices

Appendix A, "Comments and Responses"

This appendix contains the letters and oral comments received on the draft and final plan, as well as responses to all comments in both the draft and final plans. However, on the draft plan, the following must be added: "To be included in final environmental impact statement or assessment."

Appendix B, "Project Map"

A color project map must be prepared to show the location of important project measures and the location and extent of important watershed conditions that will be affected by the works of improvement to be installed. The map must show the location and kind of measures, watershed areas above structures that have floodwater retarding capacity, and benefited areas.

Appendix C, "Support Maps" (as appropriate)

This appendix contains support maps for the watershed project plan. It includes urban floodplain maps that minimally display the 100-year and 500-year frequency flood limits

and depth, breach impact areas, recreation development maps and other informational maps.

Appendix D, “Investigations and Analyses Report”

The purpose of the Investigations and Analyses Report is to present information that supports the formulation, evaluation, and conclusions of the watershed plan. The report is required for all plans and must be included as an appendix. The report is organized under appropriate headings, such as project formulation, cost allocation, engineering, biology, hydrology, geology, land use, water quality, economics, or cultural resources. The procedures, techniques, assumptions, and the scope and intensity of the investigations for each subject must be described in sufficient detail so that a reader not familiar with the watershed or its problems can form an opinion on the adequacy of the plan. This report supplements information contained in the plan; it does not replace or duplicate such information.

Appendix E, “Other Supporting Information”

This section, rather than the body of the document, is used if tabular or other supporting data are needed to make a point. If material incorporated by reference needs further explanation, this section can expand on the discussion provided in the main body of the plan’s text.

Part 502 – Reviews and Approvals

Subpart A – Approval for NED Exceptions

502.0 Exceptions to the NED Plan Requirement

For water resource plans, a plan recommending Federal action must be the alternative plan that reasonably maximizes net economic benefits consistent with protecting the nation’s environment, unless an exception is granted. Exceptions to the National Economic Development (NED) plan can only be granted by the Chief. Exceptions will be considered based on other Federal, State, local or international concerns not fully addressed by the NED plan. An exception is not required for non-water-resource plans that meet the requirements of Title 390, National Watershed Program Manual (NWPM), Part 501, Subpart B, Section 501.11B(1) (of this manual).

502.1 Timing and Documentation

The State Conservationist (STC) must request an exception to the NED plan through the Deputy Chief for Programs at the earliest possible stage in the development of the Watershed Project Plan. Exceptions must be supported by sufficient documentation, as set forth in principle 6 of Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G). The request for an exception will be forwarded to the Chief, subject to review by the Programs and coordination with the Science and Technology deputy chief area, as necessary.

502.2 Watershed Rehabilitation Projects

The following only applies to the Watershed Rehabilitation Program: In cases where human life is at risk in the event of catastrophic failure of an existing dam that does not meet

current safety and performance standards, an overriding reason for an exception to the NED plan requirement exists.

- (1) To avoid seeking individual exceptions in such cases, the NED plan is defined as the **federally** assisted alternative with the greatest net economic benefits. Thus, for rehabilitation projects, the no-action alternative may not be identified as the NED alternative, but will continue to be included to allow a valid comparison of the reasonable alternatives.
- (2) Rehabilitation alternatives, required by legislation and policy to be evaluated, include: no action; decommissioning; rehabilitation; and, where applicable, relocation of at-risk dwellings, as well as additional alternatives, as appropriate.
- (3) If all reasonable alternatives result in the same benefits, use a least-cost analysis to evaluate alternatives and select the NED plan. If benefits of all alternatives are not the same, a benefit-cost analysis will be completed for all reasonable alternatives. A project-specific exception would be required if the policy-identified NED plan is not selected.

502.3 NED and Projects Requiring Congressional Approval

For projects that require congressional approval, the decision regarding an exception will be finalized before a Watershed Project Plan is forwarded for additional review to the U.S. Department of Agriculture (USDA) and the Office of Management and Budget (OMB).

Part 502 – Reviews and Approvals

Subpart B – Technical and Policy Reviews

502.10 Plan Review

A. This subpart describes required procedures for technical and policy reviews of Watershed Project Plans. All Watershed Project Plan-EA and Plan-EISs must have technical and policy reviews.

- (1) The STC is responsible for public and interagency participation throughout the project planning process, including scoping, public meetings, and required consultations.
- (2) An interdisciplinary State-level technical review is conducted by NRCS State staff.
- (3) National-level technical review is conducted by the National Water Management Center (NWMC).
- (4) Public and interagency review is conducted consistent with procedures in Title 390, National Watershed Program Manual (NWPM), Part 502, Subpart C.
- (5) Programmatic review is conducted by the appropriate national program manager: the National Watershed Surveys and Planning (WSP) Program manager for watershed project plans, the Watershed Operations Program manager for watershed plan modifications (both revisions and supplements), and the Watershed Rehabilitation Program manager for rehabilitation plans.

B. The STC must ensure that the technical and policy reviews of the plan have met the following criteria:

- (1) Appropriate interdisciplinary planning and evaluation procedures have been followed, and a plan has been formulated that addresses the concerns of the sponsoring local organizations (SLO) and the mission of NRCS with consideration of economic, environmental, and social impacts.
- (2) All surveys, investigations, consultation requirements, and analyses are coordinated and run concurrently with the development of the Plan-EA or Plan-EIS and are made in sufficient scope and intensity to support the project.
- (3) Public and interagency participation are sufficient and properly planned, discussed and documented in the plan.
- (4) The plan clearly and correctly reflects watershed conditions and problems, with and without the project.
- (5) The kind, nature, and estimated cost of measures to be installed including mitigation, are properly determined, displayed, and documented in the Plan-EA or Plan-EIS.
- (6) The anticipated effects on the environment and on solving the problems, including the evaluation of benefits and impacts, have been determined and exhibited, and mitigation has been provided as appropriate.
- (7) The manner of financing, installing, operating, and maintaining the project has been determined and discussed.
- (8) The project, as formulated, meets the requirements of Public Law 83-566, NRCS policy, congressional criteria, Executive orders, the National Environmental Policy Act (NEPA), P&G (as applicable), and other applicable laws and regulations.
- (9) The plan conforms to established standards and NRCS requirements for technical quality.
- (10) Requirements for permits, consultation and mitigation have been considered, evaluated and discussed in the development and evaluation of plan alternatives.
- (11) The plan content and format conforms to the requirements of 390-NWPM, Part 501, Subpart D.

502.11 NRCS Reviews

A. State Staff Review

An internal interdisciplinary review of plans must be conducted by appropriate NRCS State staff to ensure that the problems identified, alternatives considered, preferred alternative, and effects are adequately described, and the plan has been developed in accordance with national policy.

B. National Water Management Center Review

- (1) The STC must submit an unsigned draft watershed plan to the NWMC director, prior to interagency review circulation. Do not submit the draft plan for review until after undertaking any applicable public scoping meetings to ensure that the plan addresses and focuses on issues of concern to the public and other agencies and that it does not prejudice the evaluation or selection of any alternative.
- (2) NWMC will conduct a thorough review and provide assistance on the unsigned draft watershed plan in conjunction with the STC to determine whether the draft plan follows the planning process, provides the rationale for plan selection, and conforms to NRCS policy and watershed planning standards including NEPA.
- (3) NWMC will prepare written comments on the unsigned draft watershed plan and provide these to the STC and appropriate national program manager. Comments will include appropriate recommendations for resolving deficiencies.

(4) The STC will document the disposition for each NWMC comment, indicating the passages in the rewritten public review draft Plan-EA or Plan-EIS in which the comment was addressed.

(5) A copy of the final Plan-EA or Plan-EIS and comment disposition documentation must be provided to the NWMC director and the appropriate national program manager.

C. Programmatic Review

(1) After the National Water Management Center, public, and interagency review comments have been addressed, the NRCS national program managers must conduct a final review for programmatic compliance.

(a) The national program manager for the National Watershed Surveys and Planning (WSP) Program will conduct the final review of all Watershed Project Plans for programmatic compliance. The Watershed Project Plan must contain all required sections with sufficient detail as described in 390-NWPM, Part 501, Subpart D, “Watershed Project Plan Content and Format.”

(b) The national program manager for the National Watershed Operations Program will review all watershed operations modifications (Revisions and Supplemental Watershed Plans) for programmatic compliance.

(c) The national program manager for the National Watershed Rehabilitation Program will review all Watershed Rehabilitation Plans for programmatic compliance.

(2) The Watershed Project Plan is complete when approved by the STC ensuring technical and policy adherence and reviewed by the WSP program manager for programmatic compliance.

Part 502 – Reviews and Approvals

Subpart C – Public and Interagency Review

502.20 Inviting Comments

After preparing a draft Watershed Project Plan-EA or Plan-EIS, including the recommendation of the NWMC review, and before preparing a final Watershed Project Plan-EA or Plan-EIS, the SLO and NRCS must solicit public and interagency review comments from all of the following:

- (1) Any Federal agency that has jurisdiction by law or special expertise with respect to any environmental impact involved or that is authorized to develop and enforce environmental standards
- (2) The Governor or agencies designated by the Governor to review Watershed Project Plans
- (3) Appropriate State and local agencies that are authorized to develop and enforce environmental standards
- (4) Indian Tribes, when the effects may be on a reservation or lands of interest to a Tribe
- (5) Any agency that has requested that it receive statements on actions of the kind proposed
- (6) The U.S. Department of Interior
- (7) Persons or organizations that may be interested or affected

502.21 NEPA Requirements

- A. For a Plan-EA, the public must be involved in the development of the Plan-EA.
- (1) The public must be informed of the availability of the draft Plan-EA by utilizing the appropriate local and State media.
 - (2) All planning efforts by NRCS and the sponsors must include well publicized public meetings to obtain public input and views on the project (7 CFR Section 622.30(c)). A public informational meeting must be held during or immediately before the review period to review the Plan-EA.
 - (3) The FONSI must be distributed to potentially affected stakeholders, as appropriate.
 - (4) For projects where the proposed action is covered by a categorical exclusion, the public will be involved in the development of the plan to the extent the STC deems appropriate. No waiting periods are required for plans covered by a categorical exclusion for purposes of NEPA. The STC will require a waiting period if it is determined it would be appropriate or helpful for planning or public involvement purposes.
 - (5) The U.S. Fish and Wildlife Service must be consulted in the preparation of all plans (Public Law 83-566 Section 12(1)).
- B. If the public has been involved in development of the project or the environmental assessment, the agency may take administrative action after issuing of the FONSI and publishing of the notice of availability in appropriate local and State media. In these cases, there is no formal requirement for a waiting period after preparation of the FONSI. However, a 30-day public review period of the EA and FONSI is required in any of the following situations:
- (1) When the proposed action would normally require a Plan-EIS
 - (2) When the proposed action is without precedent
 - (3) When the proposed action may involve new construction in a wetland where early public review is not afforded (Executive Order 11990)
 - (4) When the proposed action is proposed, conducted, supported, or allowed to be located in a floodplain (Executive Order 11988)
- C. For a Plan-EIS, the public review and administrative decision-making waiting periods must be in accordance with NEPA (40 CFR Section 1506.10).
- (1) The following minimum public review comment periods are required:
 - For a Draft Plan-EIS: Forty-five (45) day public review period
 - For a Final Plan-EIS: Thirty (30) day public review period
 - (2) In addition to these public review timeframes, no decision or preparation of the Record of Decision on the proposed action may be made or recorded by a Federal agency until the later of the following dates:
 - For a Draft Plan-EIS: Ninety (90) days after publication of the notice
 - For a Final Plan-EIS: Thirty (30) days after publication of the notice
- D. To following additional requirements apply to a Plan-EIS:
- (1) The STC must provide five hard copies to the Environmental Protection Agency (EPA) Office of Federal Activities and three hardcopies to the regional EPA environmental review office.
 - (2) EPA must publish notices of availability of the Draft Plan-EIS in the Federal Register.

- (3) The 45-day comment period for the Draft Plan-EIS begins on the date that EPA publishes the notice of availability in the Federal Register.
- (4) The 30-day comment period for the Final Plan-EIS begins on the date that EPA publishes the notice of availability in the Federal Register.

502.22 Consideration of Review Comments

A. The SLO and NRCS must fully address all substantive comments received during the comment period. Comments must be incorporated into the Final Plan-EA or the Final Plan-EIS, where possible. For a Plan-EA or Plan-EIS, all substantive comments and responses to the comments must be included in an appendix of the final plan.

B. For a Plan-EIS, comments received from EPA will be accompanied by a rating. EPA reviews the Plan-EIS using an alphanumeric rating system, in which it assigns a numeric rating on the adequacy of the document and an alphabetical rating on the environmental impact of the project.

- (1) Comments will be addressed on the Draft Plan-EIS in either a revised Draft Plan or in the Final Plan-EIS if the document receives any of the following ratings from EPA: EC (Environmental Concerns), EO (Environmental Objections), EU (Environmentally Unsatisfactory), Category 2 (Insufficient Information), or Category 3 (Inadequate), and substantive comments are attached.
- (2) EPA will review the Final Plan-EIS to determine whether its comments on the Draft Plan-EIS were addressed. As outlined in EPA policy, EPA does not provide a rating on the Final Plan-EIS; it simply reviews the final document to determine whether EPA's comments were addressed in the Final Plan-EIS.

502.23 Making the Decision

A. In the Case of a Watershed Project Plan-EA

(1) After verifying through documentation in the EA that a Plan-EIS will not be required, the STC must prepare and sign a FONSI and publish a notice of its availability in a local newspaper or, if the action has national significance, publish it in the Federal Register. The watershed agreement in the Plan-EA must then be signed, first by the SLO and then by the STC. NRCS can take action upon preparation and signature of the FONSI unless a 30-day waiting period is required (see Title 390, National Watershed Program Manual (NWPM), Part 502, Subpart C, Section 502.21).

(2) The STC must transmit a manually signed copy to each SLO and inform each SLO that a request for funding authorization will be submitted to the Chief.

B. In the Case of a Watershed Project Plan-EIS

(1) The STC must provide five hardcopies of the Final Plan-EIS to the EPA headquarters Office of Federal Activities and three hardcopies to the regional EPA environmental review office. At the same time, the STC must provide copies to the SLO, the Forest Service; other participating agencies; the U.S. Department of the Interior; and each agency, group, or individual who provided substantive comments on the draft. EPA will publish a notice of availability of the Final Plan-EIS in the Federal Register. The date that EPA publishes the notice of availability is when the 30-day public review period of the Final Plan-EIS begins.

(2) The next step is for the SLO and STC to decide whether to implement the proposed plan. The STC’s decision cannot be made sooner than 90 days after the Federal Register publication of the notice of availability of the Draft Plan-EIS or 30 days after the Federal Register publication of the notice of availability of the Final Plan-EIS (CEQ Regulation 40 CFR 1506.10). Thereafter, the STC must prepare and sign a Record of Decision (ROD), and the SLO and STC must sign the watershed agreement in the Final Plan-EIS.

(3) The STC must send a copy of the ROD to all who provided comments on the Draft and Final Plan-EIS. The STC will also send a notice of availability of the ROD to the Federal Register. Any substantive comments received on the Final Plan-EIS may be addressed in the ROD. The notice of availability must clearly indicate what the decision is, such as, “Notification that a Record of Decision to proceed with the installation of the Elm Creek Watershed Project is available.”

(4) The STC will notify the SLO that the plan has been approved by transmitting a manually signed copy to each sponsor.

Part 502 – Reviews and Approvals

Subpart D – Fund Authorization

502.30 Approval Authorities for Watershed Project Plans

Watershed Project Plans are complete when approved by the STC, ensuring technical and policy adherence, and then reviewed for programmatic compliance. The completed Final Plan-EA or Plan-EIS is then sent with a letter requesting fund authorization to the Chief. Funding is authorized by the Chief after a plan has been approved. In some cases, the plan must be approved by the appropriate committees of Congress before the Chief can authorize funding. Plans that do not require congressional committee approval are referred to as administratively approved plans. Table 502.1 summarizes approval authorities for new Watershed Project Plans.

Table 502.1 Watershed Project Plan Approval Authorities

| Public Law 83-566 Construction Cost | Total Capacity of Any Single Structure | Approval Required |
|--|--|--|
| Less than \$5 million | Less than 2,500 acre feet | Plan approval – State Conservationist Funding authorization – Chief |
| \$5 million or more | More than 2,500 acre feet and Less than 4,000 acre feet | Plan approval – State Conservationist Funding authorization – Chief, subject to prior approval by the Senate Committee on Agriculture, Nutrition, and Forestry, and the House of Representatives Committee on Agriculture |

| | | |
|------------|---------------------------|--|
| Any amount | More than 4,000 acre feet | Plan approval – State Conservationist Funding authorization – Chief, subject to prior approval by the Committee on Environment and Public Works of the Senate, and the Committee on Transportation and Infrastructure of the House of Representatives |
|------------|---------------------------|--|

502.31 Plans That Can Be Approved Administratively

- A. The STC must request funding authorization from the Chief by submitting a signed original of the Watershed Project Plan and a letter requesting funding authorization of the Watershed Project Plan. The letter will include the names and addresses of the Senators and Representative of the watershed project area, the congressional District number, and hydrologic unit number.
- B. All of the following must be provided to the program manager:
 - (1) Four hardcopies (with the OMB Fact Sheets) of the final Watershed Project Plan
 - (2) Finding of No Significant Impact (EA and FONSI) or Record of Decision (EIS and ROD)
 - (3) An electronic copy of the Watershed Project Plan
 - (4) NWMC (peer review) comments and disposition of each comment
- C. The STC must also submit one copy of the approved plan, including disposition of peer review comments, to the NWMC director.
- D. The national program manager of the Watershed Surveys and Planning Program will conduct the final programmatic review and prepare a letter for the NRCS Chief’s signature for plan authorization. Plan authorization by the Chief for each Watershed Project Plan is required before any funds may be utilized for implementation.

502.32 Plans That Require Congressional Approval

A. State NRCS Responsibilities

- (1) The STC must submit a manually signed original of the Watershed Project Plan-EA or Plan-EIS to the Chief of NRCS with a transmittal letter requesting funding authorization. The letter must include the names and addresses of the Senators and Representative of the watershed project area, congressional district number, and hydrologic unit number. The letter must include any approved requests for exception to the NED plan (see Title 390, National Watershed Program Manual (NWPM), Part 502, Subpart A, Sections 502.0 and 502.1) and supporting documentation.
- (2) The STC must also send four hardcopies of the final plan and the NWMC review comments and the disposition of those comments to the program manager. The STC must be prepared to submit up to 30 additional hardcopies (with the OMB Fact Sheet) upon request from the Conservation Planning and Technical Assistance Division (CPTAD), for the use of the congressional committees. The STC must also provide one copy of the plan to the director of the National Water Management Center.
- (3) After the STC receives notification from the Chief of project approval by congressional committees, the STC must notify the State agency having supervisory

responsibility over programs provided for by Public Law 83-566 or to the Governor if there is no State agency having such responsibility. Notifications must also be provided, as appropriate, to area (or regional) and field offices of the Forest Service, the Farm Services Agency (FSA), and appropriate local offices of Federal and State agencies.

B. National Headquarters Responsibilities

- (1) The national program manager of the Watershed Surveys and Planning (WSP) Program will conduct the final programmatic review of the Watershed Project Plan.
- (2) The WSP program manager will prepare correspondence to transmit the plan from the Chief to the Secretary of Agriculture and subsequently to OMB.
- (3) After concurrence by OMB, the WSP program manager will prepare correspondence to transmit the plan and fact sheet from the Chief to the appropriate Senate and House congressional committees.
- (4) After project approval by congressional committees, the Chief will provide notification to the following: applicable Senators and Representatives (with copies of the plan), STCs, Regional Assistant Chiefs, OMB, the Secretary of the Interior, the U.S. Army Corps of Engineers, EPA, the Office of the General Counsel, the Forest Service, USDA Rural Development, the Farm Service Agency, and NRCS Administrative Services Division.
- (5) If Congress does not approve the Watershed Project Plan, the Chief will inform the STC of the reasons and what needs to be done to make the document acceptable.

502.33 Notification of Public Law 83-566 Funding Authorization

A. National Headquarters Responsibilities

The WSP national program manager will conduct a final programmatic review and prepare the letter for the NRCS Chief's signature. The Chief will provide a letter to the STC authorizing the watershed project for Public Law 83-566 funding, with copies to the Office of Management and Budget, Office of the General Counsel, the Forest Service, the Farm Services Agency, USDA Rural Development, and NRCS Administrative Services Division. The Chief will notify congressional delegations of watershed project authorization with a copy to the STC.

B. State NRCS Responsibilities

Upon receiving funding authorization from the Chief, the STC will notify the SLO; the State agency having supervisory responsibility over programs provided for by Public Law 83-566 or the Governor if there is no State agency having such responsibility; and regional, area and local offices of appropriate Federal and State agencies. If the STC determines that it is appropriate, a press release may be issued.

502.34 Approval of Public Law 78-534 Projects

Review and approval for these plans will be carried out in the same manner as for administratively approved Public Law 83-566 watershed projects except when financial or credit assistance for purposes other than flood damage reduction is proposed. In such cases, the Chief will transmit one copy of the plan to the Office of Management and Budget and the STC will not sign the plan until authorized to do so by the Chief.

Part 502 – Reviews and Approvals

Subpart E – Special Designated Areas

502.40 Introduction

Policies contained in subpart E apply in specific areas where special commissions have been established with statutory authority to coordinate resource planning and development activities.

502.41 Appalachia

The STC will transmit the draft plan to the Appalachian Regional Commission with a request for review and comment in accordance with interagency review procedure. The relevant STC will accomplish all of the following:

- (1) Invite the Office of Appalachian Studies and the U.S. Army Corps of Engineers, Cincinnati, OH, to participate in the local review of each Watershed Project Plan.
- (2) Send the Office of Appalachian Studies three information copies of the draft plan at the same time that copies are distributed for interagency review. The Office of Appalachian Studies will be requested to submit any comments it might have through the Office of the Chief of Engineers or the district engineer, as appropriate.
- (3) Furnish the Governor with an additional copy of the draft plan for the State member of the Water Development Coordinating Committee for Appalachia.

502.42 Delaware River Basin

The procedures for the coordination and review of Watershed Project Plans in the Delaware River Basin are set forth in an Administrative Agreement executed between the Delaware River Basin Commission and the Soil Conservation Service, December 23, 1966 (Title 390, National Watershed Program Handbook (NWPH), Part 606, Subpart C, Section 606.42). The address of the Commission is 25 State Police Drive, P.O. Box 7360, West Trenton, New Jersey 08628. The telephone number is: (609) 883-9500.

502.43 Susquehanna River Basin

Watersheds located within the Susquehanna River Basin will follow the additional regulations and procedures for review as contained in 18 CFR Section 803.

502.44 Tennessee Valley Authority

Procedures for coordinating activities with the Tennessee Valley Authority (TVA) are contained in a memorandum of understanding executed between the TVA and NRCS dated November 6, 1958 (390-NWPH, Part 606, Subpart C, Section 606.43).

Part 503 – Watershed Project Plan Modifications

Subpart A – Preparation of Revised and Supplemental Plans

503.0 Introduction

- A. The watershed agreement and Watershed Project Plan are the official documents for carrying out a watershed project. Whenever the terms, conditions, and stipulations of a Watershed Project Plan must be modified, approval of such changes will be made and documented with a revised or supplemental watershed plan, by an exchange of correspondence with the sponsoring local organizations (SLOs), or by executing a project agreement.
- B. Where forestry is involved, regional foresters and the area director of the Forest Service must be notified and given the same opportunity to review the modification as was given for the original plan.
- C. State-developed procedures for coordination of proposed Federal financial assistance will be followed when a Revised Watershed Project Plan or a Supplemental Watershed Project Plan is prepared that includes the addition of any structural measure or deletion of any multiple-purpose structure. The public must be kept informed of any major changes in the plan and invited to participate in supplemental planning actions and any supplemental Plan-EA or Plan-EIS that is prepared.
- D. Preparation, review, and approval of revised and supplemental Public Law 78-534 project plans are the same as those for administratively approved Public Law 83-566 project plans.

503.1 Revised Watershed Project Plan

- A. A Revised Watershed Project Plan is required if new problems that require Federal assistance are identified or there are numerous complex changes in the planned measures.
- B. A Revised Watershed Project Plan replaces the existing plan when the original plan no longer represents the original resource conditions, planned objectives or measures, or both. The revised plan must include all information needed to install a watershed project without reference to the original plan or previous supplemental plans. The revision includes information from the prior plans and supplements that relate to environmental information, environmental effects, cumulative effects, agreements, responsibilities, and obligations including those related to the operation and maintenance of installed works of improvement.
- C. A Revised Watershed Project Plan follows the same format and content as that of a new plan (see Title 390, National Watershed Program Manual (NWPM), Part 501, and Title 390, National Watershed Program Handbook (NWPH), Part 601). A revised plan will require preparation of either a Plan-EA or a Plan-EIS.
- D. All Revised Watershed Plan EAs and EISs must be formulated and evaluated using current procedures and the current discount rate for Federal water resources planning.
- E. Revised watershed agreements must be used with all Revised Watershed Project Plans and placed at the front of the document behind the table of contents. Because the agreement is a revision, a special opening section is needed (see exhibits in 390-NWPH, Part 606, Subpart 606 D, Section 606.52). However, after the introductory paragraphs, the remaining items are used as in the exhibit in 390-NWPM, Part 506, Subpart C, Section 506.30.

503.2 Supplemental Watershed Project Plan

A. A Supplemental Watershed Project Plan is a document that changes the purpose, scope, or a major feature of an existing plan. The conditions requiring modification by a Supplemental Watershed Project Plan include changes in project purposes, scope, major features or SLO responsibilities not significant enough to warrant a Revised Watershed Project Plan. The amount of detail included in a supplemental plan depends on the nature and extent of the modifications and their effect on the overall project.

B. Conditions requiring modifications by a Supplemental Watershed Project Plan include:

- (1) Change in Purpose—Defined as the addition or deletion of one or more purposes from an approved watershed project plan.
- (2) Change in Scope—Defined as a planned increase or decrease in the degree or extent of project development.
- (3) Change in Major Features—Defined as either of the following:
 - Achieving agreed-upon objectives through changed methods without changes in purpose or scope
 - Adding provisions for Watershed Program credit assistance

C. Modifications or changes to the proposed action that have a bearing on environmental effects require that a Plan-EA or supplemental Plan-EIS be prepared. Supplemental plans involving actions not affecting the environment or covered by a categorical exclusion are not required to include an EA or EIS; these may include such actions as deleting a proposed project measure or dropping a purpose. For these actions, an environmental evaluation (EE) is conducted and the EE/CPA-52 is included in the plan to document that an EA or EIS is not required.

D. Supplemental Watershed Project Plans must be prepared according to 390-NWPM, Part 501 and 390-NWPH, Part 601. The complexity of the proposed action for which the plan is being supplemented and its effects (not the type of environmental document used for the original plan) determine whether or not the supplement contains or is accompanied by a new or supplemental EIS or new EA.

E. Modifications by a Supplemental Watershed Plan to an authorized watershed project plan that increases the Public Law 83-566 cost by 20 percent or adds a cost sharing purpose will be evaluated using current procedures. Procedures used to evaluate the approved watershed project plan must be used for all other Supplemental Watershed Plans.

- (1) All works of improvement in evaluation units significantly affected by the proposed modification must be evaluated using the current discount rate for Federal water resources planning.
- (2) For works of improvement not significantly impacted by proposed changes, the discount rate used during plan formulation must be used for both installed works and works yet to be installed.

F. For supplemental watershed plans that require preparation of a new or supplemental EIS, the works of improvement yet to be installed must be evaluated along with the portions already installed using both original and current discount rates, and must be displayed in the Supplemental Watershed Plan-EIS.

G. Supplemental plans will begin with a section entitled “Changes Requiring Preparation of a Supplement,” that describes why the plan is being supplemented and what changes are being made.

H. A Supplemental Watershed Project Plan, or the EA or EIS if it is a separate document (pre-NEPA), must contain the same content as required by 390-NWPM, Part 501, Subpart D. However, the supplemental plan must summarize or incorporate by reference the general discussions (such as descriptions of the affected environment that have not changed since the original plan) and focus solely on the issues specific to the action at hand. The EA or EIS must contain adequate information to stand on its own and allow the public to be able to understand the full nature of the proposed action and its effects.

I. Supplemental Watershed Project Plans dealing with rehabilitation must contain or be accompanied by a new or supplemental EIS or a new EA, unless the proposed action falls into a class of actions that has been categorically excluded. When a categorical exclusion(s) applies to the proposed action an EA or EIS is not required. In this case, the plan will include the environmental evaluation (EE/CPA-52) in lieu of the “Environmental Consequences” section of the plan. The environmental document (whether an EA or EIS) is based on the proposed action and its effects and not on the type of environmental document used for the original plan.

J. Supplemental watershed agreements must be used with all Supplemental Watershed Project Plans and placed at the front of the document behind the table of contents. The agreement must specify the nature of the modification, give the provisions of the original agreement (as supplemented, if appropriate) that are being modified by the new agreement, make changes resulting from new laws or policy, and specify those provisions in the original agreement that are not changed by the new agreement. The exhibit in 390-NWPH, Part 606, Subpart D, Section 606.51, is an example of a supplemental watershed agreement.

503.3 Exchange of Correspondence

A. An exchange of correspondence consists of a request from the SLO for a modification of the watershed agreement and plan and NRCS approval of the request.

B. Agreement to changes in the terms, conditions, and stipulations of the approved plan that do not require a revised or supplemental watershed project plan may be documented by an exchange of correspondence. If there are no changes in environmental effects or significant changes in information on the project, then a supplemental Plan-EA or Plan-EIS is not required. An EE will be conducted and included in the administrative record to document an EA or Plan-EIS is not required for the modifications. Examples of changes that do not require a new EA or EIS include the following:

- (1) Changes in the works of improvement that do not involve a change in purpose, scope, environmental effects already analyzed in the original Plan-EA or Plan-EIS, or major features.
- (2) Changes in sponsors that do not involve changes in the responsibilities of any SLO.
- (3) Change in SLO responsibilities—the transfer of an SLO or changes in its responsibilities.
- (4) Changes in the cost sharing arrangements set forth in the watershed agreement.
- (5) A change from local to Federal contracting or Federal to local contracting

C. Any time an exchange of correspondence is executed one copy must be sent to the director of the Conservation Planning and Technical Assistance Division.

503.4 Project Agreement

- A. A project agreement is an agreement executed to obligate funds for the construction of works of improvement.
- B. A project agreement can provide adequate documentation for changes in cost that do not modify the cost sharing rate. These may include changes in cost that occur as a result of site adaptation in the final design or changing price levels.

Part 503 – Watershed Project Plan Modifications

Subpart B – Review and Approval of Plan Modifications

503.10 Introduction

The review of proposed modifications of Watershed Project Plans must be commensurate with the magnitude of the changes being proposed. Input by the public and concerned groups, as well as local, State, and Federal agencies must be obtained and documented.

503.11 Review and Notification Procedures

Required reviews and notification are based on the approval level of the proposed modification. The review and notification procedure outlined in Title 390, National Watershed Program Manual (NWPM), Part 502 must be followed for all revised and supplemental Watershed Project Plans that include a supplemental EIS or EA. All rehabilitation plans require review in accordance with 390-NWPM, Part 502, Subpart B and Section 505.35 (of this manual). The required review of other modifications is determined by the State Conservationist (STC).

503.12 Approval and Authorization

- A. Watershed plan modifications must be reviewed for conformance with national policy by the Watershed Operations Program national program manager or Watershed Rehabilitation Program national program manager, as applicable.
- B. Project plan modifications must be approved and authorized for funding using the same criteria established for new Watershed Project Plans, with the following exception. Watershed plans that were originally approved by a congressional committee do not require approval of modifications from the same committee.
- C. Watershed Program statutory authorities must not be exceeded.

503.13 Approval and Authorization of Public Law 78-534 Projects

Preparation, review, and approval procedures for Public Law 78-534 projects are the same as those for administratively approved Public Law 83-566 projects, except with the following one exception. If revisions and supplements to a subwatershed project plan involve Federal financial or credit assistance from flood damage reduction funds for purposes other than flood damage reduction, the Chief will transmit one informational copy of the supplemental subwatershed project plan to the Office of Management and Budget. The Chief authorizes the STC to execute the revised or supplemental plan.

Part 504 – Project Installation

Subpart A – General Provisions

504.0 Introduction

- A. Installation is the phase of project development that begins after the Watershed Project Plan has been approved and Federal assistance for installing the project has been authorized. Watershed Program funds may not be used for developing final layout and structural details until after Federal installation assistance is authorized. The installation phase continues until the construction of the project features is complete. Table 504.1 in this manual describes the successive phases in the life of a watershed project.
- B. Installation of project measures must be implemented as provided by project agreements between the NRCS and the sponsoring local organizations (SLOs). The project agreements detail the working arrangements, funding, and responsibilities of each party for carrying out specified elements of work.
- C. The SLO is responsible for carrying out the approved Watershed Project Plan. NRCS is responsible for providing authorized assistance as set forth in the approved Watershed Project Plan. As stated in the watershed agreement, no work may be initiated by either party until a project agreement is entered into that details the working arrangements.
- D. The latest civil rights nondiscrimination statement, as found on the USDA home page, must be included in all agreements generated by this program. The following statement is the most current at the time of this revision; “The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.”
- E. Additionally, in the mutually agreed-to section all agreements generated by this program must include the following nondiscrimination clause (Title 120, General Manual (GM), Part 401, Subpart C): “By signing this agreement the recipient assures the Department of Agriculture that the program or activities provided for under this agreement will be conducted in compliance with all applicable Federal civil rights laws, rules, regulations, and policies.”

504.1 Project Implementation

A. Installation Schedule

The State Conservationist (STC) must develop a planned sequence of installation for each watershed project approved for installation. Because of variations in availability of funds and acquisition of real property rights, the actual schedule of installation may vary

considerably from the planned schedule of installation. The SLO is to be advised and consulted at all stages of scheduling and performing work.

B. Budget Requests and Funds Management

(1) Operations Budget Requests—The STC must submit budget requests for technical and financial assistance funds for implementation of specific projects through the POINTS database, as specified by the annual budget process. The request is to be submitted as specified in Title 390, National Watershed Program Manual (NWPM), Part 504, Subpart D (in this manual). The Conservation Planning and Technical Assistance Division (CPTAD) will coordinate the review of the request for funds with appropriate National Headquarters staff.

(2) Funds Management—Funds that will not be obligated in the current fiscal year will be recalled at the end of the third quarter of the fiscal year for redistribution to projects where funds can be obligated.

(3) Claims Management—The STC must monitor all aspects of contract administration. The STC must ensure that efforts are made to resolve all contractual issues by mutual agreement at the contracting officer level and to avoid litigation. When contracting officer decisions for claims exceeding \$100,000 are appealed by the contractor, the STC must notify the Deputy Chief for Programs and provide the information needed for the claims database. The Deputy Chief for Programs, in consultation with the Deputy Chief for Management, will appoint an independent review team of representatives from CPTAD, Management Services Division, and Conservation Engineering Division. The team will review the case and recommend alternative actions to minimize NRCS litigation risks.

C. Controls on Future Development

Prior to construction of significant or low hazard dams, the STC will verify that the SLO has certified that adequate controls on future development within the breach inundation area (as defined in NEM 210-520.28) are in force. The controls must limit improvements within the breach inundation area such that the hazard class does not increase during the evaluated project life.

D. Reaffirming Feasibility

(1) The continued feasibility of a project must be monitored and documented in the project files every 5 years. Factors to be considered in determining the continued feasibility are economic, environmental and social defensibility and the SLO commitment to continue the project. If it is determined that the project is no longer feasible to install, the plan must be modified to delete the infeasible elements and a completion report must be prepared.

(2) When reaffirming feasibility, the discount rate at the time the plan was approved may be used for plans approved after January 3, 1969. A discount rate of 3.25 percent must be used for plans approved before that date. Results of an economic analysis using the current discount rate must also be included in the feasibility report.

E. Water Resources Long-Range Plans

(1) A State water resources long-range plan must be updated every 3 to 5 years for the Watershed Surveys and Planning, Watershed Operations, and Watershed Rehabilitation Programs. Long-range plans are not required for completed watershed projects.

(2) The water resources long-range plan must include all of the following:

- Anticipated projects to plan, implement, or both
- Assessments of dams for rehabilitation
- Status of rehabilitation projects
- Project planning and implementation priorities
- Reportable products to be produced
- Needed funds, both technical assistance (TA) and financial assistance (FA)
- Needed personnel

(3) For authorized watershed projects, the long-range plan must additionally include the following:

- Remaining work (TA/FA) in current dollars to complete the project; this is utilized to estimate unfunded Federal commitment in the Program Operations Information Tracking System (POINTS).
- The probability of implementing the long-range plan considering land use or other changes in the watershed, local interest, and sponsor's capability to proceed with installation.
- The correct operational status of the project (not necessarily what is currently displayed in POINTS).

504.2 Agreements Required

Prior to Federal financial assistance funds being granted, the STC must execute the following agreements:

A. Project Agreement

Project agreements include any agreement entered into by NRCS and the SLO in which detailed working arrangements are established for the installation of project measures. Further information and coordination is available through the State contracting specialist or appropriate administrative staff.

B. Real Property Acquisition Assurance

(1) This assurance applies if real property interests were acquired for the installation of project measures. Form NRCS-ADS-78 must be completed and signed by the SLO and must be provided before Federal financial assistance is granted. The NRCS-ADS-78 must be supported by an attorney's opinion.

(2) When acquisition is needed, acquisition procedures must conform to Title II of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA).

C. Operation, Maintenance, and Replacement Agreement

Arrangements for operating and maintaining planned practices, as well as replacing practice elements whose design life is less than the overall practice or project life, are to be included in an operation and maintenance (O&M) agreement and O&M plan between the SLO or land user and NRCS. The O&M agreement, O&M plan, or both is to be entered into before NRCS furnishes financial assistance for real property acquisition, relocation assistance, or installation of any planned measures. O&M agreements and O&M plans must conform to the requirements in the National Operation and Maintenance Manual (Title 180, National Operation and Maintenance Manual (NOMM), Part 500).

D. Drug-Free Workplace Certification

Before a construction contract is awarded to install any of the planned watershed measures, the grantees must indicate that they will abide by the regulations implementing sections 5151 to 5160 of the Drug-Free Workplace Act of 1988 (Public Law 100-690, Title V, Subtitle D; 41 U.S.C. Section 701 et seq.) and 7 CFR Section 3017.600, “Purpose,” by signing OMB Form AD-1050 (for grantees who are individuals) or OMB Form AD 1049 (for grantees other than individuals).

504.3 Real Property Rights

A. Definition

Real property acquisition includes obtaining needed land, water, mineral, and other subsurface rights, and required Federal, State, and local permits or clearances for installation of planned measures. Acquisition of rights may be obtained with the use of fee simple title, easements and rights of way or by permits and clearances as required by applicable State regulations.

B. Responsibilities

- (1) Public Law 83-566 does not provide authority for land acquisition by the Federal Government. The SLO must acquire all rights needed for investigations, surveys, installation, operation, maintenance, and inspection of works of improvement to be installed with Federal financial assistance on non-Federal lands (Public Law 83-566 Section 4 (2)). This will include routes for ingress and egress. No cost sharing will be provided for engineering, legal, or administrative costs incurred by the local organizations for acquiring real property rights except for real estate appraisals in connection with cost-shared real property rights acquisition (including direct costs associated with appearing as an expert witness in condemnation proceedings on the agency’s behalf).
- (2) Water and other resource rights are the responsibility of the SLO. The SLO must obtain the water rights necessary before the project agreement is signed. To fulfill their obligations, the SLO must present satisfactory evidence that water rights are held or can be obtained by landowners or their organizations or associations for the quantity, seasonal use, and storage of water, if required, to supply contemplated need.
- (3) NRCS is responsible for providing real property acquisition maps showing the minimum area and rights needed for each project measure. The STC must ensure that a real property work map is developed and furnished to sponsors. The map is to be a visual picture of cartographic presentation of the proposed project measures as they relate to existing physical features at the site; it should include some related real property information needed to acquire property rights. The map is not a construction drawing nor is to be construed to be a plat map for real property document or land record purposes. The map must show all of the following:
 - (a) Location of the project measures and a delineation or description of the minimum land areas needed for the measures, including borrow and spoil areas, construction, flowage, wildlife compensation, temporary rights needed during installation of the measures, and ingress and egress routes when applicable. To the extent known, it should also show any subsurface rights needed for mineral or other outstanding rights. The criteria of Title 210, National Engineering Manual (NEM), Part 531, Subpart D, Sections 531.40 through 531.43, on mineral and liquid and gaseous deposits apply to this agreement.

- (b) Topographic information pertaining to the project measures such as water, flood and flowage, and other contour or elevation lines, landmarks, and control and other points pertinent to the project measures.
- (c) Existing structures and improvements that will or may be affected by the project measures, including roads and bridges, railroads, buildings, utilities, pipelines, water sources, and fences.
- (d) Apparent ownerships, acreages, and boundaries to the extent known to NRCS from general knowledge of the area. If ownerships and boundaries are unknown to NRCS or there is a reason to believe that they are questionable or in dispute, no attempt should be made to show this information. Sponsors are responsible for the legal aspects of property titles, boundaries, and descriptions. If State law or local practice requires that sponsors make legal plats, the STC may waive showing any ownership or boundary information on work maps.
- (e) When Federal financial assistance is not involved in the real property acquisition, a tract index must be included to show or reference the land tracts and the minimum real property on the basis of apparent ownerships. However, if ownership or boundary information is not shown as provided in above paragraph the index is to be prepared on a tract basis.
- (f) When Federal cost sharing is involved the real property work map is to be expanded to serve as the base document in establishing Federal cost sharing arrangements. After the real property work map is furnished to sponsors, they are responsible for converting the map or developing a new map that shows actual ownerships, boundaries, outstanding prior surface, subsurface, and other rights, and other information needed to document the acquisition requirements. NRCS must use the expanded work map to develop a tract register to document the tracts or rights needed, appraisal values, acquisition costs, and cost sharing values.
- (4) The STC must approve in writing all real property acquisition maps and all subsequent changes required by NRCS. Changes may be made only after consultation with the SLO.

C. Requirements

(1) Dams

- (a) For watershed projects authorized prior to this NWPM revision:
- If the structure does not have an auxiliary spillway, the minimum land rights area upstream from the dam must be all areas below the elevation of the top of the dam, unless the watershed plan or plan modification allows a lower elevation.
 - If the structure has an auxiliary spillway, the minimum land rights elevation may not be lower than the higher elevation of either: (1) the auxiliary spillway crest or (2) the maximum elevation of the water surface during passage of the 100-year, 24-hour storm through the dam. If the minimum land rights elevation for a specific dam is lower than the elevation of the top of dam, the rationale for the selected elevation of required land rights must be discussed in the watershed plan or plan modification and a provision must be included in the Watershed Agreement that describes the potential risk and liability the sponsors and landowners may be assuming by not securing land rights to the top of dam elevation.

(b) For watershed projects authorized after the effective date of this NWPM revision, the minimum land rights area upstream from the dam is all areas below the elevation of the top of the dam.

(c) For watershed rehabilitation projects the minimum land rights area upstream from the dam must be for all areas below the elevation of the top of the dam, unless the plan allows a lower elevation (not lower than the elevation of the 100-year, 24-hour storm or auxiliary spillway elevation, whichever is higher).

- If the land rights elevation is lower than the top of the dam, the rationale for the selected elevation of required land rights must be discussed in the plan and a provision must be included in the Watershed Agreement that describes the potential risk and liability the sponsors and landowners may be assuming by not securing land rights to the top of dam elevation.
- The land rights must include a prohibition on future construction of inhabitable dwellings upstream from the dam below the elevation of the top of the dam. All land rights must be identified by metes and bounds surveys conducted by a professional land surveyor.

(d) On privately owned land, real property rights must be acquired for the structure, spillways, the reservoir area (including permanent and temporary water storage areas), areas for spillway discharge, mitigation areas and areas for other activities including construction, operation and maintenance, spoil disposal, borrow, and diversion of water.

- Fee simple title or term easements for at least the length of the period of analysis are required for the dam, spillways, ingress and egress routes, and pool areas.
- Flowage easements in lieu of fee simple title may be obtained for the flood pool (temporary water storage), areas of spillway discharge, and areas needed only for construction or disposal of spoil.
- Temporary easements may be obtained in lieu of permanent rights-of-way where needed to install measures to mitigate unavoidable adverse landscape resource effects.
- Additional criteria for real property rights are contained in 390-NWPM, Part 504, Subpart A, Section 504.3C(3) (of this manual).

(e) Before construction of any project for local flood protection, the SLO must agree to participate in and comply with applicable Federal floodplain management and flood insurance programs as described in the watershed agreement.

(f) Prior to construction of “high” hazard dams, the STC will require the SLO to provide an Emergency Action Plan in accordance with the 210-NEM, Part 520, Subpart B, Sections 520.27 and 180-NOMM, Part 500.

(g) On publicly owned lands, the SLO must acquire special use or occupancy permits from the appropriate land-managing agency before any detailed planning or implementation of structural works of improvement are undertaken. The SLO must apply for permits with sufficient lead time to ensure an orderly installation of the project.

(h) In determining real property rights needed for the structure, the STC must consider all pertinent circumstances including present and likely future land use and the extent of potential damage from flooding caused by proper operation of the structure.

(2) Channels

(a) The STC must ensure that all of the following are included in the minimum area of real property rights to be acquired for the channel work:

- Areas within the channel's designed top width and berm width necessary on each channel bank to ensure stability of the channel, channel banks, and side slopes
- Areas needed for installation, inspection, design, operation and maintenance, ingress and egress, and disposal and diversion of water
- Areas needed for environmental protection features
- Other areas adversely affected by changed stream flow characteristics or induced flooding

(b) Fee simple title or term easements for the period of analysis must be acquired for the channel itself, appurtenances, any needed diversions, and areas needed for ingress, egress, and travel ways to allow for operation and maintenance of the works of improvement. In addition, fee title or easements are required for any additional areas, including downstream areas that may be subjected to adverse effects by changed stream flow characteristics, such as extended flooding of low-water crossings and more than negligible flood damage to property.

(3) Induced Flooding

In cases where the installation could result in induced flooding, the following criteria must be met with respect to various types of works of improvement.

(a) Flooding of Roads and Railroads

(i) Top-of-dam elevations may not be set at a level higher than upstream highways and public roads. An exception may be made when it is possible for the highway or public road to be closed when necessary for a brief period and an alternate all-weather route can be used with a minimum of inconvenience. A written right or permission to flood the highway or public road must be obtained from the State, county, or agency having jurisdiction over the highway or public road. The written right or permission may be an easement, court order, or, if those cannot legally be given, a permit. The written right or permission must be accompanied by a citation of the applicable State statute or a written opinion of the State attorney general stating that the State, county, or agency granting the permission has legal authority to allow the road to be closed by flooding.

(ii) Occupied dwellings affected by the temporary closing of the flooded road must be accessible by an all-weather road that will not flood more frequently than it did under preconstruction conditions. If a road providing the only access to a dwelling is at a lower elevation than that of the top of dam, a historical record of pre-construction temporary flooding must be developed and documented in the administrative record.

(iii) Public roads may be located at the same elevation as the top of the dam, or below the top of the dam elevation (such as in the case of a road located in or across the auxiliary spillways of dams) under exceptional cases, if any of the following conditions apply:

- Because of the nature of the terrain adjacent to the dam area (such as in mountainous areas), the road must be located so that one or more points of the road crown is at or near the top of the dam.
- Natural flooding of one or more points along the road above or below the project area would make the road impassable before any flooding caused by the structure would take effect, and State law permits flooding of roads under those conditions.

- Flow through the auxiliary spillway is at a lesser frequency than that at which the road flooded before construction of the structure.

(iv) Railroads that are to remain in use may not be flooded.

(b) Flooding of Buildings

(i) The STC may not allow dwellings, including basements, or any other buildings that contain valuable property or that may be used as permanent or seasonal living quarters, to remain in the area upstream of a dam and below the top-of-dam elevation and the area downstream from the dam within the flowage area of the auxiliary spillway, unless they are floodproofed or otherwise protected from damage. Before financial assistance is made available to the SLO, the dwelling or building must be demolished, relocated, raised, floodproofed, or protected by a floodwall. This must be done so that drainage is adequate and ponding of water is not unreasonable.

(ii) If requested by the SLO and approved by the STC, other buildings, such as barns and garages, will be allowed to remain in the flowage easement area. Approval for flooding buildings of this type will not be granted if the building is used for the storage of feed, regulated chemicals, perishables, supplies, equipment, or other items that would be substantially damaged by flooding. This prohibition against allowing other buildings also applies to any building used for other purposes if flooding would cause an interruption or delay of operations carried on in the building or if a death or damage to the building's contents could occur.

(c) Flooding of Water Sources

Flooding of water sources, such as springs, wells, or stream diversions, or the interruption of delivery, conveyance, and disposal systems is prohibited until the SLO has complied with State laws, ordinances, and regulations relating to water sources.

(d) Flooding of Utilities

Public or private utilities may not be flooded unless the utility company or owner has determined that the function of the facility will not be affected adversely and a subordination agreement has been obtained.

(e) Flooding of Burial and Historical Sites

(i) Burial sites, such as cemeteries and private family plots, may not be flooded unless disinterment and reburial has been accomplished in accordance with applicable State laws (Public Law 89-665).

(ii) Historical sites or monuments may not be flooded until compliance with procedures for such property has been completed as required under the National Historic Preservation Act. The STC must assist the SLO in obtaining permission to survey for or recover archeological or historical resources in accordance with 420-GM, Part 401. The STC must ensure that appropriate Government-to-government (Tribal government) consultation is conducted per Executive Order 13085.

(4) Permit or Term Easements for Project Installation

Permit or term easements are to be acquired for areas in addition to those covered in sections (1), (2), and (3) above as needed for surveys and investigations, for one-time operations such as spoil spreading, and as needed for construction performance. These areas include those for construction ingress and egress, equipment staging, and parking lots.

- (5) Public Recreation and Public Fish and Wildlife Habitat Improvements and Developments
 - (a) Fee simple title is required for all privately owned land acquired for public recreation and public fish and wildlife habitat purposes when Watershed Program cost sharing assistance is provided. Fee simple title is preferred for all non-Federal public land needed. However, if it is not feasible to obtain this title, the granting of a perpetual easement generally will suffice. An acceptable permit from the agency administering the land will be sufficient for real property rights required on Federal land.
 - (b) At least one access road must be provided to all principal recreation areas. Rights-of-way required for public utilities, such as power lines and pipelines needed to service recreation or fish and wildlife developments, must be acquired by at least a perpetual easement.
 - (c) Construction of private facilities on land acquired with Federal cost-share funds is prohibited. The exception to this is for facilities constructed or operated by private concessionaires on a controlled permit basis to serve the planned use of the improvement or development, approved by the SLO and NRCS.
- (6) Wetland or Floodplain Acquisition
 - (a) Wetland and floodplain conservation easements, including land acquired or improved for flood damage reduction using Watershed Program cost sharing will be acquired by the SLO. Real property acquired in fee title or as perpetual easements with deed restrictions must be compatible with the purposes for which the land was acquired. These easements must be used to retain excessive floodwaters, improve water quality and quantity, and provide habitat for fish and wildlife.
 - (b) Real property acquired by the SLO in fee title will be addressed in the operation and maintenance agreement and must not be sold or otherwise disposed of except as provided for in the watershed agreement (see exhibit in 390-NWPM, Part 506, Subpart C, Section 506.30, in this manual).
 - (c) Wetland and floodplain acquisition will be used to retain excessive floodwaters, improve water quality and quantity, provide habitat for fish and wildlife. When acquired for flood damage reduction, use must be compatible with flood mitigation. Land uses must be limited to purposes that provide public benefit such as recreation, fish and wildlife habitat, water quality improvement and other purposes that are compatible with the remaining flood hazard.

504.4 Easement Monitoring and Enforcement

Wetland, floodplain and mitigation easements acquired with Watershed Program funds will be operated and maintained by the project sponsor according to an operation and maintenance plan and agreement. Any monitoring protocol established must be discussed and be addressed in the Plan-EA or Plan-EIS and the associated Finding of No Significant Impact (FONSI) or ROD. The operation and maintenance plan and agreement must require that federally funded easements be protected as applicable to the intended purpose of the easement. Signage must be used, as needed, to protect easements.

Part 504 – Project Installation

Subpart B – Financing Provisions

504.10 Introduction

A. The Watershed Project Plan must be authorized before funding may be made available for project operations. Watershed Program assistance may include technical and financial assistance, advances, and loans. The watershed agreement must specify the Watershed Program assistance to be provided and show evidence of the SLO commitment for funding, installing, and operating and maintaining the project. The Chief of NRCS allocates Watershed Program funds for watershed projects from annual appropriations made for this program. USDA Rural Utilities Service (RUS) may also receive appropriations for Watershed Program loans.

B. The SLO must provide its share of installation costs from sources other than Watershed Program funds. Local financing may include State, county, and other local funds, such as watershed or special purpose district taxes. Loans or grants of funds from other Federal programs may be used unless prohibited.

504.11 In-kind Contributions

A. In-kind contributions are applicable only to projects that will be approved administratively or were transmitted to the Office of Management and Budget (OMB) after May 1, 1979. No exceptions will be allowed for any other projects regardless of the date or nature of project supplements. Property purchased with Federal funds may be considered the grantee's in-kind contribution only when authorized by Federal legislation.

B. In no case will the amount of an in-kind contribution exceed the SLO share of the cost for the works of improvement. The maximum cost eligible for in-kind credit is to be the same as that for cost sharing. The SLO will receive no cash reimbursement for in-kind contributions of real property. Real property already dedicated to and improved for public recreation or fish and wildlife use will not be eligible as an in-kind contribution.

504.12 Value of In-kind Contributions

The value allowed as an in-kind contribution for real property acquired by the sponsor by means other than donation cannot exceed the sponsor's actual costs. The basis for determining the value for personnel services, material, equipment, buildings, and land must be documented. In-kind contribution arrangements must be documented in the project agreement.

504.13 Loans

The USDA Rural Utilities Service may make watershed loans to the SLO to help finance the local share of project costs set forth in approved Watershed Project Plans. RUS has developed notices and procedures for granting these loans for all or part of the local cost for a watershed work of improvement. A memorandum of understanding between NRCS and RUS was established to describe the working relationship between agencies for watershed loans (see exhibit in Title 390, National Watershed Program Handbook (NWPH), Part 606, Subpart E, Section 606.61).

504.14 Advance of Funds by NRCS

A. In special situations the STC may advance funds to the SLO to use for engineering and construction costs, purchase of real property rights, or engineering services. A project agreement must be signed by NRCS and the SLO before any funds can be advanced. The project agreement must specify all of the following:

- (1) Purpose of the advance
- (2) Amount of the advance
- (3) Repayment plan
- (4) Interest terms

B. The special conditions that follow must be met in all cases:

- (1) **Engineering and Construction Costs for Municipal and Industrial Water Supply—**Engineering and construction costs to provide storage capacity for future municipal or industrial water supply are eligible for an advance of funds. Engineering and construction costs for storage capacity for future M&I water supply are not to exceed 30 percent of the total cost of the structure. The advance must be repaid with interest within 50 years after the retention reservoir is constructed, or in a shorter period if required by State law. Interest will not be charged until the water supply from the structure is first used or until 10 years after the date of completion of the structure, whichever is earlier.
- (2) **Real Property Rights—**Funds may be advanced to purchase real property rights if all of the following conditions are met:
 - (i) The immediate purchase is essential to preserve the site for project works of improvement.
 - (ii) A watershed project plan has been approved.
 - (iii) NRCS and the SLO have signed an agreement covering the acquisition of real property rights.
 - (iv) USDA RUS has approved the repayment by the date the advance is made to the SLO.
 - (v) The advance and accrued interest are to be repaid by the SLO before the works of improvement are constructed.
- (3) **Engineering Services—**An advance of funds can be made for engineering services for works of improvement if all of the following conditions are met:
 - (i) The work of improvement is included in the Watershed Project Plan.
 - (ii) The engineers retained or employed by the SLO are satisfactory to NRCS.
 - (iii) The total advance does not exceed 5 percent of the estimated installation cost of the works of improvement.

Part 504 – Project Installation

Subpart C – Completion of Projects

504.20 Fully Installed Projects

A. Watershed projects are complete when all planned measures, including mitigation and land treatment, involving Watershed Program assistance are installed in compliance with the Watershed Project Plan as amended or supplemented and all long-term land treatment contracts have expired.

B. The STC must provide a completion report to the Director, CPTAD, after all planned measures have been installed. The SLO must be requested to concur in the completion letter but the SLO concurrence is not required to report a project completed. The completion report must include the number and purposes of project features installed and an estimate of the Watershed Program costs and local costs. The estimated costs include real property rights, technical assistance, financial assistance, and administration costs. Copies of this notification must be sent to other concerned Federal agencies.

C. The STC must send each SLO a letter informing them of the official completion date of the project, and reminding them of their operation and maintenance responsibilities.

D. Watershed Program funds may not be charged to completed projects, except for post-installation assistance as defined in Title 390, National Watershed Program Manual (NWPM), Part 505 (of this manual), without prior approval of the Chief.

504.21 Completion of Partially Installed Projects

A. In the event that a project is partially implemented and there is little likelihood that remaining works will be installed, the STC and the SLO must review the project. If they agree that no further progress can be made, the project will be completed, subject to the following:

(1) A supplemental watershed agreement will be prepared deleting the measures that have not been installed.

(2) A completion report with total installation costs will be submitted to the Director, CPTAD.

(3) The project status will be reported as “installation complete” by CPTAD upon receipt of the completion report.

B. If the STC and the SLO agree that additional progress can be made, a schedule for installing the remaining measures will be prepared. If progress is not made within a reasonable period of time the STC will again review the likelihood of project completion and reassess actions to bring the project to completion.

504.22 Deauthorized Projects

A. Deauthorization is applicable only to projects where no long-term-contracts (LTCs) have been signed, where no planned measures have been installed, or where no operation and maintenance (O&M) agreements are in effect. Deauthorization of a project removes authority to expend Public Law 83-566 funds.

B. When it becomes evident that the proposed works of improvement will not be installed, the STC must consult with the SLO to seek concurrence to deauthorize funding for the project. Agreements with the SLO to deauthorize funding for the project must be documented by an exchange of correspondence.

C. If the SLO does not concur in deauthorization, the STC must submit the matter to the director of CPTAD, setting forth the facts and the reasons why the SLO does not agree. The director will make a decision to deauthorize a project based on a case-by-case review of the information provided.

D. The STC must send a notice of intent to deauthorize Federal funding (see exhibit in Title 390, National Watershed Program Handbook (NWPH), Part 606, Subpart E, Section 606.65,

“Notice of Intent to Deauthorize Federal Funding—Example”) to the Federal Register, NRCS Chief, NRCS Assistant Chief, and concerned Federal, State and local agencies. If authorization for funding by the Chief was subject to approval by resolution by congressional committees, the Chief must give the appropriate committees written notice of the proposed deauthorization at least 60 days before final deauthorization action is taken. The Chief must notify the STC if there are congressional concerns about the proposed deauthorization.

E. Following the 60-day waiting period, the STC must notify the CPTAD director of any concerns received. If there are none, the STC will request the Chief to deauthorize the project. The STC must notify the SLO and concerned Federal, State, and local agencies of the final action. The project status must be recorded as “deauthorized” in the national project status database.

F. The STC must send a notice to the Federal Register announcing final deauthorization action and notifying the public that the action is not being implemented (see exhibit in 390-NWPH, Part 606, Subpart E, Section 606.66, “Notice of Deauthorization of Funding—Example”).

Part 504 – Project Installation

Subpart D – Reports

504.30 Introduction

The STC will ensure the Program Operations Information Tracking System (POINTS) and other databases to enter and maintain project information involving Watershed Surveys and Planning, Watershed Operations, and Watershed Rehabilitation Programs are used. Other databases include, but are not limited to, the following which may require data maintenance or are used for reference:

- (1) Cultural resources
- (2) Dams inventory
- (3) Cumulative total of obligated watershed construction funds (a running account)

504.31 Annual Operation Budget Estimates

After fund request data are entered into POINTS, the STC must keep the information up to date so that accurate budget estimates and allocations can be prepared. As new projects that are approved or changes occur during the year, they should be added to the database. Factors to be included in developing the annual budget estimates and fund requests are all of the following:

- (1) The approval date for watershed project authorization
- (2) The schedule for installation of planned measures
- (3) The State’s program analysis and long-range plan
- (4) Business plan
- (5) The SLO progress in fulfilling their obligations
- (6) The SLO capability to proceed with installation

504.32 Progress Summaries

Watershed Program status summaries will be made available from reports in POINTS and other databases residing in CPTAD. The reports will be utilized at the national and State level to inform Congress, project sponsors, and others about watershed project planning and implementation activities and program achievements. The planning, operational, and rehabilitation status of watershed projects (table 504.1) will be maintained in POINTS so that accurate reports can be prepared for projects in the various stages of planning and implementation.

Table 504.1 Watershed Project Life Stages

| Project Life Stage | Description |
|---------------------------|---|
| Application | Request for assistance received from SLO and Form SF 424 submitted. |
| Planning | <p>Active—A watershed planning project is active when funding for planning is authorized from the Chief.</p> <p>New—Planning project is new before being authorized by the Chief for planning. These watershed plans may be in the application stage.</p> <p>Complete—The watershed project plan is complete when approved by the STC ensuring technical and policy adherence, and reviewed by the WSP Program manager for programmatic compliance.</p> <p>Terminated—A planning project will be terminated when, after determining that there is no possibility of developing a feasible or acceptable project plan, either the SLO withdraws their application in writing or the STC terminates planning assistance.</p> <p>Deauthorized—The planning authorization will be cancelled if the watershed plan is not in interagency review within the 5-year time period.</p> |
| Operations | <p>Active—Funding is authorized and project is implemented as funding allows. The continued feasibility of a project is monitored and documented in the project files every 5 years in accordance with NEPA requirements in the Title 190, General Manual, Part 410. Factors to be considered in determining the continued feasibility are economic, environmental and social defensibility and the SLO commitment to continue the project. Modifications are prepared as necessary. Use of other program funds in lieu of Watershed Program funds to implement the plan is acceptable, provided the unfunded Federal commitment is reduced to account for other programs assistance.</p> <p>Inactive—Activities to implement the project have temporarily ceased because of land use changes in the watershed, reduced local interest, sponsor’s capability to proceed with installation, and similar circumstances. Other program funds could be used in lieu of Watershed Program funds to implement the plan, but the amounts are not accounted for to reduce the unfunded Federal commitment in the Watershed Project. Opportunities exist for resumed activity when the STC and SLO agree and notification is provided to the CPTAD director.</p> |

| | |
|-----------------------|--|
| | <p>Installation Complete—When all planned measures of the original plan, supplements or revisions are installed, and all LTCs have expired. Includes projects in which all measures have not been installed, but were supplemented out of the project plan in order to complete the project.</p> <p>Deauthorized—When no LTC have been signed, no measures have been installed, no O&M agreements are in effect, and there is no evidence that the project will be implemented.</p> <p>Project Life Complete—When: all planned measures in the watershed project are implemented, and the evaluated life of the installed measures has ended.</p> |
| Rehabilitation | <p>In Planning—When a watershed rehabilitation plan is being prepared, the plan is not yet authorized. Dam Status for this phase is “Active” when WF-07 funds have been requested for planning within 3 POINTS fund request years, and “Inactive” when funds have not been requested within 3 POINTS fund request years.</p> <p>In Implementation—When the watershed rehabilitation plan is authorized for implementation by the Chief. Dam Status for this phase is “Active” when WF-07 funds have been requested for implementation within 3 POINTS fund request years, and “Inactive” when funds have not been requested within 3 POINTS fund request years.</p> <p>Plan Installed—When all planned measures in the rehabilitation project have been installed or completed.</p> <p>Installed Without Federal Assistance—When a plan has been prepared and the sponsor selected a rehabilitation alternative other than the Watershed Rehabilitation Program.</p> |

Part 505 – Post Installation Assistance

Subpart A – Overview

505.0 Introduction

Part 505 establishes policy for administering the operation and maintenance requirements for any measure installed with NRCS assistance provided under Public Law 83-566. It also includes provisions for additional work, remedial assistance, rehabilitation, and completion of Federal interest work.

505.1 Determining Type of Post Installation Assistance

At the request of and with input from the sponsoring local organizations (SLO), NRCS determines the type of post installation assistance needed.

505.2 Additional Work

A. Additional work may be considered in watershed projects. This includes installing works of improvement to benefit new beneficiaries or the same beneficiaries to a different degree. It may include works of improvement to serve an additional purpose.

B. Additional work considered for Active and Completed projects must follow the policies in Title 390, National Watershed Program Manual (NWPM), Part 503 (in this manual).

Part 505 – Post Installation Assistance

Subpart B – Operation and Maintenance

505.10 Operation and Maintenance Required Agreement

The State Conservationist (STC) must ensure that O&M requirements for post installation works are included in an O&M agreement or in the contract documents before obtaining Watershed Program financial assistance.

505.11 Operation and Maintenance Defined

A. Operation

Operation, as defined in Title 180, National Operation and Maintenance Manual (NOMM), Part 500, Subpart A, Section 500.02, includes the “administration, management, and performance of non-maintenance activities needed to keep a practice safe and functioning as planned.” This includes being cognizant of changes in watershed conditions, both upstream and downstream from completed practices, that may alter the overall function of the project, so appropriate actions can be taken promptly.

B. Maintenance

(1) Maintenance, as defined in 180-NOMM, Part 500, Subpart A, Section 500.02, includes the “recurring activities necessary to retain or restore a practice in a safe and functioning condition, including the management of vegetation, the repair or replacement of failed components, the prevention or treatment of deterioration, and the repair of damages caused by flooding and vandalism.”

(2) Damages to structures installed under Public Law 83-566 caused by catastrophic events may be repaired with assistance from the Emergency Watershed Protection Program. Damages to dams installed under Public Law 83-566 caused by catastrophic events may also be repaired as part of rehabilitation work as described in 390-NWPM, Part 505, Subpart D (in this manual below).

505.12 Responsibilities

Responsibilities for operation and maintenance of watershed works of improvement are described in 180-NOMM, Part 500, Subpart A, Sections 500.3 and 500.4. The O&M requirements must be documented in an O&M agreement or contract document with the SLO. The STC will ensure that an effective O&M program is carried out. NRCS will manage O&M agreements throughout the term of the agreement using Conservation Technical Assistance (CTA) funds.

505.13 Operation and Maintenance Time Periods

A. The SLO responsibility for O&M begins when a structure is determined to be complete by NRCS. During the vegetation establishment period, which may take 3 years or more, the SLO is required to perform maintenance to help ensure adequate vegetative establishment.

However, NRCS will provide for repairs associated with the initial establishment of vegetation where deficiencies are a result of natural causes.

B. Following the 3-year vegetative establishment period, the STC will notify the SLO by letter that the vegetative cover is performing as designed and remind the SLO of its responsibility to continue the obligations of the O&M agreement throughout the evaluated life.

C. The term of the O&M agreement expires when the evaluated life of the works of improvement has been met. Once this period is completed, the STC will provide a letter to the SLO indicating that the O&M agreement with NRCS has expired and reminding that the SLO may have continued O&M responsibilities in order to remain in compliance with applicable Federal, State, and local laws, regulations, and ordinances.

Part 505 – Post Installation Assistance

Subpart C – Remedial Assistance

505.20 Remedial Assistance Defined

Remedial assistance is defined as assistance needed to correct problems caused as a result of a mistake or misjudgment by NRCS during the installation of a measure or as a result of latent site conditions unknown to NRCS or the sponsor or land user at the time of installation. Changes in policy, technical standards, or engineering concepts developed subsequent to the installation of the original measure are not considered mistakes or misjudgments by NRCS. The following may be considered for remedial assistance:

- (1) Repair of a measure's components that deteriorate more rapidly than planned or do not perform as expected because of unusual or latent conditions.
- (2) Reconstruction or repair of completed measures that malfunctioned or failed because of a design or construction deficiency.
- (3) Modification of a structure, property relocation, or addition of "other measures" (see 390-NWPM, Part 505, Subpart D, Section 505.35D for definition of "other measures"), that are the most cost effective to meet the criteria for a higher hazard classification where a structure was classified incorrectly before installation.

505.21 Procedure

A. Remedial assistance may be necessary in watershed projects that have "active," "inactive," or "installation complete" status. The need for remedial assistance must be documented by a program report. Remedial assistance and action may require a supplemental environmental impact statement (EIS) or environmental analysis (EA) to address the effects of the remedial action. The significance of the effects of the remedial actions will determine whether a supplemental EIS or EA is warranted. The environmental evaluation (EE) will assist the responsible Federal official (RFO) to determine whether an EA or EIS should be prepared, or whether the proposed action is covered by a categorical exclusion. When a categorical exclusion applies to the proposed action, the program report must include the EE documentation.

B. The report must contain all of the following:

- (1) Causal factors leading to the need for remedial work
 - (2) Alternatives considered
 - (3) Analysis of the cost effectiveness of alternatives
 - (4) Estimated technical and financial costs, benefits, and environmental effects
 - (5) Recommended solutions
 - (6) An engineering report, if engineering issues are involved, will be prepared as per the requirements set forth in Title 210, National Engineering Manual (NEM), Part 504.
- C. Technical input from the appropriate State technical specialists will be included in the above sections of the program report.
- D. NRCS may provide remedial cost sharing assistance up to the same cost sharing rate used for the original installation. Waivers to the cost-share policy may be granted for unusual or extenuating circumstances. State Conservationists must request waivers from the Deputy Chief for Programs.
- E. Financial assistance for remedial assistance must be requested from the Deputy Chief for Programs.

Part 505 – Post Installation Assistance

Subpart D – Watershed Rehabilitation Program

505.30 Rehabilitation Introduction

- A. This subpart refers to the Watershed Rehabilitation Program authorized by Public Law 83-566 Section 14, the Watershed Protection and Flood Prevention Act.
- B. Rehabilitation is defined as all work necessary to extend the service life of a dam and to meet applicable safety and performance standards. Only dams originally constructed with assistance from the following four programs are eligible for rehabilitation assistance: Public Law 83-566, Public Law 78-534, Pilot Watershed Program authorized under the Department of Agriculture Appropriation Act of 1954, and the Resource Conservation and Development (RC&D) Program authorized by the Agriculture and Food Act of 1981.
- C. Rehabilitation work will result in changes to a dam's "as-built" condition, this may include any of the following:
- (1) Protecting the integrity of the dam or extending the useful life of the dam beyond the original evaluated life expectancy.
 - (2) Correcting damage to the dam from a catastrophic event (100-year frequency rainfall event or a storm event that produces a flow in the auxiliary spillway of at least two feet or more in depth).
 - (3) Correcting the deterioration of structural components that are deteriorating at an abnormal rate.
 - (4) Upgrading the dam to meet changed land use conditions in a watershed served by the dam or changed safety criteria applicable to the dam.
 - (5) Decommissioning (removal) of the structure and stabilizing the site.
- D. Rehabilitation work does not include activities that are operation and maintenance; see Title 390, National Watershed Program Manual (NWPM), Part 505, Subpart B (of this manual). A dam is not eligible for rehabilitation assistance if there are maintenance needs that have not been addressed or if the need for rehabilitation is the result of lack of maintenance.

E. Rehabilitation work may be considered in completed or operational Watershed Projects. Rehabilitation projects that also add purposes or beneficiaries must follow the policies set forth in 390-NWPM, Part 503 (of this manual). Rehabilitation projects must be planned in conformance with policies set forth in 390-NWPM, Parts 501 and 502 (of this manual).

F. The completion of rehabilitation work on any project measure will redefine that measure's evaluated life and the O&M responsibilities of the SLO relative to that measure.

G. The implementation strategy for the Watershed Rehabilitation Program includes assessing the condition of dams, dam rehabilitation planning, and rehabilitation of eligible project dams, in the order listed. Dam assessments will provide local sponsors with data regarding the condition of a dam, risks to the public should a dam fail, and estimated rehabilitation alternatives and costs. Dam assessments requested by local sponsors will be completed for all dams, beginning with dams classified as high hazard under the national dam safety hazard classification system. Dams classified as significant or low hazard will be assessed after all high hazard dams have been assessed. A portion of the annual program funds will be used to fund dam assessments in order to maintain a large portfolio of potential high priority dam rehabilitation projects.

H. Applications that are submitted by local project sponsors for rehabilitation planning and implementation assistance will be ranked and funded annually based on the condition of the dam and risk to loss of life should the dam fail. Dams that have the highest risk of failure and threat to loss of life will have priority for program planning and implementation. Coordination of priorities for assessments, planning, and rehabilitation of dams will be completed with State dam safety and regulatory agencies in every State.

505.31 Assessment Assistance

A. Introduction

This section applies to assistance for the dam assessment for being considered for rehabilitation. This assistance will provide the SLO with information to determine whether to proceed with rehabilitation of their aging dam. The SLO may submit an application for rehabilitation assistance (see 390-NWPM, Part 505, Subpart E, Section 505.42, in this manual) without an assessment being conducted.

B. Request for Assistance

A request for assistance for the dam(s) assessment must be signed and submitted by the SLO with O&M responsibility. The request may be in the form of a letter to the STC. If the State dam safety agency has ordered any action on the dam, the SLO must attach a copy of the order to the request for assistance.

C. Scope of the Assessment

An assessment is limited in scope it is a preliminary investigation on the condition of a dam. It includes information about the condition of all structural components, the designed and current potential hazard classification, and the associated risks for loss of life and property. Assessments must include all of the following:

- (1) Field assessment of a dam (on-sight evaluation)
- (2) Surveys of valley cross-sections to estimate for breach routings if other sources of information do not exist

- (3) Breach routings for estimates as necessary (not to be performed to the detail that would be required during the dam rehabilitation planning or design process and not including inundation maps)
- (4) Engineering risk assessment using “Evaluation of Potential Rehabilitation Projects” (see exhibit in 390-NWPM, Part 506, Subpart E, Section 506.40, in this manual)

D. Assessment Report

- (1) The STC must prepare a report to respond to the SLO request for an assessment. The report must include all of the following:
 - (a) Description of the existing condition of the dam and appurtenances
 - (b) Original and current NRCS hazard classification
 - (c) Rehabilitation needs
 - (d) Adequacy of operation and maintenance of the dam
 - (e) Eligibility of the dam for rehabilitation
 - (f) Failure index, risk index, and population at risk, which will be refined as a result of more detailed studies during the development of the dam rehabilitation plan
 - (g) Potential for addressing other resource concerns during rehabilitation of the dam
 - (h) Potential scope of a rehabilitation project including estimated costs
- (2) The STC must furnish a copy of the report to all SLO of the Watershed Project and to the national program manager of the Watershed Rehabilitation Program.

505.32 Application for Rehabilitation Assistance

A. Introduction

This section sets forth requirements for preparing and submitting an application for rehabilitation assistance.

B. Application Content

Application for rehabilitation assistance must be made on Standard Form 424, “Application for Federal Assistance.” This form is available at:

http://www.grants.gov/techlib/424_20090131.doc. The application must be signed by all current SLO of the Watershed Project. All of the following information must be attached to the application (a separate attachment must be provided for each dam):

- (1) Project name
- (2) Dam number
- (3) Original project authority
- (4) Dam location (legal description)
- (5) A list of SLOs with O&M responsibilities for the dam
- (6) The names, addresses, and contact information for the SLO-designated contact persons
- (7) Year the dam was constructed

- (8) Description of existing condition and known rehabilitation needs of the dam, including status of O&M
- (9) Description of the current benefits provided by the dam (including documentation of reduced flooding damages from past events if it is available)
- (10) Dam safety agency information, permit needs, comments, recommendations on rehabilitation needs for the specific dam, and a copy of any action order issued by the State dam safety agency
- (11) Statements from the SLOs that they will commit to all of the following:
 - (a) Assist in leading locally led planning effort.
 - (b) Obtain needed land rights including the use of power of eminent domain, if necessary.
 - (c) Provide local cost-share funds, in-kind services, or both to provide the required 35 percent of total project costs.
 - (d) Enter into a new O&M agreement with NRCS, with the understanding of the terms of the new O&M agreement.
 - (e) Provide funds for continuing O&M actions.
 - (f) Obtain required permits and approvals at their own cost.
 - (g) Provide leadership to assure appropriate land use controls are enacted or acquired for downstream areas prior to construction if a low or significant hazard dam is involved.
 - (h) Provide leadership to assure adequate land treatment measures have been installed and maintained on at least 50 percent of the watershed area above the dam.
 - (i) Execute a memorandum of understanding (MOU) with NRCS before being credited with the value of any in-kind contribution.

C. Submission of Application

The application must be submitted in accordance with requirements set forth in 390-NWPM, Part 500, Subpart C, Section 500.20 (of this manual).

D. Acknowledging the Application

The STC must provide the SLO with written acknowledgement of receipt of the application after ascertaining that the application is valid.

E. Return of Application

If the STC determines that the dam is not eligible for rehabilitation assistance (see 390-NWPM, Part 505, Subpart E, Section 505.40, of this manual) or that the application does not meet the requirements of this section, or that there is little possibility to implement a feasible rehabilitation project, the STC must return the application to the SLO with a letter explaining why it is being returned. Copies of the letter must be provided to the designated State agency and the State dam safety agency.

F. Withdrawal of Application

If the SLO decides to withdraw the original application for rehabilitation assistance, the STC must request their withdrawal to be transmitted by letter, with a copy provided to the

designated State agency and the State dam safety agency. Upon receipt of such request, the STC must return the application.

505.33 Application Ranking

A. Introduction

This section sets forth procedures for ranking rehabilitation projects.

B. Evaluation of Applications

- (1) The STC must evaluate each dam with a valid application by computing a risk index for each dam and preparing an evaluation of consequences of failure for each dam. The failure index and consequences of failure must be evaluated using the process prescribed by the worksheets in the exhibit in 390-NWPM, Part 506, Subpart D, Section 506.40 “Evaluation of Potential Rehabilitation Projects.”
- (2) The STC must evaluate this information in consultation with the designated State agency and the State dam safety agency (if State permits are required). The STC must request written documentation from the State dam safety agency of its input.
- (3) Where there are multiple applications the STC must consult with the designated State agency, and then assign a consecutive priority ranking (1, 2, 3, etc.) for each dam with a valid application.

505.34 Request for Funding

A. The STC must submit the priority ranking and other project data for each rehabilitation project application for which planning funds are requested as part of the Program Operations Information Tracking System (POINTS) database.

B. The STC must only request funds when both the following conditions are met:

- (1) STC has received and ranked the application, as described in 390-NWPM, Part 505, Subpart D, Sections 505.32 and 505.33 (of this manual).
- (2) STC has committed to provide or acquire technical resources for planning of the rehabilitation project.

505.35 Development of Rehabilitation Project Plans

A. Introduction

(1) Planning of rehabilitation projects must follow the planning procedures contained in 390-NWPM, Part 501 (of this manual). Rehabilitation work and action require a Supplemental Plan-EA or Plan-EIS to address the effects of the rehabilitation action unless all the activities proposed are categorically excluded. When a categorical exclusion applies to the proposed action, the supplemental plan must include the environmental evaluation (EE) documentation. This section provides specific planning considerations associated with rehabilitation projects.

(2) The rehabilitation plan will be prepared for one or more dams in a watershed. Information for installed, or remaining to be installed, works of improvement in the project area will not be updated or displayed.

(3) In addition to the information outlined in 390-NWPM, Part 501, Subpart D, Section 501.36 (of this manual), the “Affected Environment” section of the plan must discuss the

status of operation and maintenance of the dam; sedimentation rates (originally planned, actual and future); breach analysis (assumed parameters); hazard classification (NRCS and State agency); potential modes of dam failure (stability, hydrologic, seismic, seepage, material deterioration, etc.); and consequences of dam failure (impacts of breach discharge).

B. Alternatives to Evaluate

(1) The following alternatives and expected consequences must be evaluated in addition to the requirements in 390-NWPM, Part 501 (of this manual):

- (a) Future-Without-Project (FWOP) condition or no-action alternative is the most likely future condition if none of the federally assisted action alternatives are selected.
- (b) Decommissioning the dam by removal of the dam and stabilizing the site. If the decommissioning alternative is unreasonable, it can be eliminated from detailed study and included in the “Alternatives Considered but Eliminated from Detailed Study” section.
- (c) Rehabilitation of the existing dam. Sediment storage life will be for the longest reasonable period practical (100 years maximum), but in no case will the evaluation life be less than 50 years.
- (d) National Economic Development (NED) alternative may be one of the other alternatives or a combination of alternatives. To avoid seeking individual exceptions in those cases where human life is at risk in the event of catastrophic failure of an existing dam, the NED plan is the federally assisted alternative with the greatest net economic benefits. This removes the FWOP (no-action) alternative as a NED plan option where human life is at risk in the event of catastrophic failure of an existing dam.

(2) The following alternatives (in conjunction with the alternatives listed above) must be evaluated where applicable:

- (a) Relocation or floodproofing of at-risk dwellings in the downstream breach inundation area
- (b) Rehabilitation of the existing dam with added purposes
- (c) Nonstructural measures
- (d) All other reasonable alternatives

C. Sediment Storage Rationale

The rehabilitation plan must discuss the rationale for the selection of the sediment storage life. The rationale must be based on a range of potential sediment storage values including consideration of costs, benefits, project objectives, site constraints, and other identified concerns.

D. Other Measures

Other measures for the purpose of rehabilitation alternatives may include:

- (a) Relocation or floodproofing of homes, businesses, and other structures downstream from a dam that constitutes a risk or potential threat to loss of life from a sudden dam failure.

- (b) Purchase of development rights, easements, or zoning within the breach inundation area downstream from the dam.
- (c) The treatment of critically eroding areas that significantly affects the design of a structural measure and is necessary to extend the service life of the structural measure. These land treatment measures for the purpose of rehabilitation are to be included if they are part of the most cost-effective Federal alternative and are included in the SLO O&M agreement for the evaluated life of the rehabilitation project.
- (d) The SLO is responsible for all property acquisitions associated with the rehabilitation project.

E. Discount Rates

Rehabilitation works of improvement must be evaluated using the current discount rate established annually for use in evaluating Federal water projects.

F. Computation of Cost of Rehabilitation Projects

- (1) The total installation cost of rehabilitation projects for the economic analysis is different from the total eligible project cost for determining cost-share amounts. An electronic spreadsheet has been developed for the computation of installation costs for “Economic Table 2 – Estimated Cost Distribution” (see exhibit in 390-NWPM, Part 506, Subpart B, Section 506.12, of this manual) of the plan and the computation of total eligible project cost for determination of cost-share amounts for single purpose (flood damage reduction) watershed rehabilitation projects. The spreadsheet is also used to determine percentages and values in the “Cost-share Table for Watershed Operation or Rehabilitation Projects” in the watershed agreement. The spreadsheet is available from the national program manager for the Watershed Rehabilitation Program.
- (2) Installation Cost for the Economic Analysis:
 - (a) The total installation cost of the rehabilitation project for the purpose of conducting an economic analysis must include Federal and non-Federal costs, including construction, engineering, real property rights, natural resource rights, permitting, “replacement in-kind” relocation payments, and project administration. The value of eligible in-kind contributions (390-NWPM, Part 505, Subpart D, Section 505.35H, of this manual) must be included in the total installation cost.
 - (b) The installation costs shown in “Economic Tables 1 – Estimated Installed Cost” (exhibit in 390-NWPM, Part 506, Subpart B, Section 506.11, of this manual) and “Economic Table 2 – Estimated Cost Distribution” (exhibit in 390-NWPM, Part 506, Subpart B, Section 506.12, of this manual) must not include Federal or non-Federal technical assistance for project planning.
- (3) Eligible Project Cost for Computation of Cost-share:
 - (a) When calculating the Federal cost-share amount, the total eligible project cost must include Federal and non-Federal costs, including construction, “replacement in-kind” and “required safe and sanitary” relocation payments, real property rights and non-Federal technical assistance for planning, engineering, and project administration. The value of eligible in-kind contributions (see 390-NWPM, Part 505, Subpart D, Section 505.35H, of this manual) must be included in the total eligible project cost. The cost of technical assistance provided by NRCS must not be considered as part of the total eligible project cost. The SLO is responsible for the cost of all water, mineral, and other resource rights; all Federal, State, and local

permits; and operation and maintenance—none of which are considered part of the total eligible project cost.

(b) The STC will direct staff from Programs, Management Services, and Financial Management to coordinate the computation of cost-share to assure that cost-share provisions required by statute are achieved. An example “Cost Computation for Rehabilitation Project Spreadsheet - Example” is located in Title 390, National Watershed Program Handbook (NWPH), Part 606, Subpart F, Section 606.71.

(c) The eligible project costs shown in the watershed agreement will differ from the installation costs displayed in the plan (see Table 505.1, “Comparison of Plan Installation Cost and Eligible Cost-Share”). These differences must be explained in the plan and in the watershed agreement.

Table 505.1 Comparison of Plan Installation Cost and Eligible Cost-Share

| | Installation Cost for Economic Tables | Eligible Project Cost for Cost-Share Computation |
|---------------------------------------|--|---|
| Federal Technical Assistance: | | |
| - Planning ¹ | No | No |
| - Engineering | Yes | No |
| - Project Administration ² | Yes | No |
| Non-Federal Technical Assistance: | | |
| - Planning ¹ | No | Yes |
| - Engineering | Yes | Yes |
| - Project Administration ² | Yes | Yes |
| Land Rights ³ | Yes | Yes |
| Natural Resource Rights | Yes | No |
| Federal, State, and Local Permits | Yes | No |
| Construction | Yes | Yes |
| Relocation Payments: | | |
| Replacement In-Kind | Yes | Yes |
| Required Decent, Safe, Sanitary | No | Yes |
| Beyond Required Safe and Sanitary | No | No |

- ¹ Planning includes inventory and analysis necessary to formulate and evaluate alternatives and prepare the project plan.
- ² Includes relocation assistance advisory services
- ³ Includes land rights associated with relocation

G. Federal Cost-Share Limitations

- (1) Federal cost-share must be equal to 65 percent of the total eligible project cost, but must not exceed 100 percent of the actual construction cost of the rehabilitation project. Construction costs must include the reconstruction or decommissioning of the dam and the relocation or floodproofing of downstream property.
- (2) Costs associated with new purposes added to the rehabilitation project must not be cost-shared with watershed rehabilitation funds. Cost-share may be authorized according to 390-NWPM, Part 500, Subpart E (of this manual), using watershed operation funds.

H. Non-Federal Contributions

- (1) The SLO is responsible for the non-Federal share of the cost of the rehabilitation project. SLO may provide their share of the cost in the form of any of the following:
 - Cash
 - In-kind services
 - Value of land rights in addition to those previously acquired for the current project
 - Any combination of the above
- (2) The value of in-kind contributions provided by non-Federal entities may be credited towards the SLO's 35-percent cost-share requirement. The value of all land rights must be determined by a qualified professional appraiser and certified by a responsible SLO official. See the State contracting specialist or appropriate administrative staff for requirements on determining the value of in-kind contributions.
- (3) Only non-Federal in-kind contributions of services performed and land rights acquired by the SLO after November 9, 2000 (the date of enactment of Public Law 106-472), may be credited. The SLO will not receive cash reimbursement for in-kind contributions that exceed the 35 percent cost-share amount. No credit will be given for SLO actions needed for carrying out their previously assigned responsibilities of the project.
- (4) The STC must concur to the services provided before credit for the in-kind contribution is given.
- (5) An MOU must be prepared between NRCS and the SLO that defines and establishes a maximum value of the non-Federal in-kind contributions. An application for rehabilitation assistance (see 390-NWPM, Part 505, Subpart D, Section 505.32, of this manual) must be submitted prior to preparation of a MOU. The MOU must be modified when the scope of the in-kind contributions changes. All SLOs providing in-kind services, land rights, or both for the rehabilitation project must sign the MOU.
- (6) Only costs accrued for activities included in this MOU may be considered as part of the non-Federal in-kind contribution. Determination of the final amount to be credited is at the sole discretion of NRCS. See exhibit in 390-NWPM, Part 506, Subpart C, Section 506.31 (of this manual) for elements required to be included in an MOU. If more than one dam is included in an MOU, accounting of costs for each dam must be kept separate.

I. Plan Review, Approval, and Authorization

- (1) Rehabilitation plans and supplemental Plan-EAs or Plan-EISs must be reviewed by the National Water Management Center (NWMC) in accordance with 390-NWPM, Part 502, Subpart B (of this manual).
- (2) The interagency review must be in accordance with 390-NWPM, Part 502, Subpart C (of this manual). If an exception to the NED plan requirement is needed on rehabilitation plans, it must be provided by the Chief before the interagency review (see 390-NWPM, Part 502, Subpart A, Section 502.0, in this manual). The NED exception must be reconsidered if the interagency review reveals that substantial changes are needed to the plan.
- (3) After considering all review comments received, the STC may approve the Rehabilitation Plan. Title 390, NWPM, Part 502, Subpart D, Section 502.32 and Table 502.1 (in this manual), do not apply to rehabilitation projects.
- (4) The STC must request funding authorization by completing the following actions:
 - (a) Send one signed original of the plan and fact sheet and a request for funding authorization to the Chief. Include the congressional district number, and names and addresses of the Senators and Representative.
 - (b) Send four hardcopies of the final plan and fact sheet to the national program manager for the Watershed Rehabilitation Program along with the following:
 - Finding of No Significant Impact (EA and FONSI) or Record of Decision (EIS and ROD),
 - Electronic version of the plan
 - Peer review comments and disposition of each comment
 - (c) Send one copy of the approved plan, including disposition of peer review comments, to the NWMC director.
- (5) The national program manager for the Watershed Rehabilitation Program will conduct the final programmatic review and prepare a letter for the NRCS Chief's signature to authorize funding subject to appropriations. Plan authorization by the Chief for each rehabilitation project is required prior to funds being utilized for implementation.
- (6) In situations where a sponsor chooses not to implement any of the rehabilitation alternatives in their completed rehabilitation plan, NRCS will notify the State Dam Safety Agency which participated in the prioritization of the plan to be developed through the Watershed Rehabilitation Program, and which has enforcement authority to issue an order to rehabilitate or remove an unsafe dam.

505.36 Project Implementation

- A. Project implementation must be in accordance with 390-NWPM, Part 504 (of this manual).
- B. The STC must submit a request for technical and financial assistance funds for implementation of specific rehabilitation projects through the POINTS database (390-NWPM, Part 504, Subpart A, Section 504.1B).
- C. The STC may only request funds when:
 - (1) A commitment is made to provide or acquire technical resources for implementation of the rehabilitation plan.

- (2) A determination is made that the SLO will have the required land rights and financing for the 35-percent non-Federal cost-share at the time of implementation.

D. Implementation of all work associated with the rehabilitation project must conform to policy as outlined in Title 210, National Engineering Manual (NEM). Current NRCS engineering criteria must be used. Work must meet all applicable Federal, State and local laws, regulations, and codes.

E. Prior to obligating funds for rehabilitation of high hazard class dams, the STC must verify in the project administrative record that the SLO has prepared a current Emergency Action Plan consistent with 210-NEM, Part 520, Subpart C, Section 520.27 and Title 180, National Operation and Maintenance Manual (NOMM), Part 500, Subpart F.

F. Prior to obligating funds for rehabilitation of inventory-size dams (see NEM Section 210-520.21) with low or significant hazard classification, the STC must verify in the project administrative record that the SLO has certified that controls are in force to prevent future development within the breach inundation area (as defined in NEM Section 210-520.28) that would increase the hazard classification during the evaluated project life. The restrictions on improvements acquired through easements or fee title purchases must be recorded with the deeds to the affected real property.

G. Prior to obligation of funds for implementing a rehabilitation project, the SLO must certify that land rights are obtained in accordance with 390-NWPM, Part 504, Subpart A, Section 504.3 (of this manual).

- (1) The minimum land rights area upstream from the dam must be for all areas below the elevation of the top of the dam, unless the plan allows a lower elevation (not lower than the elevation of the 100-year, 24-hour storm or auxiliary spillway elevation, whichever is higher).
- (2) If the land rights elevation is lower than the top of the dam, the rationale for the selected elevation of required land rights must be discussed in the plan and a provision must be included in the watershed agreement that describes the potential risk and liability the sponsors and landowners may be assuming by not securing land rights to the top-of-dam elevation.
- (3) The land rights must include prohibition of future construction of inhabitable dwellings upstream from the dam below the elevation of top of dam.
- (4) All land rights must be identified by metes and bounds surveys conducted by a professional land surveyor.

H. Prior to obligating funds for implementing a rehabilitation project, the STC must execute a new O&M agreement and plan that covers the new evaluated life of the rehabilitation project, in accordance with 180-NOMM; 390-NWPM, Part 506, Subparts C and 506 D, and 390-NWPM, Part 504, Subpart A, Section 504.2C (of this manual).

505.37 Operation and Maintenance

Operation and maintenance (O&M) of rehabilitation work must be performed in accordance with 180-NOMM, Part 500, and 390-NWPM, Part 505, Subpart B, Section 505.11 (of this manual).

505.38 Data Management

A. The STC must submit project benefits data in POINTS and update the NRCS Dams Inventory information upon completion of rehabilitation work.

B. The SLO must prepare and submit a completion report that verifies the completion of rehabilitation work in accordance with the approved work plan within 90 days of completion of rehabilitation work. The STC must forward the completion report to the director of the Financial Assistance Programs Division, and ensure that the following information is provided:

- (1) Project (dam) name and number
- (2) Name of sponsor
- (3) Completion date
- (4) Total construction cost (NRCS financial assistance and all SLO costs including land rights)
- (5) Federal share of the construction cost (financial assistance)

Part 505 – Post Installation Assistance

Subpart E – Completion of Federal Interest

505.40 Introduction

A. Completion of Federal Interest occurs when a project measure has accrued all the benefits in which the Federal government has an interest or when the Federal Government's financial interest has been purchased by the SLO or another entity. Completion of Federal interest may involve taking a measure out of service in an environmentally sound and safe manner or converting it to another purpose.

B. Completion of Federal interest must be documented for all installed works of improvement.

505.41 Procedure

A. The completion of Federal interest must be documented by an exchange of correspondence from the STC to the SLOs. The exchange of correspondence identifies the project measure and the expiration of the O&M agreement for the project measure. A copy of the exchange of correspondence must be provided to the director of the Conservation Planning and Technical Assistance Division (CPTAD).

B. Modification must be made to the O&M agreement to reflect the completion of Federal interest of the installed measures where the agreement includes more than one measure. In the case where responsibility is transferred to another entity, an exchange of correspondence must be completed to document the change.

505.42 Technical Assistance

NRCS may provide technical assistance for completion of Federal interest work.

505.43 Closed Projects

A. Projects are closed when the criteria for the status "Project Life Complete", described in Table 504.1 "Watershed Project Life Stages," have been met. The STC must notify the SLO in writing when a watershed project is closed.

B. Projects are considered closed when a project has been deauthorized.

Part 506 – Exhibits

Subpart A – Public Laws and Rules

506.0 Public Law 83-566, the Watershed Protection and Flood Prevention Act, as amended (16 U.S.C. Parts 1001-1008, 1010, and 1012)

Public Law 83-566, except for Sections 7 and 11, has been codified in Title 16 U.S. Code Chapter 18. Except for Sections 3a and 14, the sections of Public Law 83-566 do not have titles. Titles were added to the other sections when they were codified. The section numbers used here are those of the Act, with the corresponding U.S. Code section numbers and titles shown in parentheses. The text, except for Sections 7 and 11, is the U.S. Code version.

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Section 1 (16 U.S.C. Section 1001, “Declaration of policy”)

Erosion, floodwater, and sediment damages in the watersheds of the rivers and streams of the United States, causing loss of life and damage to property, constitute a menace to the national welfare; and it is the sense of Congress that the Federal Government should cooperate with States and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies for the purpose of preventing such damages, of furthering the conservation, development, utilization, and disposal of water, and the conservation and utilization of land and thereby of preserving,

protecting, and improving the Nation's land and water resources and the quality of the environment.

Section 2 (16 U.S.C. Section 1002, “Definitions”)

For the purposes of this chapter, the following terms shall mean:

The "Secretary"—the Secretary of Agriculture of the United States.

"Works of improvement"—any undertaking for—

- (1) flood prevention (including structural and land treatment measures),
- (2) the conservation, development, utilization, and disposal of water, or
- (3) the conservation and proper utilization of land,

in watershed or subwatershed area not exceeding two hundred and fifty thousand acres and not including any single structure which provides more than twelve thousand five hundred acre-feet of floodwater detention capacity, and more than twenty-five thousand acre-feet of total capacity. No appropriation shall be made for any plan involving an estimated Federal contribution to construction costs in excess of \$5,000,000, or which includes any structure which provides more than twenty-five hundred acre-feet of total capacity unless such plan has been approved by resolutions adopted by the appropriate committees of the Senate and House of Representatives: Provided, That in the case of any plan involving no single structure providing more than 4,000 acre-feet of total capacity the appropriate committees shall be the Committee on Agriculture, Nutrition, and Forestry of the Senate and the Committee on Agriculture of the House of Representatives and in the case of any plan involving any single structure of more than 4,000 acre-feet of total capacity the appropriate committees shall be the Committee on Environment and Public Works of the Senate and the Committee on Public Works and Transportation of the House of Representatives, respectively. Each project must contain benefits directly related to agriculture, including rural communities that account for at least 20 percent of the total benefits of the project. A number of such subwatersheds when they are component parts of a larger watershed may be planned together when the local sponsoring organizations so desire.

"Local organization"—any State, political subdivision thereof, soil or water conservation district, flood prevention or control district, or combinations thereof, or any other agency having authority under State law to carry out, maintain and operate the works of improvement; or any irrigation or reservoir company, water users' association, or similar organization having such authority and not being operated for profit that may be approved by the Secretary; or any Indian tribe or tribal organization, as defined in section 450b of title 25, having authority under Federal, State, or Indian tribal law to carry out, maintain, and operate the works of improvement.

Section 3 (16 U.S.C. Section 1003, “Assistance to local organizations”)

In order to assist local organizations in preparing and carrying out plans for works of improvement, the Secretary is authorized, upon application of local organizations if such application has been submitted to, and not disapproved within 45 days by, the State agency having supervisory responsibility over programs provided for in this chapter, or by the Governor if there is no State agency having such responsibility –

- (1) to conduct such investigations and surveys as may be necessary to prepare plans for works of improvement;
- (2) to prepare plans and estimates required for adequate engineering evaluation;

(3) to make allocations of costs to the various purposes to show the basis of such allocations and to determine whether benefits exceed costs;

(4) to cooperate and enter into agreements with and to furnish financial and other assistance to local organizations: Provided, That, for the land-treatment measures, the Federal assistance shall not exceed the rate of assistance for similar practices under existing national programs;

(5) to obtain the cooperation and assistance of other Federal agencies in carrying out the purposes of this section;

(6) to enter into agreements with landowners, operators, and occupiers, individually or collectively, based on conservation plans of such landowners, operators, and occupiers which are developed in cooperation with and approved by the soil and water conservation district in which the land described in the agreement is situated, to be carried out on such land during a period of not to exceed ten years, providing for changes in cropping systems and land uses and for the installation of soil and water conservation practices and measures needed to conserve and develop the soil, water, woodland, wildlife, energy, and recreation resources of and enhance the water quality of lands within the area included in plans for works of improvement, as provided for in such plans, including watershed or subwatershed work plans in connection with the eleven watershed improvement programs authorized by section 13 of the Act of December 22, 1944 (58 Stat. 887), as amended and supplemented. Applications for assistance in developing such conservation plans shall be made in writing to the soil and water conservation district involved, and the proposed agreement shall be reviewed by such district. In return for such agreements by landowners, operators, and occupiers the Secretary shall agree to share the costs of carrying out those practices and measures set forth in the agreement for which he determines that cost sharing is appropriate and in the public interest. The portion of such costs, including labor, to be shared shall be that part which the Secretary determines is appropriate and in the public interest for the carrying out of the practices and measures set forth in the agreement, except that the Federal assistance shall not exceed the rate of assistance for similar practices and measures under existing national programs. The Secretary may terminate any agreement with a landowner, operator, or occupier by mutual agreement if the Secretary determines that such termination would be in the public interest, and may agree to such modifications of agreements, previously entered into hereunder, as he deems desirable to carry out the purposes of this paragraph or to facilitate the practical administration of the agreements provided for herein. Notwithstanding any other provision of law, the Secretary, to the extent he deems it desirable to carry out the purposes of this paragraph, may provide in any agreement hereunder for (1) preservation for a period not to exceed the period covered by the agreement and an equal period thereafter of the cropland, crop acreage, and allotment history applicable to land covered by the agreement for the purpose of any Federal program under which such history is used as a basis for an allotment or other limitation on the production of any crop; or (2) surrender of any such history and allotments.

Section 3a (16 U.S.C. Section 1003a, “Cost-share assistance”)

(a) Easements

The Secretary may provide cost-share assistance to project sponsors to enable such sponsors to acquire perpetual wetland or floodplain conservation easements to perpetuate, restore and enhance the natural capability of wetlands and floodplains to retain excessive floodwaters, improve water quality and quantity, and provide habitat for fish and wildlife.

(b) Amount

The Secretary shall require that project sponsors of watershed projects provide up to 50 percent of the cost of acquiring easements under subsection (a) of this section.

Section 4 (16 U.S.C. Section 1004, “Conditions for Federal assistance”)

The Secretary shall require as a condition to providing Federal assistance for the installation of works of improvement that local organizations shall –

(1) acquire, or with respect to interests in land to be acquired by condemnation provide assurances satisfactory to the Secretary that they will acquire, without cost to the Federal Government from funds appropriated for the purposes of this chapter, such land, easements, or rights-of-way as will be needed in connection with works of improvement installed with Federal assistance: Provided, That when a local organization agrees to operate and maintain any reservoir or other area included in a plan for public fish and wildlife or recreational development, the Secretary must be authorized to bear not to exceed one-half of the costs of (a) the land, easements, or rights-of-way acquired or to be acquired by the local organization for such reservoir or other area, and (b) minimum basic facilities needed for public health and safety, access to, and use of such reservoir or other area for such purposes: Provided further, That the Secretary must be authorized to participate in recreational development in any watershed project only to the extent that the need therefore is demonstrated in accordance with standards established by him, taking into account the anticipated man-days of use of the projected recreational development and giving consideration to the availability within the region of existing water-based outdoor recreational developments: Provided further, That the Secretary must be authorized to participate in not more than one recreational development in a watershed project containing less than seventy-five thousand acres, or two such developments in a project containing between seventy-five thousand and one hundred and fifty thousand acres, or three such developments in projects exceeding one hundred and fifty thousand acres: Provided further, That when the Secretary and a local organization have agreed that the immediate acquisition by the local organization of land, easements, or rights-of-way is advisable for the preservation of sites for works of improvement included in a plan from encroachment by residential, commercial, industrial, or other development, the Secretary must be authorized to advance to the local organization from funds appropriated for construction of works of improvement the amounts required for the acquisition of such land, easements or rights-of-way; and, except where such costs are to be borne by the Secretary, such advance must be repaid by the local organization, with interest, prior to construction of the works of improvement, for credit to such construction funds: Provided further, That the Secretary must be authorized to bear an amount not to exceed one-half of the costs of the land, easements, or rights-of-way acquired or to be acquired by the local organization for mitigation of fish and wildlife habitat losses, and that such acquisition is not limited to the confines of the watershed project boundaries;

(2) assume (A) such proportionate share, as is determined by the Secretary to be equitable in consideration of national needs and assistance authorized for similar purposes under other Federal programs, of the costs of installing any works of improvement, involving Federal assistance (excluding engineering costs), which is applicable to the agricultural phases of the conservation, development, utilization, and disposal of water or for fish and wildlife development, recreational development, ground water recharge, water quality management, or the conservation and proper utilization of land: Provided, That works of improvement for water quality management must consist

primarily of water storage capacity in reservoirs for regulation of streamflow, except that any such storage and water releases must not be provided as a substitute for adequate treatment or other methods of controlling waste at the source, and must be consistent with standards and regulations adopted by the Water Resources Council on Federal cost sharing for water quality management, and (B) all of the cost of installing any portion of such works applicable to other purposes except that any part of the construction cost (including engineering costs) applicable to flood prevention and features relating thereto must be borne by the Federal Government and paid for by the Secretary out of funds appropriated for the purposes of this chapter: Provided, That, in addition to and without limitation on the authority of the Secretary to make loans or advancements under section 1006a of this title, the Secretary may pay for any storage of water for present or anticipated future demands or needs for municipal or industrial water included in any reservoir structure constructed or modified under the provisions of this chapter as hereinafter provided: Provided further, That the cost of water storage to meet future demands may not exceed 30 per centum of the total estimated cost of such reservoir structure and the local organization shall give reasonable assurances, and there is evidence, that such demands for the use of such storage will be made within a period of time which will permit repayment within the life of the reservoir structure of the cost of such storage: Provided further, That the Secretary shall determine prior to initiation of construction or modification of any reservoir structure including such water supply storage that there are adequate assurances by the local organization or by an agency of the State having authority to give such assurances, that the Secretary will be reimbursed the cost of water supply storage for anticipated future demands, and that the local organization will pay not less than 50 per centum of the cost of storage for present water supply demands: And provided further, That the cost to be borne by the local organization for anticipated future demands may be repaid within the life of the reservoir structure but in no event to exceed fifty years after the reservoir structure is first used for the storage of water for anticipated future water supply demands, except that (1) no reimbursement of the cost of such water supply storage for anticipated future demands need be made until such supply is first used, and (2) no interest shall be charged on the cost of such water-supply storage for anticipated future demands until such supply is first used, but in no case shall the interest-free period exceed ten years. The interest rate used for purposes of computing the interest on the unpaid balance shall be determined in accordance with the provisions of section 1006a of this title.

(3) make arrangements satisfactory to the Secretary for defraying costs of operating and maintaining such works of improvement, in accordance with regulations presented by the Secretary of Agriculture;

(4) acquire, or provide assurance that landowners or water users have acquired, such water rights, pursuant to State law, as may be needed in the installation and operation of the work of improvement;

(5) obtain agreements to carry out recommended soil conservation measures and proper farm plans from owners of not less than 50 per centum of the land situated in the drainage area above each retention reservoir to be installed with Federal assistance; and

(6) submit a plan of repayment satisfactory to the Secretary for any loan or advancement made under the provisions of section 1006a of this title.

Section 5 (16 U.S.C. Section 1005, “Works of improvement”)

(1) Engineering and other services; reimbursement; advances

At such time as the Secretary and the interested local organization have agreed on a plan for works of improvement, and the Secretary has determined that the benefits exceed the costs, and the local organization has met the requirements for participation in carrying out the works of improvement as set forth in section 1004 of this title, the local organization may secure engineering and other services, including the design, preparation of contracts and specifications, awarding of contracts, and supervision of construction, in connection with such works of improvement, by retaining or employing a professional engineer or engineers satisfactory to the Secretary or may request the Secretary to provide such services: Provided, That if the local organization elects to employ a professional engineer or engineers, the Secretary shall reimburse the local organization for the costs of such engineering and other services secured by the local organization as are properly chargeable to such works of improvement in an amount not to exceed the amount agreed upon in the plan for works of improvement or any modification thereof: Provided further, That the Secretary may advance such amounts as may be necessary to pay for such services, but such advances with respect to any works of improvement shall not exceed 5 per centum of the estimated installation cost of such works.

(2) Federal construction; request by local organization

Except as to the installation of works of improvement on Federal lands, the Secretary shall not construct or enter into any contract for the construction of any structure: Provided, that, if requested to do so by the local organization, the Secretary may enter into contracts for the construction of structures.

(3) Transmission of certain plans to Congress.

Whenever the estimated Federal contribution to the construction costs of works of improvement in the plan for any watershed or subwatershed area shall exceed \$5,000,000 or the works of improvement include any structure having a total capacity in excess of twenty-five hundred acre-feet, the Secretary shall transmit a copy of the plan and the justification therefore to the Congress through the President.

(4) Transmission of certain plans and recommendations to Congress.

Any plans for works of improvement involving an estimated Federal contribution to construction costs in excess of \$5,000,000 or including any structure having a total capacity in excess of twenty-five hundred acre-feet (a) which includes works of improvement for reclamation or irrigation, or which affects public or other lands or wildlife under the jurisdiction of the Secretary of the Interior, (b) which includes Federal assistance for floodwater detention structures, (c) which includes features which may affect the public health, or (d) which includes measures for control or abatement of water pollution, shall be submitted to the Secretary of the Interior, the Secretary of the Army, the Secretary of Health and Human Services, or the Administrator of the Environmental Protection Agency, respectively, for his views and recommendations at least thirty days prior to transmission of the plan to the Congress through the President. The views and recommendations of the Secretary of the Interior, the Secretary of the Army, the Secretary of Health and Human Services, and the Administrator of the Environmental Protection Agency, if received by the Secretary prior to the expiration of the above thirty-day period, shall accompany the plan transmitted by the Secretary to the Congress through the President.

(5) Rules and Regulations

Prior to any Federal participation in the works of improvement under this chapter, the President shall issue such rules and regulations as he deems necessary or desirable to

carry out the purposes of this chapter, and to assure the coordination of the work authorized under this chapter and related work of other agencies, including the Department of the Interior and the Department of the Army.

Section 6 (16 U.S.C. Section 1006, “Cooperative Programs”)

The Secretary is authorized in cooperation with other Federal and with States and local agencies to make investigations and surveys of the watershed of rivers and other waterways as a basis for the development of coordinated programs. In areas where the programs of the Secretary of Agriculture may affect public or other lands under the jurisdiction of the Secretary of the Interior, the Secretary of the Interior is authorized to cooperate with the Secretary of Agriculture in the planning and development of works or programs for such lands.

Section 7 (Not in U.S.C.)

The provisions of the Act of June 22, 1936 (49 Stat. 1570), as amended and supplemented, conferring authority upon the Department of Agriculture under the direction of the Secretary of Agriculture to make preliminary examinations and surveys and to prosecute works of improvement for runoff and waterflow retardation and soil erosion prevention in the watersheds of rivers and other waterways are hereby repealed: Provided, That (a) the authority of that Department of Agriculture, under the direction of the Secretary, to prosecute the works of improvement for runoff and waterflow retardation and soil erosion prevention authorization to be carried out by the Department by the Act of December 22, 1944 (58 Stat. 887), as amended, and (b) the authority of the Secretary of Agriculture to undertake emergency measures for runoff retardation and soil erosion prevention authorized to be carried out by section 7 of the Act of June 28, 1938 (52 Stat. 1215), as amended by section 216 of the Act of May 17, 1950 (64 Stat. 163), shall not be affected by the provisions of this section: Provided further, That in connection with the eleven watershed improvement programs authorized by section 13 of the Act of December 22, 1944 (58 Stat. 887), as amended and supplemented, the Secretary of Agriculture is authorized to prosecute additional works of improvement for the conservation, development, utilization, and disposal of water in accordance with the provisions of section 4 of this Act or any amendments hereafter made thereto.

Section 8 (16 U.S.C. Section 1006a, “Loans or advancements for financing local share of costs; repayment; interest; maximum amount”)

The Secretary is authorized to make loans or advancements (a) to local organizations to finance the local share of costs of carrying out works of improvement provided for in this chapter, and (b) to State and local agencies to finance the local share of costs of carrying out works of improvement (as defined in section 1002 of this title) in connection with the eleven watershed improvement programs authorized by section 13 of the Act of December 22, 1944 (58 Stat. 887), as amended and supplemented: Provided, That the works of improvement in connection with said eleven watershed improvement programs shall be integral parts of watershed or subwatershed work plans agreed upon by the Secretary of Agriculture and the concerned State and local agencies. A loan or advance under this section shall be made under a contract or agreement that provides, under such terms and conditions as the Secretary considers appropriate, for the repayment of the loan or advance in not more than 50 years from the date when the principal benefits of the works of improvement first become available, with interest at a rate not to exceed the current market yield for outstanding municipal obligations with remaining periods to maturity comparable to the average maturity for the loan, adjusted to the nearest 1/8 of

one percent. With respect to any single plan for works of improvement, the amount of any such loan or advancement shall not exceed \$10,000,000.

Section 9 (16 U.S.C. Section 1006b, “Territorial application”)

The provisions of this chapter shall be applicable to Hawaii, Alaska, Puerto Rico, and the Virgin Islands.

Section 10 (16 U.S.C. Section 1007, “Authorization of appropriations”)

There are hereby authorized to be appropriated such sums as may be necessary to carry out the purposes of this chapter, such sums to remain available until expended. No appropriation hereafter available for assisting local organizations in preparing and carrying out plans for works of improvement under the provisions of section 1003 of this title or clause (a) of section 1006a of this title shall be available for any works of improvement pursuant to this chapter or otherwise in connection with the eleven watershed improvement programs authorized by section 13 of the Act of December 22, 1944 (58 Stat. 887), as amended and supplemented, or for making loans or advancements to State and local agencies as authorized by clause (b) of section 1006a of this title.

Section 11 (Not in U.S.C.)

This Act may be cited as the “Watershed Protection and Flood Prevention Act.”

Section 12 (16 U.S.C. Section 1008, “Notification of Secretary of the Interior of approval of assistance; surveys and investigations; report and recommendations; consideration; cost of surveys; investigations and reports”)

When the Secretary approves the furnishing of assistance to a local organization in preparing a plan for works of improvement as provided for in section 1003 of this title:

(1) The Secretary shall so notify the Secretary of the Interior in order that the latter, as he desires, may make surveys and investigations and prepare a report with recommendations concerning the conservation and development of wildlife resources and participate, under arrangements satisfactory to the Secretary of Agriculture, in the preparation of a plan for works of improvement that is acceptable to the local organization and the Secretary of Agriculture.

(2) Full consideration shall be given to the recommendations contained in any such report of the Secretary of the Interior as he may submit to the Secretary of Agriculture prior to the time the local organization and the Secretary of Agriculture have agreed on a plan for works of improvement. The plan shall include such of the technically and economically feasible works of improvement for wildlife purposes recommended in the report by the Secretary of the Interior as are acceptable to, and agreed to by, the local organization and the Secretary of Agriculture, and such report of the Secretary of the Interior must, if requested by the Secretary of the Interior, accompany the plan for works of improvement when it is submitted to the Secretary of Agriculture for approval or transmitted to the Congress through the President.

(3) The cost of making surveys and investigations and of preparing reports concerning the conservation and development of wildlife resources shall be borne by the Secretary of the Interior out of funds appropriated to his Department.

Section 13 (16 U.S.C. Section 1010, “Data”)

The Secretary shall collect and maintain data on a national and State by State basis concerning -

- (1) expenditures for the individual flood control and conservation measures for which assistance is provided under this chapter; and
- (2) the expected flood control or environmental (including soil erosion) benefits that will result from the implementation of such measures.

Section 14 (16 U.S.C. Section 1012, “Rehabilitation of structural measures near, at, or past their evaluated life expectancy”)

(a) Definitions

For purposes of this section:

(1) Rehabilitation

The term "rehabilitation", with respect to a structural measure constructed as part of a covered water resource project, means the completion of all work necessary to extend the service life of the structural measure and meet applicable safety and performance standards. This may include:

- (A) protecting the integrity of the structural measure or prolonging the useful life of the structural measure beyond the original evaluated life expectancy;
- (B) correcting damage to the structural measure from a catastrophic event;
- (C) correcting the deterioration of structural components that are deteriorating at an abnormal rate;
- (D) upgrading the structural measure to meet changed land use conditions in the watershed served by the structural measure or changed safety criteria applicable to the structural measure; or
- (E) decommissioning the structure, if requested by the local organization.

(2) Covered water resource project

The term "covered water resource project" means a work of improvement carried out under any of the following:

- (A) This chapter
- (B) Section 13 of the Act of December 22, 1944 (Public Law 78-534; 58 Stat. 905).
- (C) The pilot watershed program authorized under the heading "Flood Prevention" of the Department of Agriculture Appropriation Act, 1954 (Public Law 156; 67 Stat. 214).
- (D) Subtitle H of title XV of the Agriculture and Food Act of 1981 (16 U.S.C. 3451 et seq.; commonly known as the Resource Conservation and Development Program).

(3) Structural measure

The term "structural measure" means a physical improvement that impounds water, commonly known as a dam, which was constructed as part of a covered water resource project, including the impoundment area and flood pool.

(b) Cost-share assistance for rehabilitation

(1) Assistance authorized

The Secretary may provide financial assistance to a local organization to cover a portion of the total costs incurred for the rehabilitation of structural measures originally

constructed as part of a covered water resource project. The total costs of rehabilitation include the costs associated with all components of the rehabilitation project, including acquisition of land, easements, and rights-of-ways, rehabilitation project administration, the provision of technical assistance, contracting, and construction costs, except that the local organization shall be responsible for securing all land, easements, or rights-of-ways necessary for the project.

(2) Amount of assistance; limitations

The amount of Federal funds that may be made available under this subsection to a local organization for construction of a particular rehabilitation project shall be equal to 65 percent of the total rehabilitation costs, but not to exceed 100 percent of actual construction costs incurred in the rehabilitation. However, the local organization shall be responsible for the costs of water, mineral, and other resource rights and all Federal, State, and local permits.

(3) Relation to land use and development regulations

As a condition on entering into an agreement to provide financial assistance under this subsection, the Secretary, working in concert with the affected unit or units of general purpose local government, may require that proper zoning or other developmental regulations are in place in the watershed in which the structural measures to be rehabilitated under the agreement are located so that –

(A) the completed rehabilitation project is not quickly rendered inadequate by additional development; and

(B) society can realize the full benefits of the rehabilitation investment.

(c) Technical assistance for watershed project rehabilitation

The Secretary, acting through the Natural Resources Conservation Service, may provide technical assistance in planning, designing, and implementing rehabilitation projects should a local organization request such assistance. Such assistance may consist of specialists in such fields as engineering, geology, soils, agronomy, biology, hydraulics, hydrology, economics, water quality, and contract administration.

(d) Prohibited use

(1) Performance of operation and maintenance

Rehabilitation assistance provided under this section may not be used to perform operation and maintenance activities specified in the agreement for the covered water resource project entered into between the Secretary and the local organization responsible for the works of improvement. Such operation and maintenance activities shall remain the responsibility of the local organization, as provided in the project work plan.

(2) Renegotiation

Notwithstanding paragraph (1), as part of the provision of financial assistance under subsection (b) of this section, the Secretary may renegotiate the original agreement for the covered water resource project entered into between the Secretary and the local organization regarding responsibility for the operation and maintenance of the project when the rehabilitation is finished.

(e) Application for rehabilitation assistance

A local organization may apply to the Secretary for technical and financial assistance under this section if the application has also been submitted to and approved by the State

agency having supervisory responsibility over the covered water resource project at issue or, if there is no State agency having such responsibility, by the Governor of the State. The Secretary shall request the State dam safety officer (or equivalent State official) to be involved in the application process if State permits or approvals are required. The rehabilitation of structural measures shall meet standards established by the Secretary and address other dam safety issues. At the request of the local organization, personnel of the Natural Resources Conservation Service of the Department of Agriculture may assist in preparing applications for assistance.

(f) Ranking of requests for rehabilitation assistance

The Secretary shall establish such system of approving rehabilitation requests, recognizing that such requests will be received throughout the fiscal year and subject to the availability of funds to carry out this section, as is necessary for proper administration by the Department of Agriculture and equitable for all local organizations. The approval process shall be in writing, and made known to all local organizations and appropriate State agencies.

(g) Prohibition on certain rehabilitation assistance

The Secretary may not approve a rehabilitation request if the need for rehabilitation of the structure is the result of a lack of adequate maintenance by the party responsible for the maintenance.

(h) Funding

(i) Assessment of rehabilitation needs

The Secretary, in concert with the responsible State agencies, shall conduct an assessment of the rehabilitation needs of covered water resource projects in all States in which such projects are located.

(j) Recordkeeping and reports

(1) Secretary

The Secretary shall maintain a data base to track the benefits derived from rehabilitation projects supported under this section and the expenditures made under this section. On the basis of such data and the reports submitted under paragraph (2), the Secretary shall prepare and submit to Congress an annual report providing the status of activities conducted under this section.

(2) Grant recipients

Not later than 90 days after the completion of a specific rehabilitation project for which assistance is provided under this section, the local organization that received the assistance shall make a report to the Secretary giving the status of any rehabilitation effort undertaken using financial assistance provided under this section.

506.1 Public Law 78-534, the Flood Control Act of 1944

PUBLIC LAWS - CHAPTER 665 December 22, 1944 [H. R. 4485]

Flood Control Act of 1944

Public Law 534

AN ACT

Authorizing the construction of certain public works on rivers and harbors for flood control, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, In connection with the exercise of jurisdiction over the rivers of the Nation through the construction of works of improvement, for navigation or flood control, as herein authorized, it is hereby declared to be the policy of the Congress to recognize the interests and rights of the States in determining the development of the watersheds within their borders and likewise their interests and rights in water utilization and control, as herein authorized to preserve and protect to the fullest possible extent established and potential uses, for all purposes, of the waters of the Nation's rivers; to facilitate the consideration of projects on a basis of comprehensive and coordinated development; and to limit the authorization and construction of navigation works to those in which a substantial benefit to navigation will be realized there-from and which can be operated consistently with appropriate and economic use of the waters of such rivers by other users.

In conformity with this policy:

(a) Plans, proposals, or reports of the Chief of Engineers, War Department, for any works of improvement for navigation or flood control not heretofore or herein authorized, shall be submitted to the Congress only upon compliance with the provisions of this paragraph (a). Investigations which form the basis of any such plans, proposals, or reports shall be conducted in such a manner as to give to the affected State or States, during the course of the investigations, information developed by the investigations and also opportunity for consultation regarding plans and proposals, and, to the extent deemed practicable by the Chief of Engineers, opportunity to cooperate in the investigations. If such investigations in whole or part are concerned with the use or control of waters arising west of the ninety-seventh meridian, the Chief of Engineers shall give to the Secretary of the Interior, during the course of the investigations, information developed by the investigations and also opportunity for consultation regarding plans and proposals, and to the extent deemed practicable by the Chief of Engineers, opportunity to cooperate in the investigations. The relations of the Chief of Engineers with any State under this paragraph (a) shall be with the Governor of the State or such official or agency of the State as the Governor may designate. The term "affected State or States" shall include those in which the works or any part thereof are proposed to be located; those which in whole or part are both within the drainage basin involved and situated in a State lying wholly or in part west of the ninety-eighth meridian; and such of those which are east of the ninety-eighth meridian as, in the judgment of the Chief of Engineers, will be substantially affected. Such plans, proposals, or reports and related investigations shall be made to the end, among other things, of facilitating the coordination of plans for the construction and operation of the proposed works with other plans involving the waters which would be used or controlled by such proposed works. Each report submitting any such plans or proposals to the Congress shall set out therein, among other things, the relationship between the plans for construction and operation of the proposed works and the plans, if any, submitted by the affected States and by the Secretary of the Interior. The Chief of Engineers shall transmit a copy of his proposed report to each affected State, and, in case the plans or proposals covered by the report are concerned with the use or control of waters which rise in whole or in part west of the ninety-seventh meridian, to the Secretary of the Interior. Within ninety days from the date of receipt of said proposed report, the written views and recommendations of each affected State and of the Secretary of the Interior may be submitted to the Chief of Engineers. The Secretary of War shall transmit to the Congress, with such comments and recommendations as he deems appropriate, the proposed report together with

the submitted views and recommendations of affected States and of the Secretary of the Interior. The Secretary of War may prepare and make said transmittal any time following said ninety-day period. The letter of transmittal and its attachments shall be printed as a House or Senate document.

(b) The use for navigation, in connection with the operation and maintenance of such works herein authorized for construction, of waters arising in States lying wholly or partly west of the ninety-eighth meridian shall be only such use as does not conflict with any beneficial consumptive use, present or future, in States lying wholly or partly west of the ninety-eighth meridian, of such waters for domestic, municipal, stock water, irrigation, mining, or industrial purposes.

(c) The Secretary of the Interior, in making investigations of and reports on works for irrigation and purposes incidental thereto must, in relation to an affected State or States (as defined in paragraph (a) of this section), and to the Secretary of War, be subject to the same provisions regarding investigations, plans, proposals, and reports as prescribed in paragraph (a) of this section for the Chief of Engineers and the Secretary of War. In the event a submission of views and recommendations, made by an affected State or by the Secretary of War pursuant to said provisions, sets forth objections to the plans or proposals covered by the report of the Secretary of the Interior, the proposed works shall not be deemed authorized except upon approval by an Act of Congress; and subsection 9 (a) of the Reclamation Project Act of 1939 (53 Stat. 1187) and subsection 3 (a) of the Act of August 11, 1939 (53 Stat. 1418), as amended, are hereby amended accordingly.

Section 2. That the words "flood control" as used in section 1 of the Act of June 22, 1936, shall be construed to include channel and major drainage improvements, and that hereafter Federal investigations and improvements of rivers and other waterways for flood control and allied purposes shall be under the jurisdiction of and shall be prosecuted by the War Department under the direction of the Secretary of War and supervision of the Chief of Engineers, and Federal investigations of watersheds and measures for run-off and water-flow retardation and soil-erosion prevention on watersheds shall be under the jurisdiction of and shall be prosecuted by the Department of Agriculture under the direction of the Secretary of Agriculture, except as otherwise provided by Act of Congress.

Section 3. That section 3 of the Act approved June 22, 1936 (Public, Numbered 738, Seventy-fourth Congress), as amended by section 2 of the Act approved June 28, 1938 (Public, Numbered 761, Seventy-fifth Congress), shall apply to all works authorized in this Act, except that for any channel improvement or channel rectification project provisions (a), (b), and (c) of section 3 of said Act of June 22, 1936, shall apply thereto, and except as otherwise provided by law: Provided, That the authorization for any flood-control project herein adopted requiring local cooperation shall expire five years from the date on which local interests are notified in writing by the War Department of the requirements of local cooperation, unless said interests shall within said time furnish assurances satisfactory to the Secretary of War that the required cooperation will be furnished.

Section 4. The Chief of Engineers, under the supervision of the Secretary of War, is authorized to construct, maintain, and operate public park and recreational facilities in reservoir areas under the control of the War Department, and to permit the construction, maintenance, and operation of such facilities. The Secretary of War is authorized to grant leases of lands, including structure or facilities thereon, in reservoir areas for such periods and upon such terms as he may deem reasonable: Provided, That preference shall be given to Federal, State, or local governmental agencies, and licenses may be granted without monetary consideration, to such agencies for the use of areas suitable for public park and recreational

purposes, when the Secretary of War determines such action to be in the public interest. The water areas of all such reservoirs shall be open to public use generally, without charge, for boating, swimming, bathing, fishing, and other recreational purposes, and ready access to and exit from such water areas along the shores of such reservoirs shall be maintained for general public use, when such use is determined by the Secretary of War not to be contrary to the public interest, all under such rules and regulations as the Secretary of War may deem necessary. No use of any area to which this section applies shall be permitted which is inconsistent with the laws for the protection of fish and game of the State in which such area is situated. All moneys received for leases or privileges shall be deposited in the Treasury of the United States as miscellaneous receipts.

Section 5. Electric power and energy generated at reservoir projects under the control of the War Department and in the opinion of the Secretary of War not required in the operation of such projects shall be delivered to the Secretary of the Interior, who shall transmit and dispose of such power and energy in such manner as to encourage the most widespread use thereof at the lowest possible rates to consumers consistent with sound business principles, the rate schedules to become effective upon confirmation and approval by the Federal Power Commission. Rate schedules shall be drawn having regard to the recovery (upon the basis of the application of such rate schedules to the capacity of the electric facilities of the projects) of the cost of producing and transmitting such electric energy, including the amortization of the capital investment allocated to power over a reasonable period of years. Preference in the sale of such power and energy shall be given to public bodies and cooperatives. The Secretary of the Interior is authorized, from funds to be appropriated by the Congress, to construct or acquire, by purchase or other agreement, only such transmission lines and related facilities as may be necessary in order to make the power and energy generated at said projects available in wholesale quantities for sale on fair and reasonable terms and conditions to facilities owned by the Federal Government, public bodies, cooperatives, and privately owned companies. All moneys received from such sales shall be deposited in the Treasury of the United States as miscellaneous receipts.

Section 6. That the Secretary of War is authorized to make contracts with States, municipalities, private concerns, or individuals, at such prices and on such terms as he may deem reasonable, for domestic and industrial uses for surplus water that may be available at any reservoir under the control of the War Department: Provided, That no contracts for such water shall adversely affect then existing lawful uses of such water. All moneys received from such contracts shall be deposited in the Treasury of the United States as miscellaneous receipts.

Section 7. Hereafter, it shall be the duty of the Secretary of War to prescribe regulations for the use of storage allocated for flood control or navigation at all reservoirs constructed wholly or in part with Federal funds provided on the basis of such purposes, and the operation of any such project shall be in accordance with such regulations: Provided, That this section shall not apply to the Tennessee Valley Authority, except that in case of danger from floods on the Lower Ohio and Mississippi Rivers the Tennessee Valley Authority is directed to regulate the release of water from the Tennessee River into the Ohio River in accordance with such instructions as may be issued by the War Department.

Section 8. Hereafter, whenever the Secretary of War determines, upon recommendation by the Secretary of the Interior that any dam and reservoir project operated under the direction of the Secretary of War may be utilized for irrigation purposes, the Secretary of the Interior is authorized to construct, operate, and maintain, under the provisions of the Federal reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), such additional works in connection therewith as he may deem

necessary for irrigation purposes. Such irrigation works may be undertaken only after a report and findings thereon have been made by the Secretary of the Interior as provided in said Federal reclamation laws and after subsequent specific authorization of the Congress by an authorization Act; and, within the limits of the water users' repayment ability such report may be predicated on the allocation to irrigation of an appropriate portion of the cost of structures and facilities used for irrigation and other purposes. Dams and reservoirs operated under the direction of the Secretary of War may be utilized hereafter for irrigation purposes only in conformity with the provisions of this section, but the foregoing requirement shall not prejudice lawful uses now existing: Provided, That this section shall not apply to any dam or reservoir heretofore constructed in whole or in part by the Army engineers, which provides conservation storage of water for irrigation purposes.

Section 9. (a) The general comprehensive plans set forth in House Document 475 and Senate Document 191, Seventy-eighth Congress, second session, as revised and coordinated by Senate Document 247, Seventy-eighth Congress, second session, are hereby approved and the initial stages recommended are hereby authorized and shall be prosecuted by the War Department and the Department of the Interior as speedily as may be consistent with budgetary requirements.

(b) The general comprehensive plan for flood control and other purposes in the Missouri River Basin approved by the Act of June 28, 1938, as modified by subsequent Acts, is hereby expanded to include the works referred to in paragraph (a) to be undertaken by the War Department; and said expanded plan shall be prosecuted under the direction of the Secretary of War and supervision of the Chief of Engineers.

(c) Subject to the basin-wide findings and recommendations regarding the benefits, the allocations of costs and the repayments by water users, made in said House and Senate documents, the reclamation and power developments to be undertaken by the Secretary of the Interior under said plans shall be governed by the Federal Reclamation Laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), except that irrigation of Indian trust and tribal lands, and repayment therefor, shall be in accordance with the laws relating to Indian lands.

(d) In addition to previous authorizations there is hereby authorized to be appropriated the sum of \$200,000,000 for the partial accomplishment of the works to be undertaken under said expanded plans by the Corps of Engineers.

(e) The sum of \$200,000,000 is hereby authorized to be appropriated for the partial accomplishment of the works to be undertaken under said plans by the Secretary of the Interior.

Section 10. That the following works of improvement for the benefit of navigation and the control of destructive flood waters and other purposes are hereby adopted and authorized in the interest of the national security and with a view toward providing an adequate reservoir of useful and worthy public works for the post-war construction program, to be prosecuted under the direction of the Secretary of War and supervision of the Chief of Engineers in accordance with the plans in the respective reports hereinafter designated and subject to the conditions set forth therein: Provided, That the necessary plans, specifications, and preliminary work may be prosecuted on any project authorized in this Act to be constructed by the War Department during the war, with funds from appropriations heretofore or hereafter made for flood control, so as to be ready for rapid inauguration of a post-war program of construction: Provided further, That when the existing critical situation with respect to materials, equipment, and manpower no longer exists, and in any event not later than immediately following the cessation of hostilities in the present war, the projects herein

shall be initiated as expeditiously and prosecuted as vigorously as may be consistent with budgetary requirements: And provided further, That penstocks and other similar facilities adapted to possible future use in the development of hydroelectric power shall be installed in any dam authorized in this Act for construction by the War Department when approved by the Secretary of War on the recommendation of the Chief of Engineers and the Federal Power Commission.

LAKE CHAMPLAIN BASIN

Modifications of the existing Waterbury, Wrightsville, and East Barre Dams in the Winooski River Basin, Vermont, are hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 629, Seventy-eighth Congress, second session, at an -estimated cost of \$2,120,000.

BLACKSTONE RIVER BASIN

The project for the West Hill Reservoir on the West River, Massachusetts, for flood control and other purposes in the Blackstone River Basin is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 624, Seventy-eighth Congress, second session, at an estimated cost of \$1,070,000. The project on Blackstone River for local flood protection at Worcester, Massachusetts, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 624, Seventy-eighth Congress, second session, at an estimated cost of \$2,232,000.

The project on Blackstone River for local flood protection at Woonsocket, Rhode Island, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 624, Seventy-eighth Congress, second session, at an estimated cost of \$803,000.

The project on Seekonk River, for local flood protection at Pawtucket, Rhode Island, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 624, Seventy-eighth Congress, second session, at an estimated cost of \$82,000.

CONNECTICUT RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$30,000,000 for the prosecution of the comprehensive plan approved in the Act of June 28, 1938, as modified by the Act approved August 18, 1941, for the Connecticut River Basin: Provided, Nothing in this Act or in any previous authorization shall be construed to authorize the construction of a dam, other than a flood control type dam, on the main stream of the West River in the towns of Dummerston or Newfane in the State of Vermont: Provided further, That the Army Engineers are authorized and directed to construct eight reservoirs in the West River Basin in Vermont instead of the flood control reservoir authorized by existing law, known as the Williamsville Reservoir in the above mentioned towns, in accordance with an alternative plan submitted by the Vermont State Water Conservation Board as the same may be modified by agreement between the said Board and the Secretary of War and the Chief of Engineers, provided that the Secretary of War determines that the total costs of the alternate plan shall not exceed the sum of \$11,000,000 and that the amount of flood control secured by them at the entrance of the waters of the West River into the Connecticut River shall not be less than seventy-five per centum of the flood control which may be secured from the single so-called Williamsville Reservoir now authorized to be constructed by the Army Engineers. Plans, proposals, or reports heretofore authorized for construction at Cambridgeport, Ludlow, South Tunbridge, and Gaysville, in the Connecticut River Basin, or

any modification hereafter made of the comprehensive plan for the Connecticut River Basin in Vermont under authority of the Flood Control Act approved June 28, 1938, or of section 3 of the Flood Control Act approved August 18, 1941, shall not be carried out until after compliance with the provisions of paragraph (a) of section 1 of this Act: Provided further, That neither this authorization nor any previous authorization shall be construed to authorize the construction of a dam or reservoir at the Sugar Hill site on the Ammonoosuc River.

THAMES RIVER BASIN

In addition to previous authorizations, there is hereby authorized the completion of the plan approved in the Act of August 18, 1941, for the Thames River Basin at an estimated cost of \$7,200,000.

HOUSATONIC RIVER BASIN

The project for the Thomaston Reservoir on the Naugatuck River, for flood control in the Housatonic River Basin, Connecticut, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 338, Seventy-seventh Congress, first session, at an estimated cost of \$5,151,000.

SUSQUEHANNA RIVER BASIN

The project authorized by the Act of June 22, 1939, to provide for local protection works on the Susquehanna River at Harrisburg, Pennsylvania, is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 702, Seventy-seventh Congress, second session, at an estimated cost of \$2,227,000.

The project for flood protection at Tyrone, Pennsylvania, on the Little Juniata River, Pennsylvania, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 702, Seventy-seventh Congress, second session, at an estimated cost of \$1,392,000.

The plan for flood control in southern New York and eastern Pennsylvania authorized by the Act of June 22, 1936, as modified by the Act of August 18, 1941, is hereby further modified to include the South Plymouth and Genegantslet Reservoirs on tributaries of the Chenango River substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 702, Seventy-seventh Congress, second session, at an estimated additional cost of \$4,755,000.

ROANOKE RIVER BASIN

The general plan for the comprehensive development of the Roanoke River Basin for flood control and other purposes recommended by the Chief of Engineers in House Document Numbered 650, Seventy-eighth Congress, second session, is approved and the construction of the Buggs Island Reservoir on the Roanoke River in Virginia and North Carolina, and the Philpott Reservoir on the Smith River in Virginia, are hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in that report at an estimated cost of \$36,140,000.

EDISTO RIVER BASIN

The project for local flood control on Edisto River, South Carolina, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 182, Seventy-eighth Congress, second session, at an estimated cost of \$139,000.

SAVANNAH RIVER BASIN

The general plan for the comprehensive development of the Savannah River Basin for flood control and other purposes recommended by the Chief of Engineers in House Document Numbered 657, Seventy-eighth Congress, second session, is approved and the construction of the Clark Hill Reservoir on the Savannah River in South Carolina and Georgia, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in that report at an estimated cost of \$35,300,000.

MOBILE RIVER BASIN-ALABAMA-COOSA RIVER BASIN

In addition to previous authorizations, there is hereby authorized the completion of the Allatoona Reservoir on the Etowah River, Georgia approved in the Act of August 18, 1941, at an estimated cost of \$14,400,000.

LOWER MISSISSIPPI RIVER

The project for flood control and improvement of the Lower Mississippi River adopted by the Act of May 15, 1928, as amended by subsequent Acts of Congress, is hereby modified in accordance with the recommendations of the Chief of Engineers in House Document Numbered 509, Seventy-eighth Congress, second session, and, as modified, is hereby adopted and there is hereby authorized to be appropriated, in addition to the sums previously authorized, \$200,000,000 for the accomplishment of the purposes set forth in said document.

Paragraph (d) of the Lower Mississippi River item in section 3 of the Flood Control Act of August 18, 1941, is hereby construed to authorize reimbursement for the actual market value of lands, rights-of-way, and easements, furnished subsequent to August 18, 1941, for set-backs of main-line Mississippi River levees, regardless of State laws limiting payments to local tax assessment valuations.

The project for flood control on the Boeuf and Tensas Rivers and Bayou Macon, Arkansas and Louisiana, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 151, Seventy-eighth Congress, second session, at an estimated cost of \$5,013,000.

The project for flood control on the Big Sunflower, Little Sunflower, Hushpuckena, and Quiver Rivers and their tributaries, and on Hull Brake-Mill Creek Canal, Bogue Phalia, Ditchlow Bayou, Deer Creek, and Steele Bayou, Mississippi, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 516, Seventy-eighth Congress, second session, at an estimated cost of \$3,752,000.

The project for flood protection in the backwater area of the Yazoo River authorized in the Flood Control Act of August 18, 1941, is hereby amended to authorize the Chief of Engineers, in his discretion, to include improvements for the protection of the Satartia area at an estimated additional cost of \$1,061,000 or, in his discretion, to include improvements for the protection of the Satartia area plus its extension at an estimated additional cost of \$1,952,000.

RED-OUACHITA RIVER BASIN

In addition to previous authorizations, there is hereby authorized the completion of the plan approved in the Act of August 18, 1941, for the Little Missouri River in Arkansas, at an estimated cost of \$3,800,000.

The project on Red River in the vicinity of Shreveport, Louisiana, for flood control and bank protection is hereby authorized, substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 627, Seventy-eighth Congress, second session, at an estimated cost of \$3,000,000, except that, in view of the large

expenditure already made by local interests, they shall not be required to contribute to the construction cost.

The project for the Blakely Mountain Dam on the Ouachita River, for flood control and other purposes in the Ouachita River Basin, Arkansas, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 647, Seventy-eighth Congress, second session, at an estimated cost of \$11,080,000.

ARKANSAS RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$35,000,000 for the prosecution of the comprehensive plan approved in the Act of June 28, 1938, as modified by the Act approved August 18, 1941, for the Arkansas River Basin.

The projects for local flood protection on the Arkansas River are hereby modified and authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 447, Seventy-eighth Congress, second session, at an estimated additional cost of \$10,299,400.

The project on tributaries of the Fontaine Que Bouille River for flood protection at Colorado Springs, Colorado, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 186, Seventy-eighth Congress, first session, at an estimated cost of \$500,000.

The project on Purgatoire River for local flood protection at Trinidad, Colorado, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 387, Seventy-eighth Congress, second session, at an estimated cost of \$909,000.

WHITE RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$45,000,000 for the prosecution of the comprehensive plan approved in the Act of June 28, 1938, as modified by the Act approved August 18, 1941, for the White River Basin.

UPPER MISSISSIPPI RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$10,000,000 for the prosecution of the comprehensive plan approved in the Act of June 28, 1938, for the Upper Mississippi River Basin, including the project for the Red Rock Dam on the Des Moines River for flood control and other purposes, substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 651, Seventy-eighth Congress, second session, at an estimated cost of \$15,000,000.

The project authorized by the Act of June 22, 1936, for local flood protection on the Mississippi River at the Sainte Genevieve Levee District Numbered 1, Missouri, is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 727, Seventy-seventh Congress, second session, at an estimated cost of \$141,000.

The project on the Des Moines River for local flood protection of Des Moines, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 651, Seventy-eighth Congress, second session, at an estimated cost of \$270,000.

The project on the Mississippi River for local flood protection at Sabula, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 328, Seventy-seventh Congress, first session, at an estimated cost of \$25,000.

The project on the Galena River, for local flood protection at Galena, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 336, Seventy-seventh Congress, first session, at an estimated cost of \$418,000.

The project for flood control on the Illinois River is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 692, Seventy-seventh Congress, second session, at an estimated cost of \$111,500.

The project for flood control on Farm Creek, Illinois, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 802, Seventy-eighth Congress, second session, at an estimated cost of \$3,017,900.

The project on Elk Creek and Turkey River for local flood protection at Elkport, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 700, Seventy-seventh Congress, second session, at an estimated cost of \$18,000.

RED RIVER OF THE NORTH BASIN

The projects for flood control for Red Lake River, Minnesota, including Clearwater River, Minnesota, are hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 345, Seventy-eighth Congress, first session, at an estimated cost of \$902,940.

The project for the Bald Hill Reservoir on the Sheyenne River for flood control and other purposes in the Sheyenne River Basin, North Dakota, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 193, Seventy-eighth Congress, second session, at an estimated cost of \$810,000.

The projects for the construction of one reservoir on the Pembina River and one on the Tongue River for flood control and other purposes in the Pembina River Basin, North Dakota, are hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 565, Seventy-eighth Congress, second session, at an estimated cost of \$333,800.

The project for the construction of a reservoir on the South Branch of Park River for flood control and other purposes in the Park River Basin, North Dakota, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 194, Seventy-eighth Congress, second session, at an estimated cost of \$358,610.

MISSOURI RIVER BASIN

The project adopted by the Act of June 22, 1936, to provide flood protection for the Kansas Citys, Kansas and Missouri, is hereby modified and extended to provide for improvement substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 342, Seventy-eighth Congress, first session, at an estimated additional cost for the modified project of \$8,445,000.

In addition to previous authorizations, there is hereby authorized the completion of the plan approved in the Act of August 18, 1941, for Cherry Creek and tributaries, Colorado, at an estimated cost of \$7,500,000.

The project on Knife River for local flood control at Beulah, North Dakota, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 252, Seventy-eighth Congress, first session, at an estimated cost of \$26,100.

The project on Knife River for local flood control at Hazen, North Dakota, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 252, Seventy-eighth Congress, first session, at an estimated cost of \$6,600.

The project on Milk River adopted by the Act of June 22, 1936, to provide local flood protection at Harlem, Montana, is hereby modified substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 103, Seventy-eighth Congress, first session, at an estimated cost of \$21,100.

The project on Milk River for local flood protection at Havre, Montana, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 103, Seventy-eighth Congress, first session, at an estimated cost of \$313,100.

The project on Boyer River for local flood control on East Fork of Boyer River at Denison, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 254, Seventy-eighth Congress, first session, at an estimated cost of \$17,830.

The project on Nishnabotna River for local flood control at Hamburg, Iowa, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 253, Seventy-eighth Congress, first session, at an estimated cost of \$236,000.

The plan of improvement for local flood protection on the Chariton River, Missouri, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 628, Seventy-eighth Congress, second session, at an estimated cost of \$1,610,300.

The project on Bear Creek for local flood protection at Morrison, Colorado, is hereby authorized substantially in accordance with recommendations of the Chief of Engineers in House Document Numbered 356, Seventy-eighth Congress, first session, at an estimated cost of \$220,000.

OHIO RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$70,000,000 for the prosecution of the comprehensive plan approved in the Act of June 28, 1938, as modified by the Act approved August 18, 1941, for the Ohio River Basin, including the following projects in tributary basins, namely:

The local flood protection works in the Lake Chautauqua and Chadakoin River area, substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 685, Seventy-seventh Congress, second session, at an estimated cost of \$135,500;

The local flood protection works at Dillonvale and Adena on Short Creek, Ohio, substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 889, Seventy-seventh Congress, second session, at an estimated cost of \$158,200;

The local flood protection works at Taylorsville on Salt River, Kentucky, substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 105, Seventy-eighth Congress, first session, at an estimated cost of \$129,350;

The local flood protection works at Latrobe on Loyalhanna Creek, Pennsylvania, substantially in accordance with the recommendations, of the Chief of Engineers in House Document Numbered 444, Seventy-eighth Congress, second session, at an estimated cost of \$112,500;

The plan of improvement for flood control and other purposes in the Kentucky River Basin, substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 504, Seventy-eighth Congress, second session, at an estimated cost of \$23,822,000;

The local flood protection works at Middlesborough on Yellow Creek, Kentucky, substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 495, Seventy-eighth Congress, second session, at an estimated cost of \$205,200;

The local flood protection works on the Rough River and tributaries, Kentucky, substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 535, Seventy-eighth Congress, second session, at an estimated cost of \$360,000;

The Turtle Creek Reservoir on Turtle Creek, Pennsylvania, substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 507, Seventy-eighth Congress, second session, at an estimated cost of \$2,613,000;

The Burr Oak Reservoir on the Hocking River, Ohio, substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 762, Seventy-seventh Congress, second session, at an estimated cost of \$400,000.

Neither this authorization nor any previous authorization shall be construed to authorize the construction of the Shoals Dam on the East Fork of the White River in Martin County, Indiana, pending submission and adoption by Congress of the report authorized in the, Flood Control Act of August 11, 1939.

That the general comprehensive plan for flood control and other purposes, approved in the Flood Control Act of June 28, 1938, for the Ohio River Basin, is hereby modified to include the construction of flood-control works for the protection of Ridgway, Johnsonburg, Saint Marys, and Brockway and vicinity in the State of Pennsylvania.

GREAT LAKES BASIN

The project for the Panther Mountain Reservoir on Moose River, New York, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 405, Seventy-seventh Congress, first session, at an estimated cost of \$600,000.

The project for flood control on Chittenango Creek and tributaries, New York, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in

House Document Numbered 625, Seventy-seventh Congress, second session, at an estimated cost of \$111,000.

The projects for flood control on Owasco Inlet and Outlet, Montville and Dry Creeks, State Ditch, and Crane Brook, New York, are hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 815, Seventy-seventh Congress, second session, at an estimated cost of \$64,200.

The project for the Mount Morris Reservoir on the Genesee River, New York, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 615, Seventy-eighth Congress, second session, at an estimated cost of \$5,360,000.

COLORADO RIVER BASIN (TEXAS)

In addition to previous authorizations, there is hereby authorized the completion of the plan approved in the Act of August 18, 1941, for the North Concho River, Texas, at an estimated cost of \$4,800,000.

In addition to previous authorizations, there is hereby authorized the completion of the plan approved in the Act of August 18, 1941, for Pecan Bayou, Texas, at an estimated cost of \$1,560,000.

BRAZOS RIVER BASIN

In addition to previous authorizations, there is hereby authorized the completion of Whitney Reservoir in accordance with the plan approved in the Act of August 18, 1941, for the Brazos River Basin, at an estimated cost of \$15,000,000.

RIO GRANDE BASIN

The project on Willow Creek for local flood protection at Creede, Colorado, is hereby authorized' substantially in accordance with the recommendations of the Chief of Engineers in Senate Document Numbered 104, Seventy-eighth Congress, first session, at an estimated cost of \$68,500.

GREAT SALT BASIN

The project on the Sevier River for local flood protection at Redmond, Utah, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 614 Seventy-eighth Congress, second session, at an estimated cost of \$281,000.

COLORADO RIVER BASIN

The project for the Alamo Reservoir on the Bill Williams River, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 625, Seventy-eighth Congress, second session, at an estimated cost of \$3,202,000.

The project on the Little Colorado River for local flood protection at Holbrook, Arizona, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 648, Seventy-eighth Congress, second session, at an estimated cost of \$258,000.

SAN DIEGO RIVER BASIN

The project on the San Diego River for local flood protection at San Diego, California, is hereby authorized substantially in accordance with the recommendations of the Chief of

Engineers in House Document Numbered 635, Seventy-seventh Congress, second session, at an estimated cost of \$370,000.

VENTURA RIVER BASIN

The projects on the Ventura River and tributaries for local flood protection at Ventura and Ojai, California, are hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 323, Seventy-seventh Congress, first session, at an estimated cost of \$1,600,000.

SANTA ANA RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$10,000,000 for the prosecution of the projects approved in the Act of June 22, 1936, as modified by the Act of June 28, 1938, for the Santa Ana River Basin and for the protection of Orange County, California, including the projects on Lytle and Cajon Creeks for local flood protection at San Bernardino and Colton, California, in accordance with the recommendations contained in the report of the Chief of Engineers dated February 11, 1944.

LOS ANGELES-SAN GABRIEL BASIN AND BALLONA CREEK

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$25,000,000 for the prosecution of the comprehensive plan approved in the Act of August 18, 1941, for Los Angeles and San Gabriel Rivers and Ballona Creek, California.

PAJARO RIVER BASIN

The plan of improvement for local flood protection on the Pajaro River and tributaries, California is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 505, Seventy-eighth Congress, second session, at an estimated cost of \$511,160.

SACRAMENTO-SAN JOAQUIN RIVER BASIN

SACRAMENTO RIVER

The projects for the control of floods and other purposes on the Sacramento River, California, adopted by the Acts approved March 1, 1917, May 15, 1928, August 26, 1937, and August 18, 1941, are hereby modified substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 649, Seventy-eighth Congress, second session, at an estimated cost of \$50,100,000; and in addition to previous authorizations there is hereby authorized to be appropriated the sum of \$15,000,000 for the prosecution of the modified projects: Provided, That this modification of the project shall not be construed to authorize the construction of a high dam at the Table Mountain site but shall authorize only the low-level project to approximately the elevation of four hundred feet above mean sea level, said low-level dam to be built on a foundation sufficient for such dam and not on a foundation for future construction of a higher dam.

The project for the Folsom Reservoir on the American River, California, is hereby authorized substantially in accordance with the plans contained in House Document Numbered 649, Seventy-eighth Congress, second session, with such modifications thereof as in the discretion of the Secretary of War and the Chief of Engineers may be advisable, at an estimated cost of \$18,474,000.

SAN JOAQUIN RIVER

The project for the Isabella Reservoir on the Kern River for flood control and other purposes in the San Joaquin Valley, California, is hereby authorized substantially in

accordance with the recommendations of the Chief of Engineers in his report dated January 26, 1944, contained in House Document Numbered 513, Seventy-eighth Congress, second session, at an estimated cost of \$6,800,000.

The plan for the Terminus and Success Reservoirs on the Kaweah and Tule Rivers for flood control and other purposes in the San Joaquin Valley, California, in accordance with the recommendations of the Chief of Engineers in Flood Control Committee Document Numbered 1, Seventy-eighth Congress, second session, is approved, and there is hereby authorized \$4,600,000 for initiation and partial accomplishment of the plan.

The project for flood control and other purposes for the Kings River and Tulare Lake Basin, California, is hereby authorized substantially in accordance with the plans contained in House Document Numbered 630, Seventy-sixth Congress, third session, with such modifications thereof as in the discretion of the Secretary of War and the Chief of Engineers may be advisable at an estimated cost of \$19,700,000: Provided, That the conditions of local cooperation specified in said document shall not apply: Provided further, That the Secretary of War shall make arrangements for payment to the United States by the State or other responsible agency, either in lump sum or annual installments, for conservation storage when used: Provided further, That the division of costs between flood control, and irrigation and other water uses shall be determined by the Secretary of War on the basis of continuing studies by the Bureau of Reclamation, the War Department, and the local organizations.

The plan of improvement for local flood protection on various streams in the Merced County Stream Group in the San Joaquin Valley is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 473, Seventy-eighth Congress, second session, at an estimated cost of \$1,300,000.

The plan of improvement for flood control and other purposes on the Lower San Joaquin River and tributaries, including Tuolumne and Stanislaus Rivers, in accordance with the recommendations of the Chief of Engineers in Flood Control Committee Document Numbered 2, Seventy-eighth Congress, second session, is approved, and there is hereby authorized \$8,000,000 for initiation and partial accomplishment of the plan.

The plan of improvement for flood control and other purposes on the Calaveras River and Littlejohn Creek and tributaries, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 545, Seventy-eighth Congress, second session, at an estimated cost of \$3,868,200.

NAPA RIVER BASIN

The project for the Conn Creek Reservoir on Conn Creek for flood control and other purposes in the Napa River Basin, California, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 626, Seventy-eighth Congress, second session, at an estimated cost of \$460,000.

COQUILLE RIVER BASIN

The project for flood protection on the Coquille River, Oregon, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 620, Seventy-seventh Congress, second session, at an estimated cost of \$143,000.

NEHALEM RIVER BASIN

The project for flood protection on the Nehalem River, Oregon, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House

Document Numbered 621 Seventy-seventh Congress, second session, at an estimated cost of \$23,000.

WILLAMETTE RIVER BASIN

In addition to previous authorizations, there is hereby authorized to be appropriated the sum of \$20,000,000 for the prosecution of the comprehensive plan approved in the Act of June 28, 1938, for the Willamette River Basin, with such modifications thereof as in the discretion of the Chief of Engineers may be advisable.

COLUMBIA RIVER BASIN

The projects on the Snake River for local flood protection at Heise, Roberts, and Weiser, Idaho, are hereby authorized, substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 452, Seventy-seventh Congress, first session, at an estimated cost of \$743,000.

The projects on the Palouse River and tributaries for local flood protection at Pullman and Colfax, Washington, are hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 888, Seventy-seventh Congress, second session, at an estimated cost of \$478,000.

The project on Alkali Canyon for local flood protection at Arlington, Oregon, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 631, Seventy-seventh Congress, second session, at an estimated cost of \$118,000.

WILLAPA RIVER BASIN

The project on the Willapa River for local flood protection at Raymond, Washington, is hereby authorized substantially in accordance with the recommendations *of the Chief of Engineers in House Document Numbered 701, Seventy-seventh Congress, second session, at an estimated cost of \$127,000.

CHEHALIS RIVER BASIN

The project on Chehalis River for local flood protection at Hoquiam, Aberdeen, and Cosmopolis, Washington, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in House Document Numbered 494, Seventy-eighth Congress, second session, at an estimated cost of \$669,000.

TERRITORY OF HAWAII

The project on the Hanapepe River for local flood protection at Hanapepe, Island of Kauai, Territory of Hawaii, is hereby authorized substantially in accordance with the recommendations of the Chief of Engineers in the report submitted to Congress by the Secretary of War on March 15, 1944, at an estimated cost of \$73,000.

Section 11. The Secretary of War is hereby authorized and directed to cause preliminary examinations and surveys for flood control and allied purposes, including channel and major drainage improvements, to be made under the direction of the Chief of Engineers, in drainage areas of the United States and its Territorial possessions, which include the following named localities, and the Secretary of Agriculture is authorized and directed to cause preliminary examinations and surveys for run-off and waterflow retardation and soil-erosion prevention on such drainage areas; the cost thereof to be paid from appropriations heretofore or hereafter made for such purposes: Provided, That after the regular or formal reports made on any examination, survey, project, or work under way or proposed are submitted to Congress, no supplemental or additional report or estimate shall be made unless authorized by law except

that the Secretary of War may cause a review of any examination or survey to be made and a report thereon submitted to the Congress if such review is required by the national defense or by changed physical or economic conditions: And provided further, That the Government shall not be deemed to have entered upon any project for the improvement of any waterway or harbor mentioned in this Act until the project for the proposed work shall have been adopted by law:

Pasquotank River North Carolina.
Chipola River, Alabama and Florida.
Wacasassa River and its tributaries, Florida, and of adjacent areas in Gilchrest and Levy Counties, Florida.
Oklawaha River and its tributaries, Florida, and of adjacent areas in Alachua and Marion Counties, Florida.
Clear Fork of the Mohican River, in Richland County, Ohio.
Hocking River in Hocking County, Ohio.
Leatherwood Creek, Ohio, with particular reference to flood control and water supply for Cambridge, Ohio.
For flood control, rice irrigation, navigation, pollution, salt-water intrusion, and drainage on all streams and bayous in southwest Louisiana, west of the West Atchafalaya Basin protection levee, and south of the latitude of Boyce; on all streams and bayous in Louisiana lying between the East Atchafalaya Basin protection levee and the Mississippi River; and on Amite River and tributaries, Louisiana.
Choctawhatchee River, Florida.
Scajaquada Creek and its tributaries, New York.
Susquehanna River in the vicinity of Endicott, Johnson City, and Vestal, New York.
Absecon Island, New Jersey, with a view to the protection of Atlantic City, Ventnor, Margate City, Longport, and other areas on the New Jersey coast, that have been affected from floods due to tide and wind.
Juniata River and tributaries, Pennsylvania, with special reference to the proposed Raystown Reservoir.
Rehoboth Beach, Bethany Beach, Lewes, and Fenwick Island, Delaware, and other points along the Delaware coast, with a view to providing protection against damage resulting from erosion and from floods due to wind and tide.
Buffalo River, Minnesota.
Wild Rice River, Minnesota.
Marsh River, Minnesota.
Sand Hill River, Minnesota.
Red Lake River, Minnesota.
Roseau River, Minnesota.
Snake River, Minnesota.
Middle River, Minnesota.
Tamarac River, Minnesota.
Two Rivers, Minnesota.
Warroad River and Bull Dog Creek, Minnesota.
Mississippi River and its tributaries, in the county of Aitkin, Minnesota.
Apple River, Jo Daviess County, Illinois.
Maumee River, Indiana and Ohio.
Indian Creek, Indiana.
Youghiogheny River Basin, Pennsylvania and Maryland.

Reno Beach, Lucas County, Ohio, with a view to protection of the Reno Beach-Howards Farm area and adjacent areas from floods caused by frequent windstorms and from increases in the lake level of Lake Erie.

Arkansas River above Pine Bluff, Arkansas, with special reference to control of caving banks in the vicinity of Hensley Bar and the McFadden Place, in Jefferson County, Arkansas.

Osage River, Missouri and Kansas.

Big Canyon on Washita River in Murray County, Oklahoma.

Deep Red Run in Tillman County, Oklahoma; Big Elk Creek, Little Elk Creek, Salt Fork, Elm Creek, Saddle Mountain, Turkey Creek, Oklahoma.

San Rafael Creek and its tributaries, California.

Napa River, California.

Grand River, South Dakota.

Moreau River, South Dakota.

Corte Madera Creek, Marin County, California.

Bayamon and Hondo Rivers and their tributaries, Municipality of Bayamon, Puerto Rico.

Elkhorn River and its tributaries, Nebraska.

Section 12. That the sum of \$950,000,000 is hereby authorized to be appropriated for carrying out the improvements herein by the War Department, the sum of \$10,000,000 additional is authorized to be appropriated and expended in equal amounts by the Departments of War and Agriculture for carrying out any examination or survey provided for in this Act and any other Acts of Congress, to be prosecuted by said Departments. The sum of \$1,500,000 additional is authorized to be appropriated and expended by the Federal Power Commission for carrying out any examinations and surveys provided for in this Act or any other Acts of Congress, to be prosecuted by the said Federal Power Commission.

The sum of \$500,000 additional is authorized to be appropriated as an emergency fund to be expended under the direction of the Secretary of War and the supervision of the Chief of Engineers for the construction of emergency bank protection works to prevent flood damage to highways, bridge approaches and public works: Provided, That pending the appropriation of said sum the Secretary of War may allot from existing flood control appropriations such sums as may be necessary for the immediate prosecution of such bank protection works; such appropriations to be reimbursed from the appropriation herein authorized when made.

Section 13. That the following works of improvement for run-off and waterflow retardation, and soil-erosion prevention, are hereby adopted and authorized in the interest of the national security and with a view toward an adequate reservoir of useful and worthy public works for the post-war construction program to be prosecuted by the Department of Agriculture, under the direction of the Secretary of Agriculture, in accordance with the plans of the respective reports hereinafter designated and subject to the conditions set forth therein: Provided, That the necessary plans and preliminary work may be prosecuted during the war with funds from appropriations heretofore or hereafter made for such works so as to be ready for rapid inauguration of post-war construction: Provided further, That when the existing critical situation with respect to materials, equipment, and manpower, no longer exists and in any event not later than immediately following the cessation of hostilities in the present war, the projects herein shall be initiated as expeditiously and prosecuted as vigorously as may be consistent with budgetary requirements: Provided further, That nothing in this section shall be construed as approving or authorizing the acquisition of any land by the Federal Government until the legislature of the State in which the land lies shall have consented to the acquisition of lands by the United States for the purposes within the scope of this section: Provided further, That there shall be paid annually to the county in which any lands acquired under this

section may lie, a sum equal to one per centum of the purchase price paid for the lands acquired in that county or, if not acquired by purchase, one per centum of their valuation at the time of their acquisition.

LOS ANGELES RIVER BASIN

The program on the Los Angeles River watershed is hereby approved substantially in accordance with the recommendation of the Under Secretary of Agriculture in House Document Numbered 426, Seventy-seventh Congress, first session, at an estimated cost to the United States of \$8,380,000.

SANTA YNEZ RIVER WATERSHED

The program on the Santa Ynez River watershed is hereby approved substantially in accordance with the recommendation of the Acting Secretary of Agriculture in House Document Numbered 518, Seventy-eighth Congress, first session, at an estimated cost to the United States of \$434,000.

TRINITY RIVER BASIN (Texas)

The program on the Trinity River watershed is hereby approved substantially in accordance with the recommendation of the Secretary of Agriculture in House Document Numbered 708, Seventy-seventh Congress, second session, at an estimated cost to the United States of \$32,000,000.

LITTLE TALLAHATCHIE RIVER WATERSHED

The program on the Little Tallahatchie River watershed is hereby approved substantially in accordance with the recommendation of the Acting Secretary of Agriculture in House Document Numbered 892, Seventy-seventh Congress, second session, at an estimated cost to the United States of \$4,221,000.

YAZOO RIVER WATERSHED

The program on the Yazoo River watershed is hereby approved substantially in accordance with the recommendation of the Acting Secretary of Agriculture in House Document Numbered 564, Seventy-eighth Congress, second session, at an estimated cost to the United States of \$21,700,000.

COOSA RIVER WATERSHED (Above Rome, Georgia)

The program on the Coosa River watershed above Rome, Georgia, is hereby approved substantially in accordance with the recommendation of the Acting Secretary of Agriculture in House Document Numbered 236, Seventy-eighth Congress, first session, at an estimated cost to the United States of \$1,233,000.

LITTLE SIOUX RIVER WATERSHED

The program on the Little Sioux River watershed is hereby approved substantially in accordance with the recommendation of the Assistant Secretary of Agriculture in House Document Numbered 268, Seventy-eighth Congress, first session, at an estimated cost to the United States of \$4,280,000.

POTOMAC RIVER WATERSHED

The program on the Potomac River watershed is hereby approved substantially in accordance with the recommendation of the Assistant Secretary of Agriculture in House Document Numbered 269, Seventy-eighth Congress, first session, at an estimated cost to the United States of \$859,000.

BUFFALO CREEK WATERSHED (New York)

BUFFALO, CAYUGA, AND CAZENOVIA CREEKS

The program on the watershed of Buffalo Creek and its tributaries, Cayuga, and Cazenovia Creeks, is hereby approved substantially in accordance with the recommendation of the Acting Secretary of Agriculture in House Document Numbered 574, Seventy-eighth Congress, second session, at an estimated cost to the United States of \$739,000.

COLORADO RIVER WATERSHED (Texas)

The program on those portions of the Colorado River watershed included in the watersheds of Pecan Bayou, San Saba River, Brady Creek, and the area tributary to the main stream of the Colorado River below its confluence with the Concho River and above the mouth of Pecan Bayou, is hereby approved substantially in accordance with the recommendation of the Assistant Secretary of Agriculture in House Document Numbered 270, Seventy-eighth Congress, first session, at an estimated cost to the United States of \$2,693,000.

WASHITA RIVER WATERSHED

The program on the Washita River watershed is hereby approved substantially in accordance with the recommendation of the Under Secretary of Agriculture in House Document Numbered 275, Seventy-eighth Congress, first session, at an estimated cost to the United States of \$11,243,000.

Section 14. That the balance remaining from the authorization of \$10,000,000 provided in section 7 of the Flood Control Act approved June 28, 1938, for the five-year period ending June 30, 1944, to correlate the program for the improvement of watersheds by the Department of Agriculture for measures of run-off and waterflow retardation and soil-erosion prevention on the watersheds with the program for the improvement of rivers and other waterways by the Department of War is hereby reauthorized to be expended during the postwar period by the Department of Agriculture for the prosecution of the work authorized in section 13 of this Act: Provided, That not more than 20 per centum of the authorization made available herein shall be expended on any one project.

Section 15. That section 7 of the Act of June 28, 1938 (Public, Numbered 761, Seventy-fifth Congress), is hereby amended by adding at the end of the first sentence thereof the following: "The Secretary of Agriculture is hereby authorized in his discretion to undertake such emergency measures for run-off retardation and soil-erosion prevention as may be needed to safeguard lives and property from floods and the products of erosion on any watershed whenever fire or any other natural element or force has caused a sudden impairment of that watershed: Provided, That not to exceed \$100,000 out of any funds heretofore or hereafter appropriated for the prosecution by the Secretary of Agriculture of works of improvement or measures for run-off and waterflow retardation and soil-erosion prevention on watersheds may be expended during any one fiscal year for such emergency measures."

Approved December 22, 1944.

506.2 Codified Rule – 7 CFR Part 622, Watershed Projects

TITLE 7 – AGRICULTURE

CHAPTER VI--NATURAL RESOURCES CONSERVATION SERVICE, DEPARTMENT OF AGRICULTURE

PART 622 – WATERSHED PROJECTS

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Subpart A – General

Section 622.1 – Purpose.

This part sets forth the general policies for planning and carrying out watershed projects under Pub. L. 83-566, 68 Stat. 666 (16 U.S.C. 1001 et seq.) and flood prevention projects under Pub. L. 78-534, 58 Stat. 889 (33 U.S.C. 701b-1).

Section 622.2 – Scope.

(a) To assist sponsors in preparing and carrying out watershed plans, the Natural Resources Conservation Service (NRCS) shall conduct investigations and surveys, with the cooperation and assistance of other Federal agencies, to:

- (1) Determine the extent of watershed problems and needs, and

(2) Set forth viable alternative solutions consistent with local, regional, and national objectives, including an alternative solution which makes the greatest net contribution to national economic development.

- (b) Alternatives will consist of either land treatment, nonstructural or structural measures, or combinations thereof that will help accomplish one or more of the authorized project purposes.
- (c) Authorized project purposes are watershed protection, conservation and proper utilization of land, flood prevention, agricultural water management including irrigation and drainage, public recreation, public fish and wildlife, municipal and industrial water supply, hydropower, water quality management, ground water supply, agricultural pollution control, and other water management.
- (d) After a final plan for works of improvement is agreed upon between NRCS and the sponsors and the approval processes are completed, NRCS will provide technical and financial assistance to install the project, subject to the availability of funds and the budgeting and fiscal policies of the President.

Section 622.3 – Relationship to the Public Law 78-534 Program.

- (a) General. The purposes and objectives of the programs under Pub. L. 83-566 and Pub. L. 78-534 are the same in most cases. Planning criteria, economic justification, local sponsorship, agency participation, financial assistance, eligible measures, operation and maintenance arrangements for the Pub. L. 78-534 program are consistent with those of the Pub. L. 83-566 program. The differences with the Pub. L. 78-534 program are outlined below.
- (b) Initiation. Flood prevention projects are individually authorized by Federal legislation. The STC and the sponsors agree on a plan of action and notify interested parties to solicit their participation. The sponsors keep the public informed and solicit their views and comments.
- (c) Subwatershed plans. These plans are administratively approved by the STC. If the plan involves purposes other than flood prevention, clearance shall be obtained from the Office of Management and Budget before approval. Financial assistance available differs only in that program funds may be used for the purchase of land rights for single-purpose flood prevention structures and installing land treatment on Federal lands.
- (d) Installation. NRCS shall award and administer contracts for the installation of project measures unless the sponsors agree to perform the work. Project agreements between the sponsors and NRCS are not required if the work consists of flood prevention structures built and funded by NRCS.

Section 622.4 – Relationship to other agencies.

NRCS will coordinate responsibilities with other water and land resource development agencies on projects that may come under the jurisdictions of various authorities. This will include any land management agencies which may have land which would be affected by project measures. Coordination with the U.S. Department of the Interior's Fish and Wildlife Service will be in accordance with section 12 of Pub. L. 83-566 (as amended).

Section 622.5 – Guidelines.

Guidelines for carrying out programs authorized under Pub. L. 83-566 and Pub. L. 78-534 are contained in miscellaneous instructions, manuals, and handbooks issued by the Natural Resources Conservation Service, Regulations for Implementing NEPA (40 CFR Parts 1500-

1508) issued by the Council on Environmental Quality, and in Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies issued by the Water Resources Council. Watershed projects are to be planned and carried out in a way that will conform to conditions mandated by the above and other applicable laws, Executive orders, and codified rules.

Section 622.6 – Equal opportunity.

The Public Law 83-566 and Public Law 78-534 programs will be conducted in compliance with all requirements respecting nondiscrimination as contained in the Civil Rights Act of 1964, as amended, and in the regulations of the Secretary of Agriculture (7 CFR Part 15), which provide that no person in the United States must, on the grounds of race, color, national origin, sex, age, handicap, or religion be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity conducted or assisted by the Department of Agriculture.

Section 622.7 – Notification under Executive Order 12372.

This program is covered under Executive Order 12372, "Intergovernmental Review of Federal Programs" and 7 CFR Part 3015, Subpart V, "Intergovernmental Review of the Department of Agriculture Programs and Activities." State processes or directly affected State, areawide, regional and local officials and entities have 60 days for comment starting from the date of submission of the application to the State Single Point of Contact.

Subpart B – Qualifications

Section 622.10 – Sponsors.

(a) Watershed projects are sponsored by one or more local organizations qualifying as sponsors. All watershed plans shall be sponsored by entities legally organized under State law or by any Indian tribe or tribal organization having the authority to carry out, operate and maintain works of improvement. Those plans that incorporate the use of nonstructural or structural measures shall be sponsored by organizations that, individually or collectively, have:

- (1) The power of eminent domain,
- (2) The authority to levy taxes or use other adequate funding sources, including state, regional, or local appropriations, to finance their share of the project cost and all operation and maintenance costs.

(b) To receive Federal assistance for project installation, sponsors shall commit themselves to use their powers and authority to carry out and maintain the project as planned.

Section 622.11 – Eligible watershed projects.

(a) To be eligible for Federal assistance, a watershed project must:

- (1) Meet the definition of a watershed area as defined in NRCS's National Watershed Manual.
- (2) Not exceed 250,000 acres in size.
- (3) Not include any single structure that provides more than 12,500 acre-feet of floodwater detention capacity nor more than 25,000 acre-feet of total capacity.
- (4) Have significant land or water management problems that can be solved or alleviated by measures for watershed protection, flood prevention, drainage, irrigation, recreation, fish and wildlife, municipal or industrial water supply, or other water management.

- (5) Produce substantial benefits to the general public, to communities, and to groups of landowners.
 - (6) Cannot be installed by individual or collective landowners under alternative cost sharing assistance.
 - (7) Have strong local citizen and sponsor support through agreement to obtain land rights, contribute the local cost of construction, and carry out operation and maintenance.
- (b) Works and improvement that may be included in a watershed project are those that:
- (1) Contribute to reducing floodwater, erosion, and sediment damages.
 - (2) Further the conservation, development, utilization, and disposal of water and the conservation and proper utilization of land.
 - (3) Have the greatest net national economic benefits consistent with protecting the Nation's environment (for structural water resource projects) relative to alternative works, unless an exception is granted by the Secretary.

Subpart C – Application Procedure

Section 622.20 – Application.

Sponsors shall follow State developed procedures (based on Executive Order 12372) for coordination of proposed Federal financial assistance and also USDA's 7 CFR part 3015 in applying for Pub. L. 83-566 assistance. Standard forms for Federal assistance or other approved forms may be obtained from NRCS State, area, or field offices. These forms should be submitted to the Single Point of Contact in accordance with the State developed procedures.

Section 622.21 –State agency approval.

The governor or designated State agency will approve or disapprove the application. If disapproved, no further action is required of NRCS. If approved or not disapproved within 45 days, the application shall be sent to the NRCS STC. After the STC has determined that the application is legally valid, he will notify the sponsor of receipt of the application. If found not legally valid, the STC will return it to the originator with an opinion.

Subpart D – Planning

Section 622.30 – General.

- (a) Watershed projects are to be planned and carried out in a way that will (1) minimize all adverse impacts, and (2) mitigate unavoidable losses to the maximum practicable degree. Projects shall comply with the requirements of the National Environmental Policy Act of 1969 (Pub. L. 91-190, 83 Stat. 852) (42 U.S.C. 4321 et seq.).
- (b) Fish and wildlife enhancement measures proposed by Federal or State fish and wildlife agencies will be included if they are technically and economically feasible and are acceptable to the sponsors and the NRCS. If additional sponsors are needed to carry out the recommended fish and wildlife measures, NRCS will assist fish and wildlife agencies in attempting to obtain such sponsors.
- (c) All planning efforts by NRCS and the sponsors shall include well publicized public meetings to obtain public input on the project.

Section 622.31 – Basic planning efforts.

Upon receipt of an application, the NRCS will make any necessary field studies and develop a report to justify the need for planning effort. Once planning is authorized by the Chief of NRCS, a watershed plan-environmental impact statement (plan-EIS) or a watershed plan-environmental assessment (plan-EA) will be prepared by NRCS to request funding. This effort shall be coordinated with other State and Federal agencies.

Section 622.32 – Reviews and approvals.

(a) The watershed plan-environmental impact statement (or assessment) will be subject to internal technical reviews, sponsor and other local party review, interagency review by other Federal, state, and concerned groups, and a final review as stated in NRCS's National Watershed Manual.

(b) After thorough review by NRCS and other agencies, the NRCS and the sponsors shall accept the plan-EIS or plan-EA by signing the watershed agreement. The watershed plan must be approved by the Committees of Congress or the Chief of NRCS. Funding for installation can then be granted by the Chief of NRCS.

506.3 Executive Order 10584, Rules and Regulations Relating to Administration

US Code – Title 16> Chapter 18> § 1005

Ex. Ord. No. 10584, Dec. 18, 1954, [19 F.R. 8725](#), as amended by Ex. Ord. No. 10913, Jan. 18, 1961, [26 F.R. 510](#), provided:

Section 1. Scope of order. This order shall apply (a) to the planning, construction, operation, and maintenance of all works of improvement under the authority of the Watershed Protection and Flood Prevention Act (Public Law 566, as approved August 4, 1954, as amended; U.S.C. 1001 et seq.) [this chapter], hereinafter referred to as the Act, and (b) to other programs and projects of the Department of Agriculture, and to programs and projects of the Department of the Interior, the Department of the Army, and other Federal agencies to the extent that such programs or projects affect, or are affected significantly by, works of improvement provided for in the Act.

Section 2. General administration. The Secretary of Agriculture shall have the following-described responsibilities under the Act [this chapter]:

(a) Approval or disapproval of applications for Federal assistance in preparing plans for works of improvement, and the assignment of priorities for the provision of such assistance.

(b) Establishing criteria for the formulation and justification of plans for works of improvement and criteria for the sharing of the cost of both structural and land-treatment measures which conform with the provisions of the Act and with policies established by or at the direction of the President for watershed protection, flood prevention, irrigation, drainage, water supply, and related water-resources development purposes.

(c) Establishing engineering and economic standards and objectives, including standards as to degrees of flood protection, for works of improvement planned and carried out under the authority of the Act.

(d) Determination and definition of (1) those land-treatment measures and structural improvements for flood prevention and measures for the agricultural phases of conservation, development, use and disposal of water or for fish and wildlife development which are

eligible for assistance under the Act and (2) the nature and extent of such assistance and the conditions under which such assistance shall be rendered.

(e) Planning and installing works of improvement on lands under his jurisdiction, and arranging for the participation of other Federal agencies in the planning and installation of works of improvement on lands under their jurisdiction. Recommendations of the heads of other Federal agencies for necessary works of improvement on lands under their jurisdiction shall be submitted as an integral part of the plans of the Department of Agriculture for works of improvement. Arrangements for construction, operation, and maintenance of works of improvement on such lands shall be mutually satisfactory to the Secretary of Agriculture and the head of the Federal agency concerned.

(f) Submitting plans for works of improvement to the State Governor or Governors concerned and to the Federal agencies concerned for review and comment when the Secretary and the interested local organization have agreed on such plans; and, when and as required by the Act, submitting such plans to the Secretary of the Interior and the Secretary of the Army for their review and comment prior to transmission of the plans to the Congress through the President.

(g) Giving full consideration to the recommendations concerning the conservation and development of fish and wildlife resources contained in any report of the Secretary of the Interior which is submitted to him, in accordance with section 12 of the Act [section [1008](#) of this title] and section 5 of this order, prior to the time he and the local organization have agreed on a plan for works of improvement, and including in the plan such works of improvement for fish and wildlife purposes recommended in the report as are acceptable to him and the local organization.

(h) Holding public hearings at suitable times and places when he determines that such action will further the purposes of the Act.

Section 3. Notification.

(a) The Secretary of Agriculture must:

(1) Notify in writing the State Governor or Governors concerned, the Secretary of the Interior, the Secretary of the Army, and other Federal agencies concerned of his decision to initiate any survey or field investigation involving water-resources development work, and furnish them with appropriate information regarding the scope, nature, status, and results of such survey or investigation.

(2) Notify the following, severally, in writing of all approvals or disapprovals of applications for planning assistance: the sponsoring organization, the State Governor or Governors concerned, the Secretary of the Interior, the Secretary of the Army, and other Federal agencies concerned.

(b) The Secretary of the Interior shall notify in writing the State Governor or Governors concerned, the Secretary of Agriculture, the Secretary of the Army, and other Federal agencies concerned of his decision to initiate any survey or field investigation involving water-resources development work, and furnish them with appropriate information regarding the scope, nature, status, and results of such survey or investigation.

(c) The Secretary of the Army shall notify in writing the State Governor or Governors concerned, the Secretary of Agriculture, the Secretary of the Interior, and other Federal agencies concerned of his decision to initiate any survey or field investigation involving water-resources development work, and furnish them with appropriate information regarding the scope, nature, status, and results of such survey or investigation.

Section 4. Coordination. In order to assure the coordination of work authorized under the Act [this chapter] and the related work of other agencies, so that the proper use, conservation, and development of water and related land resources through Federal programs and financial assistance may be achieved in the most orderly, economical, and effective manner.

(a) The Secretary of Agriculture, before authorizing planning assistance in response to an application from a local organization for assistance under the Act [this chapter] must:

(1) When an application applies to a watershed located in one of the seventeen western reclamation States or Hawaii and it appears that a major objective is the agricultural phases of the conservation, development, utilization, and disposal of water for irrigation purposes, request the views of the Secretary of the Interior concerning the feasibility of achieving equivalent irrigation benefits by means of works of improvement constructed pursuant to the Reclamation Act of June 17, 1902 (43 U.S.C. 391), and acts amendatory or supplementary thereto, or by means of assistance furnished pursuant to the Small Reclamation Projects Act of 1956, as amended (43 U.S.C. 422a–422k) [43 U.S.C. 422a to 422k–1], and authorize planning assistance under the Act only after carefully considering whether works of improvement under the Act would be a more appropriate method of achieving that objective.

(2) When it appears that a major objective of an application is the reduction of flood damages in urban areas (as defined in the most recent census), request the views of the Secretary of the Army concerning the feasibility of achieving equivalent urban flood protection benefits by means of works of improvement constructed pursuant to the Flood Control Act of March 1, 1917 (39 Stat. 948), the Flood Control Act of May 15, 1928 (45 Stat. 534), the Flood Control Act of June 22, 1936 (49 Stat. 1570), or acts amendatory or supplementary thereto, and authorize planning assistance under the Act only after carefully considering whether works of improvement under the Act would be a more appropriate method of achieving that objective.

(3) When an application applies to a watershed located in the Tennessee River drainage basin, request the views of the Board of Directors of the Tennessee Valley Authority concerning the feasibility of achieving the objectives of the application by means of works of improvement for flood control or watershed protection constructed under the Tennessee Valley Authority Act of 1933, as amended (16 U.S.C. 831 et seq.), and authorize planning assistance under the Act only after carefully considering whether works of improvement under the Act would be a more appropriate method of achieving such objectives; and when such planning assistance is authorized, consult with the Tennessee Valley Authority throughout all phases of project development concerning the relationship of works of improvement under the Act to the unified development and regulation of the Tennessee River system.

(b) The Secretary of the Interior must, prior to undertaking any survey or field investigation under the Reclamation Act of June 17, 1902 (43 U.S.C. 391), and acts amendatory or supplementary thereto, or prior to initiating investigations after receipt of a Notice of Intent to apply for a loan under the Small Reclamation Projects Act of 1956, as amended (43 U.S.C. 422a–422k) [43 U.S.C. 422a to 422k–1], relating to works of improvements wholly within a watershed or subwatershed area of not more than 250,000 acres, request the views of the Secretary of Agriculture concerning the feasibility of achieving the major objectives of the project proposal by means of Federal assistance furnished pursuant to the Act [this chapter], and submit a report on such a survey or field investigation or approve such application for assistance only after carefully considering whether works of improvement under his authorities would be a more appropriate method of achieving such objectives.

(c) The Secretary of the Army must, prior to undertaking any survey or field investigation pursuant to the Flood Control Act of March 1, 1917 (39 Stat. 948), the Flood Control Act of May 15, 1928 (45 Stat. 534), the Flood Control Act of June 22, 1936 (49 Stat. 1570), and acts amendatory or supplementary thereto, relating to works of improvement wholly within a watershed or subwatershed area of not more than 250,000 acres, request the views of the Secretary of Agriculture concerning the feasibility of achieving the major objectives of the project proposal by means of Federal assistance furnished pursuant to the Act [this chapter], and submit a report on such survey or field investigation only after carefully considering whether works of improvement under his authorities would be a more appropriate method of achieving such objectives.

(d) The Board of Directors of the Tennessee Valley Authority must, prior to undertaking any survey or field investigation under the Tennessee Valley Authority Act of 1933, as amended (16 U.S.C. 831 et seq.), relating to works of improvement for flood control or watershed protection to be installed wholly within a watershed or subwatershed area of not more than 250,000 acres, request the views of the Secretary of Agriculture concerning the feasibility of achieving the major objectives of the works of improvement for flood control or watershed protections by means of works of improvement constructed under the Act [this chapter], and proceed with such survey or investigation only after carefully considering whether works of improvement under the Tennessee Valley Authority Act would be a more appropriate method of achieving such objectives.

(e) Whenever the foregoing provisions of this section require an agency head to request the views of another agency head, such request shall be effected prior to the making of any commitment to local interests, and local interests shall be informed at the outset of negotiations that any plan resulting therefrom is subject to coordination as required by this section.

(f) When any agency having responsibilities for water resources development is considering the initiation of surveys or field investigations in a watershed or subwatershed area of not more than 250,000 acres and it appears that the purposes to be served by the project under investigation could more advantageously be met by means of a combination of works of improvement under the statutory authority available to that and other agencies, the appropriate agency head shall consider with the other agency heads concerned and the cooperating local interests the feasibility of preparing a jointly developed plan for coordinated action under available statutory authority.

Section 5. Fish and wildlife development. Upon receipt of the notice required by section 12 of the Act [section 1008 of this title] and section 3(a)(1) of this order, the Secretary of the Interior, as he desires, may make surveys and investigations and prepare a report with recommendations concerning the conservation and development of fish and wildlife resources and participate, under arrangements satisfactory to the Secretary of Agriculture, in the preparation of a plan for works of improvement which will be acceptable to the local organization and the Secretary of Agriculture.

Section 6. Relationship to comprehensive development.

(a) The Secretary of Agriculture shall submit plans for installation of works of improvement under the Act [this chapter] to the Congress through the President only if the Secretary is satisfied that such works constitute needed and harmonious elements in the comprehensive development of the river subbasin or river basin involved.

(b) Federal agencies having responsibilities for water resource developments must, in the design and justification of works of improvement, take cognizance of all upstream and

downstream works in place and in operation, or soon to be brought into operation. The guiding principle shall be to adjust the nature, capacity, and operating characteristics of works of improvement in a manner that (1) reflects the respective contributions of upstream and downstream works to flood protection and to the conservation, development, use, and disposal of water, and (2) provides the best use and control of water resources at minimum cost. Whenever approximately equivalent benefits can be obtained from alternative works of improvement, or combinations of improvements, with approximately the same cost the alternative or combination least costly to the Federal Government shall be given preferential consideration. In case benefits are produced jointly by more than one work of improvement, or in case complementary relationships exist between the projects and plans of the several agencies, the benefits claimed in justification of a system of improvements shall not include any duplication or compounding of benefits.

Section 7. Basic data. In the utilization of existing basic physical and economic data, and in the acquisition of additional basic data required for planning, design, construction, operation and evaluation of works of improvement authorized under the Act [this chapter], the Department of Agriculture shall be assisted by the principal basic-data collection agencies, including the Geological Survey in the Department of the Interior and the Weather Bureau [now the National Weather Service] in the Department of Commerce. The basic-data collection agencies shall assist and cooperate with the Department of Agriculture with respect to the following:

- (a) Provision of pertinent information in the preliminary planning of works of improvement.
- (b) Collaboration in planning programs of hydrologic-data collection in project areas, in the selection of station sites and installation of equipment for collecting hydrologic data, and in the collection of such data.
- (c) Collaboration in the analysis and interpretation of hydrologic data collected specifically for projects initiated under the Act, and of relevant data which may contribute to an analysis of the effects of such projects.

Part 506 – Exhibits

Subpart B – Economic and Structural Tables

506.10 Economic and Structural Tables Exhibits

The economic and structural tables in subpart B summarize the watershed project information. Use the format shown to ensure compliance with applicable laws and regulations, to facilitate review and subsequent modification, and for summary purposes.

- (1) Items not applicable to a particular plan may be omitted.
- (2) Prime-numbered tables generally are necessary in all water resource plans.
- (3) Use “a” and “b” tables only if applicable.
- (4) Non-water-resource plans must include Tables 1 and 4 as a minimum.
- (5) For ready reference, reproduce tables on colored paper.
- (6) Date all tables with the month and year of preparation; the date must be reasonably current.
- (7) Round all dollar figures displayed in the tables to a practical level of significance.

506.11 Economic Table 1 – Estimated Installed Cost

All measures and items with their total estimated costs are to be shown in Table 1 by Federal agency and land ownership category. This table will be the basis for providing technical, cost sharing, and credit assistance from funds made available under Public Law 83-566. The following instructions will help in the preparation of the table.

- (1) List works of improvement by major types, such as land treatment, floodplain acquisition, flood warning system, floodproofing, floodwater-retarding structures, multiple-purpose structures, irrigation structures, or channel work. Use miles as the unit of measure for channel work. Do not designate purposes or group such measures under a purpose designation.
- (2) List all land treatment by land use and evaluation unit. For water resources projects evaluation units for land treatment will be the same as those for the related structural measures. For non-water-resource-projects, evaluation units for land treatment must be based on such factors as land capability class, soil type, or erosion-rate categories used to delineate the problem area. They must correspond to the information in the watershed agreement.
- (3) If Federal agencies other than the NRCS or FS participate in the installation of works of improvement, add columns so that their participation is shown in the same manner as that for NRCS and FS. Columns that do not have entries (for example, if the FS is not participating) may be omitted.
- (4) The estimated number of units and the estimated cost in dollars to be paid from Public Law 83-566 funds and from other sources for measures to be installed on Federal and non-Federal land must be shown in the body of the table. The estimated costs include any accelerated help that may be provided by other programs for cost sharing and technical assistance on non-Federal land and works of improvement on Federal lands.
- (5) Direct project funds for each agency for engineering services and project administration must be sufficient to cover all costs that will eventually be charged to the project. These funds include allowances for assistance by the State, the Centers,

and National Headquarters. All costs for the project are to be included as part of the cost for the category rather than as a separate line item.

Table 1 – Estimated Installation Cost
 [Name of Watershed], [State]
 [Dollars] ^{1/}

| Works of Improvement | Unit | Number | | | Estimated cost (dollars) ^{1/} | | | | | | |
|---------------------------------|------|--------------|------------------|-------|---|---|-------|--------------|------------------|-------|-------|
| | | Federal land | Non-Federal land | Total | Public Law 83-566 Funds | | | Other Funds | | | Total |
| | | | | | Federal land NRCS ^{2/} /FS ^{2/} | Non-Federal land NRCS ^{2/} /FS ^{2/} | Total | Federal land | Non-Federal land | Total | |
| Land treatment Evaluation unit | | | | | | | | | | | |
| A | | | | | | | | | | | |
| B | | | | | | | | | | | |
| Technical assistance | | | | | | | | | | | |
| Preservation easements | | | | | | | | | | | |
| Flood proofing | | | | | | | | | | | |
| Land acquisition | | | | | | | | | | | |
| Flood warning system | | | | | | | | | | | |
| Relocation | | | | | | | | | | | |
| Floodwater-retarding structures | | | | | | | | | | | |
| Multiple-purpose structures | | | | | | | | | | | |
| Channel work | | | | | | | | | | | |
| Total project | | | | | | | | | | | |

^{1/} Price base: ____.

^{2/} Federal agency responsible for assisting in installation of works of improvement.

Prepared: **Month/year**

506.12 Economic Table 2 – Estimated Cost Distribution

For Watershed Protection and Flood Prevention Operations Plans: Table 2 is used to show the various items of installation cost for individual works of improvement. It is the basis for determining the percentages of costs to be shared by the SLO and NRCS for each measure or group of measures. For Dam Rehabilitation Plans: An electronic spreadsheet has been developed for the computation of installation costs for Table 2 of the plan and the computation of total eligible project cost for determination of cost-share amounts. The spreadsheet is available from the national program manager. The following instructions will help in the preparation of the table.

- (1) Under the heading “Works of Improvement,” list each measure for which a separate cost estimate is available. Use the same number or name in this table as is used on the project map. Grade stabilization structures may be grouped when a separate estimate for each structure in a system has not been developed.
- (2) Ensure that individual measures are only grouped with other measures if they have the same cost sharing. For example, specific cost items and recreation facilities must be included as separate line item entries.
- (3) The estimated construction cost includes costs expected to be incurred during the installation period, including costs for cultural resource protection and other mitigation, plus a realistic contingency allowance in accordance with good estimating practices.
- (4) The estimated real property acquisition cost consists of all costs, including those needed for cultural resource protection and other mitigation, for purchasing the needed real property.
- (5) For those measures that incorporate nonproject features, the nonproject cost will be shown in brackets in the line below the project cost in the appropriate columns, and an explanatory footnote will be added. The grand total cost includes only project costs.
- (6) Incorporate the estimated cost for project administration as part of each item listed. The project administration part of the installation cost to be borne by the sponsors includes the costs of administering construction contracts and relocation assistance advisory services.
- (7) When applicable, footnotes are to be included to identify such items as—
 - (i) Legal fees, survey costs, or floodplain easements and their values.
 - (ii) Engineering service contract costs to be borne by Public Law 83-566 funds and others.
 - (iii) Nonproject cost items.
 - (iv) Kind and value of modifications or alterations included with the real property costs.
 - (v) The cost of cultural resource protection and mitigation.
 - (vi) The cost of other environmental or social mitigation measures.
 - (vii) Non-NED project costs for nonstructural measures.

Table 2 – Estimated Cost Distribution—Water Resource Project Measures
 [Name of watershed], [State]
 [Dollars] 1/

| Works of | Installation Cost—Public Law 83-566 | | | | | | Installation Cost—Other funds | | | | | | Total installation |
|----------|-------------------------------------|--------|------|------------|---------|-------|-------------------------------|--------|------|-------|------------|---------|--------------------|
| | Constr | Engine | Real | Relocation | Project | Total | Constru | Engine | Real | Water | Relocation | Project | |

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| Improvement | uction | ring | prop rights | payments | admin | Public Law 566 | ction | ering | prop. rights | rights | payments | admin. ^{2/} | other | costs |
|--|--------|------|-------------|----------|-------|----------------|-------|-------|--------------|--------|----------|----------------------|-------|-------|
| Floodwater retard. struc. No. 1 | | | | | | | | | 3/ | | | | | |
| Multiple purpose structure No. 2 Recreational development and facilities No. 3 Water supply Water intake tower | 4/ | 7/ | 5/ | | | | 4/ | 7/ | 5/6/ | | | | | |
| Channel work Main A 10+00-40+00 (M) | | | | | | | | | | | | | | |
| Lateral A 10+00-20+00 (O) | | | | | | | | | | | | | | |
| Relocation of properties | | | | | | | | | | | | | | |
| Flood-proofing | | | | | | | | | | | | | | |
| Floodplain acquisition | | | | | | | | | | | | | | |
| Flood-warning system | | | | | | | | | | | | | | |
| Land Treatment | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | |

1/ Price base: ____.

Prepared: **Month/year**

2/ Includes \$ ____ for relocation assistance advisory service.

3/ Includes \$ ____ for moving three pipelines and \$ ____ for weighting one AT&T cable.

4/ Includes \$ ____ of Public Law 83-566 funds and \$ ____ of other funds for cultural resource protection and mitigation measures.

5/ Includes \$ ____ of real property cost for mitigation.

6/ Includes \$ ____ for surveys, legal fees, other costs.

7/ Engineering services contract cost to be borne: \$ ____ by Public Law 83-566 funds and \$ ____ by other funds.

8/ Nonproject cost for rerouting State Route 281 across top of dam are not otherwise included in this table, and are shown only to make clear they are the sponsors' responsibilities.

506.13 Economic Table 2a – Cost Allocation and Cost Sharing Summary

Table 2a shows the installation costs allocated to various purposes in multipurpose projects, as well as the sharing of costs allocated to each purpose. Relocation payments are to be included in the same manner as those for construction, real property rights, and engineering costs. Use as many columns as necessary to show each project purpose. The following instructions will help in the preparation of the table.

- (1) Each of the individual purposes served by project measures is to be entered as a subcolumn heading under the column heading “Purpose.”
- (2) All single-purpose measures serving the same purpose may be grouped by purpose under “Item.” Each multiple-purpose structure and specific cost items are to be listed separately in the same manner as shown in Table 2. List the items of installation cost (as in Table 2) under each measure or group of measures.
- (3) In the cost sharing section of the table, distribute the total cost allocated to each purpose to Public Law 83-566 funds and other funds in accordance with applicable cost sharing policy.
- (4) When relocation costs are involved, it may be necessary to show Public Law 83-566 costs for municipal water supply. In such an instance, this is to be identified by a footnote.

Table 2a – Cost Allocation and Cost Sharing Summary
Water Resource Project Measures
[Name of Watershed], [State]
[Dollars] 1/

| | Cost Allocation 2 | | | | Cost Sharing | | | | | | | |
|-----------------------------------|-------------------|------------|------------------|-------|-------------------|------------|------------------|-------|------------------|------------|------------------|-------|
| | Purpose | | | | Public Law 83-566 | | | | Other | | | |
| Item | Flood prevention | Recreation | M&I water supply | Total | Flood prevention | Recreation | M&I water supply | Total | Flood prevention | Recreation | M&I water supply | Total |
| Grade stabilization struc. | | | | | | | | | | | | |
| Construction | | | | | | | | | | | | |
| Engineering | | | | | | | | | | | | |
| Relocation | | | | | | | | | | | | |
| Real prop rights | | | | | | | | | | | | |
| Project admin. | | | | | | | | | | | | |
| Subtotal | | | | | | | | | | | | |
| Multiple purpose | | | | | | | | | | | | |
| Structure No. | | | | | | | | | | | | |

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| | | | | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Construction | | | | | | | | | | | | |
| Engineering | | | | | | | | | | | | |
| Relocation | | | | | | | | | | | | |
| Real prop rights | | | | | | | | | | | | |
| Acquisition | | | | | | | | | | | | |
| Legal fees | | | | | | | | | | | | |
| Easements | | | | | | | | | | | | |
| Road & utility modification | | | | | | | | | | | | |
| Project admin. | | | | | | | | | | | | |
| Subtotal | | | | | | | | | | | | |
| Recreation Facilities | | | | | | | | | | | | |
| Construction | | | | | | | | | | | | |
| Engineering | | | | | | | | | | | | |
| Real prop rights | | | | | | | | | | | | |
| Acquisition | | | | | | | | | | | | |
| Legal fees | | | | | | | | | | | | |
| Project admin. | | | | | | | | | | | | |
| Subtotal | | | | | | | | | | | | |
| Total | | | | | | | | | | | | |

1/ Price base: _____.

2/ Method of Cost Allocation:

Prepared: Month/year

506.14 Economic Table 2b – Recreational Facilities—Estimated Construction Costs

Table 2b shows the number, estimated unit construction cost, and total cost for each individual type of recreational facility. This table is to be included in all plans that have recreational development as an integral part of the plan and if recreational benefits for a planned development are evaluated monetarily, regardless of whether Public Law 83-566 funds will share any of the cost for facilities. The following instructions will help in the preparation of the table.

- (1) Where more than one development is involved, identify the facilities to be installed at each development. Types of facilities may include access roads, parking lots, water supply, sanitary facilities, beach development, boat docks, picnic tables, or fireplaces. Where possible, include descriptive terms, such as “blacktop road—16 feet wide, flush toilet, and concrete picnic table.”
- (2) Under “Number” show the number of units of each type of facility planned. Include a footnote to indicate those items that are estimated and subject to minor variation.

Table 2b – Recreational Facilities—Estimated Construction Costs
 [Name of Watershed], [State]
 [Dollars] 1/

| Item | Number | Estimated unit cost | Total construction cost |
|-------|--|---------------------|-------------------------|
| | [Indicate quantities that are estimated. ^{2/}] | | |
| Total | | | |

1/ Price base: ____.

2/ Estimated quantity, subject to minor variation at time of detailed planning.

Prepared: **Month/year**

506.15 Structural Table 3 – Dams With Planned Storage Capacity

Use Table 3 to show the planned storage capacity of dams. The following instructions will help in the preparation of the table.

- (1) Class of structure is to be indicated as low, significant or high as defined in Title 210, National Engineering Manual (NEM), Part 520, Subpart C, Section 520.21(e).
- (2) Total drainage area is to include the controlled and uncontrolled drainage area above the planned structure. If two or more structures are in series, the drainage area above the upstream structures is the controlled drainage area, and the area between the upstream structure and the structure being listed is the uncontrolled drainage area.
- (3) The auxiliary spillway type refers to the type of material, such as vegetated, rock, earth, or concrete.
- (4) Indicate the 1-day runoff curve number used for design of the structures. Note any deviation from the use of an antecedent moisture condition II runoff curve number.
- (5) The floodwater-retarding pool is the reservoir space allotted for the temporary impoundment of floodwater and aerated sediment. Its upper limit is the elevation of the crest of the lowest auxiliary spillway. Floodwater-retarding capacity is the volume in the floodwater-retarding pool less the aerated sediment. The surface area of the floodwater retarding pool is the area at the crest elevation of the lowest auxiliary spillway.
- (6) The submerged sediment capacity must account for all of the reservoir space allotted to the accumulation of submerged sediment during the life of the structure. Sediment aerated is the volume of sediment that deposits above the lowest ungated outlet.
- (7) The surface area for the sediment pool is the area of the reservoir at the elevation of the anticipated sediment accumulation at the dam. If the lowest ungated outlet is below the sediment pool elevation, the area to initially store water is to be shown by footnote, or by adding another line. The sediment pool area is shown in parentheses if the reservoir contains beneficial storage or the sediment capacity will not store water.
- (8) Show beneficial use storage separately for each applicable purpose, including the capacity needed for losses.
- (9) In listing the surface area for the beneficial use pool, identify the use of recreation or fish and wildlife pools, when applicable. Water storage for either of these purposes normally is considered the first increment above the sediment pool. Where other beneficial uses are included in a reservoir, show the maximum water surface area for all beneficial uses.
- (10) Table 3 is also to be used for joint-use storage structures. Joint-use storage is reservoir storage capacity partly allocated to flood prevention, but also used for conservation or beneficial storage during seasons when floods normally do not occur. The operation of joint-use storage is based on water supply forecasts and continuous inflow and outflow measurements or on a fixed time schedule. Modify the table headings as appropriate to show capacities for separate storage purposes and capacities for beneficial use storage shared with floodwater-retarding capacity.
- (11) The principal spillway is the lowest ungated spillway designated to convey the water from the floodwater-retarding pool. Type of conduit refers to the material used, such as R/C pipe, R/C box, or CMP.
- (12) The auxiliary spillway system of a dam is the spillway system designed to convey water in excess of that impounded for flood prevention or other beneficial purposes.

- (13) The exit channel of an earth, vegetated, or rock auxiliary spillway is that part of the channel downstream from the control section that safely conducts the water to a point where it may be released without jeopardizing the integrity of the structure. V_e is the maximum velocity of flow in the exit channel for the stability design hydrograph.
- (14) The stability design hydrograph is used to establish the minimum design dimensions of the earth or rock auxiliary spillway.
- (15) The freeboard hydrograph is used to establish the minimum elevation of the top of the dam.
- (16) Elevations are to be referenced to mean sea level.
- (17) All flow capacities are to be shown as maximum or peak.

Table 3 – Structural Data—Dams with planned storage capacity
 [Name of watershed], [State]

| Item | Unit | Structure no. [1, 2, 3, 4, etc.] | Total |
|---|-----------------|----------------------------------|-------|
| Class of structure | | | |
| Seismic zone | | | |
| Uncontrolled drainage area | mi ² | | |
| Controlled drainage area | mi ² | | |
| Total drainage area | mi ² | | |
| Runoff curve No. (1-day) (AMC II) | | | |
| Time of concentration (T _c) | hrs | | |
| Elevation top dam | ft | | |
| Elevation crest auxiliary spillway | ft | | |
| Elevation crest high stage inlet | ft | | |
| Elevation crest low stage inlet | ft | | |
| Auxiliary spillway type | | | |
| Auxiliary spillway bottom width | ft | | |
| Auxiliary spillway exit slope | percent | | |
| Maximum height of dam | ft | | |
| Volume of fill | yd ³ | | |
| Total capacity ^{1/} | acre ft | | |
| Sediment submerged | acre ft | | |
| Sediment aerated | acre ft | | |
| Beneficial use (identify use) | acre ft | | |
| Floodwater retarding | acre ft | | |
| Between high and low stage | acre ft | | |
| Surface area | | | |
| Sediment pool ^{2/} | acres | | |
| Beneficial use pool (identify use) | acres | | |
| Floodwater retarding pool ^{1/} | acres | | |

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| | | | |
|--|--------------------|--|--|
| Principal spillway design | | | |
| Rainfall volume (1-day) | in | | |
| Rainfall volume (10-day) | in | | |
| Runoff volume (10-day) | in | | |
| Capacity of low stage (max.) | ft ³ /s | | |
| Capacity of high stage (max.) | ft ³ /s | | |
| Dimensions of conduit | ft/in | | |
| Type of conduit | | | |
| Frequency operation-auxiliary spillway | percent chance | | |
| Auxiliary spillway hydrograph | | | |
| Rainfall volume | in | | |
| Runoff volume | in | | |
| Storm duration | hrs | | |
| Velocity of flow (V _e) | ft/s | | |
| Max. reservoir water surface elev. | ft | | |
| Freeboard hydrograph | | | |
| Rainfall volume | in | | |
| Runoff volume | in | | |
| Storm duration | hrs | | |
| Max. reservoir water surface elev. | ft | | |
| Capacity equivalents | | | |
| Sediment volume | in | | |
| Floodwater retarding volume | in | | |
| Beneficial volume (identify use) | in | | |

1/ Crest of auxiliary spillway.

Prepared: Month/year

2/ If reservoir contains beneficial storage or if sediment capacity will not store water, show area in parenthesis and footnote accordingly.

506.16 Structural Table 3a – Dikes

Structural Table 3a shows each dike separately. Data in each column to the right of the stationing should be entered on the same line as the station location.

**Table 3a – Structural Data—Dikes 1/
[Name of Watershed], [State]**

| Dike | Stationing | Top width (ft) | Average side slope | Average height of dike (ft) | 100-year frequency velocity (ft/s) | Dike protection | Volume of earth fill (yd³) |
|-------------|-------------------|-----------------------|---------------------------|------------------------------------|---|------------------------|--|
| | | | | | | | |

1/ Dikes are Class (reference NRCS Engineering Standard No. 356)
Year/month

Prepared:

506.17 Structural Table 3b – Channel Work

Use structural Table 3b is to be used for flood channels, irrigation canals, and drainage channels. The following instructions will help in the preparation of the table.

- (1) The data in each column to the right of station is to be entered on the same line as the station location it represents.
- (2) Data, such as hydraulic gradient, *n* value, and excavation volume, is to be entered to represent values between the station given and the preceding station, or it is to be entered on intervening lines.
- (3) Drainage area is the uncontrolled area at the station.
- (4) As-built and aged velocities entered in the table are to be the velocities associated with the discharges used for stability analysis. If velocities are for other than design discharge, explain by footnote.
- (5) The information in footnotes may be shown by a separate legend sheet.
- (6) Show the totals for length of channel work and volume of excavation are to be shown.
- (7) If design discharge includes overbank flow, this must be indicated by an appropriate footnote.
- (8) If the design discharge cannot be expressed in meaningful terms by frequency, show the basis for design (drainage curve, numbers, and removal rate).

Table 3b – Structural Data—Channel Work
[Name of Watershed], [State]

| | | | | | | Channel dimensions 1/ | | | | <i>n</i> Value | | Velocities (ft/s) | | | | | |
|----------------------|---------|--------------------------------|---|--------------------------------|----------------------------|-----------------------|-------------------|----------------|------------|----------------|----------|-------------------|----------|--------------------------------------|-----------------|--------------------------|-----------------------|
| Channel name (reach) | Station | Drain area. (mi ²) | () Year freq design dischg. (ft ³ /s) | Water surface elev feet. (msl) | Hydraulic Gradient (ft/ft) | Gradient (ft/ft) | Bottom width (ft) | Elev. (ft/msl) | Side slope | aged | as built | aged | as built | Excavation volume (yd ³) | Type of work 2/ | Existing channel type 3/ | Present flow cond. 4/ |
| | | | | | | | | | | | | 5/ | 5/ | | | | |

1/ Where excavation is not planned, show cross-sectional area and wetted perimeter below hydraulic grade lines. Prepared: Month/year

2/ I Establishment of new channel including necessary stabilization measures.
 II Enlargement or realignment of existing channel or stream.
 III Cleaning out natural or manmade channel (including bar removal and major clearing and snagging operations).
 IV Clearing and removal of loose debris within channel section.
 V Stabilization as primary purpose (by continuous treatment or localized problem areas—present capacity adequate).

3/ N An unmodified, well-defined natural channel or stream.
 M Manmade ditch or previously modified channel or stream (show approximate date of original construction in parenthesis).
 O None or practically no defined channel.

4/ Pr Perennial—Flows at all times except during extreme drought.
 I Intermittent—Continuous flow through some seasons of the year.
 E Ephemeral—Flows only during periods of surface runoff, otherwise dry.
 S Pounded water with no noticeable flow—Caused by lack of outlet or high groundwater table.

5/ Explain discharge upon which velocities are based, that is design, bankfull, 10-year.

Note: A subscript "L" should be added to the Roman numeral classification to indicate an impervious lining.

506.18 Economic Table 4 – Average Annual NED Costs

Use Economic Table 4 is to be used to show the estimated average annual National Economic Development plan costs. The following instructions will help in the preparation of the table.

- (1) List measures, singly or in groups, as used for evaluation purposes. Use the same groupings of measures in Tables 4 and 6. Each evaluation unit will include costs for all items in the evaluation unit whether or not benefits can be evaluated monetarily. Include all these costs in the total and in the annual cost column of Table 6. The rationale for including uneconomical or unevaluated increments will be included in the narrative.
- (2) Enter the appropriate annual costs for each of the evaluation units. Include the annual project administration cost in each evaluation unit and in the total.
- (3) Show the current price base for the installation, operation, maintenance, and replacement cost estimates.
- (4) Because of its magnitude and importance, the operation, maintenance, and replacement cost for recreational or fish and wildlife developments must be identified by footnote.
- (5) Land treatment costs that have been netted out of the benefits are not included in this table. All Public Law 83-566 costs, including technical assistance for non-cost-shared measures, must be included in this table.
- (6) Do not include non-NED project costs. If Table 2 has such costs, then Table 4 must include a footnote, such as “Non-NED project costs for upgrading housing have been excluded.”
- (7) Items that might be considered “other direct costs” are discussed in Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G) Section 2.12.7.

Table 4 – Estimated Average Annual NED Costs
 [Name of Watershed], [State]
 [Dollars] 1/

| Works of Improvement | Project outlays Amortization of installation cost | Project outlays Operation, maintenance, and replacement cost | Other direct costs | Total |
|---|--|---|---------------------------|--------------|
| Land treatment Evaluation unit 1 Evaluation unit 2 | | | | |
| Reaches 1 to 6 Multipurpose channel, dam, etc. Land treatment 2/ | | 3/ | | |

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| | | | | |
|----------------------------|--|--|--|--|
| Reaches 7 and 8 | | | | |
| Multipurpose channel, etc. | | | | |
| Total | | | | |

1/ Price base: ____, amortized over __years at a discount rate of ____percent.

Prepared: **Month/year**

2/ Costs for technical assistance to install measures and financially assisted land treatment in this evaluation unit are included. (Costs for installing associated onfarm measures are not included because they have been netted out of the analysis.)

3/ Includes \$ ____ for operation, maintenance, and replacement for recreation development.

506.19 Economic Table 5 – Estimated Average Annual Flood Damage Reduction Benefits

Use Economic Table 5 is to be used to show the estimated average annual flood damage reduction benefits. The following instructions will help in the preparation of the table.

- (1) In the “Item” column, enter the types of flood damage that have been evaluated and that will be affected by the measures included in the plan.
- (2) Do not include erosion that is not associated with flood damage reduction. Gully erosion damage includes losses resulting from land voiding and any ephemeral gully damage, sheet and rill erosion damage, or impaired land use that is interrelated with gully erosion.
- (3) In the “Without project” column, enter the average annual damage that will continue to be incurred without project installation. In the “With project” column, enter the average annual damage that will continue to be incurred with project installation.
- (4) Enter the difference between the average annual damage with and without project to show the project's total damage reduction benefits in the last column.
- (5) When the table indicates no remaining damage in a category, a footnote is needed to show that damages and benefits were not evaluated completely. Examples of appropriate footnotes might be “damages and benefits will accrue from floods of greater magnitude than the ____ frequency event, but these were not evaluated” or “this includes only the damages and benefits occurring from land voiding or deterioration that will be affected by the structural measures.”
- (6) Do not distinguish between benefits accruing within or outside the watershed unless some unusual circumstances make it necessary or desirable.
- (7) The price base is to be specific, such as “Price base: 2007 current normalized prices for cropland and pasture; 2008 prices for all others.”
- (8) Agriculture-related damage includes damages occurring in rural communities with a population of less than 50,000.

Table 5 – Estimated Average Annual Flood Damage Reduction Benefits
 [Name of Watershed], [State]
 [Dollars] 1/

| Item | Estimated average annual damage | | | | Damage reduction benefit ^{3/ 4/} | |
|--------------------|-----------------------------------|-------------------|-----------------------------------|-------------------|---|-------------------|
| | Without project | | With project | | | |
| | Agriculture related ^{2/} | Nonagric. Related | Agriculture Related ^{2/} | Nonagric. related | Agriculture related ^{2/} | Nonagric. related |
| Floodwater | | | | | | |
| Crop and pasture | | | | | | |
| Other agricultural | | | | | | |
| Residential | | | | | | |
| Commercial | | | | | | |
| Other | | | | | | |

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| | | | | | | |
|------------------------|--|--|--|--|--|--|
| Subtotal | | | | | | |
| Sediment | | | | | | |
| Overbank deposition | | | | | | |
| Reservoirs | | | | | | |
| Other | | | | | | |
| [list important items] | | | | | | |
| Subtotal | | | | | | |
| Erosion | | | | | | |
| Floodplain scour | | | | | | |
| Stream bank | | | | | | |
| Gullies | | | | | | |
| Subtotal | | | | | | |
| Total | | | | | | |

1/ Price base: ____.

Prepared:

Month/year

2/ Agriculture-related damage includes damage to rural communities.

3/ Includes effects of land-treatment measures.

4/ Costs and benefits for onfarm land treatment have been netted out.

506.20 Economic Table 5a – Estimated Average Annual Watershed Protection Damage Reduction Benefits

Economic Table 5a is to be used to show the estimated average annual watershed protection damage reduction benefits. The following instructions will help in the preparation of the table.

A. Onsite

- (1) Crop-Stand Damage — Dollar value of benefits attributed to a reduction in crop-stand damage caused by erosion or sedimentation.
- (2) Land Voiding and Depreciation — Dollar value of benefits attributed to a decrease in land voiding and depreciation.
- (3) Water Conservation — Dollar value of benefits attributed to onsite savings in water.
- (4) Maintaining Productivity — Dollar value of benefits attributed to maintaining productivity over the evaluation period.
- (5) Other — Dollar value of other types of onsite benefits.
- (6) Onsite Subtotal — Total dollar value of onsite benefits in average annual values.

B. Offsite/Public

- (1) Maintaining Productivity — Dollar value of benefits attributed to maintaining productivity for future generations. This is the part of the maintaining-productivity benefits that occurs after the end of the evaluation period.
- (2) Sediment Damages — Dollar value of benefits attributed to offsite sediment reduction.
- (3) Property Values — Dollar values of benefits attributed to an increase in values of offsite properties. Care must be taken to avoid double counting when such benefits are evaluated.
- (4) Water Treatment — Dollar value of benefits attributed to a reduction in costs of treating M&I water.
- (5) Recreation — Dollar value of benefits attributed to an increase in recreation quality or quantity.
- (6) Fish and Wildlife — Dollar value of benefits attributed to an increase in fish and wildlife values.
- (7) Water Conservation — Dollar value of benefits attributed to offsite savings in water.
- (8) Other — Dollar value of other types of offsite benefits.
- (9) Offsite Subtotal — Total dollar value of offsite or public benefits, or both, in average annual values.
- (10) Grand Total — Total annual benefits in dollars (equal to the sum of onsite and offsite/public).

Table 5a – Estimated Average Annual Watershed Protection Damage Reduction Benefits
 [Name of Watershed], [State]
 [Dollars] 1/

| Item | Damage reduction benefit, average annual | |
|-------------------|--|-------------------------|
| | Agriculture-related | Nonagricultural-related |
| Onsite | | |
| Crop Stand Damage | | |

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| | | |
|--|--|--|
| Land Voiding and Depreciation | | |
| Water Conservation | | |
| Maintaining Productivity | | |
| Other | | |
| Subtotal | | |
| Offsite/Public | | |
| Maintaining Productivity for Future Generations | | |
| Sediment Damages | | |
| Property Values | | |
| Water Treatment | | |
| Recreation | | |
| Fish and Wildlife | | |
| Water Conservation | | |
| Other | | |
| Subtotal | | |
| Total | | |

1/ Price base: ____.
Month/year

Prepared:

506.21 Economic Table 6 – Comparison of NED Benefits and Costs

Use Table 6 is used to show the estimated average annual benefits and costs and the benefit-cost ratios for project measures. The following instructions will help in the preparation of the table.

- (1) List measures, singly or in groups, as used for evaluation purposes. Use the same groupings of measures in Tables 4 and 6.
- (2) Show only NED benefits on Table 6. Damage reduction benefits must agree with those in Tables 5 and 5a.
- (3) Enter the appropriate average annual benefit. For each evaluation unit for the land treatment part, show all costs and benefits accruing to land treatment to protect the soil resource base for sustained productivity, to conserve water, to improve water quality, and to reduce sediment damage. The land treatment costs and benefits upstream of dams and channel improvements are to be shown with the structural evaluation unit. Use the same price base and evaluation period for both benefits and costs. Unemployed labor benefits are those stemming from the use of unemployed and underemployed labor.
- (4) Include only the column headings necessary to show the project benefits. Include additional or substitute columns to show any other evaluated benefits that are not listed in the sample table (such benefits must be consistent with the P&G). Describe the nature of these benefits in the narrative. Report all sustained production benefits and other watershed protection benefits from Table 5a under either the “Other economic effects” column or under the title of “Maintaining productivity” if that is the only category of benefits.
- (5) Enter the average annual cost for each evaluation unit. These figures must agree with those in Table 4.
- (6) Enter the relationship of benefits to costs, with costs expressed as “1.0.” Express the ratio to the nearest tenth.
- (7) If a benefit-cost ratio is less than unity, add a footnote referring the reader to the rationale for plan selection.

Table 6 – Comparison of NED Benefits and Costs
 [Name of Watershed], [State]
 [Dollars] 1/

| Works of Improvement | Agriculture-related | | | Nonagricultural | | | Recreation | M&I water supply | Unemployed labor | Other econ. effects | Average annual ben. | Average annual costs ² | Benefit cost ratio |
|--|---------------------|-----|-----------------|-----------------|------|-------|------------|------------------|------------------|---------------------|---------------------|-----------------------------------|--------------------|
| | Damage reduction | | Intensification | | | | | | | | | | |
| | FP | Ir. | Dr. | Res. | Com. | Other | | | | | | | |
| Land treatment – acres Evaluation unit 1 Evaluation unit 2 Reaches 1 to 6 Multipurpose channel, dam, etc. Land treatment Reaches 7 & 8 Multipurpose channel | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | x.x:1.0 |

1/ Price base: ____.
 Month/year
 2/ From Table 4.

Prepared:

Part 506 – Exhibits

Subpart C – Watershed Agreements

506.30 Watershed Agreement

A. The watershed agreement is the legal document that records the responsibilities of the sponsoring local organizations (SLOs) and NRCS for implementing the plan. Place the watershed agreement immediately behind the abstract page of the final plan. Do not include the agreement in draft plans that are distributed for public or interagency review.

B. The format and wording provided in this exhibit must be used except for sections not applicable to the planned watershed project. If needed, additional items detailing responsibilities for the specific project must be included.

**Watershed Agreement
between the**

[List all sponsors as appropriate]
(Referred to herein as sponsors)
State of _____
and the

**Natural Resources Conservation Service,
U.S. Department of Agriculture
(Referred to herein as NRCS)**

Whereas, application has heretofore been made to the Secretary of Agriculture by the sponsors for assistance in preparing a plan for works of improvement for the _____ Watershed, State of _____, under the authority of the Watershed Protection and Flood Prevention Act, as amended (16 U.S.C. Sections 1001 to 1008, 1010, and 1012); and

Whereas, the responsibility for administration of the Watershed Protection and Flood Prevention Act, has been assigned by the Secretary of Agriculture to NRCS; and

Whereas, there has been developed through the cooperative efforts of the sponsors and NRCS a Watershed Project Plan and Environmental Impact Statement (or Environmental Assessment) for works of improvement for the _____ Watershed, State of _____, hereinafter referred to as the Watershed Project Plan or plan, which plan is annexed to and made a part of this agreement;

Now, therefore, in view of the foregoing considerations, the Secretary of Agriculture, through NRCS, and the sponsors hereby agree on this Watershed Project Plan and that the works of improvement for this project will be installed, operated, and maintained in accordance with the terms, conditions, and stipulations provided for in this plan and including the following:

1. Term. The term of this agreement is for the installation period and evaluated life of the project (___ years) and does not commit NRCS to assistance of any kind beyond the end of the evaluated life.

2. Costs. The costs shown in this plan are preliminary estimates. Final costs to be borne by the parties hereto will be the actual costs incurred in the installation of works of improvement.

3. Real property. The sponsors will acquire such real property as will be needed in connection with the works of improvement. The amounts and percentages of the real property acquisition costs to be borne by the Sponsors and NRCS are as shown in the Cost-share table in section 5 hereof. *[The items shown in this table are examples. Items with the same cost-share rate may be combined into one entry.]*

The sponsors agree that all land acquired for measures, other than land treatment practices, with financial or credit assistance under this agreement will not be sold or otherwise disposed of for the evaluated life of the project except to a public agency which will continue to maintain and operate the development in accordance with the Operation and Maintenance Agreement. *[Required when land is acquired with Watershed Protection and Flood Prevention Act financial or credit assistance.]*

4. Uniform Relocation Assistance and Real Property Acquisition Policies Act. The sponsors hereby agree to comply with all of the policies and procedures of the Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 U.S.C. Section 4601 et seq. as further implemented through regulations in 49 CFR Part 24 and 7 CFR Part 21) when acquiring real property interests for this federally assisted project. If the sponsor is legally unable to comply with the real property acquisition requirements, it agrees that, before any Federal financial assistance is furnished, it will provide a statement to that effect, supported by an opinion of the chief legal officer of the state containing a full discussion of the facts and law involved. This statement may be accepted as constituting compliance.

5. Cost-share for Watershed Project Plans. The following table will be used to show cost-share percentages and amounts for Watershed Project Plan implementation.

| Cost-share Table for Watershed Operation or Rehabilitation Projects | | | | | |
|---|---------|------|----------|------|-------|
| Works of Improvement | NRCS | | Sponsors | | Total |
| | Percent | Cost | Percent | Cost | Cost |
| Cost-Sharable Items | | | | | |
| List measures by purpose and rate of assistance. ^{1/} | | | | | |
| Multipurpose Structure No. 1 | | | | | |
| Channels | | | | | |
| Floodplain easements (___ acres) | | | | | |
| Land treatment measure | | | | | |
| Mitigation | | | | | |
| Real Property Acquisition Cost | | | | | |
| Multiple purpose site (___ acres) | | | | | |
| Real estate appraisal fees, legal fees, survey costs, flowage easements | | | | | |
| Relocation ^{2/} | | | | | |
| Sponsors Engineering Costs | | | | | |
| Subtotal: Cost-Sharable Costs | | | | | |
| | | | | | |
| Non-Cost-Sharable Items^{3/} | | | | | |

| | | | | | |
|--|-----|---|-----|---|--|
| NRCS Technical Assistance/Engineering | 100 | | 0 | 0 | |
| Project Administration ^{4/} | NA | | NA | | |
| Water, Mineral and Other Resource Rights ^{5/} | 0 | 0 | 100 | | |
| Permits ^{5/} | 0 | 0 | 100 | | |
| Real Property Rights ^{5/} | 0 | 0 | 100 | | |
| Relocation, Beyond Required Decent, Safe, Sanitary ^{6/} | 0 | 0 | 100 | | |
| Non-Project Costs | 0 | 0 | 100 | | |
| Subtotal: Non-Cost-Share Costs | | | | | |
| Total: | | | | | |

1/ Installation costs explanatory notes:

(a) List each multiple-purpose measure separately. Specific cost items and joint costs of multiple-purpose measures will be shown as separate line item entries. Single-purpose measures may be grouped by kind if the rate of assistance is the same for each measure or group.

(b) For watershed protection enduring measures, the following footnote should be included: 1/ The cost-share rate is the percentage of the average cost of installing the practice in the selected plan for the evaluation unit. During project implementation, the actual cost-share rate shall not exceed the rate of assistance for similar practices and measures under existing national programs.

2/ Relocation payments and assurances explanatory notes:

(a) Includes replacement in kind, and payments necessary to meet decent, safe, and sanitary provisions. Enter the total estimated relocation assistance payment from Table 1. Percentages for cost sharing will be based upon the cost-share rate of the project purpose requiring the relocation. The relocation assistance advisory services cost is to be included when computing the cost sharing percentages. These percentages are to be used for the life of the project regardless of future changes or supplements.

(b) If the planned project measures will not cause the displacement of any person, business, or farm operation under present conditions, show cost sharing percentages, place \$0 1/ in "Estimated Relocation Payment Costs," and footnote the column as follows: 1/ Investigation of the watershed project area indicates that no displacements will be involved under present conditions. However, in the event that displacement becomes necessary at a later date, the cost of relocation assistance and payments will be cost-shared in accordance with the percentages shown.

3/ If actual Non-Cost-Sharable item expenditures vary from these figures, the responsible party will bear the change.

4/ The sponsors and NRCS will each bear the costs of project administration that each incurs. Sponsor costs for project administration include relocation assistance advisory service.

5/ The sponsors will acquire with other than Watershed Protection and Flood Prevention Act funds, such real property as will be needed in connection with the works of improvement. The value of real property is eligible as in-kind contributions toward the sponsors' share of the works of improvement costs. In no case will the amount of an in-kind contribution exceed the sponsors' share of the cost for the works of improvement. The maximum cost eligible for in-kind credit is the same as that for cost sharing.

6/ Relocation payments for the cost of improvements beyond decent, safe and sanitary requirements is a nonproject cost ineligible for assistance under the Act.

6. Land treatment agreements. The sponsors will obtain agreements from owners of not less than 50 percent of the land above each multiple-purpose and floodwater-retarding structure. These agreements must provide that the owners will carry out farm or ranch conservation plans on their land. The sponsors will ensure that 50 percent of the land upstream of any retention reservoir site is adequately protected before construction of the dam. The sponsors will provide assistance to landowners and operators to ensure the installation of the land treatment measures shown in the Watershed Project Plan. The sponsors will encourage landowners and operators to continue to operate and maintain the land treatment measures after the long-term contracts expire, for the protection and improvement of the watershed.

7. Floodplain Management. Before construction of any project for flood prevention, the sponsors shall agree to participate in and comply with applicable Federal floodplain management and flood insurance programs. For plans approved as of the date of this revised manual the sponsor is required to have development controls in place below low and significant hazard dams prior to NRCS/sponsor entering into a construction contract.

8. Water and mineral rights. The sponsors will acquire or provide assurance that landowners or resource users have acquired such water, mineral, or other natural resources rights pursuant to State law as may be needed in the installation and operation of the works of improvement. Any costs incurred shall be borne by the sponsor and these costs are not eligible as part of the sponsors cost-share.- *[The last sentence here is only required in watershed structure rehabilitation plans.]*

9. Permits. The sponsors will obtain and bear the cost for all necessary Federal, State, and local permits required by law, ordinance, or regulation for installation of the works of improvement. These costs are not eligible as part of the sponsors' cost-share.- *[The last sentence here is only required in watershed structure rehabilitation plans.]*

10. NRCS assistance. This agreement is not a fund-obligating document. Financial and other assistance to be furnished by NRCS in carrying out the plan is contingent upon the fulfillment of applicable laws and regulations and the availability of appropriations for this purpose.

11. Additional agreements. A separate agreement will be entered into between NRCS and the sponsors before either party initiates work involving funds of the other party. Such agreements will set forth in detail the financial and working arrangements and other conditions that are applicable to the specific works of improvement.

12. Amendments. This plan may be amended or revised only by mutual agreement of the parties hereto, except that NRCS may deauthorize or terminate funding at any time it determines that the sponsors have failed to comply with the conditions of this agreement or when the program funding or authority expires. In this case, NRCS shall promptly notify the sponsors in writing of the determination and the reasons for the deauthorization of project funding, together with the effective date. Payments made to the sponsors or recoveries by NRCS shall be in accord with the legal rights and liabilities of the parties when project funding has been deauthorized. An amendment to incorporate changes affecting a specific measure may be made by mutual agreement between NRCS and the sponsors having specific responsibilities for the measure involved.

13. Prohibitions. No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this plan, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.

14. Operation and Maintenance (O&M). The sponsors will be responsible for the operation, maintenance, and any needed replacement of the works of improvement by actually performing the work or arranging for such work, in accordance with an O&M Agreement. An O&M agreement will be entered into before Federal funds are obligated and will continue for the project life (___ years). Although the sponsors' responsibility to the Federal Government for O&M ends when the O&M agreement expires upon completion of the evaluated life of measures covered by the agreement, the sponsors acknowledge that continued liabilities and responsibilities associated with works of improvement may exist beyond the evaluated life.

15. Emergency Action Plan. Prior to construction, the sponsors shall prepare an Emergency Action Plan (EAP) for each dam or similar structure where failure may cause loss of life or as required by state and local regulations. The EAP shall meet the minimum content specified in Part 500.52 of the NRCS Title 180, National Operation and Maintenance Manual (NOMM), Part 500, Subpart F, Section 500.52, and meet applicable State agency dam safety requirements. The NRCS will determine that an EAP is prepared prior to the

execution of fund obligating documents for construction of the structure. EAPs shall be reviewed and updated by the sponsors annually.

16. Nondiscrimination provisions. The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW., Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

By signing this agreement the recipient assures the Department of Agriculture that the program or activities provided for under this agreement will be conducted in compliance with all applicable Federal civil rights laws, rules, regulations, and policies.

17. Certification Regarding Drug-Free Workplace Requirements (7 CFR Part 3021). By signing this Watershed Agreement, the sponsors are providing the certification set out below. If it is later determined that the sponsors knowingly rendered a false certification, or otherwise violated the requirements of the Drug-Free Workplace Act, the NRCS, in addition to any other remedies available to the Federal Government, may take action authorized under the Drug-Free Workplace Act.

Controlled substance means a controlled substance in Schedules I through V of the Controlled Substances Act (21 U.S.C. Section 812) and as further defined by regulation (21 CFR Sections 1308.11 through 1308.15);

Conviction means a finding of guilt (including a plea of *nolo contendere*) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes;

Criminal drug statute means a Federal or non-Federal criminal statute involving the manufacturing, distribution, dispensing, use, or possession of any controlled substance;

Employee means the employee of a grantee directly engaged in the performance of work under a grant, including: (i) all direct charge employees; (ii) all indirect charge employees unless their impact or involvement is insignificant to the performance of the grant; and, (iii) temporary personnel and consultants who are directly engaged in the performance of work under the grant and who are on the grantee's payroll. This definition does not include workers not on the payroll of the grantee (e.g., volunteers, even if used to meet a matching requirement; consultants or independent contractors not on the grantees' payroll; or employees of subrecipients or subcontractors in covered workplaces).

Certification:

A. The sponsors certify that they will or will continue to provide a drug-free workplace by—

- (1) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition.
- (2) Establishing an ongoing drug-free awareness program to inform employees about—
 - (a) The danger of drug abuse in the workplace;

- (b) The grantee's policy of maintaining a drug-free workplace;
 - (c) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (d) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.
- (3) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (1).
- (4) Notifying the employee in the statement required by paragraph (1) that, as a condition of employment under the grant, the employee will—
- (a) Abide by the terms of the statement; and
 - (b) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction.
- (5) Notifying the NRCS in writing, within 10 calendar days after receiving notice under paragraph (4)(b) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees shall provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers of each affected grant.
- (6) Taking one of the following actions, within 30 calendar days of receiving notice under paragraph (4) (b), with respect to any employee who is so convicted—
- (a) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (b) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency.
- (7) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (1), (2), (3), (4), (5), and (6).

B. The sponsors may provide a list of the sites for the performance of work done in connection with a specific project or other agreement.

C. Agencies shall keep the original of all disclosure reports in the official files of the agency.

18. Certification Regarding Lobbying (7 CFR Part 3018) (*for projects > \$100,000*)

A. The sponsors certify to the best of their knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the sponsors, to any person for influencing or attempting to influence an officer or employee of an agency, Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the

undersigned shall complete and submit Standard Form LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

(3) The sponsors shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

B. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by U.S. Code, Title 31, Section 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

19. Certification Regarding Debarment, Suspension, and Other Responsibility Matters—Primary Covered Transactions (7 CFR Part 3017).

A. The sponsors certify to the best of their knowledge and belief, that they and their principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(2) Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph A(2) of this certification; and

(4) Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

B. Where the primary sponsors are unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this agreement.

20. Clean Air and Water Certification.

(Applicable if this agreement exceeds \$100,000, or a facility to be used has been subject of a conviction under the Clean Air Act (42 U.S.C. Section 7413(c)) or the Federal Water Pollution Control Act (33 U.S.C. Section 1319(c)) and is listed by EPA, or is not otherwise exempt.)

A. The project sponsoring organizations signatory to this agreement certify as follows:

(1) Any facility to be utilized in the performance of this proposed agreement is (____), is not (____) listed on the Environmental Protection Agency List of Violating Facilities.

(2) To promptly notify the NRCS-State administrative officer prior to the signing of this agreement by NRCS, of the receipt of any communication from the Director, Office of Federal Activities, U.S. Environmental Protection Agency, indicating that any facility which is proposed for use under this agreement is under consideration to be listed on the Environmental Protection Agency List of Violating Facilities.

(3) To include substantially this certification, including this subparagraph, in every nonexempt sub-agreement.

B. The project sponsoring organization(s) signatory to this agreement agrees as follows:

(1) To comply with all the requirements of section 114 of the Clean Air Act as amended (42 U.S.C. Section 7414) and section 308 of the Federal Water Pollution Control Act (33 U.S.C. Section 1318), respectively, relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in section 114 and section 308 of the Air Act and the Water Act, issued there under before the signing of this agreement by NRCS.

(2) That no portion of the work required by this agreement will be performed in facilities listed on the EPA List of Violating Facilities on the date when this agreement was signed by NRCS unless and until the EPA eliminates the name of such facility or facilities from such listing.

(3) To use their best efforts to comply with clean air standards and clean water standards at the facilities in which the agreement is being performed.

(4) To insert the substance of the provisions of this clause in any nonexempt subagreement.

C. The terms used in this clause have the following meanings:

(1) The term “Air Act” means the Clean Air Act, as amended (42 U.S.C. Section 7401 et seq.).

(2) The term “Water Act” means Federal Water Pollution Control Act, as amended (33 U.S.C. Section 1251 et seq.).

(3) The term “clean air standards” means any enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, or other requirements which are contained in, issued under, or otherwise adopted pursuant to the Air Act or Executive Order 11738, an applicable implementation plan as described in section 110 of the Air Act (42 U.S.C. Section 7414) or an approved implementation procedure under section 112 of the Air Act (42 U.S.C. Section 7412).

(4) The term “clean water standards” means any enforceable limitation, control, condition, prohibition, standards, or other requirement which is promulgated pursuant to the Water Act or contained in a permit issued to a discharger by the Environmental Protection Agency or by a State under an approved program, as authorized by section 402 of the Water Act (33 U.S.C. Section 1342), or by a local government to assure compliance with pretreatment regulations as required by section 307 of the Water Act (33 U.S.C. Section 1317).

(5) The term “facility” means any building, plan, installation, structure, mine, vessel, or other floating craft, location or site of operations, owned, leased, or supervised by a sponsor, to be utilized in the performance of an agreement or subagreement. Where a location or site of operations contains or includes more than one building, plan, installation, or structure, the entire location shall be deemed to be a facility except where the Director, Office of Federal Activities, Environmental Protection Agency, determines that independent facilities are collocated in one geographical area.

21. Assurances and Compliance.

As a condition of the grant or cooperative agreement, the sponsor assures and certifies that it is in compliance with and will comply in the course of the agreement with all applicable laws,

regulations, Executive orders and other generally applicable requirements, including those set out below which are hereby incorporated in this agreement by reference, and such other statutory provisions as a specifically set forth herein.

State, Local, and Indian Tribal Governments: OMB Circular Nos. A-87, A-102, A-129, and A-133; and 7 CFR Parts 3015, 3016, 3017, 3018, 3021, and 3052.

Nonprofit Organizations, Hospitals, Institutions of Higher Learning: OMB Circular Nos. A-110, A-122, A-129, and A-133; and 7 CFR Parts 3015, 3017, 3018, 3019, 3021 and 3052.

22. Examination of Records.

The sponsors shall give the NRCS or the Comptroller General, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to this agreement, and retain all records related to this agreement for a period of three years after completion of the terms of this agreement in accordance with the applicable OMB Circular.

23. Signatures

_____ [Name of Sponsor] By _____

[Type name below signature]

Title _____

Date _____

Address

Zip Code

The signing of this plan was authorized by a resolution of the [Name of sponsor] governing body of the adopted at a meeting held on _____.

[Type name below signature]

Address

Zip Code

Secretary [or other title]

Date _____

[Add additional signature blocks as necessary]

Natural Resources Conservation Service

U.S. Department of Agriculture

Approved by:

[Type name below signature]

State Conservationist

Date: _____

506.31 Rehabilitation Project – Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING (MOU)
between the
NATURAL RESOURCES CONSERVATION SERVICE (NRCS)
U.S. DEPARTMENT OF AGRICULTURE (USDA)

and the

[Insert names of Sponsors]

Sponsors for

[Insert name of Project, Dam No. Insert no. of dam]

This MOU is between the USDA, NRCS, and the [Insert name(s) of Sponsors, Sponsoring Local Organizations for this project], hereinafter referred to as Sponsor.

AUTHORITIES, STATUTES, LAWS

The authority of NRCS to enter into this MOU is Section 14 of The Watershed Protection and Flood Prevention Act, 16 U.S.C. Section 1012, as amended by Section 313 of Public Law 106-472. This section authorizes NRCS to provide technical assistance and financial assistance to local project Sponsors for rehabilitation of aging dams constructed under the Watershed Protection and Flood Prevention Act (Public Law 83-566), the Flood Control Act of 1944 (Public Law 78-534), the Pilot Watershed Program, and the Resource Conservation and Development (RC&D) Program.

STATEMENT OF PURPOSE

Previously the NRCS provided technical assistance (TA), financial assistance (FA), or both to the Sponsor for works of improvement known as dam no. [Insert no. of dam] in the [Insert name of project]. This project was originally authorized and installed under the [Insert name of program]. NRCS has determined that this dam is eligible for rehabilitation under the authorities cited above.

According to the project plan and Operation and Maintenance (O&M) agreement for this project, the Sponsor is responsible for the O&M of this dam to assure it will function as designed and constructed. The Sponsor has an interest in extending the service life of the dam and meeting applicable safety and performance standards. The Sponsor recognizes that the process of rehabilitating a dam takes significant advance preparation, and would like to initiate work on specific areas of planning and design of a rehabilitation project.

Although NRCS has the authority to assist the Sponsor with rehabilitation of the dam identified above, NRCS resources cannot be committed to this project at this time. However, NRCS concurs with the Sponsor initiating work on specific areas of planning and design of the rehabilitation project

Federal funds for a particular rehabilitation project will be equal to 65 percent of the total costs of the rehabilitation project, but will not exceed 100 percent of the actual construction costs incurred in the rehabilitation. Also, the Sponsor will be responsible for acquisition of all land rights and permits. The Sponsor will be responsible for 100 percent of the costs of natural resource rights and local, state, and Federal permitting. The value of non-Federal in-

kind contributions can be credited to the Sponsor’s 35-percent share of the total eligible project cost.

GOAL

The primary goal of this MOU is to establish a framework under which the Sponsor may proceed with work on specific aspects of the proposed rehabilitation project.

This MOU establishes a basis for cooperation between the parties to define acceptable in-kind contributions for this project. Therefore, the parties pledge to work together with the mutual goal of rehabilitation of this project within the current limits of their respective authorities and available funding.

SCOPE OF MOU

The Sponsor may provide all or a portion of the Sponsor’s 35 percent share of the total eligible project cost by providing in-kind contribution of services and land rights acquisition. NRCS and Sponsors agree that the following services and the maximum in-kind credit values may be considered for credit to the Sponsor’s share of the total rehabilitation cost of this project:

| | |
|--|---|
| <u>Land rights acquisition</u> | <u>[Insert \$ value of in-kind contribution]</u> |
| <u>[Insert name of service performed]</u> | <u>[Insert \$ value of in-kind service]</u> |
| <u>[Insert name of service performed]</u> | <u>[Insert \$ value of in-kind service]</u> |

The Sponsor must provide NRCS with documentation of the actual costs incurred for the services for determination of final credit values. The value of land rights must be determined by a professional land appraiser.

LIMITATIONS

The in-kind credit values shown above will be the maximum to be considered for the above-stated services and land rights (unless later amended and agreed to by both parties).

The technical quality of the services provided shall be concurred with by NRCS prior to in-kind credit being given.

Only services and land rights acquisition provided by the Sponsor after November 9, 2000 (date of enactment of Public Law 106-472) will be credited.

The in-kind credit values will not exceed 35 percent of the total costs of the rehabilitation project described above. The Sponsors will receive no cash reimbursement or credit for in-kind contributions that exceed this amount.

The Sponsors are responsible for the cost of water, mineral and other resource rights, all Federal, State, and local permits, and operation and maintenance; none of which are considered part of the total eligible project cost and none of which shall be credited for the Sponsor’s cost-share.

No credit for in-kind contributions will be given for Sponsors' actions normally needed for carrying out their previously assigned responsibilities for this project.

This MOU is not a fund obligating document.

There is no guarantee that funds will be appropriated by Congress for the dam rehabilitation project described in this MOU.

There is no guarantee that, if funds are appropriated by Congress, the dam rehabilitation project described in this MOU will be given any priority for completion by NRCS.

There is no guarantee that, if the dam rehabilitation project described in this MOU is selected as a NRCS priority rehabilitation project, the alternatives currently considered by the Sponsor will be the recommended or selected alternative.

Determination of the final amounts to be credited shall be at the sole discretion of NRCS.

All actions taken and costs incurred by the Sponsor prior to the time of the approval of the rehabilitation plan will be entirely at its own risk. Therefore, there is no guarantee, implied or otherwise, that any services or land rights provided by the sponsor will be credited as an in-kind contribution.

Nondiscrimination provisions

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW., Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

By signing this agreement the recipient assures the Department of Agriculture that the program or activities provided for under this agreement will be conducted in compliance with all applicable Federal civil rights laws, rules, regulations, and policies.

TERMINATION

This MOU can be modified or terminated at any time by mutual consent of both parties or can be terminated by either party giving 60 days written notice to the other party.

By: _____

Title: _____ State Conservationist _____ Date: _____

Insert Name(s) of Sponsor(s)

By: _____

Title: _____ Date: _____

Part 506 – Exhibits

Subpart D – Rehabilitation Project Ranking

506.40 Evaluation of Potential Rehabilitation Projects

Priority ranking spreadsheet (1 of 5) consequences

| EVALUATION OF POTENTIAL REHABILITATION PROJECTS | | | | | | | | | | | |
|--|-----|-----------------------------|------|------------|---------------------|---------------|----------------------|----------------|----------------------|------------|----|
| STATE | DAM | BY | DATE | YEAR BUILT | DESIGN HAZARD CLASS | DRAINAGE AREA | mi ² | WORK PLAN DATE | CURRENT HAZARD CLASS | DAM HEIGHT | ft |
| sht 1 of 5 | | CONSEQUENCES OF DAM FAILURE | | | | | | | ver 100101 | | |
| POTENTIAL DAM FAILURE: | | | | | | | | | | | |
| Total Failure Index | | | | | | | <input type="text"/> | A | | | |
| POTENTIAL LOSS OF LIFE: | | | | | | | | | | | |
| Maximum Population-at-Risk [PAR] | | | | | | (number) | <input type="text"/> | B | | | |
| Total Risk Index | | | | | | | <input type="text"/> | C | | | |
| POTENTIAL LOSS OF PROPERTY: | | | | | | | | | | | |
| Identify major community affected by breach and rate impact as High (H), Medium (M), Low (L) or None(blank) | | | | | | | | | | | |
| Community _____ | | | | | | (H,M,L,-) | <input type="text"/> | D | | | |
| Number of homes, businesses, major buildings | | | | | | (number) | <input type="text"/> | E | | | |
| POTENTIAL LIFELINE DISRUPTION: | | | | | | | | | | | |
| Water supply, identify community disrupted by dam failure, and estimate number/amount | | | | | | | | | | | |
| Municipal sole source _____ | | | | | Users | (number) | <input type="text"/> | F | | | |
| Supplemental source _____ | | | | | Users | (number) | <input type="text"/> | G | | | |
| Irrigation water _____ | | | | | Storage | (Ac-Ft) | <input type="text"/> | H | | | |
| POTENTIAL INFRASTRUCTURE DISRUPTION: | | | | | | | | | | | |
| Transportation system crossings, identify major crossing rendered unusable by dam failure, and estimate number | | | | | | | | | | | |
| Major/Interstate _____ | | | | | Roads | (number) | <input type="text"/> | I | | | |
| Secondary/County _____ | | | | | Roads | (number) | <input type="text"/> | J | | | |
| POTENTIAL ADVERSE IMPACTS ON THE ENVIRONMENT: | | | | | | | | | | | |
| Describe impacts and rate each as High (H), Medium (M), Low (L), or None (blank) | | | | | | | | | | | |
| Threatened & endangered species _____ | | | | | | (H,M,L,-) | <input type="text"/> | K | | | |
| Sensitive riparian areas _____ | | | | | | (H,M,L,-) | <input type="text"/> | L | | | |
| Contaminated reservoir sediment _____ | | | | | | (H,M,L,-) | <input type="text"/> | M | | | |
| Wetland and wildlife habitat _____ | | | | | | (H,M,L,-) | <input type="text"/> | N | | | |
| Other _____ | | | | | | (H,M,L,-) | <input type="text"/> | O | | | |
| POTENTIAL ADVERSE SOCIAL IMPACTS: | | | | | | | | | | | |
| Describe impacts and rate each as High (H), Medium (M), Low (L) or None(blank) | | | | | | | | | | | |
| Known cultural resources _____ | | | | | | (H,M,L,-) | <input type="text"/> | P | | | |
| Historic preservation issues _____ | | | | | | (H,M,L,-) | <input type="text"/> | Q | | | |
| Socially disadvantaged community _____ | | | | | | (H,M,L,-) | <input type="text"/> | R | | | |
| POTENTIAL ADVERSE ECONOMIC IMPACTS: | | | | | | | | | | | |
| Average annual benefits attributed to this dam, updated workplan value | | | | | | (\$) | <input type="text"/> | S | | | |
| Changes in benefits since workplan; Increase(I), No change(NC), Decrease(D) | | | | | | (I,NC,D) | <input type="text"/> | T | | | |
| Low income families impacted | | | | | | (number) | <input type="text"/> | U | | | |
| INPUT BY STATE DAM SAFETY AGENCY: | | | | | | | | | | | |
| State dam safety order issued for repair, modification, removal issued, Yes(Y), No(N) | | | | | | (Y,N) | <input type="text"/> | V | | | |
| State Dam Safety Agency Priority, High(H), Medium(M), Low(L), None(blank) | | | | | | (H,M,L,-) | <input type="text"/> | W | | | |
| OTHER CONSIDERATIONS: | | | | | | | | | | | |
| Identify any other considerations and rate as High(H), Medium(M), Low(L) or None(blank) | | | | | | | | | | | |
| _____ | | | | | | (H,M,L,-) | <input type="text"/> | X | | | |
| _____ | | | | | | (H,M,L,-) | <input type="text"/> | Y | | | |

Priority ranking spreadsheet (2 of 5) failure and risk indexes (continued)

| EVALUATION OF POTENTIAL REHABILITATION PROJECTS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------------------|--------------------|---------------|-----------------------------------|--------------|----------------------|----------|------------------|--------------------|---------------|---------------|--------------|----------------|--------|-------|-------|------|-----------|-----------|----------------|------------|---|---|--|--|--|--|------------|--|--|--|--|--|--|---------|--|--|--|--|--------|--|
| STATE | DAM | BY | DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| sht 2 of 5 | | | | FAILURE & RISK INDEXES | | ver 102201 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adopted from Bureau of Reclamation "Risk Based Profile System" see: http://www.usbr.gov/dsis/risk/rbpsdocumentation.pdf | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LIFE LOSS: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Population-at-Risk [PAR], see NRCS dams inventory definition (number of people) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Estimate PAR for static loading failure, typically assume water at top of dam | | | | | | <input type="text"/> | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Estimate PAR for hydrologic loading failure, typically assume water at top of dam | | | | | | <input type="text"/> | B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Estimate PAR for seismic loading failure, typically assume water at ES crest (sunny day failure) | | | | | | <input type="text"/> | C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fatality Rates [FR] from dam breach Adopted from BuRec "A Procedure for Estimating Loss of Life Caused by Dam Failure" DSO-99-06 see: http://www.usbr.gov/research/dam_safety/documents/dso-99-06.pdf Flood Severity/Lethality [DV] is the average depth [D] times velocity [V] across flood plain (ft2/sec) $DV = (\text{breach discharge} - \text{bank full discharge}) / \text{breach floodplain width}$ Warning Time [T] between failure warning and flood wave at population (minutes) Flood Severity Understanding [U] of the warning issuer of the likely flooding magnitude | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">scenario</th> <th style="width: 10%;">breach discharge</th> <th style="width: 10%;">bankfull discharge</th> <th style="width: 10%;">breach width</th> <th style="width: 10%;">DV</th> <th style="width: 10%;">warning time</th> <th style="width: 10%;">under-standing</th> </tr> <tr> <td></td> <td style="text-align: center;">(cfs)</td> <td style="text-align: center;">(cfs)</td> <td style="text-align: center;">(ft)</td> <td style="text-align: center;">(ft2/sec)</td> <td style="text-align: center;">(minutes)</td> <td style="text-align: center;">(N/A or Vague)</td> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Static</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Hydrologic</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Seismic</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | | | | | | scenario | breach discharge | bankfull discharge | breach width | DV | warning time | under-standing | | (cfs) | (cfs) | (ft) | (ft2/sec) | (minutes) | (N/A or Vague) | Static | | | | | | | Hydrologic | | | | | | | Seismic | | | | | | |
| scenario | breach discharge | bankfull discharge | breach width | DV | warning time | under-standing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (cfs) | (cfs) | (ft) | (ft2/sec) | (minutes) | (N/A or Vague) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Static | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydrologic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seismic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| For DV>50 T=0 U=N/A (no warning) FR=0.15 For DV>50 T<60 U=vague FR=0.04 For DV>50 T>60 U=vague FR=0.03 For DV<50 T=0 U=N/A (no warning) FR=0.01 For DV<50 T<60 U=vague FR=0.007 For DV<50 T>60 U=vague FR=0.0003 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Estimate FR for static loading failure scenario | | | | | | <input type="text"/> | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Estimate FR for hydrologic loading failure scenario | | | | | | <input type="text"/> | E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Estimate FR for seismic loading failure scenario | | | | | | <input type="text"/> | F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Scenario</th> <th style="width: 10%;">Load Factor</th> <th style="width: 10%;">Response Factor</th> <th style="width: 10%;">Failure Index</th> <th style="width: 10%;">Fatality Rate</th> <th style="width: 10%;">PAR</th> <th style="width: 10%;">Risk Index</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Static</td> <td style="text-align: center;">1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Hydrologic</td> <td style="text-align: center;">*</td> <td style="text-align: center;">*</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Seismic</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4" style="text-align: right;">TOTAL=</td> <td></td> <td colspan="2" style="text-align: right;">TOTAL=</td> </tr> </tbody> </table> | | | | | | | Scenario | Load Factor | Response Factor | Failure Index | Fatality Rate | PAR | Risk Index | Static | 1 | | | | | | Hydrologic | * | * | | | | | Seismic | | | | | | | TOTAL= | | | | | TOTAL= | |
| Scenario | Load Factor | Response Factor | Failure Index | Fatality Rate | PAR | Risk Index | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Static | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydrologic | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seismic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL= | | | | | TOTAL= | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Priority ranking spreadsheet (3 of 5) static failure index (continued)

| EVALUATION OF POTENTIAL REHABILITATION PROJECTS | | | | | | |
|---|-----------------------------|--|----------------|------|--|------------|
| STATE | DAM | | BY | DATE | | |
| sht 3 of 5 | STATIC FAILURE INDEX | | | | | ver 100101 |
| PRINCIPAL SPILLWAY SYSTEM (60 points max): | | | (total points) | | | A |
| Downstream filter or filter zone around conduit (yes=0 or no=10) | | | | | | B |
| Conduit trench deep (>2d) and narrow (<3d) and steep sideslope (<2:1) (no=0 or yes=10) | | | | | | C |
| Principal spillway system (inlet, pipe, or outlet) in deteriorated condition (no=0 or yes=10) | | | | | | D |
| Conduit has seepage cutoff collars or other compaction adverse features (no=0 or yes=10) | | | | | | E |
| Conduit contains open joints, open cracks, steady seepage (no=0 or yes=10) | | | | | | F |
| Conduit founded on competent bedrock (yes=0 or no=10) | | | | | | G |
| Reservoir control gate located at outlet of conduit (no=0 or yes=10) | | | | | | H |
| RESERVOIR FILLING HISTORY (75 points max): | | | (total points) | | | I |
| Reservoir has filled to x% of effective height (earth spillway crest minus original streambed) | | | | | | J |
| (<50%=75 or 51-75%=50 or 76-90%=25 or 91-95%=10 or 96-100%=5 or >100%=0) | | | | | | K |
| SEEPAGE AND DEFORMATION (85 points max): | | | (total points) | | | L |
| Seepage carrying fines, or seepage increases with reservoir elevation increases, or | | | | | | |
| sinkholes/jugholes exist in embankment (no=0 or yes=80) | | | | | | M |
| Large amounts of seepage (no=0 or yes=6) | | | | | | N |
| Visible and significant slope movement or sloughing (no=0 or yes=6) | | | | | | O |
| Longitudinal or transverse embankment cracking greater than one foot in depth (no=0 or yes=6) | | | | | | P |
| Sinkholes/depressions within two times effective height of the dam, either face (no=0 or yes=6) | | | | | | Q |
| Poor top of dam condition, eroded, trees, rodent holes, settlement (no=0 or yes=6) | | | | | | R |
| Abnormally wet areas at downstream toe/groin of embankment (no=0 or yes=6) | | | | | | S |
| Inadequate slope protection against erosion by rainfall or waves (no=0 or yes=6) | | | | | | T |
| FOUNDATION GEOLOGY (41 points max): | | | (total points) | | | U |
| Highly fractures rock under core (no=0 or treated=3 or untreated=30) | | | | | | V |
| Karst terrain and soluble rock (gypsum or limestone) (no=0 or treated=3 or untreated=30) | | | | | | W |
| Collapsible soils (no=0 or treated=3 or untreated=30) | | | | | | X |
| Significant stress relief fractures in abutments (no=0 or treated=3 or untreated=30) | | | | | | Y |
| History of underground mining under embankment area (no=0 or treated=3 or untreated=30) | | | | | | Z |
| Coarse grained and highly permeable soils (no=0 or yes=3) | | | | | | AA |
| Presence of weak layers/conditions diminishing embankment stability (no=0 or yes=3) | | | | | | AB |
| Erodible soils (sandy/silty materials) or weakly cemented rock (no=0 or yes=3) | | | | | | AC |
| Reservoir area prone to landslides that could cause overtopping (no=0 or yes=3) | | | | | | AD |
| EMBANKMENT DESIGN AND CONSTRUCTION (24 points max): | | | (total points) | | | AE |
| Filters for core or foundation or incompatibility between zones (no=3 or yes=0) | | | | | | AF |
| Embankment or foundation drainage system (yes=0 or no=4) | | | | | | AG |
| Erodible core material (sands, silts, dispersive clays) (no=0 or yes=4) | | | | | | AH |
| Incomplete or no foundation cutoff of shallow permeable layers (no=0 or yes=4) | | | | | | AI |
| Poorly placed earthfill, inadequate density (no=0 or yes=4) | | | | | | AJ |
| Gate features to drain reservoir (yes=0 or no=4) | | | | | | AK |
| EMBANKMENT MONITORING (15 points max): | | | (total points) | | | AL |
| Instruments (except surficial survey points) installed at dam (yes=0 or no=3) | | | | | | AM |
| Installed instruments routinely read and evaluated (yes=0 or no=3) | | | | | | AN |
| Visual inspection of dam by engineer less often than yearly (no=0 or yes=3) | | | | | | AO |
| Good physical/visual access to downstream groin/toe for inspection (yes=0 or no=3) | | | | | | AP |
| STATIC FAILURE INDEX: | | | A+I+L+U+AE+AL | | | AQ |

Priority ranking spreadsheet (4 of 5) hydrologic failure index (continued)

| EVALUATION OF POTENTIAL REHABILITATION PROJECTS | | | | | | |
|---|--------------------------|--|----|--|------|------------------------|
| STATE | DAM | | BY | | DATE | |
| sht 4 of 5 | HYDROLOGIC FAILURE INDEX | | | | | ver 100101 |
| HYDROLOGIC LOADING: | | | | | | |
| Total Spillway Capacity (PS&ES) for 6hr storm [Pfb], Work Plan Tbl 3 (rainfall inches) Obtained from Work Plan Tbl 3, or dams inventory data, or computer routings | | | | | | <input type="text"/> A |
| 100 year, 6hr rainfall [P100] (inches) | | | | | | <input type="text"/> B |
| Probable Maximum Precipitation [PMP] (inches) | | | | | | <input type="text"/> C |
| if Pfb < P100 = <input type="text"/> enter 40 | | | | | | |
| if Pfb = P100+0.2(PMP-P100) = <input type="text"/> enter 25 | | | | | | |
| if Pfb = P100+0.4(PMP-P100) = <input type="text"/> enter 15 | | | | | | |
| if Pfb = P100+0.6(PMP-P100) = <input type="text"/> enter 7 | | | | | | |
| if Pfb = P100+0.8(PMP-P100) = <input type="text"/> enter 3 | | | | | | |
| if Pfb = PMP = <input type="text"/> enter 1 | | | | | | |
| Enter interpolated value | | | | | | <input type="text"/> D |
| HYDROLOGIC UNCERTAINTY: | | | | | | |
| Drainage Area [DA] (square miles) | | | | | | <input type="text"/> E |
| DA<10 enter 1.5 ; 10<DA<20 enter 1.4 ; 20<DA<50 enter 1.3 ; DA=>50 enter 1.2 | | | | | | <input type="text"/> F |
| PIPE SPILLWAY PLUGGING: | | | | | | |
| Pipe Diameter [D] (inches) | | | | | | <input type="text"/> G |
| D<12 enter 1.1; 12<=D<24 enter 1.0; 24<=D enter 0.9 | | | | | | <input type="text"/> H |
| Riser & trash rack type: | | | | | | |
| Non-standardized inlet enter 1.1, Open Top riser enter 1.0; Covered or Baffle Top enter 0.9 | | | | | | <input type="text"/> I |
| EARTH SPILLWAY FLOW: | | | | | | |
| Earth spillway flow depth [Des] from top of dam to spillway crest (feet)(10' max) | | | | | | <input type="text"/> J |
| DAM EROSION RESISTANCE: | | | | | | |
| Non-plastic (PI<10) fill enter 2.0 ; Plastic core enter 1.7 ; Overtopping armoring enter 0.8 | | | | | | <input type="text"/> K |
| Vegetal Cover Factor [Cf], see SITES or AH667 http://www.pswcrf.ars.usda.gov/ah667/ah667.htm | | | | | | <input type="text"/> L |
| Cf <0.4 enter 1.1; Cf < 0.7 enter 1.0; Cf<1.0 enter 0.9; larger Cf enter 0.8 | | | | | | <input type="text"/> M |
| EARTH SPILLWAY EROSION RESISTANCE: | | | | | | |
| Low, can be excavated with hand tools, enter 2.0 | | | | | | |
| PI>10 and SPT blows<8, PI<10 and SPT blows>8, Kh<0.10, seismic velocity<2000fps | | | | | | |
| Moderate, can be excavated with construction equipment, easy ripping, enter 1.2 | | | | | | |
| PI>10 and SPT blows>8, PI<10 and SPT blows>30, Kh<10, seismic velocity<7000fps | | | | | | |
| High, very hard ripping, requires drilling and blasting, enter 0.2 | | | | | | |
| moderately hard rock, Kh>10, seismic velocity>7000fps | | | | | | <input type="text"/> N |
| Vegetal Cover Factor [Cf], see SITES or AH667 | | | | | | <input type="text"/> O |
| Cf <0.4 enter 1.1; Cf < 0.7 enter 1.0; Cf<1.0 enter 0.9; larger Cf enter 0.8 | | | | | | <input type="text"/> P |
| HYDROLOGIC FAILURE INDEX: | | | | | | |
| dam overtopping breach: (2)(D)(F)(H)(I)(K)(M) | | | | | | <input type="text"/> Q |
| earth spillway breach: (D+5J)(F)(H)(I)(N)(P) | | | | | | <input type="text"/> R |
| larger of (2)(D)(F)(H)(I)(K)(M) or (D+5J)(F)(H)(I)(N)(P) but less than 300 | | | | | | <input type="text"/> S |

Priority ranking spreadsheet (5 of 5) seismic failure index (continued)

| EVALUATION OF POTENTIAL REHABILITATION PROJECTS | | | | | | |
|--|------------------------------|----|------|----------------------|---|------------|
| STATE | DAM | BY | DATE | | | |
| sht 5 of 5 | SEISMIC FAILURE INDEX | | | | | ver 102201 |
| SEISMIC LOADING: | | | | | | |
| Latitude (degrees.decimal) | | | | <input type="text"/> | A | |
| Longitude (degrees.decimal) | | | | <input type="text"/> | B | |
| See "http://eqint.cr.usgs.gov/eq/html/lookup.shtml" | | | | | | |
| PGA [peak ground acceleration] for 2% chance in 50 years, see NEHRP maps (%g) | | | | <input type="text"/> | C | |
| if PGA is less than 10% g, enter 0 | | | | | | |
| if PGA is between 10% g and 19% g, enter 0.15 | | | | | | |
| if PGA is between 20% g and 39% g, enter 0.30 | | | | | | |
| if PGA is between 40% g and 59% g, enter 0.65 | | | | | | |
| if PGA is greater than 60% g, enter 1.0 | | | | <input type="text"/> | D | |
| FOUNDATION LIQUEFACTION: | | | | | | |
| Select only one of the following foundation conditions which best represents the site | | | | | | |
| Loose alluvium, lacustrine, loess materials (no=0 or yes=10) | | | | <input type="text"/> | E | |
| Bedrock, glacial till, highly clayey materials (no=0 or yes=5) | | | | <input type="text"/> | F | |
| EMBANKMENT FREEBOARD FOR FOUNDATION LIQUEFACTION: | | | | | | |
| Dam height for seismic event is the height from top of dam to downstream channel bottom (ft) | | | | <input type="text"/> | G | |
| Freeboard for seismic event is the depth from top of dam to assumed pool surface (ft) | | | | <input type="text"/> | H | |
| Freeboard percent of dam height (%) | | | | <input type="text"/> | I | |
| if Freeboard is less than 25% of dam height, enter 10 | | | | | | |
| if Freeboard is 25% to 50% of dam height, enter 5 | | | | | | |
| if Freeboard is more than 50% of dam height, enter 1 | | | | <input type="text"/> | J | |
| EMBANKMENT FREEBOARD FOR EMBANKMENT CRACKING: | | | | | | |
| Freeboard is less than or equal to 15 feet (no=0 or yes=1) | | | | <input type="text"/> | K | |
| EMBANKMENT CRACKING: | | | | | | |
| Embankment contains self-healing filter zones (no=4 or yes=0) | | | | <input type="text"/> | L | |
| SEISMIC FAILURE INDEX: | | | | | | |
| (D) ((E)J) + (F)(K+1)(L+1) but less than 100 | | | | <input type="text"/> | M | |
| <hr/> <p>State Conservation Engineer's Signature concurring with technical content of sheets 2 thru 5</p> | | | | | | |

Part 506 – Exhibits

Subpart E – Glossary and Acronyms

506.50 Glossary

Administrative Record—The set of documents of all types (papers, studies, data, references, maps, correspondence, notes, computer runs, etc.) and in all formats (paper, hard drive, CD,

magnetic tape, etc.) that supports the decisionmaking process. This is NRCS’s collection of the evidence that decisionmakers understood the law applying to the decision, considered all the relevant factors, and made a reasoned decision.

Advisory Council on Historic Preservation (ACHP)—The independent agency mandated to advise the President, Congress, and Federal agencies and review their activities related to historic properties. ACHP was established pursuant to Title II of the National Historic Preservation Act of 1966 (80 Stat. 915, 16 U.S.C. 470, as amended).

Affected Environment—The physical, ecological, economic, and social characteristics of the area impacted by the project.

Alternative Cost—(Used in reference to multipurpose structures.) “Alternative cost for each purpose is the financial cost of achieving the same or equivalent benefits with a single-purpose plan.” (P&G Section 1.9.2(c))

Associated Measures—Practices necessary to ensure realization of benefits.

Catastrophic Event—For the purpose of determining eligibility for the dam rehabilitation program, a catastrophic event has been defined in the this manual, Title 390, National Watershed Program Manual (NWPM), Part 506, Subpart D, Section 506.40, as a 100-year frequency rainfall event or the storm event that produces a flow in the emergency spillway of at least 2 feet or more in depth.

Closed Project—A project may be considered closed when all works have been installed, the O&M agreement has expired, and all long-term contracts have expired.

Completed Project—A project is completed when all measures, including mitigation and land treatment, involving Watershed Program assistance are installed in compliance with the watershed plan as amended or supplemented and all long-term contracts have expired.

Completion of Federal Interest—Federal interest is completed when a project measure has accrued all the benefits in which the Federal Government has an interest or when the Federal Government’s financial interests have been purchased by the SLO or another entity.

Conformed Plan—A conformed copy of a Public Law 83-566 project plan is one where the symbol “/s/” followed by a typewritten name appears in each signature space in the watershed agreement. This is in contrast to a manually signed plan. Photocopies of the signature pages may also be used wherever the manual calls for conformed copies.

Cost Categories:

- (1) Associated costs—The costs for measures needed over and above the project measures to achieve the benefits claimed in the analysis. An example is the cost of on-farm irrigation or drainage systems required to produce the increased outputs on which the benefits of a group distribution or collection system were based.
- (2) Construction cost—The expenses incurred during the installation period for labor, material, equipment, and services; contractors overhead and profit; and other direct costs associated with items such as earthwork removal or replacement, purchase and installation of materials and appurtenances plus a realistic contingency allowance. They include any or all of the following:
 - (i) For rehabilitation projects, includes expenses for reconstruction or decommissioning of the dam, and the relocation or floodproofing of downstream property.
 - (ii) Reinforcing, underpinning, or reconstructing existing railroad and public road bridge piers and abutments necessitated by modification of the channel or the replacement of a closed conduit crossing of a public road or railroad that is an

- integral part of a closed conduit system. These costs are limited to those required to provide a facility comparable in quality and performance to the existing bridge or culvert.
- (iii) Clearing of sites for project purposes including the cost of removing buildings, bridges, fences, or other improvements that the local organization desires to abandon.
 - (iv) Relocating structures from flood-prone land to flood-free land as a nonstructural flood damage reduction measure. This applies in cases where an SLO does not take title to the property.
 - (v) Floodproofing buildings as a nonstructural flood damage reduction measure.
 - (vi) Construction of pumping plants and pressure conduits, gates, or other structures to carry interior drainage through dikes or floodwalls.
 - (vii) Construction of diversion dikes and practices for conducting surface water to project outlets or pumping plants for interior discharge.
 - (viii) Construction of necessary structures to provide controlled inlets for drainage from adjacent fields and internal ditches into the project measure.
 - (ix) Flaggers and protective devices, such as barriers or lights, required to protect workers or the public during construction.
 - (x) Alteration, modification, or reconstruction of existing irrigation or drainage facilities made necessary by project works of improvement.
 - (xi) Providing needed maintenance access, including necessary culverts and fords.
 - (xii) Borrow material obtained from land purchased by the SLO for the specific purpose of obtaining borrow material. The cost may not exceed the difference in land value before and after borrow removal or the actual cost of acquiring the borrow materials (without purchasing the land) whichever is the least cost.
 - (xiii) Construction of catwalks, handrails, fences, gates, and other such features needed for the proper functioning of the structural measures and for the operator's and public's safety. This also includes any safety features needed for public recreation or fish and wildlife in a project.
 - (xiv) The disposal of waste spoil in accordance with sound engineering and environmental principles, giving consideration to customary practices in the area, width and planned land use of floodplain, wildlife and environmental values of contiguous oxbows and vegetation, and threatened and endangered species. Agreement on the specifics of spoil disposal will be reached in the planning stage.
 - (xv) Premiums for construction liability insurance when the construction contractor is made the principal.
 - (xvi) Provision for fire prevention and suppression made necessary by project construction activities.
 - (xvii) Establishment of vegetation or other protective cover on all construction sites and in areas disturbed during construction to prevent erosion, improve stability, and restore or maintain wildlife habitat and the landscape quality. Such establishment includes herbaceous and woody plantings for erosion control, wildlife food and shelter, walkways, and screening or improving the appearance of structural measures.
 - (xviii) Identification signs and plaques, if desired by the SLO, as long as there is reasonable assurance that these signs will not be vandalized.
 - (xix) Costs for cultural resource protection and other mitigation.
- (3) Engineering cost—Expenses incurred in formulating the engineering design. These expenses include the direct cost of engineers and other technicians for surveys, investigations, designs, and preparation of plans and specifications for structural and

nonstructural measures, including associated vegetative work, and preparation of operation and maintenance plans. Also included as engineering services are costs related to the review of engineering plans and specifications prepared by others and necessary quality assurance during construction to ensure that measures are installed in accordance with the plans and specifications. It does not include the cost of similar services for real property rights, obtaining permits, or contract administration for the project.

- (4) Land treatment financial assistance cost—The cost of installing land treatment practices, excluding technical assistance, engineering, and project administration.
- (5) Non-project installation costs—Costs that will be incurred at the time of project installation for features not required for project purposes. These costs are not eligible for assistance under Public Law 83-566. They are not included in cost tabulations or accounts, nor are they considered a part of the local organizations' contribution to the installation cost, but they should be incorporated into Tables 1 through 6 in the plan.
- (6) Operation and maintenance costs—costs for the materials, equipment, services, and facilities needed to operate the project and make repairs and replacements necessary to maintain structural measures in sound operating condition during the evaluated life of the project. Included are the cost of repairs, replacements, or additions, and an appropriate charge for inspection, engineering, supervision, custodial service, and general overhead.
- (7) Planning cost—All expenditures from Public Law 83-566 and other funds for surveys and investigations, environmental studies, evaluation of alternatives, and preparation of plans prior to the authorization of assistance for the installation of works of improvement.
- (8) Program cost—All expenditures from appropriations made under authority of Public Law 83-566.
- (9) Project administration—The Public Law 83-566 and other administrative costs associated with the installation of financially assisted measures, including such items as contract administration, government representatives, permit acquisition, relocation assistance advisory services, and administrative functions connected with relocation payments.
- (10) Project installation cost—The Public Law 83-566 and other costs for installing the works of improvement to be incurred after the project is authorized for installation. Included are the costs of work required to comply with Federal and State laws or regulations.
- (11) Real property—All expenditures made in acquiring needed water, mineral, and other subsurface rights, and required Federal, State, and local permits or clearances.
- (12) Real property rights—The cost of real property rights includes all costs for the following items, including elements of work involving planning, design, acquisition, construction, mitigation for fish and wildlife habitat losses, and administrative services directly associated with real property.
 - (i) All expenditures made in acquiring needed real property rights and other interests in land in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. Section 4601 et seq., as implemented by 70 CFR Part 21).
 - (ii) Removal of buildings, improvements, or timber for salvage or relocation, or the construction of dikes or other protective works in lieu thereof. This does not include moving of buildings or other improvements from flood-prone to flood-free land as a nonstructural flood damage reduction measure.

- (iii) Salvaging, moving, or reconstruction of fences not needed for the proper operation, maintenance, public safety, or inspection of the works of improvement.
 - (iv) Changes of existing telephone, power, gas, water, and sewer lines or other utilities made necessary by the works of improvement. This does not include changes to existing irrigation or drainage facilities.
 - (v) All new roads and changes of existing public roads or private roads, or railroad bridges, culverts, and other crossings, including approaches, except reinforcing, underpinning or reconstructing existing bridge piers and abutments of public roads and railroads necessitated by modification of the channel. This does not include the cost for the excavation and installation of a closed conduit crossing of a public road or railroad when it is an integral part of an overall closed conduit structural measure.
 - (vi) All modifications and changes of roads and railroads that are to remain serviceable after project installation.
 - (vii) Premiums for construction liability insurance when someone other than the construction contractor is made the principal.
- (13) Relocation costs—The Public Law 83-566 and other costs associated with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646). Relocation payments include moving and related expenses for a displaced person, business, or farm operation as well as financial assistance for replacement housing for a displaced person who qualifies and whose dwelling is acquired because of the project. Costs over and above replacement in kind are treated as non-project costs.
- (14) Technical assistance (watershed project plans)—Technical assistance costs are the costs for salaries and expenses other than financial assistance. For watershed project plans, technical assistance, engineering, and project administration are treated as three mutually exclusive cost categories. Technical assistance costs are defined as the Public Law 83-566 and other costs for personnel and contracted services for soil surveys and for planning and applying land treatment measures on non-Federal land.
- (15) Technical assistance (rehabilitation plans)—In rehabilitation plans, technical assistance costs are all costs for technical services including engineering and contract administration except those related to real property rights and permit acquisition. (See section 14(c) of Public Law 83-566.)
- (16) Water rights—The actual cost or the value, based on appraisals, of water rights acquired by local interests for carrying out, operating, and maintaining the project.

Cultural Resources—Cultural resources refer to historic, aesthetic, and cultural aspects of the human environment. In NRCS, the term is sometimes used interchangeably to refer to any historic or archaeological properties that have been identified during planning or to refer to “historic properties” as defined by the ACHP regulations (see below). Cultural resources may also refer to: (1) resources that have little or no historic values but do have contemporary cultural value; (2) resources included in or determined eligible for inclusion in the National Register of Historic Places or an equivalent register maintained at the state or local level; (3) unevaluated resources that may be eligible for inclusion in the National Register or an equivalent; and (4) properties that may qualify for the protections afforded by the Archeological Resources Protection Act or the Native American Graves Protection and Repatriation Act (see Title 190, NCRPH, Section 601.60).

Dam—A dam is a barrier to confine or raise water for storage or diversion, to create a hydraulic head, to prevent gully erosion, or for retention of soil, rock or other debris. A dam

is a physical improvement that impounds water, and may include a sediment pool, conservation pool, and flood pool.

Deauthorized Project—An authorized watershed project can be deauthorized where no LTC have been signed, no planned measures have been installed, or where no O&M agreements are in effect. Deauthorization of the project removes authority to expend Public Law 83-566 funds.

Decommission—Taking a practice out of service in an environmentally sound and safe manner, or converting it to another purpose.

Design Life—The intended period of time that the practice will function successfully with only routine maintenance; it is determined during the design phase.

Designated State Agency—The agency designated by the Governor of a State as having supervisory responsibility over programs provided for in Public Law 83-566, as described in section 3 of the Watershed Protection and Flood Prevention Act and in 7 CFR Section 622.21.

Emergency Action Plan—A plan of action to be taken to reduce the potential for property damage and loss of life in an area affected by the failure of a dam or other potentially hazardous practice.

Environmental Assessment (EA)—A concise public document that briefly provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. (Title 180, National Planning Procedures Handbook (NPPH), Part 600)

Environmental Evaluation (EE)—An EE is a process of evaluating the environmental effects of a proposed action. Form CPA-52 provides summary documentation of the environmental evaluation (EE) of the planned actions. The EE is “a concurrent part of the planning process in which the potential long-term and short-term impacts of an action on people, their physical surroundings, and nature are evaluated and alternative actions explored” (180-NPPH, Part 600). For Form NRCS CPA-52, go to the following website: http://www.nrcs.usda.gov/Technical/envircomp/NRCS-CPA-52_4-22-09.pdf.

Environmental Impact Statement (EIS)—An EIS is a document detailing the environmental impact of a proposed law, construction project, or other major action that may significantly affect the quality of the environment. NEPA and various State environmental laws may require an EIS. (180-NPPH, Part 600)

Environmental Protection Agency (EPA) Review Ratings (Federal Register, Vol. 71, No. 67, and reprinted annually in April):

Environmental Impact of the Action

LO (Lack of Objections)—The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC (Environmental Concerns)—The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO (Environmental Objections)—The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection

for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative). EPA intends to work with the lead agency to reduce these impacts.

EU (Environmentally Unsatisfactory)—The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1 Adequate—EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 Insufficient Information—The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data analyses, or discussion should be included in the final EIS.

Category 3 Inadequate—EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA, section 309 review, or both, and should therefore be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

Evaluation Period—The number of years used in the Watershed Project Plan for discounting and amortizing project costs and benefits. It is not to exceed 100 years. The number of years used for the planned evaluated life of the project plan is also used to determine the duration of operation and maintenance agreements for project measures.

Evaluation Units—Areas that may be grouped based on like physical characteristics, like treatment requirements, or both.

Finding of No Significant Impact (FONSI)—A document by a Federal agency briefly presenting the reasons why an action, not otherwise excluded, will not have a significant effect on the human environment and for which an environmental impact statement therefore will not be prepared (40 CFR Section 1508.12).

Future-without-project (FWOP)—The future-without-project is an estimation of the most probable future condition expected to occur in the absence of any of the study's alternative plans. The future-without-project condition includes any changes expected to directly, indirectly, or cumulatively result from all reasonably foreseeable actions without any of the study's alternative plans. For example, if it is most probable that within the next 20 years 60

percent of a woodland will be cleared for agricultural purposes without any of the plans being considered by the agency, the effects of such clearing would be included in the future-without-project conditions. Similarly, if existing legislation, such as the Clean Water Act, is expected to improve water quality in a river, such improvement would be included in the future-without-project plans conditions. The future-without-project condition is synonymous with “no action” as used in NEPA and the CEQ NEPA regulations (40 CFR 1502.14(d)). (P&G Section 3.2.1). FWOP is also referred to as future-without-project plan, future-without-project condition, future-without-project plan conditions, no action, no action alternative, no action conditions, without project, without plan, without project plan, and without plan(s) condition(s).

Interdisciplinary Team—A group of individuals with diverse education, training and knowledge interacting to accomplish a common goal.

Historic Property—Is defined by the National Historic Preservation Act and expanded in the 36 CFR 800 regulations as: “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places.” This term includes artifacts, records and remains that are related to and located within such properties. The term also includes historic and cultural landscapes, properties of tradition and cultural importance to an American Indian Tribe or Native Hawaiian organization and that meet the National Register criteria (see Title 190, NCRPH, Section 601.60).

Joint Cost—(Used in reference to multipurpose structures.) The total financial cost for a structure minus the sum of separable financial costs for all purposes.

Land Administering Agencies—Government agencies that are responsible for the management and administration of public lands.

Land Treatment—Conservation practices designed to control erosion and sedimentation or provide for the proper management of land, water, and natural resources. Land treatment can be listed in three categories:

- **Required Land Treatment**—This is the treatment that must be installed upstream of dams to comply with the USDA policy that requires 50 percent of the drainage area to be adequately protected. Required land treatment also includes any treatment needed upstream of channels or reservoirs.
- **Accelerated Land Treatment**—This is land treatment being installed to address public (offsite) water and land-related resource problems. Accelerated land treatment will be the only category shown in non-water-resources projects. Water resource projects may include treatment in all three categories.
- **Associated Land Treatment**—This is the land treatment needed to ensure realization of benefits used in the economic justification of structural measures for irrigation or drainage.

Locally Implemented—Implemented without NRCS Watershed Program financial assistance.

Long-Term Contract (LTC)—Agreements entered into with landowners, cooperators, and SLOs for the implementation of land treatment measures, ecosystem restorations, habitat restoration, and conservation treatment. Under the Watershed Programs long-term contracts are usually for 3 to 10 years, and may not exceed 10 years according to the Watershed Protection and Flood Prevention Act. General requirements of NRCS long-term contract policy used in watershed project delivery include all of the following:

- Each LTC will be based on a plan or schedule of operations developed by the participant and approved by the soil and water conservation district and NRCS
- The expected range of duration of the LTC
- No LTC will be signed until the initial participation requirement specified in the watershed agreement has been met
- All required conservation treatment will be installed at least two years before the end of the contract

Maintenance—The recurring activities necessary to retain or restore a practice in a safe and functioning condition, including the management of vegetation, the repair or replacement of failed components, the prevention or treatment of deterioration, and the repair of damages caused by flooding or vandalism.

Minimum Basic Facilities—The adequate and appropriate facilities needed to achieve the intended use and to provide public health and safety and access to a project area that includes public recreation or fish and wildlife purposes.

Mitigation—Measures included to avoid, minimize, rectify, reduce or eliminate over time, or compensate for environmental impacts (see 40 CFR Section 1508.20).

National Economic Development (NED) Plan—The plan alternative that reasonably maximizes the net national economic benefits in dollars (P&G Section 1.6.3). Net economic benefits are benefits minus costs and are not the same as the benefit-cost ratio.

National Register of Historic Places (NRHP)—The Nation's official list of districts, sites, buildings, structures, and objects which meet the criteria and are worthy of preservation because of their importance in American history, prehistory, architecture, archeology, and culture. The NRHP is maintained by the Secretary of the Interior under the authority of section 101 of the National Historic Preservation Act of 1966.

NED Benefits—“...increases in the economic value of the national output of goods and services from a plan; the value of output resulting from external economies caused by a plan; and the value associated with the use of otherwise unemployed or under-employed labor resources” (P&G Section 1.7.2(a)(2)).

NED Costs—“...opportunity costs of resources used in implementing a plan. These adverse effects include: Implementation outlays, associated costs, and other direct costs” (P&G Section 1.7.2(a)(3)).

No-Action Alternative—See “Future Without Project (FWOP).” Also referred to as no action, no-action alternative plan, no-action conditions, and without-plans condition.

Non-Water-Resource Projects—Watershed projects that are not water resource projects, such as watershed protection, land treatment or ecosystem restoration projects, and locally implemented plans.

Nonstructural Flood Damage Reduction Measure—A flood control measure that reduces susceptibility to flood damage without significantly changing the depth or extent of flooding. Measures include moving structures, demolition and removal of structures, floodproofing or blockage of openings, floodplain acquisition, and measures such as flood warning systems.

Notice of Intent (NOI)—A notice of intent is a brief statement announcing a decision by the responsible Federal official to prepare an EIS for a major Federal action, and inviting public reaction to the decision (see 40 CFR Section 1508.22).

Operation—The administration, management, and performance of nonmaintenance activities necessary to keep a practice safe and functioning as planned (see Title 180, National Operations and Maintenance Manual (NOMM), Part 500, Subpart A, Section 500.02).

Operational (or Active) Project—A project that is in the process of being installed. Land treatment projects are considered operational until all long-term contracts have expired.

Peer Review—An interdisciplinary review to ensure that the plan meets NRCS technical and program requirements.

Period of Analysis—The time required for installation plus the evaluated life of the project is the period of analysis. The period of analysis is the evaluation period when OM&R occurs and the period of implementation when the installation occurs.

Preferred Alternative—The option and course of action that the SLO and NRCS agree best addresses the stated purpose and need.

Preferred plan—The “preferred alternative” (see above).

Preliminary Investigation (PI)—A brief study using existing data and field information.

Program Operations Information Tracking System (POINTS)—POINTS definitions for project plans status:

Watershed Surveys and Planning Program:

Active—A watershed planning project is active when funding for planning is authorized from the Chief.

New—Planning project is new before being authorized by the Chief for planning. These watershed plans may be in the application stage.

Complete—The watershed project plan is complete when approved by the STC ensuring technical and policy adherence, and reviewed by the WSP Program manager for programmatic compliance.

Terminated—A planning project will be terminated when, after it has been determined that there is no possibility of developing a feasible or acceptable project, either the SLO withdraws their application in writing or the STC terminates planning assistance.

Deauthorized—The planning authorization will be cancelled if the watershed plan is not in interagency review within the 5-year time period.

Watershed Operations:

Active—Funding is authorized and project is implemented as funding allows. The continued feasibility of a project is monitored and documented in the project files every 5 years in accordance with NEPA requirements in the Title 190, General Manual, Part 410. Factors to be considered in determining the continued feasibility are economic, environmental and social defensibility and the SLO commitment to continue the project. Modifications are prepared as necessary. Use of other program funds in lieu of Watershed Program funds to implement the plan is acceptable, provided the unfunded Federal commitment is reduced to account for other programs assistance.

Inactive—Activities to implement the project have temporarily ceased because of land use changes in the watershed, reduced local interest, sponsor’s capability to proceed with installation, and similar circumstances. Other program funds could be used in lieu of Watershed Program funds to implement the plan, but the amounts are not accounted for to reduce the unfunded Federal commitment in the Watershed Project. Opportunities exist for resumed activity when the STC and SLO agree and notification is provided to the CPTAD director.

Installation Complete—When all planned measures of the original plan, supplements or revisions are installed, and all LTCs have expired. Includes projects in which all measures have not been installed, but were supplemented out of the project plan in order to complete the project.

Deauthorized—When no LTC have been signed, no measures have been installed, no O&M agreements are in effect, and there is no evidence that the project will be implemented.

Project Life Complete—When: all planned measures in the watershed project are implemented, and the evaluated life of the installed measures has ended.

Watershed Rehabilitation:

In Planning—When a watershed rehabilitation plan is being prepared, the plan is not yet authorized. Dam Status for this phase is “Active” when WF-07 funds have been requested for planning within 3 POINTS fund request years, and “Inactive” when funds have not been requested within 3 POINTS fund request years.

In Implementation—When the watershed rehabilitation plan is authorized for implementation by the Chief. Dam Status for this phase is “Active” when WF-07 funds have been requested for implementation within 3 POINTS fund request years, and “Inactive” when funds have not been requested within 3 POINTS fund request years.

Plan Installed—When all planned measures in the rehabilitation project have been installed or completed.

Installed Without Federal Assistance—When a plan has been prepared and the sponsor selected a rehabilitation alternative other than the Watershed Rehabilitation Program.

Project Actions—A project action is a formally planned undertaking that sponsors carried out within a specified area for the benefit of the general public. Project sponsors are units of government having the legal authority and resources to install, operate, and/or maintain works of improvement.

Project Life—The period over which the project will perform the intended functions.

Proper Farm Plan—This term is used in section 4(5) of the Watershed Protection and Flood Prevention Act that refers to a conservation plan that provides for the essential treatment to protect the resource base and ensure the proper functioning of structural measures.

Reevaluation—Supplemental plan with cost-benefit analysis

Reformulation—Revised plan to reform the alternatives and cost-benefit analysis.

Real Property—Real property acquisition includes obtaining needed land, water, mineral, and other subsurface rights, and required Federal, State, and local permits or clearances for installation of planned measures. Acquisition of rights may be obtained with the use of fee simple title, easements and rights of way, or by permits and clearances as required by applicable State regulations. (See “Cost Categories: Real Property Rights” for costs associated with real property.)

Rehabilitation—The completion of all work necessary to extend the service life of the structural measure and meet applicable safety and performance standards (see 180-NOMM, Part 500, Subpart A, Section 500.2).

Remedial Assistance—Assistance needed to correct problems caused as a result of a mistake or misjudgment by NRCS during the installation of a measure or as a result of latent site conditions unknown to NRCS or the sponsor or land user at the time of installation. Changes in policy or technical standards, and engineering concepts developed subsequent to the

installation of the original measure are not considered mistakes or misjudgments by NRCS (see 390-NWPM, Part 505, Subpart C, “Remedial Assistance”, in this manual).

Required Land Treatment—Land treatment required by Federal or State statutes or USDA regulations in the upstream portion of a watershed to ensure the proper functioning of measures installed as part of the overall watershed plan. (See section 4(5) of the Public Law 83-566.)

Responsible Federal Official (RFO)—The NRCS Chief is the RFO for compliance with NEPA regarding proposed legislation, programs, legislative reports, regulations, and program EISs. The NRCS STC is the RFO for compliance with the provisions of NEPA in other NRCS-assisted actions. (See Title 190, General Manual (GM), Part 410, Subpart A, Section 410.4.)

Reviewable Record—The set of documents including fact sheets, informational articles, results of public participation activities, etc., that are readily available for public dissemination to inform agencies and the public about NRCS activities. It also includes records that clearly document the nature and extent of public participation. A separate reviewable record must be maintained for each watershed project, river basin study, RC&D area, etc. The record contains items such as lists of people or groups invited to participate, signup sheets or other records of attendance, meeting notes, issues discussed, extent of controversy, views expressed, positions taken, and decisions made. These records may also include views expressed in letters, telegrams, etc.

Rural or Rural Communities—All territories of a State that are not within the outer boundary of any city or town that has a population of 50,000 or more according to the latest decennial census of the United States. (<http://www.census.gov/geo/www/garm.html>)

Scoping—An early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

Separable Cost—(Used in reference to multipurpose structures). The separable cost for a purpose is the reduction in financial cost that would result if the purpose were excluded from the structure. This reduction includes the financial cost of measures serving only the excluded purpose, and the reductions in the financial cost of measures serving the multiple purposes.

Sponsoring Local Organization (SLO)—Any State or political subdivision thereof, any soil or water conservation district, flood prevention or control district, or combinations thereof, or any other agency having authority under State law to carry out, maintain and operate the works of improvement, or any irrigation or reservoir company, water users' association, or similar organization having such authority and not being operated for profit that may be approved by the Secretary; or any Indian Tribe or Tribal organization, as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. Section 450b), having authority under Federal, State, or Indian Tribal law to carry out, maintain, and operate works of improvement. Project sponsors must have the legal authority and resources to carry out, operate, and maintain works of improvement. (Public Law 83-566, Section 2). SLO are also referred to as sponsors, local organizations, local sponsors, and local sponsoring organizations.

State Historic Preservation Officer (SHPO)—The official appointed or designated pursuant to section 101(b)(1) of the NHPA who is responsible for administering the NHPA and State historic preservation program within the State or jurisdiction, or is a designated representative to act for the SHPO (Title 190, NCRPH, Section 601.60).

Tribal Historic Preservation Officer (THPO)—The tribal official, appointed by the tribe's chief governing authority or designated by a tribal ordinance or preservation program, who has assumed the responsibilities of the SHPO for purposes of Section 106 compliance on tribal lands in accordance with section 101(d)(2) of the act. This official is approved to assume the responsibilities of the SHPO on tribal land by the Secretary of Interior under the NHPA (Title 190, NCRPH, Section 601.60).

Water Resource Project—Projects having one or more of the following purposes: flood prevention, water supply, water-based recreation, water quality management (as defined in Public Law 83-566 Section 4), or large scale irrigation or drainage projects. Water Resources Projects are implemented by a “local organization” (as defined in Public Law 83-566 Section 2).

Watershed—A watershed area comprises all land and water within the confines of a drainage divide and must follow hydrologic boundaries. In the case of irrigation or salinity projects, the watershed boundary may be based on the irrigation problem area or subsurface hydrologic area, respectively. A watershed area may comprise the land and water of two or more minor drainageways that are separate tributaries to a stream, artificial waterway, lake, or tidal area. Areas from which water is brought in by diversion may be excluded from the watershed if these sources of water have no significant effect on the flood prevention and water management problems of the watershed area. The watershed area must include all direct tributary drainageways and lands from which, after project installation, water and sediment could adversely affect any proposed structural measure, such as an irrigation or drainage canal, floodway, or floodwater retarding structure, included in the plan.

Watershed Program—The Watershed Program consists of activities carried out under the authority of Watershed Protection and Flood Prevention Act (Public Law 83-566, as amended), and the Flood Control Act of 1944 (Public Law 78-534 as amended).

Watershed Project Plans—A document that contains project actions, which are formally planned undertakings carried out within a specified area by sponsors for the benefit of the general public. A Watershed Project Plan analyzes all viable alternatives, records SLO decisions, and describes the framework and responsibilities for carrying it out. Watershed Project Plans may also be referred to as Watershed Plans, Watershed Program Plans, or Plans.

With-Plan Condition—“The with-plan condition is an estimation of the most probable future condition expected to occur as a result of implementation of a specific alternative plan formulated during a study. The with-plan condition includes changes likely to directly, indirectly, or cumulatively result both from the alternative plan and from all reasonably foreseeable actions that are not part of the plan.” (P&G Section 3.2.1)

Works of Improvement—An undertaking for any of the following purposes:

- Flood prevention (including structural and land-treatment measures)
- The conservation, development, utilization, and disposal of water
- The conservation and proper utilization of land in watershed or subwatershed areas not exceeding 250,000 acres and not including any single structure that provides more than 12,500 acre-feet of floodwater detention capacity, and more than 25,000 acre-feet of total capacity

506.51 Acronyms

ACHP—Advisory Council on Historic Preservation
 CE—Categorical exclusion

CEQ—Council on Environmental Quality
CFR—Code of Federal Regulations
COE—Corps of Engineers
CPPE—Conservation Practice Physical Effects
CPTAD—Conservation and Planning Technical Assistance Division
CTA—Conservation and Technical Assistance
DEIS—Draft Environmental Impact Statement
DSEIS—Draft Supplemental Environmental Impact Statement
EA—Environmental Assessment
EAP—Emergency Action Plan
EE—Environmental Evaluation
EIS—Environmental Impact Statement
EPA—Environmental Protection Agency
EQ—Environmental quality
ESA—Endangered Species Act
FA—Financial assistance
FEIS—Final Environmental Impact Statement
FONSI—Finding of No Significant Impact
FOTG—Field Office Technical Guide
FR—Federal Register
FS—Forest Service
FSA—Farm Services Agency
FSEIS—Final Supplemental Environmental Impact Statement
FWOP—Future Without Project
GM—General Manual
HEP—Habitat evaluation procedures
LTC—Long Term Contract
M&I—Municipal and Industrial Water Supply
MOU—Memorandum of Understanding
NA—No Action
NBAPM—National Basin and Area Planning Manual
NCGCAM—National Contracts, Grants, and Cooperative Agreements Manual
NCRH—National Cultural Resources Handbook
NED—National Economic Development
NECH—National Environmental Compliance Handbook
NEM—National Engineering Manual
NEPA—National Environmental Policy Act
NHCP—National Handbook of Conservation Practices
NHPA—National Historic Preservation Act
NHQ—National Headquarters (NRCS)
NOAA—National Oceanic and Atmospheric Administration
NOI—Notice of Intent
NOMM—National Operation and Maintenance Manual
NPPH—National Planning Procedures Handbook
NRCS—Natural Resources Conservation Service
NRD—Natural Resources District
NRHP—National Register of Historic Places
NWMC—National Water Management Center
NWPH—National Watershed Program Handbook
NWPM—National Watershed Program Manual
O&M—Operation and Maintenance

OMB—Office of Management and Budget
OM&R—Operation, maintenance and replacement
OSE—Other social effects
P&G—Economic and Environmental Principals and Guidelines for Water and Related
Land Resources Implementation Studies
POINTS—Program Operations Information Tracking System
POW—Program of work
RC&D—Resource Conservation and Development
RED—Regional Economic Development
RFO—Responsible Federal Official
ROD—Record of Decision
RUS—Rural Utilities Service
RWA—Rapid Watershed Assessment
SHPO—State Historic Preservation Officer
SLO—Sponsoring Local Organizations
STC—State Conservationist
SWCD—Soil and Water Conservation District
TA—Technical assistance
THPO—Tribal Historic Preservation Officer
TVA—Tennessee Valley Authority
USACE—U.S. Army Corps of Engineers
U.S.C.—U.S. Code
USDA—U.S. Department of Agriculture
USDA-RD—U.S. Department of Agriculture, Rural Development
USFWS—U.S. Fish and Wildlife Service
WSP Program manager—Watershed Surveys and Planning Program manager