

SECTION VII - RESOURCE USE OBJECTIVES

7.01 GENERAL

The purpose of this section is to define and prescribe a series of resource use objectives for Clarence Cannon Dam and Mark Twain Lake.

Resource use objectives are statements specific to Mark Twain Lake that provide general guidance and direction for the use, development, and management of project resources. The objectives listed below have been determined through study and analysis of regional needs, public input, and resource capabilities and potentials.

As stated in Section I, the authorized purposes for Clarence Cannon Dam and Mark Twain Lake are flood control, hydropower generation, recreation, fish and wildlife conservation, water supply, and incidental navigation. Certain project purposes, by their nature, can be conflicting. For example, under certain conditions, the flood control purpose of the lake can conflict with the other project purposes of recreation and fish and wildlife conservation. The development of sound resource use objectives increases user satisfaction and minimizes conflicts between project purposes through compromises that do not seriously detract from the achievement of any or all project purposes.

Resource use objectives based on project purposes at Clarence Cannon Dam and Mark Twain Lake are identified and discussed in the following paragraphs.

7.02 RESOURCE USE OBJECTIVES

Seventeen resource use objectives, applicable to the project, are presented below. They are formulated to provide general guidance and direction to the overall management and development of Clarence Cannon Dam and Mark Twain Lake resources. The objectives are grouped into three categories: General, Recreation, and Environmental Stewardship.

a. General

(1) Administration and Management. Ensure that quality administration and management of all project lands, waters and other associated man-made and natural resources are consistent and thorough. Seek to continually increase

efficiency, cost effectiveness, and innovation in projects while keeping public use and enjoyment as a goal as well.

(Discussion) All project administrative and management decisions/actions will adhere to all applicable laws, regulations, policies, and agreements. Consistent coordination, both internally and with other applicable federal, state, and local government agencies, private organizations and individuals, will be maintained.

All actions and/or plans will be implemented in a manner compatible with authorized project purposes and all applicable social and environmental factors to insure maximum benefits. Compromise will be used to minimize conflicts in project uses and development.

(2) Regional Economic Growth. Contribute to and develop partnerships with communities, agencies, groups, and individuals with the common goal of lake and regional tourism and economic development in the tri-state area.

(Discussion) The region around Mark Twain Lake is nationally known for being the birthplace and boyhood home of author Mark Twain. An effort to promote and develop upon both the historical significance of the area and recreational opportunities available can be most efficiently accomplished through the joint effort of the Corps and other groups, local communities, and individuals. The continued development of joint projects designed to inform and attract visitors to the region will benefit the entire area. Current associations with interested parties have proven to be very successful. The expansion of these partnerships will continue to increase area tourism and economic growth.

The use of partners to assist with the operation and management of the project will be fully employed. When feasible, donations and the challenge cost-share program will be utilized to accomplish work. Section 225 of Public Law 102-580 grants authorization to the Corps to enter into cooperative agreements with non-federal public and private entities to provide for operation and management of recreation facilities and natural resources at civil works projects. The Corps may accept contributions of funds, materials and services from non-federal public and private entities. The services of volunteers are accepted under PL 98-63 to carry out any activity of the Corps except policymaking or law or regulatory enforcement. Partnerships with the Tri-City Commission, the Missouri Department of Conservation, National Rifle Association, Missouri Equine Council, Mark Twain Lake Chamber of Commerce, Paris Lions Club, and other groups have provided great benefits to the public through additional facilities and special events.

Relationships with our partner agencies and local constituent groups will be maintained and strengthened; volunteers will be utilized maximally and our use of cooperating associations will be continued. If feasible, agreements will

be formed with local cooperating associations to assist with operations related to natural resource management, interpretive and visitor service activities.

b. Recreation

(1) Quality Recreational Experiences. Seek to increase the quality of visitor experiences by maintaining and developing purposeful, functional recreation areas that meet the needs of visitors while maintaining the aesthetic integrity of the environment.

(Discussion) Opportunities to improve the quality of recreation experiences are influenced by carrying capacity, compatibility of activities, and site-specific design factors. An aggressive maintenance program will continue to be used in order to maintain the quality of all recreational areas. Rehabilitation efforts designed to stop environmental degradation and facility deterioration will continue to be a top priority. A management goal will be to provide visitors with diverse and cost-effective recreation opportunities. Efforts will continue to be made to reduce the impacts of pool fluctuations on facilities and public use.

(2) Facility Management. Provide facilities that meet the needs of the visitors to the region. Maintain, develop and alter facilities in order to meet the changing and diverse use patterns of the visitors to the park. As funds become available, renovate and upgrade recreation areas to improve available facilities and reduce maintenance costs.

(Discussion) There is a need for providing visitors with a diverse range of day and overnight recreational opportunities. Four campgrounds, three group camp areas, two tent camping areas and a backpacking area provide accommodations for overnight visitors seeking a diverse range of camping needs. Current efforts are directed to upgrading electrical service to 50 amps and adding full service hookups in the campgrounds to accommodate visitor demand and stimulate visitation to the area. Numerous day use facilities managed by the Corps of Engineers and the Missouri Department of Natural Resources provide visitors with opportunities in boating, picnicking, swimming, and fishing. Two marina concessions provide visitors with additional opportunities. The need for additional concession services including resort and marina developments have been identified through market feasibility studies and efforts will be made to meet this critical demand.

All developed recreation areas designated for recreation use are regularly evaluated for the presence of safety hazards and environmental compliance with the Environmental Review Guide for Operations (ERGO) guidelines. As any detrimental conditions are identified, they will be given priority for evaluating and implementing feasible corrective actions.

(3) Barrier-Free Access. Increase outdoor recreational opportunities for the elderly, disabled, and other disadvantaged groups by providing barrier-free access and special programs to accommodate their needs. Continue to identify, build, modify, and redesign areas/facilities as mandated by Uniform Federal Accessibility Standards (UFAS) and Americans with Disabilities Act Design Guidelines (ADADG).

(Discussion) All persons must be given access to a wide range of outdoor recreation activities through careful and appropriate planning, design and program implementation. Accordingly, consideration is given to accessible facilities and services for disabled persons in the planning, design, and operations of existing recreation areas, and the development of future public use areas at the project. Shoreline fishing access for the physically challenged and the elderly continues to be a need that warrants attention. Efforts are underway to meet this need through the development of a small accessible lake in the Frank Russell Recreation Area and the construction of accessible fishing piers in the North and South Spillway Recreation Areas. Special hunts for the physically challenged are offered to enhance recreational opportunities for these needs.

(4) Interpretive Services and Outreach Program (ISOP). Strengthen the ISOP to foster stewardship and enhance public safety through promoting a greater public awareness, understanding, and appreciation of Mark Twain Lake and its natural and developed resources. Leverage project fiscal resources through the development of strong partnerships with state and federal agencies, local constituent groups, and with support of a cooperating association and volunteers.

(Discussion) The Mark Twain Lake ISOP includes the management of public affairs, community relations, marketing, publications, tourism, interpretive and environmental education programs, special events, and the visitor center. This program enhances the Corps of Engineers image, provokes public interest in Mark Twain Lake and the surrounding area, and promotes public safety.

All activities under the ISOP shall be designed to accomplish one or more of the goals listed in ER 1130-2-550, Chapter 4. In addition to visitor center exhibits, other tools used to enhance the ISOP include but are not limited to, programs both on- and off-site, news releases, a call-in information line, web site, brochures, fliers, posters, billboards, public service announcements (PSAs), off-project displays, newsletters, interpretive trails, and special events.

The use of partners to assist with the operation and management of Mark Twain Lake will be fully investigated and implemented when necessary. When feasible, donations, challenge partnerships, and volunteers will be utilized to accomplish work.

A relevant ISOP enhances the visitor's experience and enjoyment by anticipating their needs and providing interpretive resources to meet those needs. The ISOP can empower and provoke the public in a very effective manner and is critical to achieving success in fulfilling the Corps of Engineers stewardship missions. Once the public understands and appreciates the project resources, it can join forces with the Corps of Engineers to protect and preserve them. Through proper marketing and public relation techniques, the ISOP can effectively enhance the public's understanding of the resources.

(5) Environmental Protection. Continue to provide a rewarding experience for visitors by monitoring, maintaining, and improving the aesthetic and environmental quality of the area. Sites will be monitored and steps taken to prevent damage or rehabilitate areas before site impacts have any negative effects on visitors' experiences or the environment. Use of all areas for public enjoyment will be encouraged while minimizing any environmental degradation.

(Discussion) The development of recreational facilities and opportunities will not only satisfy the technical requirements of the effort but also incorporate environmental protection and enhancement techniques. Site designs, site hardening, impact deterrence, and natural landscaping will be used to accomplish this goal. Water quality in the lake is monitored at least four times per year. Boat and land patrols and reports from concerned citizens enable us to locate point and non-point source contamination areas.

(6) Special Events. Continue to support special events to serve the mission of the Corps and to promote economic benefits received by the region. This will be accomplished by continuing to provide special events annually as funding permits and through partnerships with other agencies and groups.

(Discussion) To promote public safety, the Corps will provide events such as "Mark Twain Lake Waterfest" and the "Women in the Outdoors" event as well as continuing to speak on safety issues on and off-site at all public contacts. Other events are staged to promote economical benefits to local businesses and improve tourism. The "Mark Twain Lake Rodeo" and the "North American Bullriding Association World Championship Finals" each attract approximately 20,000 visitors to the area each year. Events such as the "Primitive Artifacts Weekend", "An Adventure in Astronomy", the "Salt River Folklife Festival", "Missouri Mule Days" and the "Environmental Education Day" promote public awareness about environmental, scientific, cultural, and historical messages for the Corps and the local area. The following events may be pursued with interested partners to promote visitation and economic benefits to the region: farmers markets, car shows, and fishing tournaments.

c. Environmental Stewardship

(1) Conservation of the Resource. Continue to monitor project resources to ensure protection against fire, overuse, abuse, off road vehicle activity, insect and disease infestation, encroachments, and trespasses. Corrective actions will be implemented to resolve problems.

(Discussion) We will strive to achieve environmental sustainability and recognize the interdependence of life and the physical environment. Seek balance and synergy among human development activities and natural systems by designing economic and environmental solutions that support and reinforce one another. Continue to accept corporate responsibility and accountability under the law for activities and decisions under our control that impact human health and welfare and the continued viability of natural systems. Seek ways and means to assess and mitigate cumulative impacts to the environment. Build and share an integrated scientific, economic, and social knowledge base that supports a greater understanding of the environment and impacts of our work. Respect the views of individuals and groups interested in Corps activities and our projects. Listen to them actively and learn from their perspective in the search to find innovative solutions to the problems that also protect and enhance the environment. The partnership with the North Fork Watershed Group and the Clarence Cannon Wholesale Water Commission will continue with direction towards resolving water quality and erosion problems in the North Fork watershed and the entire Salt River watershed.

(2) Wildlife. Public land will be managed to encourage optimal utilization by the greatest number and diversity of wildlife species through the manipulation, management, and protection of habitats and ecosystems.

(Discussion) Management activities to provide food, nesting, and escape cover will include succession control through mowing, prescribed burns and agricultural practices, native grass, food plot, and tree plantings, and selective forest and wetland management practices. All management activities will be accomplished using applicable scientific and professional standards and practices. Habitat manipulation techniques and ecosystem approaches will be implemented to maximize the carrying capacity of various vegetative conditions. Erosion control and soil conservation practices will be utilized to improve water quality and watershed characteristics.

(3) Forest. Forestlands will be managed for multiple use to enhance their ecological, scenic, recreational, and wildlife values.

(Discussion) Sustained yield management will provide for diversity in all age groups and species composition. Inventories and prescriptions will be used to monitor and maintain forest cover for its scenic, recreational, water quality, fishery, and wildlife values. Silvicultural practices may be used for disease and

pest control, fire hazard reduction, habitat manipulation, and improvements to species composition.

(4) Cultural Resources. Identify, evaluate, and preserve significant archaeological and historical sites. Implement established procedures for inadvertent discoveries of Native American burials.

(Discussion) Continue to preserve and protect the “Crigler Mounds” National Register of Historic Places site and consult with the Missouri State Historic Preservation Officer as necessary. Continue to consult with the appropriate federally recognized Native American tribes as necessary. Numerous archaeological and historical sites were identified on Corps lands during various surveys. The implementation of the Historic Properties Management Plan will provide for these sites to be identified, evaluated, mitigated or managed for the benefit of future generations. Archaeological resources recovered prior to construction have been inventoried and are preserved at the University of Missouri-Columbia.

(5) Soils. All land management activities will be based on suitable soil types, soil characteristics and land use capabilities.

(Discussion) Use soil conservation practices that minimize the effects of wind, water, and mechanical erosion. Consult with the Natural Resources Conservation Service in the respective counties to evaluate and implement suitable management practices. Develop strategies that demonstrate sound public land stewardship in all Corps decisions. Conservation measures designed to prevent soil loss such as maintaining riparian corridors and grass waterways, stream bank stabilization, terraces, fertilization and turf renovation will be implemented on project lands.

(6) Wetlands. Establish, maintain, and protect high quality wetlands to improve water quality and provide habitat for wetland flora and fauna.

(Discussion) Development and maintenance of wetlands using moist soil units, the creation of opportunistic wetlands, strip cropping in suitable areas, and establishment of wetland plants will continue in support of applicable parts of the North American Waterfowl Management Plan and the project “Environmental Action Plan”. Management of the 3000-acre waterfowl refuge will continue in the Middle and Elk Fork branches of the lake. Wetland units in the re-regulation area will continue to be managed and maintained to demonstrate the additional benefits obtained from hydropower generation. Additional opportunities will be pursued with potential partners to derive benefits from projects on project lands.

(7) Fisheries. Maintain a viable fishery resource through monitoring and protecting water quality, enhancing fish cover/habitat, managing brood ponds,

stocking, supporting watershed management efforts, and coordinating with SWPA to maintain stable pool elevations during critical spawning periods.

(Discussion) Fisheries management efforts will be coordinated with the Missouri Department of Conservation. Fishing is the single most important recreation activity that influences visitation. Coordination efforts and management strategies will focus on optimizing a quality fishery and fishing success. Largemouth bass and crappie are the primary species that benefit the majority of visitors. Cooperative relationships with the power industry and the SWPA continue to provide opportunities to maintain stable pool elevations during the spring. Opportunities to fund research to determine the most beneficial way to obtain optimum population dynamics for target species will be explored with Cooperative Fisheries Research Laboratories, the Waterways Experiment Station, and other research institutions.

(8) Prairies. Manage native grasses and forbs to closely reflect remnant prairie ecosystems. Establish native grass and forbs plantings where necessary to maintain diversity of habitat and improve soil characteristics.

(Discussion) Prescribed burning with additional grass and forbs plantings will be used to maintain this remnant example of tall grass prairies that existed prior to early pioneer settlement. Existing native grass areas will be maintained through a schedule that includes periodic burns in order to halt woody invasion of the area. Emphasis will be placed on managing current acreage with minimal additional plantings where benefits are documented in habitat appraisal and evaluation techniques.

(9) Aesthetics. Plan and design all management actions and activities with consideration to visual enhancement, impacts, and aesthetics.

(Discussion) In order to provide the opportunity for a quality recreational experience, it is essential to consider the aesthetic impact of planned improvements as well as the economic and functional requirements. Each design, construction or maintenance action will be considered according to its visual impact to the environment.

Tree, shrub, forbs, and grass species used for landscape plantings and habitat improvements will be evaluated and selected based on aesthetics, food value for wildlife, cover and other qualitative vegetative factors. Native plant species with the greatest aesthetic appeal and wildlife value should be emphasized in plantings.