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	Water Resources Policies and Authorities CIVIL WORKS ECOSYSTEM RESTORATION POLICY	
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Regulation
No. 1165-2-501

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Water Resources Policies and Authorities
CIVIL WORKS ECOSYSTEM RESTORATION POLICY

1. Purpose. This regulation provides policy on Corps of Engineers involvement in ecosystem restoration and protection through Civil Works programs and activities.

2. Applicability. This regulation is applicable to all HQUSACE elements and USACE Commands having responsibility for ecosystem restoration programs, authorities, studies and projects within the Civil Works program.

3. References.

a.. "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act," 40 CFR Parts 1500-1508, Council on Environmental Quality, 29 November 1978.

b. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C.).

c. ER 200-2-2, Procedures for Implementing NEPA.

d. ER 405-1-12, Real Estate Handbook.

e. ER 1105-2-100, Guidance for Conducting Civil Works Planning Studies.

f. ER 1110-1-12, Quality Management.

g. ER1110-2-1150, Engineering and Design for Civil Works Projects.

h. ER 1110-2-8154, Water Quality and Environmental Management at Corps Civil Works Projects.

i. ER 1130-2-540, Environmental Stewardship Operations and Maintenance Policies, November 1996.

j. ER 1140-1-211, Support for Others: Reimbursable Work.

k. ER 1165-2-28, Corps of Engineers Participation in Improvements for Environmental Quality.

1. ER 1165-2-119, Modifications to Completed Projects.
 - m. ER 1165-2-132, Hazardous, Toxic and Radioactive Waste (HTRW) - Guidance for Civil Works Projects.
 - n. EP 1165-2-502, Ecosystem Restoration - Supporting Policy Information.
 - o. "Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies," (P&G), U.S. Water Resources Council, 1983.
4. Distribution. Approved for public release; distribution unlimited.
5. Authorities. National policy concerning the protection, restoration, conservation and management of ecological resources includes compliance requirements, emphasis on protecting environmental quality, and endorsement of Federal efforts to advance environmental goals.
 - a. Study authorities through which the Corps can examine ecosystem restoration needs and opportunities include: 1) Congressionally authorized studies, pursued under General Investigations (i.e., new start reconnaissance and feasibility studies for single-purpose ecosystem restoration or multiple purpose projects which include ecosystem restoration as a purpose); 2) General Reevaluation Reports, and reformulation opportunities in conjunction with significant Post-Authorization Change Reports; 3) Section 216, Review of Completed Projects (River and Harbor and Flood Control Act of 1970); 4) major rehabilitation of existing projects; and 5) Section 22, Planning Assistance to States (Water Resources Development Act (WRDA) 1974, as amended).
 - b. Authorities through which the Corps can participate in the study, design and implementation of ecosystem restoration and protection projects include: 1) Section 1135, Project Modifications for Improvement of the Environment (Water Resources Development Act (WRDA) of 1986, as amended); 2) Section 206, Aquatic Ecosystem Restoration (WRDA 1996); 3) Section 204 Beneficial Uses of Dredged Material (WRDA 1992, as amended); and, 4) dredging of contaminated sediments under Section 312 of WRDA 1990, as amended.
 - c. Additional opportunities for ecosystem restoration and protection may also be pursued through existing project authorities for the management of operating projects; e.g., through water control changes, or as part of natural resources management.
6. Policy. Ecosystem Restoration is one of the primary missions of the Civil Works program. The purpose of Civil Works ecosystem restoration activities is to restore significant ecosystem function, structure, and dynamic processes that have been degraded. Ecosystem restoration efforts will involve a comprehensive examination of the problems contributing to the system degradation, and the development of alternative means for their solution. The intent of restoration is to partially or fully reestablish the attributes of a naturalistic, functioning, and self-regulating system.

a. Protection may be included as part of Civil Works ecosystem restoration initiatives, when such measures involve efforts to prevent future degradation of an ecosystem's structure and functions. Such measures are most appropriate if they require Corps engineering expertise in accomplishing the protection measure. Protection measures can also be undertaken as part of Civil Works natural resources management, water control management and environmental dredging activities.

b. Projects implemented under this guidance should address the restoration of ecosystems, i.e., ecological resources, and not restoration of cultural and historic resources, aesthetic resources, or clean up of hazardous and toxic wastes. Those restoration opportunities that are associated with wetlands, riparian and other floodplain and aquatic systems are likely to be most appropriate for Corps involvement. Proposals that consist primarily of land acquisition are not appropriate as Civil Works ecosystem restoration investments. The Corps will focus its restoration efforts on those initiatives most closely tied to Corps missions and areas of expertise. There may be instances where components of ecosystem restoration problems or opportunities are better addressed by other agencies through their missions and programs.

c. Ecosystem restoration and protection initiatives should be conceived in the context of broader watershed or regional water resources management programs and objectives, which may involve contributive actions by other Federal and non-Federal agencies and other stakeholders. Corps ecosystem restoration projects should utilize engineering and other technical solutions to water and related land resources problems, with emphasis on improving degraded ecosystem function and structure.

7. Cost Sharing. Per Section 210 of the WRDA 1996, the non-Federal share of the implementation costs for ecosystem restoration projects will be 35 percent of the project or separable ecosystem element costs, unless project authorization specifies otherwise. The non-Federal share includes pre-construction, engineering and design, and construction, or total implementation costs of a multiple purpose project allocated to ecosystem restoration. Non-Federal sponsors shall provide 100 percent of the lands, easements, rights-of-way, utility or public facility relocations, and dredged or excavated material disposal areas (LERRDs), and operation, maintenance, repair, rehabilitation, and replacement (OMRR&R). The value of LERRD shall be included in the non-Federal 35 percent share. Where the LERRD exceeds the non-Federal sponsor's 35 percent share, the sponsor will be reimbursed for the value of LERRD which exceeds their 35 percent share. The non-Federal share of projects implemented under Section 1135 of WRDA 1986, as amended, and Section 204 of WRDA 1992, as amended will be 25 percent of the project implementation costs. Table 1 summarizes sponsor funding requirements and information about other contributions for ecosystem restoration projects.

Table 1. Summary of Sponsor Funding Requirements and Other Contributions for Ecosystem Restoration Projects *

Item	Congressionally Authorized Projects ¹	Section 1135	Section 206	Section 204 and 207
Non-Federal Cost Share	50% - Feasibility study 35% - Implementation costs ²	25% - Total project costs	35% -Total project costs	25% - Total cost of increment over baseline project
Sponsor Work in-kind ³	50% of non-Federal share of feasibility study costs (i.e. 25% of feasibility study costs); no work-in-kind for post-feasibility phase design, plans and specifications, materials, or project construction.	No more than 80% of the non-Federal share of total project costs; can include plans and specifications, materials, and project construction.	The entire sponsor share maybe work-in-kind, including plans and specifications, materials, and project construction.	None.
Sponsor provided LERRDs ⁴	100%	100% of those not available from existing project.	100%	100% of those not available from existing project.
OMRR&R	100%	100% ⁵	100%	100%
Federal Funding Limit per Project	As stated in authorization and subject to Sec. 902 WRDA 86 cap.	\$5M	\$5M	None
Contributions from Other Federal Agencies	Funds from another Federal agency shall not be used by the non-Federal sponsor to meet its share for the project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute ⁶ .			
Voluntary contributions ⁷	Applied toward total project costs to reduce both Federal and sponsor shares.			

***Specific requirements for each project will be detailed in the PCA decision documents.**

LERRDs: lands, easements, rights-of-way, relocations and disposal; **OMRR&R:** operations, maintenance, repair, rehabilitation, and replacement.

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¹ For ecosystem restoration projects or separable elements, or an environmental part of a multiple purpose project.

² *Implementation Costs:* LERRDs, post-feasibility phase design, including plans and specifications, materials, and project construction.

³ *Work-in-kind* may not result in reimbursement of sponsor when combined with LERRDs for Section 1135 and Section 206. The PCA must be executed before initiation of the work-in-kind for Section 1135 and Section 206. The dollar value of the work-in-kind will be established prior to the initiation of the in-kind effort.

⁴ If *LERRDs* are greater than the required non-Federal share, the sponsor may be reimbursed for the increment over its required share.

⁵ Where the project is on Corps project lands, there may be instances in which it may be appropriate for the Corps to perform the OMRR&R as part of the current OMRR&R.

⁶ Per consultation with the Department of Interior, funds from the following may not be used by states as the non-Federal share: Federal Aid in Wildlife Restoration Act (Pittman-Robertson), Federal Aid in Sport Fisheries Restoration Act (Dingel-Johnson), and North American Wetlands Conservation Act (Mitchell Bill) funds.

⁷ Per Section 203 of WRDA 92, *voluntary contributions* of cash, funds, materials, and services may be accepted from sources, including governmental entities, but excluding the project sponsor. Any cash or funds received per this provision are to be deposited into the account in the U.S. Treasury entitled "Contributions and Advances, Rivers and Harbors, Corps of Engineers (8662) and shall be available until expended to carry out the ecosystem restoration project.

a. Section 906 of WRDA 1986. The cost sharing provisions for ecosystem restoration established by Section 210 of WRDA 1996 include the qualification that nothing in the provisions shall affect or limit the applicability of Section 906 of WRDA 1986. Section 906 primarily concerns fish and wildlife mitigation which is not impacted by Section 210, since ecosystem restoration and protection projects are not intended to be in lieu of mitigation. Section 906(e) of WRDA 1986 provides applicable cost sharing for activities recommended to Congress to enhance fish and wildlife resources. Projects for ecosystem restoration and protection are not enhancement projects as per 906(e).

8. Federal Objectives. The general guidance in the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G), applies to ecosystem restoration activities and will be used in formulating and evaluating ecosystem restoration projects. Consistent with the analytical framework established by the P&G, plans to address ecosystem restoration should be formulated and recommended, based on their monetary and non-monetary benefits. These measures do not need to exhibit net national economic development (NED) benefits and should be viewed on the basis of non-monetary outputs compatible with the P&G selection criteria. Multipurpose plans can also be developed and recommended with recommendations containing positive net contributions to both economic and environmental benefits. Guidance on formulation for ecosystem restoration is provided in ER 1105-2-100.

9. Environmental Compliance/Consistency. Ecosystem restoration studies and projects must be in compliance with all applicable Federal environmental statutes and regulations and with applicable state statutes. Guidance on plan formulation and evaluation, including Section 404 (Clean Water Act) and other environmental compliance considerations and requirements, is provided in the Principles and Guidelines and ER 1105-2-100.

a. National Environmental Policy Act (NEPA) compliance will be accomplished in accordance with ER 200-2-2, and the Council on Environmental Quality regulations (40 CFR Parts 1500-1508). The documentation and other requirements of NEPA apply to ecosystem restoration initiatives as they would to other water resources development initiatives.

b. Mitigation. Guidance on mitigation of fish and wildlife damages is found in ER 1105-2-100. Projects implemented using restoration authorities may not be used as wetland banks or mitigation credit for the non-Federal sponsor. However, feasibility studies may consider joint ecosystem restoration and mitigation banking projects, as long as the Corps' financial participation in the project is limited to the ecosystem restoration element. Additional information on environmental compliance and consistency is provided in EP 1165-2-502.

10. Quality Control and Assurance. Quality control (QC) and Quality Assurance (QA) are integral to restoration project development. To ensure compliance with all technical and policy requirements, a QC plan will be prepared by the district for every project, with division oversight provided through the QA program.

11. Cooperation with Others and Public Involvement. Cooperation with other Federal and state agencies, tribes and private groups in pursuit of ecosystem restoration is encouraged. Guidance on public involvement in Civil Works studies is provided in ER 1105-2-100. To the extent possible, restoration projects should support the goals and objectives established as part of ongoing regional or watershed planning and management efforts. More detailed information on cooperation with others is provided in EP 1165-2-502.

12. Water Quality. Civil Works restoration and protection projects may involve cost effective solutions involving measures to improve water quality parameters as important components of ecosystem structure and function. Consideration should be given to whether the water quality improvements will accomplish restoration of the system as other ecosystem components may also require attention. The Corps will not propose, for Civil Works implementation, restoration projects or activities that would principally result in treating or otherwise abating pollution problems caused by other parties where they have, or are likely to have, a legal responsibility for remediation or other compliance responsibility.

13. Recreation. Recreation included as part of ecosystem restoration projects must be compatible with the ecosystem restoration purpose of the project, and appropriate in scope and scale to the opportunity provided by ecosystem restoration projects. Recreation development should not require additional lands, and should be ancillary to restoration benefits. Recreation facilities may be added to take advantage of the education and recreation potential of the ecosystem project if the separable costs of such facilities are justifiable by the recreation opportunities, but the project cannot be specifically formulated for a recreation purpose. The recreation proposed should not diminish the ecosystem restoration purpose, or, if there is a reduction in ecosystem restoration outputs, the remaining ecosystem restoration benefits must still be sufficient to justify the ecosystem restoration costs of the project. Whenever conflicts occur between the ecosystem restoration purpose and recreation, ecosystem restoration shall have priority. Where appropriate, recreation at ecosystem restoration projects should be designed for day use only, and plans should seek to optimize public use in harmony with the objectives of the restoration project. The level of financial participation in recreation development by the Corps at an otherwise justifiable project may not increase the Federal cost of the ecosystem restoration project by more than ten percent without prior approval of the Assistant Secretary of the Army (Civil Works). This limit should be viewed as an upper limit on Federal cost sharing and not as a goal for expenditures. Information regarding the inclusion of recreation as part of ecosystem restoration projects, including a checklist of recreation facilities which may be cost shared at new ecosystem restoration projects is provided in EP 1165-2-502.

14. Major Rehabilitation. Ecosystem restoration opportunities may be included as part of major rehabilitation program under the following circumstances: 1) if an existing environmental feature is experiencing a reliability problem, or if an efficiency improvement will enhance the environmental feature; 2) if there is a long recognized environmental problem that may most efficiently be addressed as part of the rehabilitation measure; or 3) where concurrent construction of a rehabilitation measure and an independent restoration measure may provide economic efficiencies. Proposed changes must be justified and, like any other feature of the project, will compete with

other new start projects. In the examination of restoration needs and opportunities, priority should be given to problems with longstanding recognition. Additional information on including ecosystem restoration as part of major rehabilitation is provided in EP 1165-2-502.

15. Remediation and Ecosystem Restoration. Guidance on hazardous, toxic and radioactive waste (HTRW) associated with Civil Works projects and facilities is provided in ER 1165-2-132. Remediation differs from ecosystem restoration in terms of goals and decision frameworks. Remediation, or site cleanup of hazardous, toxic and radioactive waste (HTRW), is typically for the purpose of meeting some target criteria for contaminants or regulatory condition related to human health and safety, rather than for ecosystem quality. After remediation, sites may be used for a variety of purposes depending on the goals of the land owners. More detailed information on remediation in conjunction with ecosystem restoration is provided in EP 1165-2-502.

a. In instances where future site use includes restoration of ecological resources and maintenance of environmental benefits, it may be possible to pursue ecosystem restoration through Civil Works authorities and cost-shared projects after the clean up (e.g., for Formerly Utilized Sites Remedial Action Plan (FUSRAP) sites).

b. Brownfields. Brownfields are abandoned, idled, or under-utilized industrial or commercial properties where expansion or redevelopment is complicated by real or perceived environmental contamination. Clean up and redevelopment of these sites is typically intended to foster increased property values, stimulate tax revenues, create job opportunities and revitalize inner-city neighborhoods. The Corps has not been authorized or funded to address Brownfield redevelopment needs, however, there may be opportunities for the Corps to contribute to, or participate in Brownfields initiatives where site assessment and clean up are integral to an ecosystem restoration project, or to solving water resources problems related to other Civil Works water resources mission areas and existing authorities. There may also be opportunities to participate on a reimbursable basis as Support for Others. Corps participation in cost-shared clean up as part of water resources development is limited to situations where such participation will not result in the Corps being liable under the Comprehensive Environmental Response, Compensation and Liability Act, (CERCLA) (42 U.S.C. 9607(a)), or require its involvement with the Resource Conservation and Recovery Act (RCRA) hazardous waste as defined in 42 U.S.C. 6903(a). Detailed guidance on HTRW consideration for Civil Works projects is contained in ER 1165-2-132.

16. Regulatory Program and Ecosystem Restoration. Coordination with the Corps Regulatory program personnel is essential to ecosystem restoration planning in order to preclude conflicting actions and to ultimately improve recommendations. The Corps' Regulatory program encourages development of watershed management plans that protect and restore important elements of aquatic ecosystems. Ecosystem restoration planning utilizes broad water resources development and management perspectives which may be useful in regulatory decision making. Additional information on coordinating ecosystem restoration and Corps regulatory responsibilities is provided in EP 1165-2-502.


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17. Real Estate Considerations. The analysis of the nature and extent of real estate requirements should be conducted by a district study team that includes Real Estate, Project Management, Planning, Engineering, and other involved offices as necessary and with appropriate non-Federal sponsor personnel. The analysis must be conducted in accordance with Chapter 12 of ER 405-1-12, including consideration and identification of the specific interests, estates, and acreage required. *After coordination and consultation with the non-Federal sponsor, the government will determine the lands, easements, rights-of-way, utility or public facility relocations, and dredged or excavated material disposal areas (LERRD) required for the implementation, operation, and maintenance of the project. More detailed guidance on determining the real estate requirements for ecosystem restoration projects is provided in EP 1165-2-502.*

a. Value and Credit. For crediting and total project cost calculation purposes, the value for LERRD to be provided or performed by the non-Federal sponsor for the ecosystem restoration project shall be determined in accordance with the terms of the Project Cooperation Agreement (PCA) for the project, Section VII of Chapter 12 of ER 405-1-12.

b. Operation and Maintenance. For ecosystem restoration projects that include existing project lands owned by the United States and managed by the Corps, and where the non-Federal sponsor is responsible for the operation and maintenance of the restoration project, an appropriate real estate outgrant must be issued to the non-Federal sponsor. If the area is currently under outgrant, appropriate steps must be taken to allow the new use which includes amendment of the existing outgrant and possible cost-sharing agreement.

FOR THE COMMANDER:


RUSSELL L. FUHRMAN
Major General, USA
Chief of Staff