

Section XII

Operational Management Plan Overview

SECTION XII – OPERATIONAL MANAGEMENT PLAN OVERVIEW

12-01 INTRODUCTION

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

Master Plans and Operational Management Plans are developed and implemented with a view to their working in tandem. The Master Plan covers all resources of the project including, but not limited to, fish and wildlife, vegetation, cultural, aesthetic, interpretive, recreational, mineral, commercial and out-granted lands, easements and project waters (submerged lands held in fee). This Master Plan focuses on three primary components:

- Regional and ecosystem needs
- Project resource capabilities and suitability
- Expressed public interests and desires

The Master Plan ensures that environmental mandates and considerations are incorporated and that the economy and quality shall be given equal attention in the development of public facilities and support infrastructure. Usually, every ten years, the Master Plan is reviewed and updated and can be supplemented at any time when it becomes appropriate or necessary to do so. Based on an approved Master Plan, the Lake Shelbyville Project develops and implements an Operational Management Plan (OMP) to achieve the objectives stated in the Master Plan.

The Master Plan serves as the planning document that establishes the authority to act and the OMP is the implementation or action document that lays out the actual work, task schedules, costs and funding strategies for realization of the goals and direction set forth in the Master Plan.

Within the OMP, objectives and implementation strategies are established for each major area of emphasis: natural resource management, and park and recreation management.

The OMP, under separate cover, details objectives and strategies to implement programs based on Master Plan resource use objectives, and plans within the environmental stewardship, recreation and flood damage reduction business areas conceptually addressed in the Master Plan. Visitor assistance, public access, environmental compliance, interpretation and outreach, recreation safety, shoreline management, habitat management, fire protection and fish and wildlife management, endangered species protection and

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facilities/infrastructure operations and maintenance are some of the major programs addressed in the OMP. During development or revision of OMPs, emphasis is given to achieving environmental mandates and other ecological imperatives of a national, regional or ecosystem nature. Emphasis is also given to achieving economy in planning, designing, constructing and managing natural and recreational resources, facilities/infrastructure and other services. Concepts are refined into actual work items with schedules and cost estimates for completion.

OMP management strategies must be consistent with authorized project purposes and approved resource use objectives and land use classifications established in the project Master Plan.

The OMP is a five-year plan. The plan was updated in 2004 and will be updated again in 2009. The OMP is dynamic in nature and includes funding, staffing and schedules required to implement management activities and strategies for the entire project. Approval for the OMP and all subsequent updates rests with the District Commander. Portions of the OMP (funding, staffing, equipment needs) are updated each year resulting in a set of work plans that are approved annually by the District Commander. All approved work is based on consistency with the OMP and is contingent on the availability of funds.

For outgranted areas, the OMP will include the outgrantees' management plans for the area and information on how the outgranted areas management supports the overall management objectives of the project. Cooperation and input from partners supporting management objectives and interested customers, organizations and the general public is encouraged during formulation and updating of the OMP.

Site-specific resource management recommendations are included in the OMP. The OMP divides the public lands surrounding the lake into management units called compartments. The compartments were selected using size, topography, land use classification, and access as location criteria. Management objectives are outlined for each compartment within the OMP. Development of the OMP is a concerted effort between Project and District personnel and agency partners.

Key topics addressed under the main business areas (Environmental Stewardship Management, Recreation Management and Flood Damage Reduction) are listed as follows:

Environmental Stewardship

- _ Long Term Objectives of Resource Management
- _ Compartment Descriptions
- _ Topography (slope, aspect, general soil type, etc.)

- _Aquatic Resources (type, temperature, turbidity, etc.)
- _Vegetation (species, size, density, etc.)
- _Fish and Wildlife (species)
- _Special Considerations or Problems (protected or rare/unique habitat, rare and endangered species, national emphasis programs (e.g., Watchable Wildlife, North American Waterfowl Management Program and Neotropical Migratory Birds, etc.), pollution, forest fire control)
- _Management Objectives (for each compartment)
- _Implementation Plan (for each compartment)
- _Management Techniques (to meet objectives)
- _Five-Year Schedule (of management techniques to be applied)
- _Annual Staffing and Equipment needs
- _Annual Costs
- _Coordination (with other elements/agencies/the public)

Recreation Management

- _Safety (employee, contractor, and visitor)
- _Security
- _Visitor Assistance
- _Shoreline Management
- _Private Exclusive Use (existing approved regional plan may be inserted as is)
- _Outgrants
- _Maintenance
- _Recreation Use Fee Program
- _Interpretation
- _Cultural Resources
- _Project Sign Management Plan
- _Special Programs
- _Cooperation (with other agencies and/or special interest groups)
- _Five-Year Program (for park management)
- _Priority List (of annual programs with staffing and funding requirements)

Flood Damage Reduction

- _Develop inventories and prescriptions for operation and maintenance of all federally owned and operated flood damage reduction infrastructure located on public lands and waters.

12-02 RESOURCE MANAGEMENT

A detailed discussion of project resource management is contained in the Operational Management Plan. The guidelines set forth in this section are to insure consideration, even if only in general terms, of some basic factors

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relative to recreation and resource management that are involved in proper management of the project.

Project activities will be managed from a watershed perspective as it relates to the Kaskaskia River.

- a. Recreation. In the administration of the project, management actions effected include:

- (1) The provision of a wide range of outdoor recreation opportunities and facilities in a relatively natural setting. In addition to water-oriented facilities previously discussed, these include: playground equipment, nature trails for education, hiking trails for exercise, wildlife viewing, and photography, hunting opportunities, group camps to serve organized youth groups, and administration of group picnic shelters and picnic areas.

- (2) Reduction in conflict of use through activity and area zoning. The administration of project lands as designated in the "Water and Land Use Plan," Plate 2. Measures to be considered include: No Boat marker buoys at swimming areas, control stations at camping areas to provide security and privacy from non-campers, and no-wake boating areas.

- (3) Providing visitor information regarding natural resources along with any other outstanding features such as the dam and spillway will be accomplished through various interpretative programs.

- (4) The development of policies, which provide for maximum sustained public use without undue deterioration of the project's natural resources.

- (5) The provision of additional recreational opportunities through concessions and out grants to state governments and other political subdivisions.

- (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.

- b. Staffing and Organization. Lake administrative functions are currently housed in four separate buildings. The maintenance compound and facilities are located approximately one-half mile northeast of the administration building. The scattered location of administrative personnel has created inefficiencies in operations at the facility, requiring staff and visitors to traverse between buildings in order to coordinate routine activities. The present condition of the administrative facilities may be described as mediocre, at best. Facilities include the main administration building, a small makeshift building in the

administration building compound, and a small building and a trailer in the maintenance compound. The buildings do not comply with current energy conservation and handicapped accessibility standards.

The administration facility is critical to effective oversight of the Lake Shelbyville project. Consolidating all administration functions within one building will allow the most efficient management of the project, and will be a great improvement over the present, disjointed four building complex. The selected site will provide a visible lakeside and main dam presence and will maintain a close proximity to the maintenance yard. More details concerning the Administration and Maintenance Complex can be found in Section 11-09.

The total staff for Maintenance and Operations assigned to Lake Shelbyville is 51 people, including maintenance, ranger, secretarial and management. At present, the permanent staff is 26, with four permanent seasonal employees.

Project personnel are responsible for inspecting all areas and facilities; writing and inspecting construction, service, and supply contracts; providing minor repairs and preventative maintenance; and maintaining and servicing the hydraulic structures. Contract maintenance activities include erosion repair, grounds maintenance, painting, repair of facilities, road maintenance and repair, mowing recreation areas, solid waste removal, cleaning of recreation facilities, and janitorial services.

TABLE 20
LAKE SHELBYVILLE PROJECT STAFF

1	Operations Manager	GS-13
1	Assistant Operations Manager	GS-12
1	Civil Engineer Technician	GS-10
1	Civil Engineer Technician	GS-09
4	Park Ranger	GS-11
4	Park Ranger	GS-09
4	Park Ranger	GS-07
1	Admin Support Assistant	GS-07
1	Procurement Technician	GS-07
1	Budget Technician	GS-07
4	Park Ranger (6 month Permanent Seasonal)	GS-05
22	Temporary (STEP)	GS-01 -04
3	Maintenance Worker	GS-07
1	Civil Engineer Technician	GS-04/05
2	Temporary (SCEP)	GS-04

12-03 FOREST MANAGEMENT

The Forest Management Plan is part of the Lake Shelbyville Operational Management Plan. Its purpose is to develop, manage, and protect the vegetation resources of the project. The scope of the plan includes providing an inventory of existing vegetative conditions, the implementation of vegetative management for recreational use, the preservation and improvement of wildlife habitats and aesthetic values, the control of soil erosion, the promotion of natural ecological conditions, and development of dependable future resources of available wood products through reforestation, and accepted forest conservation practices. A complete forest inventory was completed in 1989.

a) Plan Preparation

Preparation of the Forest Management Plan is a coordinated effort involving Operations, Planning, and Real Estate elements. The general format of the plan divides the project area into workable compartments and provides a treatment prescription for each, consistent with its land use allocation.

b) Program Needs

During the life of the Forest Management Plan, certain needs will dominate. The most important of these are as follows:

- Establishment of suitable forest cover on recreation areas. There is a need for vegetative cover to serve as shade, screening, buffers, erosion control protection, and wildlife cover.

- Select those open areas which should be reforested and replant them with desirable species.

- Protect steep banks from erosion.

- Develop and hold high population of desirable wildlife.

- Protect areas from overuse.

- Re-establish suitable vegetative cover on areas that are overused and inundated by high water.

- Manage present resources to establish a quality program of timber management, which will support a future sustained yield timber harvesting effort. Before a timber harvest occurs impacts on the environment will be considered.

12-04 FIRE PROTECTION

A fire protection plan that will serve as a guide for the prevention and suppression of forest and grass wildfires on Lake Shelbyville project lands is contained in the Operational Management Plan. The objectives of a good fire protection plan are three-fold: fire prevention, pre-suppression, and fire suppression. These objectives are based on the following guidelines:

- a. Fire Prevention. Reduction of the number of fires from other than natural occurrences. Potential fire problem areas have been determined and are continually evaluated. Prevention programs are established to create public awareness of the destruction caused by fires.
- b. Pre-suppression. Pre-suppression planning is to establish efficient fire detection and response organization utilizing project personnel and existing firefighting units within the Lake Shelbyville area.
- c. Fire Suppression. Once fires have been detected, established procedures to control them are implemented. These procedures are outlined in detail in the Operational Management Plan. The Operations Manager will update the fire protection portion of the Plan annually.

12-05 FISH AND WILDLIFE MANAGEMENT

The objectives and guidelines established in this section are the basis for the preparation and implementation of the portion of the Operational Management Plan dealing with fish and wildlife management practices. The goal of the Corps of Engineers wildlife management program is to improve and sustain the health of the ecosystem. By doing so the Corps of Engineers will strive to provide populations of both game and non-game species so that all interest groups using project facilities will have the opportunity of receiving benefits from wildlife.

a) 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 joint-use objectives of the project and habitat carrying capacity. One purpose of the Operational Management Plan is to outline the ongoing fish and wildlife habitat development and maintenance program for Lake Shelbyville. 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-

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consumptive uses of wildlife, such as sightseeing and photography, receive equal consideration with that of consumptive uses, such as hunting. Methods that will be used to enhance the Watchable Wildlife Program at Lake Shelbyville will include but not limited to creating a brochure, creating visitor center displays, and conducting interpretive programs and hikes. The possibility of placing different types of non-game nesting boxes around Lake Shelbyville will be pursued. 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 the Lake Shelbyville project. Project operations procedures are continually being reevaluated and updated as required to support this program. Coordination is maintained with the Illinois Department of Natural Resources to establish criteria and programs for favorable water levels for fish and wildlife habitat.

b) Specific Recommendations

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

c) Wildlife Management

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

Illinois Department of Natural Resources Fish and Wildlife Management Programs. Much of the Government's fee land and water at the northern end of the project has been licensed to the Illinois Department of Natural Resources. On the 6,341 acres of land and water, the primary effort of the Department has been the intensive development of this area for quality habitat for upland and forest game. Extensive efforts have also been expended for waterfowl habitat development. The State's management objectives for the out granted area are as follows:

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

Corps of Engineers Wildlife Management Program. Lands not outgranted to other agencies are managed for a variety of purposes including maintaining existing wildlife populations. This is accomplished primarily through habitat

maintenance activities directed by Corps of Engineers personnel. Predator control in certain areas and regulation of hunter activities are also methods whereby wildlife population levels can be manipulated to achieve desirable levels. Several general land management practices are used to develop or maintain wildlife habitat. Soil type, topography, elevation, size of area, access and land use designation determines which practice or combinations of practices are used. Land units at Lake Shelbyville are divided into 63 management units called compartments. Soil is tested on all sites to be planted and the area fertilized according to soil testing laboratory recommendations. All compartments have written prescriptions describing wildlife habitat improvement recommendations. One-fifth of the compartments are reviewed annually and corresponding prescriptions updated. Land management practices are as follows:

- At developed recreation areas, wildlife habitat improvement includes the planting of tree and shrub species beneficial to wildlife and/or supplemental wildlife food plot plantings. Bluebird and Purple Martin houses are located in several different locations throughout the recreation areas.

- Natural plant succession will be allowed to occur on designated areas. A natural progression from annual weeds to biennial and perennial vegetation, including shrubs, and trees will occur.

- Moderate agricultural practices are applied aimed primarily at prolonging the annual weed production stage. This is accomplished primarily in bottomland areas that are prone to flooding. Natural succession is also retarded on upland areas by mowing or plowing on an irregular basis.

- Agricultural food plots are developed where necessary to provide supplemental, over-winter food sources for wildlife. Food plots are established at areas where there is no adjacent private cropland food source. Agricultural leasing of project lands is an effective tool to accomplish this goal, and will be utilized to the greatest extent practicable.

- Roosting and nesting cover for songbirds, upland game birds and small mammals is provided by establishment/maintenance of mature tall grass prairies or cool season grass plantings. Controlled burning of warm season grasses is accomplished every three years as a minimum.

- In dense stands of timber, mainly oak-hickory association, various forms of timber stand improvement are required to release more desirable mast bearing trees, protect den trees and varying the age to adjoining timber stands to provide essential habitat components for various forms of wildlife.

- All wetland areas will be preserved in their present state to the greatest extent practicable, to benefit wetland species.

- A large number of Canada Geese nest and raise their young at Lake Shelbyville. Many of the geese use the beach areas at Dam West, Sullivan,

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and Wilborn Creek Recreation Areas as molting areas. The interaction between the geese and the public has become a concern. Several practices to control the geese have been considered. Practices that have been used include spraying the vegetation and using equipment that produces a loud noise that encourages the geese to leave the area. These practices have worked to some degree but the problem still exists. Possible solutions to controlling the geese are being sought out by the Corps of Engineers and will be considered if deemed feasible and viable.

Endangered Species. No nationally endangered mammalian, reptilian, amphibian, or fish species are known to presently inhabit the project. However, a public awareness of endangered species will be developed through the posting of informative material on the animal, should sightings occur. Lake personnel will report any observations obtained of endangered species to the District Natural Resource Specialist. Personnel of the U.S. Fish and Wildlife Service will be notified of the sightings.

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

Hunting and Hunter Control. Illinois State Law prescribes rules and regulations pertaining to the public hunting on Corps of Engineers managed lands at Lake Shelbyville. The Illinois Department of Natural Resources Conservation Police Officers enforces these laws. A Memorandum of Agreement between the Corps of Engineers and Illinois Department of Natural Resources allows IDNR to enforce more restrictions on public lands owned by the Corps of Engineers at Lake Shelbyville than other areas in the State when and where applicable.

With over 16,000 acres of land available, Lake Shelbyville is the largest block of public hunting lands in the upper 2/3rds of Illinois. The Corps of Engineers has 47 widely scattered, hunter-fisherman parking lots to provide public access to the 10,566 acres of land under its management jurisdiction. An additional thirty-three metal control gates are in place to control unwanted off-road vehicle usage. To date, there are no restrictions on the number of individuals permitted to hunt on public lands with the exception of shotgun deer and turkey hunters. These limited quota hunts are established by the Illinois Department of Natural Resources. With nearly 13 million people in the State of Illinois and the population continuing to grow, it will eventually become necessary to limit public hunting opportunities at Lake Shelbyville via daily use permits, special use permits, or annual passes in order to perpetuate the wildlife resources and provide for public safety.

Interrelationship Between Programs. Other programs, such as vector control, weed control, and pest control are discussed as an integral part of the Operational Management Plan.

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.

Shoreline and Long-Range Plans. The Operational Management Plan will constitute the annual or short-range working plan for the Lake Shelbyville project. This plan applies to all Corps of Engineers managed lands. Long-range plans that propose the development of intensive recreation areas on presently undeveloped lands will consequently alter the wildlife habitat on these lands.

Fish and Wildlife Management Organization and Responsibility. The Operations Manager, through the Project Natural Resource Specialist, will prepare 1) Compartment Prescriptions and 2) Annual Work Plans, in order to implement the project fish and wildlife program. The Project Natural Resource Specialist is responsible for implementing and updating the Operational Management Plan. Preparation of prescriptions, annual work plans, and the Operational Management Plan five-year update will be a coordinated District effort.

Work Plans and Their Implementation. The Operations Manager, with the assistance of the Project Natural Resource Specialist, prepares annual work plans and appraises wildlife habitat conditions. These plans are used to implement the necessary on-ground work in compliance with the objectives of this section.

d) Fisheries Management

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 Illinois Department of Natural Resources is responsible for fisheries management at Lake Shelbyville. A fisheries biologist that is stationed in Springfield, Illinois supervises the fish management program.

Crappie, walleye, muskellunge, bluegill, largemouth bass, and white bass populations have become established. Nursery ponds are used to aid in the stocking of walleye and largemouth bass and will be used for the production of crappie if the need arises. Additional construction and use of nursery ponds is proposed. No stocking or management of non-game fish has been implemented.

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In order to collect data to guide management, various research projects and a fallfish population survey are conducted annually by the Department of Natural Resources.

12-06 SHORELINE MANAGEMENT

The subject of shoreline management is fully addressed in the Operational Management Plan (OMP). The Shoreline Management Plan was prepared and implemented as a management tool to prevent private exclusive use along the public shoreline of Lake Shelbyville. The plan was prepared under authority of Title 36 United States Code 460d; Title 36 Code of Federal Regulations 327.30 Shoreline Management at Civil Works Projects as implemented by Engineer Regulation 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. Three 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) the ownership of land adjoining public projects does not convey special rights or privileges to use of the public land and waters.

12-07 SAFETY AND SECURITY

a. General

A project safety program that identifies common recurring hazards or unsafe conditions and presents actions that will eliminate or reduce them is presented in the Operational Management Plan. The objectives of this plan expressed in general terms are: 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 public safety.

EM 385-1-1, "Safety and Health Requirements Manual" and Engineer Regulations in the 385 series establish the safety program requirement 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.

2. Biweekly Safety meetings are held for project personnel by the professional staff 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 Operational Management Plan is used in program planning and operation.

5. 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 the 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, the Manual on Uniform Traffic Control Devices for Streets and Highways (U.S. Department of Transportation, Federal Highway Commission D6.1, 1978) to insure the public is adequately safeguarded against hazards. The tailwater area and the area immediately above the dam are properly marked with signs and/or buoys. Signs, buoys, or markers have been installed in connection with outlet control structures. 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 telephones for emergency use are provided in public areas where feasible.

10. Adequate security lights are provided at all boat launching ramps where lights are available at a reasonable cost.

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

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b. Search, Rescue and Recovery. These activities are properly performed by local and state authorities, and are undertaken by Corps of Engineers personnel only in cases of emergency when situations dictate their necessity. In these cases, coordination with local authorities is essential. Body recovery missions will also be accomplished in coordination with the sheriff's department state police, or other local law enforcement agencies. Safety of personnel is taken into consideration at all times. Proper equipment is available and personnel are trained for this function when these activities are undertaken.

c. Main Dam Security Improvements. Since the events of September 11, 2001, closer examination of security has been required for all Corps of Engineers dams. In March 2002, the Internal Security Assessment Team performed an inspection of the Lake Shelbyville Dam and made recommendations for improving the security of the dam. The recommendations included installing gates, security cameras, and additional fencing.