

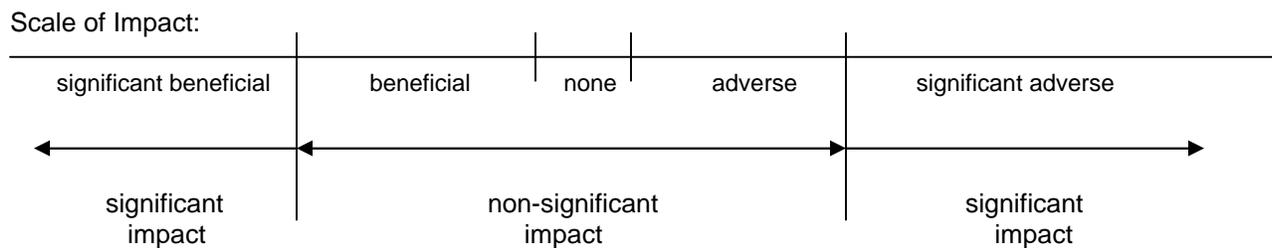
## Chapter 8: Findings and Conclusion

After examining the affected environment and considering the environmental impacts of seven alternative strategies for adjacent landowner activities guidelines, the preferred alternative is the Narrow Shoreline Variance, Alternative 7.

If the impacts of this alternative for adjacent landowner activity guidelines are considered significant, as defined in the Council on Environmental Quality regulations (40 CFR 1508.27), an Environmental Impact Statement is required. If the analysis concludes that any impacts associated with a preferred alternative would not be significant, then a finding of no significant impact can be issued.

There is a continuum of potential beneficial or adverse impacts from an action for any given resource. As suggested in Figure 8-1, there may be no impact on a specific resource, perhaps because there is no incremental impact from the action (for example the action would have no impact on a resource like ground water). Perhaps when the incremental impact from the project is added to other past, present and reasonably foreseeable future impacts, the total impact is within natural variation of that resource, and therefore no significant impacts would be forecast. Perhaps a small beneficial or adverse impact might occur, but the level of effect would be small enough that the resource affected has ample capacity to absorb the effect, or the total impact does not a regulatory threshold (e.g. a water quality standard). Finally, an impact may be large enough that a significance threshold is crossed.

Figure 8-1. Distinguishing between significant and non-significant impacts.



The Council on Environmental Quality regulations require that an action be analyzed in terms of “context” and “intensity” (40 CFR 1508.27). The action must be considered in several contexts such as society as a whole (human, national), the affected region, the affected interests and the locality. For this action, considering new allowable adjacent landowner activities guidelines, there is no effect on society as a whole. The affected region, north central Texas, is experiencing rapid growth and development and there is continuing pressure on lands surrounding Grapevine and Lewisville Lakes from the ever increasing private developments adjacent to Federal lands. Likewise, Grapevine and Lewisville Lakes were constructed in ecoregions known as the Blackland Prairies and the Cross Timbers, both considered to be highly valuable and rapidly disappearing habitat types in region. Finally, the affected interests and locality in our context the adjacent landowners that live part or full time on these properties, currently number in the range of a few hundred families, but based on the number of private parcels of land that adjoin Grapevine and Lewisville Lakes, may soon exceed one thousand. Parcels that are currently not developed, would almost assuredly be developed sometime in the future, and pressure from adjacent landowners to mow and underbrush and develop access paths would continue. As the CEQ regulations state, in the case of site-specific actions, significance would usually depend upon the effects in the locale rather than in the world as a whole.

Intensity refers to the severity of impact, and CEQ provides 10 intensity issues to consider for significance determination. Table 8-1 lists these issues, and summarizes the factors analyzed, the facts found and the connections between those facts and the finding of no significant impact.

Table 8-1. Significance determination for the Narrow Shoreline Variance Alternative (preferred alternative)

Consideration		Effect	Significance Threshold	Exceeded	
Environmental Impacts	Mowing/Underbrushing	See Tables 4-3 through 4-14	substantial habitat quality lost, water quality standard exceeded, adjacent landowners denied access to shore	No	
	Habitat Management	See Table 4-3 through 4-14	substantial habitat quality lost, water quality standard exceeded, adjacent landowners denied access to shore	No	
	Access Paths	See Table 4-15	substantial habitat quality lost, water quality standard exceeded, adjacent landowners denied access to shore	No	
Public Health & Human Safety	Mow & Underbrush	Decrease	more encounters with rodents and snakes; increase of fire (or the perception of an increase) due to increased grass and underbrush	more than 1% of population has public health and safety compromised	No
		Increase	no effect on health and public safety		
	Habitat Management	Restoration of Native Veg.	no effect on health and public safety		
		Control of Undesirable Veg.	if not controlled, more poison ivy could increase incidents of reactions; if controlled with herbicides, increased risk of water contamination	contaminate drinking water supply above regulatory standards	No
		Establishment of Buffer Zone	protect water quality	contaminate drinking water supply above regulatory standards	No
	Access Paths	Change in Number	no effect on health and public safety		
Unique Characteristics of area	Adjacent landowner activities guidelines.	Study area is within an ecosystem known as the Blackland Prairie and Cross Timbers, both rapidly disappearing and considered highly valuable by Texas Parks & Wildlife as extremely valuable	substantial habitat quality lost	No	
Controversial Effects on Human Environment	Mow & Underbrush	little or no scientific controversy on the effects of mowing and underbrushing.	other resource agencies or scientific groups dispute the size, nature or effect of mowing and underbrushing	No	
	Habitat Management	some scientific controversy on the ability to effectively manage ecosystems without introducing unexpected consequences.	other resource agencies or scientific groups dispute the size, nature or effect of habitat management prescriptions	No	
	Access Paths	little or no scientific controversy on the effect of paths to shorelines	other resource agencies or scientific groups dispute the size, nature or effect of shoreline management prescriptions	No	
Uncertain Effects on Human Environment	Mow & Underbrush	little or no uncertainty of the effects of mowing and underbrushing	other resource agencies or scientific groups offer evidence that is substantially different than presented	No	
	Habitat Management	Restoration of Native Veg.	some uncertainty of the unintended consequences of habitat management	other resource agencies or scientific groups offer evidence that management prescriptions are incorrect	No
		Control of Undesirable Veg.	amount of herbicides applied unknown	other resource agencies or scientific groups offer evidence that is substantially different than presented	No
		Establishment of Buffer Zone	little or no uncertainty of the effects of buffer zones	other resource agencies or scientific groups offer evidence that is substantially different than presented	No
	Access Paths	little or no uncertainty of the effects of access paths	other resource agencies or scientific groups offer evidence that is substantially different than presented	No	

Table 8-1. Significance determination for the Preferred Alternative (continued)

Consideration		Effect	Significance Threshold	Exceeded	
Precedents for Future Actions with Significant Affects	Mow & Underbrush	Increase	More area in high disturbance	substantially more area mowed	No
	Habitat Management	Restoration of Native Veg.	does not set a precedent		
		Control of Undesirable Veg.	herbicide use on Federal lands	contaminate drinking water supply above regulatory standards	No
	Access Paths	Change in Number	adjacent landowner access to shoreline	quality public outdoor recreation experiences for present and future generations and long term public access to public lands denied	No
Cumulative Effects	Habitat quality		see Table 7.2	see Table 7.1	No
	Water quality		see Table 7.2	see Table 7.1	No
	Human Community (access paths)		see Table 7.2	see Table 7.1	No
Adverse Effects on Cultural Resources			no cultural resources in study area would be affected by mowing/underbrushing, habitat management, or access paths		No
Endangered or Threatened Species			no endangered or threatened species are impacted.	Habitat or direct loss for a endangered or threatened species	No

## **Chapter 9: Public Involvement**

### **A. Agency Coordination**

This section discusses consultation and coordination that occurred during preparation of this document. This includes contacts made during development of the proposed action, other alternatives considered, and writing of the EA. Letters were sent to Texas Parks and Wildlife Department, U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency, Texas Commission on Environmental Quality, and Dallas Water Utilities asking to participate in a workshop to discuss alternatives for the EA. The workshop was held on June 28, 2004. Copies of agency coordination letters are presented in Appendix I. A separate coordination meeting was also held with USFWS in June 2004.

A Notice of Availability was release on November 3, 2005 and a 45-day public review period was held and formal and informal coordination continued with the following agencies:

- State Historic Preservation Office (SHPO)
- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency (EPA), Region 6 Office
- Texas Parks and Wildlife Department (TPWD), and
- Texas Commission on Environmental Quality (TCEQ)

Comments were received from TCEQ, TPWD, and USFWS (Appendix I). TCEQ concurred with the findings of the programmatic environmental assessment that there would be no significant impacts to air quality as a result of alternative 7. TPWD encouraged vegetated buffer zones around all waterways and recommends no intensive mowing to the shoreline. USFWS had several concerns with the programmatic environmental assessment. A site visit was conducted on January 19, 2005, in order to reach some conclusions and gain concurrence on their concerns. A letter response was sent to USFWS after the site visit in order to gain concurrence on the programmatic environmental assessment. The draft programmatic environmental assessment was modified to include mitigation and impacts to the bald eagle.

### **B. Public Workshops**

Letters were sent to cities and counties that have interests in Grapevine and Lewisville Lakes requesting their participation in a workshop to assist in developing alternatives for the EA. A meeting with 18 people was held on April 7, 2004 and minutes from that meeting are located in Appendix K.

Letters were also sent to local Homeowner Associations on May 7, 2004 inviting their participation in workshops for developing alternatives for the mowing, underbrushing, and access path guidelines at Grapevine and Lewisville Lakes. A total of five workshops were held with Homeowner Associations and other groups. Meeting minutes from these workshops are also included in Appendix K.

In general, comments received during the workshops can be placed into four main categories. 1) Public Safety concerns related to children, undesirable (poisonous) vegetation, snakes, and predators. 2) Concerns relating to fire. 3) Concerns relating to EA distribution, Project Delivery Team, current permits, and process. 4) Concerns relating to erosion/water quality.

### **C. Public Information and Review**

In February 2004, USACE issued a news release stating that it was going to prepare a programmatic environmental assessment for the revision of the mowing, underbrushing, and access path guidelines at Lewisville and Grapevines Lakes to be published in July 2004. In July 2004, USACE issued a second news release extending the publish date to October 2004 (Appendix J).

On May 11, 2004 USACE sent letters to all members of Fort Worth District's Environmental and Recreation Advisory Committee (ENRAC) list. The letter included copies of the existing mowing, underbrushing and

access path guidelines and asked members to provide their comments related to modifying the existing guidelines.

USACE received over 30 letters from adjacent landowners or concerned citizens during the production of the programmatic environmental assessment. Comments reiterated the concerns covered in the public meetings and covered/supported the full spectrum of the alternatives considered in the programmatic environmental assessment. Letters were received requesting that USACE allow no mowing on Federal property and letters were received requesting to mow everything to the shoreline.

A draft version of this document was available for public review on the Fort Worth District Website and at the Grapevine and Lewisville Lake Project Offices and the Grapevine and Lewisville Public Libraries. In accordance with NEPA, a 45-day public review period of the draft programmatic environmental assessment was provided via a Notice of Availability (Appendix J) mailed to the local project mailing list. Twenty-seven comments were received from the general public during the comment period. Comments can be generalized and categorized into the following categories: 1) requests for additions to the narrow shoreline variances, 2) requests that the narrow shoreline variances be extended from 100- 250 feet from the mow/underbrushing zone, 3) USACE property is unsafe due to fire hazards, pests and undesirable vegetation including snakes, bobcats, skunks, rats, poison ivy, and thorny vines, 4) requests that Appendix H be modified, 5) legal comments on the programmatic environmental assessment, and 6) support for alternative 7 or support of an alternative to reduce the mowing and underbrushing zone.

Several comments requested that areas behind their house to be included as a narrow shoreline variance. As a result of the public comments, some areas met the criteria for being designated as a narrow shoreline variance and were added as narrow shoreline variances and others did not and were not added. New maps with the newly added narrow shoreline variance areas are located in Appendix B. No future requests for a narrow shoreline variance, after the Finding of No Significant Impact is signed, would be analyzed without a supplemental environmental assessment paid for by the requester.

Several comments requested an increase in the Narrow Shoreline Variance to at least 250 feet or add areas that currently do not qualify as narrow shoreline variances because they have been mowing for an extended period of time. USACE determined that 50 feet would provide habitat for small mammals and some wildlife species. U.S. Fish and Wildlife Service and Texas Parks and Wildlife Service agreed that some habitat is provided regardless of the buffer or corridor width. The area behind most residential developments around the lake is designated as multiple resource management that is compatible with wildlife management, vegetation management, and/or low density recreation and should be managed as such. Therefore, because since the land is designated as wildlife management, and the resource agencies supported the 50 feet, to afford the maximum amount of protection to the Cross Timbers and Prairies and the Blackland Prairies Ecosystems, USACE would not extend the narrow shoreline variance to more than 50 feet from the mowing and underbrushing zone. No areas would be added to the narrow shoreline variances because of historical mowing practices.

Several comments were received stating that USACE property promotes fire hazards, pests, and undesirable vegetation. USACE is allowing 25-feet of mowing and underbrushing at Grapevine and 50-foot at Lewisville to reduce the risk of fire, pests, and undesirable vegetation. The area is managed and designated as habitat, vegetation, and low density recreation. USACE and other literature acknowledge there is a heightened risk to safety associated with using natural areas and appropriate precautions should be taken by individuals while using these areas. The allotted mowing and underbrushing distances are in compliance with general guidelines to reduce the risk associated with fires hazards, allow some protection from poisonous and thorny vines, and provide a minimum buffer from pests and dangerous animals.

Several requests have been made to modify Appendix H. The vegetation management prescriptions should be used as general guidelines to perform vegetation management on property at Grapevine and Lewisville Lake. As areas are being maintained, specific plans would be developed for each of the management units. Changes to the Vegetation management prescriptions are expected as they are being implemented by USACE or organized groups managing large units of land. However, blanket changes to the vegetation management prescriptions such as clearing understory to a height of 12 feet from the mowing and underbrushing zone would not be made as these areas are designated as wildlife management and trees without understory are not conducive as wildlife habitat.

Several legal comments on the programmatic environmental assessment were made during the comment period. 1) USACE should have prepared an Environmental Impact Statement, 2) the purpose and need section of the draft environmental assessment is inadequate, 3) reliance on inaccurate, inapposite, and irrelevant data, 3) mitigation requirements should be stated, and 4) the cumulative impact analysis is insufficient.

Several comments were received either requesting that USACE prepare an environmental impact statement or that USACE should have prepared an environmental impact statement. USACE feels that the preparation of a programmatic environmental assessment was the appropriate method and procedure under NEPA to determine if there would be any significant impacts from the proposed action and if an environmental impact statement needed to be prepared. No significant impacts were discovered during the NEPA process that warranted preparation of an environmental impact statement, and therefore, a programmatic environmental assessment is sufficient.

A comment was received stating that the purpose and need of the draft environmental assessment was inadequate. USACE feels that the purpose and need adequately describes why USACE was revising the mowing, underbrushing and access path guidelines. As stated in Chapter 1, USACE needs to appropriately manage the natural resources at the lakes, and the purpose of modifying mowing, underbrushing, and access paths guidelines for adjacent landowners on Federal lands encompassing Lewisville and Grapevine Lakes is to allow those landowners a reasonable measure of fire protection, public safety, and pedestrian access, while balancing these permitted private activities with the need to conserve and manage fish, wildlife, forests, wetlands, grasslands, soil, air and water resources.

A comment was received saying data reflected in Tables 2-1 and 2-2 of the DEA are unsatisfactory due to reliance on inaccurate, inapposite, and irrelevant data. Table 2-1 identifies buffer zones for water quality. Although these tables are not directly related to lake settings, they do give an example of different vegetation requirements that are necessary to provide water quality benefits for the transitional zone in the land to water interface which is considered the riparian zone. The lands are designated as fish and wildlife habitat. Water quality is an incidental benefit. However, USACE recognizes that water quality benefits are derived from grass filter strips and proposes to restore some of the existing Bermuda grass areas to native grasslands so that there are fish and wildlife benefits as well as water quality benefits.

Table 2-2 was used to show that literature supports a wide range of buffer widths needed for a variety of species. Because, the lands are designated as fish and wildlife habitat and should be managed as such, USACE established that a minimum 50-foot buffer width is needed to provide basic habitat requirements and to prevent loss of existing cross timbers and prairies habitats. The Design Recommendations for Riparian Corridors and Vegetated Buffer Strips authored by Richard Fischer and Craig Fischenich who use a three-zone buffer approach which is applicable to most forested riparian buffer strips in North America also state that minimal requirements for buffer widths is 40-feet (15-feet for zone 1, 10-feet for zone 2 and 15-feet for zone 3). U.S. Fish and Wildlife Service and Texas Parks and Wildlife Department agreed that 50-feet provided fish and wildlife habitat. USACE also used the Texas Parks and Wildlife Habitat Appraisal Procedure (WHAP) to determine the existing habitat value at Grapevine and Lewisville Lakes. WHAP uses the vegetation community approach rather than a species specific approach. Table 2-2 was utilized to support USACE's position, but it was not the only factor considered when USACE established that at least 50-feet was needed to support basic wildlife habitat.

A comment was received stating that mitigation should be discussed more in the programmatic environmental assessment. Mitigation requirements were added to the final programmatic environmental assessment in Chapter 6.

A comment was received stating that the cumulative impact analysis is insufficient. USACE added a cumulative impact analysis about future development around Grapevine and Lewisville Lakes.

Several comments were received asking that USACE increase the mowing and underbrushing zone at Grapevine Lake to 50-feet so that both lakes are consistent. Increasing the mowing and underbrushing zone at Grapevine lake to 50-feet would add an additional 322 acres of impacts bringing the total that could be mowed at both lakes to 2248 acres or about 8.6% of the land at both lakes. It would also be approximately a

27% increase in potential mowing and underbrushing zone over the status quo. A 27% increase would cross the significance threshold for multiple resources as listed within the programmatic environmental assessment.

Finally, several letters supported USACE's preferred alternative or wanted to reduce the mowing. Several comments commended USACE for their efforts to establish the narrow shoreline variances and protect the natural resources at USACE lakes. Comments were received saying that the habitat is part of the reason people moved to the area and they do not want to see it destroyed. Another commenter did not want USACE to implement the narrow shoreline variances saying that there would be confusion. Instead, they wanted USACE to reduce the existing mowing and underbrushing zone and implement alternative 3, the fire safety alternative.

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