

## CHAPTER 2 - NATURAL RESOURCES STEWARDSHIP

2-1. Purpose. This chapter establishes guidance for the administration and management of environmental stewardship and natural resource management activities at USACE civil works water resource projects. The reader should also see EP 200-2-3 for additional guidance.

### 2-2. Background.

#### a. Program Mission.

" 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 eco-system 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."

b. Program Objectives. The objectives of the Natural Resources Management Program are:

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

(2) To provide outdoor recreation opportunities on Corps of Engineers administered land and water on a sustained basis.

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

c. Implementation. The objectives stated in the preceding paragraph will be accomplished by maintaining qualified professionals at all levels of the resource management program, and by developing and fully implementing project operational management plans (OMP).

### 2-3. General Guidance.

#### a. Operational Management Plan.

(1) General. The operations element, with the coordination of the planning, real estate and safety elements will develop and implement an Operational Management Plan (OMP) for all operational projects in accordance with the approved Master Plan (MP). The OMP will include two parts: (1) Natural Resources Management and (2) Park Management. Objectives and

implementation plans will be established for each part. It is essential that the OMP be a utilitarian plan and that it be implemented fully.

(2) Preparation. The OMP should replace existing master plan appendices within one year of the date the appendices are due for revision. At projects without approved appendices, the OMP should be prepared as soon as possible. However, actual preparation time will be dictated by the availability of funds based on priorities outlined in the annual budget guidance. Guidance on the preparation of the OMP is contained in Appendix B. Requirements for detailed information within the general format specified in Appendix D is at the discretion of the MSC Commander. (For information on project master plans, see ER 1130-2-550, Chapter 3, Preparation of Master Plans.)

(3) Approval. The OMP will be approved by the district Commander. Two copies of the approved plan will be forwarded to CDR HQUSACE (CECW-ON) WASH, DC 20314-1000.

(4) Updating of Plans. The district element responsible for updating the master plan on existing projects will be determined by the District Commander. The MP and OMP will be updated as required and when funds are available through the budget priority process. The OMP will be updated by the operations element.

b. Boundary Surveys and Marking.

(1) Fee Lands. Permanent type survey markers shall be placed at all angle points of the project boundary. Fee boundary lines shall be delineated in a clear but unobtrusive manner approved by the District Commander and in accordance with the project master plan and operational management plan. Physical or natural features may obviate the need for delineating the boundary line itself; however, all corners should be monumented.

(a) New Projects. At new projects, boundary lines shall be monumented and delineated on the ground during land acquisition. Techniques for delineating the boundary line may include, but are not limited to, signs and posts, fencing, painting trees, vegetative plantings and/or plowing fire breaks. Both the monumentation and delineation of the boundary line will be completed as part of the initial project construction.

(b) Existing Project. District commanders shall assure an ongoing program at each project where the boundary monumentation is not complete. Early completion of boundary monumentation followed by a clear, positive delineation of the line on the ground is essential to protect the integrity of the project. On completed projects, funds required for surveys, monumentation and boundary marking will be programmed from maintenance funds based on budget priorities. These projects should be monumented as expeditiously as possible.

(c) Exceptions. District commanders should recognize that surveying and monumentation of certain projects, or portions of project boundaries, may not be practical or desirable. MSC commanders will exercise approval authority for requested exceptions and will provide information copies of such action to CDR USACE (CECW-ON) WASH, DC 20314-1000.

(2) Flowage Easement Lands. The policy concerning the monumenting of fee boundary lines shall be applicable also to perpetual flowage easements lands, where encroachments may

reasonably be expected from private development of adjoining lands. Landowner permission is necessary to monument.

(3) Surveillance and Prevention. Project personnel will check fee boundaries as often as is feasible to insure that the line is adequately marked and to check for unauthorized use or encroachments. The frequency of inspections and the amount of control attempted on flowage easement lands will depend upon whether the line is monumented and the individual deed restrictions. However, all boundary lines should be checked at least once every three years. The intent of this is to provide the field project manager with flexibility to determine what areas of the boundary require more frequent inspections because of potential encroachment or heavy vegetative growth that might obscure the boundary. Aerial recognizance may be a low cost per mile method to cover extensive boundaries where there is little or no activity. Records will be maintained of missing monuments. Annually, a report will be forwarded to the engineering element requesting replacement of missing monuments. The operations project manager will annually budget O&M funds to cover costs of remonumentation.

(4) Boundary Fencing. Fencing should 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. Fencing to meet management objectives other than such necessities as project employee and visitor safety will be done only when economically justified from an operation and maintenance standpoint. 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 will 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 will create user conflicts in developed areas, user fee areas or where access is restricted by other management requirements.

(1) Resource Manager/Ranger Training Program.

(a) Each district will establish and maintain a formal resource manager/ranger training program. As a minimum, the training program will span 18 months and will include assignments to the district office and one lake project. A training manual outlining the program will be submitted to the division commander for approval.

(b) In establishing trainee positions, a sufficient total number of vacancies must be projected to exist (not necessarily specifically identified) within a reasonable time in a district to provide positions for trainees to progress to the GS-9 grade level. Positions at the GS-5 and GS-7 levels are to be established for developmental purposes only. After completion of the formal training period, trainees normally will be selected for a permanent GS-9 resource manager or ranger position.

(2) Conference and Seminars. Judicious management of attendance and participation in various professional conferences, seminars and training schools is necessary to obtain maximum benefits from minimum expenditures. The importance of staying abreast of current information and discussing issues of mutual interest with various local, state, and Federal government, and private sector representatives demands expenditure of some resources.

(3) Park Practice Program. Complete series of Park Practice publications ("Guidelines," "Trends," and "Grist") published by the National Recreation and Parks Association in

cooperation with the National Park Service, will be maintained in division, district and area offices. All projects should receive "Grist" on a regular basis for use by all employees. The publications should be made available for use by natural resources management personnel at all levels of responsibility and such personnel should be encouraged to utilize them fully. Contributions by all Corps personnel of material suitable for publication in these publications are encouraged. Contributions need not be in finished form for publication. The main objective is to get the complete idea of the submission across to the publishing staff. Drawings or photographs should accompany the contribution where practicable. All material for publication should be sent by the contributor directly to Park Practice, National Park Service, Department of the Interior WASH, DC 20240.

c. Outgranting of Lands. At the conclusion of the negotiations for an outgrant and prior to construction and/or operation, the Operations Project Manager and the district real estate representative who negotiated the outgrant shall meet with the grantee (preferably at the project) and go over the terms and conditions of the outgrant. There will be coordination with operations on the final draft of the instrument prior to execution.

(1) Compliance Inspections by Project Personnel. These inspections will be performed during the term of the outgrant at least once every five years and more often if circumstances dictate. On the outgrants to be inspected by project personnel, the district real estate element will forward through operations channels to the Operations Project Manager a list of properties to be inspected along with a schedule of when the inspections should be made. Reports of the inspection will be forwarded through operations channels to the real estate element. Instances of unsatisfactory outgrantee performance will be reported immediately. Also, project personnel should perform interim inspections on all outgrants in such a way as to not be onerous or burdensome to the outgrantee. Immediate corrective action will be taken at the project level if emergency health and safety is involved. All correspondence concerning inspection of outgrants will be coordinated with the operations and real estate elements of the district. Project personnel will charge to the real estate compliance inspection cost account only that time on site devoted specifically to assisting the real estate compliance inspection effort.

(2) Compliance Inspections by Real Estate. The Operations Project Manager will be notified in advance of an inspection and will be invited to accompany real estate personnel. The Operations Project Manager should evaluate each outgrant prior to renewal and if warranted, furnish a written recommendation for extending or terminating the outgrant through the operations channels to the real estate element. A copy of the inspection report will be furnished to the operations element. The Operations Project Manager will be furnished a copy of all outgrants and pertinent correspondence.

(3) Human Habitation. Actions to remove those trailers currently on concessions and club sites at Corps projects should be terminated unless the conditions set forth in Section 1134(d) of PL 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).

(4) Private Exclusive Use. Water and land areas at Corps projects are maintained for the benefit of the general public. Since the early 1960's, the permanent siting of floating cabins, cottages and non-transient mobile homes and trailers for private exclusive use at projects areas has been discouraged. Guidelines for implementing the policy on private exclusive use, as well

as for timeshare units, are contained in Appendix B to this chapter. These established procedures are applicable to all new, expanded or existing private exclusive use developments.

#### 2-4. Natural Resource Management Activities.

a. The Corps of Engineers is the steward of nearly 12 million acres of land and water held in public trust at Corps civil works water resources projects. This acreage includes diverse natural resources such as fish, wildlife, forests, wetlands, rangelands, grasslands, soil, air and water, all of which are components of larger communities and encompassing ecosystems. Consistent with the Civil Works Natural Resources Management Program Mission, the Corps stewardship responsibility is to manage, conserve, and protect these natural resources for sustained use by future generations.

b. Natural resources inventories are to be conducted at Corps civil works projects, to provide quantitative and qualitative data for use in determining resource management needs. There are two types of inventories, Level One and Level Two.

(1) Level One inventories are of a general nature and will be conducted to provide baseline information for Master Plan purposes. Level One inventory data will be used to support the resource objectives and land use classifications for the Master Plan. In the absence of identified resource objectives and/or existing inventory data, the Level One inventory will be conducted. The Level One inventory will 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 "Candidate" 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 will 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, aerial photography, U.S. Fish and Wildlife Service, Corps project feasibility documents, etc.). (A Level One wetlands map can be constructed based on Level One soils and vegetation inventory data to determine potential wetland areas.)

(2) Level Two inventories are prepared in support of the resource objectives and/or land use classifications identified in the project Master Plan and the Operational Management Plan. Level Two inventories are required for the effective development, execution and evaluation of specific natural resources management prescriptions. Detailed inventories for "special status species," for example, are Level Two, and these inventories will 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. (Level Two inventories for wetlands designations will be based not only on soils and vegetation inventory data, but also on other critical factor information such as hydrology and hydraulics, and will be determined by expert wetland professionals.)

c. Prepare and approve Master Plans in accordance with ER 1130-2-550, Chapter 3, Preparation of Master Plans. The Master Plan is the document that organizes Congressionally

authorized activities (i.e., established by project specific authorities as well as general authorities for stewardship responsibilities) which are to be conducted on the project. Master Plans will 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, will be identified in Master Plans by either a specific resource objective and/or land use classification.

d. Prepare and approve Operational Management Plans (OMP) in accordance with paragraph 2-4c above: 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.

e. Prepare and approve General Plans for Fish and Wildlife Management (General Plans) pursuant to the Fish and Wildlife Coordination Act. General Plans are 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 where it has been determined that fish and wildlife would share the use of project lands with other uses such as general recreation or where interim use is contemplated. The U.S. Fish and Wildlife Service (FWS) and the Corps have mutually agreed upon procedures for developing General Plans and the formats for General Plans. These model formats are found in Appendix C of this EP.

(1) Procedures for Developing General Plans. The August 1954 agreement between the FWS and the Corps, provides that General Plans for Fish and Wildlife Management, as specified in Section 3 of the Coordination Act (PL 732, August 14, 1946) shall be developed jointly by the Corps and the FWS, and the appropriate State agency for all project lands and waters where management for fish and wildlife purposes is proposed. General Plans are prepared for the purpose of designating the type of use, as between the national migratory bird management programs of the Department of the Interior and the wildlife programs of the respective states, and therein to define lands and waters to be administered by each. Such General Plans should be only as detailed in those respects as may be necessary to indicate the agencies, the areas, and the general purpose to be accomplished under each assignment. The General Plan should not be burdened with operating details which are properly a part of the cooperative agreements understood to be necessary between the Corps and the FWS or the State in making areas available to the latter two agencies subsequent to the completion of the General Plans. In accordance with Section 8 of the August 1954 agreement, the following procedures for the development of General Plans for Fish and Wildlife Management have been developed jointly by the Corps and the FWS.

(a) Reports prepared by the Fish and Wildlife Service in cooperation with the appropriate State fish and game agency, in accordance with Section 2 of the Act of August 14, 1946, shall specify, when appropriate, the necessity for a General Plan for Fish and Wildlife Management in the recommendations of the reports. In accordance with previously established procedures, the reports will be transmitted to the District Commander.

(b) Whenever the use of project lands and waters for fish and wildlife management purposes is proposed, the Service or the appropriate state agency may request the preparation of a General Plan for Fish and Wildlife Management. The formulation of a General Plan shall be a joint cooperative endeavor by the District Commander, Regional Director of the FWS, and the head of the appropriate state agency, by mutual exchange of information pertaining thereto, discussions, and agreement. Normally, the Corps will initiate the preliminary draft of the General Plan after determining the views of the other agencies. Such draft of a General Plan will be submitted concurrently for comment to the other two agencies. Such draft of a General Plan will be subject to approval of the Assistant Secretary of the Army for Civil Works (ASA(CW)), the Assistant Secretary of the Interior for Fish, Wildlife and Parks (ASI(FWP)), and the head of the agency exercising administration over the wildlife resources of the State wherein the lands and waters lie.

(c) After the field offices of the Corps (with ASA(CW) concurrence), the state and the Regional FWS have reached agreement as to the form and context of the General Plan, signature in triplicate by the appropriate state official will be obtained thereto signifying concurrence, and the signed copies thereof will be forwarded by the Corps through channels to higher authority for approval and execution by the ASA(CW) and ASI(FWP).

(d) After completion, conformed copies of the General Plan shall be supplied by the ASA(CW) to each of the three respective parties.

(2) General Provisions for Preparation of General Plans.

(a) Every reasonable effort will be made to reach mutual agreement at an early date with respect to the provisions of General Plan for Fish and Wildlife Management for a project. Where a General Plan is to be prepared, wildlife agencies of the affected states and the FWS will be consulted by the Corps on wildlife matters with a view to reaching tentative agreement on lands and waters to be utilized for wildlife management purposes prior to published hearings on Master Plans.

(b) Project lands and waters of particular value for the conduct of the national migratory bird management program made available to the FWS may, subsequently through a cooperative agreement, be administered by a state in accordance with Section 4 of the Coordination Act, if such action appears to be in the public interest.

(c) Federal and state agencies managing the project lands for wildlife may utilize same for the production of food for the wildlife involved.

f. Natural Resources Management Concepts. Natural resources management activities shall be accomplished through the use of one or more of the following management concepts: stewardship, mitigation, or enhancement.

(1) 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 Master Plan 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.

(a) **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 is 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 Master Plan and the OMP. Preferential treatment will be given to the management of ecosystems, communities, and habitats identified as having special status species.

(b) **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, soils, recreation, water quality and other beneficial uses. The Master Plan will provide for multiple use forest management wherever practicable and compatible with other uses of project land. Where applicable, OMPs will 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.

(c) **Fish and Wildlife Habitat 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. These activities will normally be in conjunction with other Federal, state, and local agencies 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 Master Plan 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 and 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.

(d) **Grassland Management.** Grassland (including rangeland) 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 should be discontinued, where they may be reasonably expected to destroy or significantly alter plant and animal communities occupying a project. The grassland management program will comply with the resource

objectives and/or land use classifications stated in the Master Plan and OMP. Where applicable, the OMP will provide site specific prescriptions for grassland management.

(e) Wetlands Management. The Forest Cover Act provides for the development of 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 with one goal being "no net loss" of wetlands at any one project. 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.

(f) 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 Master Plans 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.

(2) Mitigation. Mitigation measures authorized by Congress 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 identified 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 Master Plan and OMP.

(3) Enhancement. PL 89-72 provides for 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.

g. Natural Resources Protection.

(1) 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. Remedial actions to correct over utilization will be identified in the Master Plan and OMP. Particular attention should be given to carrying capacities for domestic livestock and human use. Where economically justified, fencing may be used as a management tool to prevent unauthorized use and trespass, to protect against environmental degradation and to preserve desirable wildlife habitat.

(2) OMPs will stipulate wildfire control measures. The Corps may enter into reciprocal agreements with appropriate public organizations or agencies for the protection of property from fire. The agreement may provide for the reimbursement of any or all costs incurred in furnishing fire control on Corps lands. Such agreements will 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.

(3) OMPs will provide for monitoring project lands to determine unacceptable pest populations. OMPs will reference the requirements in ER 1130-2-540, Chapter 3, Pest Control Program for Civil Works Projects, for annual pest control plans and for documentation of pesticide use. See also EP 1130-2-540, Chapter 4.

h. Natural Resources Disposal and Removal.

(1) Forest Products. The operations element will prepare the determination of availability for forest products to be sold on project lands. The sale of forest products will 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) A statement of the purpose of the proposed sale.
- (b) An estimate of the volume of the various products made available and the basis for the estimate.
- (c) 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).
- (d) A listing of voluntary Best Management Practices (BMPS) 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.
- (e) Provisions for a final joint operations element-real estate element compliance inspection before release of the contractor at completion of the contract, as required.

(2) 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.

(3) 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 Master Plans and OMPs.

(4) Sand, Gravel and 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 will contain conditions to protect natural resources identified in the resources objectives and/or land use classifications presented in Master Plans and OMPs. Guidance for sale of such products is contained in ER 405-1-12.

i. Pollution Abatement.

(1) Solid Waste Disposal. Solid waste disposal will be by contract with off-project licensed 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) Water Pollution Control. Continuous vigilance for sources of pollution in the reservoir, and in stream tributaries thereto, will 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. The District Commander will assure control of all waste discharges originating on Federal property under his jurisdiction and will provide assistance to Federal, state and local agencies in controlling waste discharges originating outside Federal lands which are polluting federally owned areas. Any request for use of shoreline lands will include information concerning the sewage disposal facilities and health and safety measures to be provided by parties requesting the proposed outgrant.

(3) Air Pollution Control. The resource manager will maintain surveillance of activities near the project that the potential producers of air pollution which may affect the quality of the project with regard to aesthetics or public health and safety. Project activities, such as prescribed burning which might contribute to air pollution shall be coordinated with proper authorities.

(4) Visual Pollution Control. Unauthorized signs, abandoned watercraft and floating facilities, buildings, and other developments which have encroached on Corps property, or any obtrusive, unsightly item that presents an environmental intrusion, is a form of visual pollution. In order to preserve the natural characteristics of land, water and shorelines of Corps projects, steps will be taken to prevent or eliminate visual pollutants on land or water under Corps control.

(5) Noise Pollution Control. The making of continuance of excessive noises at any time or any place and by any means is prohibited when it interferes with an authorized use or project purpose.

(6) Pest Control. The MSC Commander is responsible for implementation of the pest control program, providing for training of pest control personnel, safe use of highly toxic materials and the proper application of restricted-use pesticides. District programs will include control agents, up-to-date and economical methods of control, and the proper use and maintenance of pest control equipment. Field operating activities will designate a single point of contract for pesticide matters. ER 1130-2-540, Chapter 3, Pest Control Programs for Civil Works Projects, assigns responsibilities and prescribes procedures concerning the use of chemicals in the Corps pest control program at all civil works projects. It also presents guidance for the preparation and submission of an annual pest control summary report.

## 2-5. Conservation of Federally-listed Endangered and Threatened Species on Existing Corps Project Lands.

a. This section provides guidance for the conservation of federally-listed endangered and threatened species as well as proposed to be listed endangered and threatened species, occurring on all project lands and waters including outgranted lands. An additional specific purpose is to provide guidance for participation in the US Fish and Wildlife Service/National Marine Fisheries Service (FWS/NMFS) endangered and threatened species recovery plan efforts.

b. The Endangered Species Act states that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of the Act. The purposes of the Endangered Species Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved and to provide a program for the conservation of such federally-listed species.

c. Civil works project lands and waters will be managed in a manner which assists in the overall conservation of federally-listed endangered and threatened species, and the ecosystems upon which they depend. Species which are candidates for listing will also be given consideration. Conservation methods and procedures will be utilized which will enable the inventory and protection of these species of special concern and their habitat, as well as the participation in their recovery.

(1) Inventory. An inventory of all federally-listed endangered and threatened species and proposed species which are candidates for listing, known to occur on project lands and waters will be accomplished. These inventories will be kept current with the listing of species by the FWS/NMFS and the individual states.

(2) Protection. The protection of federally-listed endangered or threatened species that occupy lands and waters under the control of the Corps is mandated by the Endangered Species Act. It is the policy of the Corps to insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any federally-listed endangered and threatened species, "take" species, or result in the destruction or adverse modification of the habitat of such species which is determined by the FWS/NMFS to be critical. Species that are proposed for Federal listing as endangered or threatened species are not protected under the ESA. However, because proposed species may be listed in the future, the Corps will consider proposed species in

making decisions that may affect them, and will avoid taking actions that result in the need to list proposed species.

(3) The Endangered Species Act mandates Federal agencies to utilize their authorities to carry out programs for the conservation and survival of federally-listed endangered and threatened species. The Act also requires the FWS/NMFS to develop and implement recovery plans as a program for the conservation and survival of endangered and threatened species. Therefore, it is the policy of the Corps, in balance with other Corps priority missions, to participate in the implementation of FWS/NMFS recovery plan efforts involving civil works project lands and waters.

(4) Inventory Requirements and Procedures. A baseline inventory (see paragraph 2-4.b(1) above for Level 1 inventory for Master Planning purposes) of federally-listed endangered, threatened, and proposed species occurring on Corps project lands and waters will be completed, documented, and annually updated in the Operational Management Plan (OMP).

(a) Prepare Screening Lists. A screening list of federally-listed endangered, threatened, and proposed species that potentially could occur on project lands and waters shall be obtained from the appropriate FWS Ecological Services field office. Where appropriate, Federal lists of endangered, threatened, and proposed marine and anadromous species shall be obtained from the NMFS regional offices. Requests for these lists should be made in writing. Screening lists shall be updated on an annual basis.

(b) Map Species Distributions. The historic distribution and habitat requirements of each species on the screening lists will be obtained. This information should be readily available at FWS, NMFS, or State natural resource agency offices. Information can also be extracted from files where project construction or operational activities have recently undergone consultation under Section 7 of the Endangered Species Act. The information will then be summarized into the text and maps of Master Plans as an update in accordance with ER 1130-2-550, Chapter 3, Preparation of Master Plans. Only broad habitat types where a species is known to occur or its habitat requisites are readily known to be met are to be mapped. Any habitat occurring on project lands or waters and designated by the FWS/NMFS as critical habitat will be so mapped. Once personnel have a good working knowledge of the species of concern and their habitat requirements, observations made in the field during the course of a year will be documented in the annual OMP update.

(c) Determine Which Species Occur Regularly. Each species on the screening lists shall be carefully reviewed each year for its known occurrence on project lands and waters. The main objective of this effort is to determine which species on the screening lists occur on a regular seasonal basis. Presence and abundance of federally-listed endangered and threatened species will be determined by the procedure identified in the OMP. The FWS and NMFS can provide some information on each species current locations known to the agencies. Project Office field observations can supplement the provided information. State natural resource agencies and Natural Heritage offices, colleges and universities, organizations such as the Nature Conservancy, and other fish and wildlife oriented organizations should also be contacted for any available information. Based on the information received and past field observations, a determination shall be made, and the rationale documented, of each species type of occurrence (e.g., resident species, uncommon resident species, wintering species, common migrant, uncommon migrant).

(5) Consultation and Conference Requirements and Procedures. Conference and consultation are processes by which interagency (Corps and FWS/NMFS) cooperation is achieved pursuant to Section 7 of the Endangered Species Act. The Corps will confer with the FWS/NMFS on actions that may affect proposed species, or habitat proposed for designation as critical. The Corps will consult with FWS/NMFS on any natural resources management action that may affect a federally-listed species or its designated critical habitat. The procedures for carrying out this consultation or conferencing are contained in 50 CFR Part 402, and are required by Section 7 of the Endangered Species Act. A permit shall be obtained from the FWS/NMFS for any action taken for scientific purposes or to enhance the propagation or survival of the affected species.

(6) Recovery Requirements and Procedures. The development and implementation of progressive programs for the conservation and management of fish and wildlife resources on Corps project lands has long been a requirement. A component of this requirement is the Corps' participation in the development and implementation of effective recovery plans for federally-listed endangered and threatened species. The recovery of Federally-listed endangered and threatened species is necessary to reverse the decline of each listed species and ensure its long-term survival. When this goal is met, the FWS/NMFS can take steps to delist the species. The recovery effort requires a long-term commitment of the Corps.

(a) Identify Corps Projects Targeted for Recovery Efforts. Within the FWS, regional directors are responsible for implementing recovery plans for species that occur in their regions. The FWS designates a lead Region to coordinate recovery activities for species which occur in more than one Region. Within the NMFS, the Office of Protected Resources and the appropriate NMFS regional office(s) coordinate recovery plan implementation. FWS/NMFS regional offices will be contacted to determine which existing recovery plans, or recovery plans under development, target Corps project lands and waters in the recovery effort. Copies of applicable plans will be obtained for review.

(b) Review Applicable Recovery Plans. Recovery plans delineate site-specific actions which are believed by the FWS/NMFS to be required to recover and/or protect a species. Recovery plans do not necessarily represent the views nor the official positions or approvals of any agencies other than the FWS. Approved recovery plans are subject to modification as dictated by new findings, changes in species status, and the completion of recovery tasks. An assessment will be made of the needed Corps natural resource management actions identified in each applicable recovery plan. A determination will be made of the reasonableness of each action. Alternative designs will be developed and evaluated for major cost items prior to Corps acceptance of the item. Those actions found unreasonable will be brought to the attention of the FWS/NMFS for resolution.

(c) Determine Recovery Priorities. The FWS has a recovery activity priority system based upon the degree of threat confronting the species, recovery potential, genetic distinctiveness, and conflict with economic activities. The system ranks the tasks within each species' plan. A priority 1 task is an action that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future. A priority 2 task is an action that must be taken to prevent a significant decline in a species population/habitat quality, or some other significant negative impact short of extinction. A priority 3 task is any other action necessary to provide for full recovery of the species. The NMFS system is modeled after the FWS system and differs in only a few respects. The primary difference is that the NMFS system does not take taxonomy into account. An assessment will be made of the prioritization of natural

resource management tasks in each applicable recovery plan for implementation and budgeting purposes.

(d) **Implement Recovery Action Items.** Applicable recovery action will be incorporated into OMPs as an update in accordance with this pamphlet. Also, the Endangered Species Act requires that each Federal agency, prior to implementation of a new or revised recovery plan, consider all information presented during the public review of the recovery plan.

(e) **Participate on Recovery Teams and in the Development of Recovery Plans.** When invited by the FWS/NMFS to participate on recovery teams for the purpose of developing or revising recovery plans, Corps natural resource management experts will be encouraged to do so within manpower constraints. When any Corps project lands and waters are targeted for a significant role in the recovery of a species, a request will be made to the FWS/NMFS for the involvement of qualified Corps personnel in the development of the recovery plan. The objectives of this involvement will be to ensure the development of a well-coordinated plan, and to facilitate implementation of the plan.

(7) **Budgeting Requirements.** All conservation activities identified will be accomplished when funds are available through the budget priority process presented in the Annual O&M Budget Guidance.