

CHAPTER 6

PROJECT COST SHARING AND REPAYMENT

6-1. Principles and Objectives of Cost Sharing. A fundamental objective of the Congress in authorizing Federal participation in water resources development is to insure that such action makes an optimum contribution to the public good. At the same time, Congress has sought to maintain a reasonable balance between the responsibilities assumed by the Federal Government and those left with the states and other non-Federal entities. A planning agency, accordingly, must carefully consider all available specific indications in law as well as those principles and policies defined by Congress. As reflected in existing Federal water resources legislation, Congress has established generally that the Federal Government:

a. Should undertake only those activities which local levels of government or private enterprise cannot do as readily or as well from the standpoint of the national interest;

b. May bear a part of the costs of projects and programs that benefit the Nation as a whole, or are deemed necessary to protect the interest of future generations, particularly in those fields in which profit-making organizations do not operate;

c. Should provide for mitigation of any damaging effects of Federal projects, or carry out measures to compensate for such effects;

d. May, where special circumstances make such action necessary or desirable in the National interest, provide services which normally would be provided by private enterprise or non-Federal public entities. (Examples are when long-range financial returns are not sufficiently attractive in the short-range view of private enterprise; or when costs are included for purposes not readily marketable; or when problems of comprehensive and coordinated development cannot be readily resolved below the Federal level);

e. May construct certain works for which local interests will be willing to pay, or may provide subsidies, as by permitting repayment at low Federal interest rates;

f. May develop comprehensive plans embracing even those purposes for which a high degree of responsibility remains with non-Federal entities;

g. Should not consider all purposes to warrant equal or maximum Federal participation.

The costs of establishing and maintaining resource programs must be borne, in one way or another, by the primary beneficiaries, secondary beneficiaries, state or other non-Federal public entities, or the Nation.

6-2. Formulas, Legislative, and Administrative Rules. The costs of water resources projects under the jurisdiction of the Corps of Engineers are shared between Federal and non-Federal interests in accordance with: (1) the provisions of water resource development, flood control, and other laws; (2) the specific requirements of acts authorizing the projects in some cases; and (3) administrative

instructions. Legislative authorizations have defined general rules for cost sharing, or have prescribed percentages of costs required by non-Federal entities. Prescribed percentages were traditionally developed on the basis of analogous precedents or from a sense of equity. With Congressional acceptance and approval of recommendations for projects proposed on such basis, these rules became established policy. Enactment of the Water Resources Development Act of 1986 (WRDA 1986), Public Law 99-662, produced the first comprehensive treatment of cost sharing, with formulas for all water resources purposes. Arrangements for cost sharing may include one or a combination of several aspects of the program, such as planning, design, construction, operation, maintenance and management, or an interest therein such as through provision of advice, data, materials, labor, cash, or other contributions. The amount of the local (non-Federal) cooperation involved, both monetary and non-monetary, is thus dependent upon the nature of the project under consideration and the general and specific laws pertinent thereto. The new cost sharing rules for project construction and repayment are summarized in this chapter and discussed further in subsequent chapters devoted to the individual water resources purposes.

6-3. Applicability of Cost Sharing.

a. General. Unless otherwise specified, the cost sharing provisions of Title I of WRDA 1986, as amended, apply to all projects and separable elements authorized in the Act, or in subsequent Acts, as well as to previously authorized projects, depending on the date when physical construction is started, and the type of project. For harbor projects under Section 101 of WRDA 1986, the new cost sharing applies to any project or separable element thereof, on which a contract for physical construction was not awarded before 17 November 1986. On projects for flood control and other purposes, under Section 103 of WRDA 1986, new cost sharing applies to any project (including any small project which is not specifically authorized by Congress and for which the Secretary has not approved funding before 17 November 1986), or separable element thereof, on which physical construction was initiated after 30 April 1986. Under Section 202(a)(2) of WRDA 1996, physical construction is defined to be initiated on the date of award of a construction contract. Physical construction is distinguished from the acquisition of land which is accomplished before physical construction can begin. Title I cost sharing is also applicable to the small projects not specifically authorized by Congress. When the Federal share of any project authorized in WRDA 1986 is not established in Title I, the Federal share is as otherwise provided by law (Section 108 of WRDA 1986).

b. Definition of Separable Element. The concept of "separable element" was intended as an equitable way of phasing new cost sharing policy into an ongoing program, by applying the new rules to work that represents new commitments. Section 103(f) of WRDA 1986 defines "separable element" as a portion of a project which is physically separable from other portions of the project and which achieves hydrologic effects, or produces physical or economic benefits, which are separately identifiable from those produced by other portions of the project. For separability, operational, environmental, and economic impacts must be directly related to, and only associated with, the individual project element. In the case of environmental impact, the environmental treatment for the element must be capable of passing the legal test for adequacy of coverage. Independent hydrologic effects connote a hydrologic and hydraulic independence from the output and benefits of other projects and separable elements.

Economic separability refers to the criterion requiring the separable element to have net NED benefits as the next construction element. In the programming of project construction, separable elements may be identified so as to avoid a commitment to work beyond that which has been planned in detail or to which full approval has not been granted within the Executive Branch. When construction funding for a project is programmed initially and supported by a local cooperation agreement with the project sponsor, authorized elements beyond this scope are implemented as separable elements.

c. Consistent Application. Cost sharing reforms embodied in WRDA 1986 represent a long-sought compromise between the Administration and Congress. Consistent application of the new cost sharing policy is essential, and special treatment in the form of exemption and/or exception is to be avoided.

d. Cost Sharing Exceptions and Limits.

(1) Exceptions. Title I cost sharing does not apply to the Yazoo Basin, Mississippi, Demonstration Erosion Control Program, authorized by Public Law 98-8 or to the Harlan, Kentucky, and Barbourville, Kentucky, elements of the project authorized by Section 202 of Public Law 96-367, in accordance with Section 103(e)(2) of WRDA 1986.

(2) Cost Sharing Waiver for the Territories (Section 1156 of WRDA 1986). Local cost sharing requirements for all studies and projects in American Samoa, Guam, the Northern Mariana Islands, the Virgin Islands, and the Trust Territories of the Pacific Islands, will be reduced, up to \$200,000 for each study and project. Cost sharing for each study and for each project will be established using the general cost sharing criteria. The non-Federal cost for each study and/or project will then be reduced by \$200,000, or to zero if the non-Federal share is less than \$200,000. Waivers for studies and projects are considered separately. If the waiver for a study is less than the \$200,000 maximum, there is no "balance" remaining for transfer to a project waiver.

(3) Small Project Authorization Limits (Section 915(i) of WRDA 1986). The amendments increasing small project cost limits (Section 915) do not apply to any project under contract for construction on 17 November 1986.

(4) Ability-to-Pay (Section 103(m) of WRDA 1986, as amended by Section 202(b) of WRDA 1996). Cost sharing agreements for flood control or agricultural water supply are subject to the ability of a non-Federal interest to pay, as discussed in paragraphs 6-5.f and 6-8.

6-4. Navigation.

a. Commercial Harbors, and Inland Harbors (Section 101 of WRDA 1986, as amended by Section 201 of WRDA 1996).

(1) Non-Federal sponsors must pay during the period of construction, a portion of the costs associated with the general navigation features (GNF) of the project. GNF include navigation channels, anchorages, turning basins, jetties, breakwaters, and land-based and aquatic dredged material disposal areas. The non-Federal share is based upon the project depth: 10 percent of that portion of the total cost of construction of the GNF assigned to dredging to a depth not in excess of 20 feet and any overdepth dredging associated

therewith; 25 percent of that portion of the total cost of construction of the GNF assigned to dredging to a depth in excess of 20 feet but not in excess of 45 feet and any overdepth dredging associated therewith; and 50 percent of that portion of the total cost of construction of the GNF assigned to dredging to a depth in excess of 45 feet and any overdepth dredging associated therewith. At projects where depths are not modified, non-Federal sponsors must provide a share of the GNF costs, using the appropriate percentage corresponding to the authorized or existing project depth, whichever is greater. Non-Federal sponsors must pay an additional 10 percent of the total cost of construction of the GNF, in cash, over a period not to exceed 30 years. The value of lands, easements, rights-of-way, and relocations (LERRs) provided by the non-Federal sponsor (paragraph 6-4.a(2)) for the construction, operation and maintenance of the GNF, is credited toward this 10 percent payment, including credit for utility relocation costs except in the case of deep-draft harbors (depth over 45 feet) or harbors constructed by non-Federal interests under Section 204 of WRDA 1986 (see paragraph 12-26.b) where the credit would be limited to one-half of the cost of utility relocations. In addition, no credit can be given to the non-Federal sponsor for lands which lie within the Navigational Servitude. The owner of a bridge requiring modification must share in the costs according to the principles of the Truman-Hobbs Act (P.L. 77-647); the balance is cost shared as part of the GNF.

(2) Non-Federal sponsors must provide the necessary LERR, including LERR required for fish and wildlife mitigation for the construction, operation and maintenance of the GNF. Non-Federal sponsors must also perform or assure the performance of all relocations and alterations of utilities, cemeteries, highways, railroads, or public facilities, but excluding bridges over navigable waters, necessary for the project, except that in the case of a project for a deep-draft harbor (depth over 45 feet), including those constructed by non-Federal sponsors under Section 204 of WRDA 1986, one-half of the cost of each such utility relocation is borne by the owner of the facility being relocated, and one-half by the non-Federal project sponsor (see also paragraph 10-4.b).

(3) A sponsor must also provide and maintain, without cost to the Federal Government, all local service facilities other than those for GNF needed to achieve anticipated project benefits, including dredging in berthing areas and local access channels serving GNF.

(4) Dredged Material Disposal Facilities (Section 201 of WRDA 1996). Upon request of a non-Federal sponsor, the Secretary of the Army (SA) shall modify a Project Cooperation Agreement (PCA) executed on or before 12 October 1996 to reflect the new cost sharing provisions for dredged material disposal facilities for which a contract for construction of such facilities has not been awarded. The cost sharing provisions shall not increase the non-Federal share of the construction, operation, or maintenance of:

(a) expanding any confined dredged material disposal facility which is operated by the U.S. Army Corps of Engineers and which is authorized for cost recovery through the collection of tolls;

(b) any confined dredged material disposal facility for which the Invitation for Bids for construction was issued prior to 12 October 1996; and

(c) expanding any confined dredged material disposal facility authorized by Section 123 of the River and Harbor Act of 1970, for which the capacity of the confined dredged material disposal facility was exceeded in less than six years.

(5) Dredged Material Disposal Facility Partnerships (Section 217 of WRDA 1996).

(a) The SA/Federal Government may, at the request of a non-Federal interest, add capacity at a dredged material disposal site being constructed by the SA/Federal Government if the non-Federal sponsor pays, during the period of construction, all costs associated with the additional capacity. The non-Federal interest can set and collect fees assessed to third parties to recover those costs.

(b) The SA/Federal Government may allow non-Federal interests to use capacity in an existing Corps disposal site if such use will not reduce the availability of the facility for the Federal project. The (SA)/Federal Government can impose fees to recover capital, operation, and maintenance costs associated with the partner's use.

(c) The SA/Federal Government may use public-private partnerships in the design, construction, management, or operation of dredged material disposal facilities in connection with construction or maintenance of Federal navigation projects. These partnerships may be implemented through agreements with non-Federal interests, a private entity, or both. Funds for the work may be provided in whole or in part by the private entity. The SA/Federal Government may reimburse the private entity, subject to appropriations, for the disposal of dredged material in the facility through the payment of a disposal user fee. The fee shall be sufficient to recover the funds contributed by the private entity plus a reasonable rate of return on investment. The Federal share of the fee shall equal the Federal percentage of the disposal facility cost, in accordance with existing cost sharing requirements.

(6) Cost Sharing Applications.

(a) Where channel deepening is not limited to one depth zone (e.g., where a channel is being deepened from 40 to 50 feet) cost sharing is determined as shown in Appendix G to ER 1165-2-131. This approach also applies to GNF features associated with such a project which involves deepening which crosses different depth zones such as widenings, turning basins, and anchorage areas. The existing and improved main channel depths will be used to determine cost sharing (e.g., for a channel deepened from 40 to 50 feet, there are two depth zones - one to from 40 to 45 feet, and a second from 45 to 50 feet - even though widening or other GNF features may be in areas that have natural depths of 20 feet or less).

(b) Where channel deepening is limited to one depth zone (e.g., where a channel is deepened from 40 to 45 feet) cost sharing is determined by the improved depth.

(c) Where channel deepening is limited to one depth zone (e.g., where a channel is deepened from 40 to 45 feet) the cost sharing for the entire cost of GNF associated with that deepening project are determined by the improved depth (e.g., if there is channel widening associated with a project deepened from 40 to 45 feet, all of the widening costs will be shared at the cost sharing which applies to the 45 foot depth (25 percent during construction) even though the

widening may be in areas adjacent to the existing channel that have depths of 20 feet or less. The same would apply to a new turning basin or new anchorage area associated with such a project).

(d) For navigation projects that involve no deepening (e.g., a widening only project or a project involving addition of a breakwater), the entire GNF costs are shared at either the cost sharing associated with the existing project depth, or if there is no improved depth, the natural controlling depth.

b. Inland Waterways.

(1) In WRDA 1986, and subsequent legislation, projects on waterways that are subject to fuel taxes, are specifically authorized to be funded in part by the Inland Waterways Trust Fund, with 50 percent of the construction costs paid from amounts appropriated from the General Fund of the Treasury, and the other 50 percent from the Trust Fund. The term construction in these specific cases is defined to include planning, designing, engineering, surveying, and acquisition of LERRD, including lands for disposal of dredged material and maintenance disposal, and LERRD required for fish and wildlife mitigation. Future proposals to modify or rehabilitate elements of the inland and coastal waterways system of the United States, as identified in Section 206 of the Inland Waterways Revenue Act (IWRA) of 1978, as amended, should recommend financing on this basis (see paragraph 12-4.a).

(2) Costs for all waterways outside the system identified in Section 206 of the IWRA of 1978, as amended, will be shared as commercial or recreational harbors, based on allocation to these project purposes.

c. Recreational Navigation (Section 103(c)(4) of WRDA 1986).

(1) Non-Federal sponsors for a recreational navigation project, or separable element thereof, must pay 50 percent of the joint and separable costs of constructing the GNF allocated to recreational navigation during the construction period. Non-Federal sponsors receive credit for the value of LERRD contributions (paragraph 6-4.c(2)) against the 50 percent share. The non-Federal sponsors must accomplish or pay for 100 percent of GNF operations and maintenance costs allocated to recreational navigation.

(2) Non-Federal sponsors must provide all LERRD, including LERRD required for fish and wildlife mitigation, with all retaining dikes, bulkheads, and embankments, or pay the cost of such retaining works. The value of LERRD contributions are included in the 50 percent non-Federal share of project costs assigned to recreational navigation. The non-Federal sponsors must also provide and maintain, without cost to the Federal Government, all local service facilities other than GNF needed to achieve anticipated project benefits, including dredging in berthing areas and local access channels serving GNF.

d. Emergency Navigation Authority. The cost sharing in Title I of WRDA 1986 does not apply to activities under the special authority for emergency clearing provided by Section 3 of the River and Harbor Act of 1945 (see paragraph 11-2.a(3)).

6-5. Flood Damage Reduction.

a. Single Purpose Structural Flood Control (Section 103(a) of WRDA 1986, as amended by Section 202(a) of WRDA 1996).

(1) Before construction, non-Federal sponsors must agree to: pay 5 percent of the project first costs assigned to structural flood control, in cash, during the construction of the project, proportional to the rate of Federal expenditures; and to provide all lands, easements, rights-of-way, including suitable borrow and dredged material disposal areas, and perform all related necessary relocations (LERRD), including LERRD required for fish and wildlife mitigation. All costs for relocations are part of LERRD, including costs for measures needed to prevent serious adverse effects to the flood control project structures, in the event of failure/rupture (e.g., stronger pipe requirements, special compacting or cementing to provide for added strength or to prevent piping, mechanical bolt joints to prevent leakage, new valves, relocated structures, etc.).

(2) Minimum and Maximum Contributions. If the value of the contributions in paragraph 6-5.a(1) is less than 25 percent of the costs of the project (35 percent for projects authorized, or reauthorized after formal deauthorization, after 12 October 1996) assigned to structural flood control, the non-Federal interest shall pay during construction of the project any additional amounts necessary for the total non-Federal contribution to equal 25 percent (35 percent for projects authorized, or reauthorized after formal deauthorization, after 12 October 1996). Pursuant to Section 103(a)(3) of WRDA 1986, the total non-Federal contribution cannot exceed 50 percent of the first costs assigned to structural flood control (5 percent cash contribution is required, with the remaining contribution consisting of LERRD limited to 45 percent). Guidance on funding the value of LERRD that exceeds the 45 percent is contained in ER 1165-2-131 and its successor regulation. Regarding project modifications, new cost sharing (i.e., post 12 October 1996) will not be required for project authorizations necessitated by increases in project costs in accordance with Section 902 of WRDA 1986, i.e., the basic project has not changed. However, the increased/new cost sharing (i.e., post 12 October 1996) will apply to all projects where reevaluation studies have indicated a significant change in project scope or purpose has occurred necessitating the need for a new congressional authorization. The increased/new non-Federal cost share also applies to those Section 205 projects whose Detailed Project Reports are approved after 12 October 1996, and to those Section 14 and 208 projects which are approved for construction by the division commander after 12 October 1996 unless these projects have been specifically authorized in or prior to WRDA 1996.

(3) Deferred Payment. Section 103(a)(4) of WRDA 1986 permits non-Federal sponsors to defer payment of contributions in excess of 30 percent of the costs assigned to structural flood control (5 percent cash plus 25 percent LERRD). The excess costs may be paid over a 15-year period, or shorter period, if agreed to by the ASA(CW) and non-Federal sponsors. Repayment shall begin on the date construction of the project or separable element is completed, and must include interest from the date payments would otherwise have been made, at the interest rate determined pursuant to Section 106 of WRDA 1986. However, full payment during construction is preferred.

b. Nonstructural Flood Control (Section 103(b) of WRDA 1986, as amended by Section 202(a) of WRDA 1996).

(1) Before construction, non-Federal sponsors must agree to provide the LERRD, with that necessary for construction to be furnished the Federal Government prior to the advertisement of any construction contract. Demolition and removal of structures is usually performed by the Government, and costs associate therewith are considered construction, not LERRD, costs.

(2) Minimum and Maximum Contributions. If the value of the LERRD contributions is less than 25 percent of the costs of the nonstructural flood control features/project (35 percent for features/projects authorized, or reauthorized after formal deauthorization, after 12 October 1996), the non-Federal sponsor shall pay upon completion of construction, such additional amounts as are necessary for its share to be equal to 25 percent (35 percent for features/projects authorized, or reauthorized after formal deauthorization, after 12 October 1996). The value of non-Federal contributions shall not exceed 25 percent of the costs of the nonstructural flood control features/project (35 percent for features/projects authorized, or reauthorized after formal deauthorization, after 12 October 1996). When the value of LERRD is more than 25 percent (35 percent for features/projects authorized, or reauthorized after formal deauthorization, after 12 October 1996), agreement must be reached with the non-Federal sponsor on the most efficient and practical means for acquisition of the portion of the LERRD over 25 percent (35 percent for features/projects authorized, or reauthorized after formal deauthorization, after 12 October 1996)(see ER 1165-2-131, paragraph 12.c(8)). Regarding project modifications, new cost sharing (i.e., post 12 October 1996) will not be required for project authorizations necessitated by increases in project costs in accordance with Section 902 of WRDA 1986, i.e., the basic project has not changed. However, the increased/new cost sharing (i.e., post 12 October 1996) will apply to all projects where reevaluation studies have indicated a significant change in project scope or purpose has occurred necessitating the need for a new congressional authorization. The increased/new non-Federal cost share also applies to those Section 205 projects whose Detailed Project Reports are approved after 12 October 1996, unless these projects have been specifically authorized in or prior to WRDA 1996.

(3) Deferred Payment. Additional funds needed to bring non-Federal contributions up to 25 percent of the cost of the nonstructural flood control features, may be paid over a 15-year period, or shorter period if agreed to by the ASA(CW) and non-Federal sponsor. Repayment shall begin on the date construction of the project or separable element is completed, and must include interest at the rate determined pursuant to Section 106 of WRDA 1986. However, full payment upon completion of construction is preferred.

c. Application to Projects Containing Both Structural and Nonstructural Elements. Costs will be allocated and shared in accordance with the formulas applicable to each element.

d. Special Cost Sharing Considerations.

(1) Betterments. Betterments are defined as changes in the design and construction of an element of a project resulting from the application of standards that the government determines exceed those that the government would otherwise apply for accomplishing the design

and construction of that element. Betterments desired by non-Federal sponsors that are related to the basic project and that can be accommodated in the construction of the basic project, may be approved for implementation, as part of the project, if non-Federal sponsors agree to provide any additional costs incurred by the Federal Government upfront prior to the Government incurring any obligations. Costs for betterments are not included in the total project cost estimate or economic evaluation.

(2) Comparable Features. In some projects, construction of the project and portions of the LERRD constitute approximately the same work. An example would be a bridge abutment constructed as part of a flood wall. If a clearly identifiable increase in construction costs results from these provisions (such as when abutment requirements exceed flood wall section requirements), the increased cost shall be included as part of the LERRD responsibilities and non-Federal sponsors shall contribute an equivalent amount in cash.

e. Emergency Flood Control Authorities. The cost sharing in Title I of WRDA 1986, as amended, does not apply to emergency operations and disaster assistance programs pursuant to Section 5 of the 1941 Flood Control Act (FCA), as amended. Flood control cost sharing in Title I is applicable to recommendations under the special continuing authorities provided by Section 14 of the 1946 FCA, as amended (see paragraph 15-3.c).

f. Ability-to-Pay (Section 103(m) of WRDA 1986, as amended by Section 202(b) of WRDA 1996). All local cooperation agreements for flood control projects, for which the cost sharing provisions of WRDA 1986, as amended by WRDA 1996, apply, are subject to the ability of the non-Federal sponsor to pay. Procedures for applying an ability-to-pay test were published as a Final Rule in the Federal Register, 2 October 1989, and are codified at 33 CFR 241. (ER 1165-2-121). Projects qualify for a reduction in the non-Federal share only if they meet the conditions of an "income test" (comparison of project area per capita income to national average) and a "benefit test" (comparison of one-fourth the benefit cost ratio to the normal non-Federal cost share requirement). The income test requires the use of the latest available information, which is periodically published in ECs by HQUSACE. An amendment to the ability-to-pay rule for flood control was published in the Federal Register, 26 January 1995. The amended rule establishes an eligibility for reductions in the non-Federal cost share using higher cost criteria. Projects which do not qualify for a reduction under the income and benefits receive additional consideration under the high cost test. (A proposed Final Rule further amending the amended ability-to-pay rule to reflect Section 202(b) of WRDA 1996 is in preparation)

6-6. Hydroelectric Power (Section 103(c)(1) of WRDA 1986). All costs associated with development of hydroelectric power at the site of a Corps project are borne, one way or another, by non-Federal sponsors. Current policy is to encourage non-Federal sponsors to undertake the development of the power potential at a Corps project under the Federal Energy Regulatory Commission (FERC) licensing process, and to pursue Federal development only where such non-Federal activity would be impractical. In those cases where non-Federal development is impractical and Federal development is authorized as part of a Corps multiple purpose project, a non-Federal sponsor is sought who will agree to provide the share of project development costs (joint and separable) allocated to the hydroelectric power purpose during the period of project construction in return for later reimbursement by

the Federal marketing agency out of revenues realized from sale of the power (allocated OMRR&R costs will be funded by the Corps and repaid to the U.S. Treasury out of the revenues also). In the event the development is undertaken without such a sponsor, all allocated hydroelectric power costs will be funded by the Corps and ultimately repaid to the U.S. Treasury out of the power revenues collected by the Federal marketing agency. (See paragraphs 16-3 and 16-9.)

6-7. Municipal and Industrial Water Supply (Section 103(c)(2) of WRDA 1986). For new construction of Corps multiple purpose projects in which municipal and industrial (M&I) water supply is one of the purposes (including unstarted projects previously funded for construction, resumptions, and separable elements of ongoing projects) all separable and joint costs allocated to that purpose must be provided by a non-Federal water supply sponsor during the period of construction. The sponsor is also responsible for the share of project OMRR&R costs allocated to M&I water supply. These costs are to be paid as they are incurred or in lump sum after completion of the work involved. The sponsor should be encouraged to establish a sinking fund in order to cover the replacement and rehabilitation costs when the occasion should arise. Non-Federal cost sharing and repayment arrangements required in connection with M&I water supply functions of completed Corps projects are discussed in paragraph 18-2.

6-8. Agricultural Water Supply (Section 8 of the FCA of 1944 and Section 103(c)(3) of WRDA 1986). When irrigation storage is included in a Corps reservoir pursuant to Section 8 of the Flood Control Act of 1944 (see paragraph 18-2.i), costs allocated to the irrigation purpose are funded by the Corps and ultimately repaid to the U.S. Treasury by the non-Federal users in conformity with reclamation law, under contract arrangements with the Department of the Interior. Section 8 authority is used only in the 17 western states to which reclamation law applies. Section 103(c)(3) of WRDA 1986 provides that non-Federal interests are to be responsible for 35 percent of costs (joint and separable) allocated to agricultural water supply purposes in a Corps project, to be paid during the period of construction, and for the allocated OMRR&R costs as they are incurred. Section 103(c)(3) applies to irrigation water outside the 17 western states and to other agricultural water supply functions in all areas. The non-Federal cost sharing requirements for agricultural water supply provided pursuant to this section are subject to the ability-to-pay provision in Section 103(m) of WRDA 1986, as amended by Section 202(b) of WRDA 1996. Related rules for applying an ability-to-pay test have not been formulated; policy questions should be addressed to HQUSACE (CECW-AA).

6-9. Recreation (Section 103(c)(4) of WRDA 1986). Cost sharing pursuant to Section 103(c)(4) of WRDA 1986 as applicable to recreational navigation improvements is covered in paragraph 6-4.c. The following policies are applicable to recreational elements of other Corps projects.

a. Investment Costs. The non-Federal share of the costs assigned to recreation, is 50 percent of the separable costs, to be paid during the construction period. Non-Federal sponsors must also provide all LEERRD assigned to the recreation purpose and insure the performance of all necessary relocations. The value of these contributions is counted as part of the 50 percent non-Federal share of separable recreation costs.

b. Additional Cash Contribution. When the fair market value of the LERRD contributions for recreation is less than 50 percent of the separable recreation costs, the difference must be provided by non-Federal sponsors as a cash contribution during construction. When the fair market value of the LERRD contributions exceeds 50 percent of the separable recreation costs, the non-Federal share is limited to 50 percent (the Corps becomes responsible for the increment of LERRD which exceeds 50 percent of separable recreation costs).

6-10. Hurricane and Storm Damage Reduction (Section 103(c)(5) of WRDA 1986). Section 103(c)(5) designates cost sharing for the purpose of hurricane and storm damage reduction (HSDR). This introduced a new way of viewing shore protection projects which, prior to WRDA 1986, were viewed as either being for beach erosion control or for hurricane, tidal, and lake flood protection. Pursuant to Section 103(d), the costs of constructing measures for "beach erosion control" are now assigned to one of the basic purposes designated in Sections 103(a), (b) or (c). Normally this will be either HSDR or recreation. The following policies are applicable to HSDR shore protection projects.

a. Investment Costs. The non-Federal share of the costs assigned to HSDR (project or separable element) is 35 percent, to be paid during the construction period. Non-Federal sponsors must also provide all related LERRD requirements, the value of which (see paragraph 6-10.c, following) is counted as part of the 35 percent non-Federal share.

b. Additional Cash Contribution. When the value of the LERRD contributions for HSDR is less than 35 percent of the project costs assigned to HSDR, the difference must be provided by non-Federal sponsors as a cash contribution during construction. When the value of the LERRD contributions exceeds 35 percent of the assigned costs, the non-Federal share is limited to 35 percent (the Corps becomes responsible for the increment of LERRD which exceeds 35 percent of HSDR costs).

c. Valuation of LERRD. Non-Federal sponsors must provide all of the LERRD for shore protection projects, including borrow areas, at non-Federally-owned shores. The value of these items is included in the total project cost, and non-Federal sponsors receive equivalent credit against the non-Federal cost share. There are special considerations with respect to valuing the real estate interests involved.

(1) Lands, Easements, and Rights-of Way (LER) for Project Features. Private land holdings (LER) subject to shore erosion and required for project purposes must be appraised considering special benefits in accordance with relevant statutes and Department of Justice regulations implemented by ER 405-1-12. Generally, in the absence of the protective project features the shore would erode away and be lost. However, the non-Federal sponsor should receive credit for land values, if any, resulting from this special benefits analysis, in addition to administrative and/or other costs associated with the acquisition or condemnation of the requisite elements. The market value of the entire tract at the time of acquisition, excluding any enhancement or diminution from the project, is compared to the market value of the remainder property, including any benefits or diminution in value from the project. Public land holdings (LER) subject to shore erosion and required for project purposes must also be appraised considering special benefits, but any land values

developed in this analysis must be approved by CERE-E.

(2) Borrow Areas. Similarly, when a borrow area is provided by the sponsor as part of LERRD, the resource invested by the sponsor and available for credit against its share of project costs, is the net cost of the borrow area, which reflects the change in fair market value of the borrow area before and after its use. Only the net cost should be included in project evaluations and credited against the non-Federal cost sharing responsibilities. If a sponsor makes available a borrow area already in its ownership, the net value for crediting purposes will be established on the basis of borrow area appraisals before and after use for project borrow. Normally no credit will be given when offshore borrow areas are used, since the before and after market values are considered identical.

6-11. Aquatic Plant Control (Section 103(c)(6) of WRDA 1986). Costs are shared 50 percent Federal, 50 percent non-Federal (see paragraph 21-1).

6-12. Water Quality Enhancement (Section 103(d) of WRDA 1986). This legislation provides new cost sharing policy for water quality enhancement. The costs of measures for water quality enhancement are to be assigned to the appropriate project purposes and shared in the same percentage as the purposes to which the costs are assigned. Normally, costs for water quality enhancement will be assigned to the purposes of M&I and/or agricultural water supply, recreation, or fisheries enhancement.

6-13. Fish and Wildlife Mitigation (Section 906(c) of WRDA 1986). Costs incurred after 17 November 1986 will be allocated among the authorized purposes which caused the requirement for mitigation, and cost shared to the same extent as other project costs allocated to these purposes. However, no cost sharing will be imposed without the consent of the non-Federal sponsor where contracts have previously been signed for repayment of costs unless such contracts are complied with or renegotiated. Non-Federal sponsors are also required to provide all LERRD where this is a requirement of the purpose which necessitates the mitigation, except where it is otherwise agreed that the Corps will provide them using non-Federal funds.

6-14. Fish and Wildlife Enhancement (Section 906(e) of WRDA 1986 as amended by Section 107(b) of WRDA 1992).

a. When the Secretary of the Army recommends fish and wildlife enhancement in reports to Congress, the first costs are all Federal when any of the following apply (different provisions may apply to previously completed or authorized projects; see paragraph 19-5.b):

(1) Enhancement benefits are determined to be national in character;

(2) Enhancement is designed to benefit species that have been listed as threatened or endangered by the Secretary of the Interior; or

(3) Enhancement activities will be located on lands managed as a national wildlife refuge.

b. When enhancement benefits do not qualify as above, non-Federal sponsors are responsible for 25 percent of the first costs associated with these benefits, paid during implementation.

c. In all cases, the cost of operation and maintenance is the responsibility of the agency that manages the land for fish and wildlife purposes. (ER 1105-2-100, Chapter 4, Section VIII, Fish and Wildlife Enhancement, Paragraph 4-37, Federal and Non-Federal Participation)

6-15. Deferred Payments by Non-Federal Sponsors. The cost sharing established by WRDA 1986 specifies: (1) non-Federal payments to the Federal Government for its share of the cost of works accomplished under Federal control; and (2) non-Federal accomplishment of certain activities such as provision of LERRD. The general concept to be followed is for each party to provide its share of cost shared work prior to initiation of that work and for each party to produce its separate work activities in a time frame that permits efficient accomplishment of the overall effort (pay-as-you-go). The legislation does, however, make provision for deferral of certain non-Federal payments, most of which are at the discretion of the ASA(CW). Certain conventions have been adopted for computing interest charges for non-Federal payments made later than they would have been made under the "pay-as-you-go" concept described above. (ER 1165-2-131)

6-16. Environmental Protection (Environmental/Ecosystem Restoration). Section 306 of WRDA 1990 authorizes the Secretary of the Army to include environmental protection as one of the primary missions of the Corps. Section 307(a), WRDA 1990, establishes "no net loss of wetlands" and an "increase in the quality and quantity of the nations wetlands" as goals of the water resources development program. However, neither section provides a specific new authority to study, construct or implement specific measures. Section 210 of WRDA 1996 establishes the cost sharing for ecosystem (environmental) protection and restoration projects by amending Section 103(c) of WRDA 1986 to add environmental protection and restoration to the list of project purposes and establishes the the non-Federal share as 35 percent. Current Corps policy on cost sharing for ecosystem restoration improvements proposed for congressional authorization (i.e., projects authorized after 12 October 1996) is 50 Federal/50 percent non-Federal for feasibility study, 65 percent Federal/35 percent non-Federal for implementation (preconstruction engineering and design, construction) including separable elements, and 100 percent non-Federal for operation, maintenance, repair, rehabilitation, and replacement (OMRR&R). The non-Federal sponsor provides all LERRDs and the value of the LERRDs are included in the non-Federal 35-percent share. Where the LERRDs exceed the non-Federal sponsor's 35-percent share, the sponsor will be reimbursed for the value of the the LERRDs that exceed the 35-percent non-Federal share. Section 103 of WRDA 1986, as amended, makes no provision for work-in-kind and the non-Federal sponsor 35-percent share, after appropriate accounting for LERRD and required non-Federal sponsor project coordination activities under the terms of the Preconstruction Engineering and Design Agreement and PCA, will be provided in cash during construction. Section 206 (of WRDA 1996) Aquatic Ecosystem Restoration projects (with Federal costs limited to \$5 million per project) are also cost shared 65 percent Federal/35 percent non-Federal for implementation costs and 100 percent non-Federal for LERRDs and OMRR&R costs. However, Section 1135 (of WRDA 1986) and Section 204 (of WRDA 1992) projects are cost shared 75 percent Federal/25 percent non-Federal for both feasibility study costs and implementation costs, and 100 percent non-Federal for

the incremental OMRR&R.

6-17. Hazardous, Toxic, and Radioactive Wastes (HTRW). Expending Civil Works funds is to be avoided for remediation of HTRW. Construction of Civil Works projects in HTRW-contaminated areas should be avoided where practicable. The reconnaissance and feasibility study for each project will routinely include a phased and documented review to provide for early identification of HTRW potential. Studies to determine the the existence and extent of HTRW problems will be treated as study cost and shared accordingly. Investigations for the purpose of identifying the existence and extent of any HTRW performed during PED (i.e., prior to execution of the PCA) will be performed by the Federal Government, and these costs will be included in total project costs and cost shared in accordance with the basic project purpose. However, where hazardous substances regulated under CERCLA are found to exist, the non-Federal sponsor shall be responsible for any subsequent studies and investigations required to determine the appropriate response and clean up actions. Should HTRW be discovered on lands required for the project, the non-Federal sponsor shall not proceed with land acquisition until mutually agreed upon by both parties. If the land has already been purchased, the Federal Government and the non-Federal sponsor shall decide whether to proceed with construction.

a. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Regulated Contaminants. The design and construction of remediation measures for CERCLA regulated contaminants will be the responsibility of the project sponsor and the cost will not be considered a project cost nor will the sponsor receive credit for any HTRW response costs. The non-Federal sponsor must indemnify the Government for all response costs for which the Government is found liable under CERCLA, except for such response costs or clean up costs which result from negligence of the Government or its contractors during construction. If a decision is made to avoid an HTRW site by redesigning the project (e.g., realignment of a channel or levee), the costs of redesigning and constructing the change will be cost shared in accordance with the basic project purpose, even if the realignment option costs more to construct. For projects which are not cost shared, any necessary HTRW costs will be a part of project cost. ER 1165-2-132 provides details for consideration of HTRW potential at Civil Works projects.

b. Non-CERCLA Regulated Contaminants. For all contaminants not regulated under CERCLA, but for which there is a validly promulgated Federal, state, or local requirement necessitating special action which would apply to the Government and others pursuing similar initiatives, the cost of the special action necessary to comply with the requirements will be included in project costs and will be shared as a construction cost in accordance with the cost sharing provisions of WRDA 1986. Land value credited to a non-Federal sponsor will be the fair market value of the land in the condition acquired, considering any contamination that may be present. Investigations will be undertaken during the planning phase to indicate the presence of contaminated material in the project area. Any required action (e.g., remediation, treatment, handling, disposal) will be included in the design and cost estimate as part of the project. If, prior to initiation of project construction, the non-Federal sponsor wishes to accomplish the required action, the action is considered to be a separate undertaking, independent of the Civil Works project. Therefore, for project cost and economic analysis the value of the land is the fair market value after the required action. The non-

Federal sponsor receives credit for the fair market value of the land after the required action, but does not receive credit for the cost of undertaking the required action.

6-18. Dam Safety Assurance. Dam safety assurance modifications are those modifications which are required by new hydrologic or seismic data or changes in state-of-the-art design or construction criteria deemed necessary for safety purposes. These criteria are defined more specifically in ER 1110-2-1155. Work that does not meet these criteria is accomplished as maintenance or as major rehabilitation. All dam safety assurance modifications are subject to the cost sharing requirements of Section 1203 of WRDA 1986:

a. Section 1203(a)(1). Costs incurred in dam safety assurance modifications shall be recovered: Fifteen percent of the cost of the modification is to be assigned to project purposes in accordance with the cost allocation in effect for the project at the time the modification is initiated, and shared in accordance with cost sharing in effect at the time of initial project construction. Costs assigned to irrigation will be recovered by the Secretary of the Interior in accordance Public Law 98-404. The basis for cost sharing will be the cost sharing for the basic project, based on a cost allocation, project or local cooperation agreement, letter of assurance from a local interest, or contract for use of storage, whichever was used for initial project construction cost sharing or for subsequent reallocation.

b. Section 1203(a)(2). Repayment of costs, except for costs assigned to irrigation, may be made, with interest, over a period not to exceed 30 years from the date of completion of the work.

c. Cost Recovery. Recovery of the non-Federal share of the dam safety assurance modification cost will be determined by the current arrangement for project cost recovery. For costs which are reimbursable through the sale of power, the share of dam safety cost will be reported to the power marketing agency for recovery in the same manner as major rehabilitation costs. For cost sharing based on a project local cooperation agreement which does not have a provision for dam safety cost sharing, the agreement will need to be modified to include the dam safety costs, or a new agreement will be required. Where the project cost sharing was based on a letter of intent, an agreement will be negotiated with the sponsor. In the case of water supply, the existing contract may need to be modified, or a new contract signed to cover the dam safety cost sharing. If no current agreement addresses this cost, the sponsor may elect to repay the cost, with interest, over a period of 30 years.

6-19. Correction of Design or Construction Deficiencies. Proposals for correction of design or construction deficiencies evident in completed Corps projects will be cost shared as follows:

a. A reconnaissance-type initial appraisal and report will be made at full Federal expense. This reconnaissance report will serve as the decision document.

b. If a proposal for corrective measures is made and adopted, involving cost sharing, a PCA to cover the cost sharing requirements shall be executed prior to accomplishment of further work on the adopted project. Consistent with this guidance, the PCA shall provide that:

(1) All further preconstruction engineering and design work will be cost shared in the same percentages as specified in Public Law 99-662 for the project purposes.

(2) Construction costs will be shared in the same percentages as specified in WRDA 1986, as amended, for the project purposes.

c. Provision of the non-Federal share of preconstruction engineering and design costs may be deferred until the first year of corrective measures construction. The non-Federal share of the construction costs will be provided, in each year of construction, proportionate to the anticipated Federal expenditures in that year.