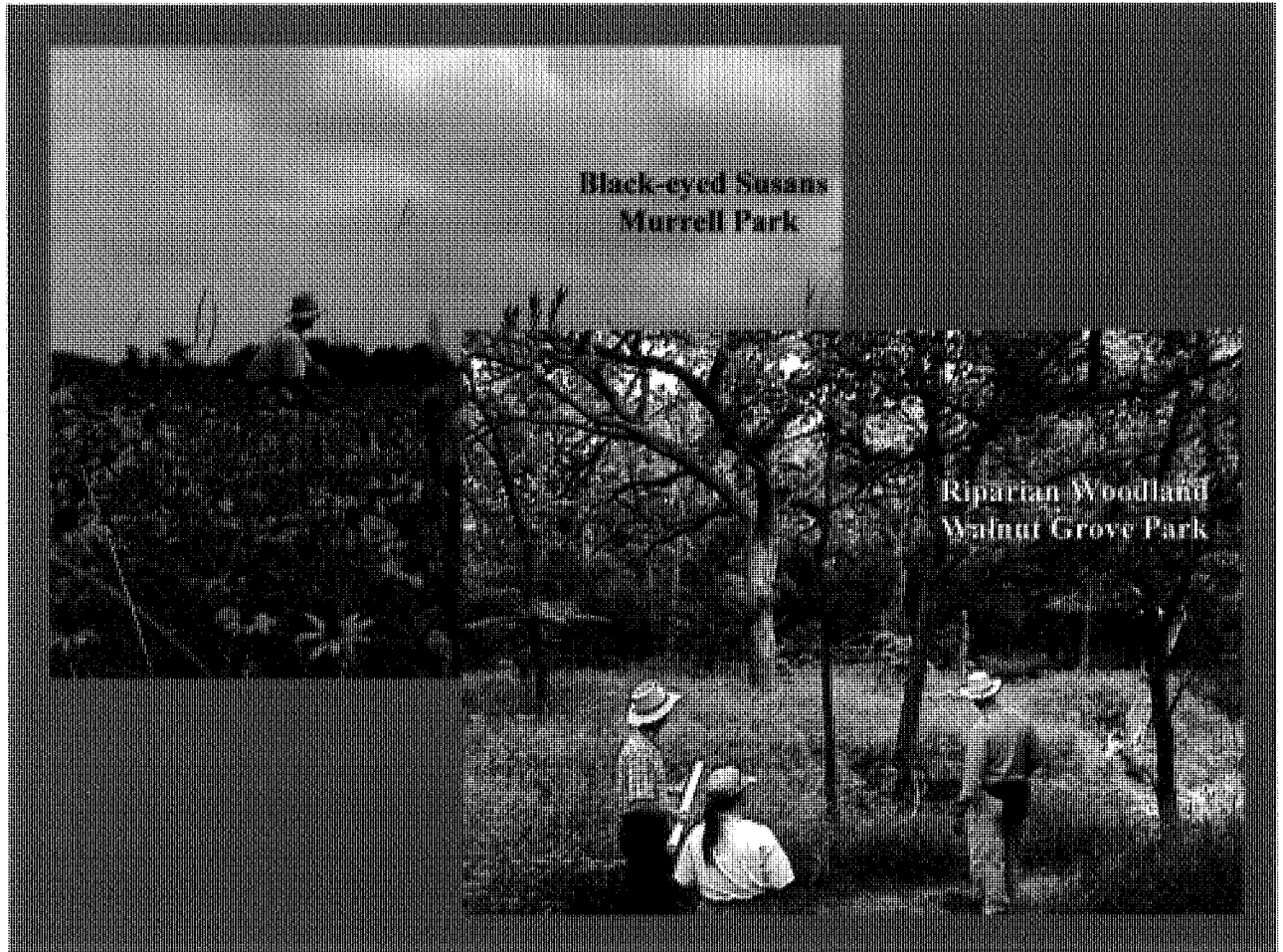


**MASTER PLAN SUPPLEMENT NO.2
TO GRAPEVINE LAKE MASTER PLAN
DESIGN MEMORANDUM NO. 1C (REVISED)**



**U.S. ARMY CORPS OF ENGINEERS
FORT WORTH DISTRICT
FORT WORTH, TEXAS**

JANUARY 2001

MEMORANDUM FOR CESWF-OD

SUBJECT: Master Plan Supplement No. 2, Grapevine Lake Master Plan, Design Memorandum No. 1C (Revised), September 1971

1. References:

- a. Chapter 3, ER 1130-2-550, 15 November 1996, Recreation Operations and Maintenance Policies.
- b. Chapter 3, EP 1130-2-550, 15 November 1996, Recreation Operations and Maintenance Guidance and Procedures.
- c. CESWF Appointment Memo #97-08, 29 April 1997, Appointment of Authorized Representative.

2. In accordance with references above, with your approval, the enclosed Master Plan Supplement will be incorporated into the Grapevine Lake Master Plan.

3. **Background:** Please refer to page one of the enclosed supplement for background discussion.

4. **Proposed Action:** For a complete description of the proposed action, please refer to pages one and two, paragraph 1-02, Purpose and Objectives. In brief, summary terms the proposed action is as follows:

- a. Identify and designate Environmentally Sensitive Areas on all lands classified as recreation lands in the 1971 Master Plan.
- b. Adopt new resource use objectives to place greater emphasis on the Corps of Engineers environmental stewardship mission.
- c. Change the land classification of Roanoke, North Shore, Knob Hills, and Rocky Point Parks from intense recreation to Multiple Resource Management - Low Density Recreation.

5. **Purpose:** The purpose of these changes is thoroughly described on pages one and two of the enclosed supplement. In very brief terms, the purpose is two-fold as follows:

- a. Comply with findings resulting from two environmental assessments written for the Opryland Hotel golf course and related facilities.
- b. Update the master plan to better reflect the Corps of Engineers environmental stewardship mission.

CESWF-OD-R

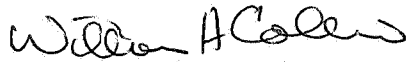
SUBJECT: Master Plan Supplement No. 2, Grapevine Lake Master Plan, Design Memorandum No. 1C (Revised), September 1971


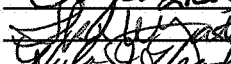
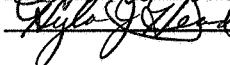
6. Coordination & Public Involvement: This supplement is the product of intense collaborative teamwork, coordination, and public involvement. The collaborative team process, involving a broad cross-section of stakeholders, is described on page two of the enclosed supplement. Letters from team members are included in Appendix A of the enclosed supplement. Public comment was solicited via the NEPA process.

7. NEPA Compliance: An environmental assessment (EA) was prepared and circulated for public comment. Public comments received were positive and resulted in one minor addition of a 7.6 acre Environmentally Sensitive Area in Oak Grove Park (Please note that Figures 1 & 2 in the enclosed supplement are being revised to reflect this minor change). The Finding of No Significant Impact (FONSI) was signed by the District Engineer 16 August 2001. Copies of the FONSI and EA are enclosed.

8. Staffing: Recommend technical review and concurrence by the following staff element and approval by Chief, Operations Division.

Encl


WILLIAM H. COLLINS
Chief, Natural Resources
and Recreation Branch

CESWF-OD-EF	concur (✓)	nonconcur ()	 Date <u>23 Jan. 02</u>
CESWF-RE-M	concur ()	nonconcur ()	 Date <u>23 Jan 02</u>
CESWF-RE	concur (✓)	nonconcur ()	 Date <u>1/25/02</u>

CESWF-OD Approved (✓) Disapproved () Date 1/30/02


DWIGHT L. QUARLES
Chief, Operations Division

CF (w/encl) :
CESWF-RE-M (w/o encl)
CESWD-CMO-R
CECW-ON
CESWF-OD-EF

Grapevine Lake Master Plan Supplement No. 2

January 2001

SUMMARY OF CHANGES TO THE 1971 GRAPEVINE LAKE MASTER PLAN DESIGN MEMORANDUM NO. 1C (REVISED)

Note: This Master Plan Supplement effects permanent changes to the 1971 Grapevine Lake Master Plan, Design Memorandum No. 1C (Revised). Due to the age and format of the 1971 Master Plan, it was determined to be more cost effective to describe the changes by narrative summary instead of incorporating the changes by reprinting the 1971 Master Plan. For a complete understanding of the Grapevine Lake Master Plan, it is necessary to review both the 1971 Master Plan and this supplement.

Change 1.....Chapter 2 of this supplement replaces Chapter VII of the 1971 Master Plan.

Change 2.....Chapter 4 of this supplement replaces Chapter V of the 1971 Master Plan.

Change 3.....Figure 1 of this supplement replaces Plates 46 thru 54 of the 1971 Master Plan in order to graphically present the land classification updates described in Chapter 4 of this supplement.

Change 4.....Areas designated as Environmentally Sensitive Areas on Figures 2 thru 11 in this supplement will no longer be available for intense recreation development. This change effectively cancels some park development design concepts as shown on Plates 6 thru 45 of the 1971 Master Plan.

Change 5.....The location of Roanoke Park shown on Figure 1 of this supplement replaces the location shown on Plates 3, 5, 18, & 19 of the 1971 Master Plan.

Change 6.....Chapter 5 of this supplement establishes utility corridors on Federal land at Grapevine Lake. This information was not addressed in the 1971 Master Plan.

Ten copies of this supplement were distributed as follows: one copy to CESWD, four copies to Elm Fork Project, and five copies to be retained in CESWF-OD-R. A complete copy was also furnished to each non-corps team member listed in Appendix A-01.

**MASTER PLAN SUPPLEMENT NO.2
TO GRAPEVINE LAKE MASTER PLAN
DESIGN MEMORANDUM NO. 1C (REVISED)**

**U.S. ARMY CORPS OF ENGINEERS
FORT WORTH DISTRICT
FORT WORTH, TEXAS**

JANUARY 2001

MASTER PLAN SUPPLEMENT
TO GRAPEVINE LAKE MASTER PLAN, DESIGN MEMORANDUM 1C (REVISED)

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Chapter 1 - INTRODUCTION

1-01. Background

The most recent version of the Grapevine Lake Master Plan was published in September 1971. Two supplements have since been approved in 1994 and 2000 to add 94.1 acres of Oak Grove Park, and 178 acres of Silver Lake Park, to existing Park & Recreation leases held by the City of Grapevine. These supplements authorized construction of trails in Oak Grove Park and construction of the Opryland Golf Course and related facilities in Silver Lake Park. The Environmental Assessments (EA) prepared for the Opryland Hotel facilities and golf course specified that all lands not classified for high density recreation, or operation and maintenance purposes, and all past, present, and future mitigation sites shall be reclassified using current land classification standards set forth in EP 1130-2-550. The EA also specified that the Corps of Engineers would designate utility corridors on Federal land to reduce future environmental impacts from new utility proposals. The required reclassification of lands and utility corridor designations are incorporated into the scope of this supplement. Also included in this supplement are additional land reclassifications and new resource use objectives as explained in the following paragraphs.

1-02. Purpose and Objectives

In addition to complying with the findings of the Opryland Golf Course EA's the Corps has determined a need to further supplement the master plan to accomplish the following objectives:

a. Identify Environmentally Sensitive Areas on all lands classified as recreation lands in the 1971 Master Plan. Environmentally Sensitive Areas are defined in EP 1130-2-550 and include areas of ecological, scientific, aesthetic, and cultural value. The 1971 Master Plan was written to comply with the land classification standards in effect at that time. These earlier standards placed little emphasis on the identification and protection of features having ecological, scientific, cultural or aesthetic value. Since 1971, the Corps of Engineers environmental stewardship mission has been clearly defined in EP 1130-2-540, and the land classification standards have changed to reflect this mission. Furthermore,

the Federal land surrounding Grapevine Lake has been in Federal ownership for approximately 50 years. During this 50-year period, the vegetation on these lands has changed dramatically, with many areas succeeding naturally toward a climax vegetation status with resulting high ecological and aesthetic value. Considering the fundamental shift in the Corps of Engineers mission toward greater environmental stewardship, and the increased ecological value of the Federal land at Grapevine Lake, there exists a great need to identify and protect Environmentally Sensitive Areas.

b. Prepare new resource use objectives for Grapevine Lake by updating Chapters five and seven of the current master plan. New resource objectives are needed to place greater emphasis on the Corps of Engineers environmental stewardship mission.

c. Examine the current recreation classification of Roanoke, Rocky Point, Knob Hills, and North Shore Parks for possible reclassification. These four parks, consisting of 475 acres, are currently undeveloped, but three of the four are traversed by the North Shore Trail which is listed by the Department of Interior as a National Trail. These parks have relatively rugged topography and support excellent examples of mature, native woodlands and grasslands typical of the Eastern Cross Timbers and Prairies Vegetational area of Texas.

1-03. Study Process

Grapevine Lake is geographically located in a rapidly developing area within the Dallas-Fort Worth metropolitan area. The dam is located less than one mile from the northern end of the Dallas-Fort Worth International Airport and project lands are almost totally included in the jurisdictional areas of six municipalities. There are three major marina concessions on the lake and numerous interest groups which contribute time and talent to the management of the lakes recreational and natural resources.

Before embarking on the effort to supplement the lake's master plan, a meeting was held on April 11, 2000 with a broad cross-section of stakeholders. The meeting was attended by representatives of eight municipalities, federal and state elected representatives, state and federal resource agencies, the marina concessionaire, and several trails and equestrian interest groups. The purpose and need for the

master plan supplement was discussed and a collaborative planning team with approximately 20 non-federal members was established (see Appendix A for team members). October 1, 2000 was set as the completion date for the final draft master plan supplement. Ultimately, this date was extended to January 2001.

1-04. Application of Public Laws

Numerous Federal laws apply to the management of Federal lands administered by the U.S. Army Corps of Engineers. The majority of these laws are listed in a Corps of Engineers publication, EP 1130-2-540, Environmental Stewardship Operations and Maintenance Guidance and Procedures, and in EP 1130-2-550, Recreation Operations and Maintenance Guidance and Procedures. These publications are available for review at any Corps of Engineers lake office or on the internet at the Corps of Engineers national website, <http://usace.army.mil>.

CHAPTER 2 - RESOURCE OBJECTIVES

2-01. Introduction

In accordance with EP 1130-2-550 the following paragraphs set forth resource objectives identified for Grapevine Lake. These objectives are intended to replace Chapters V and VII of the 1971 Master Plan, Design Memorandum No. 1C (Revised) for Grapevine Lake. Resource objectives are defined as objectives to guide future design, development and management of the resource base, natural and man-made, to obtain the greatest possible benefit through meeting the needs of the public and protecting and enhancing environmental quality. The primary focus of these resource objectives is to insure incorporation of the Corps of Engineers environmental stewardship mission in the future management and development of Grapevine Lake. The objectives are grouped under the headings of general, natural resources, and recreation.

2-02. General Objectives

a. Coordinate Planning with Responsible Federal, State, Local, and Citizen Interests. Emphasis should be placed on establishing collaborative and administrative procedures with outside interests to assure the effective and orderly development, protection, and management of recreational, cultural, scenic, and natural resources of Grapevine Lake.

b. Minimize the Number of Easements Granted On or Through Project Lands. Easement requests for utilities, roads, pipelines, etc. should be closely evaluated and granted only when there is no practical alternative to the routing across Federal land. When no practical alternative exists, easements should be located where they have the least environmental and visual impact. In all cases, consideration should be given to routing proposed easements adjacent to and parallel with, existing easements. Appropriate mitigation for damage or loss of natural resources should be negotiated prior to granting any easement. Areas classified as Environmentally Sensitive Areas should be avoided as well as key facility locations within areas classified for recreation development.

c. Administer Project Lands to Avoid Exclusive Use of Federal Lands and Facilities. Future leasing of project lands for any activity that is not available for general public use will not be allowed.

d. Improve Control of Project Lands Through Boundary Delineation Using Various Fencing Techniques. To prevent encroachments, off-road vehicle traffic, trash dumping and similar problems, the project boundary should be delineated with a type of fence that is compatible with adjacent private land. Where allowed by the Shoreline Management Plan, gates or openings in the fence should be permitted to accommodate pedestrian traffic.

2-03. Natural Resources Objectives

a. Protection of Environmentally Sensitive Areas (ESA). All project lands shall be examined for areas having scientific, ecological, cultural, or aesthetic features of high value. Such areas shall be identified and protected as ESA's. Examples of such areas would include areas dominated by climax or near-climax vegetation, areas where vegetation has been planted as mitigation for loss of natural resources, cultural sites eligible for or listed on the National Register of Historic Places, riparian areas, wetlands and other high-value aquatic sites, areas where natural vegetation or topography serves as important visual and noise buffers, and areas having exceptional aesthetic qualities such as large expanses of wildflowers. Limited or no development of public use is contemplated on land designated as an ESA, even if the ESA is located in a designated recreation area.

b. Seek Opportunities for Environmental Education, Research and Restoration on Project Lands. Through partnerships with other governmental entities and private organizations, or through direct action by the Corps of Engineers, project lands should be used for environmental education and research. Project lands degraded by past land use should be restored to provide benefits for fish and wildlife or improved water quality. All project lands classified as Multiple Resource Management - Wildlife Management General, are ideally suited for meeting this resource objective.

c. Stewardship of Wildlife Habitat. Through consultation with State and Federal wildlife agencies, animal and plant species of high, regional importance shall be identified, and habitat for those species shall be developed or improved. In accordance with EP 1130-2-540, "special status species and/or their critical habitat", which includes species listed as endangered, threatened, candidate, or sensitive by the U.S. Fish & Wildlife Service or by the state of Texas, shall be given priority in management decisions.

d. Management of Woodlands and Grasslands. In the absence of special habitat needs, as described in the above paragraph, woodlands and grasslands located on lands classified as wildlife management, low-density recreation, and environmentally sensitive areas at Grapevine Lake shall be managed to eventually reach a climax stage of vegetation typical of the Cross Timbers and Prairies ecological region of Texas. A possible exception would be areas where maintenance of expansive stands of wildflowers is considered a desirable management goal, thereby requiring maintenance of the vegetation in a sub-climax status. Woodlands and grasslands in intensive recreation areas should also be managed to achieve climax status to the extent possible while continuing to meet recreational needs.

e. Management of Aquatic Habitats. Aquatic habitats shall be improved and restored through a variety of techniques such as strategic placement of brush shelters and other fish attractors, construction of spawning beds, and establishment of native aquatic vegetation. Lake conditions shall be monitored for the presence of harmful aquatic weeds such as Hydrilla. When aquatic weeds are discovered control efforts should be initiated.

f. Maintain Public Hunting. For many years, public hunting opportunities have been available at Grapevine Lake in Wildlife Management Areas and some Aesthetic Areas. Waterfowl hunting has been the primary activity. With a limited area to hunt, the number of hunters is controlled through a permit system to increase hunter safety and enjoyment. Hunting opportunities should continue to be provided and managed through a permit system. Cooperative planning with cities and wildlife agencies, and implementation of wildlife habitat improvements, should ensure that public hunting opportunities continue to be a viable recreation opportunity at Grapevine Lake.

2-04. Recreation Objectives

a. Consolidate Public Use Areas. Wherever possible, consolidate park facilities to create larger, more functional parks. Consolidation will minimize O&M costs for roads and utilities, and day-to-day park operations will be more efficiently and economically accomplished. Emphasize operation, maintenance, facility designs and management programs which produce a family atmosphere, return visits and increased revenue. Constantly monitor for effects of user impact in park areas and take measures to stabilize and protect the resources where necessary.

b. Separation of Uses. Eliminate conflicts between day use and overnight use by physically separating areas for these specific uses.

c. Facility Rehabilitation. Evaluate all parks and prioritize rehabilitation needs. Implement and follow through on efforts to improve the quality and functionality of recreation areas to include adding new facilities, improving park road circulation patterns, providing erosion and compaction-resistant surfaces at high-use camping and picnic sites, replacing outdated cinder block restrooms, and establishing and conforming with a lake-wide architectural theme.

d. Park and Recreation Leases. Lake and District staff should encourage lessees to implement new designs and facility rehabilitation efforts where needed. Lessees should be monitored for proper operation and maintenance of facilities as required.

e. Safety Programs. Visitor safety, on land and water, should be continuously emphasized and programmed at all times. Proper safety information signage, buoys, hazard identification, safe facility design and education programs are a must. With current boating traffic perceived to be approaching an unsafe level at peak times, lake and District staff should, in the absence of a lake use study which might indicate otherwise, discourage any action which would serve to increase boating use.

f. Recreational Trends. Lake and District staff should stay informed and be sensitive to new trends in outdoor recreational activities, and take the initiative to enable the development of such opportunities.

e. Universal Accessibility. All new/rehabilitated facilities should be designed and constructed for accessibility by persons with disabilities. As funds permit, existing facilities should be retrofitted for ADA compliance, placing emphasis on those facilities which are most important such as restrooms and camp/picnic sites.

f. Aesthetics. A continued effort to improve the general aesthetics of parks and other land areas should be maintained. Recommended actions include landscaping with native plant materials, improved grounds maintenance, architecturally attractive facilities, and architectural themes. Also to be considered: confine vehicular traffic to designated roads, establish vegetative screening between closely spaced sites and screen unsightly areas as needed.

g. Trails. Existing hike/bike/equestrian trails serve a significant segment of the public at Grapevine lake. Every effort should be employed to adequately maintain and, where possible, improve and expand for increased use of these recreational trails.

2-05. Future Trail Maintenance and Development

Although this master plan supplement is not intended to revise the recreation development design concepts set forth in the 1971 Grapevine Lake Master Plan (with the exception that design concepts in some recreation areas are no longer valid due to land classification changes set forth in this supplement), there was almost unanimous interest from the planning team in the future of trail development. The planning team recommended that the supplement contain general guidance on the type of trail development that would be appropriate for the various land classifications. The following paragraphs set forth that guidance with the understanding that each trail proposal is unique and is often constructed and maintained entirely through donations and volunteer effort. Therefore, each trail proposal requires considerable flexibility in design and choice of materials that will protect resources and serve the public.

a. Low Intensity Use Trails

In general terms, the consensus of the planning team defined low intensity use trails as trails with a natural earth surface. Minor use of natural reinforcement materials such as gravel, wood chips, or crushed granite would be acceptable to control erosion or improve trail safety. Use of geotextiles or comparable materials, or limited use of concrete and paving blocks, may be acceptable for use in sensitive locations such as stream crossings or wetlands. With proper planning to protect areas classified as Environmentally Sensitive Areas and Wildlife Management Areas, low intensity use trails are acceptable in all land classifications. However, trailheads, which normally require a vehicle parking area, should be located only in areas classified for high intensity or low intensity recreation. Trailheads should not be located in Environmentally Sensitive Areas or Multiple Resource Management - Wildlife Management General Areas (Note: Trailheads could be located in Multiple Resource Management Areas that have both a Wildlife Management General and a Recreation - Low Density classification.)

b. High Intensity Use Trails

High intensity use trails are generally defined as trails with a hardened surface such as concrete, asphalt, soil cement, or extensive use of crushed granite or gravel. These trails are intended for high traffic situations and are generally appropriate only in areas classified for high intensity recreation development; recognizing, of course, that in a few locations existing high intensity use trails are located in Environmentally Sensitive Areas.

CHAPTER 3 - ENVIRONMENTALLY SENSITIVE AREAS

3-01. Identification Process and Team

All Federal land currently classified as a public recreation area in the 1971 Grapevine Lake Master Plan was field inspected for the presence of Environmentally Sensitive Areas (ESA's) by the following team of natural resource specialists: (Note: Most of the Federal land located west of Highway 377 is currently classified for Wildlife Management and was not inspected because these lands, due to their current classification, are already protected and managed in much the same manner as an ESA. ESA's are defined in EP 1130-2-550 as follows: Areas where scientific, ecological, cultural, or aesthetic features have been identified. These areas, normally located within one of the other classification categories, must be considered by management to ensure the sensitive areas are not adversely impacted. Normally, limited or no development of public use is contemplated on land in this classification as well as land classified for Wildlife Management.)

Donald N. Wiese.....Natural Resources Manager, Corps
of Engineers
Dale King.....Natural Resources Specialist,
Corps of Engineers
Mike Armstrong.....Wildlife Biologist, U.S. Fish and
Wildlife Service
Jennifer Barrow.....Wildlife Biologist, Texas Parks &
Wildlife Department
John Davis.....Urban Wildlife Biologist, Texas
Parks & Wildlife Department
Margaret Forbes.....Graduate Research Assistant,
University of North Texas, Institute of Applied Science

3-02. Selection Criteria

The team of natural resources specialists used professional judgement and the following criteria as a means of evaluating Federal lands for ESA's. It is important to note that any existing public uses, including existing utility easements, roads, etc. taking place or located on these areas will continue to be authorized. It is not the intent of this master plan supplement to stop existing uses within ESA's. For example, many of the ESA's have equestrian trails, bike trails, and golf cart paths within the boundaries of the area. These uses, as well as the maintenance activities

needed to maintain these uses will be allowed to continue. Of the 4,483 acres of designated recreation lands (which includes the 620 acres of operations land leased to the City of Grapevine for the Grapevine and Cowboy golf courses), a total of 1,724 acres has been designated as ESA. An additional 867 acres of land classified as Esthetic Area in the 1971 master plan were also designated as ESA.

1. Vegetation is largely comprised of mature, native vegetation in a climax or near-climax status.

2. Vegetation exhibits rich species diversity.

3. Area has high value as resting, nesting, feeding, or roosting areas for important and sensitive wildlife species, especially neotropical songbirds, shorebirds and waterfowl.

4. Area serves an important aesthetic function as a visual buffer to adjacent private development, wildflower or wildlife viewing area, or contributes significantly to general open space values of spaciousness and natural landscape appeal.

5. Area serves an important water quality function as a run-off filtering zone for streams, wetlands, and erosion sensitive shorelines.

6. Presence or high probability for presence of archeological, historical, or paleontological resources.

3-03. Area Descriptions

The findings of the evaluation team are listed by park area in the following paragraphs. Each area is described by an alpha-numeric designation such as S1 for Silverlake Park, MM1 for Meadowmere Park, etc. The ranking criteria which apply to each area are listed for each area as well as a note about potential future uses of the area. The areas are shown on Figures 1 through 11.

**FIGURE 2. ROCKLEDGE AND SILVER LAKE PARKS
(includes Grapevine and Cowboy Golf Courses)**

D1.....A 20-acre mature upland forest with wetland features. A golf green and cart path have been constructed in this area, but much of the area remains intact. Possible archeological features. Ranking Criteria 1, 2, 3, 5, & 6. No additional future uses are recommended.

D2.....This 31-acre area is the historical Denton Creek channel and adjacent undisturbed streamside zone (approximate total width 200-400 feet). This area features mature bottomland hardwoods, archeological sites, and an active heron rookery, and also serves as an important streamside protection zone. Ranking criteria 1, 2, 3, 5, & 6. No additional future uses are recommended.

D3.....This 103-acre mature upland forest may be the largest tract of intact upland forest on Grapevine Lake. The area is bisected by the uncontrolled spillway channel and features an intermittent stream along the northern boundary of the tract. Unique paleontological resources have been found on this tract. Ranking criteria 1, 2, 3, 4, & 6. Future uses may include low-impact nature and hike/bike trails.

S1.....This 9-acre mature upland woodland is a linear tract which parallels the park road in the Corps-managed Silverlake Park fee camping area. A walking/nature trail goes through portions of the area and the area serves as a critical visual screen next to private property. Ranking criteria 1, 2, 3, & 4. Future use may include expansion of the existing trail.

S2.....This 9-acre mature upland woodland is a narrow shoreline tract bordering the park road in the Corps-managed day use area of Silverlake Park. It has high aesthetic and wildlife habitat value. Ranking criteria 1, 2, 3, & 4. No future uses are recommended.

S3.....This 6-acre mature upland woodland is located along an intermittent stream near the entrance to the Corps-managed Silver Lake Park campground. Disturbance to this area has been limited to construction of a sewage lift station by the City of Grapevine near the south end of the tract. The area has high wildlife habitat value and serves as a very important visual buffer between Silver Lake Park and adjacent

residential areas. Ranking criteria 1, 2, 3, & 4. No future uses are recommended.

FIGURE 3. OAK GROVE PARK

OG1 & 2.....These two areas total 27-acres and follow relatively narrow tributaries, Morehead Branch (OG1) and Farris Branch (OG2) featuring high quality riparian and upland wildlife habitat. The City of Grapevine sewage treatment plant discharges a steady flow of treated effluent into Morehead Branch, adding significantly to the habitat value of the tributary. Ranking criteria 1, 2, 3, & 5. Future use may include low-impact trail development for hiking and interpretive use.

OG3 & 4.....These tracts of good quality upland hardwood habitat totaling 60-acres serve a critical function as a visual barrier along the Oak Grove Park entrance and circulatory roads, screening the park from adjacent residential areas. Ranking criteria 1, 2, 3, & 4. Future use may include hike and bike paths.

OG5.....This 157-acre tract includes an area of high quality upland hardwoods currently used by mountain bike enthusiasts, and sizeable riparian areas on the south and north side of Dove Road. Most of the area has high value as a visual screen adjacent to residential development. Ranking criteria 1, 2, 4, & 5. Continued use of the area north of Dove Road for trails and related activities is anticipated. No future uses are recommended for the area south of Dove Road.

OG6 & 6A.....This 38-acre and 7.6-acre undeveloped tract of upland hardwoods with interspersed patches of native prairie is good quality wildlife habitat and serves as a visual screen adjacent to residential development. Tract OG6A, locally referred to as Heron Point, is a prominent, forested peninsula with exceptional esthetic appeal. Future uses may include low-impact trails or walk-in primitive camping. Ranking criteria 1, 2, 3, and 4.

FIGURE 4. MEADOWMERE PARK

MM1.....This relatively large riparian corridor totaling 83 acres along Dove Creek supports closed canopy, mature woodlands of cedar elm, pecan, post oak and associated

species. The on-going drought has caused noticeable mortality among dominant trees. The east end of the corridor has the woodlands giving way to shoreline and wetland vegetation. Ranking criteria 1, 2, 3, & 5. Future uses may include hike-and-bike trails which parallel the Meadowmere Park entrance road. Low-impact hiking trails would be suitable along the banks of Dove Creek.

MM2.....This 10-acre tract supports a mature stand of pecan and post oak which follow the course of a small tributary. Adjacent pasture is succeeding naturally toward a woodland condition. This tract is centrally located in Meadowmere Park and contributes significantly to the park's open space character. Ranking criteria 1, 2, 3, 4, & 5. Future uses should be limited to low-impact trails.

FIGURE 5. WALNUT GROVE PARK

WG1.....This 76-acre tract is a shoreline and riparian tract lying between Meadowmere Park to the east and Walnut Grove Park to the west. Most of the area is heavily wooded with small riparian areas along unnamed tributaries. Being a shoreline tract, the area has significant aesthetic value as well as high value as wildlife habitat. Ranking criteria 1, 2, 3, 4, & 5. Future uses should be limited to low-impact trails.

WG2.....This 174-acre riparian corridor along Kirkwood Branch exhibits exceptional habitat diversity. The higher elevations have remnant patches of native prairie while the areas closer to Kirkwood Branch are dominated by mature cedar elm, American elm, oaks and pecans. The perennial nature of Kirkwood Branch adds significant habitat value to this tract. Ranking criteria 1, 2, 3, 4, & 5. Future use of the tract may include trail development complimentary to the existing Walnut Grove Hiking and Equestrian Trail.

WG3 & WG4.....These two tracts, 71 acres and 36 acres, respectively, are two of the finest examples of closed canopy, mature upland hardwood forests on Federal land at Grapevine Lake. The wildlife habitat value is exceptional and the location within Walnut Grove Park adds significantly to the open space value of the park. Ranking criteria 1, 2, 3, 4, 5. Future uses could include trail development complimentary to the existing Walnut Grove trails.

FIGURE 6. MARSHALL CREEK PARK

MC1.....This 34-acre tract of high quality upland and riparian hardwoods follows a small tributary lying just east of T.W. King Road. The tract has high quality wildlife habitat and serves an important water quality function along the unnamed tributary. Ranking criteria 1, 2, 3, & 5. Future uses may include low-impact hiking or equestrian trails.

MC2.....This 349 acre area takes in the main riparian corridors in Marshall Creek Park as well as a diverse upland prairie site north of Trophy Club's sewage treatment plant. A large portion of the area takes in a significant shallow water area and brushy peninsula within the reservoir. This area is of significant value to waterfowl, shorebirds, and neotropical birds. During field reconnaissance in June, 2000, the calls of painted buntings and dickcissels were noted. An indigo bunting and a nesting pair of red-headed woodpeckers were also sighted in the area. Ranking criteria 1, 2, 3, 4, & 5. Future uses may include low-impact trail development and facilities, which would facilitate wildlife viewing and photography.

FIGURE 7. DENTON CREEK WILDLIFE MANAGEMENT AREA

DC 1 & 2.....These two parcels, totaling approximately 350 acres, are the mitigation sites for the natural resource losses associated with construction of the Opryland Hotel golf course and related facilities and the Cowboy Golf Course. Future use of these parcels would be limited to low intensity trail development.

FIGURE 8. KNOB HILLS PARK

KH1 & 2.....These two tracts, totaling 115 acres, support the largest and finest examples of undisturbed native prairie on Federal land at Grapevine Lake. There are also important cedar elm-hackberry-pecan woodlands where the prairie begins to give way to woody vegetation at lower elevations. Ranking criteria 1, 2, 3, 4, & 5. Future uses may include additional equestrian, hike, and bike trail development compatible with the existing trail. Management favoring continued improvement of the prairie should be a priority.

KH3.....This 62-acre tract is a relatively narrow but heavily wooded riparian area leading into Knob Hills Park. This area serves an important water quality function and has high wildlife habitat value. Ranking Criteria 1, 2, 3, 4, & 5. Low impact hike and bike trails could be developed in these areas.

FIGURE 9. ROCKY POINT PARK AND POINT NOBLE SHORELINE

RP1.....This 98-acre heavily wooded riparian area on Sharps Branch is excellent wildlife habitat and serves to filter stormwater runoff from adjacent residential areas. Ranking criteria 1, 2, 3, & 5. Future development should be limited to spur trails providing links to the main hiking/equestrian trail in Rocky Point Park.

RP2.....This 131-acre heavily wooded area is located totally within Rocky Point Park and makes up the majority of the higher elevations within the park. The woodlands are mature and very diverse, and are interspersed with small patches of native prairie. The entire area serves as an important visual buffer next to rapidly growing residential areas. Ranking criteria 1, 2, 3, & 4. Future development could include continued development of the existing trail system.

PN1.....This 79-acre shoreline tract, running from Rocky Point Park to the beginning of Twin Coves Park, is steep and rugged with only a thin strip of Federal land between the lake and adjacent residential development. This segment of shoreline is critically important as a buffer against shoreline erosion and a visual screen next to residential areas. The area may also serve as a corridor for wildlife traveling along the shoreline between larger tracts of Federal land. The Northshore Trail currently does not extend along this shoreline due to the narrow character of the Federal land in many locations. Perhaps with the use of trail easements across private land, the trail could be extended through the area. Ranking criteria 1, 2, 3, 4, & 5.

FIGURE 10. TWIN COVES PARK

TC1 & 2.....These two areas, totaling 225 acres, are relatively long, narrow riparian corridors supporting mature stands of riparian and upland woodlands. These areas are excellent wildlife habitat and also serve to preserve open space and provide a visual buffer along the entrance road to Twin Coves Park and next to adjacent residential areas. Ranking criteria 1, 2, 3, 4, & 5. Future uses may include continued hiking and nature/interpretive trail development.

FIGURE 11. MURRELL PARK

M1.....This 70-acre area is a relatively long, narrow riparian corridor serving the same functions and meeting the same ranking criteria as Twin Coves Park areas TC1 & 2.

M2.....This 11-acre area is a flat, open field centrally located within the western end of Murrell Park. This field exhibits exceptional wildflower blooms throughout spring and summer and should be managed to support continued blooms and general open space values. Ranking criteria 2 & 4.

M3 & M4.....These two areas, totaling 58 acres, are similar in that they support dense, mature stands of riparian and upland woodlands and each one is a boundary tract lying next to residential developments. Area M4 also has excellent native prairie habitat along both sides of the main circulatory road in Murrell Park. Ranking criteria 1, 2, 3, 4 & 5. Future use of these tracts should be limited to hike/bike trail development, which is complementary to the existing Northshore Trail.

M5.....This 67-acre area supports a relatively large, dense stand of mature upland hardwoods and runs adjacent to approximately 16,000 feet of Government boundary which borders existing or planned residential/commercial areas. Ranking criteria 1, 2, 3, 4 & 5. Future use of the area should include continued operation of the existing Northshore Trail and the possible addition of low-impact, primitive campsites accessible only by way of the Northshore Trail.

CHAPTER 4 - LAND CLASSIFICATION UPDATES AND CHANGES

4-01. Scope of Update and Changes

As explained in Chapter 1, the Corps of Engineers is obligated, per the findings of the Environmental Assessment for the Opryland Hotel golf course and related facilities, to update the land classification of Wildlife and Esthetic Areas as set forth in the 1971 master plan. Additionally, the objectives of this master plan supplement include a requirement to examine the current intensive recreation land classification for Roanoke, North Shore, Knob Hills, and Rocky Point Parks. The resulting changes in land classification are described in the following paragraphs. All land classification changes and updates in this master plan supplement follow the classification system set forth in EP-1130-2-550, dated November 15, 1996.

4-02. Updates to Wildlife and Esthetic Areas

The 1971 Master Plan classified all lands west of Highway 377 as Wildlife Management Area. By virtue of this master plan supplement these lands are henceforth classified as Multiple Resource Management Area - Wildlife Management General.

The 1971 Master Plan also classified a large block of land between Highway 377 and Marshall Creek Park, and several smaller, scattered shoreline areas, as Esthetic Area. By virtue of this master plan supplement these lands are henceforth classified as Multiple Resource Management Areas - Recreation Low Density and Wildlife Management General.

The above changes are depicted on Figure 1. These changes are essentially a change in nomenclature to reflect current standards and will not have a direct bearing on, or cause a change in, the way these lands have been managed in the past. As Wildlife Management and Recreation Low Density areas, these areas are afforded a high degree of protection from potential disturbances such as easements or rights-of-way for utilities or roads. The natural character of these areas is to be protected although wildlife management activities such as prescribed burning, vegetative manipulation, or construction of wetlands, nesting structures or other wildlife-related facilities is appropriate. Public

use of these areas is generally limited to passive activities such as hiking, bird-watching, nature appreciation, hunting, and fishing.

4-03. Updates to Recreation Areas

In discussing the current high density recreation classification of Roanoke, North Shore, Knob Hills, and Rocky Point Parks with representatives of the cities of Roanoke and Flower Mound, and with equestrian organizations currently using the areas, several changes were recommended and are hereby incorporated into this master plan supplement. These changes are substantial in that Roanoke Park is relocated and all four of these parks are reclassified from High Density Recreation to Multiple Resource Management Area - Recreation Low Density. The changes are described in the following paragraphs and are depicted on Figure 1.

a. The 21-acre Roanoke Park area has been relocated from the west side of Highway 377 to the east side of Highway 377 and is reclassified from High Density Recreation to Multiple Resource Management Area - Recreation Low Density. The 21-acre tract on the west side of Highway 377 is now classified as Multiple Resource Management Area - Wildlife Management General. The new location will better serve the general public as a possible future trailhead for the low-impact trails that may eventually traverse areas east and west of Highway 377.

b. North Shore, Knob Hills, and Rocky Point Parks are hereby changed from High Density Recreation to Multiple Resource Management Area - Recreation Low Density. This change reflects the current and historic recreational use of the areas and is complementary to the park and recreation management goals of the adjoining Town of Flower Mound.

CHAPTER 5 - UTILITY CORRIDORS

5-01. Purpose of Corridors

As a result of the Environmental Assessments published for the Opryland Hotel Golf Course, entrance road, and related facilities, the U.S. Army Corps of Engineers agreed to designate utility corridors on Federal land at Grapevine Lake. The purpose of these corridors would be to serve as the Government's preferred routing for future utility line proposals. Concentrating future utility easements into these designated corridors would reduce environmental impacts by reducing fragmentation of wildlife habitat, reducing impacts on visual aesthetics, and in some cases reducing the direct loss of natural resources. Any loss of natural resources that could not be avoided within a designated corridor would be mitigated as specified by the Corps of Engineers. The designation of utility corridors will also facilitate the land use planning efforts of cities, utility interests, and real estate developers. The placement of any future utilities within an existing easement may require the consent of the owner of the existing easement. Use of corridors within areas leased by the Corps to others would also require consent of the lessee. Future changes in environmental or other laws and regulations, or the discovery of currently unknown cultural resources, could negate the usefulness of any designated corridor.

5-02. Corridor Descriptions

During the examination of project lands for Environmentally Sensitive Areas, potential utility corridors were also examined. This was accomplished by identifying existing utility and road easements on Federal land and by discussing known utility needs with the public works staff of each city bordering Federal land. During that process, nineteen corridors were identified. Eighteen of these corridors follow existing utility easement routes and/or road easements. The remaining corridor was designated based on known needs expressed by the various cities. The following paragraphs describe in general terms the type, location, and size of the designated corridors. Corridor locations are also noted on Figures 2 through 11.

Corridor No. 1.....This corridor follows an existing, overhead electrical transmission line which runs roughly parallel to the toe of Grapevine Lake Dam through land that is leased to

the City of Grapevine for the city's municipal golf course. Near the south end of the dam, the corridor crosses to the west side of Fairway Drive and continues south along an existing water line easement parallel to Fairway Drive to the intersect with Highway 26. Additional utilities could possibly be located within the existing easement or within 15 feet either side of the existing easement, but only if the integrity of the dam is not compromised.

Corridor No. 2.....This corridor follows two existing, overhead electrical transmission lines located in the southern portion of Silver Lake Park and along Highway 26 and the Corps property boundary south and east of the Project Office. One line runs roughly north-south along the Corps boundary, then runs roughly in an east-west direction parallel to Highway 26 and across Corps property on the east side of Ruth Wall Road. This line crosses over Ruth Wall Road and then intersects the second line which runs roughly in a north-south direction. Any future utilities in the north-south segment, west of Ruth Wall Road, would need to stay within the existing easement. Future utilities within the segment lying east of Ruth Wall Road could likely be authorized within 15 horizontal feet on either side of the existing easement.

Corridor No. 3.....This corridor follows the recently authorized entrance road to the Opryland Hotel and Golf Course. Future utilities proposed for this corridor could be located within 25 feet of the roadway on either side.

Corridor No. 4.....This corridor follows a water line easement which generally runs in a southeast-northwest direction across Farris and Morehead Branches. This corridor could accommodate additional utilities within 25 horizontal feet from the north boundary of the existing easement. During discussions with the City of Grapevine regarding this corridor, the City expressed a need to extend Dove Road in a southeasterly direction across Farris and Morehead Branches and has expressed a desire to align the proposed road extension along the route of this corridor to the maximum extent possible. The proposed road extension would require an approximate easement width varying from 100 to 150 feet and would require a separate environmental assessment and full public review.

Corridor No. 5.....This corridor runs parallel to Dove Road where the road crosses McPherson and Jones Branches. Any

future utilities in this corridor should be located within 25 horizontal feet on either side of the existing road easement.

Corridor No. 6.....This corridor runs parallel to the east entrance road of Meadowmere Park to a point where the road crosses the first east-west road in Meadowmere Park. The corridor then runs west along this east-west road to a point where it intersects with the west entrance road to Meadowmere Park. Utilities along this corridor should be located as close to the roadway as practical. Future overhead utilities should be avoided in this corridor to reduce the impact on visual aesthetics in Meadowmere Park.

Corridor No. 7 A & B.....These two corridors are conceptually identified to meet a need expressed by the City of Southlake for future sewer lines and possible lift stations near the south terminus of Federal land located along two unnamed tributaries. The city's objective in placing the new sewage facilities would be to achieve gravity flow to strategically located lift stations where the sewage would then be pumped in a westerly direction with an ultimate destination being the Trinity River Authority sewage treatment plant. Precise corridor locations are yet to be determined, but would generally be east-west corridors crossing the two unnamed tributaries at approximate right angles using the minimum width necessary. In discussing these corridors, the city was advised that long runs of sewer line on Government land for the sake of reducing impact on private land is to be avoided to the maximum extent possible. The city was also advised that damage to high quality habitats during construction of underground utilities should be avoided by using subsurface boring in lieu of open cuts

Corridor No. 8.....This corridor runs parallel to White Chapel Road on both sides of the road. The corridor extends 25 horizontal feet from both the east and west limits of the existing road right-of-way. The city may someday seek to widen and elevate White Chapel Road at the crossing of Kirkwood Branch. As presently located, this critical north-south road becomes inundated during maximum flood events. Establishment of a utility corridor at this location does not convey approval of any expansion of the roadway. Should the City of Southlake request expansion of the roadway, an environmental assessment and public review period may be required depending on the degree of environmental impact.

Corridor No. 9.....This corridor runs east-west and parallel to an existing overhead electrical line along the south line of Government tract E-405. It then departs from the existing overhead electrical line and continues in a due east-west direction across Marshall Creek and across Government tract E-401-A. The extension of the corridor across Marshall Creek was done at the request of the Town of Trophy Club to accommodate the town's plans for future gravity-flow sewers and continuous-loop water lines across Marshall Creek. This corridor is confined to the width of the existing electric line easement, except where it crosses Marshall Creek on Tract E-401-A, where it has a width of 25 feet. Because this utility corridor crosses an Environmentally Sensitive Area where no easement currently exists (where it crosses Marshall Creek), any proponent of a utility line at this location will be required to relocate an existing electrical transmission line located a short distance to the north of this corridor. The relocation would place the existing line inside the utility corridor. The relocation of the existing electrical line will be considered a mitigative action to reduce disturbance to the Environmentally Sensitive Area. Future utility construction in this corridor where it crosses the woodlands on either side of Marshall Creek should be installed by way of subsurface boring if possible. The Town of Trophy Club has conceptual plans for a roadway and bridge across Marshall Creek in the proximity of this utility corridor. However, designation of this utility corridor does not convey approval of the proposed roadway.

Corridor No. 10.....This corridor runs parallel to an existing overhead transmission line which runs roughly parallel to State Highway 377. This corridor extends 25 horizontal feet on the east side of the existing electric line easement and extends west to the east right-of-way line of the railroad track which runs parallel to State Highway 377.

Corridor No. 11.....This corridor runs parallel to the route of an underground natural gas pipeline located roughly on the west boundary of Government tract F-541. A small portion of this corridor crosses Graham Branch on Government tract F-539. This corridor extends 25 horizontal feet from the east boundary of the existing easement where it follows the Government boundary line. At other locations the corridor extends 25 horizontal feet on both the east and west boundary of the existing easement. It is important to note that any utility crossing of Denton Creek within this corridor must be accomplished by subsurface boring. No open cuts or overhead

utility lines will be allowed in this corridor where it crosses the bottomland hardwood forest of Denton Creek.

Corridor No. 12.....This corridor runs parallel to the west right-of-way line of Cleveland-Gibbs Road. The corridor extends 25 feet to the west of the road right-of-way.

Corridor No. 13.....This corridor runs parallel to an existing overhead electrical line located primarily on Tract F-501. The corridor extends 15 feet on the east side of the existing easement.

Corridor No. 14.....This corridor runs parallel to Interstate Highway 35 West. The corridor extends 15 horizontal feet from the east and west line of the existing highway easement.

Corridor No. 15 A & B.....These two corridors run parallel to Farm-to-Market Road FM 1171 (15 A) and the abandoned roadbed of the old FM 1171 (15 B). The corridors extend 25 horizontal feet from the south line of FM 1171 and 25 feet from the north edge of the abandoned roadbed of old FM 1171. The Texas Department of Transportation currently has plans to widen FM 1171. The designation of this utility corridor does not convey approval for the widening of FM 1171 where it crosses Federal land.

Corridor No. 16.....This corridor follows the route of an existing overhead utility line where it crosses Surveyors Branch. The width of this corridor is limited to the width of the existing electric line easement.

Corridor No. 17.....This corridor runs parallel to the north right-of-way line of Cardinal Lane where it crosses Government Tract D-306. The corridor extends 25 feet north from the north right-of-way line of Cardinal Lane.

Corridor No. 18.....This corridor runs parallel and 25 feet north of the north right-of-way line of Wichita Trail.

Corridor No. 19.....This corridor consists of an abandoned park roadbed which runs east-west through Murrell Park along the common boundary between Government tracts B-118 and B-125-A. The corridor extends 15 feet either side of the old roadbed.

APPENDIX A - COLLABORATIVE PLANNING TEAM

A-01. Collaborative Planning Team

The following planning team was established at an introductory meeting held on April 11, 2000. Subsequent meetings of the entire planning team were held at City Hall, Grapevine, Texas on June 3, 2000 and August 30, 2000. The Corps team members also met separately with each city to discuss anticipated park development plans and utility corridors needs which may affect Federal land. Copies of letters from these team members are included in this appendix.

DON WIESE.....	CORPS OF ENGINEERS (Team Leader)
RON PIVONKA.....	CORPS OF ENGINEERS
DALE KING.....	CORPS OF ENGINEERS
DR. HANK JARBOE.....	CORPS OF ENGINEERS
ANNIE HENRY.....	CORPS OF ENGINEERS
RICH ADAMSON.....	CORPS OF ENGINEERS
MIKE ARMSTRONG.....	U.S. FISH & WILDLIFE SERVICE
JENNIFER BARROW.....	TEXAS PARKS & WILDLIFE DEPARTMENT
JOHN DAVIS.....	TEXAS PARKS & WILDLIFE DEPARTMENT
BART STEPHENSON.....	TOWN OF FLOWER MOUND
STAN LASTER.....	CITY OF GRAPEVINE
JOE MOORE.....	CITY OF GRAPEVINE
BEN HENRY.....	CITY OF SOUTHLAKE
SHIRLEY ROGERS.....	TOWN OF NORTHLAKE
RONNIE ANGEL.....	CITY OF ROANOKE
LONNIE EGERTON.....	TOWN OF MARSHALL CREEK
PAUL ROSENBERGER.....	TOWN OF TROPHY CLUB
ALANA SOMMER.....	CROSS TIMBERS EQUESTRIAN TRAILS ASSOC.
JULIE LANDESBERG.....	CROSS TIMBERS EQUESTRIAN TRAILS ASSOC.
BUD MELTON.....	TEXAS TRAILS NETWORK
GILBERT WELCH.....	MARINAS INTERNATIONAL
KEN DICKSON.....	UNT INSTITUTE OF APPLIED SCIENCE
MARGARET FORBES.....	UNT INSTITUTE OF APPLIED SCIENCE
TERRY HODGIN.....	DALLAS WATER UTILITIES

Mapping and GIS Support:

Dennis Akins.....	Corps of Engineers
Lita Schutter.....	Corps of Engineers
Bryon Haney.....	Corps of Engineers

A-02 - LETTERS FROM TEAM MEMBERS

U.S. FISH & WILDLIFE SERVICE
TEXAS PARKS & WILDLIFE DEPARTMENT
TOWN OF FLOWER MOUND
CITY OF GRAPEVINE
CITY OF SOUTHLAKE
TOWN OF NORTHLAKE
CITY OF ROANOKE
TOWN OF TROPHY CLUB
CROSS TIMBERS EQUESTRIAN TRAILS ASSOC.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
WinSystems Center Building
711 Stadium Drive, Suite 252
Arlington, Texas 76011

September 20, 2000

Mr. Don Wiese
Natural Resource Manager (CESWF-OD)
U.S. Army Corps of Engineers
819 Taylor Street
Fort Worth, Texas 76102-0300

Dear Mr. Wiese:

This responds to your August 30, 2000, request for our review and comments on the proposed designation of Environmentally Sensitive Areas at Grapevine Lake, Tarrant and Denton Counties, Texas. The following comments are provided for your consideration.

First of all, we would like to take this opportunity to commend the U.S. Army Corps of Engineers (Corps) for taking the initiative to reclassify some current Federal lands as Environmentally Sensitive Areas. We are all well aware of the rapid development occurring around Grapevine Lake, and as stewards of the Federal land around the lake, the Corps has recognized that without proper planning the open space and high quality wildlife habitat on the remaining undeveloped lands could be lost. Therefore, we agree that your proposal to supplement the 29-year-old master plan to provide maximum protection of highly valuable open space and wildlife habitat, while preserving opportunities for additional recreation development, is necessary to find an acceptable balance of these two competing uses.

The 1971 master plan was written to comply with the land classification standards in effect at that time and, therefore, did not identify features having ecological, scientific, aesthetic, and cultural value. Since 1971, the Corps environmental stewardship mission has been clearly defined in EP 1130-2-540, and the land classification standards have been changed to reflect this mission. Furthermore, the Federal land surrounding Grapevine Lake has been in Federal ownership for approximately 50 years. During this 50-year period, the vegetation on these lands has changed dramatically. A major drawback of the current master plan is its lack of resource objectives reflecting an increase in habitat value which has occurred over the past 50 years. Natural vegetation succession and maturation, as well as the loss of habitat on adjoining private lands, have resulted in this substantial increase in habitat value. Considering the fact that there was no mitigation for the initial impacts to fish and wildlife resources when the reservoir was constructed and the increased ecological value of the Federal land around Grapevine Lake, we concur that there exists a great need to identify and protect the Environmentally Sensitive Areas (ESA's).

This is your future. Don't leave it blank. - Support the 2000 Census.

During June 2000, a team of natural resource specialists and biologists from the University of North Texas, Texas Parks and Wildlife Department, Corps, and U.S. Fish and Wildlife Service completed a field inspection of all Federal land currently classified as a public recreation area in the 1971 Grapevine Lake Master Plan. We evaluated these lands for the presence of ESA's. The ESA's were defined as: areas where scientific, ecological, cultural, or aesthetic features have been identified. The team inspected a total of 4,361 acres of public recreation lands at Grapevine Lake. Of this total, the team identified 2,191 acres of ESA's, 1,716 acres of which were located in public recreation parks. We concur with all areas selected for reclassification as ESA's.

The only concern we have with the areas selected for reclassification is that some of them are isolated from each other by present development or undeveloped private property. These isolated pockets of wildlife habitat, although high quality, would not provide a travel corridor for wildlife between these areas. Travel corridors are essential to the survival of a variety of migratory and resident bird and mammalian species in this highly urbanized metroplex area. The multi-disciplinary Corps team involved in the review of land use proposals and preparation of mitigation plans now believes that very little Federal land remains at Grapevine Lake where future mitigation could be done. Therefore, we recommend the Corps consider requiring developers to purchase areas, where feasible, that would connect ESA's as mitigation for future projects on Federal lands.

The Corps has also proposed to revise their resource objectives for Grapevine Lake. The primary focus of the revised objectives would be to insure incorporation of the Corps environmental stewardship mission in the future management and development of Grapevine Lake. While completing the field inspection, we observed several instances where private landowners, whose property bordered Federal lands, were encroaching on Federal property. In most cases the private landowners were maintaining Federal land as an extension of their yards by mowing and clearing trees and shrubs. These types of activities have an enormous impact on fish and wildlife resources by significantly reducing the quality and quantity of the habitat available. If the Corps wants to insure incorporation of their environmental stewardship mission in the future management and development of Grapevine Lake, we recommend improving control of project lands through boundary delineation using various fencing techniques. Where the boundary is clearly delineated, as was the case in all of the instances we observed, we further recommend increasing enforcement efforts to deter unauthorized encroachments.

We appreciate the opportunity to comment on the designation of ESA's at Grapevine Lake. Please contact Mike Armstrong of this office at (817) 277-1100 if you have any questions or require additional information concerning our comments.

Sincerely,



Thomas J. Cloud, Jr.
Field Supervisor



COMMISSIONERS

LEE M. BASS
CHAIRMAN, FT. WORTH

RICHARD (DICK) HEATH
VICE-CHAIRMAN, DALLAS

ERNEST ANGELO, JR.
MIDLAND

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NOLAN RYAN
ALVIN

PERRY R. BASS
CHAIRMAN-EMERITUS
FT. WORTH

ANDREW SANSON
EXECUTIVE DIRECTOR

*To manage and
conserve the natural
and cultural resources
of Texas for the use and
enjoyment of present
and future generations.*

September 20, 2000

Don Wiese
Natural Resource Manager
Ft. Worth District Corps of Engineers
PO Box 17300
Ft. Worth, TX. 76102-0300

Mr. Wiese,

Please allow me to express to you how impressed I was at the quality of habitat that still remains on Corp property around Grapevine Lake. As an Urban Biologist with the Texas Parks and Wildlife Department, I am constantly observing habitats throughout the Dallas / Ft. Worth area. I must say that the quality and diversity of native grasses and forbs found in the prairie patches on the sites we visited are some of the best I've seen in this area. I expected our visit to the properties around Grapevine Lake to simply reveal more degraded and abused habitats. I was pleasantly surprised to see that that was not at all the case.

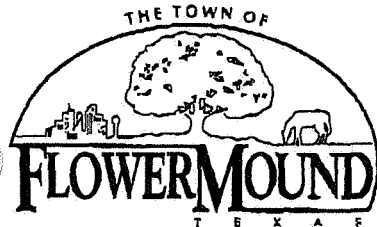
The wooded portions exhibited diversity and added to the habitat value of these properties. The prairie meadows still contained an abundance of increasingly rare native grasses such as Little Bluestem, which once dominated this area. The presence of this grass in such abundance indicates to me that these properties are quite healthy habitats. This indication was confirmed when we spotted Dickcissels occupying the meadows. Dickcissels are birds that inhabit the prairie. Since these habitats have been, and continue to be drastically reduced, these birds are declining. I was glad to see them there.

In short, the properties we visited surrounding Grapevine Lake still possess high quality habitats. I urge you and your agency to be diligent in your efforts to ensure that these habitats are properly managed and protected so that birds like the Dickcissel will always have a place to thrive. Please feel free to contact me if I may be any further assistance.

Sincerely,

John M. Davis

John M. Davis
Urban Biologist, Texas Parks and Wildlife Department
PO Box 941, Cedar Hill, TX. 75106
972-293-3841 fax 972-293-3842 jmdavis01@aol.com



October 31, 2000

Mr. Lee Hunt, Lake Manager
U.S. Army Corps of Engineers
Grapevine Lake
110 Fairway Drive
Grapevine, TX 76051

RE: Environmentally Sensitive Areas and Designation of Parks

Dear Lee:

The Town of Flower Mound has reviewed the proposed Environmentally Sensitive Areas (ESA's) for the north shore of Grapevine Lake. As you are aware, Flower Mound and its citizens are quite proud and therefore extremely sensitive to the natural beauty of our community. It is with great enthusiasm that we support your proposed ESA's for the federally owned land adjacent to Flower Mound and endeavor to assist you in any way to preserve the natural vegetation and wildlife in these areas.

Additionally, we support the designation of Northshore, Knob Hills and Rocky Point parks as low intensity use. Although these parks have previously been designated as high intensity use, the lack of adequate vehicular access to these park areas prohibit such use. In addition, the new designation is in line with the vision of our community and compatible with the recently adopted Park and Trail Master Plan approved in February 2000.

Thank you for allowing the Town of Flower Mound an opportunity to assist in the updating the Grapevine Lake Master Plan. If you have any questions or need further information, please contact me at 972.874.3003.

Sincerely,

Bart C. Stevenson, Executive Director
Community Services

cc: Honorable Mayor and Town Council
Park Board
Van James, Town Manager
Mike Boles, Town Engineer



September 19, 2000

Mr. Donald N. Wiese
Natural Resource Manager
Department of the Army
Fort Worth District
Corps of Engineers
Fort Worth, TX 76102-0300

Ref: Environmentally Sensitive Areas / Grapevine, Texas

Dear Don:

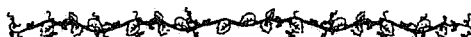
The City has reviewed the ESA Maps prepared by your office surrounding Grapevine Lake. Based upon previous conversations and meetings with you, Lee Hunt and Dale King of the lake office, we have the following comments for the final map preparation.

PROJECT OFFICE PANEL

The City of Grapevine is continuing to work with Grapevine Golf Club, Ltd. (Dallas Cowboys and Evergreen Alliance Golf, Ltd.) as the Dallas Cowboys Golf Course is completed and made ready for play. The City is also continuing its project to remodel the Municipal Golf Course. The City does not anticipate any encroachment into the 20.401 acre ESA (G1) and adjacent to the 22.144 acre ESA (G2) than has already been approved by the USACE. The useful life of a golf course is, however, very long and the City requests the Corps' cooperation if future adjustments to adjacent golf course structures may be necessary in areas G1 and G2 in order to maintain and enhance either the City's or the Cowboy's Golf Course.

OAK GROVE PANEL

The City requests that a roadway and utility corridor 150 feet in width be preserved along the north boundary of the 9.147 acre ESA (OG1) downstream of the City's wastewater treatment plant. This will provide adequate width for the planned construction of Dove Loop Road. Based upon our meeting in the field, our consultant will have a survey crew physically stake the limits of this corridor and will provide to the City and to the Corps of Engineers a corridor description that is tied to physical monuments in the area and can be re-created at the time the City is ready to construct the roadway.



PUBLIC WORKS DEPARTMENT

THE CITY OF GRAPEVINE P.O. Box 95104 • Grapevine, Texas 76099 • Phone Metro 817/410-3135 • Fax 817/410-3003

The City would be opposed to any connection of the 17.547 acre ESA (OG2) and the 40.607 acre ESA (OG3) located east of the southernmost entry road (Park Road # 1) into Oak Grove Park. The corridor between these two (2) ESA's is the location planned for the Dove Loop Road connection to the Dove Road and Dove Loop Road intersection. We request that the corridor remain as currently reflected on the panel.

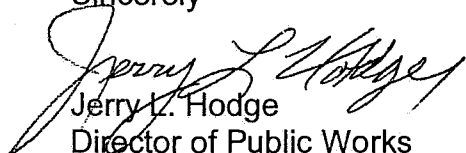
The City of Grapevine is planning a hike and bike trail to be constructed along Park Road # 1 extending from Dove Road to Oak Grove Park. This hike and bike trail is planned to be on the south side of the Park Road # 1 and therefore should be outside of area OG3.

MEADOWMERE PANEL

The City of Grapevine is planning a combination project consisting of a wastewater line, waterline, and hike and bike trail along Meadowmere Park Road extending from Kimball Road north into the park. This routing goes through the center of the 85.140 acre designated ESA (MM2) south of Meadowmere Park. The City requests that a utility and roadway corridor be preserved for these improvements within the area comprised of the roadway and the mowed areas adjacent to the roadway from Kimball Road to the north side of area MM2.

We appreciate the opportunity to comment on the proposed ESA Maps. If we can be of any assistance, please don't hesitate to contact me at 817-410-3134.

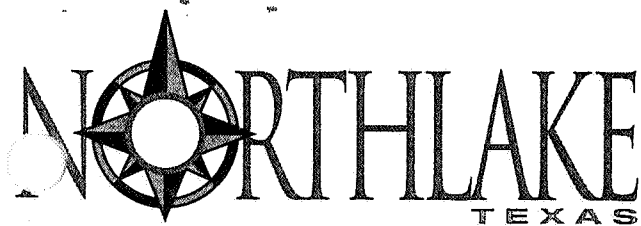
Sincerely



Jerry L. Hodge
Director of Public Works

Cc: Roger Nelson, City Manager
Bill Gaither, Director of Administrative Services
Joe Moore, Assistant Director of Parks and Recreation
File

O:\stan\miscdocs\ESAs_CorpoEng



The Town of Northlake

PO Box 729

1301 West FM 407

Justin, Texas 76247-0729

Phone 940-648-3290

Fax 940-648-0363

E-mail nlaketx@aol.com

September 29, 2000

TO: Don Wiese
US Army Corp of Engineers

FROM: Shirley Rogers
Town Secretary

Dear Don:

After reviewing all of the materials that have been presented to the committee group, the Town of Northlake does not have any problems or concerns with the areas designated to environmentally sensitive.

As IH35W corridor and Marshall Creek basin are the within the town's border, the Mayor and Town Council are very much in agreement with protecting the environment along with the wildlife and vegetation in those sensitive areas.

They would like to keep the areas as natural as possible while allowing some hiking, biking or equestrian trails for the residents to use. They are opposed to concrete paths. The town would like to see future uses to include low impact development and facilities.

The Council has noted on their master plan updated in July 2000 of possible multi trail system it would like to implement in the near future. (Copy included)

Thank you for allowing the Town of Northlake to be a part of this master plan update for Lake Grapevine. It has been a pleasure and a learning experience for me.

Very sincerely yours,

Shirley Rogers
Town Secretary

**City of Roanoke
Parks and Recreation**

202 Main Street
Roanoke, TX 76262



(817) 491-6067
Fax (817) 491-6068

September 29, 2000

Lee W. Hunt
Lake Manager
Grapevine Lake Project
110 Fairway Drive
Grapevine, TX 76051

Dear Mr. Hunt,

The City of Roanoke, Texas would like to show its support in the improvement and reclassification of the corps property surrounding/leading to Grapevine Lake. We feel that this land can be very beneficial to the residents of Roanoke as well as surrounding areas.

Within the city limits of Roanoke, we would like to designate and relocate "Roanoke Park" from the West side of Highway 377 to the East side of Highway 377. We feel that with the existing roads and the access of Old Highway 377, this would be a better location for the park. We could envision a roadside park at this location as well as a trail head that could tie into pre-existing trails already established around the lake. We feel at this time that the best trails for us would be hiking, jogging and bike trails.

If you have any further questions concerning these recommendations, please feel free to call me. My office number is 817-491-6067. I look forward to working with the corps on these improvements and reclassifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Ronnie Angel". The signature is fluid and cursive.

Ronnie Angel
Director, Parks and Recreation



City of Southlake

Community Services

September 29, 2000

Mayor:
Rick Stacy

Mayor Pro Tem:
Gary Fawks

Deputy Mayor Pro Tem:
Ronnie Kendall

Councilmembers:
Rex Potter
Keith Shankland
Greg Standerfer
Patsy DuPre

City Manager:
Billy Campbell

Assistant City Manager:
Shana Yelverton

City Secretary:
Sandra LeGrand

Donald N. Wiese
Natural Resources Manager
U.S. Army Corps of Engineers
Attn: CESWF-OD-R
P.O. Box 17300
Fort Worth, Texas 76102-0300

Subject: City of Southlake Commentary on Lake Grapevine ESAs

Dear Mr. Wiese:

The City of Southlake certainly appreciates the opportunity to offer our comments on the Environmentally Sensitive Areas (ESAs) identified by the Corps of Engineers (COE) in and around the Lake Grapevine area in Southlake. The following comments are the City of Southlake's policy statements concerning (1) the designations of the ESAs themselves; (2) potential park and/or trail uses within these areas; and (3) the allocation/designation of utility corridors within the ESAs.

1. **ESA Designation Areas:**

The City of Southlake fully supports the areas designated as ESAs as presented to city staff by COE representatives.

2. **Park and/or Trail Uses within ESAs:**

As designated on the City of Southlake's current plans and future master plans, the extent of park and/or trail uses within the proposed ESAs would be limited to the following:

- (a) limited areas of hard-surface multi-purpose trail, acknowledging that any such trails shall be constructed only if the COE and the city agree that construction disturbance and long-term maintenance would be minimal
- (b) natural-surface hiking and equestrian trails as approved by the COE
- (c) appurtenant non-habitable shade structures, benches, markers, camping sites and other such low-impact structures approved by the COE through site-specific review
- (d) continued support for the low-impact Nature Center in fringe of COE property adjacent to Southlake's Bob Jones Park.

400 N. White Chapel • Southlake, Texas 76092

- (e) Bob Jones Park loop road connection in adjacent portion of non-treed area of COE property, with possible small bulb of head-in parking stalls, as approved by COE

3. **Utility Corridors and/or Utility Construction in ESAs:**

The City has a developed Sanitary Sewer Concept Plan. The Sanitary Sewer Concept Plan identifies future approximate locations where a sanitary sewer line will be constructed as the areas within the city develop. With that, the city has identified two specific areas within proposed Environmentally Sensitive Areas (ESAs) where a sanitary sewer line may be constructed in the future. These two areas were discussed in the City's meeting with the staff from the COE on September 19, 2000. The city respectfully requests the COE to consider these two locations for the possibility of constructing a sanitary sewer line in the future and to identify these areas as utility corridors within the ESAs. The two areas of sewer lines are as follows: The City's N-2 and a portion of the N-3 gravity sewer line in the Walnut Grove ESA (see attached project map). Furthermore, the City respectfully requests the COE to continue to identify the culvert crossing along White's Chapel as a utility corridor within the ESA (also on map).

Sincerely,

Chris L. Carpenter, AICP
Senior Park Planner

Shawn Poe, P.E.
Assistant City Engineer

TOWN OF

TROPHY CLUB

October 10, 2000

US Army Corp of Engineers
Don Wiese CESWF-OD
PO Box 17300
Fort Worth, TX 76102-0300

Dear Mr. Wiese:

I am writing in regard to your request for comments on the master plan that is in the process of revision for Lake Grapevine. You have specifically requested that I address three areas; the proposed Environmentally Sensitive Areas (ESA), utility corridors, and our proposed road concept.

I have attached a concept plan for the area that we intend to lease from your organization in the future. The land area is 365 acres, it is located south of Marshall Creek Road, west of T.W. King Road, north of all existing subdivisions, and has a tail that follows Marshall Creek. In this area, the proposed ESA will affect a significant portion of the property south of Marshall Creek. Because we are in an early planning stage, the exact amenities are not completely known; this ESA may reduce the number of soccer, softball, and baseball fields that can be placed south of the creek.

Items two and three will be discussed together. Our future Town concept plan calls for the completion of a loop road. Because of this future road, we have indicated in the past that we would like to have a utility corridor and road that will travel through the Corp Property. These items are needed for the health, safety, and welfare of the community as a whole. A looped water system would allow for any area in Trophy Club to be serviced with water regardless of the location of future water main breaks. Trophy Club's future growth will be occurring in the central, west, and north corridors of the Town making the loop road very critical to the Town. Without the loop road and utility system, a significant fire and safety hazard could be created. A road allows for quicker police, fire and paramedic response to emergencies.

Thanks for allowing Trophy Club to participate in this process. If you should have any questions, please feel free to contact me at (817) 430-1911, extension 106.

Respectfully,

A handwritten signature in black ink, appearing to read 'Paul', followed by a long horizontal line extending to the right.

Paul Rosenberger

CROSS TIMBERS EQUESTRIAN TRAILS, INC.
P.O. BOX 255
ARGYLE, TX 76226

Don Wiese
USACE
Fort Worth, Tx.

Dear Mr. Wiese,

Cross Timbers Equestrian Trails Assoc., Inc. would like to thank you for the opportunity to sit on the task force to form a Master Plan Supplement for Grapevine Lake and its adjacent USACE property. Our organization appreciates the generous consideration you have shown to the equestrian community in the past, and your willingness to include us in your plans for the future. The process has been an informative and enjoyable one, and we are pleased with the results to date.

Cross Timbers has a maintenance agreement with the Grapevine Lake USACE to maintain three equestrian/hiking trails on Corps property. This agreement was founded in 1994 with the formation of the 5 mile Cross Timbers Trail on the North West side of the lake in the area of Rocky Point and Knob Hills Parks. Later the agreement came to include the 10 mile Walnut Grove Trail on the Southern border of the lake and the 5 mile Rocky Point Trail to the East of the Cross Timbers Trail.

The trails included in this system are dirt surface trails. Maintenance supplied by CTETA usually includes at least two work days on each trail annually, with more scheduled as the needed. Work includes, but is not limited to, mowing twice annually, trash pickup at trail heads, brush and limb trimming, weed eating, rut smoothing, and culvert placement.

CTETA also works with the Corps in the Volunteer Patrol Program. Rangers provide classroom training for participants, and CTETA requires Patrol members and their mounts to pass a riding test as well. Patrol members log their time on the trails and report to the Corps office any matters of concern. They also carry extra water, maps, first aid equipment, and Corps trail regulations. Volunteer hours are recorded and submitted to the Corps annually.

CTETA also has a bimonthly newsletter that is used as a reminder about trail use etiquette, such as calling the Corps office to check for trail closings due to wet weather before riding. This helps prevent damage to the trails that can be caused by riding in wet conditions.

We are pleased to see that the USACE has designated many areas that we ride on as Environmentally Sensitive Areas. Equestrians have long enjoyed the great variety and abundance of flora and fauna around Grapevine Lake. Wildlife seems to be very tolerant of horse activity. We regularly see many birds, small animals and reptiles when we ride. Most just watch us go by. Waterfowl and Red tailed Hawks are especially frequent sightings on the Walnut Grove Trail. Egrets and Herons are seen often on all three trails. Wildflowers abound all year round on the Cross Timbers Trail, with an especially vibrant display of Bluebonnets every Spring on the East end of the trail.

We hope that our relationship with the USACE on Grapevine Lake will continue to be one of mutual benefit in the future. We would also request to have dirt surface equestrian trails continue to be an option for future trails in ESAs. Our trails are also used extensively by hikers and joggers, families with children, people walking their dogs, bird watchers, etc. Bike trails are not used much by foot traffic due to the speed of the cyclists on the trails.

CTETA would like to request that bike and equestrian trails continue to be separate from each other. Because of the limited line of sight on a wooded trail, and the speed that cyclists travel, it is much too dangerous for the equestrian and bike traffic to share a trail. Also, putting both user groups on one trail would increase the likely hood of trail erosion. Options for providing for expansion of both bike and equestrian trails could include:

1. Allowing them in separate areas with common trail heads, such as the Dunham Road Trailhead, which serves the Cross Timbers Equestrian trail, and the Knob Hills bike trail.
2. Having trails for both uses in the same area with a degree of separation that did not allow visualization of one trail from the other. An example of this would be the bike and equestrian trails on the Greenbelt trail system from Ray Roberts Lake to Highway 380. Having dual trails in that area does not seem to have adversely affected wildlife habitat. Regular sightings of deer, turkey, small animals and many species of birds are common on those trails. However, this can only work in wide expanses of terrain, or with actual natural boundary such as the Trinity River provides on the Greenbelt trail.
3. These dual trails would not be appropriate in areas where the width of the Corps property and the density of usage would not allow the trails to stay completely separate from each other. An example of this would be areas with pre-existing trails that are on narrow strips of land between development and the lake. No additional trails of any type could be safely added in these areas. It would not be possible to physically or visually separate the trails.. Examples of the areas that would not work well for dual trails would be the Walnut Grove, Cross Timbers, and Rocky Point equestrian trails, or the Rocky Ledge bike trail. The dangers from placing dual trails in these areas would be many, as illegal activity of either user group on the others trail would result in sudden, unexpected encounters that could result in serious injury.
4. Allowing some short areas of shared trails. These would be appropriate in areas where the trails travel through a highly developed park, at roadway crossings and bridges. It would be essential to have a wide trail with open, flat terrain to allow each user group to be aware of others on the trail. Perhaps posting signs for cyclists and equestrians warning to use caution and proceed slowly would be beneficial.

CTETA has been involved with a multiple community effort to investigate the feasibility of a trail from the west end of the Cross Timbers Trail, around the West end of the Lake, and connecting to the West end of the Walnut Grove Trail on the South side of the Lake. All of the communities involved (Flower Mound, Northlake, Roanoke, Trophy Club, and Southlake) are either actively planning for development of segments of this trail or have

no objections to it being in the Corps property adjacent to their community. It is hoped that the Corps will deem this a worthy project.

The trails would be dirt surface trails. Because these trails would be new, we would be able to use trail engineering principals that would help prevent erosion by building a natural surface trail properly, taking into account fall lines, grades, etc. CTETA is hoping to lead the interested parties in seeking a grant that would fund the construction of or relocation of a bridge to cross the Denton Creek at the inlet to the lake to complete the loop.

We are requesting that the USAC will deem this a worthy project when we present it for consideration. CTETA also requests to expand some of it's trails to the north along the Cross Timbers and Rocky Point trails to adjoin the existing trails to trails that the city of Flower Mound has included in it's Parks and Trails Master Plan.

You specifically asked our opinion regarding paved trails in WMA's or ESA's. CTETA believes that the construction of these trails could be harmful to the plant and animal life you are hoping to protect in those areas. Heavy equipment will cause disturbed soil that could lead to erosion problems. Paved trails would be costly to construct and to maintain. Paved trails are conducive to abuse by motorized vehicles, high speed bike traffic and large volume use. This would definitely have a negative impact on the wildlife in the area. CTETA does believe that paved trails can be appropriate in the areas designated as high density recreational areas, such as in a campgrounds, developed parks, or ball field type facilities.

As our area becomes more heavily developed, the few natural areas we have left become more and more precious, for humans and for plants and animals. We all need quiet places where we can escape the urban hustle and bustle, slow down and hear the birds sing, walk in the shade of the old trees. The many equestrians who use the trails do so with a respect for the natural environment and a willingness to work hard to help preserve it. Riding is our connection to nature, our therapy and our peace.

In closing, CTETA would like to express an agreement with the areas the task force has identified as ESAs , and to express our hope that the USAC will continue its partnership with the equestrian community by allowing further development of equestrian trails on Corps property, including those designated as ESAs and WMAs. We would again like to thank you for including us in this process.

Alonna Sommer
President
Cross Timbers Equestrian
Trails Assoc., Inc.

Julie Landesberg
305 E. Bob Jones Road
Roanoke, Texas 76262
817-430-4077

September 28, 2000

Mr. Donald N. Wiese
Natural Resource Manager
U.S.A.C.I.L. District 1 Ft. Worth
Attn: CESWF-01D-R
P.O. Box 17300
Ft. Worth, Texas 76102

Dear Mr. Wiese:

Thank you for the opportunity to participate in the Corps' Master Plan Review for Grapevine Lake. As a member of Cross Timbers Equestrian Trails Association and the coordinator for volunteer maintenance and patrol of Walnut Grove Park, I am very interested in the results of this review. For those of us who volunteer on behalf of Walnut Grove Park, we are proud that these trails are included in the National Registry of Trails. As a resident living adjacent to this property, I can speak for my neighborhood when I say we consider Walnut Grove Park a very special and valuable asset to our community.

We were very pleased to learn that the Corps' latest review considers much of the area within Walnut Grove Park as an Environmentally Sensitive Area. Since the City of Southlake's plans for Bob Jones Park and the leased portion of Walnut Grove Park include development of a Nature Center and soft surface nature trails for hikers, this seems to be very compatible to the Corps' ESA designation.

You have asked for our comments on the proposal to allow asphalt or concrete trails in ESA's and WMA's. I strongly support the Corps' current position to consider only low-impact trails. I am not in support of hard-surfaced trails in these areas. Not only am I concerned about the impact the disturbance of construction will have, but I am concerned hard-surfaced trails will encourage increased illegal use by ATVs and bicycles on trails designated for passive use. I think this is a realistic concern as much of this land is adjacent to developed communities.

From our experience in providing volunteer maintenance, much of the erosion we currently see on our trails is a result of years of use and abuse prior to their being an organized volunteer maintenance program. We feel future damage can be controlled with:

- Proper signage - alerting users that the trails are closed in wet weather
- Increased volunteer patrol to educate users and report illegal vehicle use
- Increased enforcement of trail rules

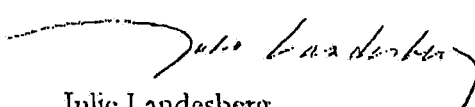
Mr. Donald N. Wiese
September 28, 2000
Page 2

I feel the Corps has been very responsible in providing the various user groups designated areas for their recreational activities. I also think the Corps has been wise to separate many activities for the sake of enjoyment and, more importantly, safety. In particular, I feel it is important to separate biking trails from equestrian/hiking trails, and I strongly urge the Corps to continue to do so.

From our vantage in providing volunteer patrol, we see first hand the safety concerns when wheeled vehicles – motorized or not – mix with equestrian/hiking activity. This past year, we have seen a major increase in illegal wheeled vehicle use on the trails designated for horseback riding and hiking. Because of this, equestrians and hikers must constantly be “on their guard,” watching and listening for oncoming vehicles so as to be able to get off the trail and out of the way safely. Since the wheeled vehicle travels at a much faster rate of speed, the more passive user really must be the one to abandon the path. It can be quite dangerous. I hope the Corps’ revised plan will reiterate the current designations of trails in the Corps’ various parks, assuring that all users have a safe and enjoyable experience on trails specifically designated for their activity.

Thank you for considering these comments.

Sincerely,



Julie Landesberg

APPENDIX B - ENVIRONMENTAL ASSESSMENT AND PUBLIC INVOLVEMENT

B-01 Environmental Assessment Process

An Environmental Assessment (EA) of this master plan supplement will be prepared by the Corps of Engineers following final approval of the supplement by the planning team. The EA and the master plan supplement will be available for a 30-day public comment period. Hard copies of the EA and master plan supplement will be available for public review at the Corps Grapevine Lake Office and at city hall of the various cities represented on the team. Electronic versions will be posted on the Corps of Engineers web site at <http://swf.usace.army.mil>. Upon completion of the EA process, a copy of the EA will be appended to the master plan supplement.

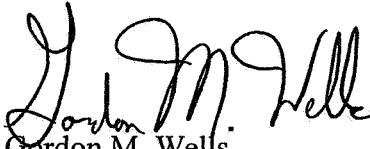
**FINDING OF NO SIGNIFICANT IMPACT
GRAPEVINE LAKE MASTER PLAN SUPPLEMENT
GRAPEVINE LAKE, DENTON AND TARRANT COUNTY, TEXAS**

An Environmental Assessment (EA) was published May 18, 2001 for implementing the Master Plan Supplement developed for Grapevine Lake, Denton and Tarrant Counties, Texas. The EA identified the affected environment, project alternatives, and addressed the potential environmental consequences of the alternatives.

Implementation of the supplement to the Master Plan is needed to incorporate current land classification standards, include contemporary requirements mandated by Federal environmental laws, and to better reflect the Corps of Engineers environmental stewardship mission. Two alternatives were considered for the proposed action: 1) No Action; 2) Implement Master Plan Supplement. These have been evaluated for impacts to vegetation, wildlife, threatened and endangered species, aquatic resources, land use, and cultural resources. Under the No Action alternative, no changes would be made to the current Master Plan of Grapevine Lake. Lands around the lake would remain classified as they are in the original Master Plan. The Recommended Plan, implementation of the Master Plan Supplement entails permanent changes to portions of the 1971 Grapevine Lake Master Plan. This would include revising resource management objectives, identifying the Environmentally Sensitive Areas on mitigation sites and all lands classified as recreation and aesthetic lands, changing the location of Roanoke Park, changing the land classification of North Shore, Knob Hills, and Rocky Point Parks, and designating utility corridors.

The alternatives considered for the proposed action would have minimal adverse impacts on terrestrial and aquatic resources, or any state or Federally listed endangered or threatened species or critical habitats. This action would therefore not warrant the preparation of an environmental impact statement (EIS). No adverse comments were received during public review of the EA; however, as a result of one comment, approximately 10 additional acres of Federal land in Oak Grove Park were designated as environmentally sensitive. This is not considered a significant change to the original EA.

DATE 16 August 2001


Gordon M. Wells
Colonel, Corps of Engineers
Commanding

ENVIRONMENTAL ASSESSMENT

**IMPLEMENTATION OF THE MASTER PLAN SUPPLEMENT
DEVELOPED FOR GRAPEVINE LAKE**

Prepared by:

**UNITED STATES ARMY CORPS OF ENGINEERS
FORT WORTH DISTRICT**

May 2001

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Executive Summary

This Environmental Assessment (EA) is prepared in accordance with provisions of the National Environmental Policy Act (NEPA) of 1969. The EA addresses the potential impacts of the Fort Worth District, U.S. Army Corps of Engineers proposed supplement to the Grapevine Lake Master Plan. The proposed supplement would incorporate current land classification standards, include contemporary requirements mandated by Federal environmental laws, and better reflect the Corps of Engineers environmental stewardship mission.

This EA addresses two alternatives to the proposed action: 1) No Action; 2) Implement the Master Plan Supplement. Under the No Action alternative, no changes would be made to the current Master Plan of Grapevine Lake. Lands around the lake would remain classified as they are in the original Master Plan. The Master Plan Supplement alternative entails permanent changes to portions of the 1971 Grapevine Lake Master Plan. This would include revising resource management objectives, identifying the Environmentally Sensitive Areas on mitigation sites and all lands classified as recreation and aesthetic lands, changing the location of Roanoke Park, changing the land classification of North Shore, Knob Hills, and Rocky Point Parks, and designating utility corridors.

The current Grapevine Lake Master Plan was last revised in September 1971. Two previous supplements approved in 1994 and 2000 added 94.1 acres of Oak Grove Park and 178 acres of Silver Lake Park to existing Park & Recreation leases held by the City of Grapevine. An EA, which accompanied the 2000 supplement, stated that past, present and future mitigation sites would be reclassified using current land classification standards set forth in EP 1130-2-550. The EA also stated the U.S. Army Corps of Engineers would designate utility corridors on Federal land to reduce future environmental impacts from new utility construction proposals.

The Master Plan Supplement was developed through a collaborative team effort involving the US Army Corps of Engineers, U. S. Fish & Wildlife Service, Texas Parks & Wildlife Department, seven cities adjoining the lake, open space advocates, equestrian groups, concessionaires, and University of North Texas, Applied Sciences Department. Individual meetings were also conducted with Parks and Recreation and Public Works officials from the cities of Flower Mound, Northlake, Southlake, Westlake, Trophy Club, Marshall Creek, Grapevine and Roanoke. Other alternatives, conceptualized during public involvement, were not carried through for further analysis because all other alternatives are variations of the proposed action.

There would be no significant adverse effects to the natural environment associated with the proposed project. The proposed action would not adversely impact biological or cultural resources within the project area. The proposed action would not affect any federal species listed or proposed for listing as threatened or endangered in accordance with the Endangered Species Act.

1.0 INTRODUCTION

The Grapevine Dam and Lake project was completed in 1952 by the U.S. Army Corps of Engineers (USACE) for the purpose of flood control and water supply. The Flood Control Act of 1946 (Public Law 526) authorized construction of the project. The project is located on Denton Creek, a tributary of the Trinity River, about 30 miles northwest of Dallas, Texas. The lake, in its function for flood control, will fluctuate from 535 feet (top of conservation pool) to 560 feet (spillway crest).

Upon completion of the dam and lake, a Master Plan for Grapevine Lake was developed so that the lake and the surrounding lands could be managed according to the designated land use. The most recent version of the Grapevine Lake Master Plan was published in September 1971. USACE, Fort Worth District (SWF) initiated a study to evaluate the potential impacts of revising the 1971 Grapevine Lake Master Plan to identify areas around the lake for reclassification to environmentally sensitive areas, change the location of Roanoke Park, change the land classification of North Shore, Knob Hills, and Rocky Point Parks, and designate areas for utility corridors. Environmentally Sensitive Areas are defined as areas having scientific, ecological, cultural, or aesthetic features (EP 1130-2-550). This study was initiated due to loss of habitat on private land, coupled with the high value of remaining habitat on Federal land at Grapevine Lake.

1.1 Purpose and Need of the Proposed Action

The purpose of the proposed action would be to implement the Master Plan Supplement developed for Grapevine Lake. By implementing the supplement, USACE would be able to revise resource management objectives, identify the Environmentally Sensitive Areas on past, present and future mitigation sites and all lands classified as recreation and aesthetic lands, change the location of Roanoke Park, change the land classification of North Shore, Knob Hills, and Rocky Point Parks, and designate utility corridors on Federal land to reduce proliferation of utility easements and associated adverse environmental impacts. The supplement to the Master Plan incorporates current land classification standards, includes contemporary requirements mandated by Federal environmental laws, and better reflects the Corps of Engineers environmental stewardship mission. The rapid rate of urbanization and the resultant widespread loss of natural resources and high quality wildlife habitat in the North Central Texas region also point to the need to adopt this supplement to the 30-year-old Master Plan. In summary, the supplement is needed to reflect the Corps of Engineers natural resources management mission of managing and conserving natural resources consistent with ecosystem management principles, providing quality outdoor recreation experiences, and serving the needs of present and future generations.

1.2 Compliance

As required by the National Environmental Policy Act (NEPA) of 1969 and subsequent implementing regulations promulgated by the Council on Environmental Quality, this Environmental Assessment (EA) is prepared to determine the potential impacts associated with implementing the Supplement to the Master Plan of Grapevine Lake. The lead agency for this change in policy is the Fort Worth District, U.S. Army Corps of Engineers.

2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 Existing Conditions

The current Grapevine Lake Master Plan was last revised in September 1971. Two previous supplements approved in 1994 and 2000 added 94.1 acres of Oak Grove Park and 178 acres of Silver Lake Park to existing Park & Recreation leases held by the City of Grapevine. An EA, which accompanied the 2000 supplement, stated that past, present and future mitigation sites would be reclassified using current land classification standards set forth in EP 1130-2-550. The EA also stated the U.S. Army Corps of Engineers would designate utility corridors on Federal land to reduce future environmental impacts from new utility construction proposals.

Currently, Federal land at Grapevine Lake is categorized by designated land use. The Master Plan designates lands necessary for operation of the project (Grapevine Lake), park areas, wildlife and nature study areas, and land to enhance the aesthetics of the project area.

During the past several years, the pace of urbanization on private land surrounding Grapevine Lake has been extremely rapid. Portions of Denton, Tarrant, and Dallas Counties, which includes areas around Grapevine Lake, have been characterized as the most rapidly developing areas in the United States. This development has resulted in significant, region-wide losses of wildlife habitat and native vegetation characteristic of the Cross Timbers and Prairies ecological area of Texas. The loss of this habitat on private land, coupled with the high value of remaining habitat on Federal land at Grapevine Lake, has greatly increased the need to protect and carefully manage remaining habitat on Federal land.

2.2 Description of the Proposed Action and Alternatives

Two alternatives were considered for the proposed action: 1) No Action, 2) Implement Master Plan Supplement. Other alternatives were not carried through for further analysis because all other alternatives conceptualized during public involvement are variations of the proposed action.

The Master Plan Supplement was developed through a collaborative team effort involving the US Army Corps of Engineers, U. S. Fish & Wildlife Service, Texas Parks & Wildlife Department, seven cities adjoining the lake, open space advocates, equestrian groups, concessionaires, and University of North Texas, Applied Sciences Department. Individual meetings were also conducted with Parks and Recreation and Public Works officials from the cities of Flower Mound, Northlake, Southlake, Westlake, Trophy Club, Marshall Creek, Grapevine and Roanoke.

2.2.1 No Action Alternative

The "No Action" or "Without Master Plan Supplement" alternative is the condition where there would be no supplement to the current Master Plan of Grapevine Lake. Under this alternative, lands around the lake would continue to be managed using the current Master Plan and retain their current classifications. This alternative would fail to address the reclassification of lands and the designation of Environmentally Sensitive Areas and utility corridors. Lake areas would eventually be developed according to their land use classification and the natural resources in these areas would be adversely impacted. Development of the existing natural areas around Grapevine Lake would result in loss of valuable wildlife habitat and other unique natural resources, impact lake water quality, and contribute to the deterioration of regional air quality. Development of these natural areas would also result in adverse impacts to the overall aesthetic quality of the lake. The "no action" alternative does not allow compliance with findings of earlier environmental assessments conducted at the lake or meet the objectives of the Corps of Engineers environmental stewardship mission as identified in EP 1130-2-540.

2.2.2 Master Plan Supplement Alternative

The preferred alternative entails implementing the Supplement developed by USACE. This supplement to the Grapevine Lake Master Plan is contained in Appendix A. A narrative summary of the changes would be as follows: Chapter 2 of the supplement (Resource Objectives) would replace Chapter VII of the 1971 Master Plan (Resource Development), Chapter 4 of the supplement (Land Classification Updates) would replace Chapter V of the 1971 Master Plan (Land Management), Figure 1 of the supplement (Land Classification Plan) would replace Plates 46 thru 54 of the 1971 Master Plan (Land Use Maps), areas designated as Environmentally Sensitive Areas (Figures 2 thru 11 in the supplement) would no longer be available for intense recreation development, the location of Roanoke Park shown on Figure 1 of the supplement replaces the location shown on plates 3, 5, 18, and 19 of the 1971 Master Plan, and the supplement would establish utility corridors on Federal land at Grapevine Lake. Eighteen of the nineteen proposed corridors would follow existing easements or roads.

Environmentally Sensitive Areas are defined as areas having scientific, ecological, cultural, or aesthetic features (EP 1130-2-550). These areas would be characterized by mature, native vegetation in a climax or near-climax status; vegetation exhibiting rich species diversity; areas valued as resting, nesting, feeding or roosting areas for important and sensitive wildlife species; areas with aesthetic function (i.e. visual buffer, wildflower viewing area); areas which serve an important water quality function; or areas with the

presence or high probability for presence of archaeological, historical, or paleontological resources. Utility corridors would be defined as areas where utilities could be or have already been placed. These corridors would be designed to be as unobtrusive as possible on surrounding habitat.

3.0 AFFECTED ENVIRONMENT/BASELINE CONDITIONS

3.1 Land Management

Under the current Master Plan, federal land at Grapevine Lake is categorized by designated land use. Current land use designates lands necessary for operation of the project (Grapevine Lake), park areas, wildlife and nature study areas, and land to enhance the aesthetics of the project area. Lands for use as park areas and aesthetic areas for public use are currently located above the conservation pool level (elevation 535 feet). Park areas are reserved for use by the general public and are to be developed and administered for park and recreational purposes. The wildlife and nature study areas are intended to provide, through proper management, suitable habitat for the propagation and preservation of the native wildlife species and to promote a greater variety of species. Aesthetic areas are determined by scenic beauty, tree cover, adaptability, access to water's edge, and by the presence of sheltered and open water. Table 3-1 presents the land use acreage for project use, public use and other land use. The total land use acreage for Grapevine Lake in accordance with GSA Form 1166 dated 30 June 1971 is 17,829 acres. The vegetation on these lands has changed dramatically over the 50 years of Federal ownership, with many areas succeeding naturally toward climax vegetation status.

Other than the lake itself, park areas occupy the most acres of land within the project area (Appendix A, Fig.1). The current Master Plan discusses each park individually as to size and gives very general descriptions as to the land cover. Terrain is categorized from flat to rolling and vegetation is characterized as sparse to heavy.

Table 3-1

Land Use Acreage

Land Use Category	Land Use Designation	Acres
Project Use	Permanent Pool	7380
Project Use	Dam & Operations Purposes	600
Public Use	Park Areas	3863
Public Use	Nonprofit Group Areas	17
Public Use	Nonprofit Group/Public Interest	25
Other Land Use	Aesthetics & Wildlife	3778
Other Land Use	Flowage Easement	2166

3.2 Wildlife Management

Under the 1971 Master Plan, efforts are made to protect preferred and critical habitat, but on a case-by-case basis. Current wildlife management techniques promote an assortment of endemic wildlife species within the project area such as owls (*Tytonidae* and *Strigidae*), raccoons (*Procyon lotor*), bobcats (*Lynx rufus*), mink (*Mustela vison*), opossums (*Didelphis virginiana*), eastern fox squirrels (*Sciurus niger*), eastern cottontail (*Sylvilagus floridanus*), and white tail deer (*Odocoileus virginianus*), as well as various species of other small mammals (USACE 1999).

The lake and associated wetlands provide important feeding, staging, and roosting areas for migratory birds. Migratory waterfowl, such as ducks, pelicans, herons, egrets, gulls and terns, migrate through the area and utilize open water, shallow wetlands and riparian vegetation for feeding and roosting (USACE 1999). The typical bird population for Grapevine Lake and the surrounding lands include the great blue heron (*Ardea herodias*), turkey vulture (*Carthartes aura*), mourning dove (*Zenaida asiatica*), red-tailed hawk (*Buteo jamaicensis*), northern bob-white (*Colinus virginianus*), blue jay (*Cyanocitta cristata*), American crow (*Corvus brachyrhynchos*), Carolina wren (*Thryothorus ludovicianus*), northern cardinal (*Richmondia cardinalis*), field sparrow (*Spizella pusilla*), red-winged blackbird (*Agelaius phoeniceus*), northern mockingbird (*Mimus polglottos*), and red-bellied woodpecker (*Melanerpes carolinus*) (USACE 1999). During recent site visits conducted by the Fort Worth District, USFWS and TPWD personnel, important neotropical species such as dickcissel (*Spiza americana*), indigo bunting (*Passerina cyanea*), and painted bunting (*Paserina ciris ciris*) were observed utilizing the project area.

3.3 Threatened and Endangered Species

The Endangered Species Act of 1973 (P.L. 93-205) and the amendments of 1988 (P.L. 100-578) were enacted to provide a program of preservation for endangered and threatened species and to provide protection for ecosystems upon which these species depend for their survival. The Endangered Species Act requires all federal agencies to implement protection programs for designated species and to use their authorities to further the purposes of the Act. The Fort Worth District, Operations Division has initiated coordination for this project with U.S. Fish & Wildlife Service informally. A total of five Federally Listed Threatened or Endangered Species occur or potentially occur within Denton and Tarrant Counties. Two species are listed as endangered, two as threatened, and one as proposed threatened (Table. 3-2).

Table 3-2

Denton and Tarrant Counties Threatened and Endangered Species

Denton County

<u>Common Name</u>	<u>Scientific Name</u>	<u>Listing Status</u>
<u>Bald eagle</u>	<i>Haliaeetus leucocephalus</i>	Threatened
<u>Black-capped vireo</u>	<i>Vireo atricapillus</i>	Endangered
<u>Mountain plover</u>	<i>Charadrius montanus</i>	P/Threatened
<u>Whooping crane</u>	<i>Grus americana</i>	Endangered

Tarrant County

<u>Common Name</u>	<u>Scientific Name</u>	<u>Listing Status</u>
<u>Mountain plover</u>	<i>Charadrius montanus</i>	P/Threatened
<u>Piping plover</u>	<i>Charadrius melodus</i>	Threatened
<u>Whooping crane</u>	<i>Grus americana</i>	Endangered

Endangered	Listed as endangered - Species in danger of extinction throughout all or a significant portion of its range
Threatened	Listed as threatened - Species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range
P/	Proposed/...

4.0 ENVIRONMENTAL IMPACTS OF PROPOSED ACTION

4.1 No Action Alternative

4.1.1 Land Management

Under the No Action alternative, the proposed supplement would not be incorporated into the Grapevine Lake Master Plan. Under this alternative, lands around the lake would remain classified as they are in the original Master Plan. Land management practices would continue to follow the land classifications as set forth in the 1971 Master Plan. No Environmentally Sensitive Areas or corridor designations would be added to the Master

Plan. Lake areas would eventually be developed according to their land use classification and the natural resources in these areas would be adversely impacted.

4.1.2 Wildlife Management

The No Action alternative would eventually have negative environmental impacts in regards to wildlife management due to the continued urban development. Lake areas would eventually be developed according to their land use classification and the natural resources, including endemic wildlife populations, would diminish. The loss of habitat would adversely affect the wildlife causing them to rely on less than optimal resources or leave the area in search of more viable habitat. Efforts would still be made to protect critical habitat, on a case-by-case basis, but such efforts would be piecemealed and lacking a comprehensive approach to wildlife management.

4.2 Preferred Alternative

4.2.1 Land Management

The proposed action would revise and supplement land management practices to include Environmentally Sensitive Areas, utility corridors, change the location of Roanoke Park, and change the land classification of North Shore, Knob Hills, and Rocky Point Parks. Park areas would be positively impacted by the proposed action by reducing the acreage on which high-density recreation facilities such as campgrounds, golf courses, and athletic fields could be constructed. A team of Natural Resource Specialists used the aforementioned criteria to locate areas within each park that qualify as Environmentally Sensitive Areas. Examples of such areas include areas dominated by climax or near-climax vegetation, areas where vegetation has been planted as mitigation for loss of natural resources, cultural sites eligible for or listed on the National Register of Historic Places, riparian areas, wetland and other high-value aquatic sites, areas where natural vegetation or topography serves as important visual or noise buffers and areas having exceptional aesthetic qualities. Table 4.1 illustrates the areas within the existing parks that will be affected by the revised land management practices. These areas are currently categorized by designated land use and would be designated Environmentally Sensitive Areas (ESA) under the proposed action.

The implementation of revised management practices would have significant positive impacts, as designated project lands would be allowed to naturally mature and develop to attain the highest integrity and quality possible. A total of 2,523 acres would be designated as Environmentally Sensitive Areas, of which, 1,716 acres are located in park areas and 867 acres are located in aesthetic areas (Table 3-1). Also, the designation of utility corridors would have positive impacts concentrating and confining future utilities in areas where utilities already exist. Eighteen of the nineteen proposed corridors follow existing easements or roads thus minimizing the possible impacts. The relocation of the Roanoke Park would allow for proper use of the lands under the new management practices.

Table 4.1

Proposed Environmentally Sensitive Areas and Acreages

Park/Area	Total Acres	ESA Acres	Description Appendix Figure Codes	Appendix A Figure #
Rockledge & Silver Lake Parks	526	178	Mature upland forest (D1, D3, S1, S2, S3), Denton Creek channel (D2), bottomland hardwood areas (D2), archeological sites (D2), heron rookery (D2), streamside protection zone (D2), shoreline (S2)	Figure 2
Oak Grove Park	785	282	Riparian and upland wildlife habitat (OG1, OG2), upland hardwoods (OG3, OG4, OG5), native prairie (OG6)	Figure 3
Meadowmere Park	250	93	Riparian corridor (MM1), mature woodlands (MM1, MM2), wetland vegetation (MM1), shoreline (MM1)	Figure 4
Walnut Grove Park	448	321	Shoreline and riparian habitat (WG1), riparian corridor (WG2), native prairie (WG2), several stream tributaries (WG1), mature upland hardwoods (WG3)	Figure 5
Marshall Creek Park	804	383	Upland and riparian hardwoods (MC1), stream tributary (MC1), upland prairie (MC2), shallow water reservoir area (MC2)	Figure 6
Denton Creek Wildlife Management Area	350	350	Mitigation sites	Figure 7
Knob Hills Park	225	177	Native prairie (KH1, KH2), hardwood areas (KH1, KH2), wooded riparian areas (KH3)	Figure 8
Rocky Point Park & Point Noble Shoreline		308	Heavily wooded riparian area (RP1), shoreline (PN1), heavily wooded area (RP1)	Figure 9
Twin Coves Park	243	225	Riparian corridors (TC1, TC2), upland and riparian woodlands (TC1, TC2)	Figure 10
Murrell Park	510	206	Riparian corridor (M1), wildflower field (M2), mature riparian and upland woodlands (M3, M4), upland woodlands (M5), native prairie (M4)	Figure 11

4.2.2 Wildlife Management

The proposed action would have positive environmental impacts on wildlife management. Through consultation with State and Federal wildlife agencies, animal and plant species of high, and regional importance would be identified and habitat for those species would be developed, improved and/or protected. The revisions would give special status species (listed threatened, endangered, and proposed) and/or their critical habitats priority in management decisions. This would prove beneficial for the threatened and endangered species listed for Denton and Tarrant Counties.

4.3 Environmental Justice

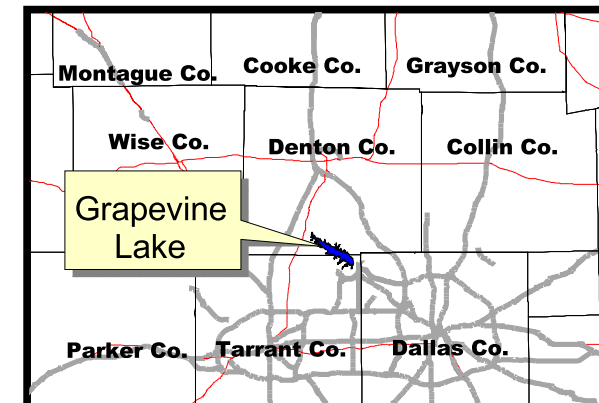
Executive Order 12898 of 11 February 1994 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," provides that each U.S. Federal Action shall identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low income populations in the United States. The preferred alternative would affect Federal lands located near the towns of Grapevine, Flower Mound, Southlake, Westlake, Trophy Club, and Roanoke. The project involves only a change in policy for management of these Federal lands. Therefore, no disproportionately high and adverse impacts on minority and low-income populations are expected. Under the definition of Executive Order 12898, there would be no adverse environmental justice impacts.

5.0 CONCLUSION

Pressure of continuing urbanization and the mitigation plans prepared for the Opryland development and Cowboys Golf Course in 2000 confirm the need to reconsider designated land uses at Grapevine Lake. Through intensive public involvement, the supplement to the Master Plan has been developed.

The proposed implementation of the supplement of the Grapevine Lake Master Plan has been evaluated in this EA. There have been no significant adverse impacts to the human environment identified from this assessment; therefore an Environmental Impact Statement would not be necessary. Pending receipt of comments to the contrary that may be received during the public comment period on this Environmental Assessment, a Finding of No Significant Impact will be signed by the District Engineer, allowing for implementation of the proposed supplement.

Grapevine Lake Master Plan

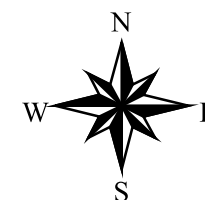


Legend

- Federal Property Line
- Utility Corridors
- Environmentally Sensitive Areas
- Approximate Lake Boundary
- Operations Area
- Multiple Resource Mgt.
- Low Density Rec.
- Intense Recreation
- Multiple Resource Mgt.
- Low Density Rec. & Wildlife Mgt.
- Multiple Resource Mgt.
- Wildlife Mgt. Area

Grapevine Lake Master Plan

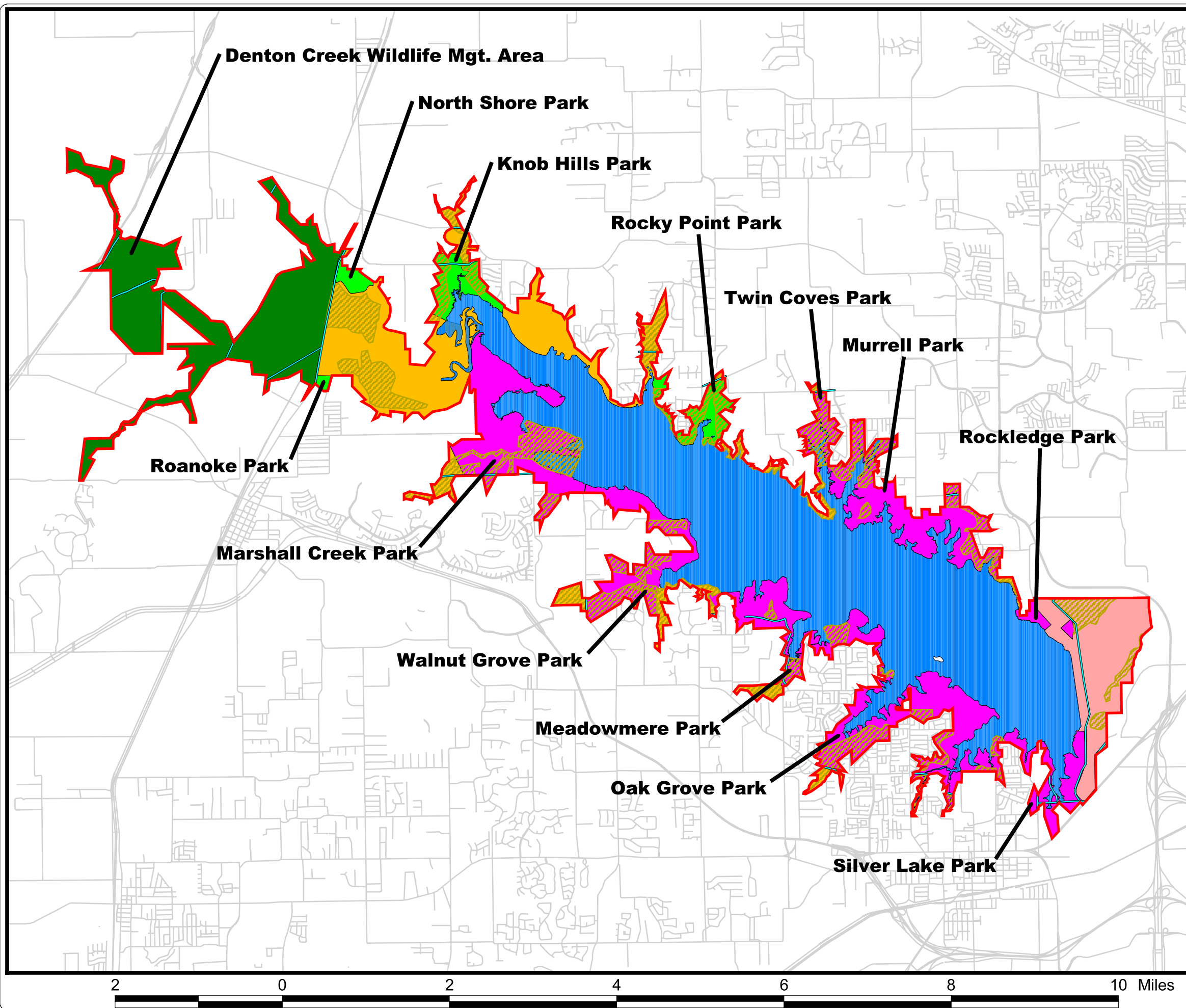
Land Classification Plan



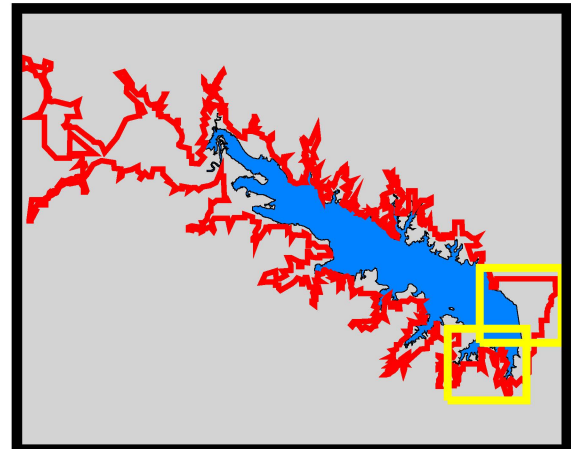
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Fig. 1



Rockledge and Silver Lake Park



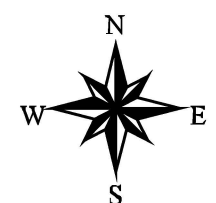
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- Federal Property Line
- Utility Corridors
- Environmentally Sensitive Areas

Note: Each Utility Corridor and Environmentally Sensitive Area is identified by a number or an alpha-numeric designation. Refer to Chapters 3 and 5 for full descriptions.

Grapevine Lake Master Plan

Utility Corridors and Environmentally Sensitive Areas



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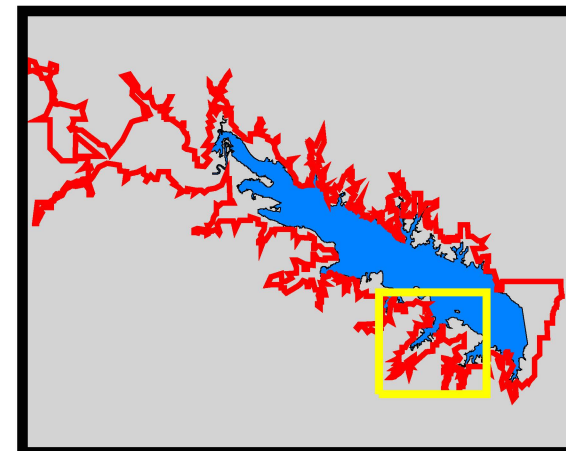
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Fig. 2



0.4 0 0.4 0.8 1.2 Miles

Oak Grove Park



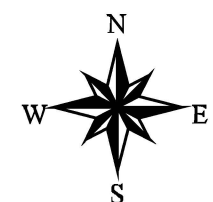
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Grapevine Lake Master Plan

Utility Corridors and Environmentally Sensitive Areas



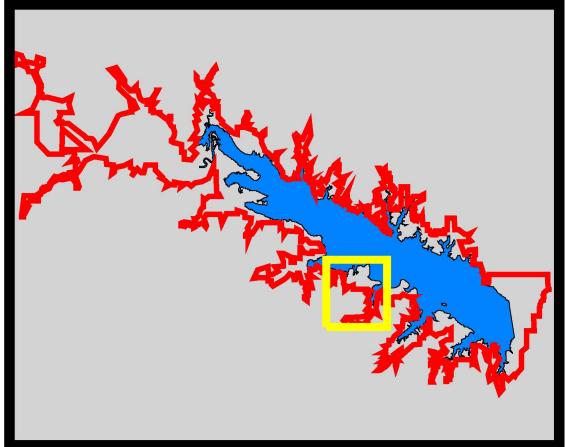
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Fig. 3

0.4 0 0.4 0.8 1.2 1.6 Miles

Meadowmere Park



Legend

- Federal Property Line
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Grapevine Lake Master Plan

Utility Corridors and Environmentally Sensitive Areas

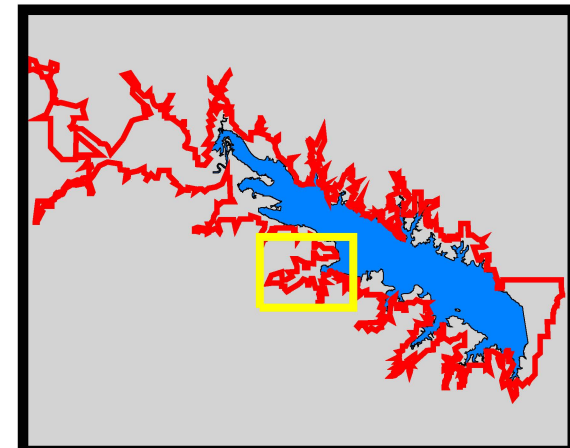


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Fig. 4

Walnut Grove Park



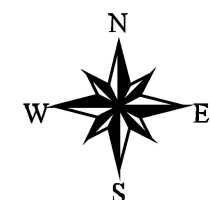
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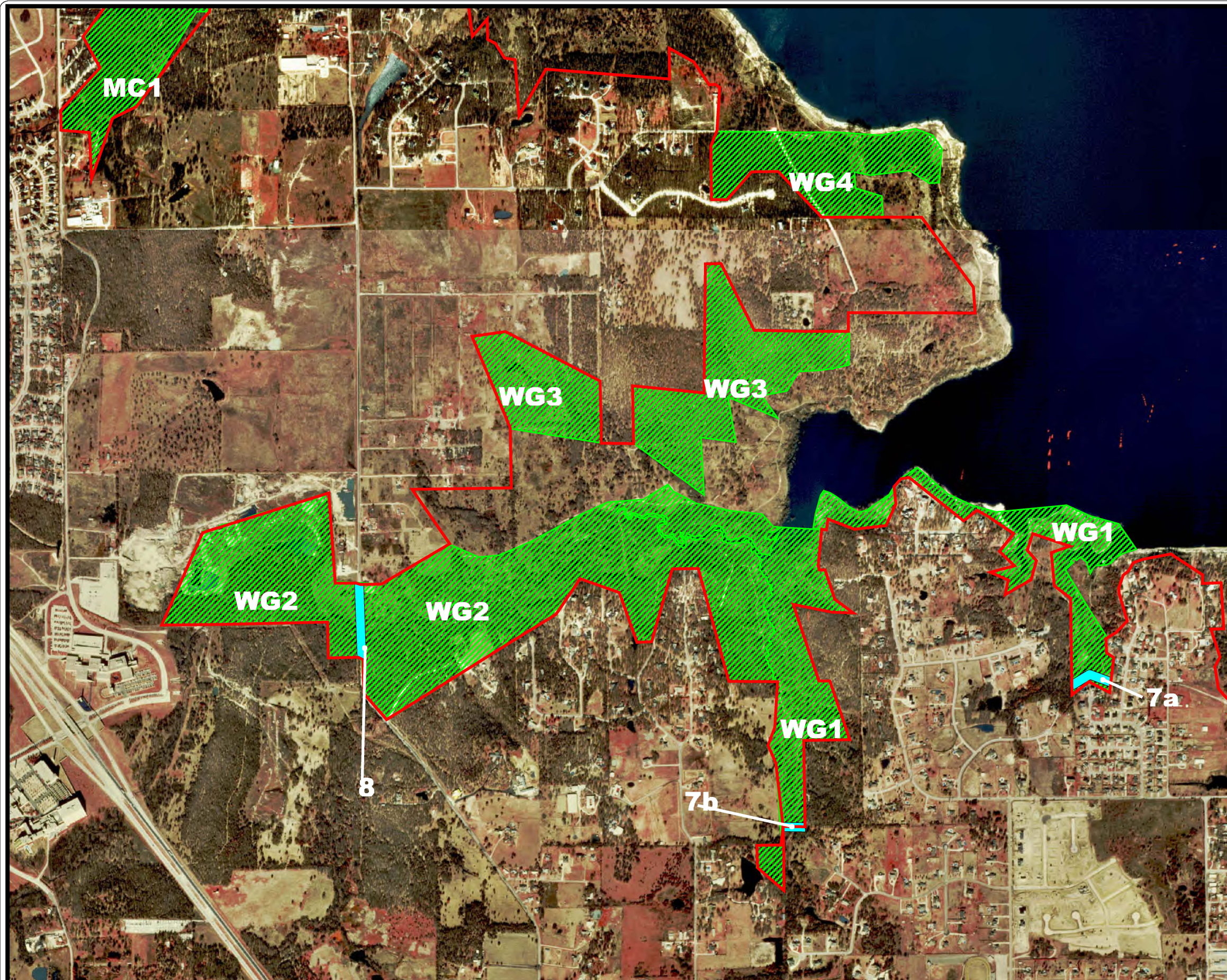
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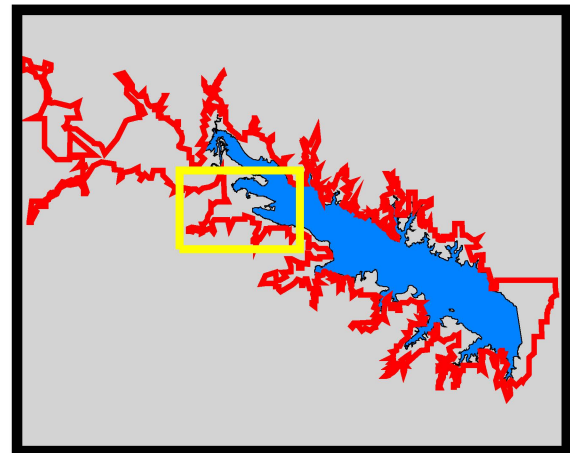
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Fig. 5



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Marshall Creek Park



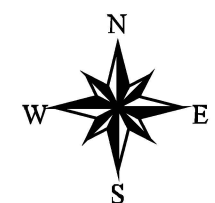
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Grapevine Lake Master Plan

Utility Corridors and Environmentally Sensitive Areas



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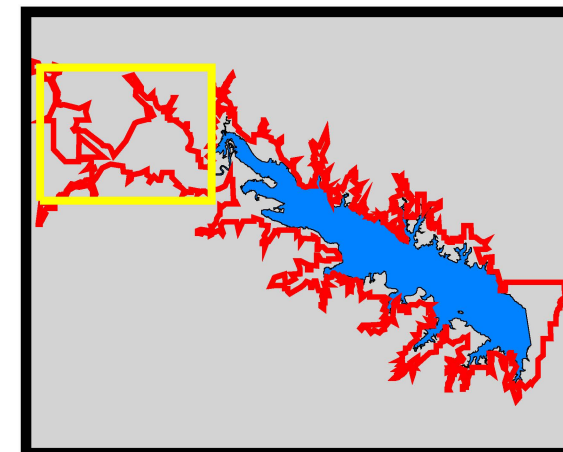
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Fig. 6



0.4 0 0.4 0.8 1.2 Miles

Denton Creek Wildlife Management Area



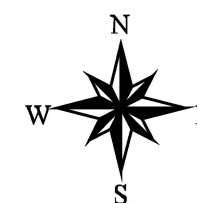
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Grapevine Lake Master Plan

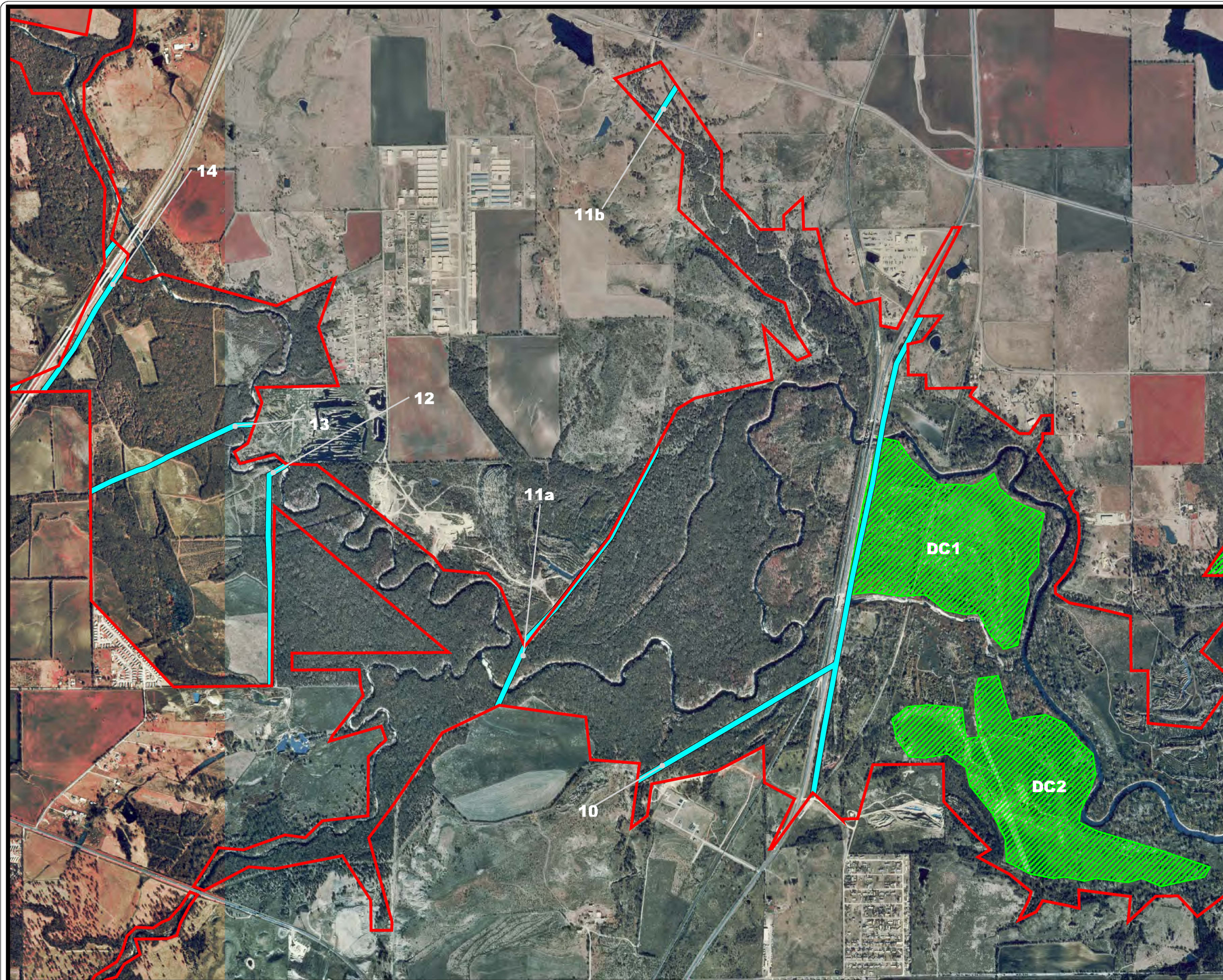
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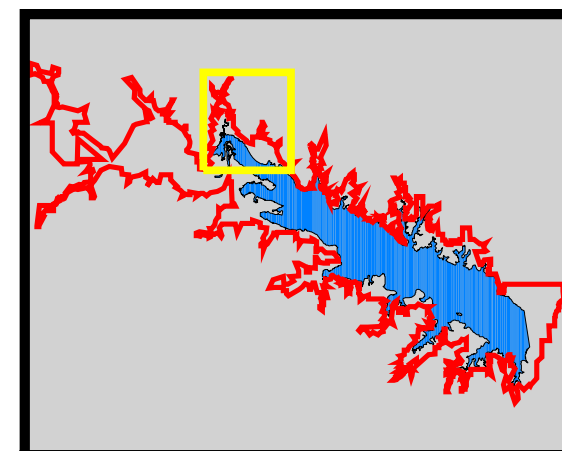
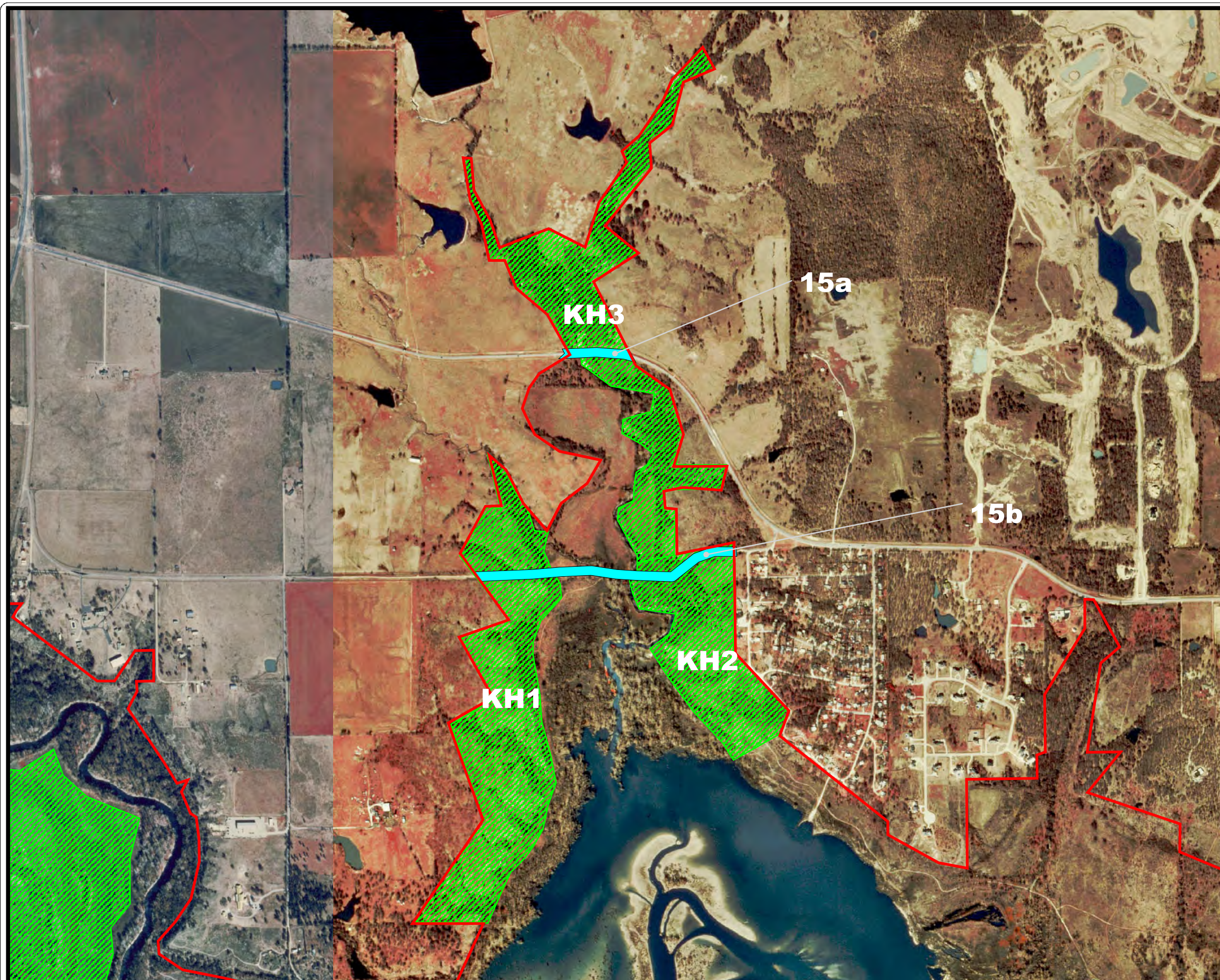
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Fig. 7



0.5 0 0.5 1 1.5 2 2.5 Miles

Knob Hills Park



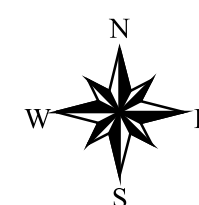
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Grapevine Lake Master Plan

Utility Corridors and
Environmentally Sensitive Areas



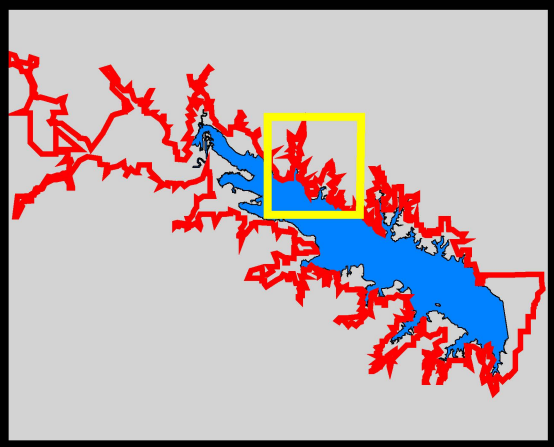
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Fig. 8

0.4 0 0.4 0.8 1.2 Miles

Rocky Point Park



Legend

Federal Property Line

Utility Corridors

Environmentally Sensitive Areas

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Grapevine Lake Master Plan

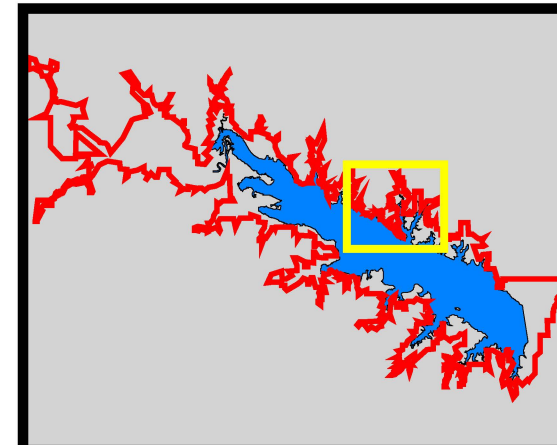
Utility Corridors and Environmentally Sensitive Areas

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Fig. 9

Point Noble Shoreline & Twin Coves Park



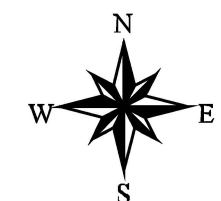
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Grapevine Lake Master Plan

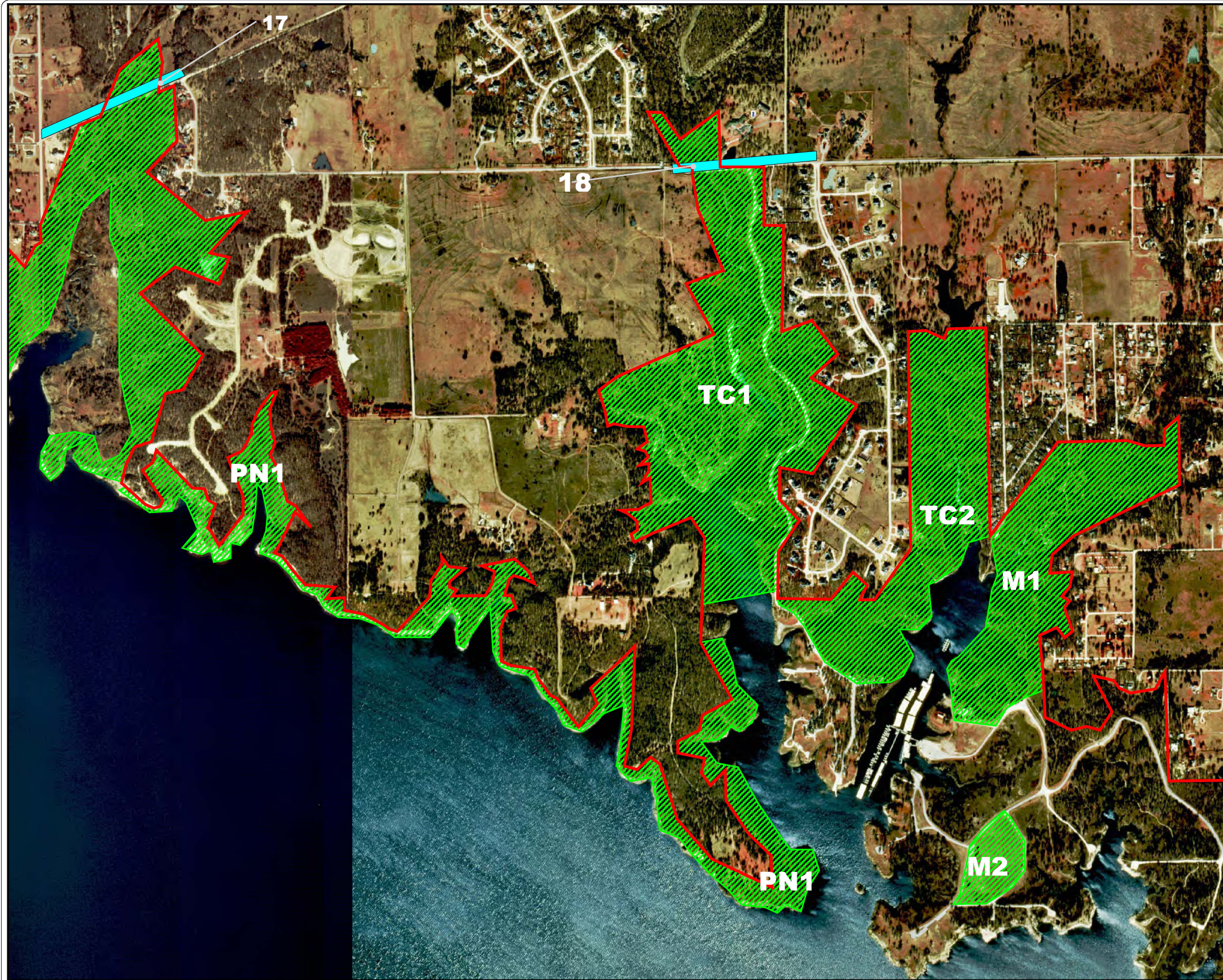
Utility Corridors and
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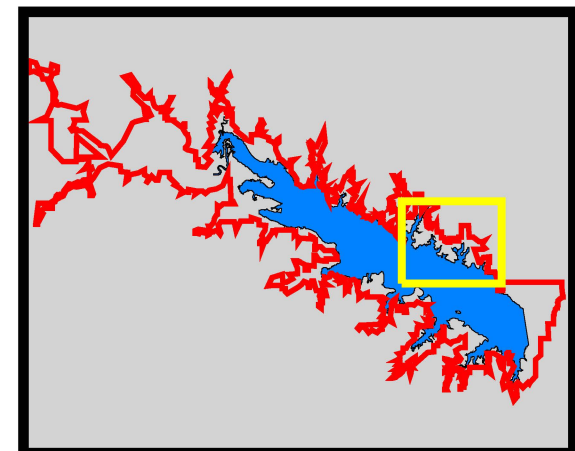
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Fig. 10



Murrell Park



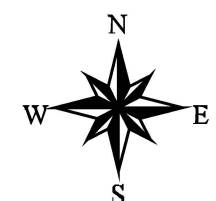
Legend

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Grapevine Lake Master Plan

Utility Corridors and Environmentally Sensitive Areas



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Fig. 11