US Army Corps of Engineers ® Rock Island District



# MASTER PLAN

# CHAPTER 5

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## **CHAPTER 5**

### **RESOURCE PLAN**

This chapter will describe in broad terms how project lands will be managed. According to Engineering Pamphlet (EP) 1130-2-550, this can be accomplished by using one of two approaches: 1) Management by Classification, which is the method the Lake Red Rock Project will utilize; and 2) the Management by Area method. Please see Chapter 3 for detailed descriptions of the High Density Recreation areas, Environmentally Sensitive Areas (ESA) and Multiple Resource Management Lands.

See Appendix H for maps showing the land classification of Lake Red Rock Project Lands.

## 5.1. CLASSIFICATION AND JUSTIFICATION

**5.1.1. Project Operations (162 acres).** This classification includes lands required for the dam and associated structures, powerhouse, operations center, administrative offices, maintenance compounds, and other areas that are used to operate and maintain the Lake Red Rock Project. 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 outgrants are issued only for uses that do not conflict with operational requirements.

*Justification:* These lands have been classified by definition in the EP. Their resource objectives and description of use are likewise described in the definition.

**5.1.2. High Density Recreation (3517 acres).** Land developed for intensive recreational activities for the visiting public including day use areas and/or campgrounds. These could include areas for commercial concessions (e.g., marinas) and quasi-public development.

*Justification:* These are lands that have been developed as recreation areas, including campgrounds and day use areas. Most of these areas were similarly classified in the 1976 master plan, which guided development of the project for the first 40 years. The Corps directly manages many of these recreation areas. South Elk Rock Recreation Area is outgranted to the Iowa DNR and Cordova and Robert's Creek Recreation Areas are outgranted to the Marion County Conservation Board for management.

**5.1.3. Mitigation (0 acres).** This classification will only be used for lands with an allocation of Mitigation and that were acquired specifically for the purposes of offsetting losses associated with development of the project. The Lake Red Rock Project has no lands under this classification.

*Justification:* When the Lake Red Rock Project was established, this was not a requirement; therefore, none were purchased.

**5.1.4. Environmentally-Sensitive Areas (1967 acres).** This classification consists of areas where scientific ecological, cultural, or aesthetic features have been identified. Such sites may have known locations for threatened or endangered species; critical habitat for priority species; high quality native plant communities; have a landscape history indicating a serious lack of disturbance; scenic or iconic landscapes. Development on lands within this classification is normally prohibited to ensure that these sensitive areas are not adversely impacted. In the Master Plan maps, cultural sites are not identified, although designated environmentally sensitive areas may have cultural sites.

**Justification:** ESA lands are classified as such to preserve the scenic, historical, archaeological, scientific, water quality or ecological value of the overall project. Red Rock Project undertook a substantial process of determining and vetting locations to be considered ESAs. Groups and individuals associated with non-governmental organizations and resource professionals were queried about what locations at Lake Red Rock should be considered for the ESA designation. A comprehensive analysis of the nominated sites ensued. The analysis included a detailed review of the historical, geological, geographical and site potential considerations. Sources of information included the notes from the Government Land Office (GLO, 1852-1859) maps, the 1875 Andreas Atlas, and historical aerial photography from the 1930s, 1950s, 1960s, 1970s, 1980s, 1990s, and 2010. Red Rock's Natural Resource Inventory System notes were examined for any notable entry that would influence an ESA designation. Flora and fauna records maintained by the Iowa DNR's Natural Areas Inventory were checked for any recorded threatened, endangered or special concern species. These were then duly noted in the analysis. The ESA and the resource management unit were also classified according to the plant community to which it would be suited by the National Vegetation Classification System. These community types were mapped, as well as an estimate of invasive species (i.e., honeysuckle and autumn olive) density.

All Lake Red Rock lands were evaluated regardless of their classification in the 1976 Master Plan. For example, a current high density recreation area may have undeveloped areas that have great potential as an ESA due to prairie or other restorative vegetation. In this case, the land area determined to have ESA qualities was removed from the high density recreation area classification. Future recreation development could occur in the area classified as High Density Recreation, but not in the area now classified ESA.

As a result of this analysis, undeveloped lands were put into one of three categories: ESAs; Important Natural Resource Areas, or ESA ineligible. Ineligible areas were typically located within the flood pool or impacted by project operations. The areas categorized as Important Natural Resource Areas lacked the quality attributes for ESA designation but are important as ESA buffers; or have the potential over time to develop into high quality resource areas. These Important Natural Resource Areas are included in Section 5.1.5.2, *Wildlife Management General*.

Resource management philosophy for ESA's can be characterized as to eradicate exotic, alien and native invasive species; re-introduce those historical ecological influences (e.g., fire) that maintained and perpetuated those communities; and to introduce native plant species to duplicate the lost or degraded native landscape species mix. This restoration of the native plant community should in turn provide a suitable environment for native and/or declining fauna.

**5.1.5. Multiple Resource Management Lands.** This classification allows for the designation of a predominate use as described below, with the understanding that other compatible uses described in Sections 5.1.5.1–5.1.5.4 may also occur on these lands (e.g., a trail through an area designated as Wildlife Management).

Four subcategories were identified under the Multiple Resource Management Lands classification:

**5.1.5.1.** Low Density Recreation (277 acres): lands with minimal development or infrastructure that support passive public use (e.g., primitive camping, fishing, hunting, trails, wildlife viewing, etc.).

*Justification:* The existing limited development or future limited development of these areas is appropriate for this subcategory. Low density recreation recognizes that limited development has or

will occur here, yet is not at a standard of a Class A recreation area. Accordingly, wildlife management and vegetation management can easily co-exist with the recreational accommodations. Hunting, trapping, fishing and agriculture are considered compatible. Other factors that may influence this classification include access, past use and the level of development on neighboring private lands. Resource objectives for low density recreation include environmental stewardship activities to achieve natural resource management goals, while recognizing that the limited development for recreational pursuits is considered compatible.

**5.1.5.2.** Wildlife Management General (29,589 acres): lands designated for stewardship of fish and wildlife resources. These areas include the Red Rock Wildlife Unit, Robert's Creek Wildlife Unit, and Corps-managed wildlife Areas.

Justification: This subcategory includes the majority of Lake Red Rock's lands. A large portion of this area is also within the flood pool and subject to occasional or frequent inundation. Land closer to conservation pool (742) is incapable of supporting any type of perennial vegetation. Land in the upper elevations of the reservoir is similarly compromised for survival of perennial vegetation, but can produce vast areas of desirable (e.g., smartweed) or undesirable (e.g., cockleburs) annual weedy vegetation.

The amount of land above flood pool (780) is comparatively smaller, yet still substantial. These areas are best-suited for sustaining perennial vegetation, forest and prairie management. These upland areas possess both relatively large tracts of unbroken habitat, and those that are highly fragmented. The areas categorized as Important Natural Resource Areas are included in The Wildlife Management General classification. These areas are important as ESA buffers; or have the potential over time to develop into high quality resource areas.

Management of the wildlife lands is accomplished by three agencies: the Corps, the Iowa DNR, and the Marion County Conservation Board. The Iowa DNR manages land west of Highway 14 in the main body of the reservoir. The flood plain of this area presents some challenges and opportunities for wildlife management. Because of the floodplain-type environment, the Iowa DNR has developed three floodable wetland areas with pumps and water control structures. Proper management of these facilities has made the Red Rock Wildlife Unit a premier waterfowl management area in the interior of Iowa. The Marion County Conservation Board manages the Robert's Creek Wildlife Unit and the Corps manages the remaining lands classified as Wildlife Management.

Agricultural leases are currently permitted in Wildlife Management General Areas, and can be an integral part of the wildlife management. Agricultural leases and food plots can provide a source of cover and food for wildlife.

While this plan does not specifically discuss or classify land as Vegetative Management, these

stewardship activities are utilized on Wildlife Management lands. The strategies are symbiotic and inseparable, especially on a landscape scale and for multi-species benefit. Invasive plant species management, while a vegetative method, has a positive impact on game and non-game wildlife populations.

**5.1.5.3. Vegetation Management (0 acres):** lands designated for stewardship of forest, prairie, and other native vegetative cover. The Lake Red Rock Project does considerable vegetation management, but for the sake of simplicity and mapping, these lands are classified with Wildlife Management General.

**5.1.5.4. Future or Inactive Recreation Areas (25 acres):** areas with site characteristics compatible with potential future recreational development or recreation areas that are closed. Until there is an opportunity to develop or reopen these areas, they will be managed for multiple resources. Lake Red Rock has one area that applies within this subcategory.

*Justification:* This subcategory includes a 25 acre site of the proposed equestrian campground. This campground is proposed for the south end of a 15 mile extension of the South Elk Rock equestrian trail.

**5.1.6. Water Surface.** The Lake Red Rock Project has not utilized this classification.

**5.1.7. Project 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 strict accordance with the terms and conditions of the easement estate acquired for the project. Easements were acquired for specific purposes and do not convey the same rights or ownership to the Corps as other lands.

**5.1.7.1. Operations Easement.** The Corps retains rights to these lands necessary for project operations (access, etc.). The Corps has several levee and roadway easements around the project that provide access to project lands or remedial works.

**5.1.7.2. Flowage Easement.** Real estate for the project was acquired beginning in 1960 and was completed by 1973. Approximately 29,000 acres of flowage easements was originally acquired. Through the willing selling program, 3,212 acres were later purchased in fee title ownership and became direct managed lands. These 3,212 acres are now included within other land classifications as determined appropriate. The remaining approximate 26,000 acres remain in flowage easements.

**5.1.7.3. Conservation Easement.** The Corps retains right to lands for aesthetic, recreation and environmental benefits. The Lake Red Rock Project has no easements of this kind.





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