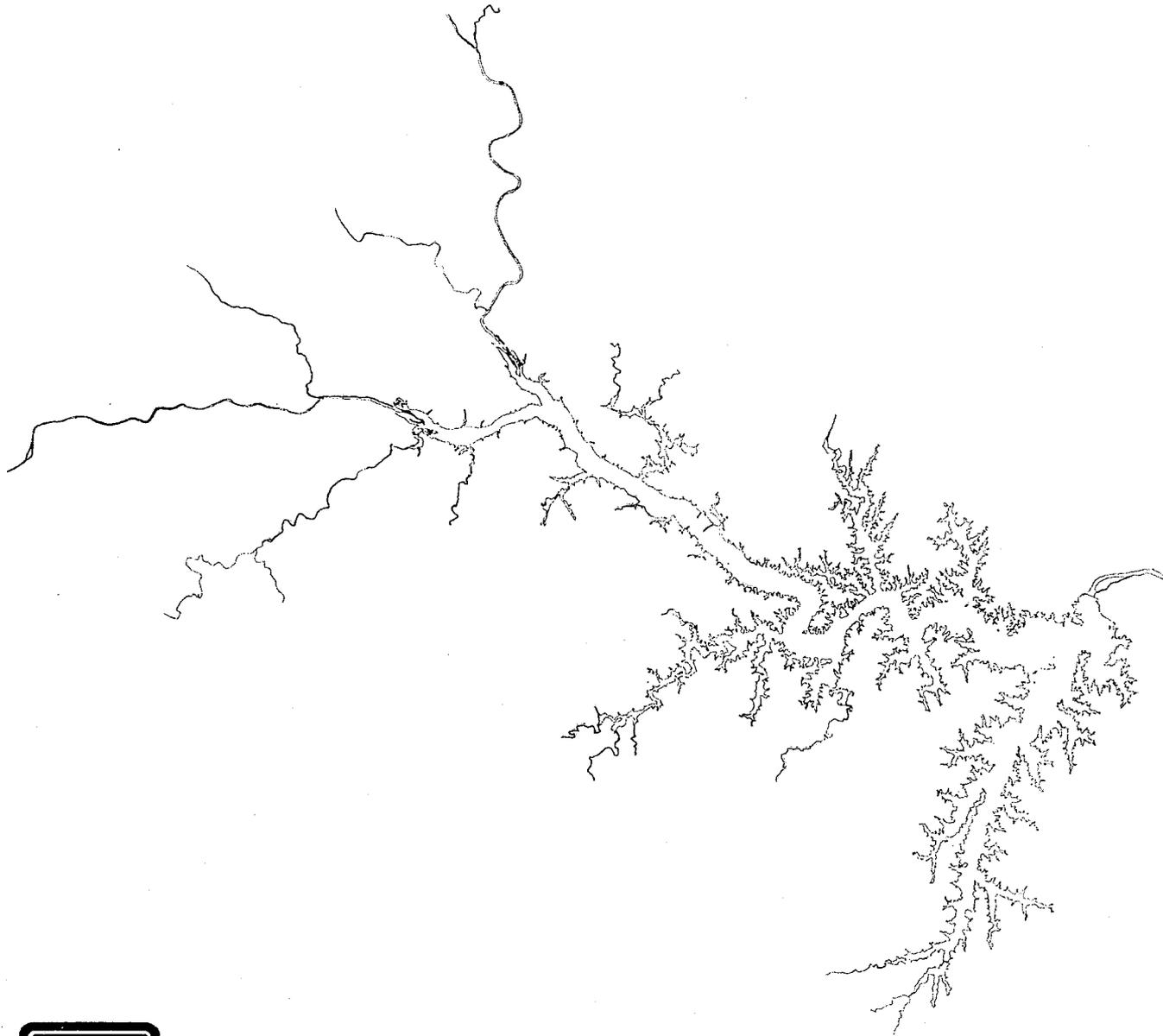


Shoreline Management Plan for John H. Kerr Reservoir North Carolina and Virginia



**US Army Corps
of Engineers**
Wilmington District

Appendix VI of the
Operational Management Plan
January 1995

SHORELINE MANAGEMENT PLAN

JOHN H. KERR DAM AND RESERVOIR
ROANOKE RIVER, NORTH CAROLINA AND VIRGINIA

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1. PURPOSE.

This plan has been developed to provide guidance and information to the public specific to the effective management of the shoreline at John H. Kerr Reservoir. The types of private uses which may be permitted on the shoreline are described within the plan. Additionally, the plan addresses the shoreline allocations, rules, regulations and other information relative to the John H. Kerr Shoreline Management Program.

2. POLICY.

It is the policy of the Chief of Engineers to protect and manage shorelines of all Civil Works water resource development projects under Corps jurisdiction in a manner which will promote the safe and healthful use of these shorelines by the public while maintaining environmental safeguards to ensure a quality resource for use by the public. Public pedestrian access to and exit from these shorelines shall be preserved. For projects or portions of projects where Federal real estate interest is limited to easement title only, management actions will be appropriate within the limits of the estate acquired.

In accordance with Engineer Regulation (ER) 1130-2-406, shoreline management plans will be reviewed at least once every five years and revised as necessary. When approved, this plan will become part of the John H. Kerr Reservoir Operational Management Plan. Shoreline management plans and permits are subject to all applicable laws referenced herein and amendments to regulations which may alter policy and implementation of the plan.

3. GENERAL OBJECTIVES.

The primary objective of this plan is to define policies and regulations pertaining to the shoreline of John H. Kerr Reservoir. This objective includes maintenance of the aesthetic and environmental characteristics of the reservoir for the full benefit of the general public. All management actions will seek to achieve a balance between permitted private uses and protection of natural and cultural resources for use by the general public.

4. AUTHORITY.

This plan was prepared in accordance with the requirements of ER 1130-2-406 dated 31 October 1990, and titled "Shoreline Management at Civil Works Projects". References include:

- a. Section 4, 1944 Flood Control Act, as amended (16 USC 460d).
- b. The Rivers and Harbors Act of 1894, as amended and supplemented (33 USC 1).
- c. Section 10, River and Harbor Act of 1899 (33 USC 403).
- d. National Historic Preservation Act of 1966 (P.L. 89-665; 80 Stat. 915) as amended (16 USC 470 et seq.).
- e. The National Environmental Policy Act of 1969 (42 USC 4321, et seq.).
- f. The Clean Water Act (33 USC 1344, et seq.).
- g. The Water Resources Development Act of 1986 (P.L. 99-662).
- h. Title 36, Chapter III, Part 327, Code of Federal Regulations, "Rules and Regulations Governing Public Use of Water Resources Development Projects Administered by the Chief of Engineers."
- i. Executive Order 12088 (13 Oct 78).
- j. 33 CFR 320-330, "Regulatory Programs of the Corps of Engineers".
- k. ER 1130-2-400, "Management of Natural Resources and Outdoor Recreation at Civil Works Water Resource Projects".
- l. EM 385-1-1, "Safety and Health Requirements Manual".
- m. ER 1130-2-435, "Project Operations, Preparation of Project Master Plans (30 Dec. 1987)".
- n. ER 1130-2-438, "Historic Preservation Program".
- o. Executive Order 11990, "Protection of Wetlands".
- p. "Endangered Species Act of 1973", as amended.
- q. Federal Insecticide, Fungicide, and Rodenticide Act of 1972 as amended (P.L. 92-516).

- r. SADvR 1130-2-14, Use of Shoreline and Water Areas for Minor Private Purposes.
- s. Reservoir/Forest Cover Act of Sept. 6, 1960 (P.L. 86-717).
- t. ER 405-1-12, Real Estate Handbook, as amended.

5. HISTORY.

a. John H. Kerr Reservoir. The impoundment of Kerr Reservoir was originally authorized for the purpose of flood control and hydroelectric generation. Various laws and regulations have expanded the reservoir's operating authorities to include fish and wildlife conservation, recreation, and water supply. The reservoir has a shoreline of approximately 800 miles and a water surface of approximately 48,900 acres. The reservoir extends approximately 39 miles upstream of the dam on the Roanoke River and approximately 19 miles upstream on the Dan River above its junction with the Roanoke River.

In general, the reservoir will fill during the early spring months and be drawn down periodically during the fall and winter. From an average of 302 feet above Mean Sea Level (M.S.L.) in April and May, the water level in the reservoir falls gradually to an average of 299.5 feet in June. The water level usually fluctuates within a 3-foot range during the recreation season of June through September. From October to December the water level is gradually lowered to an average of 295.5 feet M.S.L. and remains there until the end of March. A rule curve fluctuation table can be found in Exhibit A (Page 35).

b. Shoreline Management. The original Lakeshore Management Plan was used as an interim plan until the Project Master Plan was completed. Completion of the Master Plan necessitated revisions to the Lakeshore Management Plan, and was approved as "Appendix F to the Master Plan" in 1980.

c. Public Involvement. Public participation was ensured in the revision of the Shoreline Management Plan. A review committee met to review the initial draft plan. Meetings were held to allow the general public, other agencies, shoreline permit holders, and others the opportunity to review draft plan maps and provide comment.

In the spring of 1993, the Citizen Review Group was formed with representatives from various governmental agencies and private organizations. This group reviewed the draft plan and provided comments and suggested changes. Where possible, these changes were incorporated in the Shoreline Management Plan. For a list of organizations who participated in this group see Exhibit L (Page 50).

Comments were also solicited from the public. The draft was furnished to all local, state, Federal governments, appropriate natural resource management agencies, news media, permit holders, special interest groups, commercial concessionaires, and other concerned entities. Three public participation workshops were held, followed by 30 days for receipt of written public comment regarding the proposed revision of the John H. Kerr Shoreline Management Plan.

d. Permit History. John H. Kerr Reservoir is located in a predominately rural area within the piedmont of Virginia and North Carolina. Adjacent privately-owned residential properties adjoining the reservoir continue to be developed. Likewise, existing residential developments are expanding, resulting in an increased demand for private use of public lands and waters. Each year applications continue to be filed for floating facilities, shoreline and vegetation modifications, utility lines, and other permitted activities. The number of shoreline-use permits that have been, and continue to be issued, indicate significant private use of the public resource. Table 1 depicts the growing number of individual users:

Table 1

Cumulative Totals of Permits and Licenses

<u>Year</u>	<u>Floating Facility Permits</u>	<u>Land-Based Permits/Licenses</u>
1975	795	205
1980	1,017	409
1985	1,107	348
1990	1,811	751
1994	1,968	776

The number of shoreline-use permits issued over the past fifteen years has nearly tripled. Likewise, land-based permits and Real Estate licenses have nearly doubled over the same period. It is anticipated that the demand for permits and licenses for use of public lands and waters will continue to increase as additional adjacent lands are developed for housing.

6. EXISTING RESERVOIR LAND USE.

John H. Kerr Dam and Reservoir contains 66,263 acres above the normal pool elevation of 300 feet M.S.L. The following approximate acreage are assigned to the various land use allocations:

Project Operations	264
Recreation:	
Existing Intensive Use	7,864
Future Intensive Use	6,022
Existing Low Density Use	217
Future Low Density Use	2,782
Natural Areas	5
Wildlife Management/Forest Reserve	38,600
Flowage Easements	10,509

TOTAL PROJECT ACREAGE:	66,263

Land use allocations provide the basic framework that will guide the development, management, and operation of all project resources and facilities. Shorelines adjacent to all reservoir lands have been further classified into shoreline allocations as described in Paragraph 7 below.

7. SHORELINE ALLOCATIONS.

a. In compliance with the Corps of Engineers' shoreline management regulation (ER 1130-2-406), all shorelines of John H. Kerr Reservoir have been classified into four allocation categories. These allocation categories are described below and are in agreement with the reservoir's Master Plan and Operational Management Plan. These shoreline allocations are graphically depicted on the Shoreline Management Plan Allocations Maps presented as Exhibit O, located at the end of this plan. A (Scale: 1" = 2000') showing the boundaries and breaks from one allocation category to another is available for public inspection at the Management Center located near the dam. Future changes in law, regulation, or policy may necessitate changes in shoreline allocations after the publication of this plan.

b. With the revision of this plan 84.7 miles of shoreline have been re-allocated from that designated in the 1980 Lakeshore Management Plan. Table 2 summarizes these changes.

Table 2

Summary of Shorelines Re-allocated

<u>Previous Allocation</u>	<u>New Allocation</u>	<u>Miles Affected</u>	<u>% Total Shoreline</u>
Limited Development	Protected	7.0 miles	0.9 %
Limited Development	Recreation	4.4 miles	0.5 %
Ltd. Dev. - Caution	Limited Dev.	30.9 miles	3.9 %
Protected	Limited Dev.	7.4 miles	0.9 %
Recreation	Limited Dev.	1.3 miles	0.2 %
Protected	Recreation	<u>33.7 miles</u>	<u>4.2 %</u>
	Totals:	84.7 miles	10.6 %

c. The criteria used to determine the appropriate allocation of all shoreline areas is located in Exhibit D (Pages 39 - 40). Based on these criteria, the following shoreline allocations were established and defined as:

1. Limited Development Shoreline. (31 % of Total Shoreline) This allocation category refers to areas where private floating and certain land-based facilities and activities are permitted provided all conditions outlined in this plan are met. All shorelines not designated as public recreation shorelines, prohibited access areas, or protected lakeshore areas are included in the Limited Development Allocation.

2. Public Recreation Shoreline. (38% of Total Shoreline) Shorelines in this allocation category consist of lands set aside for recreational use. These lands include existing parks, quasi-public lease areas, recreational trails, wildlife management areas and other areas reserved for future recreational development. All legally authorized, existing private facilities currently within this shoreline allocation will continue to be "grandfathered" and permitted on an annual basis provided all conditions outlined in this plan are met (See Section 12, Page 10). New Shoreline Use Permits/Licenses authorizing floating or land-based facilities will not be issued within this shoreline allocation. Upon development of an area for public recreation, all affected existing private facilities will be removed. Individuals will not be permitted to make any modifications to the land or vegetation in this allocation.

3. Protected Shoreline. (31 % of Total Shoreline) Shorelines in this allocation category are designated for the purpose of maintaining or restoring aesthetic quality, protecting and conserving natural and cultural resources, providing fish and wildlife habitat, and reducing conflicts between private and public activities. New Shoreline Use Permits/Licenses authorizing floating and land-based facilities will not be allowed in Protected Shoreline Areas. Existing floating and

land-based facilities can remain and be reassigned to new owners provided all permit conditions are met. Personal safety and fire protection will be the primary concern when authorizing vegetative modification in this allocation. Some minor modification of vegetation or the cutting of dead trees may be permitted if the activity will not adversely impact the environment or physical characteristics for which the area was designated as protected.

4. Prohibited Access Shoreline. (Less than 1% of Total Shoreline) Shorelines in this allocation category are designated because of safety concerns relating to recreational visitors. These shoreline areas are located adjacent to lands utilized for industrial and reservoir operations and contain dangerous structures or maintenance facilities. Shoreline Use Permits/Licenses will not be permitted within these areas. Additional areas may be allocated to this shoreline category as new structures and hazards are identified.

8. FLOWAGE EASEMENT LANDS.

a. There are lands at John H. Kerr Reservoir where the Corps of Engineers' real estate interest is limited to easement title only. However, on all waters of the reservoir, regardless of ownership of the underlying land, the Corps of Engineers must assure the public's safety and navigational integrity. In this plan, easement lands are classified into shoreline use allocations as are fee-owned lands. However, these allocations apply only to floating facilities. Adjoining landowners who desire to place docks or buoys on waters over flowage easement lands must obtain a Shoreline Use Permit/License from the Resource Manager. Flowage easement landowners placing other structures directly on flowage easement lands may need written consent from the Corps of Engineers.

b. New septic systems will not be permitted within the flood pool of John H. Kerr Reservoir or Island Creek sub-impoundment. Repair or replacement of existing sanitation facilities below the flood pool will be considered, provided there is no alternative location above the top of the flood pool. In addition, all applicable local health department and/or construction permits must be obtained. The top of the flood pool elevation is 320 ft. M.S.L. east of the Clarksville bridge, 325 ft. M.S.L. west of the bridge, and 290 ft. M.S.L. for the Island Creek sub-impoundment.

c. Filling or construction on easement lands utilizes space allocated for the storage of flood waters. Proposed earth moving operations, including dredging, or construction on these lands must be reviewed by the Corps of Engineers to determine affects on flood storage and wetlands. The Resource Manager must be

contacted for written permission before proceeding with these activities.

d. Field surveys and marking of easement area boundary lines will be accomplished as budgets allow. Fee owners will be contacted before these boundary lines are established and marked.

9. ABANDONMENT OF PRIVATE PROPERTY.

Title 36, Code of Federal Regulations, prohibits the abandonment, storage, or leaving of unattended personal property on the land or waters of John H. Kerr Reservoir. After a period of 24 hours, unattended personal property shall be presumed to be abandoned and may be impounded and stored at a location designated by the Resource Manager. The Resource Manager may collect a reasonable impoundment fee before the impounded property is returned to its owner.

10. SHORELINE TIE-UP OF VESSELS.

Temporary shoreline tie-up is defined as the intermittent moorage of private watercraft along the shoreline during a period of recreational activity. This practice will be allowed as long as a conflict of use does not develop and the tie-ups last no more than a three-day period with owners maintaining constant supervision over their vessels. Campers registered at a designated campsite within a park may tie up vessels below their campsites throughout their stay. Watercraft owners are encouraged to contact local marinas for extended moorage or apply for a dock or mooring buoy permit.

11. SHORELINE USE PERMIT/LICENSE.

a. A Shoreline Use Permit/License is required for all private activities and facilities on public lands and waters owned by the Corps of Engineers at John H. Kerr Reservoir. These activities and facilities include, but are not limited to, vegetation modification, erosion control, and the placement of floating and land-base facilities. Shoreline Use Permits/Licenses are normally issued for a period of five years. These documents contain general terms and conditions that are uniformly applicable to all permits/licenses issued (See Exhibit C, Page 38). However, unique circumstances and problems may require the establishment of additional terms and/or special conditions. All applications for Shoreline Use Permits/Licenses on the reservoir are subject to approval by the Resource Manager. Requests for activities not specifically addressed in this plan should be submitted in writing to the Resource Manager for review. Should an applicant desire to appeal a decision, they may do so in

writing through the Resource Manager to the District Engineer.

b. Applicants must be at least 18 years of age. Rangers must meet with the applicant at the Shoreline Use Permit/License location in order to explain the terms and conditions. The on-site meeting also establishes the exact location of all permitted facilities/activities. Applications cannot be accepted through a second party. After the on-site applicants will receive the permit in the mail. Permits must be returned signed, with fee payment, within 30 days to guarantee the location and facility's approval as discussed.

c. Issuance of a private Shoreline Use Permit/License does not convey any property rights or exclusive use rights to the permit holder. They are non-transferrable and become null and void when:

1. Both the permittee and his/her legal spouse are deceased.
2. Legal access to public property at the location of the permit/license is no longer available to the permittee. Loss of legal access usually occurs upon sale or transfer of adjacent private property unless the permittee retains some form of legal access rights to public lands (See Section 14, Page 13).

Prospective adjacent property owners should not assume that activities being permitted to the present adjacent owner will be allowed to continue. Many facilities or activities are grandfathered to the present permittee as prior commitments before the establishment of this plan (See Section 12, Page 10). New and prospective adjacent property owners should contact the Area Ranger for information on authorized shoreline uses and permitting procedures.

d. Fees will be collected for specific permitted activities and facilities prior to the issuance of a Shoreline Use Permit/Licenses. A current fee schedule is found in Exhibit J (Page 48). Fees are to be mailed or delivered in person to the Resource Management Center along with the necessary applications.

e. Individuals issued a Shoreline Use Permit/License must agree to give the Resource Manager or his representative access over their property for the purpose of inspecting the permitted facilities and/or activities.

f. The Corps of Engineers assumes no liability or responsibility for the safety of individuals engaged in any activity associated with private facilities authorized by the shoreline use permit/license on public property. The permittee assumes full liability and responsibility for the safe conduct of

the activity and must assure the safe condition of any permitted structure.

g. All Shoreline Use Permits/Licenses are issued and enforced in accordance with the provisions of Title 36, Chapter III, Part 327, Code of Federal Regulations. Failure to obtain the proper permits/licenses or noncompliance with any of the terms and conditions, general or special, may result in a termination notice. Additionally, restitution for damages and/or the issuance of a citation for violations of the provisions of Title 36 may be considered. Title 36 violations subjects the violator to a fine of not more than \$500.00 and/or imprisonment for not more than six months.

h. Procedures for obtaining Shoreline Use Permit/Licenses are found in Exhibit K (Page 49).

12. PRIOR COMMITMENTS AND GRANDFATHERED FACILITIES.

a. Certain Shoreline Use Permits/Licenses issued prior to this plan and the 1980 Lakeshore Management Plan fall under the auspices of the "grandfather clause". This clause permits certain activities and facilities to continue or remain in areas where, because of changes in shoreline allocations and/or regulations, private use would not presently be allowed.

b. Grandfathering has contributed to the general public's misconception, confusion, and perceived inconsistencies relating to the management of the shorelines of John H. Kerr Reservoir.

c. The management of "grandfathered" shoreline use permits/licenses and activities will be conducted as follows:

(1) Docks and Associated Structures. Docks permitted prior to the 1980 Lakeshore Management Plan and located in areas other than Limited Development Areas will be considered "grandfathered". "Grandfathered" floating facilities will be allowed to remain as permitted in their present locations in accordance with Public Law 99-662, Section 1134(d). This law prohibits the forced removal, on or after December 31, 1989, of previously authorized docks and appurtenant structures which were in place on November 17, 1986, providing the following conditions are met:

(a) Docks must be maintained in usable and safe conditions at all times.

(b) Such property does not occasion a threat to life or property.

- (c) The holder of the permit is in substantial compliance with the terms of the existing permit.
- (d) Public Law 99-662 applies except where necessary for immediate use for public purposes, or higher public use, or for a navigation or flood control project.

(2) Land-based Facilities. All authorized land-based facilities, such as steps, walkways, and utility lines permitted prior to this plan and located in areas other than Limited Development are considered "grandfathered". These facilities can be re-assigned to new adjacent landowners at the request of the present permittee. "Grandfathered" land-based facilities must be kept in a safe and structurally sound condition if they are to remain. Land-based facilities must be removed at the expense of the permittee should the Shoreline Use Permit/License be terminated for any reason.

(3) Vegetation Modification. Due to significant changes in the terms and conditions of vegetation modification permits, many old permit conditions and terms were "grandfathered" (See Section 18, Page 23). A phase-in of all new restrictions will occur at the time of renewal. Permit area size limits will be "grandfathered" and re-assignable to new adjacent landowner.

(4) Mowed Lawns. The 1980 Lakeshore Management Plan "grandfathered" existing lawns developed prior to that plan. This allowed certain mowing activities to occur legally on public lands. Persons mowing are required to have a Shoreline Use Permit/License authorizing such activity. Permits will be issued for all "legal mowing areas" for the purpose of documenting the location, size, and person responsible for maintaining pre-1980 lawns. Permits for mowed areas, will be reassigned to subsequent new adjacent landowners. To promote gradual reforestation of mowed areas a permittee must take steps necessary to provide the minimum tree cover at the spacing and date shown in Table 3 below.

Table 3

Maximum Tree Spacing Requirements

<u>Tree Spacing (ft.)</u>	<u>Date</u>
100	January 1, 2005
50	January 1, 2010
25	January 1, 2020
15	January 1, 2030

a. Trees must measure at least 1 inch in diameter at the base to be considered acceptable for meeting the spacing requirements (See Exhibit N, Page 52). Spacings may be achieved through planting or by allowing trees to naturally regenerate. Failure to achieve the spacing by the date indicated in Table 3 may cause the mowing permit to be revoked and planting of the area by the Resource Manager.

b. Should the permittee choose to plant, the species selected must be from the approved list in Exhibit B-1 (Page 36). The permittee will be allowed to mow around the planted trees within the designated permit area.

(5) Vehicle Access Trails. Private vehicle access trails that existed prior to the 1980 Lakeshore Management Plan will be inventoried and licensed to the adjacent landowner controlling private access, or to another responsible party having access. An existing vehicle access trail license may be re-assigned to a new property owner. Failure to maintain a license and abide by its conditions may cause the access trail to be closed to vehicles. A pedestrian access trail may be authorized in a location where vehicular access is terminated.

13. OFF-ROAD VEHICLE USE.

a. The operation of motorized vehicles, including but not limited to automobiles, trucks, motorcycles, mini-bikes, all-terrain vehicles (ATV's), golf carts, utility and lawn tractors, etc., are prohibited on non-roadbed areas of the shoreline with the exception of:

1. Vehicle use on right-of-way easements or License granted by the Corps for private access across government lands and any authorized vehicle access trails (See Section 19).

2. Golf carts and small, slow-moving utility tractors on licensed "improved" walkways [See Section 20(e)(7), Page 31].

3. Riding lawn mowers on a permitted lawn area or in accordance with the terms of any existing authorized vegetation modification permit.

4. Approved maintenance and management activities, primarily associated with agricultural purposes, of adjacent landowners having the necessity to cross large blocks or fingers of government land to gain access to their private lands.

b. Taking any vehicle through, around, or beyond a restrictive sign, recognizable barricade, fence, or traffic control barrier and off of an authorized road or vehicle access

trail is prohibited unless authorized in writing by the Resource Manager.

14. ACCESS REQUIREMENTS FOR OBTAINING SHORELINE USE PERMITS/LICENSES.

a. All persons applying for a Shoreline Use Permit/License must have proof of legal access within 500 feet of their proposed permit. Applicants for a Shoreline Use Permit/License must have direct access to public property and must provide a recorded deed, lease, or easement agreement. Lease or easement agreements must be for a five year minimum term. A plat of the adjacent private property, with dimensions of ownership, lease, or easement clearly delineated, must be furnished for inclusion in the Shoreline Use Permit/License application. Public roads do not constitute legitimate access. However, in situations where a public road and public land have a common boundary, adjacent landowners along this road/boundary may be considered as having access.

b. In sub-divisions where a dedicated easement or access corridor provides legal access to public lands and waters for all sub-division landowners, the access corridor will be considered a legal access for applying for Shoreline Use Permits/Licenses. Spacing for community docks and other permitted facilities may be reserved at these dedicated public access corridors if requested by the sub-division's recognized landowner association.

15. PRIVATE INDIVIDUAL FLOATING FACILITIES.

Shoreline Use Permits are required for all private floating facilities, excluding registered vessels. As addressed in this plan, private floating facilities include individual boat docks, community docks, mooring buoys, and duck blinds. Floating facilities are considered private structures. Because of this the permittee may restrict use of the facility. See Exhibit J (Page 48) for current fees and Exhibit C (Page 38) for "General Conditions" relating to these permits.

a. Applicant. A dock or mooring buoy can be authorized to only one member of any family household having legal pedestrian access to the government property. When a floating facility permit is issued it grants the permittee permission to maintain a facility on the reservoir. It does not, however, necessarily imply ownership of the facility. When a floating facility is owned by more than one individual the permit will be issued to the person responsible for the facility on a day-to-day basis. Multiple owners may request that an ownership statement be placed in the file with a request that the permit be re-issued in their name should the current permittee terminate the permit.

b. Location Requirements. Newly approved floating facilities, to the greatest extent possible, will be placed directly in front of the area where the applicant and government share a common boundary. The exact location will be determined by the Resource Manager with consideration being given to the allocation of space for future applicants. Designated locations will be marked utilizing a Carsonite post with a permit decal affixed. Floating facilities may not be moved to other locations without permission from the Resource Manager. Requests for temporary or seasonal relocation can be approved provided adequate justification exists, the shoreline allocation is appropriate, and the new location does not encroach on spacing requirements of another facility as outlined in Paragraph 15(c).

c. Spacing Requirements.

(1) Each floating facility, unless grandfathered, must be separated by at least 100 feet of shoreline (150 - 300 feet if next to an existing community dock). In addition, a minimum distance of 50 feet must be maintained across reservoir waters from one floating facility to another (exception noted below in Paragraph 15(e)(2) for an extra buoy). The 100 foot spacing will be measured using the centerline of dock walkways or, in the case of buoys, the estimated location of a future dock walkway if the buoy is converted to a dock. All shoreline distances will be measured at the 300 ft. M.S.L. elevation.

(2) If an existing floating facility falls within the 150 - 300 foot spacing associated with a newly approved community dock it is considered grandfathered until such time that the floating facility must be rebuilt or replaced. At that time the permit is cancelled and the permittee is allowed to join the community dock system provided space is available.

(3) No dock will extend out from the shoreline more than one-third the total width of any particular cove. Buoys and moored vessels may not occupy more than one-third of any cove and must be anchored within 100 feet of the shoreline. Floating facilities cannot render any portion of a cove non-navigable or create any navigation hazard.

d. Facility Placement. Floating facilities must be constructed and placed at the approved location within six months of permit issuance. If the floating facility is not in place by the specified time period the authorization for the facility will be canceled and eligible persons on the waiting list will be contacted.

e. Multiple Floating Facilities. Multiple floating facilities may be permitted to the same individual when:

(1) any property/lot which is associated with an existing floating facility is purchased by a person who already has a floating facility the new permit will be re-issued in the new owners name.

(2) multiple properties/lots are owned by the same individual. Each lot/property having a dwelling or one under construction may qualify for a floating facilities.

(3) In the past, a buoy was permitted in conjunction with a primary floating facility. Because of congestion and confusion associated with the placement of this type of buoy, they will generally not be allowed. A permittee must demonstrate a need that cannot be met by the primary floating facility before any exceptions are made. An additional buoy will not be granted for the purpose of reserving shoreline spacing. If an additional buoy is authorized, it must be located within 50 feet of the permittee's primary floating facility. Individuals who have one of these "grandfathered" extra buoys will not be able to reassign it to another party.

(4) Any applicable grandfathered situation.

f. Allowable Permit Area. New floating facilities will be allowed in any area of the reservoir's shoreline allocated as Limited Development. No new floating facilities will be allowed in other shoreline allocations except for facilities located in areas covered by real estate outgrants where plans are approved through the grantee. Shoreline Use Permits/Licenses authorizing docks or buoys existing in other shoreline allocation categories that were permitted and in place prior to the August 1980 Lakeshore Management Plan are considered grandfathered, renewable, and can be re-authorized to any subsequent property owner in accordance with appropriate restrictions (See Sections 12(c) (1) and 7(c) (2)).

g. Maximum Density. Maximum density occurs when there exists, for any given area of shoreline allocated Limited Development, one dock permit for each 100 ft. of shoreline. No other new floating facilities can be issued within this area as long as this situation exists. In all cases, sufficient open area will be maintained for safe maneuvering of watercraft. When a Limited Development Area, or a portion of it, reaches maximum density, notice will be given to the public and facility owners in that area that no additional facilities will be allowed. In those cases where current density of development exceeds one dock for each 100 ft. of shoreline, the density will be reduced to the prescribed level through attrition.

h. Facility Construction.

(1) All new docks and buoys and those to be repaired or replaced must be approved by the Resource Manager and constructed according to a standard Corps plan (See Exhibits E-1 through E-3, Pages 41 - 43), a Corps approved plan certified by a registered engineer, or an approved plan used by a reputable dock construction firm on file with the Corps. Alterations to the original approved plan may not be made without prior approval. Two-story structures, side walls, and sun decks are prohibited. Additions of benches and railings can generally be approved as long as they are securely fastened to the dock in a safe manner.

(2) Mooring buoys must be commercially manufactured and meet all federal and state buoy requirements as follows (See Exhibit E-3, Page 43):

- a. White in color with a blue band
- b. Cone or sphere shaped and at least 16 inches in diameter.
- c. Must float in an acceptable manner so as to be easily seen and identified as a mooring buoy by the boating public.

(3) The maximum allowable size of an individual dock without slips is 320 square feet (16 ft. by 20 ft.). The maximum allowable size of any slip dock is 750 square feet, including the slip area. The minimum size for any dock is 8 ft. by 10 ft. All dock allowances will be calculated excluding the walkway. Size requirements apply to all new permits. Renovated docks must meet these requirements.

(4) Walkways must connect docks to the shoreline and be constructed from 36 inches to 72 inches in width. Each floating walkway must have enough floatation to provide a stable walking platform or be one solid piece connecting the shoreline to the dock without touching water. Walkways cannot be supported by fixed piers or posts. Size requirements apply to all new docks. Renovated docks must meet these size requirements.

(5) All new docks and renewals are required to have attached at least four international orange or amber reflectors at least 3" in size. Reflectors should be placed as shown on Exhibit E-2 (Page 42) and visible to boat traffic.

(6) One storage box, not to exceed 72 cubic ft. and the dimensions of 4 ft. by 6 ft. by 3 ft., is allowed to be fixed on the top surface of the dock. This box must be bolted to the dock, constructed of treated wood or other pre-approved material.

(7) Sliding or diving boards, AC electric pumps, AC electric motors (Except as part of boat lifts), low voltage

lighting, electric lines, cords, and outlets may not be attached to docks and are not considered part of any approved dock plan. All persons having these unauthorized devices on their docks will be given 30 days to remove, or face cancellation of the permit.

(8) Boat lifts can be placed on docks, however, the lifts cannot cause the dock size to exceed the maximum described in Paragraph 15(h)(3) above. Battery or air operated lifts are preferred. Electrical AC motors associated with boat lifts may be permanently fixed to the lift, per manufacturers specifications. Extension cords plugged into a ground fault electrical circuit may be utilized temporarily to operate lift motors. Temporary cords must be removed immediately after use. A permittee may install wire in conduit along the dock to the boat lift motor provided the following conditions are met:

a. All wiring is certified by an licensed electrician to meet the National Electric Code as found applicable for marina installation. A certification statement is required at initial installation, at each renewal of the permit, and when repairs or modifications are made to any part of the electrical system.

b. Wiring is connected directly into the boat lift motor with no breaks for receptacles, lighting, or other electrical connections.

c. No permanent electrical connection from the dock to shore. The electrical service on shore must be protected by a Ground Fault Circuit Interrupter (GFCI) breaker.

i. Floatation Material. On all new docks and buoys, floatation shall be of materials which will not become water-logged (not over 1-1/2 percent by volume ASTM), is resistant to damage by animals, and will not sink or contaminate the water if punctured. Floatation material used in the construction of docks or buoys must meet the criteria listed below:

(1) No metal-covered or injected drum floatation.

(2) Foam bead floatation not subject to deterioration through loss of beads, meets the above criteria and has a minimum density of 1.2 lb/cu.ft.

(3) Foam bead floatation with a density of 1.0 lb/cu. ft., not otherwise meeting the above criteria is authorized provided it is encased in an approved protective coating which meets specifications above. An approved coating is defined as warranted by the manufacturer for a period of at least eight years against cracking, peeling, sloughing, and deterioration from ultra violet rays, while retaining its resiliency against ice and bumps by watercraft.

(4) Polystyrene foam which has undergone the extrusion process as noted on the Dow plan is acceptable.

Existing floatation will be authorized until it has severely deteriorated and is no longer serviceable or capable of supporting the structure, at such time it must be replaced with approved floatation.

j. Anchoring. Floating facilities must be physically attached to the shoreline with a walkway and ropes or galvanized cables. Rope or cable used for anchoring may not obstruct the free use of the shoreline, nor damage vegetation or other natural features. Anchoring to vegetation is prohibited on any newly permitted floating facilities anchored to public owned (fee) land. Ropes or cable should be attached on the shoreline to a screw-down device or by utilizing wooden or cement post with anchor bolts attached (See Exhibit E-2, Page 42). Docks currently utilizing vegetation as an anchoring device, except those adjoining easement lands, must convert to an approved method within 5 years of adoption of this plan.

k. Repairs, Replacements and Additions. Inspections of docks and buoys will be performed periodically. If deficiencies are found, the permittee will be notified and requested to make repairs within 30 days.

If the facility is found to be in such poor condition that total replacement is required, the permittee will be given 60 days to install a new floating facility and remove the old one from public property or Federal waters. Extensions will be considered only if the permittee submits a written request.

The Corps of Engineers must be notified when voluntary replacement or alteration of floating facilities plans contemplated. All replacements or alterations must be in accordance with approved plans.

l. Dock Builders List. A referral list is maintained at the Resource Management Office listing all dock builders who have Corps approved plans suitable for use on John H. Kerr Reservoir.

m. Shoreline Use Permit Signs. Permit holders are required to post a Shoreline use permit sign on the lakeside of their dock, or prior to construction, on a 4-inch by 4-inch treated post at the location of the dock's walkway as designated by the Resource Manager. A new system is being implemented that will combine all separately issued Shoreline Use Permits/Licenses under one instrument. When this occurs the sign will suffice for all facilities at that particular site.

n. Re-issuance of Permits. Floating facilities are non-transferrable. Upon request from the permittee, a new permit may be issued to a new owner. An application will be mailed to the new owner as designated. Upon receipt of the signed application

and any administrative charges and inspection fees a new permit number will be assigned. The new owner must return the permit application within 14 days or remove the facility within 30 days of assuming ownership. Should a facility not yet constructed or installed is re-issued to a new owner, the new permittee must have the facility on the water within the original permittee's six month installation period. Failure to do so may cause re-assignment of the space to those on a waiting list. If not corrected at the time of re-issuance, the new permittee assumes all responsibility for any repair or removal requests issued by the Corps to the previous facility owner.

o. Waiting List. All persons interested in being placed on a waiting list for a particular floating facility location must fill out a Waiting List Application. This application is available at the Resource Management Center or by mail. Those on the waiting list will be contacted by letter when:

1. A permit is canceled by the Corps at a location specified by a waiting list application.

2. A permit is voluntarily relinquished by the permittee and there is no request to re-issue the permit to a new owner.

Applicants are given 14 days from receipt of the notification letter to apply for a facility. It is the applicants responsibility to ensure that all waiting list information is updated.

p. Duckblinds. Duckblinds are unique floating structures in that they are placed on the reservoir for short periods of time. A Shoreline Use Permit/Licenses for duckblinds will be issued for one hunting season at a time. Duckblinds will not be allowed within 500 yards of any developed Public Recreation Area, within 500 yards of a Prohibited Access Area, in areas adjacent to residential or other inhabited areas, nor in areas designated as local waterfowl refuge areas by State Wildlife agencies. The permittee will be required to moor the duckblind to the shore, at a marina, or remove it from the reservoir after each use.

16. COMMUNITY DOCKS.

a. Use of community docks is encouraged to reduce the proliferation of individual moorage facilities. Community docks will be subject to the same shoreline allocation requirements and fees as stipulated for individual facilities. Shoreline Use Permits/Licenses authorizing community moorage facilities will be considered when it has been determined that there is a need for moorage in a particular area, access to the area is available, and an appropriate site location exists for community mooring. Community docks will be considered in areas that do not conflict

with commercial marina services, public launching facilities, or other access points. See Exhibit J (Page 48) for current fees and Exhibit C (Page 38) for "General Conditions" relating to this type of permit.

b. Applicant. A written document must be provided to include the names, addresses, signatures of the individual members, and any other pertinent information relating to the proposed community dock. This document must designate an association member who will sign the permit.

c. Size of Facility. The maximum number of slips allowed for any one community floating facility is 20 slips. A slip is defined as a mooring opportunity for one vessel. End and side moorings will be included in the total number of slips which may be approved. Actual size of the facility may be reduced by the availability and suitability of the area, as determined by the Resource Manager.

d. Access. All applicants must provide a recorded deed and plat showing the common access for their association members. Pedestrian access to the facility across public land will be limited to those described in Section 20(e).

e. Construction Criteria. Plans showing the details of construction and the location of the facility within the permit area must be submitted along with the application. Construction requirements will be the same as those outlined for private floating facilities with the exception of allowing an anchoring bulkhead. Concrete bulkheads at the walkway connection to the shoreline can be approved at elevation 305 - 310 M.S.L. Plans must show the dock configuration and maximum number of slips proposed. Installation may, however, be accomplished in phases. Gangwalk and center walkway widths may vary from a minimum of three feet to a maximum of six feet. Slip fingers may not be less than three feet nor exceed four feet in width. Approval of plans will be required prior to the placement of mooring facilities on the reservoir. No deviation or change from approved plans will be permitted without prior written approval.

f. Maintenance of Facility. The applicant may collect fees in an amount necessary to maintain the community dock facilities and to assure the removal of the facility upon termination of the Shoreline Use Permit.

g. Spacing Requirement. A minimum of 150 ft. spacing is required between and on each side of a community dock of 10 slips or less. On community docks exceeding 10 slips a minimum spacing of 300 ft. is required.

h. Individual Private Moorage. Individuals with a private floating facility existing within the 150 - 300 ft. spacing

required on either side of a community facility will be contacted before the facility will be approved. Affected permittees must agree to joining the community facility at such time that their dock/buoy must be rebuilt or replaced. The displaced permittee must be allowed to join the community facility provided space is available. If a permit for a private moorage facility is canceled for reasons of noncompliance to regulations, a new permit will not be issued.

i. Offshore Moorage. Offshore anchoring or moorage will not be permitted in conjunction with a community dock facility.

j. Special Conditions of Community Floating Facilities. The designated representative shall sign a statement certifying that the regulations and conditions covering the issuance of the permit have been read and understood. The applicant should be aware of the following special conditions or submittal necessary prior to approval of a community dock:

- (1) The term of the permit will not exceed five years.
- (2) The name, address, and phone number of a person designated by the association that will provide 24 hour surveillance of the dock and receive correspondence from the Corps must be supplied. The Resource Manager must be advised of any changes in this designee.
- (3) The association must provide a current list of boat registration numbers of the members' boats to be moored. Members must permit other individuals having legal access to the facility to join its membership until such time that all slips are occupied. Only boats owned by association members may be moored at the facility. One boat slip is allowed per family household.
- (4) The United States shall not be held responsible for damage to any property or injuries to any person or persons which may involve the facility authorized under this permit.
- (5) Commercial activities of any kind are prohibited.
- (6) Vessels or other watercraft, while moored in the facility, may only be used for overnight occupancy when such use is incidental to recreational boating. Vessels or other watercraft are not to be used as a place of habitation or residence.
- (7) The permitted facility shall be subject to periodic inspection by Corps of Engineers

personnel. If an inspection reveals conditions causing pollution of public lands or water or conditions which make the facility unsafe in any way or which deviate from the approved application and plans, such conditions will be corrected immediately by the permittee upon receipt of notification.

- (8) The construction and operation of the permitted facility shall not unduly obstruct or inhibit the free public use of the shoreline.
- (9) Operation of the facility shall be conducted in accordance with all Federal, State, and local laws and regulations.
- (10) The operation of the permitted facility shall in no way be discriminatory against any person or persons because of sex, race, creed, color, national origin. Any person owning or holding a long-term interest in residential property in the subdivision/association shall be eligible for moorage privileges at the permitted facility.
- (11) Dock plans conforming to requirements of Paragraph 16(e) are to be approved by the Resource Manager.

17. REFORESTATION AND REGENERATION OF OPEN AREAS

a. Planting of vegetation on public property may be allowed provided it is in accordance with an approved planting plan. Planting of vegetation is encouraged only when native plant materials are used. Upon planting, all materials become public property and cannot be removed without a permit. Ornamental flower beds, azaleas, and other non-native plants are not authorized. A list of species approved for planting is included in Exhibit B-1 (Page 36).

b. A number of original agricultural leases exist on the shoreline of John H. Kerr Reservoir. Leases are inspected on an annual basis for compliance and renewal purposes. An agricultural lease is terminated at the death of the lessee and his/her legal spouse. Upon termination of a lease all open fields will either be allowed to naturally regenerate to forest land or be planted. At the time of the lease expiration, landowners living adjacent to these unique areas will be afforded the same options as persons applying for a new underbrush permit. This will allow limited mowing within a 100 ft. area around regenerating trees on a 15 ft. by 15 ft. spacing.

18. VEGETATIVE MODIFICATION.

See Exhibit J (Page 48) for current fees and Exhibit C (Page 38) for General Conditions relating to these permits.

a. Underbrushing. Underbrushing is defined as the selective cutting and continued control of woodland understory vegetation (weeds, vines, briars, etc.) and the thinning of tree saplings, as stipulated in the terms of the permit. Shoreline use permits for removal of underbrush are allowed on shorelines classified as Limited Development or Protected Shoreline. Regardless of the shoreline classification, the Resource Manager may add special restrictions to the permit to protect environmental features such as cultural resource sites, highly erodible slopes, or unique vegetative species. The following specific conditions or terms apply to all Shoreline Use Permits authorizing underbrushing:

(1) Underbrushing can be authorized to adjacent landowners or renters having legal access to the public property covered under the permit. Generally, only one underbrushing area per individual will be authorized, however, more than one area may be allowed provided it is associated with an existing dwelling or one under construction.

(2) Upon approval of this plan the maximum permit area size limit of a new underbrush area is limited to a width of 100 feet. This 100 foot wide permit area generally runs from the government's boundary line down to the water and cannot exceed one acre (43,560 sq. ft.) in size. The underbrush area will be marked in the field by the ranger using paint spots or markers. All existing underbrushing areas currently larger than the 100 ft. width requirement will be grandfathered. If the present permit area is less than 100 ft. in width the permittee may request a review by the Resource Manager to determine if a larger size area is applicable.

(3) The Corps reserves the right to revegetate the shoreline when tree spacing falls below acceptable minimum stocking level. This might occur in the case of timber encroachments, insect and disease attacks, fire, storms, or other natural disasters. These events may require the planting of vegetation and trees within the designated underbrushing area. If plantings occur the permittee is required to protect these trees from future cuttings.

(4) New underbrush areas established after the approval of this plan require that native trees, seedlings, or saplings be maintained at a spacing of no less than 15 feet on center regardless of tree diameter. If tree stocking falls below this minimum level then additional trees will be established. This will occur by planting or through natural regeneration.

(5) Within existing underbrushing areas established prior to the approval of this plan tree stocking levels must be brought up to the minimum standards on the dates specified in Table 4. To be acceptable a tree must be 1 inch in diameter at it's base by the specified date.

Table 4

Minimum Tree Spacing Requirements

<u>Tree Spacing (ft.)</u>	<u>Date</u>
100	January 1, 2005
50	January 1, 2010
25	January 1, 2020
15	January 1, 2030

(6) Within the underbrush area, vegetation having a stump diameter less than three inches (measured within one inch of ground level) may be cut or mowed, provided it is not protected under a special condition.

(7) Within the designated underbrush area, lawn mowers, weed eaters, and chain saws can be utilized to cut brush provided they do not damage the remaining vegetation. If mowing is selected as a means to control brush within the permit area the permittee must establish trees at a minimum spacing of 15 ft. x 15 ft.

(8) Within underbrush area the permittee will delineate the government property line, as surveyed and marked by the government, in a clear but unobtrusive manner in accordance with this plan. This delineation may include, but is not limited to, boundary plantings of approved species and fencing on private land. The delineation will be accomplished at no cost to the government.

(9) Vegetation cannot be cut to established a new roadway within the underbrush area. Existing roads must be maintained under an appropriate "letter of authorization" (See Section 21).

(10) The furnished Shoreline Use Permit sign must be posted at the location designated by the Resource Manager. When an underbrushing permit is associated with a dock the permit sign is placed on the dock.

b. Seeding. The broadcasting of grass seed is permitted for erosion control purposes. See Exhibit B-2, (Page 37) for recommended species and planting dates. Soil disturbance activities such as mechanical disking or plowing are not authorized.

c. Limbing. Dead or dangerous limbs may be pruned. Pruning of living vegetation is permitted but must be limited to small limbs less than one inch in diameter and located within 10 ft. of the ground.

d. Burning. Burning of piled brush resulting from underbrushing or other activity is permitted below the 300 ft. M.S.L. provided all fire laws are observed and other vegetation is not damaged. The burning-off or the total removal of leaves and other natural materials is prohibited because of associated soil erosion problems.

e. Herbiciding. Herbicide use is permitted on certain noxious plants (i.e. poison ivy and kudzu). Prior to using, chemicals must be approved and noted on the Shoreline Use Permit. Herbicide use must be in accordance with the manufacture's label and all Federal, state, and local laws.

f. Foot Paths. In Limited Development and Protected Shoreline Allocations where underbrushing is not applicable, a Shoreline Use Permit authorizing a foot path may be obtained to provide safe access to the water. This permit will allow the permittee to clear vegetation within a five foot swath. The path must be routed to minimize the effects on vegetation and the location must be approved by the Resource Manager. Foot paths cannot be utilized as roadways by motorized and/or off road vehicles.

g. Mowing. The 1980 Lakeshore Management Plan "grandfathered" existing lawns developed prior to that plan. This allowed certain mowing activities to occur legally on public lands. Persons mowing are required to have a Shoreline Use Permit/License authorizing such activity. Permits will be issued for all "legal mowing areas" for the purpose of documenting the location, size, and person responsible for maintaining pre-1980 lawns. Permits for mowed areas, can be reassigned to subsequent new adjacent landowners. To promote gradual reforestation of mowed areas permittees must take steps necessary to provide the minimum tree cover at the spacing and date shown in Table 3 below.

Table 3

Minimum Tree Spacing Requirements

<u>Tree Spacing (ft.)</u>	<u>Date</u>
100	January 1, 2005
50	January 1, 2010
25	January 1, 2020
15	January 1, 2030

1. Trees must measure at least 1 inch in diameter at the base to be considered acceptable for meeting the spacing requirements (See Exhibit N, Page 52). Minimum spacings may be achieved through planting or by allowing trees to naturally regenerate. Failure to achieve the spacing by the date indicated in Table 3 may cause the mowing permit to be revoked and planting of the area by the Resource Manager.

2. Should the permittee choose to plant, the species selected must be from the approved list in Exhibit B-1 (Page 36). The permittee will be allowed to mow around the planted trees within the designated permit area.

h. Miscellaneous Vegetation Removal. Other short term vegetation removal activities available to the public are described below:

(1) Dead or Danger Tree Permit. A Shoreline Use Permit may be obtained to cut dead, dangerous standing, or downed trees for use as firewood and/or to eliminate an unsafe condition. Individual trees must be marked by a ranger before cutting. All debris must be disposed of so as not to create a safety hazard. Deadwood removal must be accomplished without damaging other vegetation or creating a roadway. Standing dead trees within designated wildlife areas deemed beneficial to wildlife may be reserved provided they are not considered potential safety hazards. If the purpose of cutting dead trees is to obtain firewood, a fee may be charged for a deadwood permit provided multiple trees are requested and the amount of wood involved exceeds one cord.

(2) Greenwood (Firewood). A permit may be obtained to cut live standing timber when it has been determined by the Resource Manager that it is beneficial to do so. Generally, these permits are issued to professional timber harvesters for the purpose of timber stand improvement or for controlling insect and disease infestations. Occasionally, foresters will make firewood available to the public by marking and thinning overstocked stands. The permittee is required to pay the assessed value for all timber authorized for removal. Under no circumstances will timber be made available for the exclusive purpose of improving a view of the lake.

(3) Driftwood Removal. A Shoreline Use Permit may be obtained to remove or burn driftwood and other debris which have accumulated along the reservoir shoreline. This permit may authorize the use of motorized equipment below the 302 M.S.L. If motorized equipment is utilized the permittee may not damage public property, vegetation, or construct a road way to the work area. Burning of piled debris must be accomplished in compliance with all applicable local and state burning laws. This permit is cost free.

(4) Wildlife Food Plots. The planting of wildlife food plots may be authorized by the Resource Manager to promote increased wildlife food and cover. Planted material is for wildlife consumption and use only and cannot be harvested. This permit is cost free.

19. VEHICLE ACCESS TRAILS. Private vehicle access trails that existed prior to the 1980 Lakeshore Management Plan will be inventoried and Licensed to the adjacent landowner controlling private access, or to another responsible party having access. Failure to maintain a License and abide by its conditions may cause the access trail to be closed to vehicles. A pedestrian access trail may be authorized in a location where vehicular access is terminated.

a. Vehicle access trails that existed prior to the 1980 Lakeshore Management Plan may be allowed to remain open in accordance with the following:

(1) An adjacent landowner or other responsible party having legal access across private lands at the location of the access trail must obtain a License. If an existing combined Shoreline Use Permit has been issued to the responsible party, authorization will be included in their existing permit. An existing vehicle access trail License may be re-assigned to a new property owner. If a responsible party cannot be located to sign an authorization agreement then the access trail will be closed.

(2) Existing vehicle access trails that serve as extensions of a dedicated public access corridor used by all subdivision members may be authorized to a homeowners association.

(3) Maintenance of any authorized vehicle access trail will be limited to resurfacing with materials existing at the time of authorization or subsequent approved soil erosion control materials and techniques.

(4) Existing vehicle access trail turnarounds and parking areas will be restricted as designated in the conditions of the License to protect soil erosion areas. These restrictions may include, but are not limited to the mandatory installation of restrictive barriers by the responsible party and designated no vehicle operation and/or parking zones.

(5) Operation/parking of vehicles off of the designated vehicle access trail will result in the termination of the authorization and subsequent closing of the trail.

(6) Generally, only one vehicle access trail will be permitted per adjacent private home or private tract of land.

Multiple trails must be combined if they serve the same authorized party and/or general location. Persons with existing trails in close proximity to one another may be required to share one trail.

b. Construction or use of vehicle access trails developed after the 1980 Lakeshore Management Plan are prohibited. These access trails will be closed utilizing barriers and signs.

20. LAND-BASED SHORELINE USES.

a. A Shoreline Use Permit/License for certain land-based facilities may be granted to applicants having legal access to public property along shorelines allocated as Limited Development. This Permit/License is not required for structures placed on flowage easement lands. However, facilities placed on flowage easement lands must be installed according to all appropriate governmental regulations, codes, and permits. Installation must also be in compliance with easement rights and privileges acquired by the Corps of Engineers.

b. Facilities installed prior to the 1980 Lakeshore Management Plan will be permitted to remain in shoreline allocation areas other than Limited Development Shorelines, subject to the grandfathering rules covered under Section 12(c)(2) of this document. Some facilities that may have been allowed in the past, such as private launching ramps, will be phased out.

c. The following special conditions apply to all land-based facilities:

(1) The ranger will designate and/or approve the facility location to minimize the adverse effect on public property.

(2) The facility must be installed within six months of the date in which the License was granted. Within (15) days after installation, the Resource Management Office must be notified so that an inspection of the facility can be scheduled.

(3) No work shall take place on public property prior to issuance of the Shoreline Use Permit/License.

d. Electric Utility Lines. Electric lines licensed on public property are subject to specific conditions as listed below:

(1) Although in the past above-ground lines were allowed, all new electric lines must be installed underground. See Exhibit G (Page 45) for drawings and specifications of an

approved underground electric line and Exhibit H (Page 46) for an approved above-ground electric line. Exhibit H applies only to existing grandfathered lines. A copy of an Electrical Line Certification Statement (Exhibit M, Page 51), provided with the permit application, must be signed by a licensed electrician and provided to the Resource Manager within fourteen (14) days after installation. A new signed certification statement will be required at each permit renewal if the line has been altered in any way. This signed statement certifies that all conditions and requirements have been met.

(2) Electrical systems cannot exceed 120 volts and must have Ground-Fault Circuit Interrupter (GFCI) protection at the circuit breaker box on private property. No exceptions will be allowed. Installation and materials must meet the minimum standards as described in the National Electrical Code (NEC) for outside, wet locations.

(3) All overhead wiring, fixtures, and receptacles must be located at least 2 feet above the Maximum Flood Pool Elevation. The Maximum Flood Pool Elevation is 325 ft. M.S.L. west or upstream of the Clarksville bridge and 320 ft. M.S.L. east or downstream of the bridge.

(4) All outdoor fixtures and receptacles must be approved for outside, wet locations. Wiring may not be attached to trees or extend onto any floating facilities. All above-ground wiring (except that utilized to span between poles) must be fully enclosed in conduit and boxes approved for outside, wet locations. Exposed splices are not allowed.

(5) A master cutoff switch must be installed on the permittee's private property (may be inside of dwelling). This switch must be kept in the "OFF" position, except when the owner or guest is present.

(6) All poles must be either metal, treated wood, or commercially built poles and located at least 50 feet apart. The lowest utility pole must not be located below the 302 ft. M.S.L. elevation. All points of span wire found between poles must be 10 ft. or higher from the ground. Lighting fixtures must be attached to utility poles. Existing lines having "Festoon" or spliced-in lighting running along the span wire must be replaced with pole mounted lights at such time that inspections reveal the facility needs rebuilding for safety reasons.

(7) Proposed locations must have approval of the Resource Manager. The permittee is responsible for obtaining local permits necessary for that portion of the line installed on private property.

(8) Electrical pumps and motors are not allowed on Government lands with the exception of portable boat lift pumps discussed in Section 15(h) (8).

(9) Cuts for underground installation must be seeded over utilizing seed recommended in Exhibit B-2 (Page 37) for erosion control.

e. Improved Walkways and Steps. All improved walkways and steps providing access across government lands require a Shoreline Use Permit/License. The use of materials, natural or man-made, for the purpose of delineating a pathway or improving access is defined as an improved walkway. Unless a license is re-issued to another party, all walkway and step improvements will be removed from public property at the expense of the Licensee upon termination of the Shoreline Use Permit/License. Walkways and steps authorized on public property are subject to the conditions listed below:

(1) The walkway is not to exceed five feet in width. However, if the walkway is associated with a community floating facility the walkway may be six feet wide. Walkway and step permits are available for the purpose of providing a safe access to reservoir waters. These facilities are not to include sitting decks or landings.

(2) Concrete and asphalt walkways are no longer allowed. Exceptions may be granted to individuals having a person with a walking disability and requiring a substantial walkway to accommodate a wheelchair. Persons with disabilities requesting this exemption must furnish the Resource Manager a "Certificate of Disability" or letter from a physician. Concrete and asphalt walkways in place can be re-assigned to a new landowner but must be replaced with an approved non-concrete design when it deteriorates to point of requiring replacement. If stepping stones are utilized they must not exceed six square ft. in size to facilitate easy removal upon termination of the permit.

(3) Steps and walkways must follow a route, taking topographic conditions into account, that will prevent soil erosion. All routes are subject to designation and/or approval of the Resource Manager for the purpose of minimizing the adverse impact on public property and other permits/licenses. Walkways cannot extend below elevation 300 M.S.L.

(4) Walkways and steps authorized cannot be physically attached to any private dwelling. There must be at least a three-foot separation. Structures extending across the boundary line from private dwellings are considered encroachments. The Resource Manager may also designate several breaks in handrails and walks to facilitate lateral pedestrian access.

(5) If a substantial structure is being considered, detailed plans for the construction of the steps or walkway will be required. See Exhibit I (Page 47) for an approved stairway design. All carpentry and construction must meet all state and local codes. All lumber must be commercially pressure treated and approved for outdoor ground contact use.

(6) Natural unimproved pathways not causing any detriment to the environment do not require licensing. Natural unimproved pathways causing erosion or detrimental effects on the environment will be placed under a footpath permit for corrective action and monitoring.

(7) Walkways cannot be used for vehicular traffic, including off-road vehicles, all-terrain vehicles, motorbikes, and other similar motorized equipment. However, golf carts and small slow-moving utility tractors will be permitted on improved walkways for the purpose of transporting supplies, equipment, and persons with disabilities to the shoreline. Unauthorized vehicular traffic on a walkway may result in the termination of the License.

(8) The walkway and step permittee cannot restrict the general public's use of any permitted walkway or step located on public property.

f. Water Utility Lines - Irrigation, Potable, and Raw.
Water utility lines authorized on public property are subject to certain specific conditions listed below:

(1) All raw water utility lines require an anti-siphon device. Showerheads are not permitted for health reasons.

(2) The type of pump and its location must be noted on the application. Electric pumps and motors cannot be placed on reservoir land.

(3) The location of underground lines requested by the permittee must be designated by the Resource Manager to minimize the impact on public property and other permits/licenses issued in the area. All new permanent water utility lines, and those existing being renovated, must be placed underground for the purpose of reducing conflicts with other uses of public land. Cuts for underground lines must be seeded over utilizing seed as recommended in Exhibit B-2 for erosion control.

g. Miscellaneous Utility Lines Miscellaneous utility lines may be considered on a case by case basis. This may include the underground installation of air lines to facilitate the operation of boat lifts.

21. Erosion Control Activities.

a. Shoreline Erosion. John H. Kerr Reservoir is subject to extreme shoreline bank erosion. Although it is not economically feasible to implement an extensive shoreline erosion control program, the Corps is interested in retarding erosion whenever possible. The Corps' first priority for its limited erosion control funds are the shorelines associated with developed recreation areas. However, if an adjacent landowner desires to perform erosion control work on government property, the Resource Manager may issue a cost free permit for the work. Normally, permits for this purpose will be issued only in shoreline areas zoned as Limited Development, but may be issued in other zoning areas if a need can be demonstrated. A listing of permit requirements are as follows:

(1) All work must meet the specifications of the Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. Protection activities must not exceed one cubic yd./linear ft. of fill and not exceed 500 linear feet of shoreline. Nationwide and regional permits may apply.

(2) Riprap, if used, must be natural stone 6 to 12 inches in diameter and be clean of unnatural materials and building rubble. Riprap material should be placed on a filter cloth material or bedding stone as approved by the Resource Manager.

(3) All vegetative planting or seeding must be of an approved species listed in Exhibit B-2. Other species may be used if approved by a state or federal resource/conservation agency. Grass planting for erosion control is not to be mowed unless located within a vegetation modification area.

(4) Retaining walls for the purpose of stabilizing shoreline erosion may be approved if extenuating circumstances exist which prevent the use of other approved methods. Retaining walls require design certification by a state licensed civil or structural engineer experienced in retaining wall construction. In addition, review is required by appropriate District Corps offices.

b. Trail Erosion. Trail erosion is generally caused by overuse of an area by either foot or vehicle traffic. When overuse of an access route to the shoreline is creating an erosion problem, use of the trail must cease. Another alternative is for the users to make application for an improved walkway. When vehicles utilizing authorized vehicle access trails are causing an erosion problem, portions of existing roads may be closed to protect soil erosion measures.

22. Activities Below Normal Pool Elevation (300 Ft. M.S.L.).

a. Dredging below the normal lake elevation (300 Ft. M.S.L.) for the benefit of private exclusive use will not be permitted. Removal of deposited silt material will be considered on a case-by-case basis.

b. Activities such as placing riprap and authorized fills in the navigable waters of the United States and the discharge of dredged or fill material into the waters of the United States may be authorized under conditions specified in permits issued pursuant to Section 10, Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344). A Department of the Army permit must be obtained under the above referenced statutes and proposed work must be reviewed for possible impacts on flood storage. Contact the Management Center for application procedures.

c. Dredging, filling, or permanent construction on easement or fee lands requires a written consent from the Corps of Engineers and consultation with the appropriate Corps Regulatory Field Office (See Section 8(c)).

23. Boundary Line and Encroachments.

a. The boundary line at John H. Kerr Reservoir has been established and marked by the Corps of Engineers in accordance with standard survey techniques. The boundary line is marked utilizing a series of orange painted hacks and blazes on line and witness trees (See Exhibit F, Page 44). In open areas where the distance between corners is such that the monuments or pins are not visible, boundary line posts are used by the Corps of Engineers to witness the line. Whenever possible, witness posts with appropriate identification will be placed near existing corner pins. These pins and posts should not be moved or destroyed.

b. The Corps of Engineers regularly repaints the boundary line. This insures that the existing boundary line is not lost due to development or natural causes. If a private need arises for the exact location of the common government/private property line, the adjacent property owner (at their expense) must utilize a licensed surveyor. The Corps of Engineers will provide information to surveyors or property owners which might assist in the location of boundary lines and property corners. This information is kept at the Management Center. Any discrepancies identified by the survey should be resolved with the Resource Manager.

c. Any activities, other than public recreational activities or pedestrian access, which is not covered by a Shoreline Use Permit/License may be considered an encroachment or degradation of public property. These unauthorized activities are considered violations of the Rules and Regulations contained in Title 36, Chapter III, Part 327, Code of Federal Regulations. Examples of such violations may include but are not limited to: unauthorized motorized vehicle operation, development of roads, removal of or placement of debris-fill dirt, placement of dog pens, swings, patios, decks, steps, buildings, storage of equipment or vehicles, burning, tree and vegetation cutting, and grading of landforms. Violations of this nature will result in removal, restitution, and/or issuance of a citation requiring the payment of a fine and/or the appearance before a Federal Magistrate.

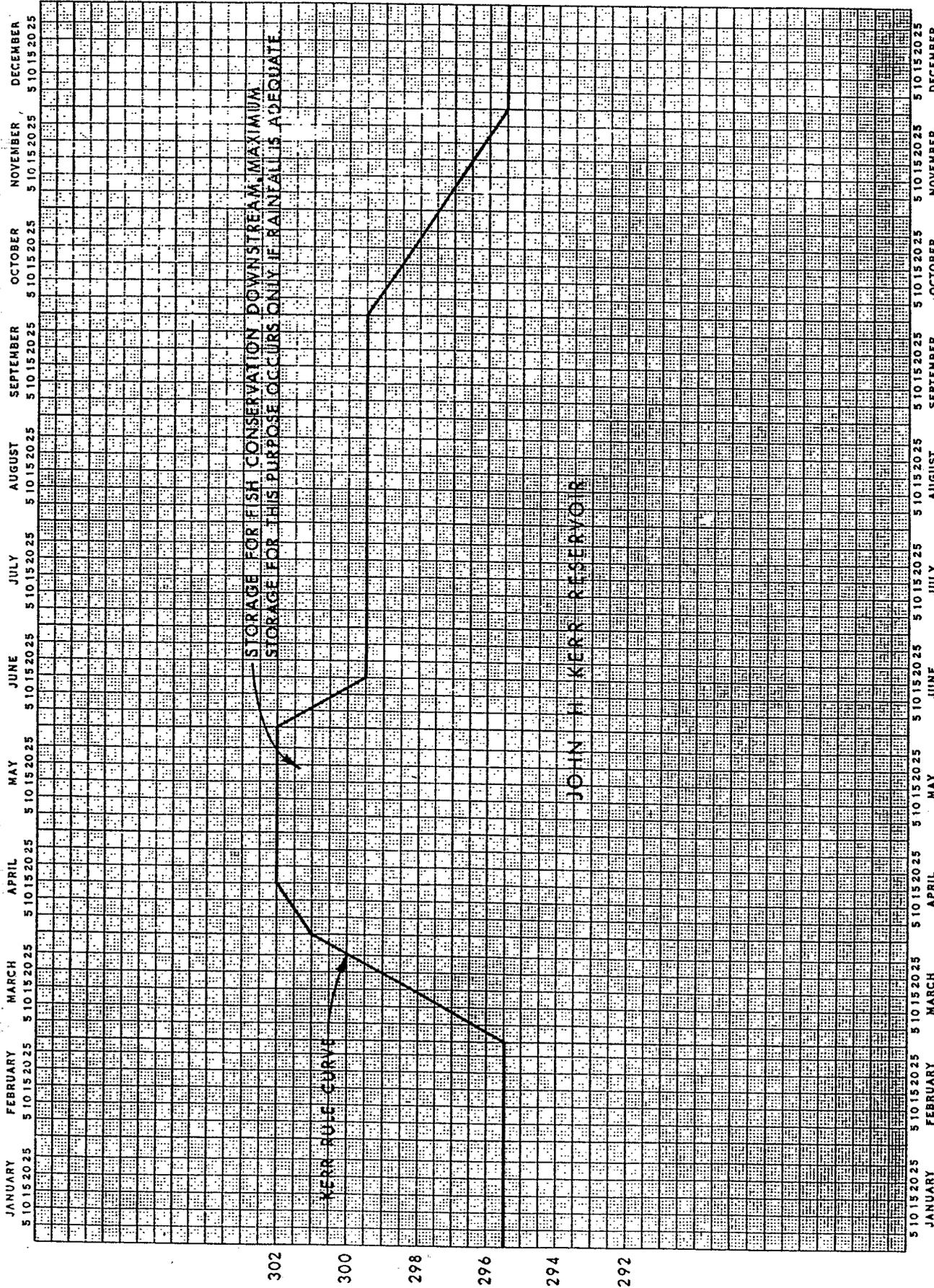
24. Conclusion.

a. It is the intent of the John H. Kerr Reservoir Shoreline Management Plan to provide optimum recreational benefits to the public while at the same time preserve and sustain the natural environmental qualities of the reservoir. As presented, the Plan is and will continue to be a flexible and working document. Periodically, shoreline allocations are adjusted, as necessary.

b. Natural Resources Management personnel at John H. Kerr Reservoir will continually monitor the needs of the lake's recreational users and recommend revisions to minimize conflicts between various interests. Minor changes in the Plan will be approved by the District Engineer. In advance of recommending any major revisions to this plan, an additional public comment period and/or public meetings will be held as required by ER 1130-2-406. Subsequently, the plan will periodically be reevaluated, revised, and submitted to higher authority for approval.

c. John H. Kerr Reservoir Resources Management personnel are available to address any questions concerning the Shoreline Management Plan and its policies. The John H. Kerr Resource Management Center is located one-half mile west of John H. Kerr Dam on Virginia State Road 678 and contains displays depicting on a larger scale the shoreline allocation areas as described in the Plan. Further information concerning the Shoreline Management program is available at the Management Center or by calling (804) 736-6143 or 738-6144.

Exhibit A
 RESERVOIR ELEVATION IN FEET, M.S.L.



ROANOKE RIVER BASIN, N.C. - VA.
 RESERVOIR REGULATION
 RESERVOIR RULE CURVE

CORPS OF ENGINEERS, U.S. ARMY
 WILMINGTON DISTRICT
 WILMINGTON, N.C. 28401

EXHIBIT B-1

APPROVED LIST OF TREE SPECIES
JOHN H. KERR RESERVOIR

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>PLANTING NOTES</u>	<u>WILDLIFE VALUE*</u>
American Beech	Fagus grandifolia	Above 310'	High
American Holly	Ilex opaca	Understory	Medium
Black Walnut	Juglans nigra	Above 310'	High
Black Cherry	Prunus serotina	Above 310'	Medium
Black Willow	Salix nigra	Water tolerant	Low
Blackgum	Nyssa sylvatica	Water tolerant	Medium
Dogwood	Cornus florida	Understory	Medium
Eastern Red Cedar	Juniperus virginiana	Above 305'	Low
Eastern Redbud	Cercis canadensis	Understory	Medium
Green Ash	Fraxinus pennsylvanica	Water tolerant	Low
Loblolly Pine	Pinus taeda	All elevations	Low
Persimmon	Diospyros virginiana	Above 310'	Medium
Pin Oak	Quercus palustris	Water tolerant	High
Red Maple	Acer rubrum	Above 310'	Medium
River Birch	Betula nigra	Water tolerant	Low
Southern Magnolia	Magnolia grandiflora	Above 310'	Medium
Southern Red Oak	Quercus falcata	Above 310'	High
Sugar Maple	Acer saccharum	Above 310'	Medium
Sweetgum	Liquidambar styraciflua	Water tolerant	Low
Sycamore	Platanus occidentalis	Water tolerant	Medium
Water Hickory	Carya aquatica	Water tolerant	High
White Oak	Quercus alba	Above 310'	High
Willow Oak	Quercus phellos	Water tolerant	High
Yellow-poplar	Liriodendron tulipifera	Above 315'	Low

* Wildlife Value

High - desired for hard mast production

Medium - desired for soft mast or browse

Low - used more for cover and roosting than food

EXHIBIT B-2
RECOMMENDED EROSION CONTROL PLANTING
JOHN H. KERR RESERVOIR

The following seed mixture will help control erosion on bare ground areas. Amounts shown are to cover a one acre area:

<u>COMMON NAME</u>	<u>POUNDS OF SEED</u>
Switchgrass, cave-in-rock	3 lbs.
Annual rye	5 lbs.
Perl millet	5 lbs.
Kobe lespedeza	2.5 lbs.
Korean lespedeza	2.5 lbs.
Ladino clover	2 lbs.
Buckwheat	10 lbs.
Total	<u>30 lbs.</u>

Recommended planting dates for the southern piedmont:

Fall - September 1 - October 1
Spring - March 1 - April 1

Seed should be available from your local agricultural supply store and pre-mixed thru the Virginia Department of Forestry's UPS Seedling Catalog.

EXHIBIT C
SHORELINE USE PERMIT CONDITIONS

1. This permit is granted solely for the purpose(s) described on Application and Permit/License for Shoreline Use.
2. The permittee agrees to and 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 facility, growing out of the ownership, construction, operation or maintenance by the permittee of the permitted facilities and/or activities.
3. Ownership, construction, operation, use or maintenance of the permitted facility is subject to the government's navigation servitude.
4. No attempt shall be made by the permittee to forbid the full and free use by the public of all navigable waters at or adjacent to the permitted facility or to unreasonably interfere with any authorized project purposes, including navigation in connection with the ownership, construction, operation or maintenance of the permitted facility and/or activities.
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 the permitted facility and/or activity shall cause unreasonable 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 a 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 right 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 or local assent required by law for the construction, operation, use or maintenance of the permitted facility.
9. The permittee agrees to construct the facility within the time limit agreed to on 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 or maintain a 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 the permitted facility within 30 days, at his 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. If permitted facilities are removed for storage or extensive maintenance, the resource manager may require all portions of the facility be removed from public property.
12. 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.
13. 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.
14. 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.
15. On all new docks and boat mooring buoys, flotation shall be of materials which will not become waterlogged, is not subject to damage by animals, is not subject to deterioration upon contact with petroleum products, (gasoline, diesel fuel, oil, or other caustic substances) and will not sink or contaminate the water if punctured. No metal-covered or injected drum flotation will be allowed. Foam bead flotation may be authorized by the district commander if it is encased in a protective coating to prevent deterioration with resultant loss of beads. Existing flotation will be authorized until it has severely deteriorated and is no longer serviceable or capable of supporting the structure, at which time it should be replaced with approved flotation.
16. Permitted facilities and activities are subject to periodic inspection by authorized Corps representatives. If an inspection reveals conditions which make the facility unsafe in any way, 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.
17. 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.
18. The permit display tag provided shall be posted on the permitted facility and/or on the land areas covered by the permit so that it can be visually checked with ease in accordance with instructions of the resource manager.
19. No vegetation other than that prescribed in the permit may be damaged, destroyed, or removed. No vegetation of any kind will be planted, other than that specifically prescribed in the permit. (not applicable on easement lands)
20. When vegetation modification on these lands is accomplished by chemical means, the program will be in accordance with appropriate Federal, state and local laws, rules and regulations.
21. When vegetation modification is allowed, the permittee will 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.
22. No change in land form such as grading, excavation, or filling is authorized by this permit. (easement lands may require written consent)
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. 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 area within 30 days from the date of ownership transfer.
25. By 30 days written notice, mailed to the permittee by registered or certified letter, the district commander may revoke this permit 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 permittee requests a hearing in writing to the district commander through the resource manager within the 30 day period, the district commander shall grant the hearing date at the earliest opportunity. In no event shall the hearing date exceed 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.
26. Notwithstanding the condition cited in condition 25 above, if in the opinion of the district commander, emergency circumstances dictate otherwise, the district commander may summarily revoke this permit.
27. The resource manager or his/her authorized representative shall be allowed to cross the permittee's property, as necessary, to inspect facilities and/or activities under permit.

EXHIBIT D

CRITERIA FOR ASSIGNING SHORELINE ALLOCATIONS.

The following criteria were utilized in assigning the lakeshore allocations prescribed in this plan. In all lakeshore allocation classifications, general consideration was given to previous commitments, land acquisition policies, increasing public use and increasing private development. Criteria were established with the intention of protecting both public lands and private investments to the extent possible. However, with consideration given to existing and future competing needs, the conservation of the public resource is the primary objective of the Shoreline Management Plan.

a. Limited Development Areas. All shoreline areas that are not included in the allocations for public recreation areas, prohibited access, and protected lakeshore (as determined by applying the criteria specified below) will be included in the limited development area allocation.

b. Public Recreation Areas. The Land Allocations Plan found in the Master Plan for John H. Kerr Dam and Reservoir indicates land areas required for existing and future recreation use. Based on this plan, shorelines adjacent to these areas are allocated Public Recreation to include:

- (1) Shorelines adjacent to existing or future recreation areas as identified in the Master Plan;
- (2) Shorelines adjacent to areas under lease to quasi-public groups;
- (3) Shorelines adjacent to marina areas;
- (4) Shorelines adjacent to lands utilized by the Corps of Engineers or other agencies for designated wildlife management areas.

c. Prohibited Access Areas. The primary purpose of the Prohibited Access Area allocation is for the provision of physical safety to the recreational visitor and security of the project operations. Shorelines where public access is prohibited include the following:

- (1) Shorelines adjacent to lands allocated to Project Operations such as the waters above and below John H. Kerr Dam, the reservoir maintenance area, and pumping stations;
- (2) Areas that present a definite safety hazard, (such as industrial water intake structures) as determined by the Resource Manager.

d. Protected Shoreline Areas. The Protected Shoreline allocation is applied to areas for the purpose of protecting environmental quality, sustained public use of the reservoir, and unique features. Criteria upon which this allocation is made include the following:

(1) Shorelines adjacent to significant historical, geological, archaeological, and ecological areas (including fish and wildlife habitat). This includes shorelines within 500 ft. of the actual resource to be protected;

(2) Shorelines of all the islands in the reservoir;

(3) Shorelines within 300 ft. of bridges, road crossings, and road ends, measured perpendicular to the right of way and from the edge of the road fill;

(4) On shorelines across the cove from recreation areas where private development would conflict with public recreation;

(5) In areas where moorage is not practical because of terrain, wind, currents, narrow stream widths (less than 50 ft. in width), wave action, water depth, debris, or other physical features;

(6) Where private facility development would impair the commercial viability of nearby marina areas;

(7) Within coves containing commercial facilities;

(8) Within 1000 ft. of the lease limits of the marina, or a distance determined to be reasonable based on the physical characteristics of the shoreline;

(9) Shoreline areas exceeding 2000 ft. in length and a distance of more than 1000 ft. from the nearest boundary line or a distance determined to be reasonable based on physical characteristics of adjacent private property and the shoreline;

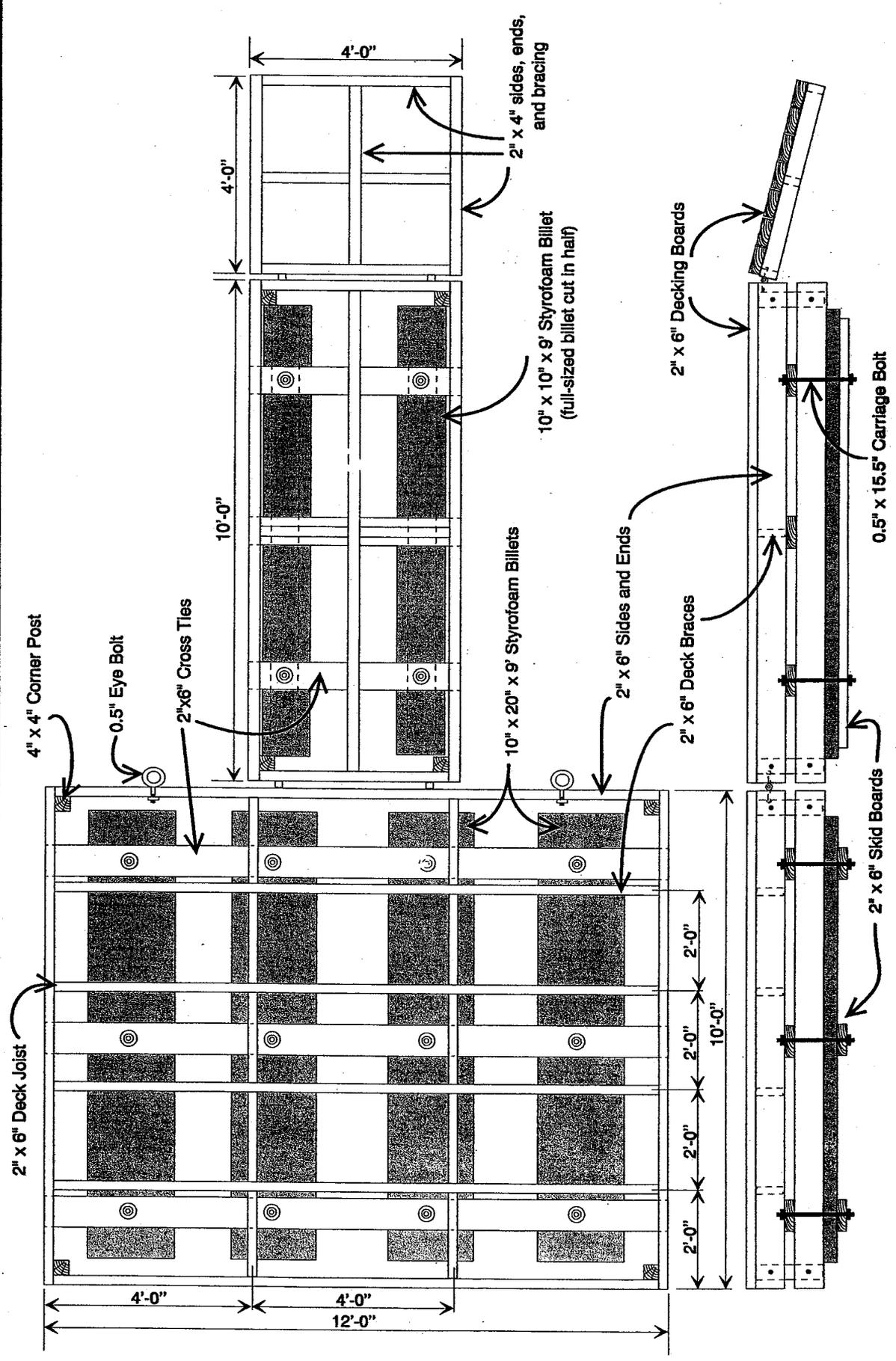
(10) Shoreline areas where natural conditions are needed to protect the visual quality of the reservoir, such as shorelines adjacent to industrial development.



US Army Corps
of Engineers
Wilmington District

EXHIBIT E-1 : Approved Drawing of Private Floating Dock

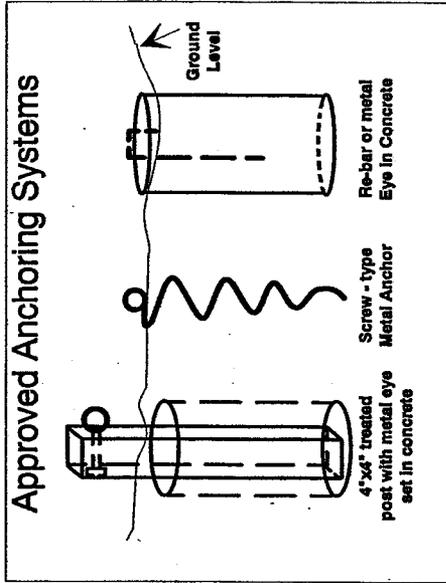
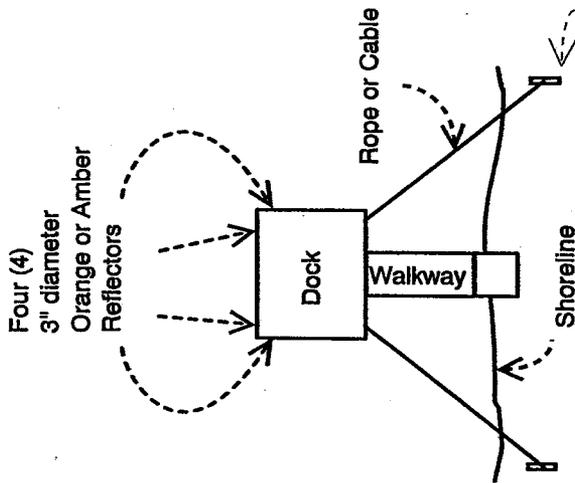
JOHN H. KERR RESERVOIR





US Army Corps
of Engineers
Wilmington District

EXHIBIT E-2 : Approved Drawing of Private Floating Dock JOHN H. KERR RESERVOIR



Bill of Materials

FLOAT

- 4 Sides and Skirts 2"x6"x9'-9"
- 8 Sides, Skirts, & Braces 2"x6"x12'
- 10 Deck Braces 2"x6"x1'x9"
- 4 Corners 4"x4"x14"
- 3 Cross Ties 2"x6"x12'
- 3 Skids 2"x6"-11"
- 23 Decking Planks 2"x6"x10'

RAMP

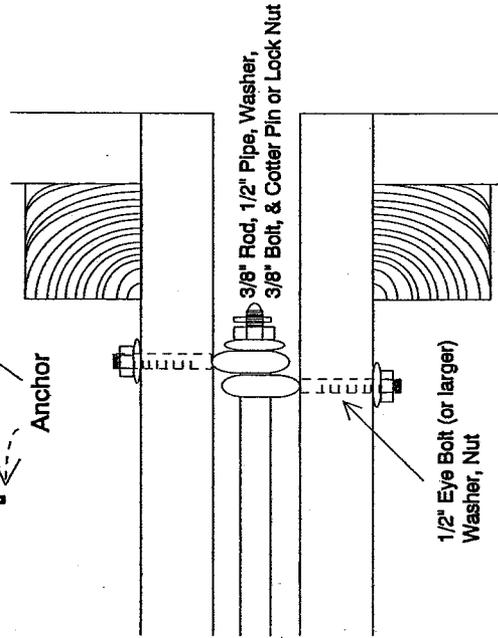
- 4 Sides and Skirts 2"x6"x10'
- 4 Corners 4"x4"x14"
- 9 Ends and Cross Ties 2"x6"x3'-9"
- 1 Long Deck Brace 2"x6"x9'-9"
- 2 Deck Braces 2"x6"x1'-10"
- 19 Decking Planks 2"x6"x4'
- 2 Skids 2"x6"x9'

GANG PLANK

- 2 Sides 2"x4"x4'
- 3 Cross Members 2"x4"x3'-9"
- 2 Cross Braces 2"x4"x2"x4"x1'-9.75"
- 8 Decking Planks 1"x6"x4'
- 5 Flotation Billefs 10"x20"x9'

HARDWARE

- 10 Galv. Eye Rods 1/2" Dia.
- 2 Galv. Rods 3/8" O.D. x 42" Lg.
- 16 Galv. Carriage Bolts w/Nuts 1/2" Dia. x 15.5" Lg.
- 32 Bolts w/Nuts 1/2" Dia. x 7.5" Lg.
- 12 Lbs. Nails 8d and 16d
- 58 Galv. Washers 1/2" Dia.
- 1 Conc. Anchor 5 Gal. Size
- 60 L.F Galv. Cable or Rope 1/4" Dia.



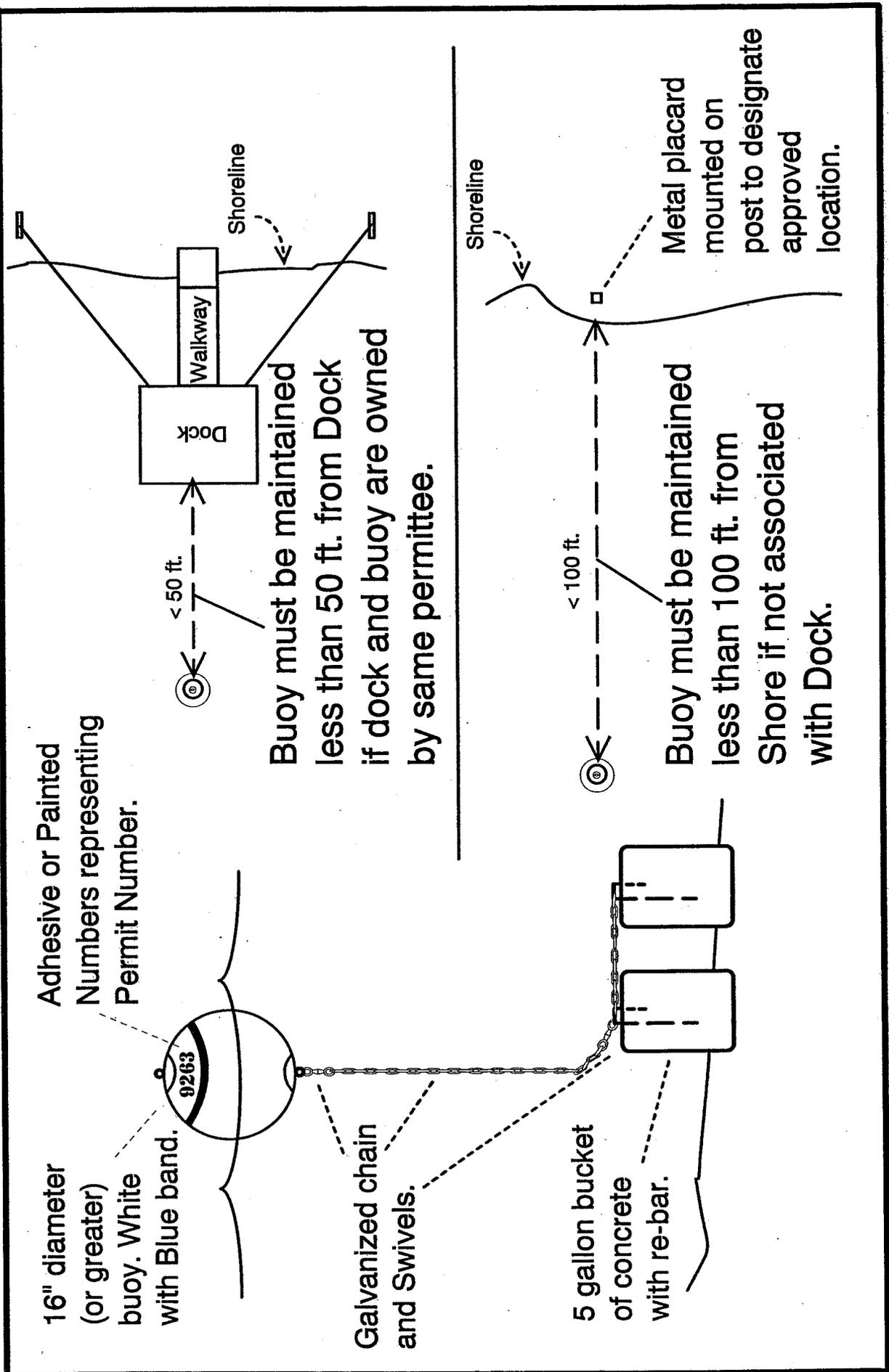
Section Connectors (minimum standard)



US Army Corps
of Engineers
Wilmington District

EXHIBIT E-3 : Approved Drawing of Private Mooring Buoy

JOHN H. KERR RESERVOIR

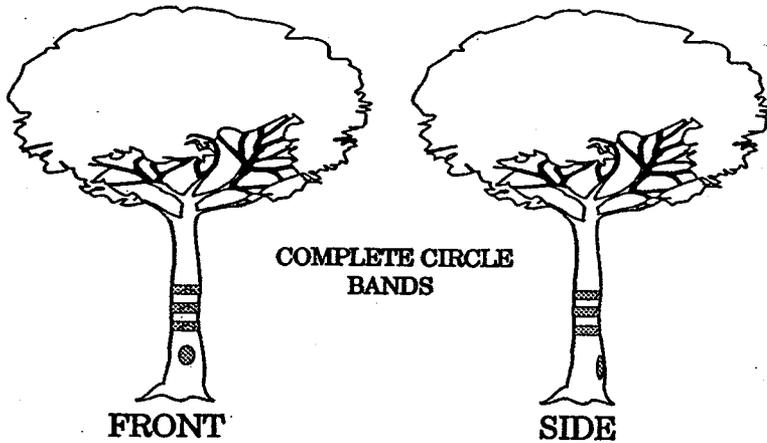




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EXHIBIT F : BOUNDARY LINE MARKINGS JOHN H. KERR RESERVOIR

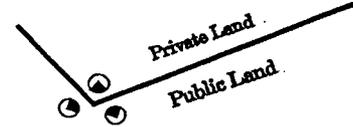
Witness trees in Wilmington District are painted orange to delineate the boundary line. Where trees are not available, a similarly marked metal or fiberglass post is used. A survey by a licensed surveyor will be necessary to determine the exact line location. The types and meanings of the markings are illustrated below.



COMPLETE CIRCLE BANDS

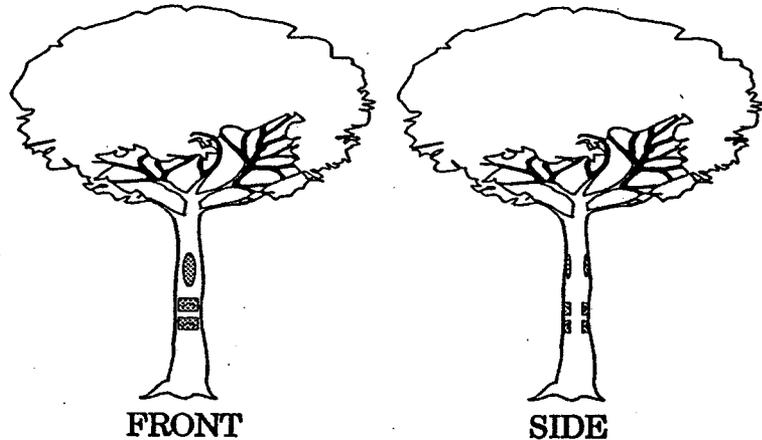
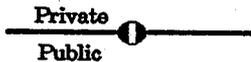
WITNESS TREE FOR CORNER

Three bands are painted completely around tree with hack marks in the band facing the corner. A blaze is located approximately waist high facing the corner.



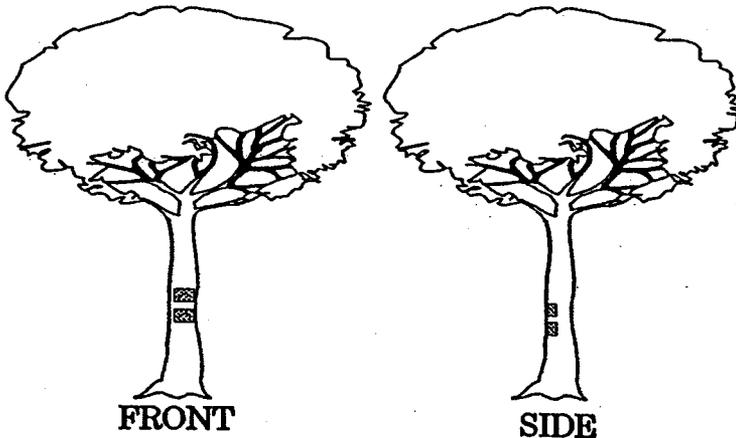
IN LINE TREE

Two bands each are painted on opposite sides of the tree in the direction of the line, with a hack cut in each band. The bands do not completely encircle the tree. A blaze is made above the bands. These markings indicate that the boundary line passes through the tree.



FRONT

SIDE

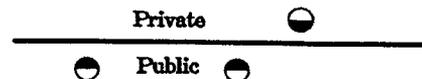


FRONT

SIDE

LINE WITNESS TREE

Two bands are painted on the tree with hacks facing in the direction of the line. The bands are painted around the edges of the tree, so that they may be seen from a distance when walking the line. These trees are normally on government property. Note that these trees are not the boundary line; they only illustrate on which side the boundary line falls.





US Army Corps
of Engineers
Wilmington District

EXHIBIT G: Approved Drawing of Underground Electric Line JOHN H. KERR RESERVOIR

★ All systems must have Ground-Fault Circuit-Interrupter (GFCI) protection at circuit breaker box on private property. No exceptions.

Master disconnect switch on private property.

Light fixture and/or receptacle must meet NEC specifications for outside, wet locations.

Wiring type and connection methods must meet NEC specifications for underground use.

All above-ground wiring must be fully enclosed in conduit and boxes approved for outside, wet locations. No exposed wiring allowed.

NOTE: Government property line may be above 320 ft. contour. In most cases, the 320 ft. contour was the minimum elevation for property acquisition.

NOTES: 1.) Drawing is not to scale. 2.) System must meet all National Electrical Code (NEC) specifications except for more stringent requirements depicted in this drawing. 3.) Underground installation required after January 1, 1991. 4.) Licensed Electrician Certification is required for all new systems or modifications. 5.) GENERAL REQUIREMENTS are listed in Section 20 (d) of Shoreline Management Plan.

Maximum Flood Pool Elevation (MFPE) is determined by location of property. For locations EAST of the Clarksville Bridge (Hwy. 58), the MFPE is 320 ft. above Mean Sea Level. For locations WEST of the Clarksville Bridge, the MFPE is 325 ft. above Mean Sea Level. Fixture and receptacle mounting heights must be at least 2 feet above the appropriate MFPE.

Maximum Flood Pool Elevation (MFPE)

Minimum elevation at base of lowest pole is 302 feet above Mean Sea Level. Pole must be made of treated wood or metal.

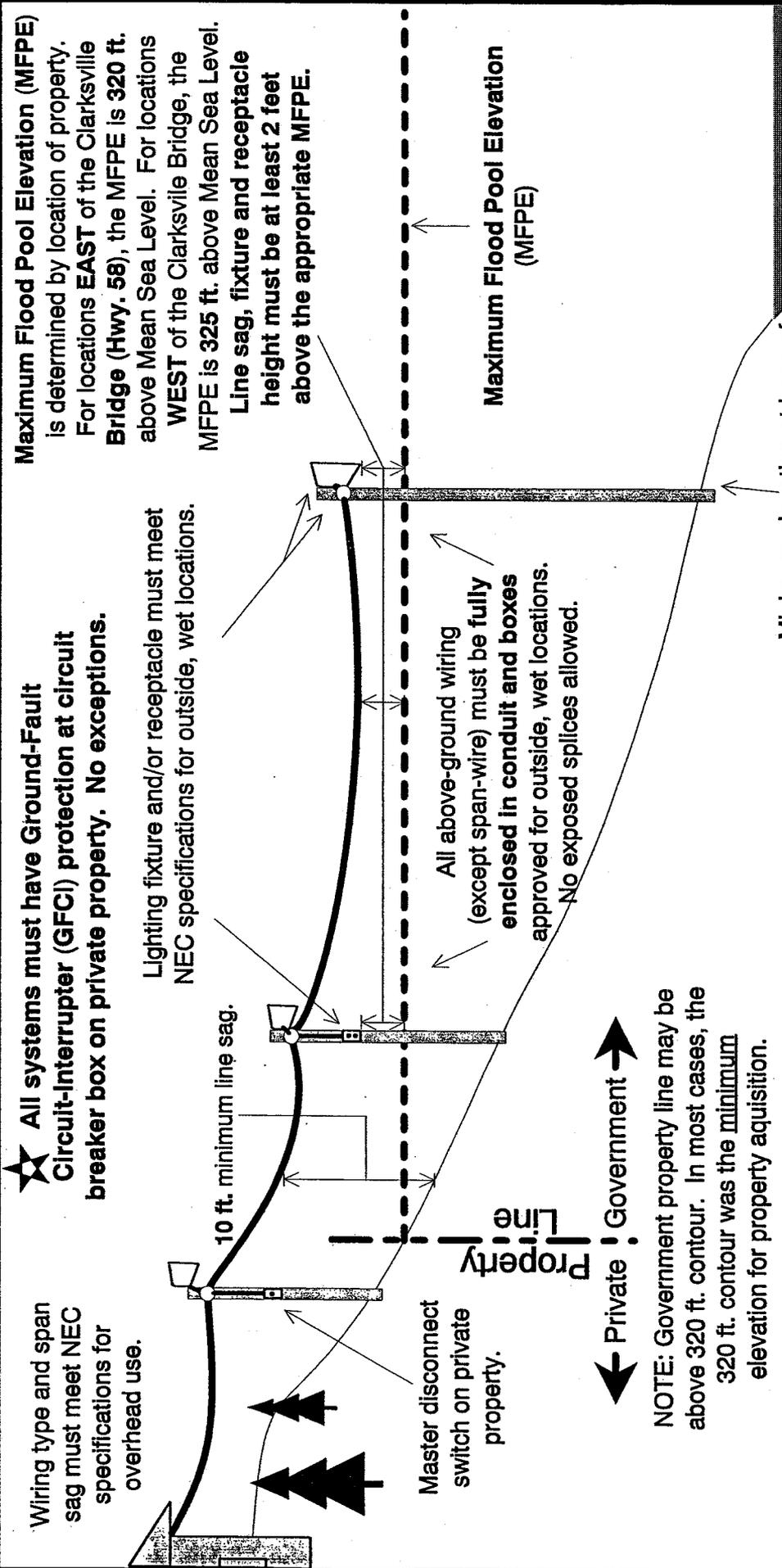
12 inch minimum line depth.
24 inch minimum where line passes beneath a roadway.

Drawing not to scale.



US Army Corps
of Engineers
Wilmington District

EXHIBIT H: Approved Drawing of Overhead Electric Line (Allowed for Systems Installed Before January 1, 1991) JOHN H. KERR RESERVOIR



★ All systems must have Ground-Fault Circuit-Interrupter (GFCI) protection at circuit breaker box on private property. No exceptions.

Maximum Flood Pool Elevation (MFPE) is determined by location of property. For locations EAST of the Clarksville Bridge (Hwy. 58), the MFPE is 320 ft. above Mean Sea Level. For locations WEST of the Clarksville Bridge, the MFPE is 325 ft. above Mean Sea Level. Line sag, fixture and receptacle height must be at least 2 feet above the appropriate MFPE.

Lighting fixture and/or receptacle must meet NEC specifications for outside, wet locations.

All above-ground wiring (except span-wire) must be fully enclosed in conduit and boxes approved for outside, wet locations. No exposed splices allowed.

← Private ! Government →

NOTE: Government property line may be above 320 ft. contour. In most cases, the 320 ft. contour was the minimum elevation for property acquisition.

Minimum elevation at base of lowest pole is 302 ft. above Mean Sea Level. Pole must be made of treated wood or metal.

Drawing not to scale.

NOTES: 1.) Drawing is not to scale. 2.) System must meet all National Electrical Code (NEC) specifications except for more stringent requirements depicted in this drawing. 3.) Underground installation required after January 1, 1991. 4.) Licensed Electrician Certification is required for all new systems or modifications. 5.) GENERAL REQUIREMENTS are listed as Section 20 (d) of the Shoreline Management Plan.

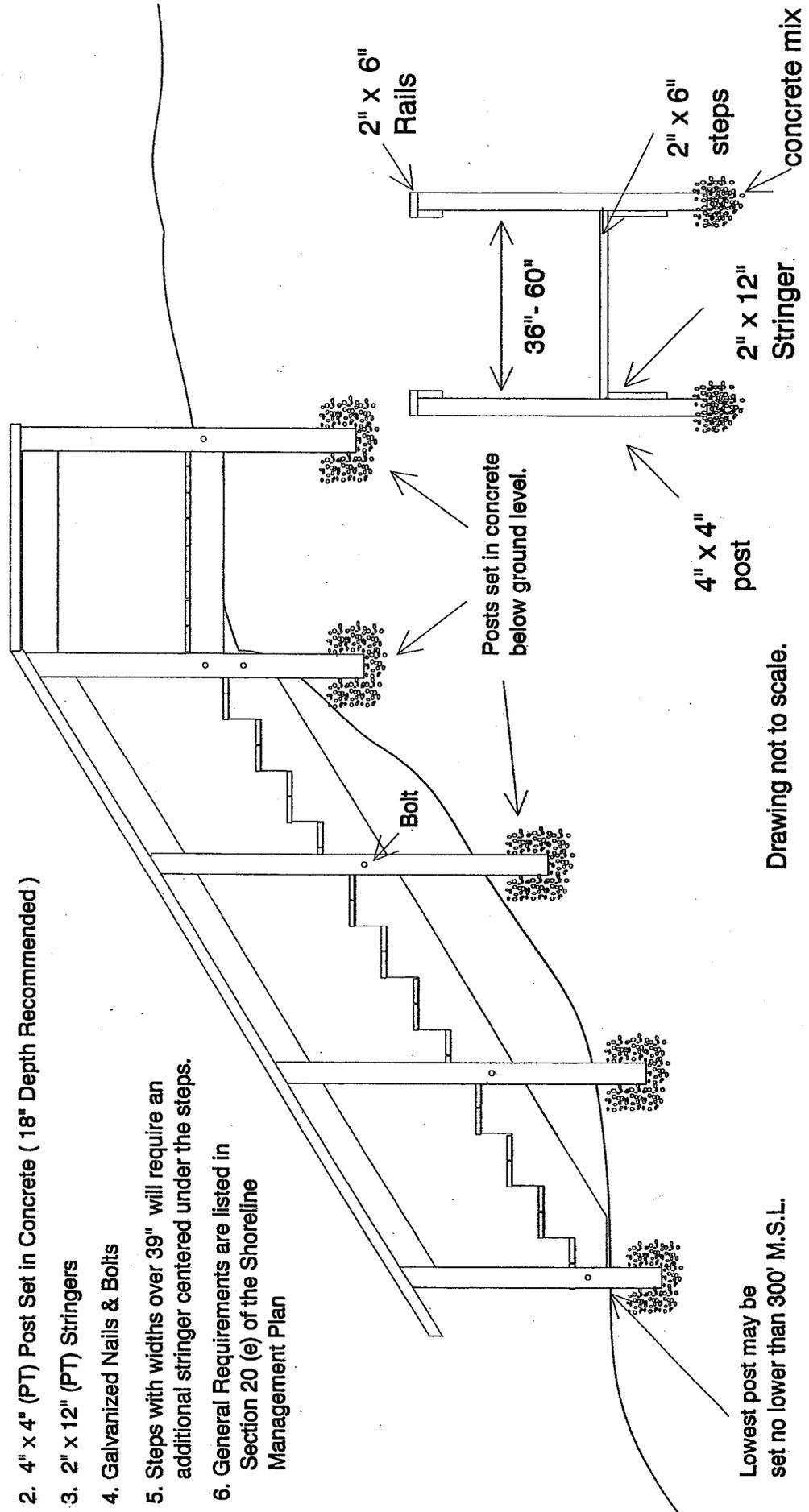


US Army Corps
of Engineers
Wilmington District

EXHIBIT I: Approved Drawing of Typical Stairway JOHN H. KERR RESERVOIR

Materials List

1. 2" x 6" Pressure - Treated (PT) Handrails & Steps
2. 4" x 4" (PT) Post Set in Concrete (18" Depth Recommended)
3. 2" x 12" (PT) Stringers
4. Galvanized Nails & Bolts
5. Steps with widths over 39" will require an additional stringer centered under the steps.
6. General Requirements are listed in Section 20 (e) of the Shoreline Management Plan



Lowest post may be
set no lower than 300' M.S.L.

Drawing not to scale.

EXHIBIT J

FEE SCHEDULE
FOR
"CONSOLIDATED PERMITS" COVERING
SHORELINE FACILITIES/ACTIVITIES

ADMINISTRATIVE FEES for Docks & Other Facilities (5-Year Term)

New Permit (or new owner of existing facility)	.....	\$400
Re-issue Permit (to same owner of existing facility)	.....	\$175
Permit Modification ¹ (additions/changes to existing facility)	.....	\$90
Vegetative Modification/Footpath/Mowing ²	.....	\$10
Erosion Control	.....	\$0

PLUS +

FAIR MARKET VALUE FEE (if applicable) (5-Year Term)

Utility rights-of-way (each utility)	.....	\$35
Improved steps and/or walkway	.....	\$50
Handrails only	.....	\$28
Boat launching ramp ²	.....	\$67
Marine way ²	.....	\$67
Improved road and turnaround ²	.....	\$56
Picnic shelter and patios ²	.....	\$50
Land-based or stationary boathouse ²	.....	\$67
Pump house ²	.....	\$20

¹ Modifications may not be for a five-year term.

² No new activities of this type will be permitted.

EXHIBIT K

PROCEDURES FOR OBTAINING A SHORELINE PERMIT/LICENSE

- Step 1. Applicant makes a written or telephone request for a Permit/License to the Resource Management Center. Be prepared to give the following information:
 - a. Type of permit or license desired
 - b. The general location of desired permit
 - c. Name and telephone number of where you can be reached between the hours of 8:00 am and 4:00 pm., Monday - Friday.
- Step 2. If Rangers are unavailable, they will contact the prospective permittee by phone and schedule a meeting at the Permit/License location.
- Step 3. The Ranger on site will tentatively approve or disapprove the type of facility and location. Upon this approval, Rangers will provide the permittee with the appropriate instructions.
- Step 4. The Permit/License application, a legal access form, and bill showing charges will be mailed to the permittee. These documents must be completed and returned with the appropriate fees within 30 days of the site visit. See mailing address below.
- Step 5. Upon receipt, the Resource Manager will approve the Permit/License. A copy, along with an appropriate permit/license sign, will be mailed back to the permittee.
- Step 6. The permittee must immediately post the permit sign as directed in the cover letter sent with the permit.
- Step 7. The permittee maintains the facility or permit area according to the terms of the permit/license. Near the expiration date the Corps will contact you concerning renewal.

Address: Corps of Engineers
John H. Kerr Reservoir
Permit Section
Route 1, Box 76
Boydton, Virginia 23917

Phone:
(804) 738-6143
738-6144

EXHIBIT L

CITIZENS REVIEW GROUP
LIST OF PARTICIPATING ORGANIZATIONS

Organization:

1. Town of Clarksville
2. Averett College - Biology Department
3. Division of North Carolina Parks and Recreation, Kerr Lake State Recreation Area
4. Kerr/Buggs Island Safety Council
5. Virginia Department of Game and Inland Fisheries
6. Kerr Lake Protective Association
7. Virginia Division of State Parks, Occoneechee State Park
8. Southside Planning District Commission
9. Merifield Landowners Association
10. U. S. Army Corps of Engineers
11. Virginia Wildlife Federation
12. Virginia Lake Country Chamber of Commerce
13. Kerr Lake Board of Realtors
14. Kerr/Tar Regional Council of Governments
15. Bright Leaf Association of Realtors
16. Audubon Society - Richmond
17. Industrial Development Authority, Clarksville
18. Sierra Club

EXHIBIT M

ELECTRICAL UTILITY CERTIFICATION STATEMENT

John H. Kerr Reservoir - (804) 738-6143

Part 1. (To be completed by license grantee.)

After meeting with a Corps of Engineers Ranger for the determination of the underground line location and utility pole base elevations, I provided my licensed electrician with that information. In addition, I informed my electrician of my location, either East or West of Highway 58 Bridge at Clarksville, Virginia, for determination of which minimum fixture elevations apply to me (322' above Mean Sea Level (M.S.L.) East of Clarksville Bridge; 327' above M.S.L. West of the Bridge).

My Shoreline Use Permit/License Number is _____.
My approved location is _____ (East or West) of Clarksville Bridge.
The base elevation of my utility pole is _____ ft. above M.S.L..

Print Name: _____

Signed: _____
Grantee

Date: _____

Part 2. (To be completed by licensed electrician.)

I, _____, a currently licensed electrician in the State of _____, registration number _____, hereby certify that the above grantee's electrical utility meets all current National Electrical Code requirements for outside wet locations. I also certify that the electric utility also meets current Corps of Engineers requirements as addressed on the attached "Approved Drawing of Underground Electric Line" (Exhibit G of Shoreline Management Plan).

I understand that all electrical utilities installed after January 1, 1991 will have underground feeder lines. I have listed on the back of this sheet all work performed to bring the utility into compliance, if any was required.

If a receptacle is present on the utility, it meets minimum elevation requirements and has a Ground Fault Interrupter located:

At the breaker box _____;

Signed: _____
Licensed Electrician

Date: _____

Work

Address: _____

RETURN THIS FORM WITHIN
FIFTEEN DAYS OF CERTIFICATION

Phone#: _____

