Operational Management Plan

Old Hickory Lake

Appendix M
To Park Management

Shoreline Management Plan

US Army Corps of Engineers ®
Nashville District

November 2020

DEPARTMENT OF THE ARMY
U. S. ARMY CORPS OF ENGINEERS, GREAT LAKES AND OHIO RIVER DIVISION
550 MAIN STREET
CINCINNATI, OH 45202-3222

CELRD-PDO (RN 1130-2-320b) 17 November 2020

MEMORANDUM FOR Commander, Nashville District, 110 9th Avenue South, Room A405, Nashville, TN 37203

SUBJECT: Old Hickory Shoreline Management Plan Approval

1. References:

a. Memorandum, CELRN-OP, 22 October 2020, subject: Old Hickory Shoreline Management Plan Update

b. ER-1130-2-406, 28 May 1999, subject: Shoreline Management at Civil Works Projects

2. A review of the 2020 draft update to the Old Hickory Shoreline Management Plan has been completed and indicates the Nashville District has adequately fulfilled the revision/review process as required by Paragraph 5.f and 5.g of ER-1130-2-406.

3. The 2020 update to the subject Shoreline Management Plan is hereby approved.

4. The point of contact for this action is Mr. Jeff DeFosse, (513) 684-3192.

ROBERT F. WHITTLE, JR.
Major General, USA
Commanding

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NASHVILLE DISTRICT
110 9TH AVENUE SOUTH, ROOM A-405
NASHVILLE, TN 37203

OCT 22 2020

CELRN-OP (1130)

MEMORANDUM FOR Commander, U.S. Army Engineer Division, Great Lakes and Ohio River (ATT: CELRD-PDS-O/Jeff Defosse), 550 Main Street, Cincinnati, Ohio 45202-3222

SUBJECT: Old Hickory Lake Shoreline Management Plan Update

1. References

a. ER 1130-2-406 dated 28 May 1999, Shoreline Management at Civil Works Projects.

b. Memorandum, CELRN-OP, 22 October 2020 , subject: Old Hickory Lake, 2020 Shoreline Management Plan Review and Update (Enclosure).

2. The update of the Old Hickory Lake Shoreline Management Plan is enclosed for your review and approval. The Plan will be made an appendix to Old Hickory Lake's Operational Management Plan.

3. If you have any questions or need further information, please contact Scott Fanning of my Operations Section at 615-736-7831.

AVICHAL.SONNY.BIMAL.1030732339 Digitally signed by AVICHAL.SONNY.BIMAL.1030732339 Date: 2020.10.22 12:38:21 -05'00'

SONNY B. AVICHAL, P.E.
LTC, EN
District Commander

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, NASHVILLE DISTRICT
110 9TH AVENUE SOUTH, ROOM A-405
NASHVILLE, TN 37203

CELRN-OP (1130) 22 October 2020

MEMORANDUM FOR Commander, Nashville District Corps of Engineers

SUBJECT: Old Hickory Lake, 2020 Shoreline Management Plan Review and Update

1. Reference ER 1130-2-406 dated 28 May 1999, Shoreline Management at Civil Works Projects.

2. The 2020 draft update of the Old Hickory Lake Shoreline Management Plan (SMP) is enclosed for your review and approval.

3. Two public information workshops were held in October 2019, to review and discuss the draft plan. The workshops were held at Gallatin High School in Gallatin, Tennessee and the Wilson County School District Office in Lebanon, Tennessee. A total of 110 people attended the workshops.

4. Information about the workshops was publicized via a news release to all local media sources, on the Nashville District Old Hickory Lake webpage and by Facebook posts.

5. After the workshops, a 30-day public comment period was established in order to receive additional comments. A total of 106 general questions and comments were received and 140 requests for allocation changes including one inquiry from Congressman Rose's office on behalf of a constituent. A summary of comments and the Corps' response can be provided upon request. Comments received were duly considered in the development of this draft plan update.

6. The 2020 SMP review and update proposes several changes. A summary of the substantive changes are listed below:

a. Consistently capitalized "Shoreline Management Plan" throughout the document.

b. Updated the percentages of Limited Development Areas, Private Docks and Mowing from 32 to 33 percent and Mowing Only from 18 to 17 percent.

c. Modified the requirements for boundary line marking and surveying: "Before any new permits for use of public land/water are issued, the line must be clearly identified, and if not, the new owner must utilize a licensed surveyor and provide a stake survey."

d. Eliminated the methods of boundary line marking that required the planting of vegetation along the public property line, but allowed for the marking of the shared public-private property corners by the planting of either trees or shrubs on or near the corners.

e. Added a method of boundary line marking involving the installation of 4x4 wooden posts three to five feet tall on all surveyed property corners adjacent to public property.

f. If an individual builds a single family residence across multiple parcels those parcels will be treated as one parcel, regardless of multiple owners.

g. Each member of a permitted community dock must have access to the dock from their private property onto public property or from legal subdivision access.

h. Specified that improved access and marine railways are types of privileges that may be covered by a real estate license. Deleted "stairs" which is a subcategory of improved access.

i. Clarified that fees for licensed privileges are based on the administrative cost of processing plus the fair market value of the property.

j. Added the ability to use solar panels for electrical power on permitted docks with no requirement for the issuance of a Real Estate license as long as they are attached to the dock's roof, no cables or wires cross government property, and all solar power equipment will be stored in a locked container on the dock.

k. Provided clarity that water withdrawal pipelines are not allowed for residential household use, water landscaping features (waterfall, pond, etc.), or agricultural use.

l. Added a paragraph to clarify that existing marine railways may be renewed even though no new marine railways will be approved. These railways were granted in lieu of a shoreline use permit for a private dock and will remain in lieu of a dock permit. Boats associated with marine railways must be stored on private property.

m. Specified that Consent to Easement instruments allow certain activities that do not "impact or restrict the acquired flowage easement rights."

n. Any future grandfathered private use on public property must conform to applicable laws, regulations, and policies in addition to the Shoreline Management Plan.

o. Added that the State of Tennessee may require permits and certifications for certain regulatory actions, especially those involving water quality such as the placement of rip rap for shoreline erosion control activities.

p. Replaced "A real estate license" with "The appropriate real estate instrument" required for privately owned sanitary drain fields on public property.

7. The project has reached out to Congressional Representatives and their staffs are aware of the changes to the SMP. No concerns were raised by any of the contiguous delegations other than an inquiry from Congressman Rose's office regarding a requested change in allocation on behalf of a constituent.

8. After your review and approval, the plan will be made an appendix to the Old Hickory Lake Operational Management Plan. If you need further information, please contact Scott Fanning, Operations Section, (615) 736-7831.

Diane E. Parks Digitally signed by PARKS.DIANE.E.1229921424 Date: 2020.09.11 07:24:16 -05'00'

DIANE E. PARKS
Chief, Operations Division

CONCUR:

AVICHAL.SONNY.B IMAL.1030732339 Digitally signed by AVICHAL.SONNY.BIMAL.1030732339 Date: 2020.10.22 12:08:27 -05'00'

SONNY B. AVICHAL, P.E.
LTC, EN
District Commander

Encl
as

Shoreline Management Plan

Attachment to
Part II of the
Operational
Management
Plan

Old Hickory Lake

November 2020

U. S. ARMY CORPS OF ENGINEERS
NASHVILLE DISTRICT
OLD HICKORY LAKE
SHORELINE MANAGEMENT PLAN
NOVEMBER 2020

TABLE OF CONTENTS

Paragraph		Page
1.	References	1
2.	Authority	2
3.	Purpose	2
4.	Objectives of the Plan	2
5.	Description of the Lake	3
6.	Present Land Use	4
7.	Residential Development on Adjoining Property	5
8.	History - Initial Permit Policy, 1954-1973	6
9.	Development of the Shoreline Management Plan, 1973-1980	6
10.	Shoreline Management Plan 1983-Present	6
11.	Public Involvement and Education	7
12.	Proprietary Jurisdiction	7
13.	Section 6, Public Law 97-140 amended by Section 1134(d), Public Law 99-662	8
14.	Shoreline Allocation	8
15.	Environmental Restoration and Conservation Program	10
16.	Activities Requiring Shoreline Use Permits	14
17.	Vegetation Alteration	16
18.	Private Floating Dock Facilities	19
19.	Shoreline Erosion Control	28
20.	Community Partnerships	30
21.	Other Activities Approved by the Resource Manager	31
22.	Leases, Licenses, Easements and Other Real Estate Instruments	33
23.	Prohibited Items	37
24.	Grandfathered Land-Based Privileges	38
25.	Activities Requiring Department of the Army Permits	39
26.	Navigation Guidelines for No-Wake Area	41
27.	Water Quality	41
28.	Fees	43
29.	Appeals Process	44
30.	Procedure for Items not Otherwise Covered in Plan	44
31.	Conclusion	45

EXHIBITS

Exhibit A.	Permit Conditions	46
Exhibit B.	Invasive Exotic Plant Control Permit Conditions	51
Exhibit C.	List Of Common Invasive Exotic Pest Plants in Tennessee	53
Exhibit D.	Agriculture Land Use Regulations	54

U. S. ARMY CORPS OF ENGINEERS
NASHVILLE DISTRICT

OLD HICKORY LAKE SHORELINE MANAGEMENT PLAN
APPENDIX M TO PART II OF THE
OPERATIONAL MANAGEMENT PLAN

1. References.

a. Section 10, Rivers and Harbors Act of 1899 (33 USC 403).

b. National Historic Preservation Act of 1966 (P.L. 89-665; 80 Stat. 915) as amended (16 USC 470 et. Seq.).

c. The National Environmental Policy Act of 1969 (P.L.91-190).

d. Title 36, Chapter III, Part 327, Code of Federal Regulations, "Rules and Regulations Governing Public Use of Water Resource Development Projects Administered by the Chief of Engineers."

e. ER 1130-2-540, Environmental Stewardship Operations and Maintenance Policies.

f. ER 1130-2-406, Shoreline Management at Civil Works Projects.

g. CEORDR 405-2-13, Issuance of Minor Licenses and Permits at Water Resource Projects.

h. Section 404 of the Clean Water Act (PL 92-500, 86 STAT 316, 33 USC 1344).

i. ER 1130-2-441, Cooperating Associations Program.

j. Section 6, PL 97-140, as amended by section 1134(d), PL 99-662.

k. The Americans with Disabilities Act of 1990, (P.L. 101-336; 104 Stat. 327).

l. 16 USC, Chapter 35, Endangered Species Act of 1973.

m. Report of the National Recreation Lake Study Commission, June 1999, Final Report.

n. Nashville District Guidelines and Policy for the Review of Cut and Fill Proposals, dated 11 December 2002.

o. ER 405-1-12, Real Estate Handbook.

p. Archaeological Resources Protection Act of 1979 (P.L. 96-95; 16 U.S.C. 470aa-mm) as amended.

q. ER 200-2-2, Environmental Quality-Procedures for Implementing NEPA, 4 Mar 1988.

2. Authority. The authority for the preparation of this document is contained within ER 1130-2-406. This plan is an appendix to the project Operational Management Plan.

3. Purpose. This Shoreline Management Plan (SMP) provides policies and guidelines for the effective long-range management of the shoreline resources of Old Hickory Lake. The Natural Resources Management mission is to manage and conserve those natural resources, consistent with ecosystem management principles, while providing quality public outdoor recreation experiences to serve the needs of present and future generations. Old Hickory Lake is a popular site for a variety of outdoor recreational activities. Recreational demands and developmental pressures increase each year, yet the total amount of public land and water area remains fixed. Sound management is necessary to provide optimum use of finite project resources.

4. Objectives of the Plan. The objectives of this plan are to balance the use of public land with the protection and restoration of the natural environmental conditions of Old Hickory Lake. In accordance with our responsibilities under the provisions of the National Environmental Policy Act of 1969, a primary goal of management of lake resources is to establish, protect, and maintain acceptable fish and wildlife habitat, preserve aesthetic qualities, and promote the safe and healthful use of the lake and surrounding public lands by the general public. This plan addresses vegetation management, construction of shoreline structures, dredging and channel excavation, shoreline stabilization, public involvement and education, and

incentives for community partnerships in shoreline management, and restoration and protection of public land. This plan also requires that all approved facility construction activities and plans incorporate best management practices (BMP's), addressing minimization of erosion and sedimentation, spill containment for construction equipment, and proper handling and disposition of solid waste.

This plan contains definitive guidance, which balances certain private exclusive uses of public resources while providing for protection and restoration of natural environmental conditions. Approximately 50 percent of the shoreline is allocated as Public Recreation Areas and Protected Shoreline Areas. Approximately 50 percent of the shoreline is designated as Limited Development Areas. Shoreline uses that do not interfere with authorized project purposes or public safety concerns, violate local norms, or result in significant environmental effects will be considered in Limited Development Areas, unless the public participation process identifies problems associated with these uses. The development of this plan has included full consideration of existing permitted private use facilities or privileges and prior commitments made for the term of their permit, lease, and/or license.

5. Description of the Lake. Old Hickory Lock and Dam is located at Mile 216.2 on the Cumberland River in Sumner and Davidson Counties, Tennessee, 25 river miles upstream of Nashville, Tennessee. The Rivers and Harbors Act of 1946 authorized it as a multipurpose project for hydropower production and navigation. Construction started in 1952 and the lake was impounded in 1954. The lake has 440 miles of shoreline at normal pool elevation, which is 445 feet above mean sea level. It extends 97.3 river miles from the dam to Cordell Hull Lock and Dam at Carthage, Tennessee.

Old Hickory is a "run-of-the-river" project, which experiences minimal annual pool fluctuations. The entire project encompasses a total of 25,802 acres of fee property, 3,653 acres of flowage easement land, and 4,700 acres of riverbed. At normal pool elevation, Old Hickory Lake has a surface area of 22,500 acres, and at maximum pool elevation (451 feet above mean sea level) the surface area of the lake increases to 27,450 acres. Land was acquired under a minimum acquisition policy, restricted to the acreage that would serve the operational and maintenance requirements of the project. This conservative

policy limited acquisition to a line or series of lines along tangents located at or near the 451 foot contour at the dam and extending to the 464 foot contour at the upper end of the lake. Some additional land was acquired in the mid-1960's for recreational purposes.

6. Present Land Use. There are 30 Corps recreation areas on Old Hickory Lake, which comprise 895 acres. Bledsoe Creek State Park, located approximately seven miles east of Gallatin, Tennessee, encompasses 164 acres of land. The City of Hendersonville operates 240 acres for municipal recreational use. The City of Gallatin maintains a 30-acre soccer complex on Station Camp Creek as well as 158-acres at Lock 4, Gallatin and Cedar Grove recreation areas, and Smith County operates a park on 14 acres included in the old Lock 7 site. Wilson County operates and maintains Tyree, Riverview and Dickerson Chapel Launching Ramps and Trousdale County operates and maintains Goose Creek and Second Creek Launching Ramps. The eight commercial concessions around the lake occupy a total of 134 acres of land and water. There are three quasi-public group camps, which occupy a total of 139 acres, and four private clubs that operate a total of 32 acres.

Land not developed is now extremely beneficial to visitors of Old Hickory Lake by providing areas for valuable recreational pursuits such as bird watching, photography, etc. as well as much needed wildlife habitat. These lands provide a suitable environment for a variety of birds, amphibians, and mammals. The upper reaches of the project offers excellent wildlife habitat conditions as a result of intensive management practices of the Tennessee Wildlife Resources Agency's (TWRA) 4,240-acre wildlife management area. Fringe areas along the lower reaches of the lake also provide habitat for many wildlife species. If left unmowed, these fringe lands may become covered with native grasses and vegetation that provides cover and food near a source of water. Major game mammals found on the project area include: white-tailed deer, raccoon, eastern gray squirrel, fox squirrel, and cottontail rabbit. Major game birds in the area include: bobwhite quail, wild turkey, mourning dove, Canada goose, wood duck, mallard duck, black duck, and baldpate. The endangered gray bat winters in a protected cave on the south bank of the lake and Old Hickory Lake is within the range of endangered Indiana bats. Several rare bird species (i.e., the bald eagle, marsh hawk, osprey, and Buckman's sparrow) are reported as frequenting the project. An active rookery of great

blue herons, black-crowned night herons, cattle egrets, and snowy egrets is located on several islands.

Creating greater vegetative diversity enhances terrestrial wildlife habitat. This plan requires the planting of native plants on public land that enhances biodiversity, benefits wildlife, and contributes to the aesthetics of the lake and restoration of shoreline previously cleared and mowed by adjoining private property owners. An active water pollution control program is important to aquatic resources of the lake. This plan also requires adequate shoreline stabilization to control erosion and improve habitat for aquatic life (see paragraph 19).

7. Residential Development On Adjoining Property. When the lake was constructed, the surrounding area was primarily farmland. The character of the shoreline today is quite varied. The lower end of the lake is surrounded by residential and industrial development, which often extends to the project boundary. Although agricultural land, forests, and bluffs are more prevalent on the upper reaches above State Highway 109, residential development is increasing. Currently, there are numerous subdivisions and many scattered residences adjacent to public property around the lake.

Development has been encouraged by favorable terrain, minimal holdings of public property around the lake, the proximity of the area to Metropolitan Nashville, and minimal water fluctuation. Increasing private development within formerly remote areas of the lake has resulted in tree vandalism and other serious encroachments on public property. These encroachments have resulted in numerous problems in properly maintaining important habitat within the Old Hickory Lake Wildlife Management Area.

Population growth in the Nashville area, economic development in the region, and increasing demand for "lakefront" property will result in continued residential development on private land bordering Old Hickory Lake. Consequently, requests for use of public property for residential landscaping and private moorage will continue to increase. In the absence of sound management, the entire shoreline could be cleared of natural vegetation and become congested with private moorage facilities and other structures. Public lands, which are available to everyone for public use, could take on the appearance of private property.

8. History - Initial Permit Policy 1954-1973. Following impoundment of the lake, shoreline use permits were routinely issued in accordance with the land use policy outlined in the Project Master Plan. Outgrants such as pipeline licenses, agricultural leases, letters of no objection for landscaping, sidewalks, stairways, and private dock permits were generally issued if the proposed work did not adversely affect project operations or interfere with public access.

9. Development of the Shoreline Management Plan, 1973-1980. In 1972-1973, a shoreline management study was conducted by the Resource Manager to determine the long-range impacts of private uses on the recreational and environmental resources of the lake. Due to the increasing number of permits that were being issued on Old Hickory Lake, problems concerning private development on public property such as overcrowding of private docks, elimination of natural vegetation, and degradation of aesthetic qualities became serious in many parts of the lake. A need for protecting the overall public interest by better managing private exclusive use of public lands and waters became evident.

A Shoreline Management Plan for Old Hickory Lake was implemented in June 1973. Its basic functions were to ensure the proper long-range management of public resources by establishing consistent guidelines for the types of permitted facilities and/or work authorized and to clearly identify areas where mowing, dock privileges and other private uses would not be permitted. In some areas, shoreline work was limited to clearing undergrowth with only hand tools. Since such a large portion of the shoreline had existing development, one basic objective was to protect remaining shoreline areas that had not been affected by such activity. Requirements and guidance for shoreline management plans at all Corps of Engineers lakes were published in a Federal Regulation on 13 December 1974. The Old Hickory Shoreline Management Plan was updated in June 1980 to include minor policy changes and to more nearly conform to the language contained in the Federal Regulation.

10. Shoreline Management Plan, 1983-Present. As a result of increased public interest in the 1980 Shoreline Management Plan, a public review process was initiated in the fall of 1980. Two (2) public meetings were held in January 1981. A citizen's advisory committee was formed to study the existing plan and

recommend changes. Based on a comprehensive review of the committee's report, information gained through the public involvement process and the 1980 plan, policy changes were made and a new plan was implemented in February, 1983. The plan was updated in October of 1989, June 1995, March 2001, April 2008 and July 2014 as a result of the public involvement.

Since 1983, the Resource Manager has conducted public workshops periodically to keep the public - including realtors, developers, and adjoining property owners - informed on matters affecting them, to answer their questions about the management of Old Hickory Lake, and to listen to what they have to offer concerning lake management. Revisions and changes to this plan is a result of an accumulation of information gathered regarding Shoreline Management from the period of 2014-2019, which refines and describes activities permitted on Old Hickory Lake. Regular input from adjoining private property owners, dock builders, environmental groups, federal and state agencies, and the public in general has been considered in developing this plan.

11. Public Involvement and Education. Old Hickory Lake personnel are available to address any questions concerning the Shoreline Management Plan and policies. Periodic newsbriefs are available on the Old Hickory Lake website to keep permittees and other concerned stakeholders informed on shoreline management policies, best management practices, environmental stewardship trends, and other topics of current interest. Contact with the media is maintained so that the public can be kept informed of latest happenings. Local group meetings and newspaper articles are used to promote watershed management issues and conservation projects in which the public can participate. Environmental Awareness Days and other special programs are held with schools to promote fish and wildlife management, biodiversity, conservation, and stewardship.

Public workshops will be held for any major update in the Shoreline Management Plan. This will also apply to policy revisions which affect changes in land use and/or impact a large number of people.

12. Proprietary Jurisdiction. No other federal agency has land ownership or jurisdiction over the administration of the Old Hickory Lake Shoreline Management Plan. However, federal, state and local laws are applicable to all Old Hickory Lake project lands and waters. While the Corps of Engineers does not have

authority to enforce regulations prepared by other federal, state and local agencies, the Corps cooperates with other agencies in their respective enforcement responsibilities specific to project lands and waters. Some of the responsibilities addressed in this plan involve environmental regulations, building codes, water and air quality standards, and local government ordinances.

13. Section 6, Public Law 97-140 amended by Section 1134(d), Public Law 99-662. Public Law 97-140 stated that no dock, cabin or appurtenant structures, lawfully installed on or before December 29, 1981, shall be required to be removed before December 31, 1989, from a water resources reservoir or lake project administered by the Secretary of the Army. This law was amended by Section 1134(d), Public Law 99-662 which states that permits for such facilities that existed as of November 17, 1986, may not be revoked unless the dock or structure presents a safety hazard or the permittee fails to comply with the conditions of the permit, or the District Engineer revokes the permit when the public interest necessitates such revocation. A grandfathered dock may be repaired or rebuilt to its original permitted shape and size or smaller with permission from the Resource Manager. If a structurally sound dock is damaged or destroyed by a storm or natural disaster, then the Resource Manager can authorize repairs.

When the dock presents a safety hazard or the permittee fails to comply with permit conditions, all deficiencies must be corrected upon receipt of notice from the Resource Manager. If all unsatisfactory conditions are not corrected within the specified time period, the permit will be revoked, the dock must be removed, and another permit or outgrant will not be issued.

14. Shoreline Allocation. The shoreline of Old Hickory Lake is allocated to the following: Prohibited Access Areas, Public Recreation Areas, Protected Shoreline Areas, and Limited Development Areas. These allocations are shown on a three part Shoreline Allocation Map. The official map is at the Resource Manager's Office. A public notice will be issued describing any changes in the map resulting from updates of the shoreline management policy.

a. Prohibited Access Areas. Approximately 0.11 percent of the shoreline of Old Hickory Lake is designated as Prohibited Access Areas. These are areas established for the physical

safety of the public. Private exclusive use privileges are not allowed in these areas. The following areas are within this classification:

(1) The immediate area of the concrete dam and power plant, including the event-restricted safety zone upstream and downstream. Visitors in boats in the safety zone are required to wear life jackets within the posted areas.

(2) The service base, including the warehouse storage areas and the maintenance shop facilities.

(3) The restricted areas of the lock, power plant, switchyard, Electrical Services Section Building, and Nashville Repair Station facilities.

During official tours, exceptions to the above restrictions allow access to the designated visitor areas of the dam and to the power plant visitor center. Visitors in boats in both headwater and tailwater areas are required to wear life jackets if they are within the posted area.

b. Public Recreation Areas. Recreation sites operated by the Corps of Engineers, the State of Tennessee, and local governments provide convenient access to Old Hickory Lake. Approximately 14 percent of the shoreline of Old Hickory Lake is designated as Public Recreation Areas. Public Recreation Areas include Corps recreation areas and launching ramps; city, county, and state parks; group camps; and public marinas. These areas have been developed around the lake in accordance with the project master plan to provide for recreational needs of the general public. The Old Hickory Lake Master Plan and Operational Management Plan, Part II, contain descriptions of these areas. Permits and licenses issued under this Shoreline Management Plan cannot be granted in these areas. Future recreation areas are also included in this classification.

c. Protected Shoreline Areas. Approximately 36 percent of the shoreline of Old Hickory Lake is designated as Protected Shoreline Areas. These are areas which have been established to retain the natural, undeveloped character of the shoreline, protect fish and wildlife habitat, maintain shoreline aesthetics, prevent erosion, and to protect other environmental values of the lake. Islands on the lake are also protected. No cutting of trees and shrubs or underbrushing is allowed on

islands. The ultimate goal in these areas is to protect them from private uses, which would be contrary to the long-term, best interests of the general public. A large part of the protected shoreline is within the Tennessee Wildlife Resources Agency (TWRA) Wildlife Management Area.

Pedestrian access, hunting, boating, fishing, hiking, photography, and other recreational activities are allowed in Protected Areas as long as they are compatible with the protection of the shoreline and with state hunting, fishing, and boating laws. Access paths, riprap, and agricultural leases may be authorized in Protected Areas upon receipt of proper permits or real estate outgrants obtained through the Resource Manager. Private docks and/or residential mowing privileges are not permitted in Protected Areas.

d. Limited Development Areas. Mowing and/or private dock privileges may be granted only in these areas. Limited Development Areas on Old Hickory Lake are further classified according to the type of private use authorized. The two sub classifications are Private Docks and Mowing (33 percent) and Mowing only (17 percent). Approximately 50 percent of the shoreline of Old Hickory Lake is designated as Limited Development Areas.

The extent of the Limited Development Area for mowing is greater than that for private docks and community docks, since many areas which may be open to mowing may front shorelines which are impractical for moorage of floating docks because of steep bluffs, narrow coves, shallow water, or impacts to navigation.

15. Environmental Restoration and Conservation Program. In all aspects of natural and cultural resources management, the Corps promotes awareness of environmental values and adheres to sound environmental stewardship, protection, compliance and restoration practices. The Environmental Restoration and Conservation Program is a management strategy designed to improve fish and wildlife habitat on the project through partnership projects with volunteers, non-profit groups, adjacent property owners, and the Tennessee Wildlife Resources Agency. Our goal is to apply the best management practices that will enhance and restore habitat and in some instances limit public access to protect historical, natural, and cultural resources. This program takes into consideration critical habitat for endangered, threatened, and candidate species as

well as non-threatened species. It also addresses the identification, removal and control of invasive exotic pest plant species.

Due to the limited acquisition of land for Old Hickory Lake and the loss of critical adjacent habitat, numerous Environmental Restoration and Conservation areas which include over 800 acres have been identified for restoration and conservation projects. Signs designating the locations as "Wildlife Management Area" are placed at the sites. Maps showing the location of project sites are maintained at the Resource Manager's Office.

Project site evaluations consider the integration of diverse natural resource components of the lake such as fish, wildlife, forests, wetlands, grasslands, soil, air and water with public access and use. These areas are important to population growth, food and water resources, shelter, breeding and rearing sites. Many of these sites are in proximity to private residences and contain significant land areas due to the terrain or land being bought above the 451-464 contour. Several islands are nesting sites for colonies of black-crowned night herons, blue herons, and cattle egrets. Nest and colony abandonment increases with increased human activity. These islands are marked with buoys and/or signs to reduce human interference. The Resource Manager's staff will work closely with the State Ornithologist of the Tennessee Wildlife Resources Agency and other bird conservationists to develop prescriptions that focus on conservation priorities and habitat conservation to improve habitat for songbirds and migratory birds.

a. Endangered and Threatened Species The Endangered Species Act of 1973, as amended, prohibits activity which jeopardizes listed species or critical habitat. Critical habitat includes those areas that contain the physical and biological features that are essential to the conservation of a given species or group of species and which may require special management or protection. Federal agencies are required to undertake affirmative programs for the conservation of listed species. Approximately 36 percent of the lake has been allocated as Protected Shoreline and specific management and protection measures are listed in the Endangered Species Manual, Nashville District Cumberland River Projects and Operation Management Plan for Old Hickory Lake, Part One, Natural Resources, Chapter 9 Management for Special Plants, Animal and Habitats. The Resource Manager's staff will coordinate the

findings of endangered or threatened plant and animal species and/or critical habitat found on the project with the U.S Fish and Wildlife Service, Tennessee Department of Environment and Conservation (Division of Natural Heritage), and the Tennessee Wildlife Resources Agency. Furthermore, coordination will be undertaken as necessary to ensure no requested activities would result in negative impacts to species or their habitats.

b. Invasive Exotic Plant Control. The lands and waters of Old Hickory Lake currently contain numerous invasive exotic plants. See Exhibit C for a list of Invasive Exotic Pest Plants in Tennessee. Invasive exotic plants pose a serious threat to biodiversity. They invade native plant communities, spread, compete, and displace natives. This disrupts and alters wildlife habitat. Only native plants are allowed to be planted around Old Hickory Lake. Native plants have many inherent qualities and adaptive traits that make them aesthetically pleasing, practical, and ecologically valuable.

The Resource Manager is responsible for invasive exotic plant management at Corps areas which include Environmental Restoration and Conservation Areas, recreation areas, beaches, campgrounds, and boat ramps. The annual work plan identifies areas where the Corps will remove exotic plants. Permission to control invasive exotic plants for the benefit of individuals, group camps, businesses, and commercial marinas can be obtained from the Resource Manager. Such activities will be conducted at no expense to the government.

Individuals desiring to remove invasive exotic plants manually or with hand tools may do so after receiving approval from the Resource Manager. Once the invasive plants are removed, native plants must be replanted. The Corps may assist in providing native plants.

Disposal of the plant material in the lake is not permitted. Disposal on public land may be approved on a case-by-case basis.

The use of commercial harvesting equipment or rotovating to control invasive aquatic plants will be evaluated on a case-by-case basis and may be permitted by the Resource Manager, or through a Department of the Army permit, if applicable. Disposal of commercially harvested plant material is not permitted on public land or water. Any public property damaged in the process of removing vegetation must be restored by the permittee.

If chemical means are requested to control invasive exotic vegetation, an application must be submitted and written permission obtained in advance from the Resource Manager. Chemicals must be applied by a licensed and certified commercial applicator. See Exhibit B for Invasive Exotic Plant Control Permit Conditions.

Only those herbicides specifically approved for terrestrial and/or aquatic use will be authorized and shall be used in strict accordance with label restrictions. The applicant must notify all property owners within 150 feet of boundaries of treatment area as shown on plans of the proposed application area and inform them of the proposed date and time of the invasive exotic plant control treatment. The applicant must supply the Resource Manager with the name(s), address(es) and phone numbers of these property owner(s) as well as original signatures of each property owner involved. It is the applicant’s responsibility to make the contractor fully aware of all permit plans and conditions prior to commencement of the work and furnish a copy of the permit to the contractor. The applicant must also notify adjoining landowners with water intakes within the proposed treatment area. In the case of aquatic treatments, the adjoining landowners must be informed to discontinue use of their water pumps until the residual time limits have expired. See herbicide manufacturer's label for distance allowed from potable water intakes. The applicant(s) must supply the Resource Manager with the name(s), address(es), phone number(s), and signature(s) of each property owner with affected water intakes, showing their acknowledgment of the proposed treatment.

Warning signs must be posted on land at the treatment area boundaries and at 50-foot intervals along the shoreline of the treatment area. For aquatic plant treatment, buoys must be placed at the treatment area boundaries and at 50-foot intervals in the water outside of the treatment area where boaters can read prior to entering the treatment area. Treatment area notices provided for this purpose must remain in place seven (7) days after treatment. All permit applications will be coordinated with and reviewed by appropriate state and federal agencies. The permittee must comply with all permit conditions. A permit will not be issued if the Tennessee Department of Environment and Conservation objects to the proposed activity. Once the permit has been issued, the permittee must notify the

Resource Manager's Office and the State Division of Water Pollution Control three (3) days prior to treatment.

16. Activities Requiring Shoreline Use Permits. The items mentioned in this plan are approved by either a shoreline use permit, real estate outgrant, or Department of the Army permit. All applications shall be made to the Resource Manager. These uses of public lands and waters that are permitted to adjacent landowners are privileges, not rights. The Corps fully expect and require that all activities on public lands and waters be in compliance with Corps policies, rules and regulations.

Failure to comply with all such provisions may result in cancellation of all activities previously permitted and/or licensed on public lands and waters. For example, a boat dock permit is subject to cancellation for violations of land use permit or real estate license requirements and/or land use permits and activities granted are subject to cancellation for violation of boat dock permit or real estate license requirements.

Persons with permits or licenses shall protect the public property against pollution. They shall comply with any laws, regulations, conditions, or instructions affecting the activity authorized if and when issued by the Environmental Protection Agency, or any Federal, state, interstate or local governmental agency having jurisdiction to abate or prevent pollution. The disposal of any toxic or hazardous materials within the public property is specifically prohibited. Such regulations, conditions, or instructions in effect or prescribed by the Environmental Protection Agency, or any Federal, state, interstate or local governmental agency are a condition of all permitted or licensed activities. They shall not discharge waste or effluent from their private property in such a manner that the discharge will contaminate streams or other bodies of water or otherwise become a public nuisance. They must obtain approval in writing from the Resource Manager before any pesticides or herbicides are applied to public lands or waters.

Persons with permits or licenses shall not remove or disturb, or cause or permit to be removed or disturbed, any historical, archeological, architectural or other cultural artifacts, relics, remains or object of antiquity. In the event such items are discovered on the public land, they shall immediately notify the Resource Managers Office and protect the site and the

material from further disturbance until the District Archeologist or his/her representative gives clearance to proceed. Damaging or destroying resources and/or collecting artifacts is a violation of the Archaeological Resources Protection Act of 1979, as amended. First time offenders can be fined up to $250,000 and imprisoned for up to two years.

The public property line around the lake was originally surveyed, established, and clearly marked with signs on metal or wooden posts and blaze marks painted yellow on trees between 1982-1984. It is the responsibility of each adjoining property owner to know the exact location of his or her property lines and corners. Before any new permits for use of public land/water are issued, the line must be clearly identified, and if not, the new owner must utilize a licensed surveyor and provide a stake survey. Before any renewal permits are issued, the line must be marked according to the approved plans. If a private need arises for the exact location of the common government or private property line, the adjacent property owner (at the owner's expense) must utilize a licensed surveyor. The Corps will provide information, including bearings and distances, describing where the public property line is located. Any discrepancies identified by the survey should be resolved with the Resource Manager. Disturbing or removal of boundary markings is considered destruction of Government property and is a violation under CFR Title 36 327.14.

Any alteration of natural vegetation or landforms on public property is prohibited without the express written approval of the Resource Manager. Removal or alteration of public property line markers or survey points is expressly prohibited. Construction on or alteration of public land can be avoided by proper research and planning to prevent costly removal of private structures and/or after-the-fact restoration of public property.

Shoreline use permits may be issued for private dock and mowing privileges on public property. Shoreline use permits are non-transferable. A new permit may be issued to a new property owner after he or she submits a completed application and the required fees. The permit will be issued only after the fee is paid. The Resource Manager will receive and process all applications for shoreline use permits. Applicants will have one-hundred eighty (180) days to meet all requirements, which may include boundary line plantings, density plantings, dock

construction, erosion control, removal of unauthorized structures, etc.

Realtor letters are a valuable tool to inform prospective realtors or buyers of the shoreline classification adjacent to their lot and/or correct any deficiencies with the existing permit prior to sale of the property. These letters are provided to the current owner(s) of property adjacent to Old Hickory Lake and are valid for ninety (90) days. Generally, Realtor Letters are issued within fourteen (14) days of a completed application.

17. Vegetation Alteration. In Limited Development Areas, adjoining private property owners may apply for a vegetation alteration permit for control of woodland understory vegetation (weeds, vines, briars, invasive plants, etc.) and to mow the public property between their property and the lake within the allocated area determined by the Resource Manager. Typically, this area is determined by the shortest possible lines from the adjoining private property outer corners to the shoreline at normal pool elevation. The amount of public property mowed generally will not exceed one-hundred (100) feet wide or one-half (1/2) acre, whichever is less. The unmowed sections may be mass planted with selected species of trees and/or shrubs which benefit wildlife. The Resource Manager or his/her representative will determine the limits of the area for all vegetation removal. Decisions regarding the issuance of a permit are made after a site inspection is completed. Where feasible, some area will be left unmowed to provide cover and edge for wildlife. In areas not previously mowed, the selective cutting and continuing control of woodland understory vegetation and the thinning of tree seedlings is allowed with a valid land use permit. Cutting trees greater than one inch in diameter at the base is prohibited. Vegetation alteration will not be permitted in areas containing large populations of wetland plant species or where significant adverse environmental impact will result.

All applicants (for both new and renewal permits) are required (only where needed) to plant native plants on public land that benefit wildlife habitat, contribute to the aesthetics of the lake, and restore shoreline previously cleared and mowed. If there is an erosion problem, all applicants are also required to control erosion by placing quarry-run stone (riprap), placing existing natural rocks, or using vegetative structures (called bioengineering methods). Initially, to slow the erosion process

until appropriate bank stabilization is completed, all applicants will be required to leave an unmowed buffer strip along the shoreline. See Shoreline Erosion Control, paragraph 19 and 25(b).

a. Existing Mowed Areas. The following measures are required for all new and renewal mowing permits. Permittees may be required to plant and maintain trees on the public land to a density of twenty-four (24) trees per acre (minimum size 1 inch base diameter). Existing trees on public land will be counted towards the twenty-four (24) per acre. Trees can be close together and randomly planted to simulate natural conditions. Symmetrical planting on evenly spaced centers is not natural in appearance and will not be required except to delineate property boundaries. If trees die, they must be replanted. Where feasible, the mowing area will be reduced and some area will be left unmowed to provide cover and edge for wildlife. Food and shelter are primary necessities of wildlife. Frequently the same plants that serve as food also provide cover. The value of cover depends on the abundance of vegetation in a particular area. Cover is more valuable in large open mowed areas. Planting designs will focus on establishing hedgerows, plant islands, and shrub growth, which provide more enduring cover. The Corps may assist in providing plants for establishing food and cover. Where there is adequate cover, a reduction of existing mowing limits will not be required. Approved plant designs must use indigenous plant materials. However, designs can be approved, on a case-by-case basis, for planting of native ornamental trees and shrubs, wildflowers, and grasses. All planting designs and layouts must be approved before planting. A list of species recommended for shoreline planting is available at the Resource Manager's Office and included in the permit application package for new owners.

b. Selected Vegetation Removal. The Resource Manager can authorize the removal of damaged trees, fallen trees, and thinning for the removal of invasive plants and promotion of biodiversity. Diseased or standing trees that pose a severe safety hazard can be removed with prior approval. Normally, a portion of the trunk will be left standing to provide habitat for wildlife and allow for the natural decay of the material. However, fallen trees, driftwood, debris, and any form of garbage can be removed without formal approval. Generally, whenever we allow a standing tree to be removed, it must be replaced with trees (a minimum of two-inch base diameter)

planted at a location designated by the Resource Manager. Limbs may be trimmed up to one third the height of the tree, not to exceed 12 feet. Holes and eroded drainage areas on public land may be filled and reseeded with proper approval from the Resource Manager's Office. See minor fills, paragraph 21 (b). The Resource Manager, on a case-by-case basis, will consider all these activities. In no event will permission be granted to cut a healthy tree when the relocation or modification of a private structure is feasible.

c. Boundary Line Marking. This requirement helps the general public determine the extent of public shoreline property. It provides the general public with a distinct delineation of where private property begins. All permittees shall be required to mark the boundary line between their property and public property. The permittee may accomplish this by one or a combination of the following methods:

(1) Plant and maintain trees (minimum size one-inch base diameter) or shrubs (minimum size two-gallon container) on or near the private property corners.

(2) Install 4x4 wooden posts between three (3) to five (5) feet tall on all surveyed property corners adjacent to public property.

(3) Install a fence or wall on private property next to the public property line.

(4) Install and maintain nesting boxes on the property corners and on forty (40) foot centers along the public property line.

The Resource Manager must approve the method of delineation. Delineation of the public property boundary shall be performed within 180 days of issuance of the permit. Failure to properly delineate the property boundary will result in revocation of mowing privileges. A suspended or revoked permit will not be re-instated or re-issued until the required work is accomplished. Suspended or revoked permits require a new application fee prior to re-instatement. In heavily wooded areas where the planting of additional vegetation is impractical, the boundary will be delineated with Corps of Engineers property line signs and/or blazes painted yellow. The

painted lines are approximate locations of the true boundary lines and are to be used and portrayed as such.

d. Environmental Restoration and Conservation Areas: Environmental Restoration and Conservation Areas (ERCA) have been established to improve fish and wildlife habitat on the project through partnership projects with volunteers, non-profit groups, adjacent property owners, and the Tennessee Wildlife Resources Agency. Within ERCA areas vegetation alteration permits or tree cutting will not be allowed. However, the Resource Manager may authorize a meandering path not to exceed four feet in width to improve pedestrian access to the lake. The path must blend in with the natural terrain, and only a natural surface will be permitted. Access paths across public lands will be restricted to pedestrian use only and will be available for the use of the general public.

18. Private Floating Dock Facilities. Private floating dock facilities include individual docks, community docks, and courtesy floats. Permits for these facilities shall be issued only in Limited Development Areas allocated for private docks. Decisions regarding the issuance of a permit are made after a site inspection is completed. Each application will be considered according to location, amount of lake frontage, pool fluctuation, shoreline characteristics, water depth (the dock must be able to float during normal pool elevation of 445 msl.) and impact on public use. Even though the part of the lake in question may be identified as a Limited Development Area on the Shoreline Allocation Map, this designation does not guarantee that a dock permit will be issued at a specific location within that area. The Resource Manager will coordinate applications for private docks on the main channel of the lake with the appropriate branch in the Nashville District Office to ensure commercial navigation is not impeded.

To be eligible for an individual private dock, an applicant must own private property which qualifies for a residential building permit and directly adjoins public property (not separated by a public road or driveway, public right-of-way, subdivision common area or leased property) at the proposed dock location. Applicants must have proof of ownership along with a plat map of the property that has been prepared by a licensed surveyor. There must be a minimum of sixty-five (65) feet of allocated shoreline to qualify for an individual dock permit. This allows the docks to remain fifty (50) feet apart and reduces conflicts

at heads of coves where space is limited. See the description of "allocated shoreline" in paragraph 17.

Only one dock will be permitted per individual at a single location. This means that an individual with a large parcel or group of two (2) or more contiguous parcels of private property adjoining public property will be permitted only one dock, regardless of total allocated shoreline. If an individual builds a single family residence across multiple parcels, those parcels will be treated as one parcel regardless of multiple parcels owners. If lots or parcels of land are subdivided or altered then all affected parcels and permitted activities must conform to the current requirements of the Shoreline Management Plan. The Resource Manager may require verification of boat ownership. The permitted dock may not be rented, leased, or licensed to other individuals or used for any purpose other than moorage of the permittee's boat. At no time will private floating facilities be used for human habitation. Private docks are only for the moorage of boats and shall not contain side floats, diving boards, slides, playground equipment, grills, tables, furniture, or similar accessories. Existing side floats not used for moorage must be removed when ownership changes to a new permittee. If special access is requested for persons with disabilities, the dock design must meet standards for the Americans with Disabilities Act (ADA). The applicant must comply with all permit conditions (see Exhibit A).

a. Individual Docks.

(1) Design Criteria. All plans for new docks and major modifications of existing structures must be certified (signed and dated) by a licensed engineer, architect, or licensed general contractor before it can be approved. Certification is intended to ensure docks are structurally sound and safe including the reasonable expectation that the dock is suitable for conditions on Old Hickory Lake such as wind, wave action, snow, etc. The applicant must submit a drawing showing the dimensions as well as structural details that meet minimum building codes. Applicants shall submit an 8 1/2" x 11" drawing showing the dimensions of the proposed structure and anchor system. The structural details can be on blue prints. Details for boatlifts, jet ski lifts, electrical facilities, and anchoring systems must be included. See paragraph 22a for electrical installation requirements.

(2) Location. Generally, a new individual dock must be constructed within the allocated area described in paragraph 17, which is the shortest possible lines from the adjoining private property outer corners to the shoreline at normal pool elevation (this is referred to as allocated shoreline). The Resource Manager will designate the exact location and type of the floating facility (individual or community dock) that will be permitted. Whenever possible, a location will be selected which will allow neighboring adjacent landowners to also qualify for dock privileges. In some locations such as near campgrounds, recreation areas, environmental restoration and conservation sites, marinas, and/or permitted skiing areas, individual docks may inhibit public use and enjoyment of project waters and shoreline. In these type areas, only a community dock will be permitted to limit the proliferation of individual facilities. An individual dock will not be located adjacent to a subdivision's common area. A community dock facility may be located adjacent to a subdivision common area and may be located adjacent to any lot in the subdivision as determined by the Resource Manager (e.g., where physically feasible in terms of access, water depths, wind protection, and environmental impacts).

The dock, boats, and attachments must be located at least fifty (50) feet away from any other dock. Some existing docks are closer than fifty (50) feet apart. In these overcrowded areas, no new docks or expansions to existing ones will be permitted. The fifty (50) foot spacing provides a safety buffer in case of fires or explosions. It also allows safe and adequate room for egress to and from docks and for maneuvering around docks by watercraft. This spacing reduces congestion and the negative visual impact.

The relocation of existing approved docks to new locations may be allowed, on a case-by-case basis, based on the size, configuration, and condition of the dock to be moved and the site conditions of the new location. The new location must conform with criteria in paragraph 18 and be in a Limited Development Area designated for docks.

(3) Size. The maximum allowable total surface area for a dock and moored boat(s) is seven hundred (700) square feet (overall length x width) including the slip(s). The maximum allowable length for an individual private dock with a slip is forty (40) feet. A dock with a slip can have one eight(8) foot

wide section, and all other sections of the dock cannot exceed six (6) feet wide. This is allowed to give safe clearance when storage lockers and/or jet ski lifts are located on the dock. The maximum size of a new dock without a slip (platform dock) is one hundred-sixty (160) square feet. The maximum width of the walkway is six (6) feet wide. The Resource Manager may reduce these size limits if necessary to protect navigation interests or public recreational use of the lake. Existing permitted docks exceeding these size requirements are grandfathered. All attachments, including, existing floating platforms, rafts, decks, etc. which do not have enclosed hulls or are not designed and used primarily for recreational navigation will be considered a part of the dock structure. The surface area of such structures will be counted toward the total square footage of the dock, regardless of the method of attachment or the presence of a boat motor or state boat registration numbers. See paragraph 18 (a) (5) for more information about attachments.

Docks or boats moored to them shall not extend more than fifty feet from the beginning of the walkway at the shoreline to the outer edge of the dock, in a direction perpendicular to the shoreline. If dock is located within a narrow cove, the dock shall not exceed fifty feet (50) in length or one-third (1/3) the width of the cove, whichever is less.

The owners of all new, renewed or reissued permits are required to install and maintain safety reflectors on each corner of the dock. These are to be placed so that they are visible to boat traffic.

Notwithstanding the provisions of this section, (Paragraph 18.a. (3), Size), in unusual circumstances involving disabilities, the Resource Manager may, at his/her discretion approve a permit for a dock exceeding the size limitations in this section. To qualify for such an exception, the permit applicant must show that an individual residing in the applicant’s home adjacent to the permit site has a proven long-term disability. The individual claiming the disability must provide evidence of the disability by documentation of eligibility for federal or state disability benefits or other documentary medical evidence acceptable to the Resource Manager. Documentary evidence of disability must include sufficient detail concerning the disability to verify the requirement for the larger dock. Authorization by the Resource Manager for docks exceeding the area limitations in this section may be granted only for the

minimum area necessary to provide safe usage. Docks for which size exceptions are authorized under this provision should conform to Chapter 10, paragraph 1003, "Recreational Boating Facilities," Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines. Evidence of residency and disability must be provided at each permit renewal. Permits with size exceptions will terminate upon the end of the residence of the qualifying individual at the property, the termination of the disability, or upon transfer of the adjoining private property. Upon termination of the permit with size exception, the dock must be restored to standard size requirements before a permit can be renewed or issued to a new applicant. This requirement will be made a condition of the permit.

(4) Construction Criteria. Floating docks must be properly constructed and firmly secured in place with shoreline anchors and/or spud poles. A concrete footer to attach the walkway to the shoreline shall not exceed twenty-five (25) square feet of surface area. Larger footers may be approved by the Resource Manager for the purpose of anchoring dock structure based on engineered drawings on a case-by-case basis. Fixed piers, fixed walkways, and fixed docks are prohibited. If spud poles are used, they must be long enough to allow for fluctuation of the lake to flood pool elevation. When it becomes necessary to remove or move a boat dock, which is moored with spud poles, removal of the spud poles by the dock owner will be required. Docks cannot be moored to trees.

Only encased flotation will be approved for both new and existing docks.

Steel, aluminum, concrete, fiberglass, pressure treated wood, or combinations of these are acceptable building materials for docks. Handrails may be installed on the dock and walkway, but not on the roof. Roofs may be authorized for the protection of the applicants' boat, but may not be used as a sun deck or storage area. The roof height will be reviewed based on the structural integrity of the dock and the aesthetic impact. Flat roofs that could be used for a sun deck or patio are no longer permitted. Existing permitted docks of this type are grandfathered. Existing stairs and or other access to roofs must be removed or access permanently restricted upon change of ownership. New enclosed boathouses will not be permitted. Roof overhangs on docks in excess of three (3) feet will be included

in the total square footage of the dock. A storage compartment not to exceed fifty (50) cubic feet may be constructed on the dock to store equipment related to boating. The storage compartment can be constructed to serve as a bench. If the dock is painted, it must be an earth tone color, such as green, brown, or tan, and it must be repainted when needed. A permit tag furnished by the Resource Manager must be displayed on each dock so that it can easily be seen from the waterway. The permittee must maintain the structure in a safe and structurally sound condition. See Paragraph 22(a) for safety requirements concerning electrical installations associated with private docks.

(5) Attachments to the Dock and Outside Moorage. Generally, new applicants that apply for a permit for a dock with slips cannot have vessels moored to the outside. Boats moored to the sides can significantly reduce the safety buffer between docks and adversely affect navigation. All vessels moored to the dock must be listed (boat registration number) on the approved application. Portions of boats which extend more than three (3) feet outside the dock slip will be included in the total square footage of the dock. Boatlifts (including personal watercraft lifts and small boatlifts) shall not be fixed with driven pilings. They must be attached to the dock in such a way that they fluctuate with the dock and water level or be removed before ownership changes to a new permittee. The square footage of the attachment will be added to the square footage of the dock structure since these type facilities are permanent structures and increase the "footprint" (actual water surface area occupied by the dock structure and facilities enclosed). The total square footage, or “footprint”, for a slip dock with attachments cannot exceed seven hundred (700) square feet; however, the “footprint” for platform docks with attachments cannot exceed 280 square feet to allow for the addition of a personal watercraft or small boat lift.

b. Community Dock Associations. The community association, not the individual members, owns a community dock. Property owners can benefit from a community dock association in several ways. A community dock can reduce the visual and physical impacts of private development along the shoreline by replacing a potential string of scattered individual docks with one centralized facility. Overall design, construction and maintenance costs per person are generally lower for a community dock than for a separate individual dock. Electrical

installation, maintenance, and inspection costs would also be lower per person in the case of a community dock. The permit cost is reduced because only one facility, and consequently one shoreline use permit, is needed to serve several adjoining property owners.

Community docks shall be permitted only in shoreline areas allocated as Limited Development for private docks. The community dock must be located within the limits of an area defined by the Resource Manager so that it is at least fifty (50) feet away from any other existing docks. The association must submit a shoreline use permit application with detailed plans showing the location of the facility on the shoreline and the type of construction. No deviation from the approved plans is allowed without the prior written approval of the Resource Manager. A member of a community dock association is not eligible for an additional individual private dock permit. However, a person with a permit for an individual dock can relinquish that permit to participate in a community dock. The community dock association must notify the Resource Manager of the change in membership. The association must furnish the Resource Manager with a list of the names, addresses, and subdivision lot numbers of all members and provide notification of any changes in membership annually. Moorage at a community dock by individuals who are not members of the association is prohibited. Individual slips may not be rented, leased, licensed, or sold, nor may any other commercial activity be associated with the operation of the facility.

Community facilities may extend more than fifty feet perpendicular from the shoreline, but may not exceed one-third (1/3) the width of the cove. Since inside walkways are shared in a community dock facility the total surface area of a community dock shall not exceed 630 square feet per member; therefore, when the design of the facility gives each member exactly the same moorage capability, the total surface area will be divided by the number of members. If there are different configurations for each member within the same structure, the square footage will be divided based on exactly how much surface area each member is utilizing taking into consideration shared fingers, etc. The construction criteria, attachments to the dock, and outside moorage are the same as for private individual docks see paragraphs 18 (a) (4&5). Existing community docks must obtain a non-profit corporation status see paragraph 18(c). Copies of the state certificate of incorporation, the corporate

charter, corporate by-laws, and a list of officers and members (names, addresses, phone numbers, and subdivision lot numbers) must be submitted when the dock is renewed. This is required to identify new owners and acquire information that may have changed in the five-year period.

There are two types of community dock associations authorized on Old Hickory Lake:

(1) Association of Individual Property Owners. Two (2)or more individuals, *each of whom meet all the requirements for obtaining a permit for a private individual dock*, may form a legal, non-profit corporation and apply for a community dock. Since the permit is issued to the corporation, new members (those who purchase the adjoining private property of a former member) will not have to apply for a separate permit. No incorporation insurance coverage is required for this type of community dock. Liability insurance coverage is required, and shall be issued as a single policy, not a series of individual policies. Each member of the community dock should have access to the dock from their private property onto public property or from legal subdivision access.

(2) Association of Multiple Family Developments. A community dock permit may be issued to an association of property owners of a condominium, cluster home development, or similar residential development with jointly owned property (common area). To provide access to public lands, the applicant must provide a dedicated access from a public thoroughfare to the proposed site of the community dock. Public lands will not be made available for parking. The individual occupants must own residential units; therefore, this excludes apartments or rental units in which residents do not actually hold title to the property involved. Persons eligible to use the community dock will be determined by the legally incorporated property owners association. Since the number of residents will generally exceed the number of slips available, association by-laws must clearly state the criteria. The number of slips will never exceed the number of residential lots adjacent to common area with allocated shoreline directly fronting a Limited Development Area allocated for private docks. Also, a property owners' association shall qualify for a community dock permit only after the residential development is substantially completed (twenty-five per cent of the units are owner occupied) and the association officers are bonafide residents. The

purpose of this requirement is to ensure that the community dock is for the legitimate recreational use of actual residents and not a speculative venture by developers to enhance marketability.

For permitting and fee purposes, a community dock serving a multiple family development is defined as a single facility of up to twenty boat slips. The maximum number of slips allowed will be determined by allotting one slip per sixty-five (65) linear feet of allocated shoreline suitable for placement of individual private docks. The Resource Manager will determine if eligibility, demand, and site conditions warrant consideration of additional facilities to the same incorporated association. Additional facilities, regardless of the number of boat slips allowed in each, will be assessed as separate community docks.

c. Establishing a Non-Profit Corporation.

(1) The applicant for a community dock must be a legal non-profit corporation. Copies of the state certificate of incorporation, the corporate charter, corporate by-laws, and a list of officers and members (names, addresses, phone numbers, and subdivision lot numbers) must be submitted with the application. Boat registration numbers of vessels to be moored at the facility shall be made available upon request. The charter must state that, "The purpose for which the corporation is organized is to obtain a permit from the U. S. Army Corps of Engineers to construct and maintain a private boat dock facility, and not to engage in any activities which are inconsistent with local, state, or federal laws."

(2) The corporate by-laws must clearly state:

* The qualifications for participation.

* Evidence of membership on a non-discriminatory basis.

* Procedures for utilization by members, routine maintenance, and removal of inoperable or ineligible vessels, and reassignment of slips.

* The schedule for regular meetings, and procedures to deal with problems occurring between scheduled meetings.

* Individual slips cannot be rented, leased, or licensed.

(3) The responsible corporate representative must sign a statement certifying that the rules and conditions covering the issuance of the permit have been read, understood, and agreed to by all members.

d. Courtesy Floats. Courtesy floats are different from other private docks in that they are only for temporary day use (no overnight moorage authorized). Such floats may be authorized to provide daytime boat tie-up and landing facilities for residents of adjacent condominiums or apartment complexes, which adjoin Limited Development Areas approved for private docks. Roofs will not be allowed on courtesy floats. Courtesy floats must conform to all other design and construction criteria and maximum size limitations applicable to individual private platform docks. The Resource Manager may determine a lesser maximum size based on the demonstrated needs of the development. The permit for a courtesy float may be issued either to the incorporated property owners association of a condominium or the property owner of a rental building.

e. Existing Enclosed Boathouses. Existing enclosed boathouses that were approved prior to the original Old Hickory Lake Shoreline Management Plan in 1973 will be allowed to remain in their present condition, as long as the facility is structurally safe. Boathouses cannot be used as a place for habitation or residence. When they change ownership, however, the new permittee will be required to remove the sides. This will allow the interior of the structure to be readily inspected to assure that it is not being used as a floating cabin or does not contain facilities such as refrigerators, stoves, toilets, etc., that are conducive to human habitation.

19. Shoreline Erosion Control. Development adjacent to Old Hickory Lake has increased tremendously in recent years causing the siltation and deterioration of water depth in many coves. When an erosion problem originates on private property and extends onto public land, corrective action on private property must be taken to prevent further erosion of public land. When use of a natural pathway is creating the erosion problem, the pathway will be relocated to another area of less impact or an application for an improved walkway will be submitted. Plans for erosion prevention, describing tools and type of materials to be used must be approved by the Resource Manager. Permanent

erosion control and bank stabilization can be accomplished by one or a combination of three methods: placing quarry-run stone (riprap), placing existing natural rocks, or using vegetative structures along the shoreline.

a. Buffer Strip. When the Resource Manager determines erosion control is required in the area that is proposed for vegetation alteration or is being mowed, the applicant must stabilize the bank along that entire portion of the shoreline that is eroding. At a minimum, an unmowed buffer strip must be maintained until appropriate bank stabilization is completed. Generally, a buffer strip serves only as a temporary measure to slow down the erosion process. Permanent bank stabilization will then be required within one-hundred eighty (180) days of issuance of the permit. A buffer strip is required for all mowing permits immediately after the permit is issued or renewed. The width of the buffer strip will be determined on a case by case basis. The establishment of buffer strips are also encouraged in areas were no apparent erosion exists. They enhance wildlife habitat, improve water quality, and enrich the aesthetics of the shoreline. The Resource Manager has established buffer strips at Cages Bend Campground as a demonstration area. Buffers are also being established at other recreation areas and at environmental restoration and conservation sites.

b. Riprap. Placement of large quarry-run stone (referred to as riprap), with its inherent habitat values for aquatic life, is the cheapest, most effective structural method of shoreline erosion control, and the preferred method of permanent bank stabilization. Stone must be six (6) inches in diameter or larger. Stone less than six (6) inches in diameter does not provide adequate erosion protection or habitat value and will not be approved for use as riprap. However, if large stone is used and recreational access is desired across the riprap, an access way can be prepared by top-dressing with a limited amount of fine stone material to fill voids and make access safe and easy.

The Resource Manager will recommend the proper way to install the riprap for a particular situation and will require a method, which will minimize destruction of vegetation and not cause ground disturbance along the shoreline. In most cases, filter fabric will be required. Small stone can also be approved for use as a filter blanket, provided it is topped with large stone.

In all cases, riprap will be placed along the existing shoreline and in a continuous manner without creating inlets or boat harbors. No land reclamation will be authorized. Public land disturbed by equipment used for riprapping must be leveled, seeded, mulched, and replanted with trees (if required) to restore vegetative cover to the shoreline. When the siltation problems originate on private property and extend onto public land, corrective action on private property should be taken to redirect the water runoff and prevent further erosion and sedimentation into the lake.

c. Vegetative Structures. Vegetative structures can be used to control shoreline erosion. These bioengineering methods are an alternative to riprapping that combines mechanical and vegetative methods to stabilize a site by constructing living structures that control erosion and sediment. Vegetation used may include native woody species which root easily, such as willow (various species), ash, dogwood (various species), maples, birch, sycamore, locust, and forsythia. Bioengineering methods can be used to save existing vegetation, which alone is not strong enough to hold the slope or shoreline. Bioengineering methods include coconut fiber rolls and mats, willow stakes, etc. This method also promotes a more natural shoreline appearance. There are products available locally that can be used such as plant carpets or pre-vegetated biodegradable blankets which collect and hold sediments; fiber mats and fiber rolls which when anchored in shallow water serve as a breakwater to protect the toe of the slope and retain eroded material; and pre-grown aquatic plants which endure wave action and protect roots and rhizomes even in exposed sites. Installation is labor intensive but does not usually require heavy equipment. The Resource Manager's Office will provide applicants with assistance in planning these types of vegetative shoreline erosion controls.

20. Community Partnerships. The commitments and resources of local communities, private landowners, and concerned citizens are essential to protecting and improving the land and water resources of the lake. We have an active volunteer program and encourage partnerships to accomplish the objectives of this plan. Cooperating associations are also encouraged. These are non-profit, tax-exempt corporations whose partnership with the Corps results in the accomplishment of association goals and enhancement of the Corps mission, particularly in regard to natural resources management. Through the Corps' Challenge

Partnership Program, non-federal public and private groups and individuals can contribute to and voluntarily participate in the operation and/or management of natural resources at Old Hickory Lake. Challenge Partnership agreements may be used for identification, protection, improvement, rehabilitation, preservation, management, or interpretation of natural resources and environmental features. Agreements will be entered into as determined appropriate by the District Engineer. Associations can aid applicants by providing financial, technical, and physical assistance in complying with requirements of this plan as it relates to tree and shrub plantings, shoreline erosion control, aquatic plant control, water quality, and fish and wildlife habitat improvements. The association may solicit tax-deductible donations from private companies and individuals for conducting the above mentioned activities on public land. Associations must comply with the requirements of the State of Tennessee in obtaining a non-profit 501(c)(3) status. The association must also have liability insurance. Any group interested in establishing a cooperating association should contact the Resource Manager for more details.

21. Other Activities Approved by the Resource Manager. A permit or written permission is required for the following listed items and for any activities not outlined in this plan.

a. Paths. The Resource Manager may authorize a meandering path not to exceed four (4) feet in width to improve pedestrian access to the lake. Tree cutting will not be allowed. The path must blend in with the natural terrain, and only a natural surface will be permitted. The use of stepping-stones will be allowed if such material is placed flush with the ground and the resulting appearance is not that of a sidewalk. Stepping-stones should not exceed twenty-four (24) inches by twenty-four (24) inches and should normally be placed eight (8) to twelve (12) inches apart. Access paths across public lands will be restricted to pedestrian use only and will be available for the use of the general public.

b. Minor Fills. The placement of fill material on public land and/or flowage easement lands above the ordinary high water elevation for residential landscaping purposes will be considered on a case-by-case basis. The depth of the fill shall not exceed one vertical foot or a total of ten cubic yards. A primary consideration in the evaluation of such a request will be the preservation of the reservoir storage capacity. Any fill

application plans that exceed the one foot or ten cubic yard maximum will require an offset plan for flood storage capacity in accordance with the District's fill policy. The offset plans must be certified by a licensed engineer. Applicants must submit complete plans and obtain written approval from the Corps of Engineers before placement of any fill material within flowage easement land.

c. Removal of Drift/Storm Damaged Vegetation on Public Lands. Permission for the removal of drift, trash, and other debris is not required. Storm-damaged vegetation may be removed after contact with the Resource Manager. If equipment is necessary for the removal of drift or storm-damaged vegetation, only rubber-tire equipment such as a front-end loader may be used to minimize damage to public lands. In most communities around the lake local public works departments will remove tree limbs and driftwood when placed at the edge of the road. If public property is damaged during the removal of debris, it must be restored to its original condition.

Generally, open burning is prohibited on public land because it may interfere with the attainment or maintenance of the air quality standards for the state of Tennessee in Sumner, Trousdale, Wilson and Smith counties and the Metropolitan Government of Nashville in Davidson County. The burning of materials that produce toxic fumes, including, but not limited to, tires, plastic and other flotation materials or treated wood products is prohibited. In extreme conditions, burning of driftwood and storm-damaged vegetation on public lands may be approved where allowed by local regulations. Specific location(s) for burning must be approved by the Resource Manager, and burning must be in accordance with all state, county, and local burning requirements. All burn areas shall be reseeded to re-establish vegetation on the affected area where necessary.

d. Fish and Wildlife Enhancements. As a result of the continued loss of fish and wildlife habitat throughout the Old Hickory Lake watershed, the Resource Manager encourages fish and wildlife habitat enhancements on public property. Enhancements which benefit wildlife and do not adversely affect project management goals or missions will be approved on a case by case basis. Examples of habitat enhancements include the planting of native vegetation, fish attractors, establishment of

nesting/forage habitat such as monarch butterfly way stations, construction of chimney swift towers, etc.

22. Leases, Licenses, Easements, and Other Real Estate Instruments. Items that involve structures placed on public land or changes in landform are covered by a real estate lease, license, or other legal outgrant. All commercial development activities require a real estate lease. Minor privileges, such as electrical lines, water pipelines, improved access and marine railways, are covered under a license. All plans for stairs, special access walkways, footbridges, and chair lifts must be certified (signed and dated) by a licensed engineer, architect, or licensed general contractor before being permitted. Certification is intended to ensure structures are safe. The state electrical inspector must certify the electrical installation, and a copy of the electrical inspection certificate must be furnished to the Resource Manager before final approval.

Applications will be made for lease, license, easements, and any other real estate instrument through the Resource Manager's office and will be coordinated and issued by the Real Estate Division. Fees for these privileges are based on the administrative cost of processing plus the fair market value of the property.

a. Electrical Lighting and Equipment. Electrical facilities shall be approved only to provide lighting or power for a permitted floating dock facility or to provide power to a water withdrawal pump provided that the installation of such facility does not pose a safety hazard or conflict with other recreational use. The electrical installation must be according to the National Electrical Code (NEC). The State Electrical Inspector must certify all work, and a copy of every subsequent re-certification (e.g. for rewiring or adding more outlets) shall also be furnished to the Resource Manager within one-hundred eighty (180) days. When an electrical license is renewed, it must be re-certified. If a new property owner wishes to continue use of electrical facilities on public property, they must have the wiring re-inspected and provide the Resource Manager with a new state inspection certificate. The electrical service must have an electrical disconnect above flood pool elevation that allows the service to be turned off quickly in case of an emergency. The electrical disconnect must be located on the shoreline within clear view from the dock.

Because of the potential hazards of electrical shock, the Resource Manager will require removal of any electrical equipment if the installation cannot be certified or if the dock or water withdrawal system is removed. The Resource Manager will approve the location of all security lights on public land. Generally, lights on poles should be located near the walkway of the dock to provide safe access at night. These lights must be low intensity and directed in a manner to provide lighting only for the use of a permitted floating dock facility. Motion sensors and timers are recommended to reduce the amount of artificial light on the lake when docks are not being used. High intensity floodlights will not be allowed. All new electrical lines and other utilities shall be installed underground. The Resource Manager, on a case-by-case basis, may approve overhead electrical lines when the natural conditions preclude underground installation. Electrical lines or fixtures cannot be affixed to trees on public property. Solar panels may be used for electricity as long as they are attached to the roof of a permitted dock and no cables or wires cross government property. All required solar power equipment must be stored in a locked container located on the dock. An electrical inspection will be required for solar power installations. Real Estate licenses are not required for solar panels.

b. Water Withdrawal Pipelines for outdoor non-potable use. Water withdrawals may be approved to adjacent landowners with a valid shoreline use permit and may only be used for public property within their allocated area. Any approved existing water withdrawals for irrigation may remain. Applications for water withdrawal pipeline licenses will be considered if the total quantity of water to be drawn from the lake does not adversely affect project operations. Applicant must complete a "Water Withdrawal Data Sheet for Individuals" for the Nashville District, Hydrology and Hydraulics Branch. All water withdrawal pipelines must be installed underground or can be attached underneath or along the side of steps or otherwise concealed from view. Existing pipelines installed above ground that cannot be installed as mentioned above must be removed upon sale or transfer of the property. Water pumps shall be located on a dock, on private property, or submersible. Permanent sprinkler systems are not allowed to be installed on public property. Water withdrawal pipelines are not allowed for residential household use, water landscaping feature (waterfall, pond, etc.), or agricultural use on public and/or private property.

c. Freshwater (potable) pipelines. Freshwater pipelines shall be approved only to provide freshwater for a permitted floating dock facility. All freshwater pipelines must be installed underground or can be attached underneath or along the side of steps or otherwise concealed from view. Existing pipelines installed above ground that cannot be installed as mentioned above must be removed upon sale or transfer of the property.

d. Stairs. Stairs can be approved for safe access to an approved boat dock. Generally, metal or wooden steps will be approved when deemed necessary for safe access. The width of the stairs shall not exceed five (5) feet and landings (rest areas) shall not exceed a five (5) feet by five (5) feet area.

e. Special Access Provisions For Mobility Impairments. Special access facilities for persons of the applicant's immediate family with a documented long-term physical disability will be licensed on a case-by-case basis when the Resource Manager deems such facilities are needed to provide safe access to a permitted dock. Sidewalks and above ground walkways that do not access the dock or are T-shaped, Y-shaped, or consist of more than one walkway will not be permitted. The access sidewalks or walkways and dock design must meet standards for the Americans with Disabilities Act (ADA). The distance and slope from the property line to the dock will vary from site to site. An "Accessible" slope is considered to be 1:20 or 5 percent maximum and "Challenge Level 1" is 1:12 or 8.3 percent. Generally, concrete sidewalks can be used effectively at sites where the slope does not exceed 8.3 percent. Sidewalks can minimize the visual and physical impacts on public land, and provide the most direct route to the shoreline. In these cases, the concrete must be flush with the ground and be a color (i.e. pea gravel, brown, or gray) that blends with the surrounding natural environment. Although metal and wooden walkways have a greater visual and physical impact on public land especially when switchbacks and landing are required, they can be approved. Above ground walkways may be required on steep slopes (greater than 8.3 percent) and rough terrain to meet the side slope and grade standard. Metal or wooden walkways can provide for easier transition onto the dock walkway and are easier to remove. The support runners may be elevated, provided the top of the runner does not exceed 24 inches above ground level at any point along the walkway. Handrails must be constructed of rigid materials,

which provide adequate support, i.e., wood or metal. Handrails that are strictly decorative are not allowed, i.e., rope handrails. All approved handrails must include a three foot break at points designated by the Permit/License to provide for lateral pedestrian access. Upon transfer of the adjoining private property, the licensee must remove the structure and restore the area to its original condition. This requirement will be a condition of the license.

f. Footbridges. Footbridges with handrails, constructed to a maximum five (5) foot width, may be authorized for access to permitted dock across larger drainage ditches and low areas on public land. Footbridge plans should be simple and not ornate. Footbridges may not extend below or cross over 445-msl elevation, and all materials must be suitable for ground contact.

g. Chair lifts. Licenses for the construction of chair lifts or similar structures may be permitted in special situations (i.e., for physical disability) to permitted facilities. The size of such facilities will be limited in order to minimize impact on public property. Chair lifts will be permitted only in Limited Development Areas allocated for private docks.

h. Marine Railways. Existing marine railways may be renewed. No new marine railways will be approved. These railways were granted in lieu of a shoreline use permit for a private dock and will remain in lieu of a dock permit. Boats must be stored on private property.

i. Agricultural Leases. Existing agriculture leases for hay, grazing, and water access purposes adjacent to established agricultural property may be renewed. New agricultural leases may be issued on a case-by-case basis and generally will be for grazing purposes only. Where agriculture leases are in place efforts will be taken to limit animal access into the water by requiring buffer strips and granting water utility line licenses. Soil samples will be required bi-annually for the purpose of fertilizing and overseeding. Genetically engineered seed and or plants are not allowed on public land. The Resource Manager or Real Estate Division may cancel a lease if there is a problem with overgrazing and water pollution (i.e. area denuded of vegetation and cattle feces in water) or if lease conditions are not being met. Where land area permits, a suitable buffer

strip along the immediate shoreline shall be left unmowed for additional erosion control purposes. If water access is needed, erosion control and/or fencing may be required. Overgrazing of public land will not be permitted. The total area of private land and public land grazed will be managed by the permittee to ensure that the number of livestock present is not in excess and will not be detrimental to the resource. Agricultural leases will not be issued for residential mowing purposes. Areas leased for hay and grazing purposes must remain open for the recreational use of the general public. See Exhibit D for agriculture land use regulations.

j. Consent to Easement Instruments. The placement of certain types of structures (not for human habitation) on flowage easement property may be allowed provided the work does not impact or restrict the acquired flowage easement rights. Applicants must submit complete plans through the Resource Manager's Office to obtain written approval. A consent to easement instrument may be issued by the Corps Real Estate Office.

23. Prohibited Items, Encroachments, Unauthorized Structures, and Destruction of Public Property. Public lands around Old Hickory Lake are dedicated to full and free use by the general public. Private activity and uses not specifically authorized with written approval are prohibited. Prohibited items include, but are not limited to:

a. Structures including patios, decks, fences, invisible dog barriers, buildings, sheds, barbecue grills, satellite dish antennas, playground equipment, or planters.

b. Flowerbeds, gardens, and exotic plants.

c. The spreading of sand or gravel to construct parking areas, turn arounds, a beach and/or a private access ramp.

d. The storage of any object such as firewood, boats, trash cans, scrap material, pet houses and pens, etc.

e. The disposal of litter, leaves, trash, or any other debris or waste.

All unauthorized structures and private items shall be removed from government property within thirty (30) days of written

notice. Trash, litter, and debris shall be removed immediately upon verbal or written notice. Prohibited items are subject to impoundment and removal by the Corps of Engineers at the owner's expense. When unsafe and dilapidated docks are removed by the government, the moorage permit will be revoked and not reinstated or reissued until reimbursement has been made to the government for the cost of removal. Violations may result in the issuance of a citation requiring the payment of a fine and/or appearance before the U.S. Magistrate and/or revocation of all or part of the Shoreline Use Permit/License.

In severe cases of destruction, the current permit(s) and/or license may be revoked and a moratorium placed on the issuing of any new permits/licenses or renewals for land use and moorage facility in the affected area. The moratorium on the use of public land will be for the property owner who committed the violation and/or any future adjacent property owner for a period up to fifteen (15) years or longer.

In instances were vegetation has been damaged, destroyed, altered or removed from public property, the length of the revocation/moratorium will be determined based on the International Society of Arboriculture's (ISA) *Guide for Plant Appraisal* by applying the Trunk Formula Method to assess an appraisal to determine the dollar value as a result of the destruction of vegetation on public property. Any destruction resulting in damages of greater than $5,000 but less than $10,000 will result in a five (5) year revocation/moratorium period, damages greater than $10,000 but less than $15,000 will result in a revocation/moratorium period of ten years and damages greater than $15,000 will result in a fifteen (15) year revocation/moratorium period. The permittee/applicant may have an independent appraisal conducted by an individual trained in the use of ISA's *Guide for Plant Appraisal.*

In instances where archaeological sites have been damaged or destroyed on public property, the Corps will review the actions under Section 110(k) of the National Historic Preservation Act. Violations may result in the revocation of all or part of the Shoreline Use Permit/License.

24. Grandfathered Land-based Privileges. In an effort to implement this management plan fairly with regard to existing private use on public land, the Resource Manager may honor all prior written commitments of the Federal Government. The

"grandfather clause" is a provision which allows existing land-based privileges of a type no longer permitted to be continued by the individual who originally obtained the permit or real estate outgrant, provided he or she adheres to all terms and conditions of the permit or outgrant. Examples of land-based privileges are portable buildings, patios, concrete picnic tables, grills, etc. Such permits or outgrants shall remain in effect until:

a. The transfer of ownership of the individual's adjoining private property.

b. The death of the individual and spouse.

c. Permit or outgrant conditions are violated and not corrected upon reasonable notice.

d. The individual voluntarily discontinues the private use covered by the grandfather clause.

When any of these events occurs, the permit or outgrant becomes null and void. Those land-based structures not necessary for access to the dock will be removed. Any future private use on public property at that location must conform to current requirements of the Shoreline Management Plan, applicable laws, regulations and policies. (See Paragraph 13 for policy on existing permitted docks which are not located in Limited Development Areas allocated for private docks. Public Law 99-662 allows a dock to remain even if ownership changes as long as it is not a safety hazard.)

25. Activities Requiring Department of the Army Permits. Activities involving excavation of the lake bottom, depositing dredged or fill material into the lake, construction of outfalls, intakes, pipeline crossings, installation of fish attractors, etc. require Department of the Army approval under Section 10 of the River and Harbor Act of 1899 and/or Section 404 of the Clean Water Act. Some categories of work have previously been authorized under provisions of nationwide or regional permits (general permits) so that an individual Department of the Army Permit is not required. The average processing time for non-controversial, individual permit applications is sixty (60) days from the date a complete application is received in the Nashville District, Regulatory Office. Because of the public notification process required,

controversial applications, which involve potentially adverse environmental impacts, could take much longer and could ultimately be denied. Therefore, applications should be submitted to the Resource Manager as far in advance of the proposed work as possible.

a. Dredging. Applications for dredging are accepted in Limited Development Areas allocated for boat dock privileges to provide sufficient water depth for boat access to permitted dock facilities. Detailed plans for controlling siltation and erosion of dredged material and disposal of spoil material shall be described on the initial application. If an off-site retention pond is used and the runoff has the potential to re-enter the lake, detailed engineering plans will be required for the design and construction of the retention pond. Performance bonds may be required for jobs with a complex or large scope of work.

In unusual circumstances, as determined by the Resource Manager applications for docks to extend more than fifty (50) feet from the shoreline (not to exceed 59 feet) may be accepted and must be accompanied by a comprehensive justification for the need for the additional size. The justification must include:

1. Depth measurements at 10 foot intervals and lake elevations

2. Type of lake bottom: Rock, silt, etc.

3. Type and size of boat to be moored and the depth of water the boat draws and/or the type of lift to be utilized and the depth of water the lift requires to operate.

4. Possible alternatives to the larger dock such as dredging, alternate moorage options, etc.

b. Shoreline Erosion Control. A Nationwide Department of Army Permit can approve most shoreline erosion control applications. Riprap in excess of five hundred (500) feet along the shoreline or in an amount greater than one (1) cubic yard per linear foot (below the waterline) requires an Individual Department of the Army Permit. Additional permits and certifications may be required by the State of Tennessee. The Resource Manager will recommend the proper type of shoreline erosion control (see paragraph 19).

The construction of retaining walls is prohibited. This method of erosion control is more expensive to install and maintain than other erosion control methods, and it eliminates habitat for aquatic life. Experience has shown that many existing walls were not properly constructed and are subject to cracking and undercutting. In special cases in which the Resource Manager determines that erosion control is required and placement of riprap or vegetated structures is not practical, an application for gabion baskets may be considered. Design and materials must be approved in advance by the Resource Manager.

26. Navigation Guidelines for No-Wake Areas. The U.S. Aids to Navigation System on the Western River System and the Uniform State Waterway Marking System specify the accepted navigation and regulatory markers on Old Hickory Lake. No-wake areas in and along the commercial channel obstruct and impede navigation causing safety and operational problems for commercial traffic. Generally, a No-wake area in a location outside of main navigation and secondary channels does not adversely affect through boating; however, a navigation review is necessary on secondary channels to insure that the area will not adversely affect through traffic. No-wake areas are primarily enforced by the Tennessee Wildlife Resource Agency (TWRA). No-wake areas are established by state law and are approved for marinas and certain public boat launching areas after review by the Resource Manager. No-wake designations will not be given to solely protect private docks.

27. Water Quality. Safeguarding the water quality of Old Hickory Lake is of utmost importance because Old Hickory Lake provides aquatic habitat, recreational opportunities, and a dependable residential, municipal, and industrial water supply. The cooperation of area residents and federal, state, and local agencies is necessary in this effort.

a. Trash, Refuse, Debris. The disposal of household trash, grass cuttings, leaves, tree limbs, waste oil or chemicals, or any other material in the lake or on public land is strictly prohibited. Burning household trash or garbage on public land is also prohibited.

b. Privately Owned Sanitary Facilities. The Division of Water Resources of the Tennessee Department of Environment and Conservation regulates septic tanks, drain fields, and other

sanitary facilities on adjoining private property. The construction or installation of a new privately owned septic tank, drain field, or holding tank on public land is not allowed. However, the Resource Manager may consider an application for the expansion of an existing sanitary drain field provided all the following are met:

(1) Site conditions on public land are suitable for the expansion of the drain field and will not cause substantial adverse environmental impacts;

(2) The existing facility on adjoining private property is not functioning properly and is a possible source of ground water pollution;

(3) The state environmentalist responsible for the area provides written documentation that no suitable location for expansion of the existing inadequate sanitary drain field exists on private property and no other alternative for disposing of the waste from the affected residence is available.

The appropriate real estate instrument along with applicable fees will be required for a privately owned sanitary drain field on public property.

c. Fill Material. The U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into any waterway or adjacent wetland, regardless of ownership, under the authorities of Section 404 of the Clean Water Act and/or Section 10 of the River and Harbor Act of 1899 (See Paragraph 24). Copies of these regulations are available for public review from the Resource Manager.

d. Non-Point Sources of Water Pollution. The Resource Manager is committed to protecting and accelerating the restoration of our watersheds. The Corps has coordinated meetings with developers, contractors and the general public to share information about erosion control and best management practices to reduce siltation and run-off. The Resource Manager will continue to actively work with local governments and watershed associations such as the Old Hickory Lake Watershed Association and the Cumberland River Compact within the watershed to host educational workshops. Rangers routinely patrol the watershed to ensure infractions of state water quality laws are reported. Particular attention is given to

impacted waters that are on Tennessee's Department of Environment and Conservation, Division of Water Pollution Control 303(d) list. The 303(d) list is a compilation of the streams and lakes in Tennessee that are "water quality limited" or are expected to exceed water quality standards in the next two years and need additional pollution control. Once a stream has been placed on the 303(d) list, it is considered a priority for water quality improvement efforts. Our office will work to report sources of pollutants on these creeks and to eliminate all adverse agricultural and land use activities on public land. Several of our environmental restoration sites are located on these creeks.

This plan contains requirements that can reduce the impact of water pollution and improve water quality. The spilling, pumping or discharge of contaminants, pollutants, waste, including but not limited to, human or animal waste, petroleum, swimming pool discharge, gravel dredging, siltation from unprotected construction sites, and industrial or commercial products and by-products, on project land or into project waters is prohibited. Private individuals, residential and commercial developers, road construction companies, and farmers are encouraged to use structural techniques, stabilization of storm water conveyances, stream habitat improvement, streambank protection and restoration, and detention basin on private land to prevent pollution from entering the lake. The public is encouraged to contact the Resource Manager concerning any activity whether on private or public land that may result in pollution of the lake.

The U.S. Army Corps of Engineers has implemented a property protection program known as "CORPS WATCH", which was developed to reduce vandalism, larceny, arson and environmental and cultural degradation of government property. This program utilizes a toll free hotline (1-866-413-7970) and provides cash rewards of $100 to $1,000 to individuals whose information leads to the arrest and prosecution of offenders. The call center is available 24 hours a day 7 days a week and callers can remain anonymous.

28. Fees. Fees associated with permits or licenses shall be paid prior to issuing a new permit or license. Shoreline use permits will normally be issued for a five (5) year term. Permits can be suspended or revoked by the Resource Manager at any time for failure to pay fees. An administrative fee will be charged for Real Estate licenses. A schedule of current fees

for activities mentioned in this plan is available from the Resource Manager.

29. Appeals Process. Most problems concerning shoreline management can be resolved at the local level through the Resource Manager. If a problem cannot be resolved at this level, documentation of the dispute may be forwarded to the District Engineer for review. The review will focus on any procedural deficiencies in the Resource Manager's decision, or conflicts with the decision and the Shoreline Management Plan. The decision of the District Engineer is final.

30. Procedures for Items Not Otherwise Covered in this Plan. There may be occasions when requests for privileges or work within the scope of shoreline management arise which are not specifically addressed in this plan. If this occurs, the Resource Manager will take the following actions:

a. Review the request for general conformance with the objectives and intent of the Shoreline Management Plan and determine if the request is likely a one-time event or whether it will likely be a recurring demand.

b. If the request is likely a one-time event and a decision concerning the application could clearly be shown to be either contrary to, or not contrary to, the overall public interest in light of the objectives of the Shoreline Management Plan, the Resource Manager shall approve or deny the request in a timely manner and document the administrative file as to the nature of the request and reasons for actions taken.

c. If the request would likely be of a recurring nature, in addition to making a determination and taking action as in (b), above, the Resource Manager shall forward a copy of the documentation to the Nashville District Office, with a proposal of how such requests should be addressed in updates to the Shoreline Management Plan.

d. If a request is highly controversial, could impact the administration of the shoreline management program by setting a precedent for similar proposals, or is not clearly in, or contrary to, the overall public interest, the Resource Manager shall forward the request to the District Office for review and joint determination as to the proper course of action. The applicant will be advised in a timely manner as to the status of

his or her request and informed of the anticipated date of a decision on the request. Once a decision is made, the Resource Manager will draft proposed wording to be included in updates to the Shoreline Management Plan to address similar requests, and submit the proposal to the District Office for review.

31. Conclusion. It is the intent of the Old Hickory Lake Shoreline Management Plan to improve the natural aspects of the project and to provide for increased wildlife habitat and biodiversity while providing optimum benefits to the public. Unlimited private exclusive use of project land and water is not in the best interest of the general public. In addition to the permit requirements of this plan, the Resource Manager specifies as a part of the Old Hickory Lake annual and five-year plans, work projects for protection and restoration of natural resources. As presented, the Old Hickory Lake Shoreline Management Plan is, and will continue to be, a flexible and working document. Old Hickory project personnel will continually monitor the needs of all project users and recommend revisions to minimize conflicts between various interests. This Plan is prepared as an appendix to Part II of the Operational Management Plan for Old Hickory Lake.

EXHIBIT A

PERMIT CONDITIONS

1. This permit is a privilege granted by the United States. To maintain this privilege, the permittee must be in compliance with Title 36, Part 327, Sections 14 and 20, which address destruction of government property and unauthorized structures on public lands. Any uncorrected non-compliance issues associated with those sections, or with the conditions below, may result in suspension, revocation, or non-renewal of this permit. Non-renewal or revocation will require removal of any permitted facility(ies) at the owner's expense. Until non-compliance issues are satisfactorily resolved, the permit will not be reinstated or reissued, even if the property changes ownership. It is the property owner's responsibility to inform potential purchasers of any restrictions imposed by the Corps due to non-compliance with permit conditions. By signing this permit, the permittee agrees to this and all other conditions of this permit. This permit is granted solely for the purpose described on the attached permit. Any deviation will result in revocation.

2. The permittee agrees to and does hereby release and agree to save and hold the Government harmless for any and all causes of action, suits at law or equity, or claims or demands or from any liability of any nature whatsoever for or on account of any damages to persons or property, including a permitted facility, growing out of the ownership, construction, operation or maintenance of the permittee of the permitted facilities and/or activities.

3. Ownership, construction, operation, use and maintenance of a permitted facility are subject to the Government's navigational servitude.

4. No attempt shall be made by the permittee to forbid the full and free use by the public of all public waters and/or lands at or adjacent to the permitted facility or to interfere with any authorized project purposes, including navigation in connection with the ownership, construction, operation or maintenance of a permitted facility and/or activity.

5. The permittee agrees that if subsequent operations by the Government require an alteration in the location of the

permitted facility and/or activity or if in the opinion of the District Commander a permitted facility and/or activity shall cause obstruction to navigation or that the public interest so requires, the permittee shall be required, upon written notice from the District Commander to remove, alter, or relocate the permitted facility, without expense to the Government.

6. The Government shall in no case be liable for any damage or injury to the permitted facility which may be caused by or result from subsequent operations undertaken by the Government for the improvement of navigation or for other lawful purposes, and no claims or rights to compensation shall accrue from any such damage. This includes any damage that may occur to private property if a facility is removed for noncompliance with the conditions of the permit.

7. Ownership, construction, operation, use and maintenance of a permitted facility and/or activity are subject to all applicable Federal, state, and local laws and regulations. Failure to abide by these applicable laws and regulations may be cause for revocation of the permit.

8. This permit does not convey any property rights either in real estate or material; and does not authorize any injury to private property or invasion of private rights or any infringement of Federal, state or local laws or regulations, nor does it obviate the necessity of obtaining state and local assent required by law for the construction, operation, use or maintenance of a permitted facility and/or activity.

9. The permittee agrees to construct the facility within 180 days of the permit issuance date. The permit shall become null and void if construction is not completed within that period. Further, the permittee agrees to operate and maintain any permitted facility and/or activity in a manner so as to provide safety, minimize any adverse impact on fish and wildlife habitat, natural, environmental, or cultural resources values and in a manner so as to minimize the degradation of water quality.

10. The permittee shall remove a permitted facility within 30 days, at his/her expense, and restore the waterway and lands to a condition accepted by the Resource Manager upon termination or revocation of this permit or if the permittee ceases to use, operate or maintain a permitted facility and/or activity. If

the permittee fails to comply to the satisfaction of the Resource Manager, the District Commander may remove the facility by contract or otherwise and the permittee agrees to pay all costs incurred thereof.

11. The use of a permitted boat dock facility shall be limited to the mooring of the permittee's vessel or watercraft and the storage, in enclosed locker facilities, of his/her gear essential to the operation of such vessel or watercraft. Use of the facility for any other purpose is cause for revocation of the permit.

12. Neither a permitted facility nor any houseboat, cabin cruiser, or other vessel moored thereto shall be used as a place of habitation or as a full or part-time residence or in any manner which gives the appearance of converting the public property, on which the facility is located, to private use.

13. Facilities granted under this permit will not be leased, rented, sub-let or provided to others by any means of engaging in commercial activity(s) by the permittee or his/her agent for monetary gain. This does not preclude the permittee from selling total ownership to the facility.

14. Floats and the flotation material for all docks shall be fully encased and fabricated of materials manufactured for marine use. The float and its flotation material shall be 100% warranted for a minimum of 8 years against sinking, becoming waterlogged, cracking, peeling, fragmenting, or losing beads. All floats shall resist puncture and penetration and shall not be subject to damage by animals under normal conditions for the area. All floats and the flotation material must be fire resistant. Any float which is within 40 feet of a line carrying fuel shall be 100 percent impervious to water and fuel. The use of new or recycled plastic or metal drums or non-compartmentalized air containers for encasement or floats is prohibited. Repair or replacement shall be required when it or its flotation material no longer of existing flotation performs its designated function or it fails to meet the specifications for which it was originally warranted.

15. Permitted facilities and activities are subject to periodic inspection by authorized Corps representatives. The Resource Manager will notify the permittee of any deficiencies and together establish a schedule for their correction. No

deviation or changes from approved plans will be allowed without prior written approval.

16. Floating facilities shall be securely attached to the shore in accordance with the approved plans by means of moorings which do not obstruct general public use of the shoreline or adversely affect the natural terrain or vegetation. Anchoring to vegetation is prohibited.

17. Docks are for the moorage of boats only and shall not contain diving boards, slides, side floats, playground equipment, grills, tables, furniture, or similar accessories. Roofs may not be used as a sun deck or storage area.

18. Special access facilities for persons with physical disabilities will be licensed on a case-by-case basis when the Resource Manager deems such facilities are needed to provide safe access. Upon transfer of the adjoining private property, the licensee must remove the structure and restore the area to its original condition. This requirement will be a condition of the license.

19. The permit display tag shall be posted on the permitted facility and/on the land areas covered by the permit so that it can be visually checked with ease in accordance with instructions provided by the Resource Manager.

20. No vegetation other than that specified on the permit will be damaged, destroyed or removed. No vegetation of any kind will be planted, other than that specifically prescribed in the permit. In severe cases of destruction, the current permit may be revoked and a moratorium may be placed on the issuing of any new permits/license or renewals for land use and moorage facilities in the affected area. The moratorium on the use of public land will be for the property owner who committed the violation and/or any future adjacent property owner(s) for a period up to 15 years or longer.

21. In instances where archaeological sites have been damaged or destroyed on public property, the Corps will review the actions under Section 110(k) of the National Historic Preservation Act. Violations may result in the revocation of all or part of the Shoreline Use Permit/License.

22. No change in land form such as grading, excavation or

filling is authorized by this permit.

23. This permit is non-transferable. Upon the sale or other transfer of the permitted facility or the death of the permittee and his/her legal spouse, this permit is null and void.

24. By 30 days written notice, mailed to the permittee by certified letter, this permit may be revoked whenever the public interest necessitates such revocation or when the permittee fails to comply with any permit condition or term. The revocation notice shall specify the reasons for such action. If the permittee requests a hearing in writing to the District Commander through the resource manager within the 30 day period, the district commander shall grant such a hearing at the earliest opportunity. In no event shall the hearing date be more than 60 days from the date of the hearing request. Following the hearing, a written decision will be rendered and a copy mailed to the permittee by certified letter.

25. Notwithstanding the provision of condition 23 above, if in the opinion of the District Commander, emergency circumstances dictate otherwise, the permit may be summarily revoked.

26. When vegetation modification is accomplished by chemical means, the program will be in accordance with appropriate Federal, state, and local laws, rules and regulations.

27. Government representatives shall be allowed to cross the permittee's property, as necessary, to inspect facilities and/or activities under permit and, if necessary, to remove an unauthorized structure. If removal by the government is required, the permittee agrees to fully reimburse the government within 90 days for the full cost of removal.

28. When vegetation modification is allowed, the permittee shall delineate the government property line in a clear, but unobtrusive manner approved by the Resource Manager and in accordance with the project Shoreline Management Plan.

29. If the ownership of a permitted facility is sold or transferred, the permittee or new owner will notify the Resource Manager of the action prior to finalization. The new owner must apply for a Shoreline Use Permit within 14 days or remove the facility and restore the use area within 30 days from the date of ownership transfer.

EXHIBIT B

INVASIVE EXOTIC PLANT CONTROL PERMIT CONDITIONS

1. This permit is granted solely for the purpose described by the attached permit.

2. The applicant does hereby release and agree to save and hold the Government harmless from any and all causes of action, suits at law or equity, or claims or demands or from any liability of any nature whatsoever, for, or on account of, any damages to persons or property, including the permitted work.

3. Attached Herbicide Application Record must be completed and signed by a licensed applicator and the applicant and returned to the Resource Manager within seven (7) days of completion of work.

4. The contractor shall furnish the applicator a Material Safety Data Sheet for all herbicides used.

5. The Government shall in no case be liable for any re-infestation of invasive exotic plants, and damage or injury to adjoining private property due to the improper application of the permitted work. No claims or right to compensation shall accrue to the Government from any such damage.

6. Any herbicide used must be approved by the Environmental Protection Agency. The application of herbicides is subject to all applicable Federal, State, and local laws and regulations.

7. The applicant must notify all property owners within 150 feet of boundaries of treatment area as shown on plans of the proposed application area and inform them of the proposed date and time of the invasive exotic plant control treatment. The applicant must supply the Resource Manager with the name(s), address(es), and phone numbers of these property owner(s) as well as method of notification, (i.e. verbal or written). If an adjacent property owner objects to the treatment, no treatment will be allowed within the immediate vicinity of that person’s dock or allocated area. It is the applicant’s responsibility to make the contractor fully aware of all permit plans and conditions prior to commencement of the work and furnish a copy of the permit to the contractor.

8. The applicant must also notify adjoining landowners with water intakes within the proposed treatment area. In the case of aquatic treatments, the adjoining landowners must be informed to discontinue use of their water pumps until the residual time limits have expired. (See herbicide manufacturer's label for distance allowed from potable water intakes). The applicant must supply the Resource Manager with the name(s), address(es), phone number(s), and signature(s) of each property owner with affected water intakes, showing their acknowledgment of the proposed treatment.

9. The applicant or his/her contractor shall post warning signs on land at the treatment area boundaries and at 50-foot intervals along the shoreline of the treatment area. For aquatic plant treatment buoys shall be placed at the treatment area boundaries and at 50-foot intervals in the water outside of the treatment area where boaters can read prior to entering the treatment area. Treatment area notice is provided for this purpose which must remain in place seven (7) days after treatment.

10. The contractor must have a commercial applicator's license from the State of Tennessee. Herbicides must be used strictly in accordance with the label instructions.

11. The applicant shall notify the Resource Manager's Office and the State Division of Water Pollution Control within three (3) days prior to treatment.

12. Treatment areas are subject to periodic inspection by Corps personnel. If an inspection reveals conditions, which make the treatment unsafe in any way, or conditions, which deviate from the approved plans, such conditions will be corrected immediately by the owner upon receipt of notification. No deviation or changes from approved plans will be permitted without prior written approval of the Resource Manager.

13. No vegetation other than that prescribed in the permit may be damaged, destroyed or removed.

14. This permit is non-transferable. The permit is valid for a thirty (30) day period. Subsequent treatments require that a new permit be issued.

15. If emergency circumstances dictate otherwise, the Resource Manager may summarily revoke this permit.

EXHIBIT C

List of Common Invasive Exotic Pest Plants in Tennessee

Trees

Mimosa (*Albizia julibrissin* Durazz)
Princess tree (*Paulownia tomentosa* (Thunb.) Sieb. & Zucc.Stevd.)
Tree-of-heaven (*Ailanthus altissima* (Mill) Swingle)

Shrubs

Autumn olive (*Elaeagnus umbellata* Thunb.)
Japanese Bush honeysuckles (*Lonicera* japonica.)
Amur Bush honeysuckle (Lonicera maackii.)
Marrows Bush honeysuckle (Lonicera marrowii.)
Japanese barberry (*Berberis thunbergii* DC.)
Multiflora rose (*Rosa multiflora* Thunb. Ex Murr.)
Privet (*Ligustrum* spp.)

Herbaceous Plants

Eurasian water-milfoil (*Myriophyllum spicatum* L.)
Garlic mustard (*Alliaria petiolata* (M. Bieb.) Cavara & Grande)
Japanese grass (*Microstegium vimineum* (Trin.) A. Camus)
Japanese Knotweed (*Polygonum cuspidatum* Sieb. & Zucc.)
Japanese spiraea (*Spiraea japonica* L.f.)
Musk thistle (*Carduus nutans* L.)
Purple loosestrife (*Lythrum salicaria* L.)

Vines

Climbing euonymus (*Euonymus fortunei* (Turcz.) Hand.-Mazz.)
Japanese honeysuckle (*Lonicera japonica* Thunb.)
Japanese wisteria (*Wisteria floribunda* (Willd.)DC.)
Kudzu (*Pueraria montana* (Lour.)Merr.)
Oriental bittersweet (*Celastrus orbiculata* Thunb.)

EXHIBIT D

AGRICULTURE LAND USE REGULATIONS

1. The lessee hereby agrees that he will re-seed and fertilize as required to maintain a sufficient sod to prevent and/or retard erosion and build soil fertility. Where seeding is required by the Resource Manager or his/her representative, planting operations must include the prevention of erosion until sod is established. The re-seeding may be with legumes, commercial grasses and/or mixtures thereof, other than noxious plants (Johnson Grass, Kudzu, Multiflora Rose, Thistle, etc.), as determined by the Resource Manager or his/her representative. Verification of seeding and fertilizing shall be furnished the Resource Manager or his authorized representative upon request.

2. The lessee shall regulate his grazing activities to weather and seasonal conditions to prevent overgrazing and possible erosion. The Resource Manager or his authorized representative shall be the sole judge of overgrazing. Grazing of sheep, hogs and goats shall not be allowed. The lessee shall not burn over the leased area to clear sedgegrass or any vegetative matter. It shall be the responsibility of the lessee to prevent erosion in areas where livestock have access to the lake for water. Any fences constructed by the lessee shall remain the property of the lessee and shall be removed from said premises at the expiration or revocation of this lease.

3. To reduce the risk of wildfires, fire lanes may be allowed as determined by the Resource Manager or his/her representative.

4. The protection of the property line post, signs and monuments will be the responsibility of the lessee. Any damage must be reported to the Resource Managers Office. Damaged or missing markers shall be replaced by the lessee.

5. In order to assist the Government in its efforts to reduce the production of price-supported crops in surplus supply, the lessee agrees in accepting this lease that he will not utilize the leased premise for the purpose of planting, cultivation or producing any such crops. The lessee further agrees that in the event he breaches this condition for any reason, the Government shall have the option, at the election of the Secretary of the Army or his authorized representative, to declare and take any crops so planted, cultivated or produced as the property of the Government without payment to

the lessee. The lessee further agrees that the exercise by the Secretary of the Army does not release the lessee from other punitive action.

6. The lessee agrees, as part of the consideration for this lease, that he will not accept any Federal cost sharing payments for soil conservation practices. Further, the lessee agrees that he/she will not accept any other Federal or State subsidy based on the lease without the written approval of the District Engineer.

7. ENVIRONMENTAL PROTECTION.

a. Within the limits of their respective legal powers, the parties to this license shall protect the premises against pollution of its air, ground, and water. The grantee shall comply with any laws, regulations, conditions, or instructions affecting the activity hereby authorized if and when issued by the Environmental Protection Agency, or any Federal, state, interstate or local governmental agency having jurisdiction to abate or prevent pollution. The disposal of any toxic or hazardous materials within the premises is specifically prohibited. Such regulations, conditions, or instructions in effect or prescribed by said Environmental Protection Agency, or any Federal, state, interstate or local governmental agency are hereby made a condition of this license. The grantee shall not discharge waste or effluent from the premises in such a manner that the discharge will contaminate streams or other bodies of water or otherwise become a public nuisance.

b. The grantee will use all reasonable means available to protect the environment, natural resources, and cultural resources, and where damage nonetheless occurs from the grantee’s activities, the grantee shall be liable to restore the damage resources.

c. The grantee must obtain approval in writing from the Resource Manager before any pesticides or herbicides are applied to the premises.

8. HISTORICAL PRESERVATION. The grantee shall not remove or disturb, or cause or permit to be removed or disturbed, any historical, archeological, architectural or other cultural artifacts, relics, remains or object of antiquity. In the event such items are discovered on the premises, the grantee shall immediately notify the Resource Managers Office and protect the site and the material from further disturbance until District Archeologist or his/her representative gives clearance to proceed.