

A. BOAT DOCKS.

1. Comment - What properties are open to new docks and what is the time period of doing this? Why when all criteria are met are not all owners allowed boat docks? Will more areas be open to docks based on requests made at these meetings?

Response - Where boat docks are and are not permitted is a highly controversial topic. Approximately every five years we reevaluate requests to change the shoreline allocations and allow more boat docks. Some lakeside homeowners and developers demand that currently Protected Areas be reallocated as Limited Development so that more areas can have docks. Other people believe that current allocations offer a good balance and allocations should not be changed. Still others argue that the Corps is too permissive and that selected areas which are currently classified as Limited Development should be closed to private development.

During the public workshops in September 2000 and during the subsequent 30-day comment period we received written requests to reevaluated 20 areas. After full consideration of comments received, and an evaluation of these locations as compared to the criteria for Shoreline Allocations changes, we have opened 3.6 miles of shoreline. These newly opened areas were previously classified as Limited Development mowing only. The following criteria was used to make the determination:

- a. Docks must be in a Limited Development Area. If sufficient controversy or demand exists, consideration should be given, consistent with other factors, to a process or reevaluation of the shoreline allocations and plans. Proposed uses cannot interfere with authorized project purposes, public safety concerns, violate local norms or result in significant environmental impacts.
- b. Consideration must be given to the effects of added private boat docks on commercial marinas.
- c. Such use should not "despoil" the shoreline nor inhibit public use or enjoyment thereof.

- d. The installation and use of such facilities will not be in conflict with the preservation of the natural characteristics of the shoreline nor will they result in significant environmental damage.
- e. They will not create a safety hazard and inhibit public use or enjoyment of project waters or shoreline. Private floating recreation facilities will not be placed so as to interfere with any authorized project purposes, including navigation, or create a safety or health hazard.
- f. Group owned boat-mooring facilities might be permitted where practicable (e.g., where physically feasible in terms of access, water depths, wind protection, etc.) Group owned facilities may be allowed to limit the proliferation of individual facilities.
- g. Locations must consider the operating objectives and physical characteristics of the project.

Even though a particular area of the lake may be classified as a Limited Development, this designation does not guarantee that a boat dock permit will be issued at a specific location within that area. Decisions regarding the issuance of a permit are made after a site inspection is completed. Each application is considered based on the amount of lake frontage, shoreline characteristics, water depth (the dock must be able to float during normal pool elevation of 445 msl.) and impact on public use.

To be eligible for an individual private dock, an applicant must own private property which qualifies for a residential building permit and directly adjoins public property (not separated by a public road or driveway, public right-of-way, or leased property) at the proposed dock location. Applicants must have proof of ownership along with a plat map of the property that has been prepared by a licensed surveyor. There must be a minimum of 65 feet of allocated shoreline to qualify for an individual dock permit. If there is less than 65 feet of allocated shoreline, the person may qualify for a community dock. However, the total allocated shoreline of the two or more applicants must be at least 65 feet. This allows the docks to remain 50 feet apart and reduces conflicts at heads of coves where space is limited.

In addition to these eligibility requirements, the Shoreline Management Plan (SMP) specifies the design criteria, dock location, dock size, construction criteria, attachments to the dock and outside moorage, and community dock requirements.

2. Comment - Unfortunately, slips at private marinas are scarce and very expensive. We checked today and found prices ranging from \$2200 to \$4300 a year just to moor your boat...utilities are on top of those prices. As a resident of Old Hickory, it appears we would have to dock our boat approximately 30 to 45 minutes from our house in Hendersonville at Creekwood since there are no slips currently available on our side of the lake. This defeats one of the primary purposes we chose to live on the lake...convenient access to our boat.

Response - There are nine commercial marinas on the lake. Collectively they have approximately 1098 wet storage slips and 258 dry storage spaces. Six of the nine currently have waiting lists for wet storage. In the Mt. Juliet area, construction is underway on a new dry storage facility that will accommodate approximately 300 vessels of varying sizes. We are considering advertising/soliciting bids for a new marina facility on the lake to better accommodate the growing need. However, we are concerned about the overall carrying capacity of the lake and in the future we will be taking a closer look at this issue.

3. Comment - If you will not allow docks please consider private boat storage on our land with one ramp/dock to put boats in the water.

Response - Private boat ramps and storage buildings are not allowed on public land. There are 35 Corps recreation areas on Old Hickory Lake, which provide convenient access to the lake. In addition, many older subdivisions have a public right-of-way set aside to afford access to the lake. There are some existing private ramps on the lake that are "grandfathered". The "grandfather clause" is a provision which allows existing land-based privileges of a type no longer permitted to be continued by the individual who originally obtained the permit or real estate outgrant, provided he or she adheres to all terms and conditions of the permit or outgrant.

4. Comment - Are there changes to designated open/closed areas vs. 1995 plan? Advance public notice of projected areas?

Response - In 1995, we changed 22 miles of shoreline from Limited Development to Protected. This was primarily bluff in the area above Highway 109. All of the property owners were contacted in advance. Also in 1995, we opened 2-1/2 miles of shoreline from Limited Development (mowing only) to Limited Development (docks and mowing). This change was based on request from adjacent property and the fact that the shoreline met the criteria for opening it to docks. These property owners were aware of the consideration to change the allocation and were notified after the change was made. The 2001 plan opens 3.6 miles of shoreline for boat docks. The reevaluations were based on the criteria listed above and no advance notice was given.

5. Comment - I had a boat slip dock for several years on the main channel. What would be the proper procedure to apply for a new permit for 2 new single slip docks?

Response - You should contact our office and make an appointment to meet a ranger at your lake property. Only one dock will be permitted per individual at a single location. This means that an individual with a large parcel or group of contiguous parcels of private property adjoining public property will be permitted only one dock, regardless of total lake frontage. Docks on the main channel can not exceed 400 square feet. We generally limit them to no more than 20 feet from the shoreline.

6. Comment - How do big, new, high dollar developments receive permission for boat docks and marinas, yet we can't?

Response - All shoreline allocation changes are public knowledge. There are still a few large tracts of undeveloped land in highly populated areas like Hendersonville, Gallatin, and Mt. Juliet. Many of these tracts are in "Limited Development Areas" of the lake where individuals can apply for docks. We have worked extensively with realtors, the public, Congressional representatives, and the media to make sure they are aware of our policies. For example, a developer may buy a large farm tract fronting a "Limited Development Area" that has one approved dock. He/she can subdivide it and a number of docks appear

in an area that for years there were not any. Another developer may buy a large farm tract fronting a "Protected Area," request an allocation change and hope that a political windfall will result in a change in allocation. However, our decision to open areas is not political or done by favoritism to any particular interest group. All reevaluations are based on the criteria listed above.

The areas that we have granted permission for docks were classified "Limited Development". Some have asked that we permit docks in currently Protected Areas where docks would not harm the purpose for which the areas were set aside. The Corps, they say, should decide on a case by case basis, depending on the merits of the argument. This would definitely lead to charges of favoritism and inconsistency. From a practical standpoint it just would not be manageable. Either an area is open to docks or it's not. Some have asked that we re-designate some currently Limited Development areas to Protected. We believe that we have made commitments to landowners in these areas that we will honor. Only if previously unknown resources needed protection, such as the discovery of a significant cultural resource or endangered species of plant or animal, or other higher need, such as changes in commercial navigation, flood, or power generation requirements, would we change the designation of a current Limited Development area.

7. Comment - I'm concerned about the requirement for two feet water at dock. Could the dock permit one-day be lost due to siltation? Two-foot depth rule is a lot of gray area, it "stinks" - someone may want to improve depth. Where is that measurement to be taken and from what water depth? Does it include the silt in the water to hard base or not? What about those people that currently have a dock in less than two feet of water and attempt to sell their property?

Response - Based on the comments we received, the two-foot proposal was changed. We simply stated, "the dock must be able to float during normal pool elevation of 445 msl." The intent was to make sure we were not issuing dock permits in areas that could not feasibly provide moorage. An existing permit will not be revoked, if due to siltation the dock will not float. The permittee should contact this office and request a dredging permit. A permit may be issued to allow individuals to dredge silt/sand from the lake bottom to allow the dock to float. However, this plan requires all

permit holders to control erosion and we believe it will be in the best interest of those attempting to sell their property to insure that the dock facility is usable for actually dock moorage. We will continue to issue dredging permits.

8. Comment - The Corps should better enforce the proper maintenance, appearance, and safety of private moorage facilities.

Response - We do our best to accomplish proper enforcement by boat and land. It is impossible to find all and/or correct all violations immediately or as they occur. We encourage adjacent landowners to take part in our Lake Watch program. This program involves a group of volunteers who keep an eye out on public property. You can help us by reporting problems with docks, illegal tree cutting and illegal dumping. You can be assured that we will quickly check it out and take appropriate action to have the problems corrected. Anyone interested in helping or who has information to report can call either 847-2395 or 822-4846 during the week. After hours and on holidays, call 847-3281.

9. Comment - The 700 square foot limitation on the size of boat docks should be increased to accommodate larger boats. We looked at other shoreline plans on the Internet. The plan for Thurmond Lake in Georgia specifies a total of 720 square feet, and the structure can't exceed 100 feet total from the shoreline. And the Hartwell Lake plan in Georgia stipulates 1120 square feet is the maximum with a limitation on any one side of 40 feet. Obviously, we would prefer a larger allotment of total square footage for a dock like these homeowners in Georgia; however, since we are currently limited to 700 square feet and a maximum length of 50 feet from the shoreline, we believe no further restrictions on how the dock is configured are necessary.

Response - We believe that a size limitation protects shoreline aesthetics and public recreation by preventing docks from being greatly oversized. Based on our studies, the majority of boat owners have been able to design their docks within our guidelines in a manner to accommodate large boats. Granted, extremely large cruisers may have to be berthed at commercial facilities. However we do not believe that the maximum dock size allowed should be based on the size of the largest boats available. We have a

responsibility to all users of the lake to limit the amount of public waters displaced by private structures.

10. Comment - We also believe the existing regulations on dock size are sufficient if your primary concern is one of safety. Don't limit the width to 35 feet. Plans for docks already have to be certified and approved by licensed engineers or contractors to assure that they are structurally sound. In fact, you stated that you were proposing changing the overall size of platform docks from a maximum of 120 square feet to 160 because dock builders said a 6-ft wide dock was not structurally sound. So, if they can develop plans for docks that meet the 700 square foot maximum requirement and certify that they are structurally sound, then why change the maximum length? And, the plan already limits the length of the dock from the beginning of the walkway to 50 ft or 1/3 width of the cove, whichever is less. Why add one more restriction when it doesn't appear necessary to meet your intent?

Response - This suggestion was adopted and we did not change the width. The maximum allowable length for an individual private dock with a slip remains forty (40) feet. The requirement for certified plans has served us well over the past five years and the dock builders continue to do an outstanding job in constructing sound docks.

11. Comment - I would like to see the Corps allow individuals that already have 700 square feet docks are allowed a "side float" for a personal watercraft. Especially where you would still have the minimum 65' between docks. The reason for this is mainly a safety concern of having to walk around those that are hoisted up on the fingers. Also this is because they are so popular now and they weren't years ago when docks were designed.

Response - When Jet Ski usage increased in 1996, we struggled with this very dilemma. We received several requests to add lifts to existing 700 square feet docks and these requests were denied. At that time, the method for measuring square footage of facilities was to take the total width time the total length of the dock. So to allow more variance for Jet Ski lifts, we changed the method of measuring such that the square footage of the lift attachment was added to the square footage of the dock structure. This benefited many owners of docks in the 600

square feet range that would have been over the limit using total width times the total length. For persons at the maximum square footage, we decided to allow one eight- (8) foot wide finger. This allowed safe clearance when storage lockers and/or Jet Ski lifts were located on the dock. We believe it is in the best interest of the public to maintain the 700 square feet limit. The majority of boat owners have been able to design their docks within our guidelines in a manner to accommodate their boats and jet skis.

12. Comment - There should be more of an emphasis on community boat docks in lieu of individual docks.

Response - We encourage the establishment of community dock associations. Sixty percent of the proposed new open areas are for community docks only. This is done to limit the proliferation of individual facilities along the shoreline.

13. Comment - Suggest that boat lifts must be attached to the dock in such a way that they fluctuate with the dock and water level.

Response - We agreed with your suggestion. Boatlifts (including personal watercraft lifts and small boatlifts) shall not be fixed with driven pilings. They must be attached to the dock in such a way that they fluctuate with the dock and water level or be removed before ownership changes to a new permittee. The intent is to not have an underwater structure that could become a navigation hazard during high water conditions.

14. Comment - Will "blue" floats continue to be approved?

Response - Yes, if it meets the following conditions. The float and its flotation material shall be 100% warranted for a minimum of 8 years against sinking, becoming waterlogged, cracking, peeling, fragmenting, or losing beads. All floats shall resist puncture and penetration and shall not be subject to damage by animals under normal conditions for the area. All floats and the flotation material must be fire resistant.

15. Comment - Will 65-ft shoreline rule for docks take effect on renewal or will existing docks be grandfathered?

Response - Existing docks that do not meet the 65 feet requirement can be renewed or reissued.

B. WATER QUALITY.

1. Comment - Water quality of Old Hickory Lake is very important and steps should be taken to monitor and preserve the quality of the water.

Response - We agree. We have addressed water quality concerns in the Shoreline Management Plan. We will continue to work closely with local governments and state agencies responsible for protection of water quality. The state has made significant progress in solving past problems by upgrading sewage treatment plants and replacing septic systems with municipal waste collection systems. We have strongly encouraged erosion control, and closely monitor construction activities adjacent to public lands to ensure adequate erosion control measures. We will continue our efforts in this regard.

2. Comment - What are the primary reasons for the loss of water quality?

Response - It is important to define what we mean when we talk of water quality. Many people compare the muddy waters of Old Hickory Lake with the clear waters of Dale Hollow or Center Hill Lake and conclude that water quality is obviously lower at Old Hickory. Water clarity does not necessarily equate with water quality. Some "clean looking" lakes in other parts of the country can be heavily polluted. Old Hickory Lake generally has good water quality according to state water quality standards. It is prone to being muddy after rains and carries a lot of driftwood, snags, etc. Our recent droughts and high temperatures have adversely affected water quality by reducing the amount of dissolved oxygen in the water, and increasing the amounts of nuisance algae, which can discolor the water and give it an unpleasant odor. Being surrounded by residential and commercial developments, Old Hickory Lake is subject to the usual municipal sewage and industrial outfalls of any metropolitan area. These are subject to state standards, inspections, and monitoring. Overall, however, water quality is not deteriorating on Old Hickory. Water quality of Old Hickory Lake is controlled for the most part by releases from upstream tributary

projects. Our Water Quality Section is evaluating the overall system relationships through the use of computer models and continuous monitors so that the system can be operated to minimize seasonal problems, which may occur in Old Hickory Lake. With normal rainfall and weather patterns, and continued state enforcement of discharge standards, water quality on Old Hickory Lake should not be a problem for recreational use or water supplies.

3. Comment - Corps and homeowners should work actively together to improve water quality.

Response - We welcome any citizen involvement we can get in this area. The state is directly responsible for water quality standards, permitting of discharges, and enforcement, but as responsible stewards of this valuable resource, the Corps and all the using public should take an active part in monitoring violations and seeing that corrective action is taken. Homeowners play an important part in controlling improper waste disposal since they are familiar with their neighborhood areas. One leaking sewer line may not have much impact on the lake as a whole, however a number of these can definitely cause localized problems. Any incident of pollution such as this should be reported to the appropriate State or local health agencies and the Resource Manager.

4. Comment - Restrictions should be placed on boats and holding tanks so they cannot dump raw sewage into the lake.

Response - Regulations related to discharges from boats are established and enforced by federal and state agencies. Under these regulations, Old Hickory Lake is classified as a "discharge" lake. This means that only vessels equipped with Type I or II U. S. Coast Guard approved marine sanitation devices can legally discharge treated sewage into the lake. The Corps cannot require boats on Old Hickory to have holding tanks or require marinas to install pump-out stations. We are well aware of public concerns in this area and are working to get pump-out stations installed on some of our other lakes that are "no-discharge" lakes such as J. Percy Priest and Center Hill. Hopefully if these are well accepted and used by the boating public, public pressure can persuade responsible entities to install pump-out facilities on other lakes and, more importantly, persuade boaters to use them. Tennessee

is involved in the Tennessee Marina Pumpout Program where funds are being distributed to marinas across the state for the construction of pumpout stations for public use. These funds come from the U.S. Fish and Wildlife Service to the Tennessee Wildlife Resources Agency. The goal of this program is to have widespread, easily accessible pumpout facilities for boaters to remove their on-board sewage waste. Unfortunately, we have found that even where pump-outs are available, only a minimal percentage of boaters will use them. You can help by encouraging our local marinas to take advantage of this program and by encouraging other boaters to use proper sanitation methods.

5. Comment - There is concern with future development around the lake in regard to sewer lines and septic fields. There should be no sewage pollution of the lake.

Response - Being surrounded by residential development, Old Hickory Lake is subject to the usual residential septic systems, municipal sewage and industrial outfalls of any metropolitan area. The state has made significant progress in solving past problems by upgrading sewage treatment plants and replacing septic systems with municipal waste collection systems. The Groundwater Protection Division of the Tennessee Department of Environment and Conservation regulates septic tanks, drain fields, and other sanitary facilities on adjoining private property. The construction or installation of a new privately owned septic tank, drain field, or holding tank on public land is not allowed. However, the Resource Manager may consider an application for the expansion of an existing sanitary drain field provided all the following are met:

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

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

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

Again, you can help by reporting any drain field failures and visible ground or water pollution.

6. Comment - Keep water level at 445 as set by your objectives.

Response - Old Hickory Lake is kept at a relatively constant elevation throughout the year for navigational purposes. Since Old Hickory Lake is located on the lower Cumberland and has a relatively small storage capacity in relation to water flows, there is a high flow through rate of water. Although this is not primarily a flood control dam, the Corps owns approximately 5 feet above the normal lake elevation of 445 mean sea level in order to control flood conditions. Compared to most of the lakes in Tennessee and in the country, Old Hickory Lake's elevation fluctuates very little. This makes the lake very appealing because it can be used practically year-round for recreational boating of large vessels. The fluctuation that we experience is primarily due to power generation. The power plant has four generators with a capacity of 25,000 kilowatts each. The generator running time is determined by the amount of river flow and the need for electricity. Generally, the water level fluctuates about one-half to one foot daily. In the summer time the peak need for electricity is in the evenings and in the winter it is in the mornings. However, the generating schedule can change at anytime with out notice based on the system needs for kilowatt hours and voltage stability. It would be ideal to maintain the lake levels at 445 msl, however; the plan of operation for storage and routing floodwaters upon their release is very complex and is integrated over the entire watershed.

C. MOWING

1. Comment (a) - All residential areas should be opened to mowing and landscaping.

Comment (b) - There should be less mowing allowed and more natural planting required.

Response - We hope that you are beginning to get a feel for what we face in any management policy! For every opinion, there is an opposite one! We try to take a balanced approach. Where mowing was historically allowed prior to development of the initial Lakeshore Management

Plan in 1973, we continue to allow mowing. In developing areas where mowing was not allowed previously, but in an area where vegetative alteration would not have substantial adverse impacts on natural resource values, we allow mowing provided the permittee plant trees and ripraps the shoreline where necessary. However, the new plan is different from the old plan as it relates to what can be removed. In the old plan, any vegetation less than an inch in diameter could be removed. In the new plan we will be more selective and save beneficial hardwoods and native shrubs that are less than one inch in diameter. The new plan will clearly show which areas are open to mowing. Where feasible, the mowing area will be reduced and some areas will be left unmowed to provide cover and edge for wildlife. Food and shelter are primary necessities of wildlife. Frequently the same plants that serve as food also provide cover. The value of cover depends on the abundance of vegetation in a particular area. Cover is more valuable in large open mowed areas. Planting designs will focus on establishing hedgerows, plant islands, and shrub growth, which provide more enduring cover. The Corps will assist in providing plants for establishing food and cover. Where there is adequate cover, a reduction of existing mowing limits will not be required.

D. SHORELINE CLEAN-UP

1. Comment (a) - There should be a program to clean up litter and debris from the shoreline. More efforts should be made to clean-up floating debris. Why doesn't the Corps do more to remove debris?

Comment (b) - Leaves, grass litter, and other lawn material should not be allowed to be dumped into the lake.

Comment (c) - Corps should step up enforcement against litters and other abusers of public lands.

Comment (d) - Would like to have a lake drawdown for lakeshore clean up. Lakeshore clean up should be better coordinated with the public.

Comment (e) - Homeowners should be recognized for their efforts in maintaining a clear shoreline.

Comment (f) - Dock owners should be required to keep their shoreline areas clean.

Response - As anyone knows who lives on the lake or has ever boated on Old Hickory, drift and debris are problems that we must all continue to work at together. We recognize that homeowners do a valuable service in keeping their areas of shoreline clean. We organize a lakewide clean-up effort at least once each year, using scouts, school groups, and anyone who will volunteer. Generally the lake is drawn down once a year to allow people to repair docks or conduct activities that can't be done when the water is high. This is an excellent time to pick up trash from along the shoreline. Unfortunately, the drought of the last few years has not given us the latitude to release water for the drawdown, which might later be critically needed. Obviously we do not have the staffing or funding to maintain a permanent litter pick up crew. With budget constraints that limit essential services, most people would agree that litter clean-up efforts would have to be a community effort conducted with volunteer services. We will continue to do all we can to help organize and publicize clean-up efforts through "Take Pride in America" campaigns and other means. We have added a section to the proposed SMP to clearly prohibit the dumping of grass clippings, leaves, and other materials into the water. We also encourage compost bins for leaves and grass clippings.

E. SHORELINE EROSION CONTROL

1. Comment (a) - **The Corps should provide funds to riprap the shoreline.**

Comment (b) - **This plan places the expense for controlling shoreline erosion on the adjacent property owners. Is there a plan to get the boaters? Their boats create waves and erosion to contribute to the cost of erosion control.**

Response - Hundreds of thousands of miles of shorelines and riverbanks are subject to erosion in the US. There simply is not enough tax money available for the Federal Government to provide shoreline protection. Each year we budget for erosion control at public access areas and recreation areas. We are very interested in forming cost-sharing partnerships with all interested parties, private, non-profit, and corporate groups willing to assist in erosion control projects. We do not have any plans to assess fees to boaters for the waves created during

operation. It is virtually impossible to develop a fair and balanced correlating fee on wave actions.

2. Comment - Buffer strips have shown not to work properly for water erosion of the bank, as does the riprap. This only will slow the surface soil erosion, not water or wave damage and erosion. The riprap is absolutely necessary.

Response - We have experienced success using buffer strips to control erosion at two test sites. This is a natural method of controlling erosion and stabilizing the bank. A buffer strip is a 10 to 15 feet strip of land next to the water edge, which is allowed to grow up in dense vegetation. The easiest way to grow a buffer strip is to stop mowing the area and let natural succession take place. Another way is by planting trees, shrubs and other vegetation. Vegetation used may include native woody species that root easily, such as willow (various species), ash, dogwood (various species), maples, birch, sycamore, locust, and forsythia.

Biotechnical methods can be used to save existing vegetation, which alone is not strong enough to hold the slope or shoreline. Biotechnical methods include coconut fiber rolls and mats, gabion baskets, etc. This method also promotes a more natural shoreline appearance. There are products available locally that can be used such as plant carpets or pre-vegetated biodegradable blankets which collect and hold sediments; fiber mats and fiber rolls which when anchored in shallow water serve as a breakwater to protect the toe of the slope and retain eroded material; and pre-grown aquatic plants which endure wave action and protect roots and rhizomes even in exposed sites. Installation is labor intensive but does not usually require heavy equipment. These methods are not only good soil stabilizers but are environmentally sound. Buffer strips also increase aesthetic value to the lake and gives it a more natural look especially when aquatic plants are used. Both methods can be inexpensive and low maintenance. Rangers will meet property owners on-site and assist with determining what method will provide the best success.

Shoreline erosion control is important to the longevity and quality of our lake. When soil erosion occurs the lake becomes shallower which decreases navigation, water supply, and flood storage capacity. Erosion also decreases water quality. The soil particles suspended in the water decrease

overall biological productivity of the lake. Natural vegetation serves to protect the shoreline from erosion, and improve water clarity by filtering sediment and nutrients originating from adjacent developments, roadways, and farms before they enter the lake.

3. Comment - Will property owner be required to riprap their portion of the shoreline in order to renew their dock permit.

Response - Yes, if there is erosion.

4. Comment - The Corps should require a homeowner to riprap the shoreline if it is needed when a dock permit is issued.

Response - We agree. The SMP supports your comment.

5. Comment - Need rocks lining banks rather than shrubs or trees to control erosion.

Response - All homeowners who want to mow and remove vegetation, which would otherwise serve to stabilize the banks, are required to riprap or maintain a buffer strip along the shoreline as a condition of their mowing permit. The most common non-biological erosion control method is quarry run limestone riprap. Riprap is stones six to nine inches in diameter. Riprap does a good job of holding the soil in place. It also provides many holes and crevasses which provides good cover for aquatic invertebrates and small fish. Drawbacks to riprap are that it is somewhat expensive and labor intensive during installation. Many people do not find riprap aesthetically pleasing.

Controlling shoreline soil erosion and siltation is a major challenge on our lake. Runoff from upland developments and wave action erosion is the primary contributing factors. We are taking proactive measures to address these concerns by requiring erosion control when needed. We have encouraged local officials to require builders to install siltation fences, retention ponds and straw bales to control runoff from upland developments. You are invited to visit our erosion control demonstration site at Walton Ferry Park in Hendersonville. Please call and ask for free seed and plants to promote the regeneration of vegetation along the shoreline.

6. Comment - If you have more than enough riprap and trees and no evidence of an erosion problem, will you still be required to have a no mowing buffer strip? If so, why?

Response - No.

F. DREDGING

Comment (a) - Dredge East Station Camp Creek and Town Creek cove. It is dangerous - boats get stuck, you can't stand up in it without sinking 4 feet. It is nasty and is filling up. There are many tires in cove - over 50 tires.

Comment (b) - Dredge the area of East Station Camp Creek that is eroded too less than 2 feet. There is some areas going from deep water to our boat dock that is 1 foot or less. This area is worse this year than it was when we first moved here in 1995. It is becoming hazardous to navigate. How can it be dredged? When? What can be done to keep it from happening in future?

Comment (c)- Interested in learning more info about the possibility of dredging Old Hickory Lake cove area like they are doing in Hendersonville. I had never heard about the annual clean-up project!

Comment (d) - Are there any plans to stop, control, and even restore the water level in Shutes Cove (Langford Cove subdivision area)? The silting in the back of this cove gets worse every year. The center of the back of the cove is now about 6-12" deep. This center section is spreading to the sides of the cove. This was not like this when I moved in and I feel that if this silting is from the creek and surrounding construction (new). If it continues it will affect our entire neighborhood especially resale value with regards to water use and dock permit transfers capability. This silting & filling is not the result of the property owners on the water, but they will suffer the consequences, especially with your new plan.

Response - There simply is not enough tax money available for the Federal Government to dredge all areas on the lake with siltation problems. East Station Camp Creek, Town Creek and Langford Cove are just a few of the tributaries on the lake that catch run-off from many upland developments. As we mentioned earlier, we are taking proactive measures to address these concerns. We encourage

local officials to require builders to install siltation fences, retention ponds and straw bales to control runoff from upland developments.

Applications for dredging are accepted in Limited Development Areas allocated for boat dock privileges to provide sufficient water depth for boat access. Plans for controlling siltation and erosion of dredged material and disposal of spoil material shall be described on the initial application. Performance bonds may be required for jobs with a complex or large scope of work.

Dredging projects on a larger scale like the one in Hendersonville is considered an ecosystem restoration project. Ecosystem restoration activities examine the condition of existing ecosystems, or portions thereof, and determine the feasibility of restoring degraded ecosystem structure, function, and dynamic processes to a less degraded, natural condition. Ecosystem restoration provides a more comprehensive approach for addressing the problems associated with disturbed and degraded ecological resources than does focusing only on fish and wildlife habitat or just silts removal.

Corps activities in ecosystem restoration concentrate on engineering solutions to water and related land resources problems. Not all ecosystem restoration opportunities are appropriate for Corps involvement. There will be instances where components of ecosystem restoration problems or opportunities are addressed by other agencies through their missions and programs. Those restoration opportunities that involve modification of hydrology or substrate are likely to be most appropriate for Corps initiatives. Such activities are most likely to address ecosystems associated with wetlands, riparian, and aquatic systems. Budget limitations require the Corps to focus its restoration efforts on those initiatives most closely tied to Corps missions and areas of expertise.

The Corps of Engineers has the authority, provided by Section 1135 of the Water Resources Development Act of 1986, as amended, to make modifications in the structures and operations of water resources projects constructed by the Corps of Engineers to improve the quality of the environment. The primary goal of these projects is ecosystem restoration with an emphasis on projects benefiting fish and wildlife. To qualify under this

program, projects must be justified—that is; the benefits resulting from constructing the project both monetary and non-monetary must justify the cost of the project. The project also must be consistent with the authorized purposes of the project being modified, environmentally acceptable, and complete within it. Each separate project is limited to a Federal cost of not more than \$5 million, including studies, plans and specifications, and construction.

Project cost are shared a local sponsor (usually a local city or county government) and the Corps on a 25/75 percent ratio. The steps to getting a project are:

1. Problem perception (a problem must exist).
2. Request for Federal action from local sponsor.
3. The problem is studied and a report prepared.
4. Report reviewed and approved or denied.
5. Congressional authorization of funds.
6. Project implemented.

As a part of this six-step process you have reconnaissance planning, feasibility planning, pre-construction engineering and design, real estate acquisition, construction, and operation and maintenance. This process takes a considerable amount of time. However, if you are interested in pursuing it, you will first need a local sponsor that is willing to pay 25 percent of the total cost to complete the project.

G. TREE CUTTING AND PLANTING

1. Comment - Would like to see tougher restrictions on the cutting of trees on public property.

Response - We are committed to protecting trees and shrubs, and want to see more of them planted around the lake. Our trees are as much a part of our natural heritage as they are an important environmental resource. We are charged with preserving all of the trees that exist on the public lands surrounding Old Hickory Lake. We are making significant improvements in reforesting open areas. Occasionally, tree vandals set our efforts back by many years. One provision of the new plan is to discourage these types of thoughtless acts. Cutting of trees on public land without written approval may result in the issuance of a citation requiring the payment of a fine

and/or appearance before the U.S. Magistrate and/or revocation of all or part of the Shoreline Use Permit/License.

In severe cases of destruction, the current permit may be revoked and a moratorium placed on the issuance of any new permits or license for landuse and moorage privileges. The moratorium on the use of public land will be for the property owner who committed the violation and/or any future adjacent property owner for a period up to 15 years or longer as determine by the Resource Manager. We hope this provision serves as a deterrent to those who have no regard for public land.

If you see anyone cutting trees on public land or if you are interested in the Lake Watch and Backyard Wildlife Habitat programs, please call the Old Hickory Lake Resource Managers Office at 822-4846 or 847-2395. After hours and on holidays, call 847-3281.

2. Comment (a)- What is the policy on removal of trees that are a hazard?

Comment (b) - If the Corps could allow trees that are not desirable to be removed and new trees planted when the owner plants more trees than what is already there.

Response - No standing trees on public property are allowed to be cut without authorization from the Resource Manager. If a tree poses a hazard, a ranger will investigate and determine what action is appropriate. If a mowing permit is issued, certain, not all vegetation less than one inch in diameter may be cut under authorization of that permit. For example, a permittee may be given permission to cut a two-inch mimosa tree, which is an invasive exotic species, but required to leave a one-quarter inch White Oak, which provides food and cover for wildlife.

We can authorize the removal of damaged trees, fallen trees, and thinning for the removal of invasive plants and promotion of biodiversity. Diseased or standing trees that pose a safety hazard can be removed with prior approval. Generally, whenever we allow a standing tree to be removed, it must be replaced with trees (a minimum of two-inch base diameter) planted at a location designated by the ranger. In no event will permission be granted to cut a healthy tree when the relocation or modification of a private structure is feasible.

3. Comment - In areas where the density of the trees on Corps property prohibits the growth of grass, will Corps work with adjacent property owner to remove some trees and plant trees and shrubs in more open areas of the Corps property.

Response - There are several shade tolerant grass species that can be planted to provide a ground cover under the tree canopy.

4. Comment - Now the rule is 24 trees per acre and you are proposing 32. Thirty-two trees/acre is one every 35' which causes poor growth of grasses/ground cover and creates soil erosion in to the lake. This seems to be a bit excessive. Reason: that means one tree every 35 feet and many trees grow to be 60 feet across the branch structure. Thus, no daylight under these trees and thus little to no undergrowth to hold back the soil from erosion. There must be grass of some kind or undergrowth to hold the surface soil from becoming lake silt. The trees do not hold the surface soil from washing into the lake during hard rains.

Response - At this time, we are going to continue the requirement of only 24 trees per acre. However, our proposal of 32 trees per acre was intended to produce a tree canopy of 40 percent. Over the past 10 years AMERICAN FOREST has issued three reports on the state of urban forests. The focus of these reports has been on the health of trees in growing urban areas. Healthy urban forest ecosystems include a mix of tree species and sizes, and have enough good soil available to grow large trees. When urban forest are healthy, they provide communities with many valuable services that can be measured in dollar benefits. The value of trees for stormwater management is a good example. Trees slow stormwater runoff and reduce peak flows. Additional ecological values produced by urban forest, including improved air and water quality, energy conservation, and wildlife habitat enhancement, increase the importance of maintaining and restoring the natural forest habitat of the shoreline.

Some may argue that we are a suburban community rather than urban. However, the recommendation for suburban communities is fifty- percent canopy. The trend is that the communities surrounding Old Hickory Lake are rapidly moving towards an urban population. It is estimated that

Tennessee's population has increased thirteen percent from 1990 - 2000. With this rapid growth, the overall risk to ecosystems is extreme. Economy and practicality dictate we can't save everything. However, it is very important that we conserve and develop the small fringe of public land along the lake to provide access to nature. With metropolitan Nashville, Hendersonville, and Gallatin rapidly expanding to engulf surrounding communities and countryside, future generations will judge us harshly if we are not farsighted enough to protect and regenerate even a portion of federal public lands for their use and enjoyment.

We will place great emphasis on planting trees and will work in partnerships to get the shoreline reforested by providing trees to adjacent property owners. Our plan allows for flexibility. Existing trees on public land will be counted towards the 24 trees per acre. Trees can be close together and randomly planted to simulate natural conditions. Symmetrical planting on evenly spaced centers is not natural in appearance and will not be required except to delineate property boundaries. If trees die, they must be replanted.

5. Comment - Provide an alternative to property line marking. Allow for mitigation off-site for planting of trees.

Response - One or a combination of the following methods can mark the boundary line:

(1) Plant and maintain trees (minimum size 1 inch base diameter) or shrubs (minimum size 2 gallon container) on or near the private property corners and on forty-foot centers along the public property line.

(2) Plant and maintain a solid hedge along the public property line.

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

6. Comment (a) - The vegetation will block our view of the lake - especially if trees and shrubs are planted - very concerned!

Comment (b) - Give people a little more latitude to create a better view so long as they keep within the vegetation allowable guidelines.

Response - Our plan allows for flexibility. Trees can be randomly planted to simulate natural conditions. Symmetrical planting on evenly spaced centers is not natural in appearance and will not be required except to delineate property boundaries. Limbs may be trimmed up to one third the height of the tree, not to exceed 12 feet. It is our intent to emphasize the importance of maintaining and restoring the natural forest habitat of the shoreline.

7. Comment - "Minimum 1 inch average diameter, breast high" This is not a nurseryman's conventional method of tree measurement. Also, whose breast? Suggestions...install 1-1/2 inch trees. Using conventional measuring techniques, measured at the base, this will produce the proper tree size with little or no question as to diameter. Thank you for your consideration in this matter.

Response - Very good suggestion. We changed the plan to read, "plant and maintain trees (minimum size 1 inch base diameter)."

H. SHORELINE MANAGEMENT ADMINISTRATION

1. Comment (a) - Any changes in SMP should be open to public notification. Landowners should be notified. Update and inform dock owners. New property owners particularly should be kept informed about permit requirements, agricultural leases, etc.

Comment (b) - Allow public to have more input to Resource Manager on how often SMP should be reviewed. There should be yearly meetings to review progress of five-year plan.

Response - We wholeheartedly agree on the need for good communications. We make every effort to fully inform and involve the public in the management of the lake. We issue quarterly newsletters to all permit holders. The Resource Manager stays in contact with the local news media and keeps them up to date on any happenings of interest. We hold well-publicized annual meetings on any aspect of management the public wants to discuss. At one time we tried to maintain a mailing list of all property owners adjoining the lake, but the rate of turnover was so high we

couldn't keep up with it. As the next best thing, we have held meetings with realtors to keep them informed of Corps policies and requirements, so they could direct potential buyers to us if they had questions. Anybody is welcome to come to the Resource Managers office at any time to discuss policies, problems, or offer suggestions. We welcome this. Communication is a two way street, and we need to know your view or realize you have questions before we can respond. Let us know if you have specific suggestions that can help us communicate more effectively. If you have not been receiving newsletters, please call and we will be sure to add your name to our list.

We are quite willing to answer specific questions in writing. We get so many general phone inquiries that we can't possibly respond to every verbal inquiry in writing. However, if you have specific questions, such as "is an area open for new boat docks," or "can I mow in a certain location," that are important in deciding whether to buy in a particular subdivision, yes, most certainly we would confirm our answer in writing.

2. Comment - Applaud Corps for having a shoreline management plan. Favorably impressed by ranger staff.

Response - Thank you. The shoreline management plan is our way of ensuring consistency in management decisions and preserving the shoreline in a natural state for future generations to enjoy. It's always good to get compliments.

3. Comment - Do public meetings and public involvement really make a difference in how the shoreline management plan is changed? How can I become personally involved in the draft revisions?

Response - The information, suggestions, and questions from concerned citizens really do affect policy decisions related to the shoreline management plan. We study and discuss these comments at length, and make changes when we conclude that they are in the best interests of the overall public. The new plan will contain a number of changes directly resulting from input received during the review process. We obviously cannot satisfy every demand or wish. Some may say that they were not heard or that the meetings were just a cover-up for a decision that already had been made. This is not true. We can assure you that all issues are openly debated at length. Our professional staff is

dedicated to managing public resources in the best interests of all, including but not limited to adjacent landowners. Some decisions will not be popular with all people. Some will not agree with our rationale, no matter how objective we tried to be in the formulation of our policies. Yes, we do listen. We respond. But, we don't play favorites or give privileges based on whom someone may know. We are as consistent and fair as possible.

How can you be personally involved in the update process? By attending meetings and speaking out. By visiting the Resource Manager and expressing your views. Let us know how we can improve. We are open-minded. You may not always get the answer you want, but we will fully explain our reasoning.

4. Comment - Would like to see all people on the same shoreline treated equal.

Response - We also agree on the need for consistency. The Resource Manager and staff work hard to manage, conserve and protect many miles of shoreline. It is not always possible to find and correct problems and or violations as they occur. Our management policy is to systematically correct each violation by performing routine patrols, renewal inspections and onsite meetings.

There are violations that we miss; however it is not due to favoritism. Keep in mind that we are human and we do make mistakes. We don't play favorites or give privileges based on whom someone may know. We sincerely believe we are consistent in the application of the Shoreline Management policies. This doesn't mean we are always so absolutely rigid that we cannot adapt to common sense and needed improvements.

4. Comment (a) - How are the "grandfather" clauses going to effect all of your new suggestions? Will they only take effect upon transfer of property and issuing of new permits? The riprap is more important for erosion than most of these new proposals are for anything. I did not see anywhere where riprap has to be completed prior to the new permit.

Response - This plan requires all applicants (for both new and renewal permits) to meet the tree density requirement,

mark the boundary line with trees and riprap or establish a buffer strip along the shoreline to help prevent erosion. This is a change from previous plans where only new applicants were required to do the area plantings and control erosion.

When the Resource Manager determines erosion control is required in the area that is proposed for vegetation alteration or is being mowed, the applicant must stabilize the bank along that entire portion of the shoreline that is eroding. At a minimum, an unmowed buffer strip must be maintained until appropriate bank stabilization is completed. Generally, a buffer strip serves only as a temporary measure to slow down the erosion process. Permanent bank stabilization will then be required within 180 days of issuance of the permit. A buffer strip is required for all mowing permits immediately after the permit is issued or renewed.

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

- a. The transfer of ownership of the individual's adjoining private property.
- b. The death of the individual and spouse.
- c. Permit or outgrant conditions are violated and not corrected upon reasonable notice.
- d. The individual voluntarily discontinues the private use covered by the grandfather clause.

When any of these events occurs, the permit or outgrant becomes null and void. Those land-based structures not necessary for access to the dock will be removed. Any future private use on public property at that location must conform to current requirements of the shoreline management plan. Public Law 99-662 allows a dock to remain if it meets the requirements and conditions of the law.

5. Comment - Is there a difference between a "shoreline use" permit and a "dock" permit? Are any docks currently issued under a "shoreline use" permit? Paragraph 12 states that docks existing prior to 11/17/86 basically are "grandfathered" and cannot be revoked except for reasons stated. It also allows for these docks to remain even if ownership changes, as long as no safety hazards are present. As an example, my dock was permitted prior to 1986 but was issued to the previous landowner. When I purchased the property in 1994 a new permit was issued to me to construct a new dock. Is the current dock allowed to remain with another change of ownership? All currently permitted docks should be allowed to remain and be transferred or reissued with a change of ownership regardless of the new proposed rules.

Response - A "shoreline use permit" is the official document used by the Resource Manager to approve planned activities such as moorage facilities, vegetative alterations and riprap. A "dock permit" is an abbreviated term used by most landowners when a boat dock is approved by a shoreline use permit.

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

6. Comment - Green rules & regulations book should be in larger print so it is easier to read.

Response. The plan will be available on the Internet and can be printed in a large font from there. However, if you want a larger print copy, contact my office

I. AQUATIC PLANTS

1. Comment - Corps should inform public about aquatic weed problem. What is being done about aquatic weeds?

Response - With the drought of the last several years, we have noticed an increase in the abundance of aquatic plant growth, particularly last summer. Aquatic plants are generally beneficial in providing cover, diversity, and food sources for invertebrates, fish and waterfowl, and in trapping sediments and recycling nutrients. Furbearers like the muskrat forage directly on aquatic plants and use them in den construction.

The plants that can potentially causes problems on the lake are Eurasian watermilfoil (Myriophyllum spicatum). In 1989 the exotic aquatic plant was discovered on the lake. By the summer of 1989 the plant was already established and presented access problems in some recreation areas, including several boat ramps and swimming areas. In 1991 the Corps along with the State of Tennessee implemented a treatment program and we used EPA approved chemicals to treat several areas. In a five-year period, we were able to control the plant to a manageable level. We recognize the benefits of aquatic plants and our goal has never been to eradicate aquatic plants in Old Hickory Lake. The Corps has not chemically treated milfoil on Old Hickory since 1995.

It is only when plants grow out of control and clog embayments, or algae causes water quality, odor, and aesthetic problems that chemical control is needed. If chemical means are necessary to control invasive exotic vegetation, an application must be submitted and written permission obtained in advance from the Resource Manager. Chemicals must be applied by a licensed and certified commercial applicator. Only those herbicides specifically approved for aquatic use will be authorized and shall be used in strict accordance with label restrictions. Applications can be small-scale spot treatments or could be large areas, but there must be plants present before we allow an area to be treated.

The chemicals that are currently registered for use have undergone rigorous testing in the field and laboratory so their persistence and effects on water quality, fish, wildlife, and human health are well documented. In most cases those agents registered by EPA degrade into inert, harmless by-products within a short period of time. Each herbicide incorporates a "label" specifying its proper use, application rates and procedures, and safety information along with other product information.

When permits are issued to spray for aquatic plants, the applicant must notify all property owners within 150 feet of boundaries of treatment area as shown on plans of the proposed application area and inform them of the proposed date and time of the treatment. The applicant must supply the Resource Manager with the name(s), address(es) and phone numbers of these property owner(s) as well as original signatures of each property owner involved. It is the applicant's responsibility to make the contractor fully aware of all permit plans and conditions prior to commencement of the work and furnish a copy of the permit to the contractor.

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

Warning signs must be posted on land at the treatment area boundaries and at 50-foot intervals along the shoreline of the treatment area.

2. Comments - What regulations will be utilized for chemicals used for invasive species plant control?

Environmental impact throughout food chain. Federal, state, local, or non-governmental or us army regulations and/or guidelines in choosing chemicals and application rates.

The lands and waters of Old Hickory Lake currently contain numerous invasive exotic plants. Invasive exotic plants

pose a serious threat to biodiversity. They invade native plant communities, spread, compete, and displace natives. This disrupts and alters wildlife habitat. The use of native plants around Old Hickory Lake is highly recommended. Native plants have many inherent qualities and adaptive traits that make them aesthetically pleasing, practical, and ecologically valuable.

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

Individuals desiring to remove invasive exotic plants manually or with hand tools may do so after notifying the Resource Manager. Once the invasive plants are removed, native plants must be replanted. The Corps will assist in providing native plants. Disposal of the plant material in the lake is not permitted.

The use of commercial harvesting equipment or rotovating will be evaluated on a case-by-case basis and may be permitted by the Resource Manager, or through a Department of the Army permit, if applicable. Disposal of commercially harvested plant material is not permitted on public land or water.

If chemical means are requested to control invasive exotic vegetation, an application must be submitted and written permission obtained in advance from the Resource Manager. Chemicals must be applied by a licensed and certified commercial applicator.

Only those herbicides specifically approved for terrestrial use will be authorized and shall be used in strict accordance with label restrictions. The applicant must notify all property owners within 150 feet of boundaries of treatment area as shown on plans of the proposed application area and inform them of the proposed date and time of the invasive exotic plant control treatment. The applicant must supply the Resource Manager with the

name(s), address(es) and phone numbers of these property owner(s) as well as original signatures of each property owner involved. It is the applicant's responsibility to make the contractor fully aware of all permit plans and conditions prior to commencement of the work and furnish a copy of the permit to the contractor.

All permit applications will be coordinated with and reviewed by appropriate state and federal agencies. The permittee must comply with all permit conditions. A permit will not be issued if the Tennessee Department of Environment and Conservation objects to the proposed activity.

J. SURVEYS/BOUNDARY LINES

1. Comment - Shouldn't there be some uniformity on how much land was taken during the survey and how far the boundary is from the water? Why don't the tax plats match the Corps maps? Why didn't the Corps stay with the original survey? Would like to see Corps property line delineated permanently.

Response - Land was acquired by an aerial survey under a minimum acquisition policy, restricted to the acreage that would serve the operational and maintenance requirements of the project. Generally, the acquisition line was located at or near the 451-foot contour. In 1982, an on ground survey was performed to establish pins, monuments and signs. The distance of the Corps boundary to the water will vary and is site specific depending on the terrain. Imagine the "bathtub ring" effect that would occur if the level of Old Hickory Lake was raised by 6 feet. The water would extend back considerably from the normal shoreline in low areas, while along bluffs there would be little horizontal difference.

The actual acquisition of land was not that simple, nor did it follow the 451-foot contour perfectly. The contour was used as a general guide, however actual acquisition followed standard meets and bounds using available surveys, deeds, title data, maps, and topographic features to determine the actual locations of the lines. There is now a well-marked, accurate public property line delineated around the entire lake. We re-mark the line approximately every five years. Some people apparently mistake the re-marking for a new survey and believe the lines may be

changing. This is not the case. We realize that there may be specific instances in which questions exist as to how the boundary lines were delineated, or about old plat maps. Contact the Resource Manager if you have a specific questions about surveys in a particular area.

Comment - What measures will Corps take to establish Corps lines where property owners have removed markers.

Response - If the government determines that an adjacent landowner has destroyed or removed a Corps monument or pin, the landowner (at the owner's expense) must utilize a licensed surveyor to reestablish the marker. The destruction, injury or defacement of public property is a violation of C.F.R. Title 36, Chapter III, Part 327, Section 14. A violation of the provisions of this regulation shall be subject to a fine of not more that \$5000.00 or imprisonment for not more than 6 months, or both.

It is the responsibility of each adjoining property owner to know the exact location of his or her property lines and corners. Before any new permits for the use of public land are issued, the line must be clearly identified, and before any renewal permits are issued, the line must be marked according to the approved plans. If a private need arises for the exact location of the common government property line, the Corps will provide information, including bearings and distances, describing where the public property line is located. Any discrepancies identified by the survey should be resolved with the Resource Manager.

K. COMMERCIALIZATION/PRIVATIZATION

1. Comment - Would like a moratorium on private commercial developments around Old Hickory Lake. Public Access Areas should not be developed or taken over by private developers. Corps should not sell any property. Do not want the lakes to go private.

Response - We believe we operate quality recreational facilities. There are also quality parks and other public recreation areas operated by state or local governments, as well as commercial marinas. The Corps is statutorily and fiscally limited in its ability to provide additional public recreational facilities. We give consideration to

local governments which request an outgrant to assume responsibility for operating and improving access and other recreational facilities around the lake. However, the Corps will continue to operate and maintain the major recreation areas and campgrounds around Old Hickory Lake. Any requests for private commercial developments would undergo a full Master Plan review process and be fully coordinated with the public. Land use practices on private property are local zoning matters that are approved or denied by city or county planning commissions.

L. Electrical

1. Comment (a) - Who - the corps or the county will handle electrical inspection? Will the county agree and this could be costly to owner. We don't have our houses or swimming pools reinspected why docks. Electrical should be in accordance with county requirements. Electrical disconnects at 451 elevation within 50' of dock will require a post about 6' tall on gradual slope property. This is unsightly when we go to great efforts and expense to bury the electrical service. Just put the disconnect on the dock. Property line markings makes no sense. You have mark on post. You say so public can see. I can find no one (except Lake Owner) who knows this.

Comment (b) - Re-certification of electrical installation: I assume that you are referring to the county electrical inspector for this re-certification. This will require an application for an electrical permit and a paid fee for doing the inspection. They also do not inspect existing electrical installation that has been underground unless it is exposed...and it was stated that all installation would have to be buried.

Comment - (c) While we don't claim to be electrical engineers, we were curious enough about the requirements to consult the national electrical code, and we found a reasonable, less costly, more aesthetically appealing alternative you should consider proper labeling of the breaker switch at the electrical panel. In fact, there were several references throughout the code about disconnect in "remote places". For example, section 230-72 "if one of the disconnecting means of section 230-71 is used for fire protection only, it may be in a remote place." In addition, the requirement for a re-inspection with every permit renewal is costly and time consuming.

While it may not appear to be that way, the state inspector cannot give you a specific time when he will be there and someone is required to be at home for the inspection. That means at least a day or a day and a half off from work in addition to the fee. It seems that if the system is certified as safe, then it should be presumed safe and not subject to an additional inspection until the property is sold and a new owner applies for a permit. After all, that's the way we do our residences. We don't subject our homes, which are much more of a fire hazard than our docks, to electrical re-inspection every five years.

Response - County electrical inspectors are responsible for the inspection of electrical facilities. County inspectors are certified and are knowledgeable of state and local regulations and codes. Because docks are located on public land, we are required by regulation to make sure that the facility or facilities are free of hazardous conditions that may cause bodily injury. This of course is different for you residence because that is private property. However, we must insure that any changes made during the term of the permit meets codes. For the safety of those using public land, we require the facilities to be inspected prior to renewing a permit for another five-year term.

The electrical service must have a disconnect above flood pool elevation that allows the service to be turned off quickly in case of an emergency. A pole mounted disconnect will not be required, if a breaker service inside the home will shut the power off. The county electrical inspector determines whether a ground fault interrupter breaker inside the house or junction box mounted outside on a pole will meet the "disconnect" requirement of the code. They're the authority. If your service is inside the house, you will have to make arrangements for the inspector to inspect.

2. Comment - I also suggest low voltage lighting on the floating docks rather than limiting their positioning to only corners.

Response We agree. We changed the plan to say; "high intensity flood lights will not be allowed."

M. MISCELLANEOUS - These are important items that did not neatly fit the other categories. They are included here so that individual responses can be given.

1. Comment - Do not make changes detrimental to present landowners.

Response - This is an important consideration in everything we do. We do not believe that any changes have been made that would adversely affect existing rights or privileges. Some people may be unhappy that we did not make changes, which might benefit them, such as changing shoreline allocations, however they have not had anything taken away either.

2. Comment - Why should there be a small area designated as Protected when large areas all around it are classified as Limited Development?

Response - There may be a number of reasons. There may be small areas set aside for special scenic qualities, to protect cultural sites, spawning areas, or because of inadequate water depths. Some small areas around commercial or public launching facilities, which provide convenient lake access, are closed to private docks based on the availability of access nearby. Original shoreline allocations designated some undeveloped areas in pockets of development as Protected to provide some shoreline areas free from development by private docks. Adjacent areas were later developed and property owners requested allocation changes so they could have docks. However, in most cases, they knew at the time the land was purchased that they adjoined closed areas. If we opened up all areas as the adjacent private property was developed, the entire lakeshore would eventually be congested with private docks. We believe the majority of the public supports our position that a large portion of shoreline must be preserved in an undeveloped state.

3. Comment - Would have like to had a chance to study the new plan before this meeting.

Response - The Lake Cast newsletter was sent to all permit holders on August 29, 2000. It referenced that you could get a copy of the plan at the workshops that were held September 12 and 14, 2000. The newsletter and newspaper

articles gave the website address where the plan was available to view prior to the workshops. Each person that attended the workshops was given a copy of the plan to review and make comments during the 30-day comment period. Several persons came by our office to pick up plans and we mailed plans to those that called and requested a copy.

4. Comment - I generally agree and support the new plan and would like to see stricter enforcement of laws and policies governing these areas.

Response - We do issue warnings and citations for those that violate regulations. Violations of regulations can result in fines of up to \$5000 and/or six months in jail. These actions are a last resort, as we would much prefer to work with people to correct problems voluntarily. We conduct patrols to detect and discourage violations of Shoreline Management regulations and unauthorized encroachments onto public lands. Again, we do the best we can. We perform water patrols and occasional aerial surveillance, so you may not always be aware that we are out there doing our job. Anytime you suspect that an individual is improperly using public lands, just call and a ranger will investigate.

5. Comment - The Corps property next to mine is badly in need of a good clean up? Your department has recently issued me a mowing permit for a 20-ft trail down to the cove. When time permits, I would like to clean up the litter that now exists, as well as keep the nature look. I am a firm believer that our lakes need cleaning up along the shores but, leave the natural beauty that nature provides for us. I find it very disgusting to see people littering our waterways and shorelines.

Response - We agree. Protecting the natural beauty of nature by removing litter and other debris from waterways and shorelines is very important and vital to preserving our precious ecosystem. We greatly appreciate your efforts and positive attitude toward environmental stewardship.

6. Comment - What can you do to help stop the people from jumping off the cliffs at Coles Ferry ramp. We have observed drinking of alcohol, drug use, skinny-dipping, sex, vandalism, trespassing, fire arm use. We need your help! The launching ramp at Coles Ferry ramp is very short we have had to pull several people out of the water

(vehicles). Can you lengthen the ramp or post sign cautioning the public of the short ramp and deep drop off at end of ramp? How can you help? The point on the East Side of the Coles Ferry ramp is eroding. Can you help with this? Do you provide the limestone quarry rocks? The cove at Coles Ferry has much debris and is getting very shallow. Has increased aquatic milfoil in cove.

Response - This is another area where there are no easy answers. Diving, jumping or swinging from trees, bridges or other structures is prohibited. However, Rangers must observe the act or have a witness who observed the act and is willing to testify in court before a citation can be issued. We work with local law enforcement officials to increase patrols during the recreation season. Federal, state and local laws are applicable to all Old Hickory Lake project lands and waters. While the Corps of Engineers does not have authority to enforce regulations prepared by other federal, state and local agencies, the Corps cooperates with other agencies in their respective enforcement responsibilities specific to project lands and waters.

We have closed several remote areas which received little use and were abused (trash dumping, littering, hangouts, etc.). However, many of the remote access sites provide the only convenient lake access for rural areas. Ramps are inspected annually for drop-offs. We will inspect this ramp for erosion. Again, we ask for your help. If you know of an area that is a particular problem, call us and we will see what we can do.

7 Comment (a) - Your updated regulations are sound and reasonable. We are in favor of the control you want to establish. We too want to support the wonderful wildlife that the lake has.

Comment (b) - It's reassuring to know we have a conservation-oriented lake management group that's willing and interested in working with those of us who are property owners.

Comment (c) - I agree with proposed changes.

Response - Thank you. It's always good to get compliments. It's more rare than you may think for our hard working staff to receive deserved credit from those they serve. The

objective of the Shoreline Management Plan is to achieve a balance between permitted private use and resource protection for general public use. We have strengthened this plan by emphasizing principles of conservation and good environmental stewardship to the natural and cultural resources occurring on Old Hickory Lake. The specific paragraphs that emphasize stewardship are 3, 5, 10, 14, 17, 18, 22, and 25. The intent of this plan is to use both passive and proactive best management practices to sustain healthy ecosystems and biodiversity, and conserve natural resources, such that Corps lands and waters are left in a condition equal to or better than their condition when acquired, and such that those natural and cultural resources are available to serve the needs of present and future generations.

8 Comment (a) - Relax dock furniture restriction. Set standards for allowing certain types of furniture on docks.

Comment (b) - Relax rules for use of dock by permitting seating on dock.

Response - We do not plan to relax the furniture restriction. Docks are for moorage of vessels only. A storage compartment not to exceed fifty cubic feet may be constructed on the dock to store equipment related to boating. The storage compartment can be constructed to serve as a bench

9. Comment - Is there a requirement for a permit to run the wire that keeps dogs in your yard when you run the wire past your lot line across corps property and all the way out in the lake.

Response - Underground or above ground dog fences are prohibited on public land. Public lands around Old Hickory Lake are dedicated to full and free use by the general public. Private activities that may interfere with this free and full use are not allowed. C.F.R. Title 36, Chapter III, Part 327, Section 11, stipulates that no person shall allow animals to impede or restrict otherwise full and free use of project lands and waters by the public, or allow animals to bark or emit other noise which unreasonably disturbs other people.

10. Comments (a) - Section on burning driftwood, etc.,

needs revision. Permits are not required by any government agency for parts of the year for some areas of the lake.

Comment (b) - If you make burning too hard to do, such as a hassle to get a burn permit people will just leave the drift.

Response - Burning of driftwood and storm-damaged vegetation on public lands may be approved. Specific location(s) for burning must be approved by the Resource Manager. The property owner is the responsible for complying with all state, county, and local burning requirements that apply.

11. Comment (a) - I did not like the meeting format. The real flaw in this process, however, was the lack of dialogue. Had we broken into small groups and had discussions with people familiar with the plan and its proposed changes, we might have felt like our attendance was worthwhile. This way, I went home thinking what a waste of three hours, because I had already written my concerns on a card. I was told the comments would get responded to so why stay and put 12 questions on the board that would go unanswered and not discussed when they were already submitted in writing? And, because I don't really know your rationale for the proposed changes, my arguments may have nothing at all to do with your intent. I won't really know until you answer them when the new plan is published. I can only hope.

Comment (b) - We would like to recommend that you consider a different format for your "workshops." According to Webster's, a workshop is "a seminar or series of meetings for intensive study, work, discussion, etc." Unfortunately, the format of your workshop allowed for none of this. You presented the highlights from the proposed changes and took no questions from the audience. Then at 8 PM when you announced we were going to break into small groups and reconvene at 9:30 PM you lost over two-thirds of the participants. Plus, the time in small groups was useless. My group had 6 people - two of whom just came to say hi to their ranger and didn't really understand the purpose of the meeting. The rest of us each got our main point on our group's list of top four issues. I was among the six or seven people who stayed until the very end to see what all three groups came up with and the other two

groups accomplished no more than mine did..everybody got their personal agenda on their group's list.

Response - We used what is known as a "nominal group technique" for the workshops. This is a structured workshop/meeting process, which identifies and ranks the major concerns or issues affecting the group. Each group was lead by a facilitator. The process allows the facilitator to: control the meeting and discussion; to keep the group working toward the task at hand; to ensure that everyone participates by presenting his/her ideas; and to set priorities and reach consensus on the goals, problems, solutions, or program suggestions proposed by the group.

We received 108 comments as a result of the workshops and 30-day comment period. Several changes to the plan we made as a result.

12. Comment - Violations: Isn't the citation and fine severe enough? This 15 years or longer moratorium seem a bit excessive, as most people will sell their property within 5 to 7 years. The property owner, not the property, commits these violations.

Response - Some have stated that this action is too tough. It's our opinion that it's not tough enough. In many cases, where large trees are destroyed, the damage done to public land will take several hundred years to restore. In unique areas such as scenic bluffs and wetland areas, we may never be able to adequately restore the site to its previous condition. However, we believe that 15 to 20 years can allow natural succession to take place and allow newly plant vegetation and seedlings to grow to a substantial size. For years, some have destroyed public property with intentions of only paying a fine. We have to find something that will serve as a deterrent to those who have no regard for public land. We hope that the threat of having a mowing or dock permit revoked will prevent tree vandalism and the destruction and defacement of public land.