

SECTION XIII
OPERATIONAL MANAGEMENT
PLAN OBJECTIVES

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13-01 INTRODUCTION

The Operational Management Plan (OMP), under separate cover, details implementation of several program areas only conceptually addressed in the Master Plan: recreation, safety, shoreline management, forest management, fire protection and fish and wildlife management.

13-02 RECREATION

a. SCOPE

A detailed discussion of project recreation management is contained in the OMP. The guidelines and policies set forth in this section are the basis for preparation and implementation of the OMP relative to efficient recreation management at the lake. The OMP will be updated after approval of the Master Plan.

b. GOAL

The goal of the lake recreation program is the efficient operation and maintenance of lake facilities to maximize public benefits and implement authorized project purposes. This is accomplished through the effective organization and utilization of manpower and materials.

c. PURPOSE

In the administration of the lake, management objectives contributing to lake efficiency and requiring the allocation of manpower and funding include:

- (1) The provision of a wide range of outdoor recreation opportunities and facilities in a relatively natural setting.
- (2) Reduction in conflict of use through activity and area zoning. The administration of lake lands as designated in paragraph 8-01, and on the Land and Water Use Plan (see PLATE 2).
- (3) The provision for visitor information regarding natural resources and ecologic areas along with any other outstanding features.
- (4) The development of policies which provide for maximum sustained public use without undue deterioration of lake resources.
- (5) The provision of additional recreational opportunities through the issuance of leases to private individuals, state governments and other political subdivisions for concession and public park development.
- (6) The maintenance of facilities and grounds to a high standard.
- (7) The provision of a safe and rewarding outdoor recreation experience to the visiting public.

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(8) The provision of populations of both game and non-game species so that all interest groups using lake facilities will have the opportunity of receiving benefits from wildlife. SECTION VII includes, in greater detail, the goals and objectives of the Fish and Wildlife Management Program.

d. STAFFING

The total staff for Operations and Maintenance assigned to Carlyle Lake is 23.2 full-time-equivalents (FTE), including office, secretarial and management. At present, the total permanent staff is 18. An additional 9.0 FTE of student help is allocated per year.

The project manager and staff are responsible for all aspects of operations, maintenance and administration of a water resource development project and its natural and cultural resources. The ranger staff is responsible for natural resource management, outdoor recreation, administering service contracts, health and safety of visitors, pollution abatement, visitor assistance, boundary surveys and marking, working with state and local agencies and informing the public of Corps activities. Maintenance workers and contract personnel are responsible for maintaining and servicing the hydraulic structures, replacement of sand at beaches, realignment of protective buoys, erosion repair, seeding, fertilizing, tree and shrubbery planting, maintenance of trails, painting, repair of facilities (benches, tables and signs), road maintenance and repair, maintenance of comfort stations, shower buildings, miscellaneous facilities, and preventive maintenance particularly on all buildings.

13-03 SAFETY

a. GENERAL: A project safety program that identifies common, recurring hazards or unsafe conditions and presents actions that will eliminate or reduce them is included in the OMP. The objectives of this plan expressed in general terms will be: to assign responsibilities for administration of a viable safety program; to establish programs for training and familiarizing personnel in all aspects of safety; and to present guidelines relative to employee safety and visitor safety.

EM 385-1-1, "Safety and Health Requirements Manual" and Engineer Regulations in the 385 series establish the safety program requirements for all Corps of Engineers activities and operations. Pertinent provisions of EM 385-1-1 and other applicable regulations are applied to all activities. Resource personnel have become familiar with these instructions and implement and enforce those provisions applicable to all Corps personnel, contract personnel and the visiting public. Other measures that are employed to maintain health and safety include, but are not limited to the following:

(1) The project manager has appointed a member of the project staff as the project safety officer. The project safety officer will develop plans and programs to carry out the provisions of EM 385-1-1 and the Engineer Regulations in the 385 series.

(2) Safety education lectures are given to Government personnel by immediate supervisors as required by EM 385-1-1.

(3) Resource management training courses and requirements comply with Section 1 and 2 of EM 385-1-1.

(4) The project safety plan portion of the OMP is used in program planning and operation.

(5) Project personnel promote, develop, and maintain public interest in recreational safety through the establishment of water safety councils. Personnel also participate in and take advantage of programs offered by organizations such as the National Water Safety Congress, National Safe Boating Council, U.S. Coast Guard, Coast Guard Auxiliary, Power Squadrons, the American Red Cross, and the National Association of State Boating Law Administrations. Guidance and assistance is obtained from the District safety office.

(6) Safety equipment and materials such as first aid kits, search, rescue and recovery equipment; portable signs and barricades; communications equipment; vehicles; motor launches; and fire fighting equipment are maintained at each project.

(7) Restricted areas, swimming areas, danger zones, and hazardous areas are properly marked with the appropriate buoys, markers, signs, or barricades which conform to the current Uniform State Waterway Marking System and the Manual on Uniform Traffic Control Devices for Streets and Highways (U.S. Department of Transportation, Federal Highway Commission D6.1, 1978). Such devices are placed and maintained to insure the public is adequately safeguarded against hazards. Tailwater areas and areas immediately above spillways and dams are properly marked with signs, buoys, booms, or other markers. Project roads and boat launching ramps are adequately signed, marked, or barricaded for proper use and protection of the visiting public.

(8) All facilities and equipment comply with applicable Occupational Safety and Health Administration (OSHA) Standards.

(9) Commercial telephone for emergency use is provided in public use areas where feasible.

(10) Adequate security lights are provided at all boat launching ramps when the lights are available at a reasonable cost. In areas where electrical service is not readily available, reflective type signs/markers have been installed and maintained to identify ramp locations.

(11) Information bulletin boards are provided in public use areas containing location charts, emergency numbers, Title 36 rules and regulations, safety tips and other information of interest to the visitor.

b. Search, Rescue and Recovery. These activities are directed by the County Sheriff and normally conducted by state and local authorities. The safety of Corps personnel is a major consideration at all times during search and recovery operations. Corps personnel will have proper equipment and training for these activities. An updated search and rescue plan is being developed with the Sheriff departments of Clinton, Bond and Fayette counties.

13-04 SHORELINE MANAGEMENT

The subject of shoreline management is fully addressed in the OMP. The Shoreline Management Plan was prepared and implemented as a management tool to lessen the impact of private exclusive use along the public shoreline of Carlyle Lake. The plan was prepared under authority of Title 16 United States Code 460d; Title 36 Code of Federal Regulations 327.30 Shoreline Management at Civil Works Projects as implemented by Engineer Regulation

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1130-2-406, 31 October 1990. The objective of the plan is to provide policy and guidance for the protection of shorelines where degradation has occurred. Four basic considerations were used in formulating the Shoreline Management Plan. These were: a) the demand for water oriented recreational facilities is increasing while the amount of shoreline is fixed; b) development of private property adjacent to the project is certain to continue; c) some areas of the lake are impractical for moorage due to physical factors such as access, water depths, aesthetics, wind or wave action; d) the ownership of land adjoining public projects does not convey special rights or privileges to use of the public land and waters.

13-05 FOREST MANAGEMENT

a. SCOPE The policies and guidelines established in this section are the basis for the preparation and implementation of the OMP.

b. POLICY

The goal of forest management at Carlyle Lake is to attain through prescribed silvicultural practices, a natural ecologically healthy forest component. Forest resources are being managed to increase their total recreation, wildlife, aesthetic and commercial values. Selected timber management practices are utilized for the control of soil moisture, erosion, increased forest growth and to promote adequate future supplies of timber through a sustained yield program carefully calculated to protect the total forest resource.

Adequate measures will be taken for protection of forest resources from insects, disease, fire, and overuse. The objective of the Forest Management Program is to increase the value of all lake lands for recreation, wildlife habitat maintenance.

c. PLAN PREPARATION

The OMP contains specific information regarding the forest management program in the Natural Resource Management Section. It is prepared through a coordinated District effort. The plan divides the land area into workable compartments and provides a treatment prescription for each consistent with its land use allocation.

d. FOREST MANAGEMENT OBJECTIVES

All lands in Government fee ownership are managed to upgrade their forest resources. The extent of management practices is largely dependent upon land use allocations. Lands are continuously and simultaneously available for their primary land use classification as well as forest manipulation. General management considerations on the basis of land use allocation are described below: (See PLATE 2 for the location of each category of land use described)

(1). Recreation Lands. The nature of these lands, when developed, require intensive management practices to protect and maintain their high aesthetic values. Cultural practices such as pruning and cutting are done only for public safety, construction, to increase turf vigor, and to improve aesthetics. Planting occurs where needed with top priority given to shade, screening and aesthetic values.

(2). Recreation - Low Density Use Lands. Public use of these lands is more limited than for high-density use lands. Therefore, forest management practices take a more intensive scope. Harvesting is accomplished for construction, wildlife habitat maintenance and timber stand improvement. Planting is given priority in old fields where new population tree and shrub species create high wildlife and aesthetic value.

(3). Wildlife Management Lands. The management of wildlife lands will be oriented toward developing habitat for both game and non-game wildlife. Where canopy closure is restricting, removal of a portion of the over story accomplishes necessary browse development. Where possible, planned thinnings will produce commercially marketable timber. During thinning cuts, consideration is given to trees that have the lowest potential value for den trees or the production of mast. Where openings are necessary to diversify the overall habitat, complete removal of all trees on certain areas is prescribed. Timber or firewood sales have proven to be an effective method to accomplish this. Adjoining fields will be evaluated and suitable shrubs or trees will be planted as the need arises.

(4). Environmentally Sensitive Lands. Natural areas are selected to preserve existing unusual specimens, ecosystems, unusual geological formations, etc. in their natural state, and no active forest improvements will be undertaken at such areas. Management on these areas is as follows: No timber stand improvements will be allowed; removals will be made only for the purposes of providing access or for construction; paths will be allowed between "set aside" natural areas but no development will be allowed within the actual natural area; these will be allowed to develop naturally without any outside influence. Any newly qualified sites discovered throughout the years will be recommended for designation through the Master Plan process. An attempt will be made to designate a significant acreage to this allocation where the quality and uniqueness are great enough to dictate this designation.

(5). Historical and Archaeological Lands. The trees and grasses will be managed to improve, preserve, and make available the features that have historical significance. Vegetation and trees may be removed to uncover structures, allow more light, remove dangerous trees, or to reconstruct parts of the features. No standard forest practices will be undertaken on the site or near enough to detract from its appearance. The historical and archeological lands will be managed as described above. When public facilities are constructed on lands in this category, they will be managed the same as Recreation Lands.

(6). Vegetative Management Lands. Management activities for these lands includes protection and development of forest and vegetative cover and wetland restoration. All lands in Government fee ownership are being managed to maintain their forest resources for recreation, wildlife, and scenic values.

13-06 FIRE PROTECTION

a. GENERAL

A fire protection plan that serves as a guide for the prevention and suppression of forest and grass fires on Carlyle Lake lands is contained in the OMP. The objectives of a fire protection plan should be three-fold: fire prevention, presuppression, and suppression. These objectives should be based on the following guidelines:

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(1). Fire Prevention. To reduce the number of man-caused fires is the primary goal of management personnel. Fire problem areas must be determined, and prevention programs must be established to create public awareness of the destruction caused by fires.

(2). Presuppression. Presuppression planning will be aimed at establishing an efficient fire control organization utilizing project personnel. This fire-fighting force will operate in close coordination with similar units provided by the State of Illinois and local fire departments.

(3). Suppression. Once fires have been started, established procedures to control them must be implemented. These procedures will be outlined in detail in the OMP. The lake manager will update the Fire Protection Plan annually so that improved techniques learned from actual fire-fighting experiences may be incorporated into it.

13-07 FISH AND WILDLIFE MANAGEMENT

a. SCOPE

The objectives and guidelines established in this section will be the basis for the preparation and implementation of the portion of the OMP dealing with fish and wildlife management practices.

b. POLICY

The program objective is to provide the maximum number of fish and wildlife species desired for the use and enjoyment of the public, consistent with the multiple objectives of the lake and habitat carrying capacity. One purpose of the OMP is to outline the on going fish and wildlife habitat development and maintenance program for Carlyle Lake. The scope of the plan is to biologically evaluate fish and wildlife habitat on specific areas and prescribe practices for improving or maintaining habitat on these areas; to evaluate the success of the plan as it relates to wildlife production; and to maintain cooperation between the Corps of Engineers and other Federal and State agencies in the development of water resource programs. Non-consumptive uses of wildlife, such as sightseeing and photography, receive equal consideration with that of consumptive uses, such as hunting. Vegetative and water level manipulation and agricultural cropping, are the principal methods of fish and wildlife habitat improvement and are consistent with other joint uses and basic physical limitations at Carlyle Lake. Lake operation procedures are continually being reevaluated and updated as required to support this program. Coordination is maintained with the IDNR to establish criteria and programs for favorable water levels for fish and wildlife habitat.

c. SPECIFIC RECOMMENDATIONS PLAN PREPARATION

The OMP is a coordinated District effort and divides the area into workable compartments. The Plan provides a prescription for each area based upon its use as described in the Master Plan.

d. WILDLIFE MANAGEMENT OBJECTIVES

Fish and wildlife resources will be generally managed as outlined below:

(1). IDNR Fish and Wildlife Management Programs. A portion of the Government's fee land and water at the northern end of the lake has been licensed to the IDNR. On this 8,178 acres of land and water, the primary effort of the Department has been the intensive development of this area for quality habitat primarily for waterfowl.

The state's management objectives for the outgranted area are:

- (a) To manage the area to provide high quality habitat conditions for wildlife species that use the Carlyle Lake area;
- (b) To consider the overall ecology of the river basin from a conservation, aesthetic, and recreation standpoint;
- (c) To make these lands and waters available to the public and;
- (d) To provide the maximum days of recreation use that is compatible with the resources.

(2) Fisheries Management Program

Operation of lake levels for the purpose of fish management includes maintenance of stable or slowly rising water levels during critical spawning seasons (approximately May 15 to June 15), and possible fall and winter drawdowns to increase predation success and productivity.

The Division of Fisheries of the IDNR is responsible for those aspects of fish management at Carlyle Lake which do not pertain directly to changes in the surface elevation of the lake. The fish management program is supervised by a professionally trained Reservoir Fisheries Biologist stationed at Carlyle, Illinois.

The IDNR, in coordination with the Corps of Engineers, will conduct all fish rearing and stocking operations in the lake to insure sufficient and desirable populations of fish species.

In order to collect data to guide in management actions, a creel census and a fall fish population survey are conducted annually by the Department of Natural Resources.

(3). Corps Wildlife Management Program. Lands not outgranted to other agencies are managed for wildlife by the Corps. Seven general land management practices are used to develop or maintain wildlife habitat. Soil type, topography, elevation, size of area, access and land use determines which practice or combination of practices are used. Land units are divided into compartments and sub-units called areas. Soil is tested on all sites to be planted and the area fertilized according to soil testing laboratory recommendations. All compartments and areas have prescriptions including wildlife habitat improvement recommendations. One-fifth of the compartments will be reviewed and prescriptions updated annually. The seven land management practices are:

(a) At developed recreation areas, wildlife habitat improvement is limited to the planting of tree and shrub species beneficial to wildlife.

(b) Natural plant succession will be allowed to occur. A natural progression from annual weeds to biennial and perennial vegetation, including shrub and tree planting, is permitted.

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(c) Natural succession is allowed to occur, but moderate agricultural practices are applied aimed primarily at prolonging the annual weed production stage. Natural plant succession is managed to favor an interspersed of food, nesting, and cover-producing vegetation.

(d) Practice No. 4 will be an expansion of Practice No. 3. Practice No. 3 is implemented, but with the added establishment of shrub rows in fields. These hedge rows provide food, cover, and more edge environment.

(e) Agricultural food plots are developed where needed or along shrub rows developed as in Practice No. 4. Food plots are established at areas where there is no adjacent private cropland food source or the cropland is over one-fourth of a mile from the hedge row.

(f) Controlled burns are required for some habitat types. This practice is used to manage existing or reestablished mature tall grass prairie. Controlled burning is recommended every three years.

(g) In wooded areas various forms of timber stand improvements are required to release more desirable mast bearing trees and create varying basal area desirable for different forms of wildlife.

(4). Endangered Species. The bald eagle is the only federally listed threatened or endangered species known to presently inhabit the Carlyle Lake vicinity. However, a public awareness of endangered species will be developed through the posting of informative material on the animal or plant. Lake personnel will report any observations obtained of endangered species to the District Resource Specialist in the District Office. Personnel of the U.S. Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife at Springfield, Illinois, will then be notified of the sightings.

(5). Diseases of Fish and Wildlife in the Carlyle Lake Vicinity. Project personnel will be alert for signs of fish or wildlife disease outbreaks. Sick or dead specimens will be delivered to the U.S. Department of Agriculture's Regional Diagnostic Laboratory at Centralia, Illinois. The District Resource Specialist will be immediately notified of die-off problems and he will in turn notify area biologists of the IDNR. The public will be notified of serious disease outbreaks through standard media outlets and procedures.

(6). Hunting and Hunter Control. Rules and regulations pertaining to public use and hunting management are prescribed by Administrative Orders authorized by the IDNR. The result of annual meetings between representatives of the Corps and Department of Natural Resources is the signing of a Memorandum of Understanding. At these meetings, viewpoints of a regulatory nature are exchanged and a format is developed for a safe, managed hunt program. Important safety items stressed by Corps representatives are included in the state's administrative orders and are enforced by the Department of Natural Resources law enforcement officers.

(7). Interrelationship Between Programs. Other programs, such as vector control, weed control and pest control will be discussed as an integral part of the OMP.

(8). Recreation Site Development. During the planning and development of recreation sites, consideration is given to wildlife through the prudent integration of proposed developments and natural vegetation. Mitigation measures are developed to lessen the impact on wildlife habitat.

(9). Short and Long-Range Plans. The OMP, will constitute the annual or short-range working program for Carlyle Lake. This program applies to all Corps managed land. Long-range plans which predicate the development of intensive recreation areas on wild lands will consequently alter the wildlife habitat development of these lands. When intensive recreation area development occurs, wildlife habitat development at these sites will be similar to the tree and shrub planting habitat maintenance program being pursued at the present recreation areas.

(10). Fish and Wildlife Management Organization and Responsibility. The Project Manager, through the Lake Resource Ranger, will prepare 1) Compartment Prescriptions, and 2) Annual Work Plans, in order to implement the lake fish and wildlife program. The Lake Resource Ranger is responsible for implementing and making recommendations for updating the OMP. Preparation of prescriptions, annual work plans, and the OMP five year update will be a coordinated District effort.

(11). Work Plans and Their Implementation. The Project Manager, with the assistance of the Lake Resource Ranger, prepares annual work plans and reappraises wildlife habitat conditions. These plans are used to implement the necessary on-the-ground work in compliance with OMP.