

## CHAPTER 2 - NATURAL RESOURCES STEWARDSHIP

2-1. Purpose. This chapter establishes the policy for the administration and management of natural resources activities at USACE civil works water resource projects.

2-2. Policy. It is the policy of the Corps of Engineers that:

a. Programs and activities related to environmental stewardship and the management of natural resources shall implement and be consistent with:

(1) the following mission statement:

" The Army Corps of Engineers is the steward of the lands and waters at Corps water resources projects. Its Natural Resources Management Mission is to manage and conserve those natural resources, consistent with ecosystem management principles, while providing quality public outdoor recreation experiences to serve the needs of present and future generations.

In all aspects of natural and cultural resources management, the Corps promotes awareness of environmental values and adheres to sound environmental stewardship, protection, compliance and restoration practices.

The Corps manages for long-term public access to, and use of, the natural resources in cooperation with other Federal, State, and local agencies as well as the private sector.

The Corps integrates the management of diverse natural resource components such as fish, wildlife, forests, wetlands, grasslands, soil, air, and water with the provision of public recreation opportunities. The Corps conserves natural resources and provides public recreation opportunities that contribute to the quality of American life."

(2) the following program objectives:

(a) To manage natural resources on Corps of Engineers administered land and water in accordance with ecosystem management principles, to ensure their continued availability.

(b) To provide a safe and healthful environment for project visitors.

b. Project personnel and the operations element, with the coordination of the planning, real estate and safety elements and the effected publics, shall develop and fully implement project Master Plans (MP) and Operational Management Plans (OMP) to accomplish the natural resources program objectives. Specific guidance on the Master Plan and OMP preparation and implementation processes is provided in Chapter 3 of ER 1130-2-550.

c. Natural Resource Management Activities.

(1) Operations Project Managers are responsible for the completion of natural resources inventories on Corps civil works projects. Natural resources inventories data shall be available on all project lands, including outgrants, at Corps civil works projects to provide quantitative and qualitative data for use in determining resource management needs. The inventory data may be in a form such that it may be used in information management systems such as the Natural Resources Management System (NRMS) or a Geographic Information System (GIS). There are

two types of inventories, Level One and Level Two.

(a) Level One inventories are of a general nature and will be conducted to provide baseline information for MP purposes. Level One inventory data will be used to support the resource objectives and land use classifications for the MP. In the absence of identified resource objectives and/or existing inventory data, a Level One inventory will be conducted. The Level One inventory shall be conducted in sufficient detail to determine general plant and animal composition, acreage of dominant vegetative types (such as grasslands, woodlands, and wetlands among others), soil types, land use capabilities, and the presence of "special status species" and/or their critical habitat occurring on project lands and waters. "Special status species" include any species which is listed, or proposed for listing, as threatened or endangered by the U.S. Fish and Wildlife Service (FWS) or National Marine Fisheries Service (NMFS), under the provisions of the Endangered Species Act; any species covered by the Migratory Bird Treaty; any species designated by the FWS as a "candidate" or "listing" species or "sensitive" species; and any species which is listed and protected by State statute in a category implying potential endangerment or extinction. The Level One inventory shall be in most cases accomplished using available existing information which is readily available from a variety of sources (e.g., U.S. Geological Survey maps, county soil surveys, U.S. Fish and Wildlife Service, aerial photography, Corps real estate maps, Corps project feasibility documents, State Heritage Offices, etc.).

(b) Level Two inventories are prepared in support of the resource objectives and/or land use classifications identified in the project MP and the OMP. Level Two inventories are required for the effective development, execution and evaluation of specific natural resources management prescriptions. Detailed inventories for "special status species" are Level Two, and these inventories shall be conducted at frequencies necessary to determine the existence of any new populations of "special status species" occurring on project lands, or to determine significant changes in the existing population levels of these species.

(2) "Special status species" and/or their critical habitats that occur on water resources development projects shall be protected and/or conserved in accordance with the Endangered Species Act, as amended, and with existing state statutes. Endangered species Recovery Plans prepared by the FWS and/or NMFS shall be followed in efforts to protect and conserve federally listed species or their critical habitat on Corps administered lands and waters. See Chapter 2 of EP 1130-2-540 for procedures on complying with Endangered Species Act. Corps personnel should cooperate in the management of state-listed and protected species where feasible.

(3) MPs shall be prepared and approved in accordance with Chapter 3 of ER 1130-2-550. The MP shall document and organize congressionally authorized natural resources management activities (i.e., established by project specific authorities, as well as general authorities for stewardship responsibilities) which are to be conducted on the project. MPs shall reference the legal authorities and responsibilities which guide the project's role within the region, watershed, and ecosystem. Natural resources related interpretive programs, such as Watchable Wildlife, shall be identified in MPs by either a specific resource objective and/or land use classification.

(4) OMPs shall be prepared and approved in accordance with Chapter 3 of EP 1130-2-550 to document: a summary of natural resources inventories and evaluations; the inventory methodologies used; resource objectives; and site specific prescriptions for the management of the resources. Specific (Level Two) inventories are developed and conducted to support approved resource objectives and determine the existence of any "special status species" occurring on project lands. General (Level One) inventories should be described in the OMP and

conducted in the absence of resource objectives and/or existing inventory information.

(5) General Plans shall be prepared and approved pursuant to the Fish and Wildlife Coordination Act, and in accordance with Chapter 2 of EP 1130-2-540. General Plans shall be prepared when existing project lands and waters are to be used for fish and wildlife purposes under the administration of other agencies, and for lands acquired specifically for wildlife mitigation whether managed by the Corps, or other agency. General Plans are not necessary for other lands and waters managed by the Corps in the interest of good stewardship and multipurpose use of natural resources. Specific guidance is provided in Chapter 2 of EP 1130-2-540 on the necessity for General Plans under different operation situations.

(6) Natural resources management activities shall be accomplished through the use of one or more of the following management concepts: stewardship, mitigation, or enhancement.

(a) Stewardship. Natural resources management through a stewardship concept ensures the conservation, preservation, or protection of those resources for present and future generations. Stewardship focuses on sustaining ecosystems. Stewardship shall be applied in a biological community context, thereby providing protection for the existing species populations, communities, habitat types and ecosystems. "Special status species" and their habitats shall be identified and accommodated in the MP and OMP. The application of the stewardship concept within ecosystems and their component biological communities (such as forests and woodlands, range and grasslands, and wetlands), including fish and wildlife and soils, is described in the following paragraphs.

- Ecosystem Management. An ecosystem is a dynamic community of biological organisms, including humans, and the physical environment in which they interact. Ecosystem management by the Corps shall be a proactive, goal-driven approach to sustaining ecosystems and their values. The Corps will manage communities to promote regional environmental values occurring on project lands toward sustaining ecosystems in which the project lands and waters occur. Such ecosystems and communities will be identified in resource objectives and/or land use classifications contained in the MP and the OMP. Preferential treatment will be given to the management of ecosystems, communities, and habitats identified as having special status species.

- Forest and Woodland Management. The Forest Cover Act provides a statutory mandate for multiple use forest management, or other vegetative cover management, on project lands and waters. Forest and woodland management will be applied to develop, maintain, protect, and/or improve vegetation conditions for timber, fish, wildlife, soils, recreation, water quality and other beneficial uses. The MP will provide for multiple use forest management wherever practicable and compatible with other uses of project land. Where applicable, OMPs shall provide for the continued production and harvest of forest products through sustained yield programs, reforestation, and accepted conservation practices. Where applicable, the OMP will provide site specific prescriptions for forest and woodland management.

- Fish and Wildlife Management. Section 2 of the Forest Cover Act provides authority for the Corps to manage project lands and waters for any or all conservation purposes, including fish and wildlife conservation. The Corps will conduct fish and wildlife management activities which seek to maintain populations of targeted wildlife species through the manipulation and management of habitat. The Corps will coordinate and conduct its program in conjunction with other Federal, state, and local agencies having fish and wildlife management responsibilities using a variety of techniques including the placement of artificial structures and other practices.

Where not managed by other Federal, state or local agencies, the Corps will conduct fish and wildlife management programs on all project lands and waters which are identified by land classification and/or resource objective for fish and wildlife management. The MP and OMP will identify and document the fish and wildlife species that inhabit project lands and waters. Those species that are to receive management emphasis will be special status species, and those species specified by laws and national focus plans/agreements such as the Endangered Species Act and the North American Waterfowl Management Plan. The OMP will include site-specific prescriptions for the management of fish and wildlife habitat, or for management of a specific species or species group.

- Grassland Management. Grassland (including range land) management is within the mandate of the Forest Cover Act. The Corps will provide for the protection and development of vegetative cover other than forests and woodlands as well as establish conservation measures for its maintenance. Grassland management techniques will be applied whenever the opportunity exists to protect native grasslands or prairie, and/or improve vegetative conditions as a soil conservation, watershed protection, fish and wildlife habitat, or range management practice. Livestock grazing, haying, crop production and other agricultural activities are tools that may be used in the manipulation of vegetation and should not be used, or discontinued, where they may be reasonably expected to destroy or significantly alter plant and animal communities that occupy a project. The range and grassland management program will comply with the resource objectives and/or land use classifications stated in the MP and OMP. Where applicable, the OMP will provide site specific prescriptions for range and grassland management.

- Wetlands Management. The Forest Cover Act provides for the development of other vegetative cover, such as wetlands, so as to yield maximum benefit and otherwise improve such areas. Wetlands are those areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands will be assigned a resource objective or wetlands land classification in the Master Plan and the OMP. Existing wetlands will be protected, conserved, and maintained. On hydric soils (indicating previous wetland conditions) consideration and management emphasis should be given to returning, operating, and/or maintaining wetlands for wetland plant communities. Consideration should be given to buffering the wetland within an adequate amount of land to prevent abuse or loss from adjacent land uses. The development and maintenance of wetlands should integrate the needs of fish and wildlife and support national programs and efforts associated with the Endangered Species Act, Section 307 of PL 101-640, EO 11990, and the North American Waterfowl Management Plan. Wetlands management objectives and practices should be featured in the Master Plan and OMP.

- Soils Management. All land management prescriptions developed for use at water resources development projects will integrate the constraints and favorable characteristics associated with specific soil types and land use capabilities. Land uses and conservation practices recommended by the Natural Resources Conservation Service for each land use capability class should be carefully considered during the development of MP and OMPs. Where available, an inventory of soil survey maps will be maintained at project offices and referenced in management prescriptions contained in the OMPs. Constraints associated with the soils and land use capabilities of a particular site will be identified and incorporated into Master Plans and OMPs. The OMP will provide site specific prescriptions for soils management including erosion control, sediment management, and bank stabilization.

(b) Mitigation. Mitigation measures authorized by Congressional legislation or approved

by Headquarters compensate for ecological resources unavoidably and adversely affected by a Corps project. Mitigation includes stand-alone projects; work undertaken concurrently with project construction; and operation, maintenance, and management of mitigation measures. The species, habitat, and/or measures identified as mitigation are contained in feasibility reports and design memoranda submitted as supporting documentation for the project authorization and in other supporting documents such as special reports to Congress. Mitigation measures that are cost shared with a local sponsor shall have the appropriate ratio of shared costs identified in the above reports and documents. Approved mitigation plans and associated measures shall be incorporated into the MP and OMP.

(c) Enhancement. PL 89-72 provides for the consideration of fish and wildlife enhancement opportunities at Corps water resources development projects. Enhancement measures/activities are those measures/activities taken above a stewardship level (i.e. level required to sustain fish and wildlife resources for the life of the project), and those measures/activities which produce an increase or concentration of animal numbers for the purpose of recreational benefits. Enhancement measures/activities are subject to cost-sharing or total funding by others, in accordance with administrative guidance provided by the Assistant Secretary of the Army for Civil Works.

(7) Natural Resources Protection. Management activities designed to prevent destruction of, or to minimize the degradation of, natural resources due to harmful effects of soil erosion and resultant sedimentation, wildfire, insects, and disease shall be specified in the OMP.

(a) Management activities undertaken for the purpose of repairing or restoring the adverse impacts of improper or over utilization will be identified in the MP and OMP. Particular attention should be given to carrying capacities for domestic livestock and human use.

(b) To facilitate the protection of property from fire, the Corps may enter into reciprocal agreements with appropriate public organizations or agencies. Such agreements may provide for the reimbursement of any or all costs incurred in furnishing fire control on Corps lands. Such agreements shall include a waiver from claims for compensation of any loss, damage, personal injury or death resulting in the performance of the agreement. Authority to approve fire control agreements is delegated to district commanders.

(c) OMPs will provide for monitoring project lands to determine unacceptable pest populations. OMPs will reference the requirements in ER 1130-2-540 for annual pest control plans and for documentation of pesticide use. Specific guidance on the development of natural resources protection plans is provided in EP 1130-2-540. Where appropriate, districts and/or projects are encouraged to enter into cooperative monitoring and control arrangements with other agencies, such has been done with the U.S. Forest Service for monitoring the presence of gypsy moths (See Chapter 4 of this regulation).

(8) Natural Resources Disposal and Removal. Project natural resources typically disposed of include forest products, agricultural crops, minerals, sand, gravel and embedded stone. It is not appropriate to sell project natural resources where there is reason to believe that such a sale will lead to the destruction or significant degradation of project plant or animal populations, habitat type, natural or cultural features presently existing on, within or beneath project lands and waters.

(a) Forest Products. The operations element shall prepare the determination of availability for forest products to be sold on project lands. The sale of forest products shall be

administered by the real estate element, in accordance with ER 405-1-12. Minor sales may be accomplished by the operations project manager on water resources development projects under the general guidance (ER 405-1-12) issued by the real estate element. Project-wide salvage contracts may be used to dispose of forest products resulting from insect and storm damage or recurring activities which require small-scale removal of forest products. Determinations of availability will contain as a minimum:

- A statement of the purpose of the proposed sale.
- An estimate of the volume of the various products made available and the basis for the estimate.
- A statement on the accuracy of the estimate to serve as the basis for a lump sum sale (if forest products are intended to be sold on lump sum basis).
- A listing of voluntary Best Management Practices (BMP) published by State forestry agencies will be included in the sales contract. Examples of BMPs include seasonal harvesting requirements, riparian protection zones, maximum log lengths, and allowable equipment size.
- Provisions for a final joint operations element-real estate element compliance inspection before release of the contractor at completion of the contract, as required.

(b) Agricultural Crops and Activities. A determination of availability will be prepared by the operations element for hay, grazing, crops and other agricultural activities to be disposed of by sale or removed from lease. All hay, grazing, crops and other agricultural sales or leases will be administered in accordance with applicable sections in ER 405-1-12.

(c) Minerals. ER 405-1-12 sets out policy and procedures on mineral exploration and leasing. Instruments authorizing mineral exploration or production activities shall include requirements to protect natural resources identified in the resource objectives and/or land use classifications presented in MPs and OMPs.

(d) Sand, Gravel, Embedded Stone. Sand, gravel, and embedded stone, which are generally referred to as common variety minerals are defined as real property (41 CFR Part 101-47.103-12 (c)). The Secretary of the Army has authority to dispose of these items without disposing of the underlying Government-owned lands under Department of the Army control. Determinations of availability prepared by the operations element shall contain conditions to protect natural resources identified in the resources objectives and/or land use classifications presented in MPs and OMPs. Guidance for sale of such products is contained in ER 405-1-12.

d. Pollution Abatement Activities.

(1) Solid waste disposal shall be by contract with licensed off-project sanitary collectors when such a method is economically and administratively feasible. Where practical, arrangements shall be made for disposal of solid wastes off the project. Where this is not feasible, disposal shall be accomplished on the project in accordance with Federal, state and local laws.

(2) Continuous vigilance for sources of water, air, visual, and noise pollution in the reservoir, in stream tributaries thereto, and on project lands shall be maintained. Periodic real

estate compliance inspection reports of all outgrants require specific comments regarding the possibility of pollution as a result of activities of the grantee. Surveillance of industrial, agricultural, and other operations which are potentially harmful to reservoir waters shall also be maintained in cooperation with the Environmental Protection Agency (EPA) and other Federal, state or local interested agencies. Permits for shoreline use shall be issued in accordance with paragraph f. below and Chapter 5, of this regulation.

(3) Projects shall be operated in a non-polluting manner in accordance with ER 200-2-3.

e. Outgranting of Lands.

(1) Pest management on outgranted lands shall be implemented and managed in accordance with Chapter 3 of this regulation.

(2) The operations element shall make determinations of availability of project lands for all outgrants. The operations element shall also be afforded the opportunity to make recommendations as to conditions of the proposed outgrant and agreement reached on those conditions prior to the start of negotiation or issuance of a Notice of Availability for Leasing. (See also Chapter 5 of this regulation and ER 405-1-12.)

(3) The performance of compliance inspections on lands outgranted for road, street, power line, pipe line, and underground communication line rights-of ways, other uses covered by licenses and permits, and selected (as delegated by the Real Estate Division) agriculture and grazing lease areas normally shall be by project personnel. Immediate corrective action shall be taken at the project level if emergency health and safety is involved.

(4) Real estate personnel shall perform annual compliance inspections on all other outgranted lands including lands outgranted for commercial concession, public park and recreation, and fish and wildlife purposes, and selected areas outgranted for agricultural and grazing purposes.

(5) Areas Relinquished by Non-Federal Interests. See ER 1130-2-550, Chapter 2, paragraph 2-2.r.

(6) Hotel type accommodations are excluded from any limits on length of stay.

(7) The Corps shall not prohibit non-Federal public lessees from charging differential fees based on residency, in accordance with that lessee's established policy. The Corps will not, however, encourage these lessees to institute such fees.

(8) Human habitation or residency on project fee lands or waters shall not be allowed except as approved by the District Commander. Construction of facilities conducive to human habitation shall not be permitted below the top of the flood control pool plus a reasonable freeboard. Such activity, if permitted would place undue limitations on the proper operation of the project in view of the Corps responsibility for the safety of people in the area and the orderly public use of the lake. However, in view of the enactment of Section 320 of the Water Resources Development Act of 1990, which was intended to prohibit the removal of trailers at concessions and club sites, at Corps projects, actions to remove those trailers should be terminated unless the conditions set forth in Section 1134 (d) of Public Law 99-662 are not being met. Existing leases may be modified as needed to provide for continuation of trailer uses as long as there is compliance with the conditions of Section 1134 (d).

(9) Private Exclusive Use.

(a) The Corps policy prohibits the expansion or the development of new private exclusive use except that permitted under the shoreline management program. However, in some cases, or at specific projects, private exclusive use may serve as an interim means to optimize utilization of public lands. Such use will be considered a low priority and is subject to termination when lands are needed for a higher priority use.

(b) Time share development will not be allowed. If time shares of private exclusive use have been permitted at a project, action should be taken to phase them out, such as termination at the end of the current lease.

(c) If a state proposes a recreation development that will include residential development, the Corps will work with the state to develop legislation that would transfer lands above the operating pool to the state for residential development on that land.

(d) Regional plans for private exclusive use should be updated to provide for any changes which result.

f. EO 12512 Surveys. It is the policy of the Corps to efficiently manage those lands at water resource projects which would be acquired in accordance with the 1971 implementation of the 1962 Army/Interior Joint Acquisition Policy. EO 12512 surveys will be conducted pursuant to provisions of the Federal Property Management Regulations (FPMR) (41 CFR part 101-47.8) and Chapter 8 of ER 405-1-12. Detailed guidance for reviewing lands not encompassed by this acquisition policy is presented in EP 1130-2-540, as is guidance on excessing Corps lands.

g. Boundary Surveys and Marking.

(1) Permanent type survey markers shall be placed at all angle points of the project boundary except where the land is adjacent to other federal or state lands. At new projects, boundary lines shall be monumented and delineated on the ground during land acquisition and be completed as part of the initial project construction. District commanders shall ensure an ongoing program at each project where the boundary monumentation is not complete; funds required for surveys, monumentation, and boundary marking will be programmed from maintenance funds based on budget priorities. MSC commanders shall exercise approval authority for requested exceptions. Specific guidance on boundary monumentation procedures and techniques is provided in EP 1130-2-550.

(2) The policy concerning the monumenting of fee boundary lines shall also be applicable to perpetual flowage easements lands, where encroachments may reasonably be expected from private development on adjoining lands. Landowner permission is necessary to monument.

(3) Project personnel shall inspect boundaries at intervals sufficient to insure that boundary lines remain adequately marked and monumented. Inspectors shall identify and document unauthorized uses of project lands and encroachments. At a minimum, boundary lines should be inspected every two years. For easement lands, the frequency of inspection and amount of effort expended shall be a function of individual deed restrictions and the presence of easement in monumentation.

(4) Fencing shall be used as a management tool to delineate project boundaries where



alternative management practices are not sufficient to ensure the safety of project employees and visitors. Where economically justified, fencing may be used to prevent unauthorized use and trespass, to protect against environmental degradation, and to preserve desirable wildlife habitat. The extent and type of boundary fence to be used shall be determined on a project by project basis. Where fencing is used to delineate project boundaries, adequate provision for pedestrian access from adjacent land must be provided except where such pedestrian access from adjacent land will create user conflicts in developed areas, user fee areas, or where access is restricted by other management requirements.

h. Natural Resources Management Program Staff. (See ER 1130-2-550, Chapter 2, paragraph 2-2.e.)