MARK TWAIN LAKE MASTER PLAN

CLARENCE CANNON DAM AND MARK TWAIN LAKE MONROE CITY, MISSOURI

CHAPTER 4 LAND ALLOCATION, LAND CLASSIFICATION, WATER SURFACE, AND EASEMENT LANDS

This Master Plan is a land use plan. Specific parcels of land are classified into land use categories based on resource capability. This Plan provides a conceptual guide for use, management, and development of all Corps lands.

EP 1130-2-550, 30 Jan 2013, provided guidance utilized to delineate Project lands at Mark Twain Lake based on Land Allocation and Land Classification. The delineation of these lands into individual management areas was an integral part of the planning process and facilitated identification of the most appropriate land and resource uses of the various project areas. The boundaries of the management areas are based on physical, administrative, and operational characteristics.

4.1. LAND ALLOCATION

Land Allocation identifies the congressionally authorized purposes for which Corps lands were acquired. For specific locations and delineations, reference Plate No. 1. There are four categories of allocation applicable to Corps projects:

Operations (i.e. flood control, hydropower, multiple resource management, etc.) Lands acquired for the congressionally authorized purpose of constructing and operating the Project.

Recreation

Lands acquired specifically for the congressionally authorized purpose of recreation. These lands are referred to as separable recreation lands. Allocated recreation lands can only be given a land classification of *Recreation*.

Fish and Wildlife

Lands acquired specifically for the congressionally authorized purpose of fish and wildlife management. These lands are referred to as separable fish and wildlife lands. Allocated fish and wildlife lands can only be given a land classification of *Wildlife Management*.

Mitigation

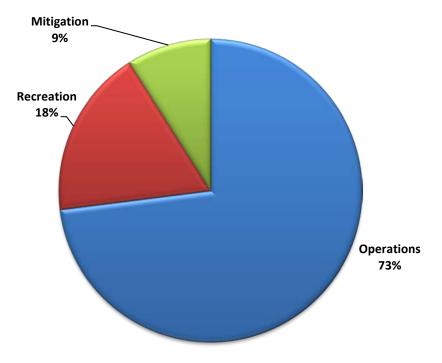
Lands acquired or designated specifically for the congressionally authorized purpose of mitigating losses associated with the development of the Project.

Three allocations (Operations, Recreation and Mitigation) occur at Mark Twain Lake, and established the basis for the authorized acquisition of 54,741 fee title lands and 9,740 acres of flowage easement lands which provide safe, efficient operation of the Project for its authorized purposes. Mark Twain Lake missions include flood risk management, hydropower, water supply, environmental stewardship, recreation, and incidental navigation.

Table 4-1. Land Allocation Acreage Summary, Clarence Cannon Dam and Mark Twain Lake

Land Allocation	Acreage
Operations	40,078
Recreation	9963
Mitigation	4700
Total Acreage	54,741

Figure 4-1. Percentages of Land Allocation



4.2. LAND CLASSIFICATION

Land classifications identify the primary purpose and management of the lands of Mark Twain Lake. Project lands are zoned for development and resource management consistent with authorized project purposes. Additionally, the classification process refines land allocations to fully utilized project lands and considers public desires, legislative authority, regional and project specific resource requirements, and suitability. Plate No. 2 reflects the delineation of Project lands according to the following classifications.

Project Operations

This classification includes lands required for the dam and associated structures, powerhouse, reregulation pool, re-regulation dam, administrative offices, maintenance compounds, and other areas that are used to operate and maintain Mark Twain Lake. Where compatible with operational requirements, Project Operations lands may be used for wildlife habitat management, recreational use or agricultural activities. Licenses, permits, easements or other out-grants are issued only for uses that do not conflict with operational requirements.

High Density Recreation

These lands are designated for intensive levels of recreational use to accommodate and support the recreational needs and desires of visitors. They include lands on which existing or planned major recreational facilities are located and allow for developed public recreation facilities, concession development, and high-density or high-impact recreational use. In general, any uses of these lands that interfere with public enjoyment of recreation opportunities are prohibited. Low-density recreation and wildlife management activities compatible with intensive recreation use are acceptable, especially on an interim basis. No agricultural uses are permitted on those lands except on an interim basis for maintenance of scenic or open space values. Permits, licenses, and easements are not issued for non-compatible manmade intrusions such as pipelines, overhead transmission lines, and non-project roads, except where warranted by the public interest and where no viable alternative area or route is available.

Mitigation

This classification is used for lands allocated for mitigation, and that were acquired specifically for the purposes of offsetting losses associated with development of the Project. Mark Twain Lake possesses lands allocated for mitigation, and subsequently classified as Wildlife Management Areas.

Environmentally Sensitive Areas

Lands in this classification are designated as sensitive areas based on their scientific, ecological, cultural or aesthetic features. Designation of these lands is not limited to just lands that are otherwise protected by laws such as the Endangered Species Act, the National Historic Preservation Act or applicable State statues. These areas must be considered by management to ensure they are not adversely impacted. Environmental Stewardship management techniques may be implemented within environmental sensitive areas with full consideration for protecting the ecological or cultural aspect of these areas. Limited or no development of public use is generally contemplated on land in this classification. No agricultural or grazing uses are permitted on these lands unless necessary for a specific resource management benefit, such as prairie restoration. These areas are typically distinct parcels located within another, and perhaps larger, land classification area.

Multiple Resource Management Lands

Lands in this classification are designated based on their predominate use as described below with the understanding that alternate compatible uses may also occur within the delineations.

• Low Density Recreation. These lands are designated for dispersed and/or passive

recreation use. Development of facilities and infrastructure on these lands is minimal. Recreation experiences provided on these lands include trails, geo-caching, walking, fishing, hunting, primitive camping, nature study, and other outdoor activities commensurate with the purposes of the area. Facilities may include boat ramps, boat docks, trails, parking areas and vehicle controls, vault toilets, picnic tables, and fire rings. Manmade intrusions, including power lines, non-project roads, and water and sewer pipelines, may be permitted under conditions that minimize adverse effects on the natural environment. Vegetation management, including agricultural activities, that do not greatly alter the natural character of the environment, are permitted for a variety of purposes, including erosion control, retention and improvement of scenic qualities, and wildlife management. Hunting and fishing are allowed pursuant to state fish and wildlife management regulations where these activities are not in conflict with the safety of visitors and project personnel.

• Wildlife Management. These lands contain valuable wildlife habitat components that are maintained to sustain habitat suitable for diversity of wildlife species. Licenses, permits, and easements for public infrastructure (utilities and public roads) may be permitted under conditions that minimize adverse effects on the natural environment. Wildlife Management lands are available for sightseeing, wildlife viewing, nature study, and hiking. Consumptive uses of wildlife, including hunting, fishing, and trapping, are allowed when compatible with the wildlife objectives for a given area and with both Federal and state fish and wildlife management regulations.

• Vegetation Management. Lands in this classification are designated for the stewardship of forest, prairie, or other native vegetative cover. Mark Twain Lake does not have lands classified as Vegetation Management.

• **Future or Inactive Recreation Areas.** This classification consists of lands that have the characteristics compatible with future recreational development. Portions of existing recreation areas possess future development potential as shown on the corresponding plates or in Chapter 5, Resource Plan.

Water Surface

Mark Twain Lake administers a surface water zoning program that has four sub-classifications:

• **Restricted.** Water areas are restricted for project operations, safety, and security purposes.

• **Designated No-Wake.** This classification is used to protect environmentally sensitive shoreline areas and recreational water access areas from disturbance, and/or for public safety.

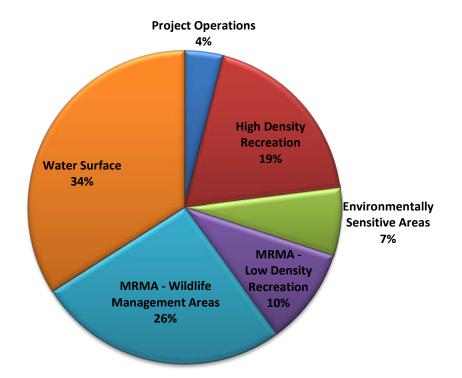
• Fish and Wildlife Sanctuary. The Middle Fork Waterfowl Refuge has a seasonal restriction to protect migrating waterfowl.

• **Open Recreation.** These waters are available for year-round or seasonal waterbased recreational use.

Land Classification	No. of Areas	Acreage
Project Operations	7	2082
High Density Recreation	15	10234
Environmentally Sensitive Areas	4	3633
MRMA – Low Density Recreation	9	5656
MRMA – Wildlife Management Areas	1	14536
Water Surface	1	18600
Total Acreage		54,741

Table 4-2. Land Classification Acreage Summary, Clarence Cannon Dam and Mark Twain Lake

Figure 4-2. Percentages of Land Classification



EASEMENT LANDS

These are lands on which easement interests are held, but no fee title ownership was acquired. Planned use and management of easement lands will be in accordance with the terms and conditions of the easement acquired for Project purposes.

• **Flowage Easement.** These are easements purchased by USACE granting the right to temporarily inundate flowage easement lands during flood risk management operations. There are 9,740 acres of flowage easement lands located at Mark Twain Lake.

• **Roadway Easement.** Mark Twain Lake has three roadway easements. These roadway easements permit Government personnel, vehicles, and equipment to access Corps-managed lands and facilities. The easements and operational status are noted below.

- 1. Spalding Sewage Treatment Plant Access Road Operational
- 2. Joanna Ridge/Little Indian Creek Access Road Not developed
- 3. Bluffview Radio Tower Access Road Not developed