



U.S. Army Corps of Engineers  
Fort Worth District

# LEWISVILLE LAKE

## PROGRAMMATIC ENVIRONMENTAL ASSESSMENT

Prepared by:  
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3880 Hulen Street  
Fort Worth, Texas 76107

Prepared for the: **U.S. Army Corps of Engineers Fort Worth District**

Contract Number DACA63-97-D-0026 Delivery Order Number 0006



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**August 1999**

## **EXECUTIVE SUMMARY**

This Programmatic Environmental Assessment (PEA) is being conducted in accordance with the National Environmental Policy Act of 1969 and implementing regulations. This PEA discusses the environmental impacts of more than 300 foreseeable individual development activities being proposed by 18 public and private entities on Federal lands around Lewisville Lake within the next 10 years. These activities are being assessed to properly evaluate the cumulative impacts of all of these developments. Activities with a cumulative result of “no significant impact” would be included in the supplementation of the Lewisville Lake Master Plan, the document which provides the authority for potential implementation of the proposed activities.

Over 300 PEA activities were grouped into categories by either similar actions, connected actions, or actions that would have cumulative affects. The resulting 9 categories were: Bridges and Roadways; Water Related Recreation Use Facilities; Existing Parks Enhancements; Utilities; Golf Courses; Habitable Structures; Hike, Bike, and Equestrian Trails; Land Use Classification Changes; and Miscellaneous Activities.

Category activities which had enough detailed information, were authorized within the Lewisville Lake Use Study Development Plan Guidelines, and/or whose individual impacts did not reach the level of significance were then environmentally assessed and considered for cumulative impacts.

Approximately 30 of the over 300 activities were assessed and removed from further environmental evaluation and consideration as listed in Section 6.10. These activities would require additional information, redesign, and/or require additional environmental impact analysis, e.g. a separate Environmental Assessment or an Environmental Impact Statement. However, approximately 270 activities were assessed and are anticipated to result in no significant adverse impacts, either individually or cumulatively, as long as the projects are designed to adhere to applicable regulations, policies, mitigation requirements, standards and guidelines. These activities are being recommended for a Finding of No Significant Impact (FONSI) and are being proposed for inclusion into the supplementation of the Lewisville Lake Master Plan for potential implementation of these proposed activities.

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## **SECTION 1**

### **1.0 INTRODUCTION**

This Programmatic Environmental Assessment (PEA) discusses the environmental impacts of more than 300 individual development actions being proposed by 18 public and private entities within the next 10 years on Federal lands around Lewisville Lake. The PEA identifies the future and foreseeable individual development actions, assesses the potential cumulative impacts from these actions on the human and natural environment, and presents information to be used in the ensuing supplement to the Lewisville Lake Master Plan, Design Memorandum No. 1C, June 1985. The PEA has been conducted in accordance with the National Environmental Policy Act (NEPA) of 1969 and pertinent implementing regulations.

### **1.1 Lewisville Lake Location**

Lewisville Lake is located in the southern portion of Denton County in north-central Texas (Exhibit 1). The lake is approximately 25 miles northwest of the City of Dallas central business district and is at the northern boundary of the City of Lewisville. The lake is approximately 12 miles long and over 5 miles wide in several locations. Lewisville Lake is located in the Trinity River basin along the Elm Fork of the Trinity River. Cities and towns around the lake include: City of Denton, City of Lewisville, City of Lake Dallas, City of Oak Point, City of Frisco, City of Highland Village, City of The Colony, Town of Hickory Creek, Town of Little Elm, Town of Copper Canyon and Town of Shady Shores.

### **1.2 Background**

The City of Dallas constructed the original lake, Lake Dallas, in the 1920's. The Garza Dam on the Elm Fork of the Trinity River was completed in 1927 and water storage was begun in 1928. The original dam was 10,890 feet long and was of earthen dike construction, protected on the upstream face with stone paving. The north dike was 5,240 feet long and the south dike was 5,083 feet long, separated by a service spillway 567 feet long. The height of the dam was approximately 50 feet and was set at elevation 540 feet above mean sea level (msl). Normal pool elevation was 515 feet above msl. The top width of the dam was approximately 24 feet. Because the water storage capacity of the original Lake Dallas was reduced significantly by siltation, the U.S. Army Corps of Engineers (USACE) began construction of the Lewisville Dam in 1948. Lewisville Lake was created by the completion of Lewisville Dam in 1955. The 28,980-acre lake serves to fulfill a variety of needs, both local and regional. The lake, which is operated and maintained by the USACE, is one of 25 lakes under the supervision of the District Engineer, USACE, Fort Worth District. The Lewisville Lake dam is 32,888 feet long and is constructed of selected soils placed in six-inch compacted layers. The top of the dam is 125 feet above the original streambed. During dam construction, a 16-foot diameter flood release conduit and two 60-inch municipal water supply release conduits were installed. Gates are located at the opening to each conduit to allow controlled releases of water.

The primary purposes of the lake are flood control and water conservation. Associated purposes include fish and wildlife management, recreation and hydroelectric power generation. The

operation of Lewisville Lake was modified in 1988 as part of the construction of Ray Roberts Lake, upstream of Lewisville Lake, resulting in a permanent increase of the conservation pool elevation from 515 feet above msl to the current 522 feet above msl.

A total of 555,000 acre-feet of water (at conservation pool) are stored in Lewisville Lake for municipal and industrial purposes. An additional 325,700 acre-feet is provided for floodwater storage. The Cities of Dallas and Denton contributed funds for construction in order to provide citizens with a municipal water source. From 1955 through 1997, it has been estimated that the accumulated potential flood damage prevented by Lewisville Lake and Ray Roberts Lake flood control capabilities was approximately \$16.7 million (USACE 1998). Specific statistics for Lewisville Lake are presented in Table 1.1.

Table 1.1 Lewisville Lake Statistical Data	
<b>Dam</b>	
Length (including spillway)	32,888 feet
Height (above streambed)	125 feet
Width of crown (maximum)	20 feet
Top elevation (above msl)	560 feet
<b>Flood-Control Outlets</b>	
Three gate-controlled intakes	Each 6.5 feet wide and 13 feet high
One circular flood control conduit	16-foot diameter
<b>Water-Supply Outlets</b>	
Two gate-controlled discharge conduits	60-inch diameter
<b>Emergency Spillway</b>	
Length	560 feet
Crest elevation (above msl)	532 feet
<b>Reservoir</b>	
Capacity (flood-control pool)	325,700 acre-feet
Capacity (conservation pool)	555,000 acre-feet
Area (flood-control pool)	39,080 acres
Area (conservation pool)	28,980 acres
Shore line (conservation pool)	187 miles
Conservation pool elevation (above msl)	522 feet
Flood pool elevation (above msl) – 100-year flood	537 feet

Source: USACE 1998

## SECTION 2

### 2.0 PURPOSE AND NEED

#### 2.1 Study Authority

In 1994, the Town of Little Elm and the City of The Colony were interested in constructing two new marinas on Lewisville Lake. In compliance with Engineer Pamphlet (EP) 405-1-2, dated April 1, 1994, a Marina (Market) Demand Study was conducted. After the market study was completed, a determination was made by the District Engineer that there was enough demand for a new marina; however, that demand could be addressed by allowing expansion of existing marinas instead of creation of a new marina. A 5-year moratorium on construction of new marinas was established in August 1994. The moratorium allowed existing marinas to expand to meet demand. The USACE news release announcing the moratorium stated that market conditions would be re-evaluated as the moratorium neared expiration. Since then, existing marinas have expanded as needed and additional expansion of these existing facilities has been approved.

As the end of the moratorium drew near, the USACE initiated an effort in the fall of 1997 to facilitate a comprehensive Lake Use Study. The USACE partnered with the North Central Texas Council of Governments (NCTCOG) acting on behalf of participating local governments. The USACE and NCTCOG agreed to share the total study cost. Eleven governmental entities and several leaseholders with interest in the future development of the lake participated, materially and financially, in the study effort. The Lake Use Study consists of two phases – a Water-Related Recreation Use Study (WRRUS) and a lake-wide environmental assessment (Programmatic Environmental Assessment). The WRRUS provides base level information necessary for the USACE to determine and prudently allocate within zones, facilities and services required for potential water-related development, including marinas. After completion of the WRRUS, the effort moved into the second phase, which involved submission of water-related recreation and other land use development plans and initiation of a lake-wide Environmental Assessment. The WRRUS was completed in December 1998. This PEA is part of the second phase of the USACE Lewisville Lake Use Study.

#### 2.2 Purpose

The Program Mission Statement for the U.S. Army Corps of Engineers (USACE) is:

“The Army Corps of Engineers is the steward of the lands and waters at Corps water resources projects. Its Natural Resources Management Mission is to manage and conserve those natural resources, consistent with ecosystem management principles, while providing quality public outdoor recreation experiences to serve the needs of present and future generations.

In all aspects of natural and cultural resources management, the Corps promotes awareness of environmental values and adheres to sound environmental stewardship, protection, compliance and restoration practices. The Corps manages

for long-term public access to, and use of, the natural resources in cooperation with other Federal, State, and local agencies as well as the private sector.

The Corps integrates the management of diverse natural resource components such as fish, wildlife, forests, wetlands, grasslands, soil, air, and water with the provision of public recreation opportunities. The Corps conserves natural resources and provides public recreation opportunities that contribute to the quality of American Life.”

In addition to this Mission Guidance, the USACE also has responsibilities pursuant to Federal laws to preserve, maintain, manage, and develop the project lands, waters, and associated resources consistent with these laws. The USACE accomplishes these requirements through the development of Master Plans for USACE reservoirs such as Lewisville Lake. The master plan is the basic document providing this direction and authority for project development and use. As such, it is a vital tool for the responsible stewardship of project resources. According to the enacting regulation for master plan development, Engineering Regulation (ER) 1130-2-550, a master plan must incorporate environmental considerations and focus on three primary components: (1) regional and ecosystem needs, (2) project resource capabilities and suitability, and (3) expressed public interests and desires. Specific guidance for implementing this regulation is contained in EP 1130-2-550. This guidance calls for periodic reevaluation of lake master plans by an interdisciplinary team to assess the extent to which the document serves its intended purpose, is up-to-date, is responsive to current and foreseeable regional needs, public interests and desires, and communicates direction and intent for use by project management personnel and provides for supplementation of master plans in need of only minor revisions and modifications.

The increase of the conservation pool elevation at Lewisville Lake in 1988 as a result of construction of Ray Roberts Lake and the tremendous growth in the region’s population in recent years has culminated in a considerable increase in the types and numbers of requests from entities around the lake to utilize Federal lands. These factors have put pressure on the USACE to reevaluate and supplement the current Lewisville Lake Master Plan, which was drafted in 1985. Supplementation of the current Master Plan requires consideration of the cumulative environmental effects of the proposed activities in accordance with the provisions set forth in NEPA and other pertinent implementing regulations. As noted in the introduction section of this report, this PEA takes into consideration these environmental mandates and provides the necessary environmental documentation to supplement the Lewisville Lake Master Plan.

Per regulation guidance, development of supplements requires considerable coordination and public involvement. Within the USACE, development of supplements includes coordination with all elements having responsibility for the planning, design, development, and/or management of the lake project. In the case of the Lewisville Lake Use Study, team members from the USACE included personnel from the Lake Operations, Real Estate, and Environmental Divisions, and Lewisville Lake Project Office staff. Outside of the USACE, coordination with other Federal, state, regional, and local agencies was essential, including working closely with the local entities that are proposing actions that require cost share sponsors and, of course, the general public. Proposed development plans have been submitted as part of this document by 18

separate public and private entities. The USACE partnered with the NCTCOG, representing several of these entities, through a series of scoping and planning meetings throughout both phases of the Lewisville Lake Use Study process. A steering committee was developed representing these entities. Several of the scoping/planning meetings and steering committee meetings have been attended by local mayors, city and county officials, and staff aides from both State and Federal Congressional and Senate offices. In addition, copies of the PEA and coordination letters have been sent to the United States Fish and Wildlife Service (USFWS), Texas Parks and Wildlife Department (TPWD), the Environmental Protection Agency (EPA), the Texas State Historic Preservation Office (SHPO), and the Texas Natural Resources Conservation Commission (TNRCC).

The National Environmental Policy Act (NEPA) of 1969 is the primary legislation, which sets forth regulations for the consideration of environmental consequences in the decision-making process of proposed major Federal actions. Title II of this act created the Council on Environmental Quality (CEQ) and in 1978 the CEQ issued regulations (40 CFR Parts 1500-1508) which established statutes for implementing the provisions of NEPA. This PEA serves to fulfill the requirements of NEPA and pertinent USACE regulatory guidance for implementing the procedural provisions of NEPA found in ER 200-2-2.

Although an Environmental Assessment (EA) or Environmental Impact Statement (EIS) may be required for an individual action by a Federal agency, where Federal programs involve a multiplicity of individual projects, the CEQ has endorsed the concept of a Programmatic Environmental Assessment (PEA). Because they are broad in nature, a PEA may cover basic policy issues so that these issues do not need to be repeated in subsequent EA's or EIS's prepared for the individual projects within a program. PEA's also promote consideration of cumulative environmental impacts that might be ignored in EA's or EIS's prepared for individual projects (Sigal and Webb, 1989). Thus, the CEQ promotes the concept of tiering EA's/EIS's in order "...to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review." For example, whenever a PEA has been prepared and a subsequent EA or EIS is required for a site-specific action included within the program already evaluated, the more specific EA or EIS need only refer to pertinent data from the PEA and focus on specific impacts of the proposed project. Tiered environmental documents eliminate repetitive discussions of the same issues and focus on the issues relating to specific actions.

There are no guidelines specific to the preparation of a PEA, but NEPA regulations define the scope for a PEA by directing agencies to group together actions of several types:

1. Connected actions, i.e., actions that are closely related and automatically trigger other actions that may require an EA or EIS.
2. Cumulative actions, i.e., actions that may have cumulatively significant impacts when evaluated in conjunction with other proposed actions.
3. Similar actions, i.e., actions that, in conjunction with other proposed or reasonably foreseeable agency actions, have common elements that provide a basis for evaluating



their consequences together. Similar actions may be grouped based on relevant characteristics such as timing, geographical location, impacts, alternatives, methods of implementation, media or subject matter.

The agency action to be evaluated in this PEA is the cumulative environmental impact of proposed development activities identified in Section 5 of this report and the subsequent development of a supplement to the current Lewisville Lake Master Plan that could include potential implementation of these activities.

A PEA is generally prepared in less detail and with less quantification than an EA for a specific project, since a PEA usually does not lend itself to complex quantitative analyses. Because a PEA is broad in scope, additional environmental impact analyses may be required for certain individual activities in cases where sufficient detail is not available to adequately assess the environmental impacts as part of the programmatic process. However, a subsequent EA or EIS can be tiered to the PEA and need only reference the PEA and summarize relevant issues, allowing the EA or EIS to concentrate on the specific action at its focus.

As the lead agency responsible for the operations and management of Federal lands at Lewisville Lake and because the proposed action consists of a large-scale program of multiple individual activities at the lake over a period of 10 years, the USACE has determined that a PEA is the appropriate document for assessing these activities.

Consistent with the CEQ Regulations, the scope of the analysis presented in the PEA defines the potential range of environmental impacts that may result from implementation of the proposed action, but it concentrates on those environmental components with the potential to be impacted. Environmental components with a greater potential to be significantly impacted are considered in more detail in order to provide decision-makers with sufficient evidence and analysis to determine whether to prepare a Finding Of No Significant Impact (FONSI) or an EIS (40 CFR 1508.9) would be appropriate. The affected environment is described in Section 4 and the proposed development activities and their potential impacts are described in Section 6.

## **2.3 Need**

There are more than 300 foreseeable individual development activities being planned by 18 public and private entities on Federal lands around Lewisville Lake within the next 10 years. This PEA is needed to properly evaluate and assess the cumulative impacts of all foreseeable development projects on Federal lands around Lewisville Lake and to allow supplementation of the Lewisville Lake Master Plan, the document which provides the authority for potential implementation of the proposed activities.

## SECTION 3

### 3.0 ALTERNATIVES

The NEPA regulations indicate to some extent the scope of alternatives to be considered in all EA's and EIS's. These include the proposed action, the no-action alternative, and other "reasonable" alternatives to the proposed action. These regulations also generally set the scope for a PEA by directing agencies to group activities together as described in Section 2.2 (i.e., connected, cumulative, and similar actions), and to consider direct, indirect, and cumulative impacts.

The USACE requested 10+ year development plans from all entities, individuals, leasees, etc. with interest in developing activities or projects that would affect Lewisville Lake fee properties within the development guidelines provided by the USACE. Where alternatives were provided by the sponsoring entity, they have been included in the impact assessment. Where alternatives were not provided by the sponsoring entity or did not meet the development guidelines criteria, the USACE has either proposed the no action alternative or developed an alternative that would involve modifying the sponsoring entity's original alternative to meet all applicable regulations, policies, standards and guidelines. The no action alternative is being proposed as the preferred alternative for those projects where insufficient design detail was provided to adequately assess environmental impacts. Therefore, these projects were not included in the PEA cumulative impact analysis and a separate environmental document would be required.

The proposed action assessed in this PEA is the assumed implementation of all the individual projects where any alternative other than the no action alternative was proposed.

## SECTION 4

### 4.0 AFFECTED ENVIRONMENT

#### 4.1 Physical Resources

##### 4.1.1 Topography

The topography of the area around Lewisville Lake is nearly level to moderately steep. Elevations range from 520 to 643 feet above mean sea level.

##### 4.1.2 Soils and Farmlands

Federal lands around Lewisville Lake contain five different general soil types (see Exhibit 2). Birome-Gasil-Callisburg soils are classified as moderately deep and deep soils in upland savannahs. They are well drained, gently sloping to moderately steep, loamy soils that have moderate to slow permeability. Navo-Wilson, Branyon-Buleson-Heiden, and Altoga-Vertel-Ferris soils are classified as moderately deep and deep soils on upland prairies. Navo-Wilson soils are well drained and somewhat poorly drained, nearly level to gently sloping, loamy soils that have very slow permeability. Branyon-Burleson-Heiden soils are well drained and moderately well drained, nearly level to moderately steep, clayey soils that have very slow permeability. Altoga-Vertel-Ferris soils are well drained, gently sloping to moderately steep, clayey soils that have moderate and very slow permeability. Frio-Ovan soils are classified as deep soils on bottomlands. They are well drained and moderately well drained, nearly level, clayey soils that have moderately slow and very slow permeability.

All of the Federal land around Lewisville Lake is clearly not farmland and none of the land is farmed. Therefore, the Farmland Protection Policy Act does not apply and coordination with U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) is not required.

#### 4.2 Land Use

The 16,352 acres of land surrounding Lewisville Lake are under the jurisdiction of the USACE. The land is allocated within an overall land use allocation/classification system. The classification system above the conservation pool elevation of 522 feet msl, described further below, are recreation (4,603 acres of which 1,190 are developed), wildlife management (6,758 acres), and project operations (1,190 acres). These classifications are mapped on Exhibit 3.

##### **Recreation**

a. Intensive Recreation: Facilities have been or will be provided to accommodate the recreation needs of visitors in concentrated numbers, including adjacent or associated lands without facilities as required for open space purposes, to make a whole and desirable recreation unit. Private or long-term group use of these lands will be discouraged. Management practices leading to habitat improvement for the benefit of wildlife will be encouraged. No licenses, permits, or easements will be issued for such incompatible man-made intrusions as underground or exposed pipelines, cables, overhead transmission lines, or non-project roads. Exceptions to this restriction may be made where necessary to serve a demonstrated public need in those instances

where no reasonable alternative is available. No hunting or agricultural uses are permitted on this land.

b. Low-Density Recreation: Lands designated as public use areas for low-density recreational activities by the visiting public. Natural conditions preclude intensive public use development because extensive alteration of natural systems would be required. Difficult access is also a factor indicating low-density as the most appropriate use for these lands. This land use type may be appropriate when a conflict exists between public use and wildlife habitat. Private or long-term exclusive group use of these lands will be discouraged. Management practices leading to habitat improvement for the benefit of wildlife are encouraged. No licenses, permits, or easements will be issued for such incompatible man-made intrusions as underground or exposed pipelines, cables, overhead transmission lines, or non-project roads. Exceptions to this restriction may be made where necessary to serve a demonstrated public need in those instances where no reasonable alternative is available. No hunting or agricultural uses are permitted on this land.

c. Future Low-Density Recreation: Future low-density recreation use classifications have been assigned to areas where such use is planned. These lands should be managed in the interim for low-density recreation/wildlife management purposes.

### **Wildlife Management**

a. Wildlife Management Areas: Lands designated as habitat for fish and wildlife or for propagation of such species and where wildlife habitat maintenance or improvement is appropriate. Private or exclusive group use of these lands will not be permitted. Vehicles will not be allowed, nor any structures not directly related to access or control of access through the area. Exceptions to this restriction may be made where necessary to serve a demonstrated public need in those instances where no reasonable alternative is available. Licenses, permits, or easements may be issued on a case-by-case basis for such man-made intrusions as underground or exposed pipelines, cables, overhead transmission lines, or non-project roads. Such out grants will include appropriate controls as required to preclude or minimize the adverse visual or other impacts upon the natural character of the area. Wildlife management lands are generally available for selected low-density recreation activities such as hiking, hunting, fishing, nature study, nature photography, wildlife observation, and other related activities. Public access to wildlife management lands may be restricted at certain critical periods when wildlife would otherwise be adversely affected, such as during critical breeding and nesting periods. Wildlife habitat improvements, which exceed the natural capability of the land, are not permissible offsets.

b. Natural Areas/Environmental Sensitive Areas: Lands designated for preservation of scientific, ecological, historical, archeological, or visual values. Lands managed to preserve and protect rare, unique, or sensitive species of flora and fauna are designated as natural areas. Limited or no development is contemplated on land in this classification. Such lands will normally be continuously available for low-density recreational activities. Vehicles will not be allowed, nor any structures not directly related to access or control of access through the area. No licenses, permits, or easements will be issued for such incompatible man-made intrusions as underground or exposed pipelines, cables, overhead transmission lines, or non-project roads.

### **Project Operations**

Land designated to provide for safe, efficient operation of the project for those authorized purposes other than recreation and fish and wildlife. This includes, but is not limited to, the land on which project operational structures are located.

### **4.3 Cultural Resources**

There are 153 recorded cultural resource sites located on USACE fee property at Lewisville Lake. An adequate cultural resources inventory of all fee property located upstream from the dam was accomplished in the 1980s prior to the pool raise. Of the 146 cultural resource sites located upstream from the dam, only 11 have been determined eligible for the National Register of Historic Places (NRHP). The other 135 sites located upstream from the dam have been determined ineligible for the NRHP.

The approximately 2,000 acres of USACE fee property located downstream from the Lewisville Lake dam have **not** been inventoried adequately for cultural resources. Within these 2,000 acres, there are seven recorded cultural resource sites. None of these seven sites has been evaluated for NRHP eligibility.

In accordance with the National Historic Preservation Act of 1966, as amended, the steps required to determine a proposed project's potential to affect historic properties (NRHP-eligible cultural resources) would depend upon that project's location relative to the Lewisville Lake dam. For projects located downstream from the dam, a cultural resources survey would be required for the project's area of potential effects. If cultural resources are identified, they must be evaluated for NRHP eligibility in consultation with the Texas State Historic Preservation Officer (SHPO). For projects located upstream from the dam, the preceding steps are not necessary because inventory and evaluation already have been completed.

If no cultural resources are/were identified within the project's area of potential effects, or if the cultural resources are/were determined to be ineligible for the NRHP, then a finding of no historic properties affected shall be coordinated with the SHPO. If historic properties (NRHP-eligible cultural resources) are/were identified which would be affected adversely by the project, then the Advisory Council on Historic Preservation shall be notified, and the SHPO shall be consulted to evaluate alternatives that could avoid, minimize, or mitigate adverse effects on historic properties. Such alternatives can include mitigation through data recovery.

### **4.4 Water Quality**

#### **4.4.1 Surface Water**

The Texas Natural Resources Conservation Commission (TNRCC) has established surface water quality standards on the basis of beneficial uses such as domestic water supply, propagation of fish and wildlife, contact recreation, and non-contact recreation. Texas surface water standards for Lewisville Lake (Segment 0823) with these four beneficial uses are given below:

Chlorides, maximum annual average (not to exceed)	80 mg/l
Sulfates, maximum annual average (not to exceed)	60 mg/l
Total Dissolved Solids, maximum annual average (not to exceed)	500 mg/l
Dissolved Oxygen, minimum 24-hour mean	5.0 mg/l
pH, allowable range	6.5 to 9.0
Fecal Coliforms, log average (not to exceed)	200/100 ml
Temperature, maximum	90° F

(Source: *Appendix A, Chapter 307 – Texas Surface Water Quality Standards*)

The TNRCC annually submits its Clean Water Act, Section 303(d) List of Texas water bodies that do not meet or are not expected to meet applicable water quality standards to the EPA. Lewisville Lake was not included on this list of water bodies. Segment 0822, Elm Fork Trinity River below Lewisville Lake, however, was indicated on the list with a medium priority and impairments from both point and non-point sources. Specifically, in the upper 15 miles, dissolved oxygen concentrations are occasionally lower than the standard established to assure optimum conditions for aquatic life. The average lead concentration in water exceeds the human health criterion for freshwater fish. This criterion was established to protect consumers from bioaccumulation of toxicants in fish tissue. Risk of exposure to lead from fish consumption has not been assessed. The mean dissolved lead concentration exceeds the criterion established to protect aquatic life from chronic exposure.

The Elm Fork, Segment 0824, Elm Fork Trinity River above Ray Roberts Lake is also indicated on the list as having a medium priority as a result of non point source pollution. In the lower eight miles of the segment, the mean dissolved lead concentrations exceed the criteria established to protect aquatic life from chronic exposure. This section of the Elm Fork was removed from the list for cadmium concentrations. Based on a revised methodology for determining the cadmium concentration, the mean was determined to be below the criterion for chronic exposure. (Source: *State of Texas 1999 Clean Water Act Section 303(d) List and Schedule for Development of Total Maximum Daily Loads, Texas Natural Resource Conservation Commission*). While these results do not indicate a water quality problem in Lewisville Lake, areas up and downstream of the lake do have water quality issues and discharges in Lewisville Lake may contribute to the poor water quality observations in the identified reaches.

The TNRCC also administers Section 401 Water Quality Certification under the Clean Water Act. Activities requiring a Section 404 permit would also require Section 401 Water Quality Certification from the TNRCC.

The EPA web site Ambient Water Quality Data (Conventional) for the Elm Fork Trinity River from 1990 through 1998 recorded the monitoring history shown on Table 4.1.

A detailed study and analysis of the available water quality data is beyond the scope of this PEA.

Table 4.1 Ambient Water Quality Data for Elm Fork Trinity River from 1990 through 1998			
Water Quality Parameter	Total Number of Observations	Observations Exceeding Criteria	Percent Observations Exceeding Criteria (%)
Phosphorous	372	145	38.98
PH	1,267	2	0.16
Dissolved Oxygen	1,243	255	20.51
Ammonia	324	28	8.64

(Source: [http://www.epa.gov/surf2/hucs/12030103/indicators/data/iii6\\_usdvw.html](http://www.epa.gov/surf2/hucs/12030103/indicators/data/iii6_usdvw.html))

The EPA originally promulgated its National Pollutant Discharge Elimination System (NPDES) General Permits for Storm Water Discharges from Construction Activities in Region 6 on September 9, 1992. This permit was effective for a period of five years. On July 6, 1998, EPA released a second permit to replace the original expired permit. The permit states that sediment shall not leave a construction site. If sediment escapes a construction site, it must be removed at a frequency sufficient to minimize offsite impact (Part IV.D.2.a). Further, storm water management controls must be implemented such that the site is in compliance with Part IV.2.b. (1) and (2). This section specifically states that changes in either the peak flow or total volume of flow discharged from a site be minimized such that no change in the flow regime of receiving waters occurs. The permit states that this objective may be achieved via several best management practices (BMPs) including silt fence, rock check dams, detention basins, retention basins, velocity dissipators, and infiltration devices.

Intense development has occurred in the vicinity of Lewisville Lake and further development is planned in the future. This urban development has had the impact of increasing concentrations of sediments, metals, nitrogen and phosphorous in storm water runoff. Additionally, urban development causes a change in the runoff travel time, an increase in the peak flow and an increase volume of runoff as the percentage of impervious surfaces within the watershed increases. As an indication of the intense development currently occurring in Texas, EPA's Storm Water General Construction Permit Notice of Intent (NOI) Database currently lists approximately 34,000 construction sites in Texas that have filed for coverage under the General Construction Permit. Approximately 720 permits have been issued in Denton County and 270 of these permits have been issued in the area immediately surrounding Lewisville Lake.

On September 29, 1995, EPA promulgated its Final NPDES Storm Water Multi Sector General Permit for Industrial Activities. This permit includes operational guidelines for medium and large municipal separate storm sewers, water transportation facilities, and other industrial activities. Part VI.C.3 of the permit states that measures and controls in the form of pollution prevention measures, BMP's, and other controls shall be implemented to reduce possible pollutant discharges at the source. A listing of current general discharge permittees is provided on EPA's website under its permit compliance system. This system tracks permittees that have NPDES permits to discharge wastewater into rivers. Exhibit 4 identifies the location of currently issued permits in the area immediately surrounding Lewisville Lake.

On January 9, 1998, EPA promulgated its Phase II regulations for small municipalities. Communities identified in this document must meet six minimum control measures in order to apply for coverage by 2002. These measures are:

1. Public Education and Outreach on Storm Water Impacts
2. Public Involvement/Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post-Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention/Good Housekeeping for Municipal Operations

This document provides guidance to small communities to achieve the goals set out in this permit. Within the Lewisville Lake watershed the communities of Corinth, Denton, Denton County, Hickory Creek, Highland Village, Lake Dallas, Double Oak, Flower Mound, and Lewisville are identified to meet the coverage requirements.

It would be required that NPDES permit guidelines be adhered to in both the construction and the operational stage of all developments within the Lewisville Lake study area. Application of the guidelines set out in these permits should mitigate adverse impacts future development activities would have on water quality in Lewisville Lake. Active USACE monitoring and EPA enforcement of these guidelines would form the baseline for the mitigating actions set out in this PEA.

The objectives of the many permits promulgated by the EPA may be achieved through alteration of everyday design and operating practices and implementation of multiple structural BMP's. For more detailed information on the various types of BMPs see Section 8.2. BMPs would be required for all activities.

Documentation of compliance with all applicable Federal and state water quality regulations would need to be provided for each project/activity along with the final plans and specifications for environmental and master plan review prior to issuance of USACE real estate instruments.

#### **4.4.2 Groundwater**

The subject property is underlain by the Upper Cretaceous Woodbine Formation on the west side of the lake and the Eagle Ford Formation on the east. The Woodbine Formation is sandstone with clay and shale. The upper part is mostly fine-grained, well-sorted, reddish-brown sandstone with ripple marks and large-scale cross bedding. Some of the sandstone has large discoid concretions. The middle part is mostly fine-grained sandstone, which is cross-bedded. Interbeds of carbonaceous clay are present. The lower part is interbedded sandstone and clay. The sandstone is fine grained and very thinly bedded to massive. The thickness of the Woodbine Formation ranges from 175 to 250 feet. The Eagle Ford Formation is a medium to dark gray selenitic shale with some thin, platy beds of sandstone and sandy limestone. It contains marine megafossils. The thickness of the Eagle Ford Formation is reported to range from 300 to 400 feet.



Usable water-bearing aquifers in the area of study are in the Woodbine aquifer and in the Paluxy and Twin Mountains Formations. The latter two formations are part of the Trinity Group aquifer, a major aquifer in the state of Texas. A major aquifer is defined as "one that yields large quantities of useable quality water in a comparatively large area of the state." The Woodbine aquifer is a minor aquifer. Minor aquifers yield large quantities of water in small areas or relatively small quantities of water in large areas of the state.

The Paluxy Formation is composed of sandstone, mudstone, and limestone. Recharge to the unconfined portion of this aquifer is primarily from infiltration of precipitation and seepage of surface water bodies along the outcrop of the formation. The Twin Mountains Formation is composed of sand with inter-bedded clay, limestone, dolomite, and gravel. The form of recharge is similar to that of the Paluxy Formation. The Woodbine aquifer is composed of friable, iron bearing fine-grained sand and sandstone with interbedded shale, sandy shale, and clay. Rainfall on the outcrop is the primary source of recharge to the Woodbine aquifer.

With increased usage of surface water from Lewisville Lake, it may become necessary to supplement with groundwater. Additional usage of aquifers in the area may impact groundwater (i.e., increased drawdown leading to decreased water quality).

#### **4.5 Wetlands**

Wetlands and other waters of the U.S. are regulated under Section 404 of the Clean Water Act, as amended, and Executive Order (EO) 11990, Protection of Wetlands. Information regarding wetlands in the vicinity of Lewisville Lake was obtained from an in-house literature review and an on-site visit. The in-house literature review included U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps, USGS 7.5-minute topographic quadrangles, the Soil Conservation Service (SCS) published soil survey for Denton County, Texas, and color infrared aerial photographs. During site visits, accessible portions of proposed project areas were examined for the presence of wetlands. A wetland delineation, which identifies the wetland boundary, was not performed at any site. Rather, a general determination was made as to the presence or absence of wetlands at a location. If a site was not accessible, a determination was made on the probability of wetland occurrence based on information gathered during an in-house review and on sites near and similar to the areas through which the proposed routes would pass. Documentation of compliance with all Section 404 regulations and/or EO 11990 would need to be provided for each project along with the final plans and specifications for environmental and master plan review prior to issuance of USACE real estate instruments.

Denton County hydric soils are Kaufman clay and Trinity clay in flood prone areas (SCS, 1980). The banks of the lake on the eastern side of the lake are generally too steep or of unsuitable substrate to accommodate a great deal of wetland development. The more gradual slope of Lewisville Lake's bank on the western side allows for a greater floodplain area and, subsequently, more wetlands. Wetlands are also prevalent at the distal end of the Hickory Creek arm and in the area along the Elm Fork of the Trinity River before it enters the lake. These wetlands provide food and habitat for migrating waterfowl as well as for year-round resident faunal species. Such species as ducks, coots, grebes, herons, gulls, terns, and hawks may utilize the area for feeding, perching and roosting. Migratory species may also stage in such areas.

Land-based animals use wetlands as feeding grounds and cover. Aquatic organisms may also utilize wetlands as cover and nursery areas.

The type of wetland encountered during the site visit was primarily emergent shoreline marsh in the sloughs or fingers of the lake. There are also flooded forested areas and wooded riparian wetlands along most streams. Rooted aquatic vegetation is present but not widespread in Lewisville Lake and areas of rooted aquatic vegetation do qualify as wetlands. Exhibit 5 shows wetlands identified on the NWI maps covering Lewisville Lake.

#### 4.6 Aquatic Resources

Lewisville Lake, with a surface area of 28,980 acres, has designated water uses of Contact Recreation, High Quality Aquatic Habitat and as a Public Water Supply. There are 19 permitted domestic outfalls in the lake, permitted to release 19.08 million gallons per day. There is one industrial outfall but no known releases. Lewisville Lake has a good water quality status with only a few violations in dissolved oxygen and in sulfates. The minimum dissolved oxygen level is 5.0 milligrams per liter and the maximum allowable sulfate level is 60 milligrams per liter.

The lake is rated with a Secchi disk transparency of 1.02 meters ranking the lake approximately in the middle of all Texas reservoirs that were ranked.

The fish of Lewisville Lake represent a typical assemblage of reservoir fish. Included are recreationally important species such as channel catfish (*Ictalurus punctatus*), largemouth bass (*Micropterus salmoides*), white crappie (*Pomoxis annularis*), black crappie (*P. nigromaculatus*), bluegill (*Lepomis macrochirus*), redear sunfish (*L. microlophus*), warmouth (*L. gulosus*), striped bass (*Morone saxatilis*), white bass (*M. chrysops*), and hybrid bass (a cross of the two species of *Morone*). Rough fish such as gar (*Lepisosteus spp.*), bowfin (*Amia calva*), and buffalofish (*Ictiobus spp.*), are present and utilized by many people as food fish. There are also a typical assortment of fish such as minnows (Family Cyprinidae), shiners (*Notropis spp.*), shad such as gizzard shad (*Dorosoma cepedianum*), and inland silverside (*Menidia beryllina*), necessary to provide food for more desirable species.

The fish species known to occur in Lewisville Lake are species, which are typical for most water bodies in the area. No surprise or unusual species are known to occur here.

#### 4.7 Floodplains

Executive Order 11988 – Floodplain Management, was issued May 24, 1977, in furtherance of the National Environment Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), the National Flood Insurance Act of 1968, as amended (42 U.S.C. 4001 et seq.), and the Flood Disaster Protection Act of 1973 (Public Law 93-234, 87 Stat. 975). The purpose of the Order was to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.

The order states that each agency shall provide and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and

preserve the natural and beneficial values served by floodplains in carrying out its responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities.

In carrying out the activities described in Section 1 of this Order, each agency has a responsibility to evaluate the potential effects of any actions it may take in a floodplain; to ensure that its planning programs and budget requests reflect consideration of flood hazards and floodplain management; and to prescribe procedures to implement the policies and requirements of Executive Order 11988.

Title 44 Code of Federal Regulations Chapter 1 Part 9 - Floodplain Management and Protection of Wetlands (44CFR9) is the regulation that sets forth the policy, procedure and responsibilities for the Federal Emergency Management Agency (FEMA) to implement and enforce Executive Order 11988, Floodplain Management, and Executive Order 11990, Protection of Wetlands.

Lewisville Lake has been mapped by FEMA in regard to special flood hazard zones (44CFR Chapter 1 Part 65). Special hazard zones include areas of shallow flooding, areas of special flood-related erosion and areas of special flood hazard. Title 44 CFR Chapter 1 part 59.1 defines each of these special hazard zones. The flood insurance rate map (FIRM) series for Denton County, Texas and Incorporated Areas (Map Number 48121C00000 E) delineates all special flood hazard zones for Lewisville Lake. The following individual maps cover all USACE incorporated areas of Lewisville Lake:

48121C0245,	48121C0385,	48121C0391,	48121C0392,	48121C0393,	48121C0394,
48121C0405,	48121C0410,	48121C0415,	48121C0420,	48121C0527,	48121C0529,
48121C0531,	48121C0532,	48121C0533,	48121C0534,	48121C0545,	48121C0555,
48121C0556,	48121C0557,	48121C0558,	48121C0559,	48121C0565,	

Any proposed project to be constructed on USACE property that would impact special hazard zones as indicated in the maps above would be subject to the rules and regulations as outlined in Title 44 CFR Chapter 1 with particular reference to Parts 9 (Floodplain management and protection of wetlands), and 65 (Identification and mapping of special hazard zones) as administrated by FEMA through:

Town of Copper Canyon, Town of Corinth, Town of Cross Roads, Denton County, City of Denton, Town of Hickory Creek, City of Highland Village, City of Lake Dallas, City of Lewisville, Town of Little Elm, Town of Shady Shores and City of the Colony.

Exhibit 6 shows the FEMA Zone A (100-year boundary) and Zone X (500-year boundary) based on the FEMA Q3 floodplain series. The Q3 data series was produced by FEMA. The procedure involved the digital scanning of FEMA paper maps and their conversion to vector format. At a regional level the map provides significant detail about the location of floodplains in the governing counties and cities. At a local scale, the accuracy of the data sets is inconsistent and

should not be used for any detailed small-scale, site-specific floodplain studies. The map series as indicated above should be addressed for this information.

The Cities and Towns indicated above might have additional floodplain ordinances and permitting requirements (such as Floodplain Development Permits) separate from the FEMA permits. Each City or Town whose jurisdiction includes a portion of a proposed project would have to be contacted in order to determine what additional floodplain permitting is required.

The special hazard zones describing the Elm Fork between Lewisville Lake and SH121 require a Corridor Development Certificate (CDC) permit for approval of any proposed projects within the regulatory (100-year floodplain) and review (Standard project floodplain) areas. Exhibit 7 indicates the CDC boundary south of Lewisville Lake. The CDC process is a joint effort of the NCTCOG, the USACE and member NCTCOG cities with jurisdiction over the Trinity River floodplain. The purpose of the CDC process is to affirm local government authority for local floodplain management while establishing a set of common permit criteria and procedures for development within the Trinity River Corridor. The CDC process ensures that a development's effect on future flooding would be considered in floodplain permitting decisions. The CDC program is administered by member cities and counties, with technical oversight by the USACE and the NCTCOG. The City of Lewisville is a member of the CDC process and has jurisdiction over the Elm Fork between Lewisville Lake and SH 121.

In addition to the floodplain issues described above, the USACE has established a 100-year flood pool around Lewisville Lake. According to the Lewisville Lake Use Study Development Plan Guidelines (Exhibit 8), and USACE personnel, this flood pool includes all areas below the 537.00 msl contour above the dam. The Lewisville Lake Use Study Development Plan Guidelines outline the development for any projects within the flood pool. This document outlines what structures may be allowed in the flood pool and the additional requirements (e.g. no reduction in storage capacity, no impact to the floodplain elevation) needed for USACE approval. In general, the policy disallows the construction of "habitable" structures below 537.00 msl and requires compensatory storage for any fill below 537.00 msl.

## **4.8 Terrestrial Resources**

### **4.8.1 Vegetation**

The vegetation of the Lewisville Lake Project area can be classified into two communities, the Blackland Prairies and the Cross Timbers and Prairies. (F.W. Gould, Vegetational Areas of Texas, 1962, 1969)

#### The Blackland Prairies

This community has a gently rolling to nearly level topography, which is well dissected and marked by the rapid surface drainage. The soil composition for this community is very fertile consisting of dark-colored alkaline clays mixed with gray acidic sandy loams. Blackland Prairie soils support a tall-grass prairie dominated by little bluestem (*Schizachyrium scoparius*). Other important grasses are big bluestem (*Andropogon gerardii*), Indiangrass (*Sorghastrum nutans*), switchgrass (*Panicum virgatum*), sideoats grama (*Bouteloua curtipendula*), hairy grama

(*Bouteloua hirsuta*), tall dropseed (*Sporobolus asper*), silver bluestem (*Bothriochloa laguroides*), and Texas winter grass (*Nassella leucotricha*). Under heavy grazing, Texas winter grass, buffalo grass (*Buchloe dactyloides*), Texas grama (*Bouteloua rigidiseta*), and many annuals increase or invade the land. Various post oak (*Quercus stellata*) wooded areas dot the landscape as well as areas of pecan (*Carya illinoensis*), cedar elm (*Ulmus crassifolia*), soapberry (*Sapindus saponaria*), honey locust (*Gleditsia triacanthos*), sugar hackberry (*Celtis laevigata*), and Osage orange (*Maclura pomifera*). Invasive mesquite (*Prosopis glandulosa*) is common in disturbed areas. Most of the Blackland Prairie has been lost to other land uses. Only a few remnants are protected as hay meadows or conservancy land.

#### The Cross Timbers and Prairies

The Cross Timbers and Prairies are composed of alternating bands of wooded habitat dominated by post oak and blackjack oak (*Quercus marilandica*) scattered throughout prairie regions. Common Grass species are little bluestem, Indiangrass, and big bluestem. Additional woody species include cedar elm, sugar hackberry, pecan and eastern red cedar (*Juniperus virginiana*). Understory species include Texas redbud (*Cercis canadensis*), Texas Mulberry (*Morus microphylla*), Mexican Plum (*Prunus mexicana*) and Smooth Sumac (*Rhus spp.*). The Cross Timber region overlays sandy, slightly acidic soils derived from the Cretaceous Woodbine and Trinity Strata. (G.M. Diggs, B.L. Lipscomb, and R.J. O'Kennon, Flora of North Central Texas, 1999)

#### **4.8.2 Wildlife**

The Lewisville Lake area contains a typical assortment of endemic wildlife species such as owls (families Tytonidae and Strigidae), raccoons (*Procyon lotor*), bobcats (*Lynx rufus*), mink (*Mustela vison*), opossums (*Didelphis virginiana*), squirrels (*Sciurus niger*), rabbits (*Sylvilagus floridanus*), and deer (*Odocoileus virginianus*), as well as species of moles, shrews, bats, skunks, mice, etc.

Lewisville Lake and associated wetlands offer important feeding, staging, and roosting areas for migratory birds. Species such as ducks, coots, grebes, pelicans, herons, egrets, gulls, terns, and hawks migrate through the area and utilize open water, shallow wetlands, and the associated riparian vegetation for feeding, perching and roosting. There is a typical resident bird population, which includes 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 chickadee (*Parus carolinensis*), tufted titmouse (*Parus bicolor*), Carolina wren (*Thryothorus ludovicianus*), northern cardinal (*Richmondia cardinalis*), field sparrow (*Spizella pusilla*), red-winged blackbird (*Agelaius phoeniceus*), northern mockingbird (*Mimus polyglottos*), and red-bellied woodpecker (*Melanerpes carolinus*).

#### **4.9 Threatened or Endangered Species**

There are no known Federally listed threatened or endangered flora or fauna species in the Lewisville Lake area. A few Federally listed species may migrate through Denton County and might be seen in the Lewisville Lake area. These species are the whooping crane (*Grus*

*americana*), the piping plover (*Charadrius melodus*), and the interior least tern (*Sterna antillarum athalassos*). In addition, the bald eagle (*Haliaeetus leucocephalus*) is listed as indigenous to Denton County. Currently, none of these species are known to occur in the Lewisville Lake area. However, should any threatened or endangered species be identified, further study and coordination with the USFWS would be required during the environmental review process prior to issuance of USACE real estate instruments.

#### 4.10 Aesthetics

Aesthetics represents the way an individual perceives the world about them. While there are no Federal policies regarding aesthetics, it is USACE policy to establish architectural themes for facilities on project lands so that they blend with the existing views to the extent practicable. Any facilities or structures proposed to be located within the Lewisville Lake project area are required to blend in like manner with existing structures or in compliance with Lake/Park architectural themes. The following paragraphs describe the existing views in the lake vicinity.

The Lewisville Lake study area has a rural/agricultural character consisting of mostly grassland used as pasture with scattered dense groves of native and introduced fruit and nut trees, all bordering the reservoir area at the north end of Lewisville Lake. Above Garza Dam, flooding has created shoreline with some small stretches of beach, areas of uncleared, inundated trees, and additional bottomland, possibly rich in aquatic and wildlife resources. The study area has one densely urbanized area, Lake Dallas, which has a more commercial character. All other developed areas are rural, scattered and random among agricultural fields, pastures, and dense groves of trees. Along the shoreline are numerous private and public parks, as well as limited use areas subject to flooding, leaving most of the immediate shoreline (between 10' to 50' or more) undeveloped.

There are two distinct characteristics of shoreline. The western shoreline is generally characterized by uncleared inundated trees, gently sloped shore rising out of the water with dense to scattered trees, creating some areas of visible shoreline development. The eastern shoreline is characterized by steep slopes with dense groves of trees that confine the view from within and from the lake to the interior. To the southern end of the study area is the partly demolished Garza Dam giving distinctive visual character from the shoreline as well as from the lake while framing and creating views. There is no industrial development on either side of this area of the lake.

Specific to the western side of the lake is the IH 35E corridor cutting through rural and agricultural areas with a concentration of urban light industrial/retail development at the southern end of the study area (Lake Dallas). The western side of the lake has limited concentrations of development. The view from the roadways is of relatively flat to gently undulating grassland with no understory. Vertical elements of interest are groves of trees and houses. Where there are dense groves of trees the view is confined.

The eastern side of the lake has a more agricultural and rural character with more open grassland and pasture. The dense trees of the shoreline contain the view from within to the lake and from the lake to the interior. The view from the roadways is of relatively flat grassland with no understory. Presently there are limited concentrations of development; these include Crescent Oaks, Emerald Sound, Eagles Landing, Cedar Pine Lane, and Lakewood Village.

## 4.11 Recreation

Lewisville Lake is one of several USACE lakes that create recreational opportunities for Denton and surrounding counties. There are currently 23 developed parks and/or lake access areas around Lewisville Lake that provide areas for water-related recreation. The parks and lake access areas have a variety of recreation facilities for public use. Four marinas are also located around the lake to provide services to boaters and fishermen. Water-related recreation facilities currently provided at each park and/or lake access area is shown on Table 4.2.

Table 4.2 Existing Water-Related Recreation Facilities on Lewisville Lake													
Facility Name	Operated By	Boat Ramp	Camping	Picnic Facilities	Swimming	Trailer Area	Golf Course	Sanitary Facilities	Showers	Drinking Water	Trailer Dump Station	Nature Trails	Hiking Trails
<b>Parks</b>													
Arrowhead Access Area	USACE	2						X					
Big Sandy Access Area	USACE	1											
Copperas Branch Park	City of Highland Village	1		X	X			X					
Cottonwood Park	Town of Little Elm	1	X	X		X		X					
Crescent Oaks Park	City of Oak Point	1											
Doe Branch Access Area	USACE	1											
East Hill Park	Lakeside Management	3		X	X			X	X	X			
Eastvale Park	USACE	1	X	X				X					
Fish Trap Access Area	USACE	1											
Harbor Lane Park	Town of Hickory Creek	1		X									
Hickory Creek Park	USACE	1	X	X	X	X		X	X	X	X	X	X
Hidden Cove Park	City of The Colony	1	X	X		X		X	X	X	X		
Lewisville Lake Park	City of Lewisville	2	X	X	X	X	X	X	X	X	X		
Little Elm Park	Town of Little Elm	1	X	X		X		X		X			
Oakland Park	USACE	1	X			X		X	X	X	X		
Pilot Knoll Park	USACE	1	X	X	X	X		X	X	X	X	X	
Point Vista Access Area	USACE	1											
Stewart Creek Park	City of The Colony	1	X	X	X	X	X	X		X	X		
Sycamore Bend Park	USACE	1	X	X		X		X		X			
Tower Bay Access Area	USACE	1						X					
Westlake Park	USACE	1		X	X			X	X	X			
Willow Grove Park	City of Lake Dallas	0		X									
Wynnewood Park	City of The Colony	0					X*						
<b>Marinas</b>													
Dallas Corinthian Yacht Club	Dallas Corinthian Yacht Club	1											
Eagle Point Marina	Eagle Point Marina, Inc.	1											
Lakeview Marina	Lake Dallas Boat Co.	1											
Pier 121 Marina	Lakeside Management	1											

\* Under Construction

The USACE has also dedicated 8,000 acres of hunting area on government lands around the lake, which are managed as natural areas. The majority of the above parks are located at the lakes edge and are in part or completely within fee ownership or flowage easement maintained by the USACE.

With the increasing public demand for various water-related recreational activities, Lewisville Lake has provided and continues to provide a variety of natural and man-made resources, which fulfill the leisure needs of approximately 3 million visitors each year.

#### 4.12 Socioeconomic Resources

Lewisville Lake is located in southeastern Denton County, one of the fastest growing portions of the Dallas-Fort Worth metropolitan area. The project serves as a water supply, flood control, and recreational resource for a large portion of the North Texas region. The 16 counties included in the North Central Texas Council of Governments (NCTGOC) region had a combined population of 4,963,064 in January 1999. This total represents an increase of 20.7 percent over the 1990 population of 4,111,750 and a 59.1 percent increase over the 1980 population of 3,119,806.

Denton County has increased in population 46.6 percent, from 273,525 in 1990 to 400,915 in January 1999. Table 4.3 displays the growth experienced by area cities.

Table 4.3 Area Population Growth				
	1980	1990	1999	% Growth '80-'99
Lewisville	24,273	46,521	74,700	208%
The Colony	11,586	22,113	25,700	122%
Frisco	3,499	6,138	26,200	649%
Highland Village	3,246	7,027	12,150	274%
Corinth	1,264	3,944	9,150	624%
Copper Canyon	465	978	1,300	180%
Hickory Creek	1,422	1,893	2,050	44%
Lake Dallas	3,177	3,656	5,900	86%
Little Elm	926	1,255	2,200	138%
Shady Shores	813	1,045	1,650	103%
DENTON CO. TOTAL	143,126	273,525	400,915	180%

Source: NCTCOG, 1999

The population projections in Table 4.4 indicate that the population growth in the project is expected to continue. It should be noted that if the rate of growth that has occurred in the 1990s continues, the projected populations would be exceeded well before the dates that were anticipated by NCTCOG in 1996.



Table 4.4 Area Population Projections		
	2010	2020
Lewisville	81,750	97,950
The Colony	28,750	34,300
Frisco	33,700	63,350
Highland Village	16,350	23,600
Corinth	9,850	13,750
DENTON CO. TOTAL	479,000	622,000

Source: NCTCOG, 1996

The significance of the population trends and projections of the Lewisville Lake area is that a tremendous demand for recreational opportunities has been created by the population growth.

In 1990, the median household income of the area surrounding Lewisville Lake was greater than Denton County as a whole. The Lewisville Lake area (Census Tracts 201.02, 214.01, 214.02, 214.03, 215.02, 215.04, 215.05, 215.06, 216.01, 216.03, 216.04, 217.03, 217.05, 217.06, and 217.07) had a median household income of \$46,830, almost \$10,000 more than Denton County's \$36,914.

The minority population of the Lewisville Lake area is similar to Denton County as a whole. According to the 1990 Census, approximately 5.7% of the Lewisville Lake area is Hispanic and 2.7% is Black. This compares to Denton County totals of 7.0% Hispanic and 5.0% Black.

#### **4.13 Hazardous, Toxic and Radioactive Waste**

Data collected for the Hazardous, Toxic, and Radioactive Waste (HTRW) Initial Assessment were from three primary sources, a Regulatory Review Report, Oil and Gas Well Survey, and information collected during the site survey. The Regulatory Review Report was prepared by VISTA Information Solutions, Inc. and includes an acquisition of lists of regulated facilities at the Federal and state levels that occur within a search distance set by The American Society for Testing and Materials (ASTM) in publication E 1527-97, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Search distances are specified within the Regulatory Report and a copy is provided in Exhibit 9. The Oil and Gas Well Survey was performed by Banks Information Solutions, Inc. and identified oil and gas wells within a one-half mile radius of USACE property. A copy of the report is provided in Exhibit 10.

During the site reconnaissance each activity investigated was also viewed for the potential of HTRW issues. Visual observations of items such as monitoring wells, petroleum storage tanks and fuel pump islands, use and storage of chemicals, and the presence of industrial facilities are examples of the observations made. Some assumptions were made regarding the potential for regulated substances, such as the presence of petroleum, for fueling of watercraft, at the marinas on the lake.

A summary of the findings presented in the VISTA Regulatory Report indicates numerous underground and above ground storage tanks and leaking underground storage tanks within the specified radius and nine Resource Conservation and Recovery Act (RCRA) registered sites within the reporting area. Each of these listed sites is addressed within the pertinent section of the EA.

The sites listed on the Regulatory Review report prepared by VISTA are sites regulated by the EPA and the State of Texas regulating entity, the TNRCC. Compliance of these listed sites is regulated by the EPA and TNRCC. The potential for impact to the proposed actions on the USACE property is based on the data presented in the report. The potential for future impact from these regulated sites is not addressed (i.e., leakage from a registered underground storage tank).

The Oil and Gas Well Survey performed by Banks indicated three areas of oil and gas exploration and/or production in the proximity of USACE property. On the east side of Lewisville Lake, in the area of Cottonwood Creek, five wells were located. Three of these wells were dry wells, one was abandoned, and the fifth well was a gas well drilled in 1961 and plugged and abandoned in 1987.

Oil and gas well production on the northern portion of the lake, north of US 380, is located on either side of Elm Fork of the Trinity River, in the vicinity of USACE property. Eight wells were located in this area, all of which were reportedly dry and have been plugged and abandoned.

On the west side of Lewisville Lake, in the vicinity of Pecan Creek, eighteen wells are located. Eight of the wells are listed as dry, plugged and abandoned and two of the wells were gas wells drilled prior to 1962 and plugged and abandoned in 1968 and 1972, respectively. The remaining wells are gas wells drilled between 1960 and 1970 and are currently in use as gas storage injection wells.

Based on the information provided by Banks, indicating the date of installation, the date of plugging and abandoning, and the distance from proposed actions, none of these wells appear to present an adverse impact to the proposed actions on Lewisville Lake.

The HTRW survey was conducted in order to assess the potential for environmental impact to the USACE property. The assessment is based on the nature of the regulated operation, distance from the USACE property, the nature of the proposed activity, and the environmental setting. The potential for impact to the subject property is discussed in Chapter 6.

#### **4.14 Noise**

Noise sources around the lake may generally include activities in parks and recreational areas, areas around homes and schools, activities around commercial areas, and noise from vehicles, watercraft, aircraft, wind, birds, and air conditioning/compressor units, all of which would be considered exterior ambient noise sources.

Existing exterior ambient noise measurements were taken and assessed in the Lake Lewisville Bridge Crossing Environmental Overview Study dated January 23, 1995. The existing noise measurements ranged from 50 dBA  $L_{eq}$  to 66 dBA  $L_{eq}$  (dBA  $L_{eq}$  is defined in Section 6.1.1).

This 17 dBA  $L_{eq}$  range from 50 dBA  $L_{eq}$  to 66 dBA  $L_{eq}$  measured in the study referenced above, is representative of existing noise levels around the entire lake and should not vary significantly. Therefore these existing exterior ambient noise measurements can be applied to the existing conditions and noise levels for this PEA.

#### **4.15 Air Quality**

Air quality is regulated nationally by the EPA. The EPA delegates authority to the TNRCC Office of Air Quality for monitoring and enforcing air quality regulations in Texas.

In compliance with the requirements of the Federal Clean Air Act of 1970 and the Clean Air Act Amendments of 1977 and 1990, the EPA promulgated and adopted the National Ambient Air Quality Standards (NAAQS) in order to protect public health, safety, and welfare from known or anticipated effects of six pollutants. Table 4.5 lists the NAAQS for these six pollutants. The TNRCC, may adopt other, more stringent, air quality standards than those of the EPA, however, the TNRCC observes the same air quality standards as the EPA.

##### **Vicinity Air Quality**

The EPA classifies the status of a county's ambient air with respect to conformity to the NAAQS. The classifications are as follows:

<b><u>Classification</u></b>	<b><u>Definition</u></b>
Attainment	Met or better than requirements
Nonattainment	Did not meet requirements
Unclassifiable	Cannot be classified

The Clean Air Act Amendments (CAAA) of 1977 and 1990 required all states to submit to the EPA a listing identifying those air quality regions, or portions thereof, which meet or exceed the NAAQS or cannot be classified because of insufficient data. Portions of air quality control regions, which are shown by, monitored data or air quality modeling to exceed the NAAQS for any criteria pollutant are designated nonattainment areas for that pollutant. The CAAA also established time schedules for the states to attain the NAAQS.

The project area around Lewisville Lake is located within Denton County which is designated an attainment area for all NAAQS except ozone, for which the county is designated a serious ozone nonattainment area. In addition, a portion of the county which includes the Lewisville Lake area is within the Metropolitan Planning Organization's (MPO) Transportation Management Area (TMA); therefore, the transportation conformity rule does apply to transportation projects including bridges and roadways.

Table 4.5 National Ambient Air Quality Standards

Pollutant	Time Frame	National Standards <sup>a</sup>		
		Primary	Secondary	Basis
Ozone (O <sub>3</sub> )	Maximum 8-Hour Average	0.08 ppm	0.08 ppm	Never to be exceeded over a three year average.
Carbon Monoxide (CO)	Maximum 1-Hour	35.0 ppm	35.0 ppm	Not to be exceeded more than once per year.
	Maximum 8-Hour	9.0 ppm	9.0 ppm	Not to be exceeded more than once per year.
Sulfur Dioxide (SO <sub>2</sub> )	Annual Arithmetic Mean <sup>b</sup>	80.0 $\mu\text{g}/\text{m}^3$ 0.03 ppm	---	Annual arithmetic mean never to be exceeded.
	Maximum 24-Hour	365.0 $\mu\text{g}/\text{m}^3$ 0.14 ppm	---	Not to be exceeded more than once per year.
	Maximum 3-Hour	---	1300 $\mu\text{g}/\text{m}^3$ 0.50 ppm	Not to be exceeded more than once per year.
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	100.0 $\mu\text{g}/\text{m}^3$	100.0 $\mu\text{g}/\text{m}^3$	Annual arithmetic mean never to be exceeded.
Particulate Matter (PM <sub>10</sub> <sup>c</sup> )	Annual Arithmetic Mean	50.0 $\mu\text{g}/\text{m}^3$	50.0 $\mu\text{g}/\text{m}^3$	Never to be exceeded over a three year average.
	Average 24-Hour	150.0 $\mu\text{g}/\text{m}^3$	150.0 $\mu\text{g}/\text{m}^3$	99th percentile of concentrations not to be exceeded over a three-year average.
Particulate Matter (PM <sub>2.5</sub> <sup>d</sup> )	Annual Arithmetic Mean	15 $\mu\text{g}/\text{m}^3$	15 $\mu\text{g}/\text{m}^3$	Never to be exceeded over a three year average.
	Average 24-Hour	65 $\mu\text{g}/\text{m}^3$	65 $\mu\text{g}/\text{m}^3$	98th percentile of concentrations not to be exceeded over a 3-year average.
Lead (Pb)	Maximum Quarterly Arithmetic Mean	1.5 $\mu\text{g}/\text{m}^3$	1.5 $\mu\text{g}/\text{m}^3$	Never to be exceeded for a calendar quarter.

<sup>a</sup> Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

ppm = parts per million

$\mu\text{g}/\text{m}^3$  = microgram per cubic meter

Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

<sup>b</sup> Arithmetic mean is the most common measure of the central tendency. It is the sum of the data collected during the given period divided by the number of observations in the same period.

<sup>c</sup> PM<sub>10</sub> Particulate Matter: Particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers.

<sup>d</sup> PM<sub>2.5</sub> Particulate Matter: Particles with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers. This is a new standard which was established by the EPA and which went into effect on September 16, 1997.

All projects in the MPO's Transportation Improvement Program (TIP) that are proposed for Federal or state funds were initiated in a manner consistent with Federal guidelines in Section 450, of Title 23 CFR and Section 613.200, Subpart B, of Title 49 CFR. Energy, environment, air quality, cost, and mobility considerations are addressed in the programming of the TIP. Proposed transportation projects should be consistent with the area's financially constrained Metropolitan Transportation Plan (MTP) known as Mobility 2020 as adopted by the NCTCOG, the MPO for the Dallas-Fort Worth region, on December 19, 1996 and the 1998 TIP as adopted by the NCTCOG on April 10, 1997. Both the MTP and the TIP have been found to conform to the State Implementation Plan (SIP).

## SECTION 5

### 5.0 ACTIVITIES LIST

This Activities List is a list of proposed activities (actions) that would be reasonably expected to occur in the future and that would affect the natural environment. They have been broken into categories of activities that could be expected to have similar types of impacts. The individual projects are listed first followed by activity, the specific lake zone where the project is located (where applicable), and the sponsoring entity (in parentheses). The activities and information regarding each project, as submitted by the sponsoring entity, are included in a separate document entitled “Resource Document for the Lewisville Lake Programmatic Environmental Assessment” (Resource Document). The Resource Document is on file and can be viewed at the Town of Copper Canyon City Hall, the City of The Colony’s City Managers Office, The Colony Public Library, the City of Highland Village City Hall, the Upper Trinity Regional Water District, the City of Lake Dallas City Hall, Denton County Courthouse, City of Lewisville Parks and Recreation Department, Lewisville Public Library and the USACE Lewisville Lake Project Office.

### 5.1 Bridges and Roadways

#### 5.1.1 Lake Lewisville Bridge Crossing (Denton County)

**5.1.2** Maintenance and Repair Activities: Bridge replacement on Fish Hatchery Road at McWhorter Creek (City of Lewisville); Intersection improvements at Lewisville Lake Park Road and Mill Street (City of Lewisville); Reconstruction of Kealy and Jones Streets (City of Lewisville); and the addition of equestrian and pedestrian access to bridges in Copper Canyon (Town of Copper Canyon)

**5.1.3** Future Proposed Road and Bridge Actions: Wynnewood Peninsula Roadway and Bridge (City of the Colony); FM 2499 (Denton County); and Proposed Old Alton Bridge replacement (Denton County)

### 5.2 Water Related Recreation Use Facilities

Consists of three activities: Marinas, Boat Launch Facilities, and Dry Boat/Stacked Storage. Zone identification added following Park or Marina name.

#### 5.2.1 Marinas

Impact on vessel carrying capacity is - 1 vessel on the water to 10 stored.

##### 5.2.1.1 Zone A

**Pier 121 Marina in East Hill Park** - Zone A - (Marinas International, Inc.)

- a. Additional boat sales facility

**Eagle Point Marina in Lewisville Lake Park** - Zone A - (City of Lewisville)

- a. On shore structures and improvements:

- Ship store
  - Additional marina office and service space
  - Restroom
  - Additional paved parking
  - 25' covered dry boat storage units (30)
  - 14' by 70' concrete boat service pads (3)
  - Retail boat and RV sales
  - Security fencing around existing service department yard
  - Additional service center for boats and RV's with concrete lot and security fencing
  - Additional hard surface service road
- b. At the Slalom Shop located at the marina
- Retail/service center – designed to sell and service marine related products (2)
  - Cover existing display area
  - Hard surface storage (approx. 60,000 sq. ft.)
  - Enclose existing canopy
  - Hard surface extension to connect EPM sign to existing road
  - Covered rack storage to be used to store boat inventory
  - Addition to sales office
  - Cover 7 existing parking spaces

#### **5.2.1.2 Zone B**

##### **Dallas Corinthian Yacht Club - Zone B - (Dallas Corinthian Yacht Club)**

- a. Floating structures and improvements:
- Additional 100 rental wet slips
- b. On shore structures and improvements:
- Addition of a high water concrete boat launch ramp
  - Raise the top of earthfill and rock breakwater with additional rock
  - Reinforce present harbor pole seawall
  - Dredge an area starting at present docks 3,4,5 and 6 back 50 feet toward shore
  - Raise concrete pad surrounding jib crane
  - Build rock material breakwater from east shore bank out to west

**Lakeview Marina in Willow Grove Park - Zone B (Lake Dallas Boat Company).** Additionally proposed floating structures would cover approximately 3.6 acres of surface water.

- a. Floating structures and improvements:
- Additional boat wet slips (306)
  - Add floating breakwater
  - Add floating restrooms and shower facilities
  - Floating restaurant (hamburger/sandwich place)
- b. On shore structures and improvements:
- Resurface roads and parking lots
  - Add security gates to marina area entrance roads
  - Gravel boat trailer storage area
  - Close existing road

- Plant trees and landscape around marina
- Fence trailer storage
- Build new marine service center
- Add marine travel lift
- Build restroom and shower facilities (on land)

### 5.2.1.3 Zone C

**Proposed Marina in Wynnewood Park - Zone C - (City of the Colony)** Two alternative sites are under consideration. The proposed floating structures would cover approximately 15.2 acres of surface water.

- a. Floating structures:
  - 1300 wet slips
  - Ship store/gasoline service
  - Construct retaining wall
  - Construct floating wavebreak
  - Excavation/Dredging
- b. On shore structures:
  - Restaurant
  - Parking area
  - Helipad

**Proposed Cottonwood Park Marina in Cottonwood Park - Zone C - (Town of Little Elm).** Floating structures would cover approximately 23 acres of surface water.

- a. Floating structures:
  - 1,000 rental wet slips (200-250 first phase)
  - Ships' store
  - Offices
  - Fuel dock
  - Pump-out facility
  - Restrooms
  - Repair and maintenance facility
  - Restaurant with courtesy slips
  - Boat rental
  - Yacht sales dock
  - Floating breakwater
  - Earth and rock breakwater
- b. On shore structures and improvements:
  - Fuel storage tanks
  - Recreational vehicles parking
  - Roads and parking area
  - Gate house and access barriers
  - Restroom and shower facilities
  - Storage facilities
  - Service hoist
  - Night watchman residence

- Improved electrical system
- Dredging
- Pipe and lift type sewer system

**Proposed Marina in Hidden Cove Park - Zone C - (City of the Colony).** Two alternative sites are under consideration. The proposed floating structures would cover approximately 3 acres of surface water.

- a. Floating structures:
  - 250 slips
  - Boat repair facility

## **5.2.2 Boat Launch Ramps**

Impact on vessel carrying capacity is - 1 vessel on the water to 1 parking space available.

### **5.2.2.1 Zone A**

**Eagle Point Marina in Lewisville Lake Park - Zone A - (City of Lewisville)**

- a. 2 Lane Boat Ramp
- b. Parking lot (50 units) (assumed)

**Eastvale Park - Zone A- (City of the Colony)**

- a. Additional 1 lane boat ramp
- b. Courtesy dock at boat ramp
- c. Parking lot (25 units) (assumed)

**Canoe/Jon Boat Launching Facilities Along Hickory Creek - Zone A - (Town of Copper Canyon)**

**Stewart Creek Park – Zone A – (City of The Colony)**

- a. 100 additional parking spaces at existing boat ramp
- b. Construct a concrete ramp at the jet ski launch area
- c. Watercraft rental (canoes, kayaks, jet skis, paddle boats)

**Lewisville Lake Environmental Learning Area – Zone A – (LLELA)**

- a. Lakefront Research and Education Area
  - 1 lane rudimentary boat ramp
  - Concrete slab pavilion (30' x 40')
  - Gravel access road

### **5.2.2.2 Zone B**

**Dallas Corinthian Yacht Club**

- a. Add a one lane high water boat launch ramp (this ramp would only be used during periods of high water and therefore would not impact carrying capacity)



**Lakeview Marina in Willow Grove Park - Zone B - (Lake Dallas Boat Company)**

- a. Build 2 new boat ramps (one in current lease area, other in area of Willow Grove Park that they are proposing to lease)
- b. Add parking lots (80 units assumed)

**Willow Grove Park – Zone B – (City of Lake Dallas).**

- a. Build a one lane boat ramp

**5.2.2.3 Zone C****Hidden Cove Park – Zone C – (City of the Colony)**

- a. 3 lane boat ramp
- b. Parking lot (75 units)
- c. Courtesy dock west of boat ramp

**Little Elm Park - Zone C - (Town of Little Elm)**

- a. New 2 lane boat ramp with courtesy dock
- b. Parking lot (50 units)
- c. Add courtesy dock on each side of existing boat ramp

**5.2.3 Dry Boat Storage & Dry Stacked Storage (Valet Type Service)**

Dry Storage has no measurable impact on the lake while Dry Stacked Valet Storage has the same impact as a Marina Slip on the vessel carrying capacity - 1 vessel on the water to 10 stored.

**5.2.3.1 Zone A****Eagle Point Marina in Lewisville Lake Park - Zone A – (City of Lewisville)**

- a. 325 Units Dry Boat Storage
- b. 300 Units Dry Stack Boat Storage

**Pier 121 Marina in East Hill Park – Zone A - (Marinas International, Inc.)**

- a. Unspecified number of covered dry boat storage units

**5.2.3.2 Zone B****Lakeview Marina in Willow Grove Park – Zone B - (Lake Dallas Boat Company)**

- a. 380 units of dry boat storage

**5.2.3.3 Zone C****Proposed Marina in Hidden Cove Park – Zone C – (City of the Colony)**

- a. 60 units of RV/Dry Boat Storage (28 first phase)

**Proposed Cottonwood Park Marina in Cottonwood Park – Zone C – (Town of Little Elm)**

- a. 100 dry boat storage units

**Proposed Marina in Wynnewood Park – Zone C – (City of The Colony)**

- a. 600 dry boat storage spaces

**5.3 Parks – Enhance Amenities in Existing Recreational Areas****5.3.1 Lewisville Lake Park (City of Lewisville)**

- a. Construct courtesy boat dock
- b. Construction of picnic shelter and parking lot (100 units)
- c. Construct new restroom with lift station
- d. Restroom and kitchen facilities to replace existing at Conner Pavilion
- e. 3 miles of hike and bike trails (8-foot wide concrete)
- f. Construction of restrooms for disc golf course
- g. Pipe rail fence throughout park
- h. Build playground behind Conner Pavilion
- i. Reshape and repave existing parking lot
- j. Build additional disc golf course
- k. Entrance to day use area:
  - Build new entrance road
  - Build new control building
- l. Plant additional trees throughout
- m. Build shelter at group picnic area
- n. Campground improvements:
  - Add on to the shower facility
  - Add 35 new camp sites
  - Provide sewer hook-ups
  - Redesign tent pad sites and add sites
  - Replace group shelters
  - Pave gravel parking sites
  - Build entrance gate shack
- o. Athletic complex improvements:
  - Replace existing backstops
  - Enlarge restroom facilities at baseball/football fields
  - Replace restroom facilities at soccer complex
  - Pave existing and new parking lot and add 150 more spaces
  - Expand pipe rail fence to eliminate cable
  - Pave between the fields (backstops)

**5.3.2 Willow Grove Park (City of Lake Dallas)**

- a. Extend existing road system and pave existing road
- b. Pave existing trail
- c. Replace existing restroom and add another

- d. Replace existing picnic tables, as needed, add additional ones, build roof shelters for all picnic tables
- e. Build large pavilion on existing concrete pad
- f. Construct a boardwalk/pier
- g. Construct a portable building for canoe/paddleboat concession and food concession
- h. Install two additional ball fields
- i. Develop a swimming area with the addition of gravel and sand
- j. Add additional parking and pave existing parking area
- k. Add a playground

### **5.3.3 Copperas Branch Park (City of Highland Village)**

- a. Install pump station in lake and irrigation system on turf areas in the park
- b. Add picnic tables
- c. Add sand volleyball courts
- d. Construct 30 overnight camping sites
- e. Construct RV dump station
- f. Construct fish cleaning station
- g. Install multipurpose lighting on sports fields
- h. Construct picnic pavilion to accommodate 150 people
- i. Construct additional roadway from park entrance to Highland Village Road
- j. Expand trail system to connect Inland Trail from Copperas Branch Park entrance to Highland Village Road

### **5.3.4 Little Elm Park (Town of Little Elm)**

- a. Nature trail
- b. Expand picnic area
- c. RV campsites
- d. Tent campsites
- e. Screened shelters
- f. Playground
- g. Showers/restrooms facility
- h. Improved electric system
- i. Improved water and sanitary sewer facilities
- j. Athletic facility
  - 1 new baseball field
  - 4 new soccer/football fields
  - 2 new tennis courts
  - Additional and improved parking facilities

### **5.3.5 Cottonwood Park (Town of Little Elm)**

Requesting lease of additional 110 acres of currently undeveloped area for these amenities:

- a. Nature trail
- b. Picnic areas

- c. RV campsites
- d. Athletic complex
  - Football/soccer field
  - Baseball field
  - Tennis courts
- e. Group shelters
- f. Parking lot
- g. Gate house
- h. Fishing pier
- i. Lighthouse

### **5.3.6 Eastvale Park (City of the Colony)**

- a. Walking/jogging trail
- b. Additional picnic tables
- c. 3 additional parking lots
- d. Fishing pier
- e. Gazebo
- f. Covered deck
- g. Sand volleyball court
- h. Horseshoe throwing pits
- i. Additional restrooms
- j. Park host building/area
- k. Connect to Colony water system
- l. Install fire hydrant near park entrance
- m. Connect to Colony sewer system when available, if not available, install septic tank and drain field system to service park
- n. Add public pay phones and a phone line to conduct park business
- o. Bury electric service lines

### **5.3.7 Hidden Cove Park (City of the Colony)**

- a. Swim beach (2)
- b. Courtesy dock
- c. Mountain bike trail
- d. Fishing pier (3)
- e. Basketball court (2)
- f. Sand volleyball court (3)
- g. Gazebo
- h. Group camp facilities
- i. Lift station (2)
- j. Wastewater expansion
- k. Playground (2)
- l. RV camp sites
- m. Tent camp sites
- n. Water well

- o. Environmental bathroom
- p. Athletic fields
- q. Renovation/conversion of existing concession

### **5.3.8 Stewart Creek Park (City of the Colony)**

- a. Tree planting
- b. ADA camp site
- c. New restroom/sewage (2)
- d. Sand volleyball court
- e. Expand swim/beach area
- f. Extend courtesy dock
- g. Improve jet ski launch
- h. Expand parking lot
- i. Basketball court
- j. Gazebo
- k. Camping picnic tables at two locations
- l. Expand walking trail
- m. Fishing pier
- n. Playground
- o. Park host area
- p. Pavilion
- q. Designated tent camping
- r. Improvements to existing golf course
  - Restaurant and bar
  - Expansion of courtesy dock to include 20 slips
  - Beach area
  - Pedestrian trail

### **5.3.9 Wynnewood Park (City of the Colony)**

- a. Playground areas
- b. Basketball courts
- c. Sand volleyball courts
- d. Restrooms
- e. Hike/bike trail
- f. Gazebo
- g. Fishing pier
- h. Picnic tables
- j. Athletic fields

### **5.3.10 Crescent Oaks Park (City of Oak Point)**

Requesting lease of 0.5 additional acre.

- a. Expansion of existing boat pier
- b. Expansion of existing gravel parking lot and paving it
- c. Replace existing wooden pier with a floating dock/pier

- d. Add a fish cleaning station
- e. Add new and improved landscaping
- f. Add fencing, lighting and traffic control

#### **5.3.11 Eagle Point Marina in Lewisville Lake Park (City of Lewisville)**

- a. Pavilion
- b. RV campsites with dump site (50 spaces)

#### **5.3.12 Lakeview Marina in Willow Grove Park (Lake Dallas Boat Company)**

- a. Lease remaining 33 acres of Willow Grove Park into Lakeview Marina Lease area
  - Build camp site area with 20 RV hookups
  - Batting cages

#### **5.3.13 Pier 121 Marina in East Hill Park (Marinas International)**

- a. Unspecified number of campsites

### **5.4 Utilities**

#### **5.4.1 Utilities – Within Existing Easements**

- a. Electrical transmission line along US 380 between US 377 and Navo Road (CoServ Electric)
- b. 24-inch water line paralleling the existing 24-inch water line from Fish Hatchery Road to the Eastside Pump Station (City of Lewisville)
- c. 12-inch water line along east side of IH 35E from Lake Park Road north to Garden Ridge Boulevard (City of Lewisville)
- d. 36-inch raw water line along Jones Street from east of Cowan Avenue to the City of Lewisville intake structures (City of Lewisville)
- e. 10 million gallons of additional water storage north of Feaster Pump Station (City of Lewisville)
- f. 20-inch water line along Jones Street east of Feaster Pump Station (City of Lewisville)
- g. 12-inch sanitary sewer main along west side of East Hill Park Road to serve East Hill Park and Pier 121 Marina
- h. 30-inch water line in Hickory Creek area parallel to existing pipeline (Upper Trinity Regional Water District)
- i. 24-inch potable or non-potable water pipeline in an existing 45 foot permanent utility easement parallel to Kansas City Southern Railroad south of the dam (Upper Trinity Regional Water District)
- j. 60-inch raw water pipeline within an existing 45 foot permanent easement from the intake structure immediately north of the dam to the water treatment plant (Upper Trinity Regional Water District)

- k. Water treatment plant and ground storage on Kealy Street at Jones Street (City of Lewisville)

#### **5.4.2 Utilities – Not Within Existing Easements**

- a. Electrical transmission line easement at Pilot Knoll (CoServ Electric)
- b. Electrical transmission line across the lake at Shahan Prairie Road (CoServ Electric)
- c. 21-inch sanitary sewer line easement in McWhorter Creek area (City of Lewisville)
- d. 42-inch raw water pipeline to connect recently constructed Upper Trinity Regional Water District intake to existing line coming from old Lewisville intake structure (City of Lewisville)
- e. 12-inch sanitary sewer line from Lake Park Road to Tower Bay Boat Ranch including a lift station (City of Lewisville)
- f. Northeast Denton County 24-inch pipeline extension to cross not only USACE property but also the lake (Upper Trinity Regional Water District)

### **5.5 Golf Courses**

#### **5.5.1 Proposed New Golf Courses**

##### **City of Frisco**

- a. 18-hole golf course located east of FM 423 and north of The Colony in Wildlife Management Area

##### **Lakeview Marina in Willow Grove Park (Lake Dallas Boat Company)**

- a. Develop new 9-hole Golf Course
- b. Driving Range

##### **Copperas Branch Park (City of Highland Village)**

- a. Develop New 9-hole golf course in southwest section of park

##### **Pier 121 Marina in East Hill Park (Marinas International, Inc.)**

- a. Develop new 18-hole golf course

#### **5.5.2 Enhancements to Existing Golf Courses**

##### **Lewisville Lake Park (City of Lewisville)**

- a. Additions to the existing Lewisville Lake Park 18-hole Golf Course
  - Cart path extensions
  - Addition of trees
  - Addition of lights to driving range
  - Drilling of water wells
  - Effluent water pipeline
  - Pave maintenance facility area
  - Addition of electric pumping station to replace current propane pump

- b. Additions to the existing Lewisville Lake Park 9-hole Executive Golf Course
  - Add lights to the golf course
  - Cart path extensions
  - Addition of another batting cage facility
  - Expand Pro Shop

## **5.6 Habitable Structures – Hotels, Lodges, and Cabins**

### **5.6.1 Hotels**

#### **Pier 121 Marina in East Hill Park (Marinas International, Inc.)**

- a. Hotel (unspecified number of stories)
  - 200 guest rooms
  - Indoor/outdoor swimming pools
  - Conference center
  - Restaurant
  - Athletic club
  - Small retail shops
  - Tennis courts
- b. Cabins (20)

#### **Wynnewood Park (City of the Colony)**

- a. Hotel (440 guest rooms (unspecified number of stories), meeting rooms, banquet facilities and one/more restaurants)
- b. Conference center

#### **Eagle Point Marina in Lewisville Lake Park (City of Lewisville)**

- a. 12-story business/resort hotel (180 guest rooms)
- b. Convention/exhibit center
  - Helipad
  - Hard surface parking lot
  - Multi-level parking facility (400 units)
  - Gunite seawall around hotel/restaurant perimeter

### **5.6.2 Lodges and Cabins**

#### **Little Elm Park (Town of Little Elm)**

- a. Lodge (unspecified number of stories)
  - 75 space parking lot
  - Restaurant
  - Gameroom
- b. Cabins (5)

#### **Hidden Cove Park (City of the Colony)**

- a. Lodge (75 rooms and 2 conference/banquet rooms)
- b. Cabins (25) – rustic with showers and bathrooms



**Stewart Creek Park (City of the Colony)**

- a. Cabins (10 – rustic)

**5.7 Hike, Bike and Equestrian Trails****Hike and bike trail system (City of Frisco)**

**New Equestrian Trails (Town of Shady Shores)** - Add a new equestrian trail to connect Garza trails to Cielo trails along shoreline with a Trailhead Parking Lot added as an access point with public parking lot on USACE land at the north end of Garza Road. Also add a new equestrian trail to connect to Trinity Trail System.

**Equestrian, Hike and Bike Trail System (Town of Copper Canyon)** – Equestrian, hike and bike trail system with the addition of access points with parking lots, picnic areas and restroom facilities. Also add signage to enhance the use and safety of the trail system and benches adjacent to trails for hikers, birders, etc.

**Expand Inland Trail (City of Highland Village)** – Expand Inland Trail (8-12 ft. wide concrete trail) across USACE property and add natural surface trails (native soil/mulch) along shoreline.

**Trailhead Parking Lot (Lewisville Lake Environmental Learning Area)** - Add gravel-parking lot at intersection of Jones and Kealy streets.

**Shoreline Hike and Bike Trail (City of the Colony)** – A 23 mile hike and bike trail along the shoreline from the proposed new Ridgpointe Park to Hidden Cove Park extending through Stewart Creek Park, Eastvale Park and Wynnewood Park.

- a. Hike/bike trail
- b. Benches
- c. Fishing pier

**Peninsula Park Trails – Lease additional USACE lands to develop Peninsula Park (City of Highland Village)**

- a. Hiking trails (8-12 foot wide concrete)
- b. Benches
- c. Picnic tables

**5.8 Land Use Classification Changes**

**Land use classification change (USACE and City of Denton)** - Exchange 50 acres of low-density recreation lands north of US 380 to intensive recreation lands from undeveloped portions of Doe Branch Park to support the Section 1135 wildlife mitigation area

**Land use classification change (USACE and City of Denton)** – Exchange of approximately 2,600 acres of low-density recreation land located north of US 380 to wildlife management land to support the Section 1135 lease to the City of Denton

**Land use classification change (USACE and LLELA)** - Exchange 10 acres of wildlife management lands at intersection of Federal property and Fish Hatchery Road south of the dam to intensive recreation lands from undeveloped portions of Doe Branch Park to support the Lewisville Lake Environmental Learning Area's proposed research lab/dormitory building and camping sites.

**Land use classification change (City of Frisco)** - Land use classification change to support application for an 18-hole golf course located east of FM 423 and north of The Colony Lakeview Marina in Willow Grove Park

## **5.9 Miscellaneous**

### **5.9.1 City of the Colony**

#### **Eastvale Park**

- a. Miniature golf course with clubhouse
- b. Concession/food store
- c. 3 retail/commercial shops
- d. Convenience store with gasoline and bait sales

#### **Hidden Cove Park**

- a. Model airplane area
- b. Miniature golf/arcade
- c. Paddle boat/canoe concession
- d. Nature center
- e. Kiddie wading pool
- f. Pioneer village
- g. Concession expansion

#### **Wynnewood Park**

- a. Concession areas

### **5.9.2 Town of Little Elm**

#### **Little Elm Park**

- a. Swimming pool with dressing rooms and restrooms
- b. Bait shop/café and fishing barge
- d. Band Shell

### **5.9.3 Marinas International, Inc.**

#### **Pier 121 Marina in East Hill Park**

- a. Requesting lease of remaining 60 acres within East Hill Park boundaries for expansion, as follows:

- Roller blade trail
- Entertainment complex:
  - Arcade
  - Party barn
  - Archery range
  - Miniature golf course
  - Go-cart track
  - Batting cages
  - Driving range
  - Equestrian trail

#### **5.9.4 City of Lewisville request for additional 200 acres of land under LLELA lease**

Request lease of additional 200 acres in area under lease to Lewisville Lake Environmental Learning Area (LLELA) for other recreation and other city functions:

- a. Swimming pool with dressing rooms and restroom facilities
- b. Community building with meeting rooms and recreation center
- c. Package wastewater plant
- d. City service center
- e. 10 additional baseball fields
- f. 10 additional soccer fields
- g. 3 football fields
- h. 5 softball fields
- i. 4 playgrounds
- j. 4 concession stands
- k. 6 restrooms
- l. 6 picnic shelters
- m. Hike/bike trails
- n. Campground

## SECTION 6

### 6.0 ENVIRONMENTAL IMPACTS

This section is organized according to major project categories and projects as shown on the Activities (project) List in Section 5. Exhibit 11 shows the location of the major project categories (e.g. bridges and roadways, marinas, parks).

#### 6.1 Bridges and Roadways

The actions covered include proposals for new roadways and bridges to be construct across Federal properties at Lewisville Lake and proposals for reconstruction, enhancement or maintenance of already existing roadways and bridges. The proposed actions include:

- Lake Lewisville Bridge Crossing (Denton County)
- Bridge replacement on Fish Hatchery Road over McWhorter Creek (City of Lewisville)
- Right-turn lanes and traffic signals on Lewisville Lake Park Road at Mill Street and corner clip at golf course (City of Lewisville)
- Reconstruction of Kealy and Jones Streets (City of Lewisville)
- FM 2499 crossing the Hickory Creek arm of the lake (Denton County)
- Old Alton Bridge replacement (Denton County)
- Roadway through Wynnewood peninsula at Wynnewood Park with bridge to connect SH 121 (City of the Colony)

##### 6.1.1 Lake Lewisville Bridge Crossing

#### Project Description

This proposal involves construction of a new roadway from IH 35E to FM 720 including a new bridge over Lewisville Lake. The route would utilize existing roadways in some locations and would require construction of a new roadway in other areas. There has already been an extensive amount of design and environmental survey work performed on the proposed Lake Lewisville Bridge crossing. In November 1993, Denton County completed a Feasibility Study on the proposal, including determinations of the need and type of facility, and identification and evaluation of various alternatives. Subsequently, in January 1995, Denton County completed an Environmental Overview Study which included public involvement and evaluation of the potential environmental impacts of the feasible alternatives recommended in the November 1993 Feasibility Study.

#### Alternatives

There were six different alignment alternatives studied and evaluated in the previous studies, which are shown on Exhibit 12. Alternative 5 was selected as the preferred alternative by the applicant. This alternative consists of two 12-foot wide travel lanes (one in each direction) and 6-foot wide outside shoulders. This would be done within 80 feet of right-of-way, providing for the potential future expansion of two additional travel lanes to make a four-lane roadway without having to acquire any additional lands. The 1995 Environmental Overview Study did not identify any potentially significant adverse impacts.

The bridge, where it crosses Lewisville Lake, would be required to have (at a minimum) a 52-foot clearance above the uncontrolled spillway elevation of 532 msl. This height elevation would be maintained for a total span of 360 feet with support columns spaced on 120-foot centers. This passage expanse would be centered over the water expanse to allow unimpeded passage of sailboat masts during periods of high water.

Given the scope of this proposal and the considerable amount of available design and environmental details, it was determined that the potential environmental impacts of the preferred alternative would be discussed separately from the other road and bridge projects although the impacts of the action would be included in the analysis of cumulative impacts. The potential environmental impacts of the preferred alternative are assessed below.

## **Environmental Impacts**

### **Physical Resources**

Implementation of the proposed action would not be expected to cause any impacts to farmlands since there are no farmlands within the area of preferred alignment. Where possible, the preferred alternative would utilize existing topography and soils. However, it is anticipated there would be minor impacts to the topography and soils within the right-of-way along the roadway and bridge caused by the earth moving activities necessary to construct the roadbed and bridge abutments. Construction of the proposed project would involve activities in waters of the U.S. (the lake) such as the placement of support columns for the bridge resulting in impacts to lake soils. These activities may require Section 404 permits under the Clean Water Act and all terms and conditions of any resulting permits must be met. These permit requirements would also be included as conditions to any real estate consent/instrument along with any other mitigation required by the USACE. The impacts to lake soils from these activities are considered minor if the terms and conditions of the Section 404 permit as well as all other applicable regulations, policies, standards and guidelines are met. In addition, implementation of the proposed action would cause minor temporary impacts to adjacent lands during construction. Disturbance to existing topography and soils from construction would be kept to the minimal amount and size of disturbance possible and the use of best management practices to reduce soil erosion and runoff would be required. Following construction, the disturbed soils along the route would be stabilized with native vegetation. It is therefore determined that implementation of the proposed action would not result in significant adverse impacts to topography, soils, or farmlands over the long term.

### **Land Use**

The proposed bridge crossing would be in conflict with the existing land use classifications. The land is designated for wildlife management where easements are issued on a case-by-case basis where such use demonstrates a public need and no reasonable alternative is available. The bridge would modify the existing land use; however, no significant adverse impact is anticipated.

### **Cultural Resources**

The proposed project is located upstream of the Lewisville Lake dam, which as discussed under Section 4.3, has had an adequate cultural resources inventory. Of the 146 cultural resource sites located upstream from the dam, only 11 have been determined eligible for the National Register

of Historic Places (NRHP). The other 135 sites located upstream from the dam have been determined ineligible for the NRHP.

If no cultural resources are identified within the project's area of potential effects, or if the cultural resources are determined to be ineligible for the NRHP, then a finding of no historic properties affected shall be coordinated with the SHPO. If historic properties (NRHP-eligible cultural resources) are identified which would be affected adversely by the project, then the Advisory Council on Historic Preservation shall be notified, and the SHPO shall be consulted to evaluate alternatives that could avoid, minimize, or mitigate adverse effects on historic properties. Such alternatives can include mitigation through data recovery.

Determinations of effects on cultural resources for each action would be accomplished on a case-by-case basis when applicants provide their final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate consent/instrument.

### **Water Quality**

#### **Surface Water**

Implementation of the proposed action would result in temporary adverse impacts during the construction phase of the project, but it is anticipated that these impacts would be short-term in nature. The principal water quality impacts associated with construction are those caused by soil erosion, sedimentation, and siltation. Other possible impacts associated with construction and operational activities include accidental fuel and oil spills and release of waste from the site. These potential impacts would be minimized by implementation of erosion control strategies during the construction phase. These strategies are required as part of the EPA's General Construction Permits for Storm Water Discharges from Construction Activities in Region 6 and include such activities as silt fences, hay bale check dams, rock check dams, velocity dissipaters and construction entrances.

During construction and subsequent operation, the structure of the bridge may constrict floodwaters resulting in increased flow velocities and the potential increase in scour and erosion immediately downstream of the bridge opening. The potential for these adverse impacts would be minimized by requiring that flow velocities remain at predevelopment levels or per the FEMA's guidelines for channel modification result in an increased flow of less than 5 feet per second.

The primary adverse water quality impacts associated with operation of the bridge include the potential for soil erosion and runoff of pollutants such as fuel and oil into the lake from the bridge and roadway. Thorough application of the appropriate storm water permits should mitigate possible adverse impacts resulting from operation of the bridge. In addition, planting vegetation to help stabilize the soil and serve to trap pollutants and hold runoff would be required along the roadway. It has therefore been determined that there would be no significant adverse impacts to the water quality of Lewisville Lake from implementation of the proposed action, except on a temporary basis.

### **Wetlands**

According to the USFWS National Wetlands Inventory maps, mapped wetlands occur on the west side of the lake, north of the airport. However, it appears that the selected preferred alignment of the proposed action would miss nearby wetlands on both sides of the right-of-way. It would be necessary to verify the location and extent of the wetlands in the affected area before proceeding with the project. Impacts are not likely to be significant but, in cases where a permit is required under Section 404 of the Clean Water Act, a Nationwide permit, at minimum, would be required. In cases where a wetland would be adversely impacted but no permit is required, the USACE would comply with Executive Order (EO) 11990 and ensure “no net loss of wetlands.” Documentation of compliance with Section 404 of the Clean Water Act and/or EO 11990 would need to be provided along with final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments.

### **Aquatic Resources**

Construction of the bridge would result in temporary adverse impacts during the construction phase of the project, but it is anticipated that these impacts would be short-term in nature. It is also anticipated that any displaced aquatic resources would return and reestablish after project construction is completed. It is not anticipated that operation of these facilities would result in significant long-term impacts.

### **Floodplains**

Executive Order 11988, Floodplain Management, requires that Federal agencies avoid activities, which directly or indirectly result in the development of floodplain areas. According to FEMA’s most current floodplain maps, the preferred alignment for the proposed bridge and roadway would cross areas located within the 100-year floodplain. The floodplains are shown on Exhibit 6.

Analysis shows that the proposed action would not increase the base flood elevation to a level, which would violate applicable floodplain regulations or ordinances as long as the hydraulic design for the bridge is in accordance with current policies and standards. The proposed roadway would permit the conveyance of the 100-year flood, inundation of the roadway being acceptable, without causing significant damage to the roadway or other property.

The USACE requires that there be no net loss of flood storage at Lewisville Lake. Therefore, any fill placed within the 100-year flood pool as a result of construction of the proposed bridge or roadway must be mitigated with excavation in another area of the flood pool with disposition above flood pool elevation of 537 msl in an area approved by the USACE. As long as the proposed bridge is designed to comply with this requirement, then no significant adverse impacts to floodplains are anticipated.

### **Terrestrial Resources**

#### **Vegetation**

The project would likely impact some areas of previously undisturbed vegetation on its alignment west of the lake body. This area is not considered a significant impact that exists immediately adjacent to the project proposed. The project area east of the lake body involves a very narrow section of USACE property. Because of its size and the right-of-way width of the road proposed, impacts to vegetation are not considered significant.

**Wildlife**

Since implementation of the proposed action would clear areas of previously undisturbed vegetation within the proposed alignment on the west side of the lake, it is anticipated that implementation of the proposed action would cause some habitat fragmentation and the displacement of a few wildlife species. However, because the preferred alignment is located immediately adjacent to an existing airport, the potential of impacting high quality wildlife habitat in this area is considered to be fairly low. The impacted area east of the lake body in the alignment for the proposed bridge and roadway involves a very narrow section of USACE property. Because of its size and the right-of-way width of the road proposed, impacts to wildlife are not considered significant.

**Threatened and Endangered Species**

Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any adverse impacts to threatened and endangered species.

**Aesthetics**

The proposed project does involve a new bridge crossing Lewisville Lake which would be viewable from parts of the lake and shoreline. There are relatively few Federal guidelines, which define significant adverse aesthetic impacts. Aesthetic impacts are often left to the discretion of the general public. The public involvement activities conducted during the previous studies did not identify adverse aesthetic impacts as a potential public concern; therefore, implementation of the proposed action is not anticipated to cause significant adverse aesthetic impacts. Final plans and specifications submitted for USACE approval would be required to blend with existing facilities and/or comply with the lake/park architectural theme.

**Recreation**

As noted earlier, design of the proposed bridge would have to provide adequate clearance for recreational boats such as large sailboats, even during periods of high water. It is not anticipated that the proposed action would have any adverse impacts on water-related recreation activities. The alignment of the proposed bridge and roadway on the west side of Lewisville Lake adjacent to Lakeview Airport has the potential to affect the continued use of the airport by the local public. Denton County would need to provide documentation that the proposed bridge and roadway would not adversely impact the airport (e.g., penetrate the Federal Aviation Regulation Part 77 Imaginary Surfaces) or that satisfactory agreement has been reached between the county and the airport owner that adverse impacts have been properly mitigated.

**Socioeconomic Resources**

The areas through which the proposed roadway would traverse are experiencing rapid growth and development. This growth and development is expected to continue with or without the proposed roadway and bridge. However, the proposed roadway and bridge would likely result in some development occurring sooner. Since the proposed project would likely induce the occurrence of some development sooner than if the project were not built, but is not expected to be the sole reason for further development, impacts to socioeconomic resources are not anticipated to be significant. In addition, no other significant adverse socioeconomic impacts were identified.



Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in significant adverse impacts to socioeconomic resources.

### **Hazardous, Toxic, and Radioactive Waste (HTRW)**

The proposed bridge crossing would be required to either have a HTRW materials spill contingency plan (including mitigative procedures) approved by the USACE, TNRCC, and any other agency deemed necessary by the USACE or prohibit use of the roadway by vehicles transporting HTRW materials.

On the west side of Lewisville Lake, in the location where the bridge would cross USACE property, three listed sites are within the specified radius of the subject property:

- DJ Grocery, 631 South Denton Drive, two active/in service underground storage tanks;
- Fast Break (Lake Dallas Shamrock), 401 South Denton Drive, one active/in service underground storage tank and a leaking petroleum storage tank site, the regulatory status indicates corrective action measures are on going.
- Lakeland Cities Shopping Center/ Spritz, 603 South Denton Drive, two active/in service underground storage tanks and a leaking petroleum storage tank site, groundwater contamination is indicated and corrective actions are ongoing.

The underground storage tanks are regulated by the TNRCC. The Fast Break and Lakeland Cities underground storage tanks pose a low environmental concern to the proposed action.

No listed regulated sites were identified within the ASTM specified radius on the east side of the lake.

### **Noise**

This analysis conforms to the Federal Highway Administration (FHWA) Regulation 23 CFR 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise," and TxDOT's 1996 Guidelines for Analysis and Abatement of Highway Traffic Noise.

Sound from highway traffic is generated primarily from a vehicle's tires, engine, and exhaust. It is commonly measured in decibels and is expressed as "dB."

Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as "dBA." Table 6.1 illustrates some common sound/noise levels in dBA.

Also, because traffic sound levels are never constant due to the changing number, type, and speed of vehicles, a single value is used to represent the average or equivalent sound level and is expressed as " $L_{eq}$ ."

Table 6.1 Common Sound/Noise Levels		
OUTDOOR	dBA	INDOOR
Pneumatic hammer	100	Subway train
Gas lawn mower at 1 meter	90	Food blender at 1 meter
Downtown (large city)	80	Garbage disposal at 1 meter
Lawn mower at 30 meters	70	Vacuum cleaner at 3 meters
Commercial area	60	Normal speech at 1 meter
Air conditioning unit	60	Clothes dryer at 1 meter
Babbling brook	50	Large business office
Quiet urban (daytime)	50	Dishwasher (next room)
Quiet urban (nighttime)	40	Library

The traffic noise analysis typically includes the following elements:

- Identification of land use activity areas that might be impacted by traffic noise.
- Determination of existing noise levels.
- Prediction of future noise levels.
- Identification of possible noise impacts.
- Consideration and evaluation of measures to reduce noise impacts.

The FHWA has established the Noise Abatement Criteria (NAC) for various land use activity areas that are used as one of two means to determine when a traffic noise impact would occur. The NAC is shown on Table 6.2.

A noise impact occurs when either the absolute or relative criterion is met:

**Absolute criterion:** the predicted noise level at a receiver approaches, equals, or exceeds the NAC. "Approach" is defined as one dBA below the NAC. For example, a noise impact would occur at a Category B residence if the noise level is predicted to be 66 dBA or above.

**Relative criterion:** the predicted noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal, or exceed the NAC. "Substantially exceeds" is defined as more than 10 dBA. For example, a noise impact would

occur at a Category B residence if the existing level is 54 dBA and the predicted level is 65 dBA (11 dBA increase).

Table 6.2 FHWA Noise Abatement Criteria (NAC)		
Activity Category	L <sub>eq</sub> (dBA)	Description of Land Use Activity Areas
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (exterior)	Developed lands, properties or activities not included in categories A or B above.
D	--	Undeveloped lands.
E	52 (interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

When a traffic noise impact occurs, noise abatement measures must be considered. A noise abatement measure is any positive action taken to reduce the impact of traffic noise on an activity area.

The FHWA traffic noise modeling software was used to calculate predicted traffic noise level contours. The model primarily considers the number, type, and speed of vehicles; highway alignment and grade; cuts, fills, and natural berms; surrounding terrain features; and the locations of activity areas likely to be impacted by the associated traffic noise.

Predicted traffic noise level contours were modeled along the proposed Lake Lewisville Bridge crossing using predicted traffic volumes from the 1993 Feasibility Study and the 1995 Environmental Overview Study. The traffic volumes used were 9,021 vehicles per day (vpd) in 2020. The predicted traffic noise level contours were then used to assess impacts at Category B and C receivers that represent the residences, commercial businesses, etc. adjacent to the roadway project that might be impacted by traffic noise and that may potentially benefit from reduced noise levels.

The results showed that both the predicted 66 dBA L<sub>eq</sub> traffic noise level contour (which represents an absolute noise impact for Category B receivers) and the predicted 71 dBA L<sub>eq</sub> traffic noise level contour (which represents an absolute noise impact for Category C receivers) are within the proposed right-of-way. No receivers are located within these traffic noise level contours. Predicted traffic noise levels exceed existing levels by less than 11 dBA, and the NAC

was not approached, equaled, or exceeded. Therefore, the project would not result in a traffic noise impact and consideration of noise abatement measures is not required.

Numerous land use activity areas along the proposed Lake Lewisville Bridge crossing are currently Category D, undeveloped land. Also, no new development is currently planned, designed, or programmed in these areas. There is no NAC for undeveloped land; however, to avoid noise impacts that may result from future development of properties adjacent to the project, local officials responsible for land use control programs should ensure, to the maximum extent possible, no new activities are planned or constructed along or within the predicted (2020) traffic noise impact contours shown on Table 6.3. On the date of approval of this document (Date of Public Knowledge), FHWA and TxDOT are no longer responsible for providing noise abatement for new development adjacent to the project.

Table 6.3 Traffic Noise Impact Contours Along Lake Lewisville Bridge			
UNDEVELOPED AREAS	LAND USE	IMPACT CONTOUR	DISTANCE from RIGHT-of-WAY
Lake Lewisville Bridge Crossing From IH 35E To FM 720	Residential	66 dBA	Within Right-of-Way
	Commercial	71 dBA	Within Right-of-Way

In addition to the FHWA and TxDOT noise regulations, the National Park Service also has noise regulations under 36 CFR 2.12. These regulations are as follows:

(a) The following are prohibited:

(1) Operating motorized equipment or machinery such as an electric generating plant, motor vehicle, motorized toy, or an audio device such as a radio, television set, tape deck or musical instrument, in a manner: (i) That exceeds a noise level of 60 decibels measured on the A-weighted scale at 50 feet; or, if below that level, nevertheless; (ii) makes noise which is unreasonable, considering the nature and purpose of the actor's conduct, location, time of day or night, purpose for which the area was established, impact on park users, and other factors that would govern the conduct of a reasonably prudent person under the circumstances.

(2) In developed areas, operating a power saw, except pursuant to the terms and conditions of a permit.

(3) In nondeveloped areas, operating any type of portable motor or engine, or device powered by a portable motor or engine, except pursuant to the terms and conditions of a permit. This paragraph does not apply to vessels in areas where motor boating is allowed.

(4) Operating a public address system, except in connection with a public gathering or special event for which a permit has been issued pursuant to Section 2.50 or Section 2.51.

(b) Violation of the terms and conditions of a permit issued in accordance with Section 2.50 or Section 2.51 is prohibited and may result in the suspension or revocation of the permit.

The 60 dBA  $L_{eq}$  contour along the proposed Lake Lewisville Bridge and roadway is approximately 135 feet from the proposed right-of-way. Therefore, a traffic noise impact would occur within 135 feet of the right-of-way along both sides the bridge and roadway if the National Park Service noise regulations are followed.

Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receivers are expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected. Provisions would be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls, and proper maintenance of muffler systems.

### **Air Quality**

The primary pollutants from motor vehicles are volatile organic compounds (VOCs), carbon monoxide (CO) and nitrogen oxides (NO<sub>x</sub>). Volatile organic compounds and nitrogen oxides can combine under the right conditions in a series of photochemical reactions to form ozone (O<sub>3</sub>). Because these reactions take place over a period of several hours, maximum concentrations of ozone are often found far downwind of the precursor sources. Thus, ozone is a regional problem and not a localized condition.

The modeling procedures of ozone require long-term meteorological data and detailed area wide emission rates for all potential sources (industry, business, and transportation) and are normally too complex to be performed within the scope of an environmental analysis for a roadway project. Accordingly, concentrations of ozone for this purpose of comparing the results of the NAAQS are modeled by the regional air quality planning agency for the State Implementation Plan. However, concentrations for carbon monoxide are readily modeled for roadway projects and are required by Federal regulations.

Future traffic projections are required for proposed roadway projects in order to perform an air quality analysis. Traffic projections for the Lake Lewisville Bridge crossing were obtained from the 1993 Feasibility Study and the 1995 Environmental Overview Study. The proposed project's traffic projection does not exceed 20,000 vehicles per day for either the Estimated Time of Completion (ETC) or ETC+20 years (2005 and 2025 respectively) and thus is exempt from a traffic air quality analysis because previous analyses of similar projects did not result in a violation of the NAAQS. This is in accordance with the Texas Department of Transportation's (TxDOT) 1999 Air Quality Guidelines, which were approved by the Federal Highway Administration (FHWA).

### **6.1.2 Maintenance and Repair Activities**

Several of the additional road and bridge proposals are considered to be maintenance and repair activities. These actions include: 1) replacement of the bridge on Fish Hatchery Road spanning McWhorter Creek, 2) the addition of right-turn lanes and traffic signals at the intersection of Lewisville Lake Park Road and Mill Street, 3) reconstruction of Kealy and Jones streets near the City of Lewisville's wastewater treatment plant, and 4) the addition of equestrian and pedestrian access to bridges in the Town of Copper Canyon. The types of construction activities needed to repair and maintain these already existing facilities have already been approved in previous environmental documents and are authorized within current easement boundaries and conditions. Further discussion of environmental impacts for these actions is not necessary. These actions

were included in this PEA in order to make public disclosure of future possible actions on USACE managed lands. A brief description of each of the above referenced proposals is found in the following paragraphs.

**Bridge Replacement on Fish Hatchery Road at McWhorter Creek**

This project involves replacing the existing two-lane bridge structure with a new two-lane bridge structure. The proposed bridge replacement would be constructed within the existing right-of-way and no additional right-of-way would be required. The City of Lewisville would construct, operate and maintain the new bridge. Additional project related information is included in Section 2 of the Resource Document.

**Improvements at intersection of Lewisville Lake Park Road and Mill Street**

This proposed action involves construction of right-turn lanes on Lake Park Road at Mill Street, installation of traffic signals at Mill Street and Lake Park Road, and a corner clip at the golf course. The action is being proposed by the City of Lewisville who would be responsible for the construction, operation and maintenance of the improvements. The purpose of the action is to improve vehicle circulation into and out of Lewisville Lake Park. Construction is estimated to begin in 1999. Additional project related information is included in Section 3 of the Resource Document.

**Reconstruction of Kealy and Jones Streets**

The City of Lewisville is proposing to reconstruct Kealy Street and Jones Street to improve the condition of the existing streets. Both existing roadways are two-lane undivided asphalt surfaced roadways with curb and gutter within 60 feet of right-of-way. The proposed roadways would also be two-lane undivided roadways with curb and gutter within 60 feet of right-of-way but would be resurfaced with concrete. No additional travel lanes or additional right-of-way would be involved. If the proposed design changes and either additional travel lanes or additional right-of-ways were involved, the environmental impact assessment discussed below would have to be re-evaluated. The City of Lewisville would construct, operate and maintain the proposed roadways. Construction is estimated to begin in 2006. Additional project related information is included in Section 4 of the Resource Document.

**Addition of equestrian and pedestrian access to bridges in Copper Canyon**

The Town of Copper Canyon is proposing to add equestrian and pedestrian access improvements to bridges in Copper Canyon.

**6.1.3 Future Proposed Road and Bridge Actions**

The remaining actions listed under the bridge and road proposals include: 1) Roadway through Wynnewood Peninsula and bridge spanning Lewisville Lake dam to connect to SH 121, 2) FM 2499 crossing the Hickory Creek arm of Lewisville Lake, and 3) bridge replacement at Old Alton Bridge. Not enough detail on these actions was provided to adequately assess the environmental impacts in this PEA. Therefore, the no action alternative is being proposed as the preferred alternative for each of these actions. Each action would require either an individual or grouped EA(s) or EIS(s). The actions were included in this PEA in order to make public disclosure of future possible impacts to USACE managed lands yet to be assessed. The following paragraphs

give a brief description of the proposed actions and describe some of the potential problems and conflicts associated with each.

### **Wynnewood Peninsula Roadway and Bridge**

The proposed action involves construction of a public roadway through Wynnewood Peninsula Park to connect FM 423 and SH 121 by way of a bridge that would cross a narrow “cut” in Lewisville Lake. Boyd Road is the two-lane asphalt road, which currently connects FM 423 to the north end of the Wynnewood Peninsula Park area where it dead-ends. An old service road through part of the park has deteriorated and has been abandoned as part of the current golf course construction process.

Both Denton County and the City of The Colony have recognized the need for a new roadway extending through the peninsula to its southern point and each has proposed by its official Thoroughfare Plan that this road be extended by a bridge across the narrow cut in Lewisville Lake spanning the Lewisville Lake dam and connecting to SH 121. Such a connection between FM 423 and SH 121 would provide regional transportation benefits including relief for the already congested FM 423 corridor as it passes through the City of The Colony. On November 24, 1998, the Denton County Commissioners Court officially made this planned roadway a part of its “Denton County Better, Safer Roads Program.”

Phase 1 of this roadway would involve construction of a two-lane paved road from existing Boyd Road to the southern end of the peninsula, thus providing access to each of the planned recreational uses on the peninsula (i.e., the golf course, marina and park). Construction of Phase 1 is projected for the 1999-2000 time period. Construction of the bridge and extension of the roadway to connect to SH 121 is Phase II and is projected for the 2000-2003 time period, subject to available funding. No alternatives were provided, either for location or design. Since the City of the Colony did not provide any design details or detailed alignment or alternatives with their proposal for this action, any attempt to assess the environmental impacts of this proposal would be beyond the scope of this PEA.

The proposed road and bridge would have land use conflicts within Wynnewood Park (recreation land) and wildlife management lands south of the dam. The bridge would also have potential impacts to the Lewisville Lake dam. It is the USACE policy not to allow drill piers or shafts in a flood control embankment. In addition, the bridge would have to provide a minimum clearance of 17 feet at the crest of the dam and 52 feet above the uncontrolled spillway elevation of 532 msl. Given the conflicts this road and bridge alignment would cause to land use within Wynnewood Park and south of the dam, as well as potential impacts to the dam itself, this project was removed from further study in this PEA, and a separate environmental document would be required.

### **FM 2499**

This is a new roadway being proposed by Denton County and would involve a bridge across the Hickory Creek arm of the lake. Denton County has completed a Draft Environmental Assessment (EA) for this project and has submitted it to the Texas Department of Transportation and Federal Highway Administration. Therefore, in order to avoid duplication of Federal funding, effort, and resources, this project was removed from further study in this PEA. The

USACE has requested to be included as a cooperating agency in review of the draft EA to ensure that all USACE regulations, policies, standards, and guidelines are properly considered and addressed. These regulations, policies, standards, and guidelines include providing a minimum 30-day opportunity for public review and comment following mailing of notices of availability to concerned citizens, agencies, organizations, etc. In addition, copies of the draft EA must be made available locally to communities adjacent to affected USACE lands. If the final EA does not meet these requirements, or USACE is not included as a cooperating agency, then a separate USACE environmental document, funded by the proposed project sponsor, would be required.

### **Proposed Old Alton Bridge Replacement**

Denton County is proposing to replace the existing bridge on Old Alton Road over the Hickory Creek arm of the lake. Insufficient data was provided to evaluate this project. Therefore, it was removed from further study in this PEA and a separate environmental document would be required.

## **6.2 Water Related Recreation Use Facilities**

Water Related Recreation Use Facilities consists of three activities: Marinas, Boat Launch Ramps, and Dry Boat/Stacked Storage. Lewisville Lake is divided into three zones: Zone A, Zone B, and Zone C. Each of the three zones has carrying capacities (capacity limits) in terms of the number of vessels (any boat motorized or nonmotorized) it can accommodate while maintaining a reasonable level of resource protection, safety, water quality and user satisfaction. The carrying capacity of each zone and a map depicting the zones is included in the Lewisville Lake Future Water-Related Development Policy (Exhibit 13). Each of the three activities and the associated projects by zone are discussed below.

### **6.2.1 Marinas**

Impact on vessel carrying capacity is - 1 vessel on the water to 10 stored in wet slips.

#### **Project Descriptions**

##### **Pier 121 Marina (Zone A)**

Pier 121 Marina is an existing marina located in the southeast area of the lake which is planning future expansion and development projects as shown on the Activities List in Section 5. Additional project related information is included in Section 6 of the Resource Document. No additional wet slips are being proposed beyond those already authorized.

##### **Eagle Point Marina (Zone A)**

Eagle Point Marina is an existing marina located on the southwest side of the lake and has a fairly extensive list of proposed projects planned within the 10-year development period. These projects are shown in Section 5 and are assessed below. Additional project related information is included in Section 8 of the Resource Document. No additional wet slips are being proposed beyond those already authorized.

##### **Dallas Corinthian Yacht Club (Zone B)**



The Dallas Corinthian Yacht Club is a member owned and member operated marina whose 10-year development plan projects shown in Section 5 consist primarily of improvements to make the marina more useable and to accommodate additional membership. An additional 100 wet slips are being proposed which equates to a 10 vessel impact on carrying capacity. Additional project related information is included in Section 7 of the Resource Document.

**Lakeview Marina (Zone B)**

Lakeview Marina is an existing marina located on the west side of the lake directly north of Willow Grove Park. It is the oldest marina on the lake and was constructed on the original lake, Lake Dallas, in the 1930's. Their 10-year development plan includes several projects at the marina as well as annexing Willow Grove Park and implementing several projects there. Additionally proposed floating structures would cover approximately four acres of surface water and include 306 wet slips which equates to a 31-vessel impact on carrying capacity. The proposed projects at Lakeview marina are shown in Section 5. Additional project related information is included in Section 9 of the Resource Document.

**Proposed Marina in Wynnewood Park (Zone A or Zone C)**

The City of The Colony is proposing a new marina in Wynnewood Park in one of two alternative site locations. One alternative site location is in Zone A and the other is in Zone C. The proposed floating structures would cover approximately 15.2 acres of surface water and include 1,300 wet slips which equates to a 130 vessel impact on carrying capacity. Other projects being proposed under the 10-year development plan are shown in Section 5. Additional project related information is included in Section 18 of the Resource Document.

**Proposed Cottonwood Park Marina (Zone C)**

The Town of Little Elm is proposing a new marina at Cottonwood Park. The proposed marina would involve floating structures, on shore structures and other improvements, which are further, identified in Section 5. The proposed floating structures would cover approximately 23 acres of surface water and include 1,000 wet slips which equates to a 100 vessel impact on carrying capacity. Additional project related information is included in Section 5 of the Resource Document.

**Proposed Marina in Hidden Cove Park (Zone C)**

The City of The Colony is proposing a new marina in Hidden Cove Park in one of two alternative site locations. The proposed floating structures would cover approximately three acres of surface water and include 250 wet slips which equates to a 25 vessel impact on carrying capacity. Additional projects are identified under Section 5. The alternative site locations and other associated projects being proposed under the 10-year development plan are included in Section 15 of the Resource Document.

**Alternatives**

The only marina that provided alternatives was the proposed new marina in Wynnewood Park. Two alternative sites were provided for the new marina: one in Zone A and one in Zone C. Since the carrying capacity of Zone A is already exceeded, the USACE will issue no further authorizations for additional capacity (e.g., wet slips, boat ramps, boat ramp parking spaces, dry

stacked boat storage). As a result, the proposed marina in Wynnewood Park cannot go in Zone A. Therefore, the assessments made in this PEA assume that the proposed marina site would be in Zone C. No alternatives were provided at the other marinas. Therefore, the only other alternative considered was the no action alternative.

### **6.2.2 Boat Launch Ramps**

Impact on vessel carrying capacity is – 1 vessel on the water to 1 vehicle/boat trailer parking space (boat ramp parking space) available and/or one boat ramp lane to 25 boat ramp parking spaces.

### **Project Descriptions**

#### **Eagle Point Marina in Lewisville Lake Park (Zone A)**

The City of Lewisville is proposing a 2-lane boat ramp. Although a boat ramp parking lot was not specified, a parking lot with 50 parking spaces is required and therefore assumed which equates to a 50-vessel impact on carrying capacity.

#### **Eastvale Park (Zone A)**

The City of The Colony is proposing an additional 1-lane boat ramp and a courtesy dock at the boat ramp. Although a boat ramp parking lot was not specified, a 25-space parking lot is required and therefore assumed which equates to a 25-vessel impact on carrying capacity.

#### **Canoe/Jon Boat Launching Facilities Along Hickory Creek (Zone A)**

The Town of Copper Canyon is proposing canoe and jon boat launching facilities along the north side of Hickory Creek near the Old Alton Bridge crossing. A 25-space parking lot is required and therefore assumed which equates to a 25-vessel impact on carrying capacity.

#### **Stewart Creek Park (Zone A)**

The City of The Colony is proposing watercraft rental from the golf course (canoes, kayaks, jet skis, and paddle boats) and 100 additional parking spaces at the existing boat ramp to alleviate the lack of space already apparent at Stewart Creek Park and to construct a concrete ramp at the jet ski launch area. The City states that there are trailers parking on the hill area, along the roadsides, and in grassy areas causing the need to have additional parking. The USACE would allow authorization for overflow parking as documented in the WRRUS without impacting zone carrying capacities. The WRRUS does identify that there was overflow in Stewart Creek Park during the sample period; however, that overflow problem ranged from 2 to 24 vehicles for a 1-hour period. For example, the average overflow in Stewart Creek Park (as documented in the WRRUS) for a 1-hour period is 13 vehicles with trailers; therefore, the USACE could allow from 10 - 15 additional parking spaces without impacting zone carrying capacity (if conditions warrant and the vehicle to ramp ratio is favorable). In this case, the vehicle to ramp ratio is 1 ramp to 50 parking spaces. The optimum ratio would be 1 ramp to 25 parking spaces. The USACE recommendation for this action would be to add an additional ramp (if site conditions are favorable), add 10-15 additional parking spaces to account for average overflow and to not allow additional vehicles with trailers to park illegally. All of these management practices may be

accomplished at no additional impact to carrying capacity in Zone A. Therefore, for the purposes of this PEA, 85 parking spaces are counted against the Zone A carrying capacity.

**Lakefront Research and Education Area at LLELA (Zone A)**

The proposed Lakefront Research and Education Area at LLELA would be located on the peninsula adjacent to the overflow spillway at Lewisville Lake. The proposed activities consist of the following improvements: construction of a rudimentary boat ramp for launching research boats, construction of a concrete slab pavilion (30' x 40') to be used as the research staging area, and building a gravel road base off an existing road that goes from Fish Hatchery Road to the research site. Additional project related information is included in Section 28 of the Resource Document.

Implementation of these improvements would further LLELA's mission for environmental education, habitat restoration and preservation, and environmental research. The rudimentary boat ramp would not be open to the public; therefore, it would not impact the carrying capacity of Zone A. These types of actions are similar to those currently authorized by the USACE in accordance with the master plan and development policies and guidelines including the land use allocation/classification system. Further discussion of environmental impacts for these actions is not necessary. These actions were included in this PEA in order to make public disclosure of future possible actions on USACE managed lands.

**Dallas Corinthian Yacht Club (Zone B)**

The Dallas Corinthian Yacht Club is proposing a 1-lane high water boat ramp to be utilized only when the existing boat ramp is inundated. Therefore, this ramp does not count against the carrying capacity of Zone B.

**Lakeview Marina (Zone B)**

The Lake Dallas Boat Company is proposing two new 1-lane boat ramps (one in current lease area and one in the area of Willow Grove Park that they are proposing to lease). They are also proposing a 25 to 30-space parking lot for their existing boat ramp. The two new one lane boat ramps would equate to 50 required parking spaces which, when combined with a 30 space parking lot for their existing boat ramp, equates to an 80 vessel impact on carrying capacity.

**Willow Grove Park (Zone B)**

The City of Lake Dallas is proposing a 1-lane boat ramp and a 30-space boat ramp parking lot, which equates to a 30-vessel impact on carrying capacity.

**Hidden Cove Park (Zone C)**

The City of The Colony is proposing a 3-lane boat ramp, courtesy dock and a 75-space boat ramp parking lot, which equates to a 75-vessel impact on carrying capacity.

**Little Elm Park (Zone C)**

The Town of Little Elm is proposing a new 2-lane boat ramp with courtesy dock, a 50-space boat ramp parking lot, and the addition of a courtesy dock on each side of the existing boat ramp, which equates to a 50-vessel impact on carrying capacity.

**Alternatives**

No alternatives were provided. Therefore, the only other alternative considered was the no action alternative.

### **6.2.3 Dry Boat Storage & Dry Stacked Storage (Valet Type Service)**

Dry boat storage has no measurable impact on the lake while dry stacked valet type boat storage has the same impact as a marina wet slip on the vessel carrying capacity – 1 vessel on the water to 10 stored.

### **Project Descriptions**

#### **Eagle Point Marina in Lewisville Lake Park (Zone A)**

A total of 325 dry boat storage units and 300 dry stack boat storage units are being proposed which equates to a 30 vessel impact on carrying capacity.

#### **Pier 121 Marina in East Hill Park (Zone A)**

Marinas International indicated an anticipated demand for additional covered storage but did not specify the number of anticipated storage units nor type (dry boat storage or dry stack boat storage). Therefore, impacts associated with this could not be assessed. Since the carrying capacity of Zone A is already exceeded, the USACE will issue no further authorizations for additional capacity (e.g., wet slips, boat ramps, dry stacked valet storage). As a result, the no action alternative is being proposed for the additional covered storage.

#### **Lakeview Marina (Zone B)**

A total of 380 dry boat storage units and no dry stack boat storage units are being proposed which has no impact on carrying capacity.

#### **Proposed Marina in Hidden Cove Park (Zone C)**

A total of 60 dry boat storage units and no dry stack boat storage units are being proposed which has no impact on carrying capacity.

#### **Proposed Cottonwood Park Marina (Zone C)**

A total of 100 dry boat storage units and no dry stack boat storage units are being proposed which has no impact on carrying capacity.

#### **Proposed Marina in Wynnewood Park (Zone C)**

A total of 600 dry boat storage units and no dry stack boat storage units are being proposed which has no impact on carrying capacity.

**Alternatives**

No alternatives were provided. Therefore, the only other alternative considered was the no action alternative.

**6.2.4 Environmental Impacts****Physical Resources**

Implementation of the proposed actions would not be expected to cause any impacts to farmlands since there are no farmlands within the areas of the proposed development projects. Where possible, the proposed projects would utilize existing topography and soils. However, it is anticipated there would be minor impacts to the topography and soils within the project areas caused by the earth moving activities necessary to construct the projects. Some of the proposed actions would involve activities in waters of the U.S. (the lake) such as dredging, sidecasting of material, breakwaters, boat ramps, etc. resulting in impacts to lake soils. These activities may require Section 404 permits under the Clean Water Act and all terms and conditions of any resulting permits must be met. These permit requirements would also be included as conditions to any real estate consent/instrument along with any other mitigation required by the USACE. The impacts to lake soils from these activities are considered minor if the terms and conditions of the Section 404 permit as well as all other applicable regulations, policies, standards and guidelines are met. In addition, implementation of the proposed action would cause minor temporary impacts to adjacent lands during construction. Disturbance to existing topography and soils from construction would be kept to the minimal amount and size of disturbance possible and the use of best management practices to reduce soil erosion and runoff would be required. Following construction, disturbed soils would be stabilized with native vegetation. It is therefore determined that implementation of the proposed actions would not result in significant adverse impacts to topography, soils, or farmlands over the long term.

**Land Use**

All of the projects, except the proposed canoe/jon boat launching facilities along Hickory Creek, are located in areas designated for intensive or future intensive recreation uses. These projects comply with the requirements of intensive or future intensive recreation uses discussed under Section 4.2. Therefore, these proposed projects would not have a significant adverse impact on the project area land use. The proposed canoe/jon boat launching facilities, however, are located within designated wildlife management lands which does not allow use as a boat launching facility. The applicant has not provided any land use exchange for mitigation. Therefore, the USACE is proposing the no action alternative for the canoe/jon boat launching facilities project.

**Cultural Resources**

All of the proposed projects are located upstream of the Lewisville Lake dam, which as discussed under Section 4.3, has had an adequate cultural resources inventory. Of the 146 cultural resource sites located upstream from the dam, only 11 have been determined eligible for the National Register of Historic Places (NRHP). The other 135 sites located upstream from the dam have been determined ineligible for the NRHP.

If no cultural resources are identified within the project's area of potential effects, or if the cultural resources are determined to be ineligible for the NRHP, then a finding of no historic

properties affected shall be coordinated with the SHPO. If historic properties (NRHP-eligible cultural resources) are identified which would be affected adversely by the project, then the Advisory Council on Historic Preservation shall be notified, and the SHPO shall be consulted to evaluate alternatives that could avoid, minimize, or mitigate adverse effects on historic properties. Such alternatives can include mitigation through data recovery.

Determinations of effects on cultural resources for each action would be accomplished on a case-by-case basis when applicants provide their final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate consent/instrument.

### **Water Quality**

Implementation of the proposed actions would result in temporary adverse impacts during the construction phase of the projects, but it is anticipated that these impacts would be short-term in nature. The principal water quality impacts associated with construction are those caused by dredging, water surface and subsurface structures, soil erosion, sedimentation, and siltation. Other possible impacts associated with construction activities include accidental fuel and oil spills and release of waste from the site. These potential impacts would be minimized or mitigated by implementation of erosion control and spill prevention strategies during the construction phase. These strategies are required as part of the EPA's General Construction Permits for Storm Water Discharges from Construction Activities in Region 6 and include such activities as silt fences, hay bale check dams, rock check dams, velocity dissipaters and construction entrances.

During construction and subsequent operation, water surface and subsurface structures may constrict floodwaters resulting in increased flow velocities and the potential increase in scour and erosion immediately downstream. The potential for these adverse impacts would be minimized by requiring that flow velocities remain at predevelopment levels or per the FEMA's guidelines for channel modification resulting in an increased flow of less than 5 feet per second.

The primary adverse water quality impacts associated with operation of the proposed facilities include the potential for soil erosion and runoff of pollutants such as fuel, oil, pesticides, herbicides, fertilizers, and other wastes into the lake from the site. Operation of the site should minimize adverse impacts to storm water discharges through application of appropriate best management practices. Thorough application of the appropriate storm water permits should mitigate possible adverse impacts resulting from operation of the facilities. In addition, planting vegetation to help stabilize the soil and serve to trap pollutants and hold runoff would be required at the site. It has therefore been determined that there would be no significant adverse impacts to the water quality of Lewisville Lake from implementation of the proposed actions, except on a temporary basis.

### **Wetlands**

Construction of the proposed projects has the potential to impact the wetlands along the shoreline and on shore. Onsite jurisdictional wetland determinations and delineations were beyond the scope of this PEA. It would be necessary to verify the location and extent of wetlands in the affected areas before proceeding with any of the projects. Impacts are not likely to be significant but, in cases where a permit is required under Section 404 of the Clean Water Act, a Nationwide

permit, at minimum, would be required. In cases where a wetland would be adversely impacted but no permit is required, the USACE would comply with Executive Order (EO) 11990 and ensure “no net loss of wetlands.” Documentation of compliance with Section 404 of the Clean Water Act and/or EO 11990 would need to be provided along with final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments.

### **Aquatic Resources**

Construction of water surface and subsurface projects (e.g., wet slips, boat ramps, courtesy docks, floating breakwaters, floating structures, etc.) would result in temporary adverse impacts during the construction phase of the projects, but it is anticipated that these impacts would be short-term in nature. It is also anticipated that any displaced aquatic resources would return and reestablish after project construction is completed. It is not anticipated that operation of these facilities would result in significant long-term impacts.

Construction and operation of all other on shore projects are not anticipated to result in any adverse impacts to aquatic resources.

### **Floodplains**

Executive Order 11988, Floodplain Management, requires that Federal agencies avoid activities, which directly or indirectly result in the development of floodplain areas. According to FEMA’s most current floodplain maps, most of the proposed projects, or portions thereof, are located within the 100-year floodplain. The floodplains are shown on Exhibit 6.

The proposed actions cannot increase the base flood elevation to a level, which would violate applicable floodplain regulations or ordinances and must comply current policies and standards. The USACE requires that there be no net loss of flood storage at Lewisville Lake. Therefore, any fill placed within the 100-year flood pool as a result of project construction must be mitigated with excavation in another area of the flood pool with disposition above flood pool elevation of 537 msl in an area approved by the USACE. As long as the proposed projects are designed to comply with this requirement, then no significant adverse impacts to floodplains are anticipated.

### **Terrestrial Resources**

#### **Marinas**

**Pier 121 Marina in East Hill Park** – The additional construction of these facilities would not impact either wooded or wetland habitats. The site is currently developed, or mowed grasslands with small scattered trees along the fence lines.

**Eagle Point Marina in Lewisville Lake Park** – The additional paved parking and hard surface service road may involve a few pockets of wooded habitat. The other activities would not have an impact on wooded or wetland habitats due to the already existing development. This marina is basically making small additions and numerous improvements to already existing structures.

**Proposed Marina in Wynnewood Park** – Two alternative sites are under consideration. The proposed floating structures would cover approximately 15 acres of surface water. The onshore

structures proposed involve an area of 3 acres along the southern shore of the peninsula. These proposed activities are not impacting wooded or wetland habitats.

**Dallas Corinthian Yacht Club** – The proposed on shore structures and improvements would be constructed along a rocky, sandy shoreline and a steep slope with herbaceous non-wetland vegetation. The wooded upper end of the slope would be outside the proposed action limits. The proposed additional 100 slips would extend from the existing docks. The additional acreage of surface water requested for these slips would equal 1.1 acres.

**Lakeview Marina in Willow Grove Park** – Additionally proposed floating structures would cover approximately 4 acres of surface water not including the floating breakwater, which did not have a defined measurement. The additional onshore amenities would not have an impact on the vegetative habitat due to the existing development, which includes mowed and maintained areas with abrupt shoreline edges.

**Proposed Cottonwood Park Marina in Cottonwood Park** – The proposed floating structures would cover approximately 23 acres of surface water. The on-shore structures would be constructed in a currently developed and maintained area.

**Proposed Marina in Hidden Cove Park** – Two alternative sites are under consideration. However, the proposed floating structures would cover approximately two acres of surface water, which includes the construction of a floating breakwater.

#### **Boat Launch Ramps**

**Eagle Point Marina in Lewisville Lake Park** – The boat ramp would be constructed of concrete during a period of lower water levels. Neither the parking facility (undefined units) nor the boat ramp should impact any of the surrounding vegetation.

**Eastvale Park** – The shoreline along the proposed area is generally rocky and man-made. A few scattered willow saplings are found along the shoreline, but there should not be any significant impacts on a wooded or wetland habitat.

**Canoe/Jon Boat Launching Facilities Along Hickory Creek** – These activities would not impact surrounding vegetation due to development along existing Alton Bridge.

**Hidden Cove Park** – The site proposed for construction is located along the shoreline. It is presently well maintained and mowed with scattered large oak trees.

**Lakeview Marina in Willow Grove Park** – The proposed site for the boat ramp includes a shoreline with an abrupt edge and no wetland vegetation. The parking lots sites would include a well-maintained partially graveled area with scattered oaks and saplings, which should not be impacted.

**Willow Grove Park** – Conflict with Lakeview Marina over park space. – The proposed site for the boat ramp would be in a well-mowed site with scattered oaks, willows, and herbaceous layer. The additional parking includes the addition of 30 units (90ft x 90ft) to existing parking facility.



Trailer overflow would be contained in a 50ft x 200ft flat area at the west end of the baseball fields.

**Little Elm Park** – The proposed boat launch ramp and courtesy dock would be located on the peninsula with rocky/sandy predominantly bare ground and a few scattered herbaceous plants. The location of the new courtesy pier would be along the existing boat ramp shoreline comprised of an existing concrete pad.

**Dry Boat Storage & Dry Stacked Storage (Valet Type Service)**

**Eagle Point Marina in Lewisville Lake Park** – The construction of the dry boat storage may involve an area containing a few pockets of trees.

**Pier 121 Marina in East Hill Park** – The units of covered storage were not defined, but the facility would be located adjacent to existing covered storage.

**Proposed Marina in Hidden Cove Park** – This proposed activity would involve construction within a previously developed area along the southeastern side of the park. The graveled storage area would be 17,400 sq. ft. with an initial 28 spaces and an additional 60 spaces if demand in the market increases.

**Proposed Marina in Wynnewood Park** – The proposed activity may require up to an acre of land for the required stacked storage space.

**Proposed Cottonwood Park Marina in Cottonwood Park** – The construction site for this activity should be within a currently developed and maintained area at the southern most tip of the park.

**Lakeview Marina in Willow Grove Park** – This construction would involve approximately 3 acres of land at a currently developed site.

**Threatened or Endangered Species**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any adverse impacts to threatened or endangered species.

**Aesthetics**

The proposed projects do involve new facilities, which would be viewable from parts of the lake and shoreline. There are relatively few Federal guidelines, which define significant adverse aesthetic impacts. Aesthetic impacts are often left to the discretion of the general public. Implementation of the proposed actions is not anticipated to cause significant adverse aesthetic impacts. Final plans and specifications submitted for USACE approval would be required to blend with existing facilities and/or comply with the lake/park architectural theme.

**Recreation**

Implementation of the proposed water related recreation use facilities would have a beneficial impact on recreation if carrying capacities were maintained.

**Socioeconomic Resources**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to socioeconomic resources.

**Hazardous, Toxic and Radioactive Waste**

**Pier 121 Marina** – Pier 121 has three registered underground storage tanks that are regulated by the TNRCC. Each tank contains gasoline and is 4,000 gallons in capacity. This site is not a listed leaking petroleum storage tank site. No additional regulated sites were identified within the ASTM specified radius. No environmental concerns were identified during the site reconnaissance.

**Eagle Point Marina** – Based on information in the HTRW Site Assessment Report (Exhibit 9), Eagle Point Marina, on Eagle Point Drive, is both a listed registered underground storage tank and leaking petroleum storage tank site. Eagle Point Marina has three active/in service tanks, two containing gasoline and one with unspecified contents. Sizes range from 1,000-gallon capacity to 3,000-gallon capacity. However, information provided in a recent letter from Eagle Point Marina to the USACE dated August 27, 1999 (Exhibit 14) stated that some of the storage tank information regarding size and contents was incorrect and that the correct information is as follows: Tank 1 is a 3,000 gallon tank containing diesel fuel; Tank 2 is a 2,000 gallon tank containing unleaded plus gasoline; and Tank 3 is a 12,000 gallon tank containing super unleaded gasoline. Their letter also included additional information regarding the tanks including the installation of cathodic protection, overfill protection, an inventory control monitoring system, and soil testing in the tank and line area.

The leaking status is open with no apparent ongoing corrective actions. The status of this leaking tank poses an environmental concern to the subject property. Another leaking petroleum storage tank site located within a half-mile radius of the marina was identified during the ASTM review. This site, the Former EZ Serve at 2997 N. Stemmons Freeway, is currently in operation as Snap-E-Jack with two active/in service tanks containing gasoline. The leaking status had a final concurrence issued and the case was closed. This site does not appear to pose an environmental concern to the subject property.

During the site reconnaissance, the fuel pumps for the Eagle Point fuel tanks were observed. In addition, a watercraft paint stripping and repainting operation was observed on the subject property. During a rain event, storm water with a white color was observed discharging to the lake. During a separate site visit, another storm water drainage was observed to have a white paint residue on the concrete culvert and on the grass lining the drainage. This facility is not listed as a RCRA facility. In the approximate location of the fuel pumps, numerous 55-gallon capacity barrels were observed. Their contents are unknown. In the area of the existing Marina Office, numerous gasoline cans were observed. Their contents are unknown. The nature of the stripping/painting operation, housekeeping practices and potential waste storage at the Eagle Point Marina place a high environmental concern to the subject property. Eagle Point Marina's

August 27, 1999 letter to the USACE also included information regarding storm water runoff and the 55-gallon drums.

**Dallas Corinthian Yacht Club** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any adverse impacts to hazardous, toxic, and radioactive waste sites.

**Lakeview Marina** – The subject property has two active/in service registered underground storage tanks, which reportedly contain gasoline and diesel fuel. The tanks are owned by Lake Dallas Boat Co., Inc. and are located at 708 East Nick Street. This site is not a leaking petroleum storage tank site. Two adjacent sites, Lake Dallas Independent School District (ISD) located at 425 East Hundley Drive and a residential lot located at 307 Marina Drive, also have registered tanks. The Marina Drive tank has been removed and the Lake Dallas ISD tank is active/in service. Neither site is a listed leaking petroleum storage tank site.

One leaking petroleum storage tank site was identified within the one-half mile radius of the subject property, which is the ASTM specified radius. The site is the Lake Dallas Café True Value Hardware located at 301 Main Street. This site has had a final concurrence issued and the case is closed. Additionally, an Emergency Response Notification System (ERNS) site was identified adjacent to the Lakeview Marina. A Lone Star Pipeline release of an unknown quantity of natural gas was reported at 619 Shore Street, reportedly affecting a waterway. No additional information was provided. The potential for impact from these regulated sites is low. No additional environmental concerns were identified during the site reconnaissance.

**Proposed Marina in Wynnewood Park** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to hazardous, toxic, and radioactive waste sites.

**Proposed Cottonwood Park Marina** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any adverse impacts to hazardous, toxic, and radioactive waste sites.

**Proposed Marina in Hidden Cove Park** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any adverse impacts to hazardous, toxic, and radioactive waste sites.

**Eastvale Park** – The subject property has no listed regulated sites. The following sites were identified within the ASTM specified radius:

- The Bait House/Hays Fina, Highway 423 at Stewart's Creek Road, active/in service registered underground storage tank site; and
- Joe's Country Store, 7616 North Main Street, active/in service registered underground storage tank site and leaking petroleum storage tank site (twice; January 1996 and June 1997), impacted groundwater, corrective action measures are ongoing and site closure is pending.

These sites do not appear to pose an environmental concern to the subject property due to their current status and distance from Eastvale Park. In addition, Joe's Country Store is down hill of the park. No additional environmental concerns were identified during the site reconnaissance.

**Hickory Creek Park** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to hazardous, toxic, and radioactive waste sites.

**Willow Grove Park** – The subject property has three listed sites with registered underground storage tanks. The sites are Lake Dallas Boat Co., Inc. located at 708 East Nick Street, Lake Dallas I.S.D. located at 425 East Hundley Drive and a residential lot located at 307 Marina Drive. The Marina Drive tank has been removed and the tanks at the other two sites are listed as active/in service. None of the sites are listed leaking petroleum storage tank sites.

**Little Elm Park** – A single listed site, a registered underground storage tank at the Little Elm Elementary School located at Main Street and Lake Shore, had three tanks, which reportedly were removed from service. This is not a listed leaking petroleum storage tank and does not pose an environmental concern to Little Elm Park. No environmental concerns were identified during the site reconnaissance.

### **Noise**

None of the individual projects being proposed would involve a significant or substantial noise source. However, the overall marina developments would attract visitors, vehicles and boats to these areas, which would increase ambient noise levels. It is difficult to accurately predict future noise levels from visitors using the various recreational facilities being proposed as part of the overall marina developments. Future noise levels from vehicles using the existing and proposed access roads can be predicted using the FHWA's traffic noise modeling software. However, in order to model traffic noise levels, future traffic projections are required. Since the required traffic data was not available, traffic noise modeling was not performed. It would be difficult to predict noise levels from boats on the lake from these marinas and/or boat ramps. This would require an extensive inventory of the number of boats and types of boat motors being used. Also, boats move in unpredictable patterns on the lake. In addition, a computer model for modeling noise levels from boats is not known to exist.

Although future noise levels from all of the various projects being proposed as part of the overall water related recreation use facilities could not be predicted, it is not anticipated that these proposed projects would result in significant noise impacts. See also discussion of National Park Service noise regulations under Section 6.1.1.16.

### **Air Quality**

None of the individual projects being proposed would involve a significant or substantial air pollutant emission source. However, the overall water related recreation use facilities would attract boats and vehicles to these areas, which would increase air pollutant emissions from motors in the immediate project vicinities. However, it is reasonable to assume that many of the proposed projects would not substantially increase the number of vehicles on Federal land around the lake or the number of boats on the lake. It stands to reason that most individuals wanting to

use the lake would visit the lake with or without these projects. If these projects were developed, it would merely divert some visitors from other recreational facilities around the lake to these facilities rather than causing a substantial number of additional individuals to visit the lake that would not have otherwise done so.

Based on this assumption, the proposed projects are not expected to significantly impact air quality around Lewisville Lake. The USACE development policies and guidelines regarding water related development and carrying capacities would need to be complied with.

It would be difficult to predict air pollutant emissions from boats on the lake from these marinas and/or boat ramps. This would require an extensive inventory of the number of boats and types of boat motors being used. Also, boats move in unpredictable patterns on the lake. In addition, a computer model for modeling air pollutant emissions from boats is not known to exist.

Future air pollutant emissions from vehicles visiting the proposed facilities could be predicted using EPA approved emission factor and dispersion models. However, future traffic projections are required in order to perform modeling for an air quality analysis. Since future traffic projections were not available for these projects, an air quality analysis could not be performed. However, in accordance with TxDOT's 1999 Air Quality Guidelines which were approved by the FHWA, a traffic air quality analysis is not required for roadway projects whose traffic projections do not exceed 20,000 vehicles per day for either the Estimated Time of Completion (ETC) or ETC+20 years (estimated 2005 and 2025 respectively for these projects) because previous analyses of similar projects did not result in a violation of the NAAQS. It is certainly not anticipated that future 2025 traffic projections for any of the proposed water related recreation use facilities would exceed 20,000 vehicles per day.

Based on the above findings, it is not anticipated that the proposed water related recreation use facilities would result in significant adverse air quality impacts.

### Cumulative Impacts

Lewisville Lake and each of its three zones has carrying capacities (capacity limits). The carrying capacity of each zone and a map depicting the zones is included in the Lewisville Lake Future Water-Related Development Policy (Exhibit 13). The capacities are listed in terms of vessels (any boat motorized or nonmotorized). Table 6.4 shows the zone carrying capacities (per vessels).

Table 6.4 Zone Carrying Capacity (per vessels)							
Zone	Existing Load	Currently Authorized <sup>1</sup>	Total Load	Carrying Capacity	Currently Available	Requested	Exceedance
A	534	97	631	631	0	240	240
B	141	5	146	192	46	146	100
C	61	0	61	289	228	380	152
Totals	736	102	838	1112	274	766	492

<sup>1</sup> But not yet constructed

Zone A is the most congested zone. Currently, additional wet slips and dry stack storage units equating to an additional 97 vessels are authorized. These 97 additional authorized vessels combined with the existing load of 534 vessels equates to the carrying capacity of 631 vessels. Allowing more new development (i.e., wet slips, dry stack storage units, boat ramps, boat ramp parking spaces) within this zone would only increase boat congestion and water safety concerns. Therefore, the USACE will grant no further authorizations for development of wet slips, dry stack storage units, boat ramps or boat ramp parking within Zone A. However, the various entities within Zone A have requested authorization for development projects, which equate to 240 additional vessels thereby exceeding the carrying capacity by 240 vessels.

Zone B currently has an additional 5 vessels of authorized development projects that when combined with the existing load of 141 vessels equates to a total of 146 vessels. With a carrying capacity of 192 vessels, Zone B could accommodate 46 more vessels. However, the various entities within this zone have requested authorization for development projects, which equate to 146 additional vessels thereby exceeding the carrying capacity by 100 vessels.

Zone C currently has an existing load of 61 vessels and no currently authorized projects affecting carrying capacity. With a carrying capacity of 289 vessels, Zone C could accommodate 228 more vessels. However, the various entities within this zone have requested authorization for development projects, which equate to 380 additional vessels thereby exceeding the carrying capacity by 152 vessels.

**Findings:**

The additional authorization requests from the various entities exceed the carrying capacities in all three zones. As a result, the conclusion of this PEA would have been either the selection of the no action alternative or that carrying capacities would be exceeded causing significant impacts thereby requiring an Environmental Impact Statement (EIS). Selection of the no action alternative would have meant that none of the entities would receive authorization for any of their development requests that affect the carrying capacity of the associated zone. Selection of the applicants' requests would exceed the carrying capacity requiring the preparation of an EIS, which would be costly and time consuming.

Therefore, in order to avoid selecting the no action alternative or authorizing the impact of the carrying capacity of the lake requiring an EIS, the USACE developed a governmental alternative on behalf of the various entities. This governmental alternative would require that all the various entities requesting authorization of development projects affecting the carrying capacity of the lake to get together, come to a consensus, revise, and resubmit their requests so that the total carrying capacity of each zone is not exceeded. The USACE would review the combined requests for compliance with all applicable regulations, policies, standards, guidelines, and findings of this PEA. News releases would be released after review of final plans and specifications to notify the public of these requests for a minimum of 15 days. Any resulting controversy would then need to be satisfied by the requestor (through a public involvement process approved by the USACE) prior to further actions for the affected project by the USACE. Public controversy that has legitimate social/environmental concerns and/or is organized would require a separate EA and/or EIS. This governmental alternative would allow the various entities another opportunity to submit reasonable requests which may possibly not require any further

NEPA approvals while providing the public the opportunity to review the projects prior to final authorizations.

**Conclusion:**

With consideration being given to the above findings, the alternative being proposed for water related recreation use facilities that affect the carrying capacity of the lake is listed below. If the affected entities do not accept these alternatives, then the conclusion of this PEA regarding water related recreation use facilities would revert to either the no action alternative or the preparation of an EIS. It should be noted that even the preparation of an EIS does not guarantee authorization of a development project affecting carrying capacity.

PEA Water Related Recreation Use Facilities alternatives reviewed in Section 7 include:

1. Development projects as requested by the associated entity, which do not affect the carrying capacity of the lake (other than new marinas) will be considered in the cumulative impacts analyzed in Section 7.
2. The vessel carrying capacity alternatives included for consideration in the cumulative impacts analyzes in Section 7 are those stated in the "Lewisville Lake Future Water-Related Development Policy" memorandum (Exhibit 12). This memorandum authorizes the increase of 274 vessels distributed by a 0 vessel increase in Zone A, a 46 vessel increase in Zone B, and a 228 vessel increase in Zone C.

**6.3 Parks – Enhance Amenities in Existing Recreational Areas**

The activities in this section include enhanced amenities in existing recreational areas. All of these activities are the type of projects currently authorized by the USACE in accordance with the master plan and development policies and guidelines including the land use allocation/classification system

**6.3.1 Project Descriptions****Lewisville Lake Park**

Lewisville Lake Park is located in the southwest corner of the lake and is operated by the City of Lewisville. Their 10-year development plan includes several new and improved facility projects at the existing park. A list of all the projects being proposed within the next 10 years is included in Section 5. Additional project related information is included in Section 10 of the Resource Document.

**Willow Grove Park**

Willow Grove Park is located on the west side of the lake directly adjacent to Lakeview Marina and is operated by the City of Lake Dallas. A list of all the projects being proposed within the next 10 years is included in Section 5. Additional project related information is included in Section 11 of the Resource Document.

**Copperas Branch Park**

Copperas Branch Park is located on the southwest side of the lake and is operated by the City of Highland Village. The existing park is approximately 99 acres in size. Their 10-year development plan includes several new and improved facility projects at the existing park, which are listed in Section 5. Additional project related information is included in Section 12 of the Resource Document.

**Little Elm Park**

Little Elm Park is located along the north side of FM 720 on the east side of the lake. The park is operated by the Town of Little Elm, which has several active recreational improvement projects planned within the next 10 years as shown on the Activities List in Section 5. Additional project related information is included in Section 13 of the Resource Document.

**Cottonwood Park**

Cottonwood Park is located south of Little Elm Park. The park is operated by the Town of Little Elm, which has several development projects planned within the next 10 years as shown on the Activities List in Section 5. Additional project related information is included in Section 5 of the Resource Document.

**Eastvale Park**

Eastvale Park is located along the west side of FM 423 on the east side of the lake. The park is proposed to be operated by the City of The Colony which has several development projects planned within the next 10 years as shown on the Activities List in Section 5. Additional project related information is included in Section 14 of the Resource Document.

**Hidden Cove Park**

Hidden Cove Park was previously named Lake Lewisville State Park. When Lake Lewisville State Park moved to Ray Roberts Lake, the existing park became Hidden Cove Park. Hidden Cove Park is located on the east side of the lake and is operated by the City of The Colony which has numerous development projects planned within the next 10 years as shown on the Activities List in Section 5. Additional project related information is included in Section 15 of the Resource Document.

**Stewart Creek Park**

Stewart Creek Park is located on the east side of the lake, north of Pier 121, south of Eastvale Park and west of FM 423. The park is operated by the City of The Colony, which has numerous projects on their 10-year development plan for the park as shown on the Activities List in Section 5. Additional project related information is included in Section 17 of the Resource Document.

**Wynnewood Park**

Wynnewood Park is a relatively new park, which is approximately 650 acres in size and is located on the Wynnewood Peninsula on the east side of the lake. It is operated by the City of The Colony. The 10-year development plan for the park includes numerous projects, which are listed in Section 5. Additional project related information is included in Section 18 of the Resource Document.

**Crescent Oaks Park**



Crescent Oaks Park is located in the northern part of Lewisville Lake on the east side of the lake. It is operated by the City of Oak Point, which has several new and improved facility projects planned within the next 10 years as shown on the Activities List in Section 5. Additional project related information is included in Section 19 of the Resource Document.

**Eagle Point Marina in Lewisville Lake Park**

Eagle Point Marina is proposing two park-related actions including a pavilion and 50 RV campsites with an RV dumpsite.

**Lakeview Marina in Willow Grove Park**

Lakeview Marina is requesting lease of the remaining 33 acres of Willow Grove Park into the Lakeview Marina lease area for development of a campsite area with 20 RV hookups and batting cages.

**East Hill Park – Pier 121 Marina**

Pier 121 Marina is requesting to extend their current lease to the south and east to encompass the remainder of East Hill Park. One of the proposed projects in this extended lease area is park related and consists of an unspecified number of campsites.

**Peninsula Park**

Peninsula Park is a proposed park on the shoreline of Lewisville Lake. The City of Highland Village has requested a lease for this property from the USACE. Projects included in the 10-year development plan for this park include construction of a hiking trail, 3 benches and 3 picnic tables. The proposed park is located in a designated wildlife management area, which prohibits the use of land as parks. Since a park cannot be authorized at this location and since the proposed projects are mostly trail related, the USACE has moved this request to the trails section (Section 6.7).

**Ridgepointe Park**

Ridgepointe Park is a new proposed park being proposed by the City of The Colony. The proposed location is on the east side of the lake, west of FM 423, and east of Pier 121, East Hill Park and Stewart Creek Park. The City of The Colony's modest 10-year development plan for the park consists of a hike and bike trail, benches, and a fishing pier. The proposed park is located in a designated wildlife management area, which prohibits the use of land as parks. Since a park cannot be authorized at this location and since the proposed projects are mostly trail related, the USACE has moved this request to the trails section (Section 6.7).

**6.3.2 Alternatives**

No alternatives were provided. Therefore, the only other alternative considered was the no action alternative.

**6.3.3 Environmental Impacts****Physical Resources**

Implementation of the proposed actions would not cause any impacts to farmlands since all of the proposed development projects would occur on existing park lands. Where possible, the proposed projects would utilize existing topography and soils. However, it is anticipated there would be minor impacts to the topography and soils within the project areas caused by the earth moving activities necessary to construct the projects. In addition, implementation of the proposed actions would cause minor temporary impacts to adjacent lands during construction. Disturbance to existing topography and soils from construction would be kept to the minimal amount and size of disturbance possible and the use of best management practices to reduce soil erosion and runoff would be required. Following construction, disturbed soils would be stabilized with native vegetation. It is therefore determined that implementation of the proposed actions would not result in significant adverse impacts to topography, soils, or farmlands over the long term.

### **Land Use**

Lewisville Lake Park, Willow Grove Park, Copperas Branch Park, Stewart Creek Park, East Hill Park, Little Elm Park, Hidden Cove Park, and Wynnewood Park are all located in areas designated for intensive recreation uses. Therefore, all of the projects being proposed within these parks are authorized uses in accordance with the USACE land use allocation/classification system as described in Section 4.2.

The southern portion of Eastvale Park is designated intensive recreation use; therefore, all of the projects being proposed in this area are authorized. However, the northern portion of the park is designated low-density recreation use. Proposed projects in this area include two parking lots, restrooms, walking/jogging trail, gazebo, and a covered deck. These types of projects are generally considered acceptable and may be authorized, if appropriate, following environmental and master plan review prior to issuance of any real estate instrument.

Crescent Oaks Park is located in an area designated as wildlife management. The proposed projects at this park are generally considered acceptable and may be authorized, if appropriate, following environmental and master plan review prior to issuance of any real estate instrument.

### **Cultural Resources**

All of the proposed projects are located upstream of the Lewisville Lake dam, which as discussed under Section 4.3, has had an adequate cultural resources inventory. Of the 146 cultural resource sites located upstream from the dam, only 11 have been determined eligible for the National Register of Historic Places (NRHP). The other 135 sites located upstream from the dam have been determined ineligible for the NRHP.

If no cultural resources are identified within the project's area of potential effects, or if the cultural resources are determined to be ineligible for the NRHP, then a finding of no historic properties affected shall be coordinated with the SHPO. If historic properties (NRHP-eligible cultural resources) are identified which would be affected adversely by the project, then the Advisory Council on Historic Preservation shall be notified, and the SHPO shall be consulted to evaluate alternatives that could avoid, minimize, or mitigate adverse effects on historic properties. Such alternatives can include mitigation through data recovery.

**Water Quality****Surface Water**

Implementation of the proposed actions would result in temporary adverse impacts during the construction phase of the projects, but it is anticipated that these impacts would be short-term in nature. The principal water quality impacts associated with construction are those caused by soil erosion, sedimentation, and siltation. Other possible impacts associated with construction activities include accidental fuel and oil spills and release of waste from the site. These potential impacts would be minimized or mitigated by implementation of erosion control and spill prevention strategies during the construction phase. These strategies are required as part of the EPA's General Construction Permits for Storm Water Discharges from Construction Activities in Region 6 and include such activities as silt fences, hay bale check dams, rock check dams, velocity dissipaters and construction entrances.

The primary adverse water quality impacts associated with operation of the proposed facilities include the potential for soil erosion and runoff of pollutants such as fuel, oil, pesticides, herbicides, fertilizers, and other wastes into the lake from the site. Operation of the site should minimize adverse impacts to storm water discharges through application of appropriate best management practices. Thorough application of the appropriate storm water permits should mitigate possible adverse impacts resulting from operation of the facilities. In addition, planting vegetation to help stabilize the soil and serve to trap pollutants and hold runoff would be required at the sites. It has therefore been determined that there would be no significant adverse impacts to the water quality of Lewisville Lake from implementation of the proposed actions, except on a temporary basis.

**Groundwater**

Two groundwater monitoring wells are proposed to be installed at Lewisville Lake Park in the event surface water from the lake becomes too costly or difficult to obtain. Depending on the overall usage of the aquifers previously mentioned in Section 4.4.2, these wells may have an adverse impact on the aquifer. It is not anticipated that this impact would be considered significant. Based on the studies and evaluations conducted thus far, none of the other proposed projects are anticipated to result in any significant adverse impacts to groundwater.

**Wetlands**

According to the USFWS National Wetlands Inventory maps, mapped wetlands occur in some project areas. Construction of the proposed projects has the potential to impact wetlands along the shoreline and on shore. Onsite jurisdictional wetland determinations and delineations were beyond the scope of this PEA. It would be necessary to verify the location and extent of wetlands in the affected areas before proceeding with any of the projects. Impacts are not likely to be significant but, in cases where a permit is required under Section 404 of the Clean Water Act, a Nationwide permit, at minimum, would be required. In cases where a wetland would be adversely impacted but no permit is required, the USACE would comply with Executive Order (EO) 11990 and ensure "no net loss of wetlands." Documentation of compliance with Section 404 of the Clean Water Act and/or EO 11990 would need to be provided along with final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments.

**Aquatic Resources**

Construction of water surface and subsurface projects (e.g., courtesy docks, fishing piers, etc.) would result in temporary adverse impacts during the construction phase of the projects, but it is anticipated that these impacts would be short-term in nature. It is also anticipated that any displaced aquatic resources would return and reestablish after project construction is completed. It is not anticipated that operation of these facilities would result in significant long-term impacts.

**Floodplains**

Executive Order 11988, Floodplain Management, requires that Federal agencies avoid activities, which directly or indirectly result in the development of floodplain areas. According to FEMA's most current floodplain maps, most of the proposed projects, or portions thereof, are located within the 100-year floodplain. The floodplains are shown on Exhibit 6.

The proposed actions cannot increase the base flood elevation to a level, which would violate applicable floodplain regulations or ordinances and must comply current policies and standards. The USACE requires that there be no net loss of flood storage at Lewisville Lake. Therefore, any fill placed within the 100-year flood pool as a result of project construction must be mitigated with excavation in another area of the flood pool with disposition above flood pool elevation of 537 msl in an area approved by the USACE. As long as the proposed projects are designed to comply with this requirement, then no significant adverse impacts to floodplains are anticipated.

**Terrestrial Resources**

**Lewisville Lake Park – Vegetation:** Because of current periodic maintenance, (such as regular mowing intervals) and previous disturbance of the natural mid-story and understory, impacts to vegetation by the majority of the activities proposed are not considered significant. However, the disc golf course and portions of the proposed pathway would result in the disturbance of previously undisturbed wooded areas. **Wildlife:** A few of the activities are resulting in the clearing of previously undisturbed areas. These activities would likely result in the displacement of some resident species to adjacent undeveloped tracts of land that would provide them with the habitat they need to survive. The species that remain would be those who can adapt to a modified natural environment. The proposed project is not expected to result in significant impacts to wildlife species.

**City of Lewisville Request for Additional 200 Acres of LLELA Lease –** The proposed development area is made up of open fields and pastures with common grass, forbs, and wild flowers.

**Willow Grove Park –** Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any adverse impacts to terrestrial resources (vegetation and wildlife).

**Copperas Branch Park – Vegetation:** Current periodic maintenance, (such as regular mowing intervals) and previous disturbance of the natural mid-story and understory has resulted in a mainly manicured landscape. Impacts to the maintained landscape and wooded area by the

activities proposed are not considered significant. In a previously undisturbed portion of the park, there is a woodland dominated by green ash cedar elm and sugar hackberry. This area is the proposed location of a nine-hole golf course. **Wildlife:** A few of the activities are resulting in the clearing of previously undisturbed areas. These activities would likely result in the displacement of some resident species. The habitat currently on site is substantially fragmented, such that the existing habitat value expected would be low. The species that remain would be those who can adapt to a modified natural environment. This would result in a decreased habitat value for some species. The proposed project is not expected to result in significant impacts to wildlife species.

**Little Elm Park – Vegetation:** Because of current periodic maintenance, (such as regular mowing intervals) and previous disturbance of the natural mid-story and understory, impacts to vegetation by the majority of the activities proposed are not considered significant. However, the area proposed for the lodge to be developed contains somewhat heavily wooded areas consisting of cedar elms and hackberries and a few small mesquite trees. This area is not considered a significant impact due to its size and relative value in relation to the much larger continuous stands of native vegetation that exist offsite of the project proposed. **Wildlife:** Excluding the proposed lodge area, the project is not expected to result in impacts to any resident wildlife species because of the nature of the site area and the activity proposed. The proposed lodge area is not considered a significant impact due to its size and relative habitat value in relation to the much larger continuous habitat opportunities that exist offsite of the project proposed.

**Cottonwood Park – Vegetation:** Most of these additions would be considered passive activities. The basic make-up of the proposed site habitat for these activities includes grasslands with scattered trees. Those such as the fishing pier, parking lot and group shelters would be added in currently developed areas. **Wildlife:** The project is not expected to result in impacts to any resident wildlife species because of the nature of the site area and the activity proposed.

**Eastvale Park –** Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to terrestrial resources (vegetation and wildlife).

**Hidden Cove Park – Vegetation:** Because of current periodic maintenance, (such as regular mowing intervals) and previous disturbance of the natural mid-story and understory, impacts to vegetation by the majority of activities proposed are not considered significant. Because of the nature of some of the actions proposed, a few of the actions involve minimal impacts to previously undisturbed vegetation. Impacts to vegetation by the activity proposed are not considered significant. **Wildlife:** The activity would result in the minimal clearing of previously undisturbed areas. These activities would likely result in the displacement of some resident species to adjacent undeveloped tracts of land that would provide them with the habitat they need to survive. The species that remain would be those who can adapt to a modified natural environment. There would be additional impacts caused by human and equestrian disturbance though the area on an irregular basis. This would result in a decreased habitat value for some species. The proposed project is not expected to result in significant impacts to wildlife species.

**Stewart Creek Park – Vegetation:** The activity would result in the minimal clearing of previously undisturbed areas. The proposed project is not expected to result in significant adverse impacts to vegetation. **Wildlife:** The activity would result in the minimal clearing of previously undisturbed areas. These activities would likely result in the displacement of some resident species to adjacent undeveloped tracts of land providing them with the habitat they need to survive. The habitat currently on site is substantially fragmented, such that the existing habitat value expected would be low. The species that remain would be those who can adapt to a modified natural environment. There would be additional impacts caused by human and equestrian disturbance though the area on an irregular basis. This would result in a decreased habitat value for some species. The proposed project is not expected to result in significant adverse impacts to wildlife species.

**Wynnewood Park – Vegetation:** The activity would result in the substantial clearing of previously undisturbed areas. The proposed project is expected to result in adverse impacts to vegetation. However, these impacts are not anticipated to be significant as long as the project is designed to adhere to applicable regulations, policies, mitigation requirements, standards and guidelines. The applicant would need to provide final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments. **Wildlife:** The activity would result in the substantial clearing of previously undisturbed areas. These activities would likely result in the displacement of some resident species to adjacent undeveloped tracts of land that would provide them with the habitat they need to survive. However, because of the amount and extent of clearing likely required by this action, it is questionable that suitable land could be located adjacent to the project site. The species that remain would be those who can adapt to a modified natural environment. There would be additional impacts caused by human disturbance though the area on a regular basis. This would result in a decreased habitat value for some species. Based upon all of these factors, the proposed project is therefore expected to result in adverse impacts to wildlife species. However, these impacts are not anticipated to be significant as long as the project is designed to adhere to applicable regulations, policies, mitigation requirements, standards and guidelines. The applicant would need to provide final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments.

**Crescent Oaks Park** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to terrestrial resources (vegetation and wildlife).

**Eagle Point Marina in Lewisville Lake Park** – The pavilion would be constructed in a clear grassland habitat. The RV campsites would be within a pocket of woods, but due to this passive activity there would be few impacts to the surrounding area.

**Lakeview Marina in Willow Grove Park** – The general habitat for the sites are well maintained and mowed with scattered oaks, willows, and herbaceous layer.

**East Hill Park - Pier 121 Marina** – The proposed campsites are a passive recreational activity. The sites may be located near a ponded wetland area not on a proposed activity map. This pond

has willows and cattail surrounding it while the remaining area is mainly grassland. The campsites (the number of sites is not defined) may occupy approximately 15 acres.

### **Threatened or Endangered Species**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any adverse impacts to threatened or endangered species.

### **Aesthetics**

The proposed projects do involve new facilities, which would be viewable from parts of the lake and shoreline. There are relatively few Federal guidelines, which define significant adverse aesthetic impacts. Aesthetic impacts are often left to the discretion of the general public. Implementation of the proposed actions is not anticipated to cause significant adverse aesthetic impacts.

### **Recreation**

Implementation of the proposed projects would have a beneficial impact on recreation.

### **Socioeconomic Resources**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to socioeconomic resources.

### **Hazardous, Toxic and Radioactive Waste**

**Lewisville Lake Park** – The subject property has no listed regulated sites. An above ground storage tank was observed at the 18-hole golf course for the purpose of fueling grounds maintenance vehicles. Use of the tank and quantity of fuel usage exempts it from registration. The following sites were identified within the ASTM specified radius:

- Calvert's Big Jack, Lake Park Drive at Mill Street, active/in service registered underground storage tank site;
- Lake Park Convenience Store, 359 Lake Plaza Road, active/in service registered underground storage tank site and leaking petroleum storage tank site, impacted groundwater, corrective action measures are ongoing; and
- [Closed] Howdy-Doody Store, 1026 North Mill Street, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed.

These sites do not appear to pose an environmental concern to the subject property due to their current status and the distance from Lewisville Lake Park. No additional environmental concerns were identified during the site reconnaissance.

**Lewisville Lake Environmental Learning Area Lease Request** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to hazardous, toxic, and radioactive waste sites.

**Willow Grove Park** – The subject property has three listed sites with registered underground storage tanks. The sites are Lake Dallas Boat Co., Inc. located at 708 East Nick Street, Lake Dallas I.S.D. located at 425 East Hundley Drive, and a residential lot located at 307 Marina

Drive. The Marina Drive tank has been removed and the tanks at the other two sites are listed as active/in service. None of the sites are listed leaking petroleum storage tank sites.

A No Further Remedial Action Planned (NFRAP) site was identified on a south adjacent property to Willow Grove Park. This site was investigated by the EPA and it was determined that no further action is necessary on this site. It is not present on any other regulatory database provided. The potential for risk to the subject property is low.

Four leaking petroleum storage tank sites were identified within the one-half mile radius of the subject property, which is the ASTM specified radius. The sites include Lake Dallas Café True Value Hardware, 301 Main Street, the City of Lake Dallas Maintenance Department, 351 Betchan Drive, the Fast Break #3 (Lake Dallas Shamrock) at 401 South Denton Drive, and the Lakeland Cities Shopping Center/Spritz at 603 South Denton Drive. The 301 Main Street has had a final concurrence issued and the case is closed. The remaining three sites have reported groundwater impact and corrective action measures are on going. Additionally, an ERNS site was identified adjacent to the Lakeview Marina. A Lone Star Pipeline release of an unknown quantity of natural gas was reported at 619 Shore Street. Reportedly a waterway was affected. No additional information was provided. The potential for impact from these regulated sites is low. No additional environmental concerns were identified during the site reconnaissance.

**Copperas Branch Park** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to hazardous, toxic, and radioactive waste sites.

**Little Elm Park** – A single listed site, a registered underground storage tank at the Little Elm Elementary School located at Main Street and Lake Shore, had three tanks, which reportedly were removed from service. This is not a listed leaking petroleum storage tank and does not pose an environmental concern to Little Elm Park. No environmental concerns were identified during the site reconnaissance.

**Cottonwood Park** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any adverse impacts to hazardous, toxic, and radioactive waste sites.

**Eastvale Park** – The subject property has no listed regulated sites. The following sites were identified within the ASTM specified radius:

- The Bait House/Hays Fina, Highway 423 at Stewart's Creek Road, active/in service registered underground storage tank site; and
- Joe's Country Store, 7616 North Main Street, active/in service registered underground storage tank site and leaking petroleum storage tank site (twice; January 1996 and June 1997), impacted groundwater, corrective action measures are ongoing and site closure is pending.

These sites do not appear to pose an environmental concern to the subject property due to their current status, distance from Eastvale Park, and Joe's Country Store is cross gradient from the park. No additional environmental concerns were identified during the site reconnaissance.



**Hidden Cove Park** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to hazardous, toxic, and radioactive waste sites.

**Stewart Creek Park** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to hazardous, toxic, and radioactive waste sites.

**Wynnewood Park** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to hazardous, toxic, and radioactive waste sites.

**Crescent Oaks Park** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to hazardous, toxic, and radioactive waste sites.

**Eagle Point Marina in Lewisville Lake Park** – Hazardous, toxic, and radioactive waste sites for Eagle Point Marina are addressed in Section 6.2.4.

**Lakeview Marina in Willow Grove Park** – Hazardous, toxic, and radioactive waste sites for Lakeview Marina are addressed in Section 6.2.4.

**Pier 121 Marina in East Hill Park** – Hazardous, toxic, and radioactive waste sites for Pier 121 Marina are addressed in Section 6.2.4.

### **Noise**

None of the individual projects being proposed would involve a significant or substantial noise source. However, the overall park developments would attract visitors and vehicles to these areas, which would increase ambient noise levels. It is difficult to accurately predict future noise levels from visitors using the various recreational facilities being proposed as part of the overall park developments. Future noise levels from vehicles using the existing and proposed access roads can be predicted using the FHWA's traffic noise modeling software. However, in order to model traffic noise levels, future traffic projections are required. Since the required traffic data was not available, traffic noise modeling was not performed.

Although future noise levels from all of the various projects being proposed as part of the overall park development could not be predicted, it is not anticipated that these proposed projects would result in significant noise impacts. See also discussion of National Park Service noise regulations under Section 6.1.1.16.

### **Air Quality**

None of the individual projects being proposed would involve a significant or substantial air pollutant emission source. However, the overall park amenity enhancements would attract vehicles to these areas, which would increase air pollutant emissions from motors in the immediate project vicinities. However, it is reasonable to assume that many of the proposed

projects would not substantially increase the number of vehicles on Federal land around the lake. It stands to reason that most individuals wanting to use the lake would visit the lake with or without these projects. If these projects were developed, it would merely divert some visitors from other recreational facilities around the lake to these facilities rather than causing a substantial number of additional individuals to visit the lake that would not have otherwise done so.

Based on this assumption, the proposed projects are not expected to significantly impact air quality around Lewisville Lake. The USACE development policies and guidelines would need to be complied with.

Future air pollutant emissions from vehicles visiting the proposed facilities could be predicted using EPA approved emission factor and dispersion models. However, future traffic projections are required in order to perform modeling for an air quality analysis. Since future traffic projections were not available for these projects, an air quality analysis could not be performed. However, in accordance with TxDOT's 1999 Air Quality Guidelines which were approved by the FHWA, a traffic air quality analysis is not required for roadway projects whose traffic projections do not exceed 20,000 vehicles per day for either the Estimated Time of Completion (ETC) or ETC+20 years (estimated 2005 and 2025 respectively for these projects) because previous analyses of similar projects did not result in a violation of the NAAQS. It is certainly not anticipated that future 2025 traffic projections for any of the proposed facilities would exceed 20,000 vehicles per day.

Based on the above findings, it is not anticipated that the proposed facilities would result in significant adverse air quality impacts.

## **6.4 Utilities**

All sewer lines to be built on Federal lands must comply with the Lewisville Lake Use Study Development Plan Guidelines and must be buried not less than 3.5 feet below the natural ground surface unless specific circumstances justify a lesser depth. Also, all sewer lines below 537 feet msl must be sealed and pressurized.

All electrical transmission lines to be built on Federal lands must comply with the Lewisville Lake Use Study Development Plan Guidelines. The low point, or sag, of electrical transmission lines must be greater than or equal to 584 feet above msl or the lines must be buried.

### **6.4.1 Utilities – Within Existing Easements**

#### **Project Descriptions**

##### **Electrical transmission line along US 380 between US 377 and Navo Road**

CoServ Electric is proposing an overhead electrical transmission line, which would run parallel to US 380 between US 377 and Navo Road. The overhead electrical transmission line over Hickory Creek is near the westernmost boundary of Federal land just upstream of the Old Alton bridge crossing. This line would run parallel to existing overhead utility lines.

**24-inch water line paralleling the existing 24-inch water line along SH 121 from Fish Hatchery Road to the Eastside Pump Station**

The City of Lewisville is proposing a 24-inch water line paralleling the existing 24-inch water line along SH 121 from Fish Hatchery Road to the Eastside Pump Station. This line would be approximately 5 feet deep and approximately 13,300 feet in length. The purpose of this line would be to provide additional water supply.

**12-inch water line along east side of IH 35E from Lake Park Road north to Garden Ridge Boulevard**

The City of Lewisville is proposing a 12-inch water line along the east side of IH 35E and the railroad tracks from Lake Park Road north to Garden Ridge Boulevard. This line would be approximately 4 feet deep and 5,900 feet in length. The purpose of this line would be to improve water pressure and circulation for the area.

**36-inch raw water line along Jones Street from east of Cowan Avenue to the City of Lewisville intake structures**

The City of Lewisville is proposing a 36-inch raw water line along Jones Street from east of Cowan Avenue to the City of Lewisville intake structures at the dam. This line would be approximately 4 feet deep and 6,600 feet in length. The purpose of this line would be to increase the water supply from Lewisville Lake.

**10 million gallons of additional water storage north of Feaster Pump Station**

The City of Lewisville is proposing ten million gallons of additional water storage across from the Feaster Pump Station (Water Treatment Plant) on the north side of Jones Street. The city is proposing two five million gallon aboveground storage tanks similar in size to the existing water tanks at the Water Treatment Plant. The dimensions of the five million gallon tanks would be approximately 150-foot diameter and 40-feet high. The purpose of the water tanks is to provide additional water supply.

**20-inch water line along Jones Street east of Feaster Pump Station**

The City of Lewisville is proposing a 20-inch water line along Jones Street from Cowan Avenue to east of Feaster Pump Station (Water Treatment Plant). This line would be approximately 4 feet deep and a few hundred feet in length. The purpose of this line would be to transfer more water from the treatment plant into the water distribution system.

**12-inch sanitary sewer main along west side of East Hill Park Road to serve East Hill Park and Pier 121 Marina**

The City of Lewisville is proposing a 12-inch sanitary sewer line along the west side of East Hill Park Road to serve Pier 121 and East Hill Park. The sewer line would be approximately 16 feet deep and 9,000 feet long. The line would be constructed, operated and maintained by the City of Lewisville.

**30-inch water line in Hickory Creek area parallel to existing pipeline**

The Upper Trinity Regional Water District is proposing a 30-inch water line that would run parallel to an existing pipeline across Hickory Creek within the same 30-foot permanent utility easement.

**24-inch water line in an existing 45-foot permanent utility easement parallel to Kansas City Southern Railroad south of the dam**

The Upper Trinity Regional Water District is proposing a 24-inch water line paralleling the Kansas City Southern Railroad south of the dam. This line would be constructed within an existing 45-foot permanent utility easement between existing 24-inch and 16-inch water lines.

**60-inch water line within an existing 45-foot permanent easement from the intake structure immediately north of the dam to the water treatment plant**

The Upper Trinity Regional Water District is proposing a 60-inch water line from the UTRWD's intake structure on the north side of the dam to the existing water treatment plant south of the dam. This line would be constructed within an existing 45-foot permanent utility easement.

**Water treatment plant and ground storage on Kealy Street at Jones Street**

The City of Lewisville is proposing construction of a water treatment plant and ground storage facility, approximately 28 acres in size, located on the southeast corner of Kealy Street at Jones Street. Currently, the area is leased from USACE by Lewisville Lake Environmental Learning Area. An additional facility is proposed if the current water plant (Feaster) becomes overloaded.

**Alternatives**

No alternatives were provided for any of the above referenced projects. Therefore, the only other alternative considered was the no action alternative.

**6.4.2 Utilities – Not Within Existing Easements****Project Descriptions****Electrical transmission line easement at Pilot Knoll**

CoServ Electric is proposing an overhead electrical transmission line over Hickory Creek near the westernmost boundary of Federal land just upstream of the Old Alton bridge crossing. This line would run parallel to existing overhead utility lines.

**Electrical transmission line across the lake at Shahan Prairie Road**

CoServ Electric is proposing an underground electrical transmission line that would cross under the lake near the end of Shahan Prairie Road over to Little Elm Park northeast of the FM 720 bridge crossing.

**21-inch sanitary sewer line easement in McWhorter Creek area**

The City of Lewisville is proposing a 21-inch sanitary sewer line from SH 121 north along Fish Hatchery Road, then east along the south bank of McWhorter Creek to East Hill Park Road. The line would range in depth from 6 to 23 feet and is approximately 8,800 feet long. The purpose of the line is to provide sanitary sewer to the eastern city limits. The line will be constructed, operated and maintained by the City of Lewisville.

**42-inch raw water line to connect recently constructed Upper Trinity Regional Water District intake to existing line coming from old Lewisville intake structure**

The City of Lewisville is proposing a 42-inch raw water line roughly paralleling Jones Street below the dam. This line would be approximately 6 feet deep and approximately 1,600 feet long. The purpose of this line would be to connect the recently completed UTRWD intake to the existing line coming from the old Lewisville intake structure.

**12-inch sanitary sewer line from Lake Park Road to Tower Bay Boat Ranch including a lift station**

The City of Lewisville is proposing a 12-inch sanitary sewer line along the east side of IH 35E and the railroad tracks from Lake Park Road to Tower Bay Boat Ranch and would include a lift station. The sewer line would be approximately 7,000 feet long at an average depth of 16 feet. The purpose of the line is to provide sanitary sewer to this area. The line would be constructed, operated and maintained by the City of Lewisville.

**Northeast Denton County 24-inch pipeline extension to cross not only USACE property but also the lake**

The Upper Trinity Regional Water District is proposing a 24-inch water line known as the Northeast Denton County Pipeline Extension which would cross the northern part of the lake near Big Sandy Access Area on the west side and Crescent Oaks Park on the east side. Six alternatives were considered for this pipeline crossing and are discussed in more detail in Alternatives.

**Alternatives**

With the exception of one proposed utility outside of existing easements, no alternatives were provided. The only other action considered is the no-action alternative.

**The Upper Trinity Regional Water District's 24-inch water line extension alternatives** - The preferred option enters COE property north of "Sixth Street West" in Shady Shores and across the lake approximately 5,946 feet to Crescent Oaks Slough. The second viable option is to enter COE property north of Shady Shores in Shady Shores/COE, Big Sandy Park, along the north bank of Shayhan Point below the tree line, across the lake approximately 4,994 feet. Several other route options have been considered, but have been found to be economically unfeasible. These routes include alignments along Lake Shores Road in Oak Point. The cost of pavement replacement and/or borings make this option unfeasible. Another option would make a longer lake crossing, which does not impact the shore of Big Sandy Park. However, the option is also economically unfeasible. Routing the pipeline around the lake has also been evaluated, adding several miles to the alignment. This alternative was also found to be unfeasible.

**6.4.3 Environmental Impacts**

**Physical Resources**

Implementation of the proposed actions would not be expected to cause any impacts to farmlands since there are no farmlands within the areas of the proposed projects. Where possible, the proposed projects would utilize existing topography and soils. However, it is anticipated there would be minor impacts to the topography and soils along the projects caused by the earth moving activities necessary to construct the projects including burial of some utility lines. Some of the proposed actions would involve activities in waters of the U.S. (the lake) such as dredging, sidecasting of material, tunneling, trenching, etc. resulting in impacts to lake soils. These

activities may require Section 404 permits under the Clean Water Act and all terms and conditions of any resulting permits must be met. These permit requirements would also be included as conditions to any real estate consent/instrument along with any other mitigation required by the USACE. The impacts to lake soils from these activities are considered minor if the terms and conditions of the Section 404 permit as well as all other applicable regulations, policies, standards and guidelines are met. In addition, implementation of the proposed actions would cause minor temporary impacts to adjacent lands during construction. Disturbance to existing topography and soils from construction would be kept to the minimal amount and size of disturbance possible and the use of best management practices to reduce soil erosion and runoff would be required. Following construction, disturbed soils would be stabilized with native vegetation. It is therefore determined that implementation of the proposed actions would not result in significant adverse impacts to topography, soils, or farmlands over the long term.

### **Land Use**

In accordance with the USACE land use classification/allocation system in the Lewisville Lake Master Plan, transmission lines, sanitary sewer lines, and water transmission lines are allowed on a case-by-case basis where a demonstrated public need exists and no reasonable alternative is available. The proposed lines are not anticipated to have significant adverse effects on project area land use.

The two five-million gallon aboveground water storage tanks and water treatment plant being proposed by the City of Lewisville are located within designated wildlife management lands which does not allow these types of usage. The applicant has not provided any land use exchange for mitigation. Therefore, the USACE is proposing the no action alternative for the proposed five million gallon aboveground water storage tanks and water treatment plant.

### **Cultural Resources**

Most of the proposed projects are located upstream of the Lewisville Lake dam, which as discussed under Section 4.3, has had an adequate cultural resources inventory. Of the 146 cultural resource sites located upstream from the dam, only 11 have been determined eligible for the National Register of Historic Places (NRHP). The other 135 sites located upstream from the dam have been determined ineligible for the NRHP.

The approximately 2,000 acres of USACE fee property located downstream from the Lewisville Lake dam have **not** been inventoried adequately for cultural resources. Within these 2,000 acres, there are seven recorded cultural resource sites. None of these seven sites has been evaluated for NRHP eligibility.

If no cultural resources are identified within the project's area of potential effects, or if the cultural resources are determined to be ineligible for the NRHP, then a finding of no historic properties affected shall be coordinated with the SHPO. If historic properties (NRHP-eligible cultural resources) are identified which would be affected adversely by the project, then the

Advisory Council on Historic Preservation shall be notified, and the SHPO shall be consulted to evaluate alternatives that could avoid, minimize, or mitigate adverse effects on historic properties. Such alternatives can include mitigation through data recovery.

Determinations of effects on cultural resources for each action would be accomplished on a case-by-case basis when applicants provide their final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate consent/instrument.

## **Water Quality**

### **Surface Water**

Implementation of the proposed actions would result in temporary adverse impacts during the construction phase of the projects, but it is anticipated that these impacts would be short-term in nature. The principal water quality impacts associated with construction are those caused by soil erosion, sedimentation, and siltation. Other possible impacts associated with construction activities include accidental fuel and oil spills and release of waste from the site. These potential impacts would be minimized or mitigated by implementation of erosion control and spill prevention strategies during the construction phase. These strategies are required as part of the EPA's General Construction Permits for Storm Water Discharges from Construction Activities in Region 6 and include such activities as silt fences, hay bale check dams, rock check dams, velocity dissipaters and construction entrances.

The primary adverse water quality impacts associated with operation of the proposed facilities include the potential for soil erosion and runoff of pollutants such as fuel, oil, pesticides, herbicides, fertilizers, and other wastes into the lake from the site. Operation of the site should minimize adverse impacts to storm water discharges through application of appropriate best management practices. Thorough application of the appropriate storm water permits should mitigate possible adverse impacts resulting from operation of the facilities. In addition, planting vegetation to help stabilize the soil and serve to trap pollutants and hold runoff would be required at the sites. It has therefore been determined that there would be no significant adverse impacts to the water quality of Lewisville Lake from implementation of the proposed actions, except on a temporary basis.

### **Wetlands**

The utility line crossing Lewisville Lake at Shannon Prairie Road and the utility line running parallel to US 380 from 377 to Navo have the potential to impact the wetland environment along the shoreline. The electrical transmission line easement located near Pilot Knoll has the potential to impact the wetland environment at Fingher and Hickory Creeks.

The construction of a 24-inch water main along SH 121 from Fish Hatchery Road to East Park Hill Road has the potential to impact the wetland environment where the line crosses McWhorter Creek. The construction of the 24-inch pipeline extension located on the north side of Shady Shores has the potential to impact the wetland environment along the shoreline and where the line crosses Jefferson Slough. The construction of a 30-inch potable pipeline in the Hickory Creek area has the potential to impact the wetland environment at Fingher and Hickory Creeks.

The construction of a 24-inch potable pipeline in an existing 45-foot permanent utility easement parallel to Kansas City Southern Railroad and south of the dam has the potential to impact the wetland environment at McWhorter and Stewart Creeks and at Trinity River.

The construction of a ground storage water tank north of Feaster Pump station has the potential to impact the wetland environment in the proposed area.

The construction of a 60-inch raw water pipeline located immediately north of the dam running to the water plant has the potential to impact the wetland environment south of the dam.

The construction of a water treatment plant at the southeast corner of Kealy Street on Jones Street has the potential to impact the wetland environment in the proposed area.

It would be necessary to verify the location and extent of wetlands in the affected areas before proceeding with any of the projects. Impacts are not likely to be significant but, in cases where a permit is required under Section 404 of the Clean Water Act, a Nationwide permit, at minimum, would be required. In cases where a wetland would be adversely impacted but no permit is required, the USACE would comply with Executive Order (EO) 11990 and ensure “no net loss of wetlands.” Documentation of compliance with Section 404 of the Clean Water Act and/or EO 11990 would need to be provided along with final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments.

Based on the studies and evaluations conducted thus far, the proposed utility projects are not anticipated to result in any significant adverse impacts to wetlands, as long as the actions are in compliance with applicable Federal, state and local regulations and mitigation for the loss of any wetlands is undertaken per USACE guidelines.

### **Aquatic Resources**

Construction of water surface and subsurface projects (e.g., utility lines on or below lake bottom, setting of utility poles, etc.) would result in temporary adverse impacts during the construction phase of the projects, but it is anticipated that these impacts would be short-term in nature. It is also anticipated that any displaced aquatic resources would return and reestablish after project construction is completed. It is not anticipated that operation of these facilities would result in significant long-term impacts.

### **Floodplains**

Executive Order 11988, Floodplain Management, requires that Federal agencies avoid activities, which directly or indirectly result in the development of floodplain areas. According to FEMA's most current floodplain maps, most of the proposed projects, or portions thereof, are located within the 100-year floodplain. The floodplains are shown on Exhibit 6.

The proposed actions cannot increase the base flood elevation to a level, which would violate applicable floodplain regulations or ordinances and must comply current policies and standards. The USACE requires that there be no net loss of flood storage at Lewisville Lake. Therefore,



any fill placed within the 100-year flood pool as a result of project construction must be mitigated with excavation in another area of the flood pool with disposition above flood pool elevation of 537 msl in an area approved by the USACE. As long as the proposed projects are designed to comply with this requirement, then no significant adverse impacts to floodplains are anticipated.

## **Terrestrial Resources**

### **Impacts for Utility Projects within Existing Easements**

For projects to be constructed within existing easements, with the exception of the water tanks and water treatment plant (discussed separately below), impacts to vegetation and wildlife resulting from the proposed activities are not considered significant because the nature of these activities involves minimal temporary impacts and it is expected that any resident wildlife species would reestablish after project construction.

### **Vegetation for 10 Million gallon ground storage water tanks**

The vegetation on this site is a mosaic of open grassland, mesquite, sugar hackberry, and pecan trees. Open areas include yarrow, Mexican plum, blackberry bushes, honey suckle and goldenrod. A large wooded wetland is located along the eastern side of the activity area. Because of the nature of the wooded area present, removal of the upland areas of this project area would not be considered a significant impact.

### **Wildlife for 10 Million gallon ground storage water tanks**

The proposed activity will result in the clearing of a re-growth type of habitat that is common to the area. This would likely result in the displacement of some resident species to adjacent undeveloped tracts of land that could provide them with the habitat they need to survive. The species that remain will be those who can adapt to a modified natural environment. There will be additional impacts caused by human disturbance. This will result in a decreased habitat value for some species. The proposed project is not expected to result in significant impacts to wildlife species.

### **Vegetation for Water Plant and ground storage on Kealy Street at Jones Street**

The dominant vegetation at this site consists of post oak, mesquite, common persimmon, sumac, yarrow, wild chervil, plantago, juniper, and cedar elm. Directly adjacent to this proposed activity area there is a riparian corridor and ravine that contains a significant stand of native woodland. Indicator species in the corridor included large red oaks, green ash, mulberry, cottonwood and black willow. Debris from the tributaries and drainages include many large logs up to 6" dbh. USACE staff noted that this is one of the few original woodlands in the Lewisville Lake area that has not been logged. Construction of the proposed activity would result in the degradation of the riparian corridor by limiting its buffer zone, which would result in decreased ecological value. Disregarding these indirect impacts, the direct impacts of this activity would not be significant.

### **Wildlife for Water Plant and ground storage on Kealy Street at Jones Street**

Ample signs of wildlife are present at this proposed and surrounding location. The proposed activity would result in the removal of open woodland habitat and the increase of human disturbance to adjacent significant woodland. This will result in a decreased habitat value for

some species. The species that remain will be those who can adapt to a modified natural environment. The existing land use would have to be removed from its current Wildlife Management Area designation. The proposed project is not expected to result in significant impacts to wildlife species.

### **Impacts for Utility Projects not within Existing Easements**

**Electrical transmission line easement at Pilot Knoll** - The proposed electrical transmission line would possibly impact approximately 0.32 acres (based on a 1,400 ft length and a 10 ft easement) of wetland and wooded areas. Some of the surrounding areas are currently developed.

**Electrical transmission line across the lake at Shahan Prairie Road** – The proposed electrical transmission line does not appear to cross any surface waters and would be on already developed land.

**21-inch sanitary sewer line easement in McWhorter Creek area** – The proposed 21-inch sanitary sewer line area is approximately 10.10 acres (based on a 8,500 ft length and 50 ft width) consisting of possible wetlands, wooded areas, and open grassland areas. The vegetation found in the wooded areas is mesquite, sugar hackberry, bois d'arc, hercules club, and green brier and the open areas consist of grasses, yarrow, yucca, goldenrod, and honey locust.

**42-inch raw water pipeline to connect recently constructed Upper Trinity Regional Water District intake to existing line coming from old Lewisville intake structure** – The 42-inch raw water pipeline area is approximately 1.10 acres (based on a 1,600 ft length and a 30 ft construction easement) of young woodlands and grasslands. The woodlands consist of young cedar elms and sugar hackberries.

**12-inch sanitary sewer line from Lake Park Road to Tower Bay Boat Ranch including a lift station** – The proposed sewer line would impact approximately 0.27 acres (based on a 7,000 ft length and a width of 50 ft) of woodlands and jurisdictional waters just south of the Eagle Point Marina entrance. The wooded areas consist of mesquite and sugar hackberry scrub. The majority of the proposed activity area that would be impacted is already developed commercial and residential areas.

**Northeast Denton County 24-inch pipeline extension to cross not only Corps property but also the lake** – The proposed area that the 24-inch pipeline extension will cross 10,263 ft of Lewisville Lake and USACE property with an easement of 50 ft. This area would be approximately 3.87 acres of USACE land. There is a small wooded area consisting of hackberries and junipers that will be impacted on the south side of Smokey Road and another wooded area to be impacted as the line approaches the lakeshore. The remainder of the area the line will cross is pastureland, cropland, and residential areas, which will be an area of 33,517 ft in length and a width of 20 ft. Approximately 0.86 acres would be impacted not on USACE property.

### **Threatened and Endangered Species**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to threatened and endangered species.

**Aesthetics**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to aesthetics.

**Recreation**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to recreation.

**Socioeconomic Resources**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to socioeconomic resources.

**Hazardous, Toxic, and Radioactive Wastes**

**The Electric transmission line along US 380 between US 377 and Navo Road** indicates two regulated sites within the ASTM specified radius. The Navo General Store, 4899 US 380, has three active/in service underground storage tanks. The second site is a Denton County inactive landfill site located adjacent to Mosely Road, one-half mile south of US 380. Neither site poses an environmental concern to the subject property due to the nature of the operation and the cross gradient location of the landfill. No environmental concerns were identified during the site reconnaissance.

**The 24-inch water main paralleling the existing 24-inch water main from Fish Hatchery Road to East Hill Park Road** indicated the following regulated sites along their easement, within the ASTM specified radius:

- Lewisville Water Production Facility, 1400 North Cowan, Active/In Service underground storage tank; and
- [Closed] Howdy-Doody Store, 1026 North Mill Street, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed.

Due to the current status of these sites and the distance for these easements, these sites do not appear to pose an environmental concern to the subject property. No environmental concerns were identified during the site reconnaissance.

**The 12-inch waterline along the east side of IH 35E from Lake Park Road north to Garden Ridge Boulevard** indicated numerous regulated sites along its easement, within the ASTM specified radius:

- Avis, 1845 East Interstate Highway 35, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed;
- Big Jack's Grocery, 1850 Stemmons Freeway; leaking petroleum storage tank site; groundwater contamination;
- Big Jacks, IH 35E at FM 407, active/in service registered underground storage tank site;
- Lewisville Service Office, 2143 North Stemmons Freeway, one removed registered underground storage tank;

- Lake Park Convenience Store, 359 Lake Plaza Road, active/in service registered underground storage tank site and leaking petroleum storage tank site, impacted groundwater, corrective action measures are on going;
- Unnamed Site with San Juan Pools of Texas as the Responsible Party, 2097 North McGee Lane, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed;
- Snap-E-Jack #3, 2997 Stemmons Freeway, two active/in service registered underground storage tanks site and leaking petroleum storage tank site (Former E-Z Serve), Final Concurrence Issued, Case Closed; and
- Eagle Point Marina, #1 Eagle Point Drive, a listed registered underground storage tank and leaking petroleum storage tank site. The leaking status is open with no apparent on going corrective actions.

The majority of these sites do not appear to pose an environmental concern to the subject property due to their current status and the distance from the water line easement. The active/in service underground storage tanks are regulated by the TNRCC. Due to the current regulatory status of the Lake Park Convenience Store and its proximity to the sanitary easement, this site poses a moderate risk to the subject property. No additional environmental concerns were identified during the site reconnaissance. No environmental concerns were identified during the site reconnaissance.

**The 36-inch raw water transmission main along Jones Street, from east of Cowan Avenue to the City of Lewisville intake structure** indicated the following regulated sites along their easement, within the ASTM specified radius:

- Lewisville Water Production Facility, 1400 North Cowan, Active/In Service underground storage tank; and
- [Closed] Howdy-Doody Store, 1026 North Mill Street, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed.

Due to the current status of these sites and the distance for these easements, these sites do not appear to pose an environmental concern to the subject property. No environmental concerns were identified during the site reconnaissance.

**The 10 million gallon ground storage water tanks north of the Feaster Pump Station** indicates the following regulated sites along their easement, within the ASTM specified radius:

- Lewisville Water Production Facility, 1400 North Cowan, Active/In Service underground storage tank; and
- [Closed] Howdy-Doody Store, 1026 North Mill Street, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed.

Due to the current status of these sites and the distance for these easements, these sites do not appear to pose an environmental concern to the subject property. No environmental concerns were identified during the site reconnaissance.

**The 30-inch diameter potable water pipeline crossing Hickory Creek and parallel to an existing pipeline** has no listed regulated sites within the ASTM specified radius of the proposed action. No environmental concerns were identified during the site reconnaissance for the upper Trinity Regional Water District proposed actions.

**The 24-inch potable or non-potable water pipeline in an existing 45 foot permanent utility easement parallel to the Kansas city Southern Railroad south of the dam and the 60-inch raw water pipeline form the intake structure immediately north of the dam to the water treatment plant** have one regulated site within the ASTM specified radius of the site. The City of Lewisville facility at 1100 North Kealy is a registered underground storage tank site and a leaking petroleum storage tank site. The underground storage tanks are regulated by the TNRCC. The status of the leaking petroleum storage tank is reported as having a final concurrence issued, and the case was closed. This site does not pose an environmental concern to the proposed action.

**The Water treatment plant and ground storage on Kealy Street at Jones Street** has no listed regulated sites. The area of Kealy and Jones streets is a light industrial area. The following sites were identified within the ASTM specified radius:

- EW Johnson Co., Inc., 1495 North Kealy Street, RCRA Small Quantity Generator;
- Metl-Span Corp., 1497 North Kealy Street, RCRA Small Quantity Generator;
- City of Lewisville facility, 1100 North Kealy Street, Active/In Service underground storage tanks;
- City of Lewisville facility, 1100 North Kealy Street, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed; and
- [Closed] Howdy-Doody Store, 1026 North Mill Street, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed.

The leaking petroleum storage tanks do not pose an environmental concern to the subject location. The EPA regulates RCRA facilities and underground storage tanks are regulated by the TNRCC. No additional environmental concerns were identified during the site reconnaissance.

**The Electric transmission line easement at Pilot Knoll** has no identified regulated sites within the ASTM specified radius of the easement. No environmental concerns were identified during the site reconnaissance. The overhead electric line proposed to cross the lake in the area of Little Elm Park has no identified regulated sites within the ASTM specified radius of the easement. No environmental concerns were identified during the site reconnaissance.

**The 21-inch sanitary sewer line easement in McWhorter Creek area** has no identified regulated sites within the ASTM specified radius of the easement.

**The 42-inch raw water pipeline connecting the Upper Trinity Regional Water District intake to the existing line coming from the old Lewisville intake structure** has no identified regulated sites within the ASTM specified radius of the easements. No environmental concerns were identified during the site reconnaissance.

The **12-inch sanitary sewer line from Lake Park Road to Tower Bay Boat Ranch, including a lift station**, indicated numerous regulated sites along its easement, within the ASTM specified radius:

- Avis, 1845 East Interstate Highway 35, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed;
- Big Jack's Grocery, 1850 Stemmons Freeway; leaking petroleum storage tank site; groundwater contamination;
- Big Jacks, IH 35E at FM 407, active/in service registered underground storage tank site;
- Lewisville Service Office, 2143 North Stemmons Freeway, one removed registered underground storage tank;
- Lake Park Convenience Store, 359 Lake Plaza Road, active/in service registered underground storage tank site and leaking petroleum storage tank site, impacted groundwater, corrective action measures are on going;
- Unnamed Site with San Juan Pools of Texas as the Responsible Party, 2097 North McGee Lane, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed;
- Snap-E-Jack #3, 2997 Stemmons Freeway, two active/in service registered underground storage tanks site and leaking petroleum storage tank site (Former E-Z Serve), Final Concurrence Issued, Case Closed; and
- Eagle Point Marina, #1 Eagle Point Drive, a listed registered underground storage tank and leaking petroleum storage tank site. The leaking status is open with no apparent on going corrective actions.

The majority of these sites do not appear to pose an environmental concern to the subject property due to their current status and the distance for the sanitary sewer line easement. The active/in service underground storage tanks are regulated by the TNRCC. Due to the current regulatory status of the Lake Park Convenience Store and its proximity to the sanitary easement, this site poses a moderate risk to the subject property. No additional environmental concerns were identified during the site reconnaissance.

The **24-inch pipeline extension in northeast Denton County to cross not only Corps property but also the lake** has no listed regulated sites within the ASTM specified radius of the proposed action. No environmental concerns were identified during the site reconnaissance.

### Noise

The proposed projects would not involve any substantial noise sources and therefore, would not result in any significant adverse noise impacts. See also discussion of National Park Service noise regulations under Section 6.1.1.16.

### Air Quality

The proposed projects would not involve any substantial air emission sources and therefore, would not result in any significant adverse air quality impacts.

## **6.5 Golf Courses**

### **6.5.1 Proposed New Golf Courses**

There are four new golf courses being proposed. There was not enough detail provided on these actions to properly assess the impacts in this PEA. Therefore, the USACE proposed the no action alternative and these actions would require individual or grouped EA's. These actions were included in this PEA in order to make public disclosure of future possible impacts to USACE managed lands yet to be assessed. Descriptions of the four new golf courses are discussed below.

#### **Project Descriptions**

##### **City of Frisco 18-Hole Golf Course**

The proposed City of Frisco 18-hole golf course would be located on the east of FM 423 and north of the City of the Colony. The site would consist of an 18-hole course, hike/bike trail, land use allocation change (see Section 6.8), and future water and sanitary sewer system development. A majority of the golf course would be located within USACE property at Lewisville Lake. Additional project related information is included in Section 25 of the Resource Document.

##### **9-Hole Golf Course at Lakeview Marina in Willow Grove Park**

The Lake Dallas Boat Company is proposing a new 9-hole golf course and driving range on the 33 acres of Willow Grove Park that they are requesting to lease.

##### **9-Hole Golf Course in Copperas Branch Park**

The City of Highland Village is proposing a new 9-hole golf course in the southwest area of the park.

##### **18-Hole Golf Course at Pier 121 Marina in East Hill Park**

Marinas International is proposing a new 18-hole par 3 golfcourse in the southeast area of East Hill Park, which they are requesting to lease.

### **6.5.2 Enhancements to Existing Golf Courses**

Only the City of Lewisville is planning enhancements to the two existing golf courses in Lewisville Lake Park. These types of activities and impacts were already approved in previous environmental documents and/or authorized in the current master plan. Further discussion of impacts is not necessary. These actions were included in this PEA in order to make public disclosure of future possible development on USACE managed lands. Final plans and specifications would need to be submitted for USACE environmental and master plan review prior to construction and the issuance of any real estate consent/instruments. Descriptions of these activities are discussed below.

#### **Project Descriptions**

##### **Golf Course Enhancements at Lewisville Lake Park**

The City of Lewisville is proposing enhancements to the existing Lake Park 18-Hole Golf Course and the existing Lake Park 9-Hole Executive Golf Course. These enhancements are identified under Section 5. Additional project related information is included in Section 10 of the Resource Document.

## **6.6 Habitable Structures – Hotels, Lodges and Cabins**

Hotels, lodges and cabins are authorized within recreation land allocation along with associated facilities as outlined in the Lewisville Lake Use Study Development Plan Guidelines. These structures would be authorized on a case-by-case basis. Generally, the height of hotels will not be allowed to exceed 120 feet. Parking lots to support these types of facilities would also be authorized on a case-by-case basis if designed to appropriate standards. Impacts are not anticipated to be significant as long as the projects are designed to adhere to applicable regulations, policies, mitigation requirements, standards and guidelines. Each applicant would need to provide final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments.

### **6.6.1 Hotels**

#### **Project Descriptions**

##### **Pier 121 Marina in East Hill Park**

Marinas International is proposing a 200-room hotel with indoor/outdoor swimming pools, conference center, restaurant, athletic club, small retail shops, and tennis courts. Twenty cabins are also being proposed.

##### **Wynnewood Park**

The City of The Colony is proposing a 440-room hotel and conference center north of the golf course along the western shoreline of the peninsula. The hotel would be constructed above the 537 foot elevation and include meeting rooms, banquet facilities, and one or more restaurants.

##### **Eagle Point Marina in Lewisville Lake Park**

The City of Lewisville is proposing a 12-story resort hotel with approximately 15 rooms per floor (approximately 180 rooms total) on or above the 537-foot elevation. The hotel would be served by elevators. A permanent ground level multi-functional conference center of approximately 10,000 square feet on or above the 532-foot elevation would be attached to the hotel. The hotel would also include an adjoining restaurant, conference suites, a bar, dancing, meeting rooms, a gift/souvenir shop, workout facilities, and telephone booths. A gunite seawall would be constructed around the hotel/restaurant perimeter for erosion prevention.

A hard surface, lighted, emergency and service helipad approximately 36' x 36' would be constructed on or above the 525 foot elevation. The hotel would include a hard surface parking lot approximately 2.5 acres in size on or above the 525-foot elevation. The hotel would also include a hard surfaced 400 space multilevel parking facility on or above the 525-foot elevation.



## **6.6.2 Lodges and Cabins**

### **Project Descriptions**

#### **Little Elm Park**

The Town of Little Elm is proposing a lodge near the north end of the park. The lodge would be operated by the Town of Little Elm and used for non-profit organization meetings, family reunions, and other group activities. It would be constructed with a rustic wood exterior and metal roof. It would include a 3,000 square foot main room, an approximate 25' x 30' full kitchen, restroom facilities for men and women, two additional 1,000 square foot meeting rooms, restaurant, and game room. Parking would be provided for 75 vehicles.

#### **Hidden Cove Park**

The City of The Colony is proposing a 75-room lodge above the 537-foot elevation, which would be rustic and blend in with the natural setting. The lodge would include a restaurant/dining facility and two conference/banquet rooms. A 20-foot wide and 800-foot long asphalt road would lead to the lodge and a 200-space parking lot.

Twenty-five 400 to 750 square foot rustic cabins sleeping 2, 4 and 6 people are also being proposed. The cabins would be constructed at elevations ranging from 522 to 532 feet and would be placed on piers to meet the elevation criteria. The cabins would blend in with the natural setting and be divided into two rooms: one room would be a bedroom/bathroom combination and the other room would be a living room/kitchenette combination. Each cabin would include a parking area for two vehicles, a picnic table, fire ring and B-B-Q grill.

#### **Stewart Creek Park**

The City of The Colony is proposing ten 400 square foot (20' x 20') rustic cabins that blend in with the natural setting. The cabins would be constructed at elevations ranging from 532 to 537 feet and would be placed on piers to meet the elevation criteria. The cabins would be divided into two rooms: one room would be a bedroom/bathroom combination and the other room would be a living room/kitchenette combination. Each cabin would include a parking area for two vehicles, a picnic table, fire ring and B-B-Q grill.

## **6.6.3 Alternatives**

No alternatives were provided. Therefore, the only other alternative considered was the no action alternative.

## **6.6.4 Environmental Impacts**

### **Physical Resources**

Implementation of the proposed actions would not be expected to cause any impacts to farmlands since there are no farmlands within the areas of the proposed development projects. Where possible, the proposed projects would utilize existing topography and soils. However, it is anticipated there would be minor impacts to the topography and soils within the project areas caused by the earth moving activities necessary to construct the projects. In addition, implementation of the proposed actions would cause minor temporary impacts to adjacent lands

during construction. Disturbance to existing topography and soils from construction would be kept to the minimal amount and size of disturbance possible and the use of best management practices to reduce soil erosion and runoff would be required. Following construction, disturbed soils would be stabilized with native vegetation. It is therefore determined that implementation of the proposed actions would not result in significant adverse impacts to topography, soils, or farmlands over the long term.

### **Land Use**

Little Elm Park, East Hill Park, Hidden Cove Park, Stewart Creek Park, Wynnewood Park, and Lewisville Lake Park, are all located in areas designated for intensive recreation uses. Therefore, all of the projects being proposed within these parks are authorized uses in accordance with the USACE land use allocation/classification system as described in Section 4.2.

### **Cultural Resources**

All of the proposed projects are located upstream of the Lewisville Lake dam, which as discussed under Section 4.3, has had an adequate cultural resources inventory. Of the 146 cultural resource sites located upstream from the dam, only 11 have been determined eligible for the National Register of Historic Places (NRHP). The other 135 sites located upstream from the dam have been determined ineligible for the NRHP.

If no cultural resources are identified within the project's area of potential effects, or if the cultural resources are determined to be ineligible for the NRHP, then a finding of no historic properties affected shall be coordinated with the SHPO. If historic properties (NRHP-eligible cultural resources) are identified which would be affected adversely by the project, then the Advisory Council on Historic Preservation shall be notified, and the SHPO shall be consulted to evaluate alternatives that could avoid, minimize, or mitigate adverse effects on historic properties. Such alternatives can include mitigation through data recovery.

### **Water Quality**

#### **Surface Water**

Implementation of the proposed actions would result in temporary adverse impacts during the construction phase of the projects, but it is anticipated that these impacts would be short-term in nature. The principal water quality impacts associated with construction are those caused by soil erosion, sedimentation, and siltation. Other possible impacts associated with construction activities include accidental fuel and oil spills and release of waste from the site. These potential impacts would be minimized or mitigated by implementation of erosion control and spill prevention strategies during the construction phase. These strategies are required as part of the EPA's General Construction Permits for Storm Water Discharges from Construction Activities in Region 6 and include such activities as silt fences, hay bale check dams, rock check dams, velocity dissipaters and construction entrances.

The primary adverse water quality impacts associated with operation of the proposed facilities include the potential for soil erosion and runoff of pollutants such as fuel, oil, pesticides, herbicides, fertilizers, and other wastes into the lake from the site. Operation of the site should minimize adverse impacts to storm water discharges through application of appropriate best management practices. Thorough application of the appropriate storm water permits should

mitigate possible adverse impacts resulting from operation of the facilities. In addition, planting vegetation to help stabilize the soil and serve to trap pollutants and hold runoff would be required at the sites. It has therefore been determined that there would be no significant adverse impacts to the water quality of Lewisville Lake from implementation of the proposed actions, except on a temporary basis.

### **Groundwater**

Based on the studies and evaluations conducted thus far, none of the proposed projects are anticipated to result in any significant adverse impacts to groundwater.

### **Wetlands**

According to the USFWS National Wetlands Inventory maps, mapped wetlands occur in some project areas. Construction of the proposed projects has the potential to impact wetlands along the shoreline and on shore. Onsite jurisdictional wetland determinations and delineations were beyond the scope of this PEA. It would be necessary to verify the location and extent of wetlands in the affected areas before proceeding with any of the projects. Impacts are not likely to be significant but, in cases where a permit is required under Section 404 of the Clean Water Act, a Nationwide permit, at minimum, would be required. In cases where a wetland would be adversely impacted but no permit is required, the USACE would comply with Executive Order (EO) 11990 and ensure “no net loss of wetlands.” Documentation of compliance with Section 404 of the Clean Water Act and/or EO 11990 would need to be provided along with final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments.

### **Aquatic Resources**

Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to aquatic resources.

### **Floodplains**

Executive Order 11988, Floodplain Management, requires that Federal agencies avoid activities, which directly or indirectly result in the development of floodplain areas. According to FEMA’s most current floodplain maps, most of the proposed projects, or portions thereof, are located within the 100-year floodplain. The floodplains are shown on Exhibit 6.

The proposed actions cannot increase the base flood elevation to a level, which would violate applicable floodplain regulations or ordinances and must comply current policies and standards. The USACE requires that there be no net loss of flood storage at Lewisville Lake. Therefore, any fill placed within the 100-year flood pool as a result of project construction must be mitigated with excavation in another area of the flood pool with disposition above flood pool elevation of 537 msl in an area approved by the USACE. As long as the proposed projects are designed to comply with this requirement, then no significant adverse impacts to floodplains are anticipated.

### **Terrestrial Resources**

**Little Elm Park – Vegetation:** The area of the proposed lodge contains somewhat heavily wooded areas consisting of cedar elms and hackberries and a few small mesquite trees. The

impact to this area is not considered significant due to its size and relative value in relation to the much larger continuous stands of native vegetation that exist offsite of the project location.

**Wildlife:** The proposed lodge area is not considered a significant impact due to its size and relative habitat value in relation to the much larger continuous habitat opportunities that exist offsite of the project location.

**East Hill Park – Pier 121 – Vegetation:** The development area involves well-maintained and mowed areas without trees. There are some graveled areas. **Wildlife:** The proposed project is not expected to result in significant impacts to wildlife species.

**Hidden Cove Park – Vegetation:** Because of current periodic maintenance, (such as regular mowing intervals) and previous disturbance of the natural mid-story and understory, impacts to vegetation by the proposed lodge and cabins are not considered significant. However, the lodge and cabins would involve some minimal impacts to minor amounts of previously undisturbed vegetation. **Wildlife:** The lodge and cabins would result in the minimal clearing of previously undisturbed areas. These activities would likely result in the displacement of some resident species to adjacent undeveloped tracts of land that would provide them with the habitat they need to survive. The species that remain would be those who can adapt to a modified natural environment. There would be additional impacts caused by human disturbance through the area on an irregular basis. This would result in a decreased habitat value for some species. The proposed project is not expected to result in significant impacts to wildlife species.

**Stewart Creek Park – Vegetation:** The activity would result in the minimal clearing of previously undisturbed areas. The proposed project is not expected to result in adverse impacts to vegetation. However, additional information about the proposed project would be needed to determine the level of adverse impact. Therefore, a determination of significance cannot be made. **Wildlife:** The activity would result in the minimal clearing of previously undisturbed areas. These activities would likely result in the displacement of some resident species to adjacent undeveloped tracts of land providing them with the habitat they need to survive. The habitat currently on site is substantially fragmented, such that the existing habitat value expected would be low. The species that remain would be those who can adapt to a modified natural environment. There would be additional impacts caused by human and equestrian disturbance though the area on an irregular basis. This would result in a decreased habitat value for some species. The proposed project is not expected to result in adverse impacts to wildlife species. However, additional information about the proposed project would be needed to determine the level of adverse impact. Therefore, a determination of significance cannot be made.

**Wynnewood Park – Vegetation:** The hotel and conference center would result in the clearing of previously undisturbed areas. The proposed project is expected to result in adverse impacts to vegetation. However, these impacts are not anticipated to be significant as long as the project is designed to adhere to applicable regulations, policies, mitigation requirements, standards and guidelines. The applicant would need to provide final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments. **Wildlife:** The activity would result in the clearing of previously undisturbed areas. These activities would likely result in the displacement of some resident species to adjacent undeveloped tracts of land that would provide them with the habitat they need to survive.

However, because of the amount and extent of clearing likely required by this action, it is questionable that suitable land could be located adjacent to the project site. The species that remain would be those who can adapt to a modified natural environment. There would be additional impacts caused by human disturbance though the area on a regular basis. This would result in a decreased habitat value for some species. Based upon all of these factors, the proposed project is therefore expected to result in adverse impacts to wildlife species. However, these impacts are not anticipated to be significant as long as the project is designed to adhere to applicable regulations, policies, mitigation requirements, standards and guidelines. The applicant would need to provide final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments.

**Lewisville Lake Park – Vegetation:** Because of current periodic maintenance, (such as regular mowing intervals) and previous disturbance of the natural mid-story and understory, impacts to vegetation by the proposed hotel and associated projects are not considered significant. **Wildlife:** The proposed project is not expected to result in significant impacts to wildlife species.

### **Threatened or Endangered Species**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any adverse impacts to threatened or endangered species.

### **Aesthetics**

The proposed projects do involve new facilities, which would be viewable from parts of the lake and shoreline. There are relatively few Federal guidelines, which define significant adverse aesthetic impacts. Aesthetic impacts are often left to the discretion of the general public. Implementation of the proposed actions is not anticipated to cause significant adverse aesthetic impacts.

### **Recreation**

Implementation of the proposed projects are not anticipated to have a significant adverse impact on recreation.

### **Socioeconomic Resources**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to socioeconomic resources.

### **Hazardous, Toxic and Radioactive Waste**

All of the proposed hotels, lodges and cabins are being proposed in existing parks. Hazardous, toxic and radioactive waste impacts for each of these parks were previously addressed under Section 6.6.3. The findings were that no significant adverse impacts to hazardous, toxic, and radioactive waste sites are anticipated.

### **Noise**

None of the proposed hotels, lodges or cabins or their associated projects would involve a significant or substantial noise source. However, these developments would attract visitors and vehicles to these areas, which would increase ambient noise levels. It is difficult to accurately predict future noise levels from visitors using the various facilities being proposed as part of the

overall developments. Future noise levels from vehicles using the existing and proposed access roads can be predicted using the FHWA's traffic noise modeling software. However, in order to model traffic noise levels, future traffic projections are required. Since the required traffic data was not available, traffic noise modeling was not performed.

Although future noise levels from all of the various projects being proposed could not be predicted, it is not anticipated that these proposed projects would result in significant noise impacts. See also discussion of National Park Service noise regulations under Section 6.1.1.16.

### **Air Quality**

None of the proposed hotels, lodges or cabins or their associated projects would involve a significant or substantial air pollutant emission source. However, these developments would attract vehicles to these areas, which would increase air pollutant emissions from motors in the immediate project vicinities.

Future air pollutant emissions from vehicles visiting the proposed facilities could be predicted using EPA approved emission factor and dispersion models. However, future traffic projections are required in order to perform modeling for an air quality analysis. Since future traffic projections were not available for these projects, an air quality analysis could not be performed. However, in accordance with TxDOT's 1999 Air Quality Guidelines which were approved by the FHWA, a traffic air quality analysis is not required for roadway projects whose traffic projections do not exceed 20,000 vehicles per day for either the Estimated Time of Completion (ETC) or ETC+20 years (estimated 2005 and 2025 respectively for these projects) because previous analyses of similar projects did not result in a violation of the NAAQS. It is certainly not anticipated that future 2025 traffic projections for any of the proposed facilities would exceed 20,000 vehicles per day.

Based on the above findings, it is not anticipated that the proposed facilities would result in significant adverse air quality impacts.

## **6.7 Hike, Bike and Equestrian Trails**

### **6.7.1 Project Descriptions**

#### **Hike and Bike Trail System (City of Frisco)**

The proposed hike and bike trail system would be located on the east of FM 423 and north of the City of the Colony. The trail system would be an extension to the Stewart Creek Trail System that is identified in the City of Frisco Parks, Recreation, and Open Space Master Plan. Additional project related information is included in Section 25 of the Resource Document.

**New Equestrian Trails in Shady Shores (Town of Shady Shores)** – There are two proposed new equestrian trails in the Town of Shady Shores. One trail would connect the Garza trails to the Cielo trails along the shoreline of Lewisville Lake. The other trail, which would connect to the current Trinity Trail System, would run through Corinth along the railroad track near IH 35E and Swisher Road. The Town of Shady Shores is also proposing to add an access point with a

public trailhead parking lot on USACE land at the end of North Garza Road in Shady Shores. Additional project related information is included in Section 26 of the Resource Document.

**Equestrian, Hike and Bike Trail System (Town of Copper Canyon)** - The Town of Copper Canyon has proposed creating an equestrian, hike and bike trail system. The proposed system would contain bird watching areas and access points with parking lots, picnic areas, restroom facilities, benches, and signs along the trails to aid those using them. A detailed description of the proposed activities is included in Section 27 of the Resource Document.

**Expand Inland Trail (City of Highland Village)** - The City of Highland Village is proposing to expand an inland trail (8-12 foot wide concrete trail) across USACE property and add natural

surface trails (native soil or mulch) along the shoreline. The proposed expansion would be from Highland Village Drive at Lion's Club Park.

**Trailhead Parking Lot (Lewisville Lake Environmental Learning Area)** - The proposed activity is to add a gravel parking lot bordered by a pipe fence at LLELA. The parking lot would be located at a trailhead near the LLELA entrance along Kealy Street near the Jones/Kealy Street intersection or at an alternative site, 0.25 mile south on a disturbed site. Additional project related information is included in Section 26 of the Resource Document.

**Shoreline Hike and Bike Trail (City of the Colony)** – A 23 mile hike and bike trail along the shoreline from the proposed new Ridgepointe Park to Hidden Cove Park extending through Stewart Creek Park, Eastvale Park and Wynnewood Park. Ridgepointe Park is a new park being proposed by the City of The Colony. The proposed location is on the east side of the lake, west of FM 423, and east of Pier 121, East Hill Park and Stewart Creek Park. The City of The Colony's modest 10-year development plan for the park consists only of the southern terminus of the Shoreline Hike and Bike Trail. The remainder of the trail along with benches and a fishing pier are all located outside of the proposed Ridgepoint Park. The proposed park is located in a designated wildlife management area, which prohibits the use of land as parks. Since a park cannot be authorized at this location and since the proposed projects are mostly trail related, the USACE is addressing this request as a trail project. Additional project related information is included in Section 16 of the Resource Document.

**Peninsula Park Trails (City of Highland Village)** – Peninsula Park is a proposed park on the shoreline of Lewisville Lake. The City of Highland Village has requested a lease for this property from the USACE. Projects included in the 10-year development plan for this park include construction of a hiking trail, 3 benches and 3 picnic tables. The proposed park is located in a designated wildlife management area, which prohibits the use of land as parks. Since a park cannot be authorized at this location and since the proposed projects are mostly trail related, the USACE is addressing this request as a trail project. Additional project related information is included in Section 12 of the Resource Document.

## **6.7.2 Alternatives**

No alternatives were provided for any of the projects with the exception of the Trailhead Parking Lot (Lewisville Lake Environmental Learning Area). The parking lot would be located near the LLELA entrance along Kealy Street near the Jones/Kealy Street intersection or at an alternative site, 0.25 mile south on a disturbed site. For all the projects, the only other alternative considered was the no action alternative.

## **6.7.3 Environmental Impacts**

### **Physical Resources**

Implementation of the proposed actions would not cause any impacts to farmlands since there are no farmlands on USACE managed lands at Lewisville Lake. Where possible, the proposed projects would utilize existing topography and soils. However, it is anticipated there would be minor impacts to the topography and soils within the project areas caused by the earth moving activities necessary to construct the projects. In addition, implementation of the proposed actions



would cause minor temporary impacts to adjacent lands during construction. Disturbance to existing topography and soils from construction would be kept to the minimal amount and size of disturbance possible and the use of best management practices to reduce soil erosion and runoff would be required. Following construction, disturbed soils would be stabilized with native vegetation. It is therefore determined that implementation of the proposed actions would not result in significant adverse impacts to topography, soils, or farmlands over the long term.

### **Land Use**

All land use classifications allow trails with benches and interpretive signs and associated access facilities such as parking lots, gates, signs, restrooms, etc. Therefore, all of these projects are authorized activities pending final review of plans and specifications. However, trails in wildlife management areas cannot have picnic tables or be made of concrete but can be made of natural materials such as gravel, bark, cement stabilized soil, etc. as approved by the USACE.

### **Cultural Resources**

Most of the proposed projects are located upstream of the Lewisville Lake dam, which as discussed under Section 4.3, has had an adequate cultural resources inventory. Of the 146 cultural resource sites located upstream from the dam, only 11 have been determined eligible for the National Register of Historic Places (NRHP). The other 135 sites located upstream from the dam have been determined ineligible for the NRHP.

The approximately 2,000 acres of USACE fee property located downstream from the Lewisville Lake dam have **not** been inventoried adequately for cultural resources. Within these 2,000 acres, there are seven recorded cultural resource sites. None of these seven sites has been evaluated for NRHP eligibility.

If no cultural resources are identified within the project's area of potential effects, or if the cultural resources are determined to be ineligible for the NRHP, then a finding of no historic properties affected shall be coordinated with the SHPO. If historic properties (NRHP-eligible cultural resources) are identified which would be affected adversely by the project, then the Advisory Council on Historic Preservation shall be notified, and the SHPO shall be consulted to evaluate alternatives that could avoid, minimize, or mitigate adverse effects on historic properties. Such alternatives can include mitigation through data recovery.

Determinations of effects on cultural resources for each action would be accomplished on a case-by-case basis when applicants provide their final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate consent/instrument.

### **Water Quality**

#### **Surface Water**

Water quality impacts may occur during construction and operational activities. The principal water quality impacts associated with construction are those involving soil erosion, sedimentation, and siltation. Other possible impacts associated with construction and operational activities include accidental fuel and oil spills and release of waste from the site. These impacts can be minimized or mitigated by erosion control and spill prevention strategies implemented during the construction phase. These strategies are required as part of the EPA's General

Construction Permits for Storm Water Discharges from Construction Activities in Region 6. The trail should be maintained in a manner such that herbicides, pesticides, fertilizers, and other wastes shall not be discharged with storm water runoff. Thorough application of these permits should mitigate possible adverse impacts resulting from construction and operation of the facility.

### **Wetlands**

According to the USFWS National Wetlands Inventory maps, mapped wetlands occur in some project areas. Construction of the proposed projects has the potential to impact wetlands along the shoreline and on shore. Onsite jurisdictional wetland determinations and delineations were beyond the scope of this PEA. It would be necessary to verify the location and extent of wetlands in the affected areas before proceeding with any of the projects. Impacts are not likely to be significant but, in cases where a permit is required under Section 404 of the Clean Water Act, a Nationwide permit, at minimum, would be required. In cases where a wetland would be adversely impacted but no permit is required, the USACE would comply with Executive Order (EO) 11990 and ensure “no net loss of wetlands.” Documentation of compliance with Section 404 of the Clean Water Act and/or EO 11990 would need to be provided along with final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments.

### **Aquatic Resources**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to aquatic resources.

### **Floodplains**

Executive Order 11988, Floodplain Management, requires that Federal agencies avoid activities, which directly or indirectly result in the development of floodplain areas. According to FEMA’s most current floodplain maps, most of the proposed projects, or portions thereof, are located within the 100-year floodplain. The floodplains are shown on Exhibit 6.

The proposed actions cannot increase the base flood elevation to a level, which would violate applicable floodplain regulations or ordinances and must comply current policies and standards. The USACE requires that there be no net loss of flood storage at Lewisville Lake. Therefore, any fill placed within the 100-year flood pool as a result of project construction must be mitigated with excavation in another area of the flood pool with disposition above flood pool elevation of 537 msl in an area approved by the USACE. As long as the proposed projects are designed to comply with this requirement, then no significant adverse impacts to floodplains are anticipated.

### **Terrestrial Resources**

#### **Vegetation:**

The proposed trail development projects would be considered passive activities with low aesthetic impacts to the natural habitats such as herbaceous understory removal. The general habitats consist of predominantly herbaceous vegetation with scattered trees and saplings such as cedar elm, American elm, green ash and hackberry. Other locations with more mature trees may contain post oaks, black jacks, mulberries and cottonwoods in addition to those listed above. All

development activities should strive to avoid/minimize impacts and where this cannot be achieved, the applicant would be required to mitigate as discussed in Section 8.

**Wildlife:**

These activities would result in the minimal clearing of previously undisturbed areas. These activities would likely result in the displacement of some resident species to adjacent undeveloped tracts of land providing them with the habitat they need to survive. The species that remain would be those who can adapt to a modified natural environment. There would be additional impacts caused by human and equestrian disturbance though the area on an irregular basis. This would result in a decreased habitat value for some species. The proposed project is not expected to result in significant impacts to wildlife species.

**Threatened and Endangered Species**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to threatened and endangered species.

**Aesthetics**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to aesthetics.

**Recreation**

Implementation of the proposed trail systems would have a beneficial impact on recreation.

**Socioeconomic Resources**

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse impacts to socioeconomic resources.

**Hazardous, Toxic, and Radioactive Wastes**

**Hike and Bike Trail System (City of Frisco)** – The subject property has no listed regulated sites. Adjacent properties have registered underground storage tanks and one site is a listed RCRA small quantity generator. The Diamond Shamrock, 4907 Main Street and the 7-Eleven, 5010 Main Street each have three active/in service underground storage tanks and The Colony Texaco, 4916 FM 423 has four active/in service tanks. None of these sites are listed leaking petroleum storage tank sites. The RCRA small quantity generator site is Lakeside Cleaners, 5001 Main Street.

A leaking petroleum storage tank site was identified within the specified ASTM radius. The site, Stop N Go, 4610 FM 423, reportedly had a final concurrence issued and the case was closed. The potential for impact from these regulated sites is low. No additional environmental concerns were identified during the site reconnaissance.

**New Equestrian Trails (Town of Shady Shores)** – The subject property has no listed regulated sites. A leaking petroleum storage tank site was identified within the ASTM specified radius. Joe's Country Store, 7616 North Main Street, is an active/in service registered underground storage tank site and leaking petroleum storage tank site (twice; January, 1996 and June 1997).

Groundwater is reportedly impacted, corrective action measures are on going and site closure is pending.

This site does not appear to pose an environmental concern to the subject property due to its current status and distance from the site. No additional environmental concerns were identified during the site reconnaissance.

**Equestrian, Hike and Bike Trail System (Town of Copper Canyon)** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to hazardous, toxic, and radioactive waste sites.

**Expand Inland Trail (City of Highland Village)** – The subject property has no listed regulated sites. A leaking petroleum storage tank site was identified within the ASTM specified radius. The City of Highland Village, 948 Highland Village Road, has two active/in service registered underground storage tanks containing gasoline and diesel fuel and is a listed leaking petroleum storage tank site. Reportedly groundwater is impacted and corrective action measures are on going.

This site does not appear to pose an environmental concern to the subject property due to its distance from the site. No additional environmental concerns were identified during the site reconnaissance.

**Trailhead Parking Lot (Lewisville Lake Environmental Learning Area)** – The subject property has no listed regulated sites. The area of Kealy and Jones Streets is a light industrial area. The following sites were identified within the ASTM specified radius:

- EW Johnson Co., Inc., 1495 North Kealy Street, RCRA Small Quantity Generator;
- Metl-Span Corp., 1497 North Kealy Street, RCRA Small Quantity Generator;
- City of Lewisville facility, 1100 North Kealy Street, Active/In Service underground storage tanks;
- City of Lewisville facility, 1100 North Kealy Street, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed; and
- [Closed] Howdy-Doody Store, 1026 North Mill Street, leaking petroleum storage tank site, Final Concurrence Issued, Case Closed.

The leaking petroleum storage tanks do not pose an environmental concern to the subject location. The EPA regulates RCRA facilities and underground storage tanks are regulated by the TNRCC. No additional environmental concerns were identified during the site reconnaissance.

**Shoreline Hike and Bike Trail (City of the Colony)** – The subject property has no listed regulated sites. Adjacent properties have registered underground storage tanks and one site is a listed RCRA small quantity generator. The Diamond Shamrock, 4907 Main Street and the 7-Eleven, 5010 Main Street each have three active/in service underground storage tanks and The Colony Texaco, 4916 FM 423 has four active/in service tanks. None of these sites are listed leaking petroleum storage tank sites. The RCRA small quantity generator site is Lakeside Cleaners, 5001 Main Street.

A leaking petroleum storage tank site was identified within the specified ASTM radius. The site, Stop N Go, 4610 FM 423 reportedly had a final concurrence issued and the case was closed. The potential for impact from these regulated sites is low. No additional environmental concerns were identified during the site reconnaissance.

**Peninsula Park Trails (City of Highland Village)** – Based on the studies and evaluations conducted thus far, the proposed project is not anticipated to result in any significant adverse impacts to hazardous, toxic, and radioactive waste sites.

### Noise

The proposed projects would not involve any substantial noise sources and therefore, would not result in any significant adverse noise impacts.

### Air Quality

The proposed projects would not involve any substantial air emission sources and therefore, would not result in any significant adverse air quality impacts.

## 6.8 Land Use Classification Changes

For land use classification changes involving wildlife management areas, the Lewisville Lake Use Study Development Plan Guidelines require an exchange of land from the applicants existing recreation lease to wildlife management land at an appropriate ratio to ensure no net loss of wildlife value.

### 6.8.1 Project Descriptions

**Land use classification change (USACE and City of Denton)** - Exchange 50 acres of low-density recreation lands north of US 380 to intensive recreation lands from undeveloped portions of Doe Branch Park to support the Section 1135 wildlife mitigation area. These 50 acres were utilized as an off-road vehicle area from 1954 to 1985. From 1985 to the present, this land was redesignated to low-density recreation use. The USACE considers this exchange ratio to be appropriate mitigation considering the wildlife habitat values involved.

The City of Denton proposes to develop a nature center with classroom facilities, labs, an auditorium, a resource library, and staff offices. Also included would be access point amenities such as utilities, restroom facilities, and a parking area. These types of activities and impacts have been approved in previous environmental documents and/or authorized in the current master plan. Further discussion of impacts is not necessary. These actions were included in this PEA in order to make public disclosure of future possible land use classification changes and development on USACE managed lands. Final plans and specifications would need to be submitted for USACE environmental and master plan review prior to construction and the issuance of any real estate consent/instruments.

**Land use classification change (USACE and the City of Denton)** – Reclassification of approximately 2,600 acres of low-density recreation land located north of US 380 to natural areas/environmental sensitive areas to support the Section 1135 lease to the City of Denton.

The above two land use classification changes are related since the objective of both land use classification changes is to promote scientific research and environmental education in support of ecosystem restoration and fish and wildlife management activities. The types of facilities being proposed on the 50-acre site are those that promote scientific research and environmental education in support of ecosystem restoration and fish and wildlife management activities. The environmental impacts associated with the proposed facilities on the 50-acre site would be minimal due to the current disturbed nature of the site from previous uses. Therefore, these land use classification changes would result in minimal environmental impacts. Further discussion of the facilities' impacts is not necessary. The land use classification change from 2,600 acres of low-density recreation lands to wildlife management lands is to ensure that these lands are protected for fish and wildlife activities. These actions were included in this PEA in order to make public disclosure of future possible land use changes and development on USACE managed lands. Final plans and specifications would need to be submitted for USACE environmental and master plan review prior to construction and the issuance of any real estate consent/instruments.

**Land use classification change (USACE and LLELA)** - Exchange 10 acres of wildlife management lands at the intersection of Federal property and Fish Hatchery Road south of the Lewisville Lake dam to intensive recreation lands from undeveloped portions of Doe Branch Park to support the Lewisville Lake Environmental Learning Area's proposed research laboratory/dormitory and education center building and camping sites. This facility could be used by graduate students, visiting scientists, small environmental conferences, and summer environmental camps. Additional project related information is included in Section 28 of the Resource Document. This 10-acre classification change will be coordinated with appropriate regulatory agencies after this PEA is completed. The USACE and appropriate regulatory agencies will ensure that the exchange ratio would be appropriate mitigation considering the wildlife habitat values involved.

This land use classification change would result in minimal environmental impacts. Further discussion of impacts is not necessary. This action was included in this PEA in order to make public disclosure of future possible land use changes and development on USACE managed lands. Final plans and specifications would need to be submitted for USACE environmental and master plan review prior to construction and the issuance of any real estate consent/instruments.

**Land use classification change (City of Frisco)** - Land use classification change to support application for an 18-hole golf course located east of FM 423 and north of The Colony Lakeview Marina in Willow Grove Park. The proposed golf course location is within designated wildlife management lands which does not allow use as a golf course, hence the request for a land use classification change. The applicant has not provided any land use exchange for mitigation. Therefore, the USACE is proposing the no action alternative.

## 6.8.2 Alternatives

There are two possible locations for LLELA's proposed research laboratory/dormitory and education center building and camping sites. The first site is close to the USACE Lewisville

Aquatic Ecosystem Research Facility and could share water/sewage lines and facilitate security concerns. In addition, this site is highly disturbed (historically used for rock storage by the USACE Lewisville Lake Project Office) so buildings would have little environmental impact. The second site is close to the Lewisville Independent School District land, making it attractive because of its proximity to the education buildings that will soon be built on their property.

No alternatives were provided for the other projects. Therefore, the only other alternative considered was the no action alternative.

## **6.9 Miscellaneous**

The environmental impacts of the following activities were assessed in Section 6.3 (with the exception of the City of Lewisville's request for 200 additional acres) and found not to be significant. However, the activities are not approved as stand alone facilities as outlined in the Lewisville Lake Use Study Development Plan Guidelines. Historically, these activities have been authorized only in conjunction with, and in support of, other approved developments such as marinas, golf courses, and hotels/lodges. The following activities would be considered in conjunction with final plans and specifications of the above mentioned other approved developments submitted to USACE for environmental and master plan review prior to the issuance of any real estate instruments.

### **6.9.1 Project Descriptions**

**Eastvale Park (City of The Colony)** – The City of The Colony has proposed several activities within Eastvale Park including a miniature golf course with clubhouse, a concession/food store, three retail/commercial shops, and a convenience store with gasoline and bait sales that do not meet the stand alone facilities criteria.

**Hidden Cove Park (City of The Colony)** – The City of The Colony has proposed several activities within Hidden Cove Park including a model airplane area, miniature golf/arcade, paddle boat/canoe concession, nature center, kiddie wading pool, and a pioneer village that do not meet the stand alone facilities criteria.

**Wynnewood Park (City of The Colony)** – The City of The Colony has proposed concession areas within Wynnewood Park that do not meet the stand alone facilities criteria.

**Little Elm Park (Town of Little Elm)** – The Town of Little Elm has proposed three activities within Little Elm Park including a swimming pool with dressing rooms and restrooms, a bait shop/café and fishing barge, and a band shell that do not meet the stand alone facilities criteria.

**Pier 121 Marina in East Hill Park (Marinas International, Inc.)** – Marinas International, Inc. has proposed an office building (15,000 sq. ft. multi-story building for corporate use) and

childcare service in their existing lease area. They are also proposing several activities within the additional 60 acres requested in East Hill Park including a roller blade trail, an entertainment complex that would include an arcade, a party barn, an archery range, a miniature golf course, a go-cart track, batting cages, a driving range, and an equestrian trail. These activities do not meet the stand alone facilities criteria.

**City of Lewisville Request for Additional 200 Acres (City of Lewisville)** - The City of Lewisville is requesting lease of an additional 200 acres in an area currently under lease to Lewisville Lake Environmental Learning Area (LLELA). The purpose is for further recreation and other city functions such a swimming pool with dressing rooms and restroom facilities, a community building with meeting rooms and recreation center, a package wastewater plant, a city service center, additional baseball, soccer, football, and softball fields, playgrounds, concession stands, restrooms, picnic shelters, hike/bike trails, and campgrounds.

The 200 acres of land being requested by the City of Lewisville are currently leased by LLELA and are designated wildlife management lands. Any formal request for a reallocation of wildlife management lands to intensive use recreation, with activities such as those being proposed by the City of Lewisville, would require an exchange of land from the applicants existing recreation lease to wildlife management land at an appropriate ratio to ensure no net loss of wildlife value. The request, as well as the types of projects being proposed by the City of Lewisville, conflicts with the Lewisville Lake Use Study Development Plan Guidelines and the Lewisville Lake Master Plan. The proposal also conflicts with LLELA's 50-year lease of the land in question.

Therefore, the no action alternative is being proposed as the preferred alternative for this request. Any further consideration of this action would require either an individual EA or EIS. The action was included in this PEA in order to make public disclosure of future possible impacts to USACE managed lands yet to be assessed.

## **6.9.2 Alternatives**

No alternatives were provided. Therefore, the only other alternative considered was the no action alternative.

## **6.10 Conclusions**

Based on the environmental studies conducted thus far, most of the proposed projects, as presented and assessed in this PEA, are not anticipated to result in significant adverse impacts. These projects are being carried forward and recommended for a FONSI. However, for some projects, the no action or governmental alternative is being proposed due to insufficient design data provided, the individual impact from the project(s) are considered significant or potentially significant and/or the project does not comply with the USACE development guidelines and policies. These projects/activities are not being carried forward nor further assessed in this PEA. The projects/activities for which the no action or governmental alternative is being proposed include, but are not limited to, the following:

## **6.1 Bridges and Roadways**



Wynnewood Peninsula Roadway and Bridge

FM 2499

Proposed Old Alton Bridge Replacement

## **6.2 Water Related Recreation Use Facilities**

### Zone A

Eagle Point Marina in Lewisville Lake Park

- a. 2 lane boat ramp
- b. Parking lot (50 units) (assumed)
- c. 300 units dry stack boat storage

Eastvale Park

- a. Additional 1 lane boat ramp
- b. Parking lot (25 units)

Canoe/Jon Boat Launching Facilities Along Hickory Creek

Stewart Creek Park

- a. 100 additional parking spaces at existing boat ramp
- b. Construct a concrete ramp at the jet ski launch area
- c. Watercraft rental from the golf course (canoes, kayaks, jet skis, paddle boats)

### Zone B

Dallas Corinthian Yacht Club

- a. Additional 100 rental wet slips

Lakeview Marina in Willow Grove Park

- a. Additional 306 boat wet slips
- b. Build 2 new boat ramps (one in current lease area, other in area of Willow Grove Park that they are proposing to lease)
- c. Add 50 space parking lot (assumed)
- d. Add 25 to 30 space parking lot for existing boat ramp (30 units assumed)

Willow Grove Park

- a. Build a one lane boat ramp

### Zone C

Proposed Marina in Wynnewood Park

- a. 1,300 rental wet slips

Proposed Cottonwood Park Marina in Cottonwood Park

- a. 1,000 rental wet slips

Proposed Marina in Hidden Cove Park

- a. 250 wet slips
- b. 3 lane boat ramp
- c. Parking lot (75 units)

Little Elm Park

- a. New 2 lane boat ramp with courtesy dock
- b. Parking lot (50 units)

**6.4 Utilities**

City of Lewisville

- a. 10 million gallons of additional water storage north of Feaster Pump Station
- b. Water treatment plant and ground storage on Kealy Street at Jones Street

**6.5 Golf Courses**

City of Frisco

- c. New 18-hole golf course

Lakeview Marina in Willow Grove Park

- a. New 9-hole golf course
- b. New driving range

Copperas Branch Park

- a. New 9-hole golf course

Pier 121 Marina in East Hill Park

- a. New 18-hole golf course

**6.9 Miscellaneous**

City of Lewisville request for additional 200 acres of land under LLELA lease for associated park and recreation activities

## SECTION 7

### 7.0 CUMULATIVE IMPACTS

The following environmental impact category subsections discuss the cumulative impacts from all of the proposed projects around the lake that were carried forward from Section 6.

#### 7.1 Physical Resources

Implementation of the proposed actions would not be expected to cause any impacts to farmlands since there are no farmlands within the areas of the proposed projects. Where possible, the proposed projects would utilize existing topography and soils. However, it is anticipated there would be minor impacts to the topography and soils caused by the earth moving activities necessary to construct the projects. Some of the proposed actions would involve activities in waters of the U.S. (the lake) such as dredging, sidecasting of material, tunneling, trenching, etc. resulting in impacts to lake soils. These activities may require Section 404 permits under the Clean Water Act and all terms and conditions of any resulting permits must be met. These permit requirements would also be included as conditions to any real estate consent/instrument along with any other mitigation required by the USACE. The impacts to lake soils from these activities are considered minor if the terms and conditions of the Section 404 permit as well as all other applicable regulations, policies, standards and guidelines are met. In addition, implementation of the proposed actions would cause minor temporary impacts to adjacent lands during construction. Disturbance to existing topography and soils from construction would be kept to the minimal amount and size of disturbance possible and the use of best management practices to reduce soil erosion and runoff would be required. Following construction, disturbed soils would be stabilized with native vegetation. It is therefore determined that implementation of the proposed actions would not result in significant adverse cumulative impacts to topography, soils, or farmlands over the long term.

#### 7.2 Land Use

There are 16,352 acres of land above conservation pool surrounding Lewisville Lake that are under the jurisdiction of the USACE. The land use classification above conservation pool 522 feet msl, is broken down as follows: 4,603 acres are recreation of which 1,190 are developed, 10,579 acres are wildlife management, and 1,170 acres are project operations. The proposed projects would have the following cumulative impacts: the 1,190 acres of developed recreation land would be increased to approximately 1,500 acres leaving approximately 3,103 acres of undeveloped future recreation land. Wildlife management land and project operations land would remain at 10,579 acres and 1,170 acres respectively resulting in no net loss of these lands. This additional development accounts for a 6.7 percent increase in the amount of developed recreation land, which is not considered significant. Wildlife management land and project operations land would not be impacted. Since implementation of all the proposed projects would only increase the amount of developed recreation land by 6.7 percent and all the proposed projects are compatible with the Lewisville Lake land use allocation/classification system, the cumulative impacts to land use are not considered significant.

### 7.3 Cultural Resources

Most of the proposed projects are located upstream of the Lewisville Lake dam, which as discussed under Section 4.3, has had an adequate cultural resources inventory. Of the 146 cultural resource sites located upstream from the dam, only 11 have been determined eligible for the National Register of Historic Places (NRHP). The other 135 sites located upstream from the dam have been determined ineligible for the NRHP.

The approximately 2,000 acres of USACE fee property located downstream from the Lewisville Lake dam have **not** been inventoried adequately for cultural resources. Within these 2,000 acres, there are seven recorded cultural resource sites. None of these seven sites has been evaluated for NRHP eligibility.

If no cultural resources are identified within the project's area of potential effects, or if the cultural resources are determined to be ineligible for the NRHP, then a finding of no historic properties affected shall be coordinated with the SHPO. If historic properties (NRHP-eligible cultural resources) are identified which would be affected adversely by the project, then the Advisory Council on Historic Preservation shall be notified, and the SHPO shall be consulted to evaluate alternatives that could avoid, minimize, or mitigate adverse effects on historic properties. Such alternatives can include mitigation through data recovery.

Determinations of effects on cultural resources for each action would be accomplished on a case-by-case basis when applicants provide their final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate consent/instrument.

Based on currently available project information, the cumulative impacts of the proposed projects are not anticipated to create a significant adverse impact on cultural resources.

### 7.4 Water Quality

Implementation of the proposed actions would result in temporary adverse impacts during the construction phase of the projects, but it is anticipated that these impacts would be short-term in nature. The principal water quality impacts associated with construction are those caused by dredging, water surface and subsurface structures, soil erosion, sedimentation, and siltation. Other possible impacts associated with construction activities include accidental fuel and oil spills and release of waste from the site. These potential impacts would be minimized or mitigated by implementation of erosion control and spill prevention strategies during the construction phase. These strategies are required as part of the EPA's General Construction Permits for Storm Water Discharges from Construction Activities in Region 6 and include such activities as silt fences, hay bale check dams, rock check dams, velocity dissipaters and construction entrances. The cumulative water quality impacts associated with construction are not anticipated to be significant because it is highly unlikely that large numbers of proposed projects would be constructed at the same time.

During construction and subsequent operation, water surface and subsurface structures may constrict floodwaters resulting in increased flow velocities and the potential increase in scour and

erosion immediately downstream. The potential for these adverse impacts would be minimized by requiring that flow velocities remain at predevelopment levels or per the FEMA's guidelines for channel modification resulting in an increased flow of less than 5 feet per second. Therefore, significant adverse cumulative impacts are not anticipated.

The primary adverse water quality impacts associated with operation of the proposed facilities include the potential for soil erosion and runoff of pollutants such as fuel, oil, pesticides, herbicides, fertilizers, and other wastes into the lake from the site. Operation of the site should minimize adverse impacts to storm water discharges through application of appropriate best management practices. Thorough application of the appropriate storm water permits should mitigate possible adverse impacts resulting from operation of the facilities. In addition, planting vegetation to help stabilize the soil and serve to trap pollutants and hold runoff would be required at the site. It has therefore been determined that there would be no significant adverse cumulative impacts to the water quality of Lewisville Lake from implementation of the proposed actions, except on a temporary basis.

## **7.5 Wetlands**

According to the USFWS National Wetlands Inventory maps, mapped wetlands occur in some project areas. Construction of the proposed projects has the potential to impact wetlands along the shoreline and on shore. Onsite jurisdictional wetland determinations and delineations were beyond the scope of this PEA. It would be necessary to verify the location and extent of wetlands in the affected areas before proceeding with any of the projects. Impacts are not likely to be significant but, in cases where a permit is required under Section 404 of the Clean Water Act, a Nationwide permit, at minimum, would be required. In cases where a wetland would be adversely impacted but no permit is required, the USACE would comply with Executive Order (EO) 11990 and ensure "no net loss of wetlands." Documentation of compliance with Section 404 of the Clean Water Act and/or EO 11990 would need to be provided along with final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments.

Based on the studies and evaluations conducted thus far, the proposed projects are not anticipated to result in any significant adverse cumulative impacts to wetlands, as long as the actions are in compliance with applicable Federal, state and local regulations and any required mitigation for the loss of wetlands is undertaken per USACE guidelines. Since the USACE administers Section 404 of the Clean Water Act, it can help to ensure that cumulative impacts to wetlands around Lewisville Lake are not significant.

## **7.6 Aquatic Resources**

Construction of water surface and subsurface projects (e.g., bridges, wet slips, boat ramps, courtesy docks, floating breakwaters, floating structures, fishing piers, etc.) would result in temporary adverse impacts during the construction phase of the projects, but it is anticipated that these impacts would be short-term in nature. In addition, it is highly unlikely that large numbers of proposed projects would be under construction at the same time. It is also anticipated that any displaced aquatic resources would return and reestablish after project construction is completed.

It is not anticipated that operation of these facilities would result in significant long-term impacts.

Construction and operation of all other on shore projects are not anticipated to result in any adverse impacts to aquatic resources.

Based on currently available project information and studies conducted thus far, the proposed projects are not anticipated to result in significant adverse cumulative impacts on aquatic resources.

## **7.7 Floodplains**

Executive Order 11988, Floodplain Management, requires that Federal agencies avoid activities, which directly or indirectly result in the development of floodplain areas. According to FEMA's most current floodplain maps, most of the proposed projects, or portions thereof, are located within the 100-year floodplain.

The proposed actions cannot increase the base flood elevation to a level, which would violate applicable floodplain regulations or ordinances and must comply current policies and standards. The USACE requires that there be no net loss of flood storage at Lewisville Lake. Therefore, any fill placed within the 100-year flood pool as a result of project construction must be mitigated with excavation in another area of the flood pool with disposition above flood pool elevation of 537 feet msl in an area approved by the USACE. As long as all of the proposed projects are designed to comply with this requirement, then no significant adverse cumulative impacts to floodplains are anticipated. Since the USACE must review and approve all development projects, the USACE can help ensure that all projects are designed to comply with this requirement.

## **7.8 Terrestrial Resources**

### **Vegetation**

All of the projects are located in the transition zone between the Blackland Prairies and Cross Timbers and Prairies region of Texas as previously referenced in Section 4.8.1. Out of the 38 project location/types listed, 12 would likely result in adverse impact to some areas of previously undisturbed vegetation. The projects' impacts upon vegetation are not concentrated, but rather spread across the lake's perimeter. Impacts are not anticipated to be significant as long as the projects are designed to adhere to applicable regulations, policies, mitigation requirements, standards and guidelines. Each applicant would need to provide final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments. Each project, even when combined, would not account for a significant portion of the lake's existing vegetation. Therefore, the cumulative impacts on vegetation are not considered significant.

### **Wildlife**

Out of the 38 project location/types listed, 10 would likely result in some degree of adverse impact in the form of habitat degradation and/or habitat fragmentation. The land use plan

designates a substantial portion of USACE property as wildlife management. This land would provide wildlife impacted by the proposed development with suitable habitat needed to survive. Other areas not suitable for development such as areas in floodplains would also provide needed habitat. Impacts are not anticipated to be significant as long as the projects are designed to adhere to applicable regulations, policies, mitigation requirements, standards and guidelines. Each applicant would need to provide final plans and specifications for USACE environmental and master plan review prior to the issuance of any real estate instruments. Therefore, the cumulative impacts on wildlife are not considered significant.

## **7.9 Threatened or Endangered Species**

There are no known Federally listed threatened or endangered species known to occur on or near Lewisville Lake. Based on currently available project information, the cumulative impacts of the proposed projects are not anticipated to create a significant adverse impact on threatened or endangered species.

## **7.10 Aesthetics**

All of the proposed projects around the lake involve varying levels of development, which in turn would be viewable from different locations. However, all of the projects would not be viewable from any one location. Actually, very few of the total projects would be viewable from any one location.

It would be virtually impossible to define significantly adverse aesthetic impacts, which could be applied to any development project. That is why adverse aesthetic impacts are often left to the perception of the general public. It is not anticipated that the cumulative aesthetic impacts would be considered significant. However, it is recommended that this determination be held until after the public comment period. If no comments are received that indicate potentially significant aesthetic impacts, then it is also recommended that the USACE assume there would be none.

## **7.11 Recreation**

Many of the proposed projects would result in beneficial impacts to recreation including the marinas, parks, golf courses, trails, boat launching facilities and bird watching areas. The other projects would not result in significant cumulative impacts to recreation.

## **7.12 Socioeconomic Resources**

It is not anticipated that any of the proposed actions would have disproportionate adverse impacts on any low income or minority populations. Based on currently available project information, the cumulative impacts of the proposed projects are not anticipated to create a significant adverse impact on socioeconomic resources.

### **7.13 Hazardous, Toxic and Radioactive Waste**

Out of the 38 project location/types listed, 5 were noted to have a potential to be adversely impacted by regulatory sites. For the majority of the projects listed for this PEA, the potential for impact from regulated sites has an absent or neutral effect on the specific projects. Regulated sites include sites identified in the hazardous, toxic, and radioactive waste report, within a specified radius, and from reported oil and gas wells. The regulatory sites listed have their operations and corrective actions regulated by governing entities such as the EPA and the TNRCC. Concerns for the potential of a given regulated site to impact a project location are site specific and most commonly occur on USACE property at an existing facility. The cumulative impacts of the regulated sites on the proposed projects are not considered significant.

### **7.14 Noise**

Many of the proposed projects have the potential to increase ambient noise levels in the immediate vicinity. However, the greatest attenuator of noise is distance. There is enough distance between projects to attenuate project generated noise levels to the extent that noise levels from most projects would not significantly combine with other project related noise levels to result in significantly high noise levels. Therefore, cumulative noise impacts would not be significant.

### **7.15 Air Quality**

Most of the proposed projects would not involve any air pollution emission sources. However, others such as the proposed new roadways and bridges, marinas, parks, golf courses, and boat launching facilities would attract vehicles and boats. As discussed previously, there are no known computer models for modeling air emissions from boats traveling on lakes, therefore, this could not be performed.

Air pollutant emissions from vehicles can be modeled. However, in accordance with TxDOT's 1999 Air Quality Guidelines which were approved by the FHWA, a traffic air quality analysis is not required for roadway projects whose traffic projections do not exceed 20,000 vehicles per day for either the Estimated Time of Completion (ETC) or ETC+20 years (estimated 2000 and 2020 respectively for most of the projects) because previous analyses of similar projects did not result in a violation of the NAAQS. It is not anticipated that future 2020 traffic projections for the proposed projects around Lewisville Lake would exceed 20,000 vehicles per day. Even if they did, significant adverse air quality impacts would not be likely.

Based on the above findings, it is not anticipated that the vehicles and boats from the all of the proposed projects/activities would result in significant adverse air quality impacts.



## SECTION 8

### 8.0 MITIGATION

The Council on Environmental Quality (CEQ) has defined mitigation in its regulations at 40 CFR 1508.20 to include: avoiding impacts, minimizing impacts, rectifying impacts, reducing impacts over time, and compensating for impacts. Section 404(b)(1) Guidelines under the Clean Water Act establish environmental criteria, which must be met for activities to be permitted under Section 404. The types of mitigation enumerated by CEQ are compatible with the requirements of the Guidelines; however, as a practical matter, they can be combined to form three general types: avoidance, minimization, and compensatory mitigation.

All development projects should strive to avoid impacts to the natural environment including wetlands and sensitive habitat. Where impacts cannot be avoided, the project should be designed to minimize adverse impacts to the maximum extent practicable. Finally, where impacts remain after all avoidance and minimization efforts have been implemented, compensatory mitigation should be undertaken.

On requests that result in mitigation, the applicant would be required to provide an annual report by a qualified specialist (a wildlife biologist, ecologist, forester, range scientist, landscape architect, or other specialist in natural resource mitigation) to the USACE documenting the results of the implementation of the proposed action. This report would include; but would not be limited to, the condition of the mitigation measure enacted - a survivability analysis, condition and assessment of best management practices utilized, and the compliance with any other terms and conditions of the Real Estate Instrument. Any non-compliance issues reported would be accompanied with a written plan and timeline to ensure the USACE that compliance would be immediately initiated.

### 8.1 Utility Corridors

There are numerous utility lines (e.g. electrical, water and sewer) being proposed and existing around the lake, many of which would and do cross the lake, and it is anticipated that numerous others would be proposed in the future. The USACE would establish permanent utility easements of appropriate widths at strategic locations either on or adjacent to existing easements at Lewisville Lake. These corridors would be utilized to place as many utilities within these easements as possible, thus reducing environmental impacts to these corridors and stopping future fragmentation of the natural resources. All natural resources impacts would be either avoided, minimized, or require compensatory mitigation per Sections 1.3 wetlands and 1.4 vegetation/habitat impact below. These future requests would also require the applicant to provide all required Federal and state permits as part of their submittals. These corridors would be coordinated with appropriate regulatory agencies after this PEA is completed. Placement of future utilities within these corridors would then be reviewed for consideration as a Categorical Exclusion of "Real Estate grants for rights-of-way, which involve only minor disturbances to earth, air, or water". Changes of environmental laws, regulations, or additions to the endangered species list affecting these lands may require additional environmental review.

## 8.2 Water Quality

The USACE water quality objectives would be achieved by requiring applicants to include in their final design plans best management practices (BMP's) including silt fence, rock check dams, detention basins, retention basins, velocity dissipaters, infiltration devices, etc. Properly designed and implemented, these practices reduce the levels of sediments, nutrients, heavy metals, toxic materials, floatable materials, oil and grease, etc.

Structural BMP's are considered to be "end of pipe" or treatment BMP's. These management practices include wet ponds, vegetated treatment ponds, vegetated swales and strips, detention basins, media filtration, oil/water separators, and infiltration devices. No single BMP would provide complete surface runoff treatment, however, a combination of these BMP's would effectively reduce or eliminate these target constituents prior to release into receiving waters. Wet ponds provide a high level of particulate and some dissolved contaminant removal. Wet ponds are typically designed to detain water for a period of 14 days to achieve maximum contaminant removal. Vegetated treatment ponds provide similar treatment to wet ponds, however, they can provide more effective removal of nutrients and oxygen demanding substances depending on the vegetation selected for the pond. Vegetated swales and strips provide treatment effectiveness similar to wet ponds, however, require less area within a development and do not hold water for extended periods of time. Detention basins provide effective treatment and are especially effective with regards to removal of sediments and floatables (including oils) from surface runoff. These detention basins are designed such that they are dry between storm events and drain down over a period of 24 to 40 hours following a storm event. Media filtration consists of a settling basin followed by a filter. The most common filter media is sand, however, some filters may also use a sand/peat mixture. This treatment control specifically removes sediments, floatable materials, and oxygen demanding substances. Oil/water separators specifically remove petroleum compounds and grease. As a side benefit of their design, they are also effective at removing floatables from surface runoff. Infiltration systems are applied with the intention of recharging ground water reserves utilizing surface water runoff. Infiltration systems include: ponds, vaults, trenches, dry wells, porous pavement, and concrete grids. *(Source: BMP Manual Storm Water Quality Best Management Practices for Industrial Activities, North Central Texas Council of Governments).*

BMPs can also include a variety of activities and design practices. Alteration of common design and daily activities to promote an awareness of their possible impacts on receiving waters are considered source control BMP's. These source control BMP's consist of basic design considerations when developing a site and operational methods when performing everyday tasks on a site. Examples of source control BMP's include recognizing that only surface runoff from areas not likely to be contaminated should be routed to receiving creeks and lakes. Surface runoff likely to have been contaminated should be treated prior to release either through a wastewater treatment plant or an oil and water separator. This applies to interior floor drains and vehicle and equipment fueling, washing, cleaning, maintenance, repair, and storage areas. The type of materials to be stored should be considered when determining where it should be stored. The location of waste bins based on the types of waste to be handled should also be considered. Awareness programs implemented by property owners that inform people of issues such as storm drains that are directly connected to creeks and lakes are also considered to be source control

BMP's. These BMP's control point source pollution at their origin. This management practice is considered to be very effective in point source control. Parties owning NPDES discharges to the lake shall be responsible for normal maintenance and clearing of BMP's to ensure proper operation.

The BMP manual, "Storm Water Quality Best Management Practices for Industrial Activities," produced and distributed by the North Central Texas Council of Governments should be referenced for removal efficiencies and design constraints associated with each management practice. These methods are also effective in reducing peak flows, delaying time of concentration, and maintaining the pre-development flow regime in receiving waters. Application of these BMP's would also be required at points where concentrated flows from off-site developments discharge onto Lewisville Lake fee and flowage easement lands.

### 8.3 Wetlands

The wetland compensatory mitigation table shown on Table 8.1 provides typical recommended USACE mitigation ratios for guidance purposes only. Each project would be assessed individually and final wetland mitigation ratios may vary up or down. Each applicant would be required to monitor the mitigation site for a typical duration of 2 to 3 years to ensure the specified success rate, which is typically 80 percent. However, as with final wetland mitigation ratios, actual monitoring duration and success rates may also vary. Mitigation ratios could be further modified for on-site/in-kind versus off-site/out-of-kind. The latter could result in a higher mitigation ratio.

Table 8.1 Typical Compensatory Mitigation Ratios for Loss of Jurisdictional Waters				
Class Conditions	Open Water	Stream	Wetlands	
			Non-Forested	Forested
Low	1:1	2:1	3:1	4:1
Medium	2:1	3:1	4:1	5:1
High	3:1	4:1	5:1	6:1

### 8.4 Vegetation/Habitat

The vegetation/habitat mitigation shown on Table 8.2 provides an example, for guidance purposes only, of typical USACE compensatory mitigation ratios. This table is provided to show an example of mitigation ratios considering habitat condition in relationship to the lake flood frequencies. Each project would be assessed individually and final habitat mitigation ratios may vary up or down. For example, mature bottomland hardwoods are often given a resource category 2 habitat designation by the USFWS with a mitigation goal of "no net loss" of in-kind habitat value. Therefore, if impacts are not avoidable, the USFWS could potentially require higher mitigation values. Each applicant would be required to monitor the mitigation site for a typical duration of 2 to 5 years to ensure the specified success rate, which is typically 80 percent. However, as with final habitat mitigation ratios, actual monitoring duration and success rate may also vary. Mitigation ratios could be further modified for on-site/in-kind versus off-site/out-of-kind. The latter could result in a higher mitigation ratio.

Table 8.2 Typical Compensatory Mitigation Ratio for Loss of Vegetation/Habitat			
Flood Event Frequencies	Vegetation/Habitat Condition		
	Poor	Good	Excellent
5 Year (528' msl)	1:1	2:1	3:1
10 Year (530.8' msl)	2:1	3:1	4:1
50 Year (535.2' msl)	3:1	4:1	5:1
≥100 Year (537' msl)	4:1	5:1	6:1

## SECTION 9

### 9.0 AGENCY COORDINATION

The draft PEA was sent to the following resource agencies for review and comment in accordance with coordination requirements as set forth by the National Environmental Protection Act (NEPA): Texas Parks and Wildlife; U.S. Fish and Wildlife Service (USFWS); Environmental Protection Agency (EPA), Region 6; the Texas Historical Commission; and the Texas Natural Resource Conservation Commission.

The PEA was also sent to the 18 public and private entities, which are proposing the development actions addressed in this PEA. Some of these entities responded with letters containing comments regarding the PEA. Copies of these letters are included in Exhibit 14.

## SECTION 10

### 10.0 LIST OF PREPARERS

Jeff Anderson, Project Manager, Senior Environmental Planner, Carter & Burgess, Houston, TX.  
Steve Veal, P.E., Vice President, Carter & Burgess, Fort Worth, TX.  
Peter D. McKone, C.W.B., Senior Environmental Scientist, Carter & Burgess, Fort Worth, TX.  
Lawrence M. Brennan, Jr. R.E.M, Environmental Scientist, Carter & Burgess, Fort Worth, TX.  
David Van Gorder, L.A., Landscape Architect, Carter & Burgess, Fort Worth, TX.  
Dorcas Boerner, Geologist, Carter & Burgess, Fort Worth, TX.  
Ron Ilg, Ph.D., Environmental Scientist, Carter & Burgess, Austin, TX.  
Brad Peal, AICP, Transportation Planner, Carter & Burgess, Austin, TX.  
Scott Davis, Environmental Technician, Carter & Burgess, Austin, TX.  
Kerry Carson, Environmental Planner, Carter & Burgess, Houston, TX.  
Ellen Stevenson, Environmental Planner, Carter & Burgess, Houston, TX.  
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Stephanie DuPree, Environmental Technician, Carter & Burgess, Fort Worth, TX.  
Teresa Granger, Administrative Assistant, Carter & Burgess, Fort Worth, TX.  
Franzi Brun, GIS Specialist, Carter & Burgess, Fort Worth, TX.  
Jason Conover, GIS Specialist, Carter & Burgess, Fort Worth, TX.  
Paul Miller, GIS Specialist, Carter & Burgess, Fort Worth, TX.  
Marcia Hackett, Environmental Division, U.S. Army Corps of Engineers, Fort Worth District  
Joe Paxton, Chief, Environmental Division, U.S. Army Corps of Engineers, Fort Worth District  
Doug Cox, Operations Division, U.S. Army Corps of Engineers, Fort Worth District

## EXHIBITS

Exhibit 1. Vicinity Map





## Exhibit 2. General Soil Map

## MODERATELY DEEP AND DEEP SOILS ON UPLAND SAVANNAHS

- 1 Blome-Gask-Callisburg: Well drained, gently sloping to moderately steep, loamy soils that have moderate to slow permeability

## MODERATELY DEEP AND DEEP SOILS ON UPLAND PRAIRIES

- 2 Sargent-Somervell: Well drained, gently sloping to moderately steep, clayey and loamy soils that have moderate and very slow permeability
- 3 Novo-Wilson: Well drained and somewhat poorly drained, nearly level to gently sloping, loamy soils that have very slow permeability
- 4 Branyon-Burleson-Halden: Well drained and moderately well drained, nearly level to moderately steep, clayey soils that have very slow permeability
- 5 Altoga-Vetzel-Feris: Well drained, gently sloping to moderately steep, clayey soils that have moderate and very slow permeability
- 6 Slidel-Senger: Well drained, gently sloping to moderately steep, clayey soils that have very slow permeability
- 7 Ponder-Lindale: Well drained, nearly level to gently sloping, loamy soils that have slow to very slow permeability

## DEEP SOILS ON BOTTOM LANDS

- 8 Fris-Ovan: Well drained and moderately well drained, nearly level, clayey soils that have moderately slow and very slow permeability

## VERY SHALLOW TO DEEP SOILS ON UPLAND PRAIRIES

- 9 Alton-Somervell: Well drained, gently sloping to sloping, loamy soils that have moderate permeability
- 10 Houston-Black-Sophant: Moderately well drained and well drained, nearly level to gently sloping, clayey soils that have very slow and moderately slow permeability

\* The texture noted in the descriptive headings applies to the surface layer of the major soils.

Compiled 1979

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
TEXAS AGRICULTURAL EXPERIMENT STATION

# **GENERAL SOIL MAP**

## **DENTON COUNTY, TEXAS**

Scale 1:253,640

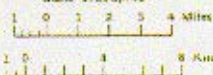
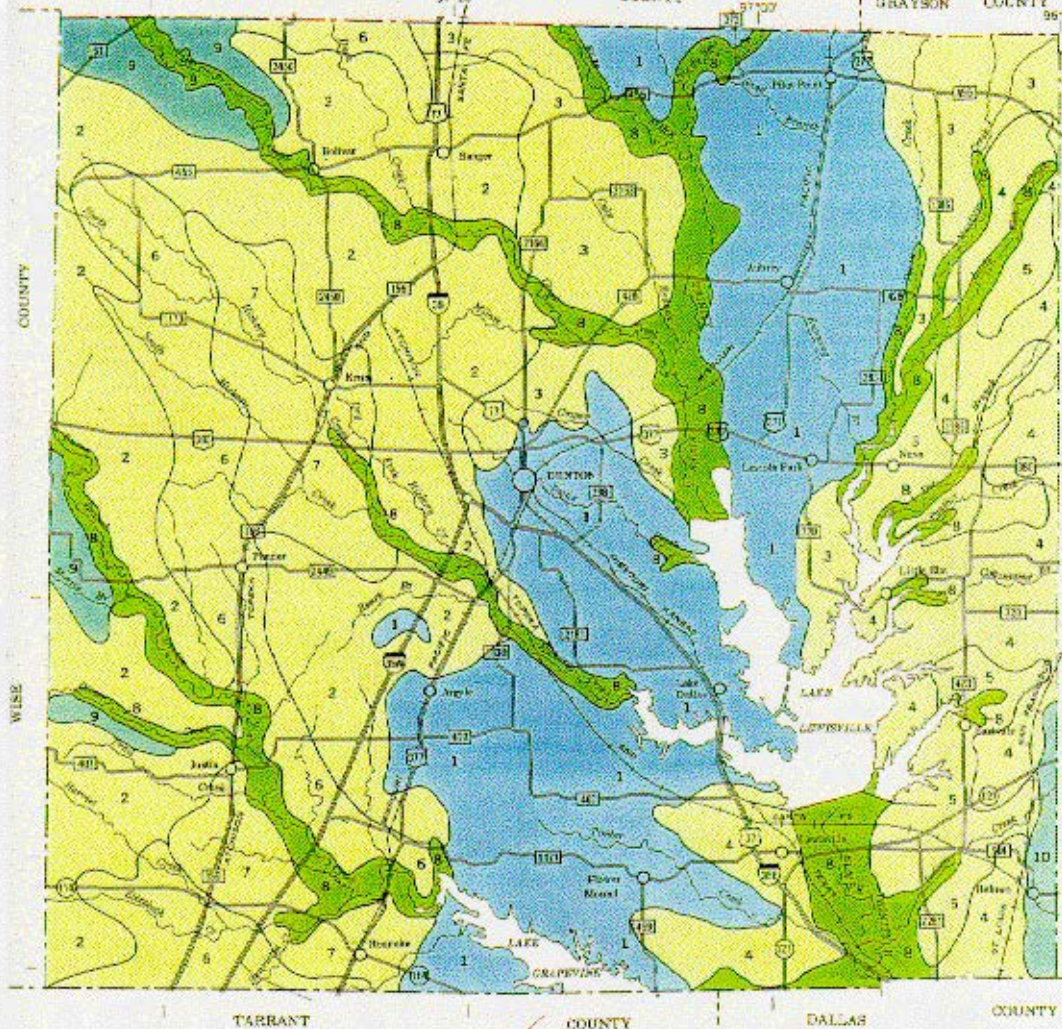


Exhibit 2



Soils were surveyed by AEC and correlated to more detailed field data. The map is compiled for general planning rather than for detailed or precise use of specific soils.

Exhibit 3. Corps of Engineers Land Use Allocation/Classification Map (1 2 3 4)



Lewisville Lake  
Corps of Engineers Land Use Allocation/Classification Map

- Corps Land Use
- Natural Area
  - Project Operations
  - Recreation
  - Wildlife Management
  - Corps Boundary
  - Roads
  - Lakes
  - Rail

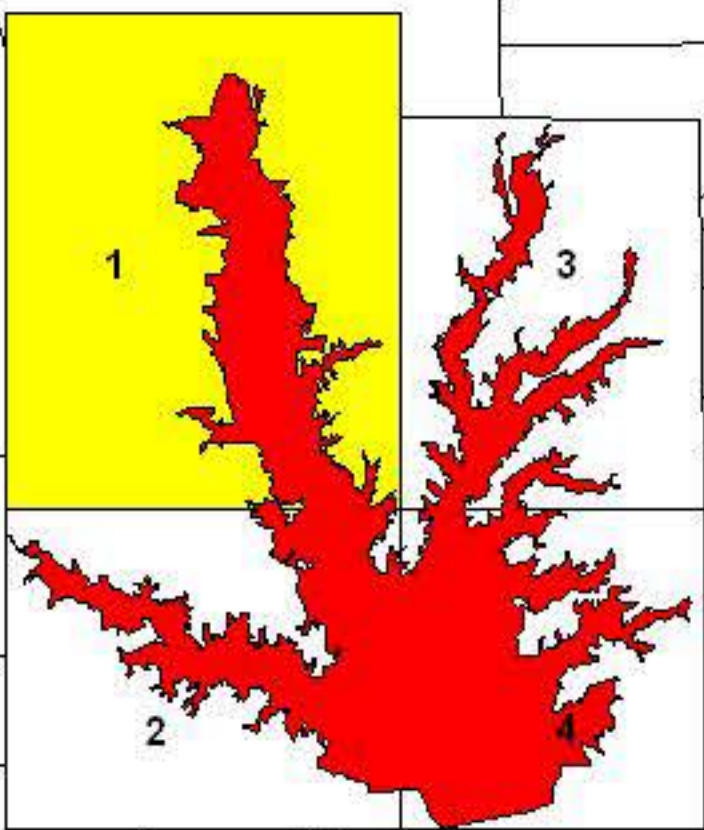
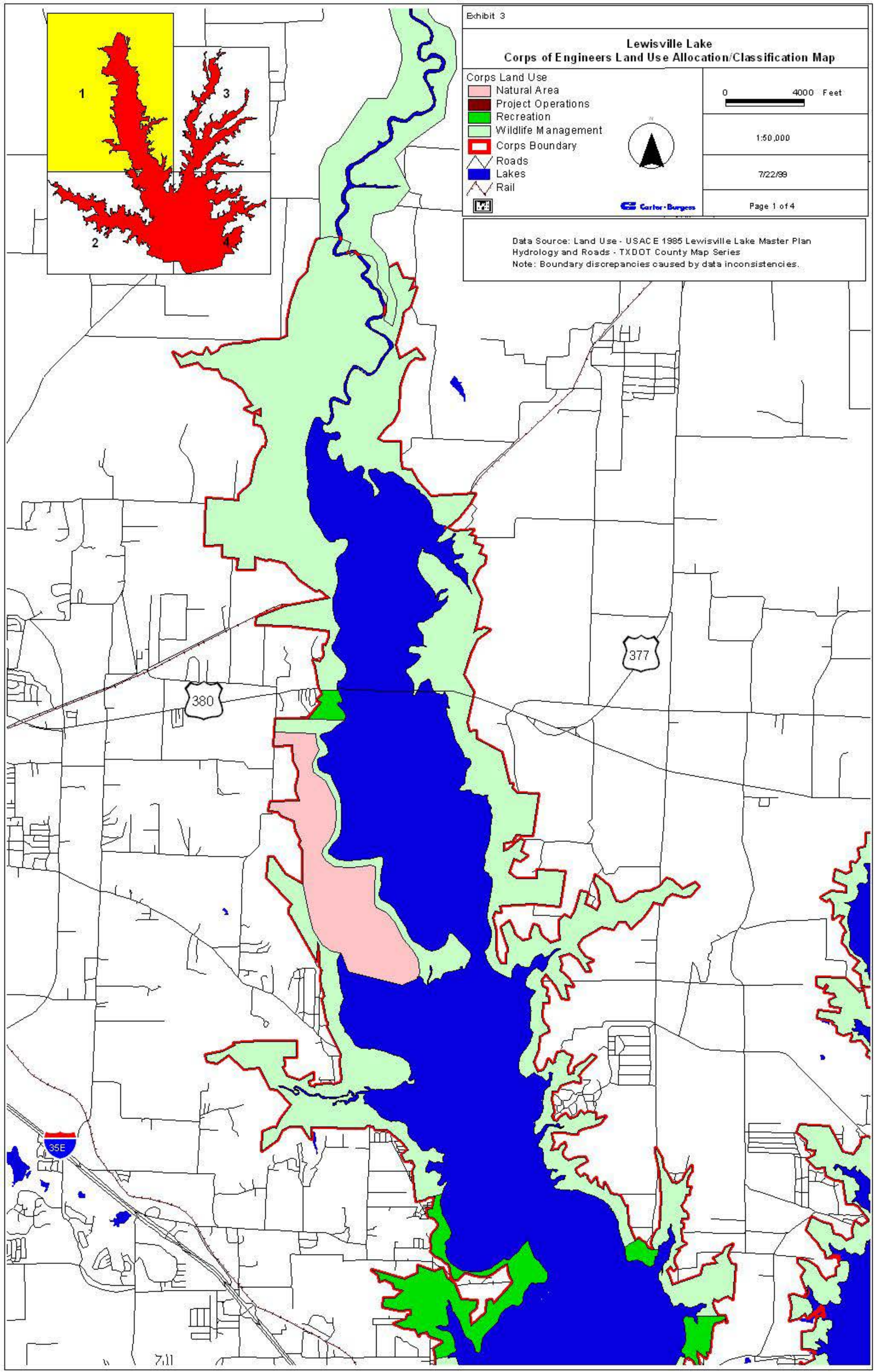
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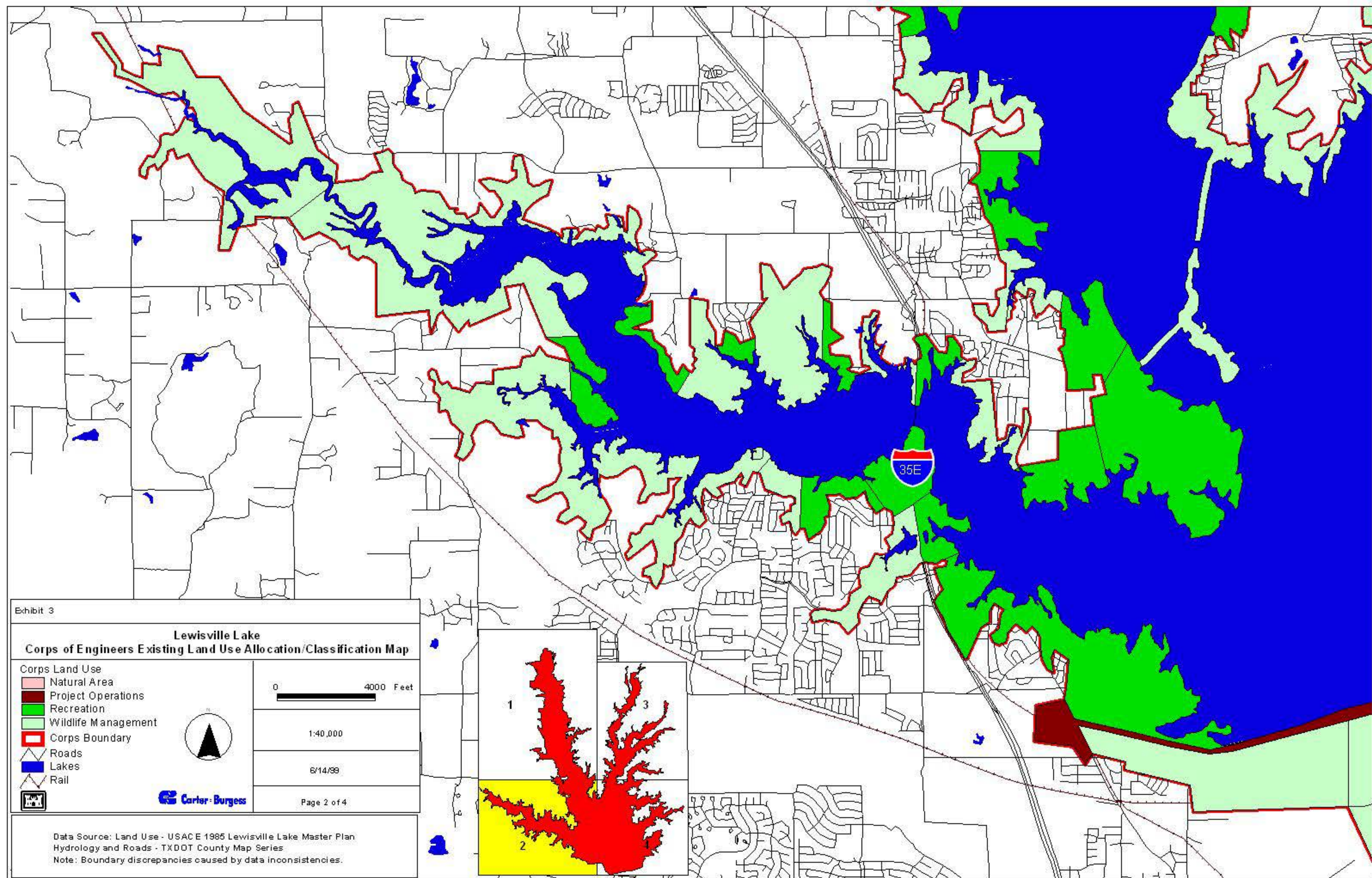
7/22/99

Page 1 of 4

Data Source: Land Use - USACE 1985 Lewisville Lake Master Plan  
Hydrology and Roads - TXDOT County Map Series  
Note: Boundary discrepancies caused by data inconsistencies.









Lewisville Lake  
Corps of Engineers Existing Land Use Allocation/Classification Map

- Corps Land Use
- Natural Area
  - Project Operations
  - Recreation
  - Wildlife Management
  - Corps Boundary
  - Roads
  - Lakes
  - Rail

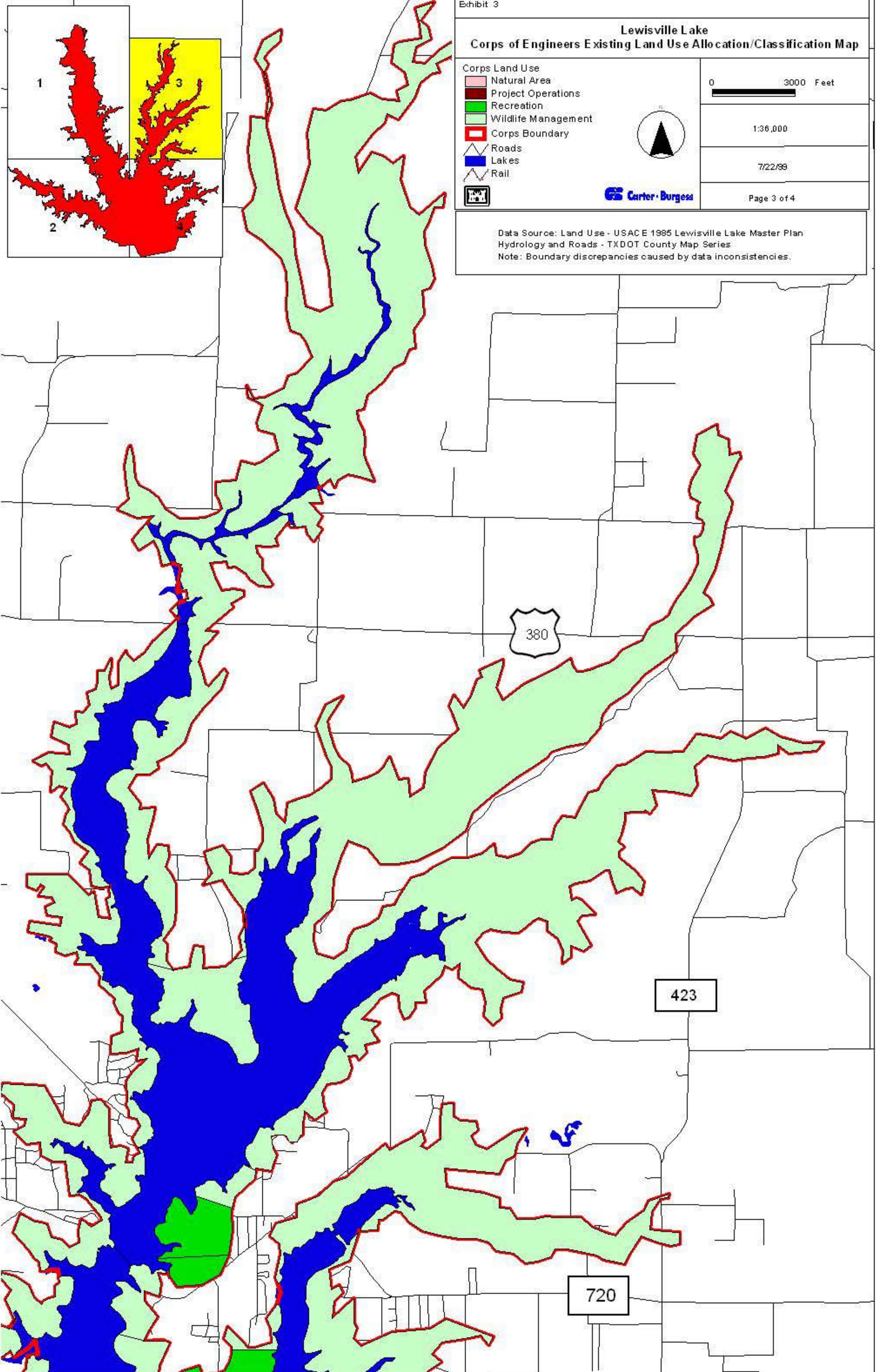
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7/22/99

Page 3 of 4

Data Source: Land Use - USACE 1985 Lewisville Lake Master Plan  
Hydrology and Roads - TXDOT County Map Series  
Note: Boundary discrepancies caused by data inconsistencies.





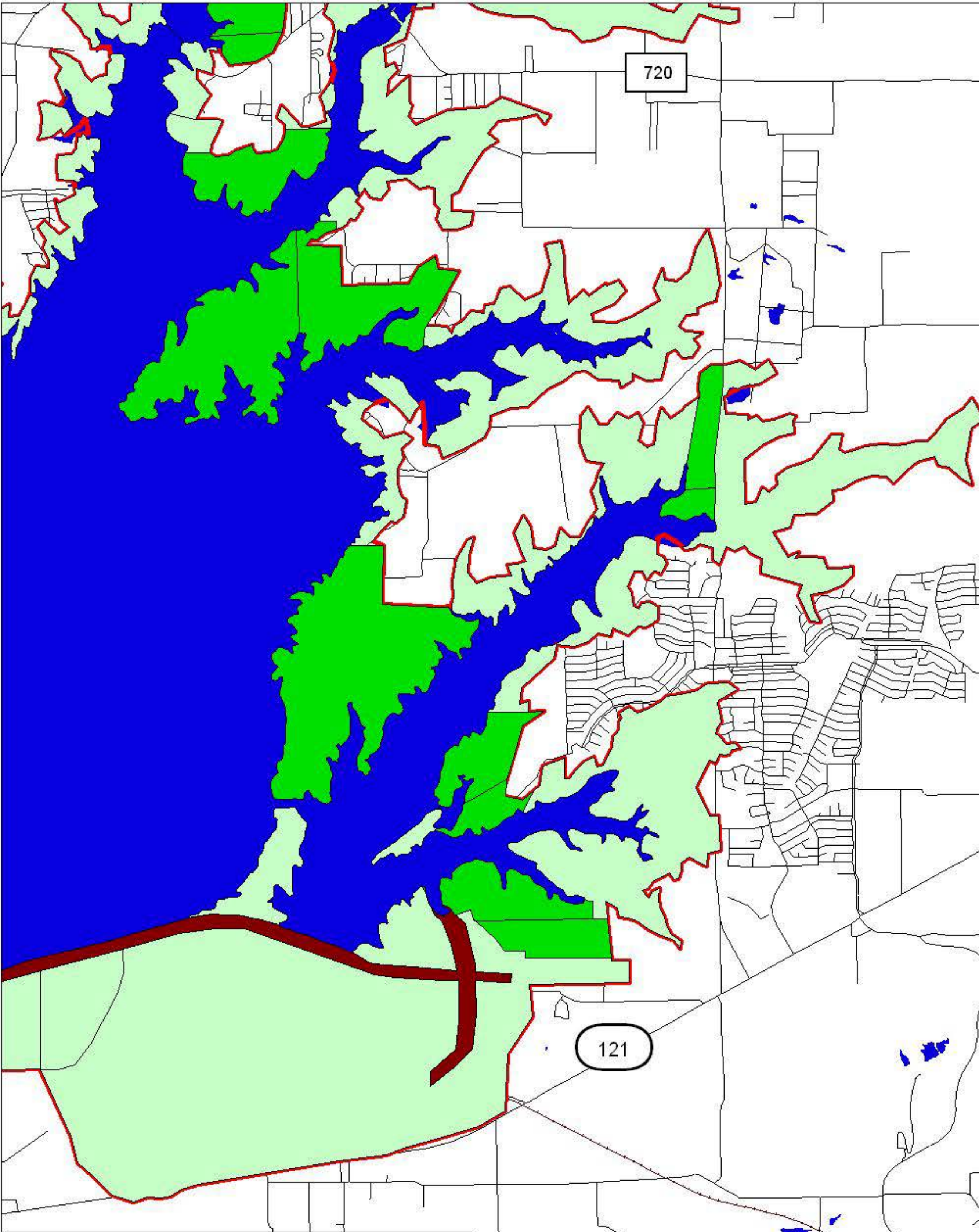
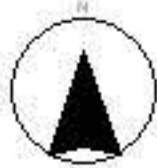


Exhibit 3

**Lewisville Lake  
Corps of Engineers Existing Land Use Allocation/Classification Map**

- Corps Land Use
- Natural Area
  - Project Operations
  - Recreation
  - Wildlife Management
  - Corps Boundary
  - Roads
  - Lakes
  - Rail



0 4000 Feet

1:40,000

7/22/99

Page 4 of 4

 **Carter-Burgess**

Data Source: Land Use - USACE 1985 Lewisville Lake Master Plan  
Hydrology and Roads - TXDOT County Map Series  
Note: Boundary discrepancies caused by data inconsistencies.

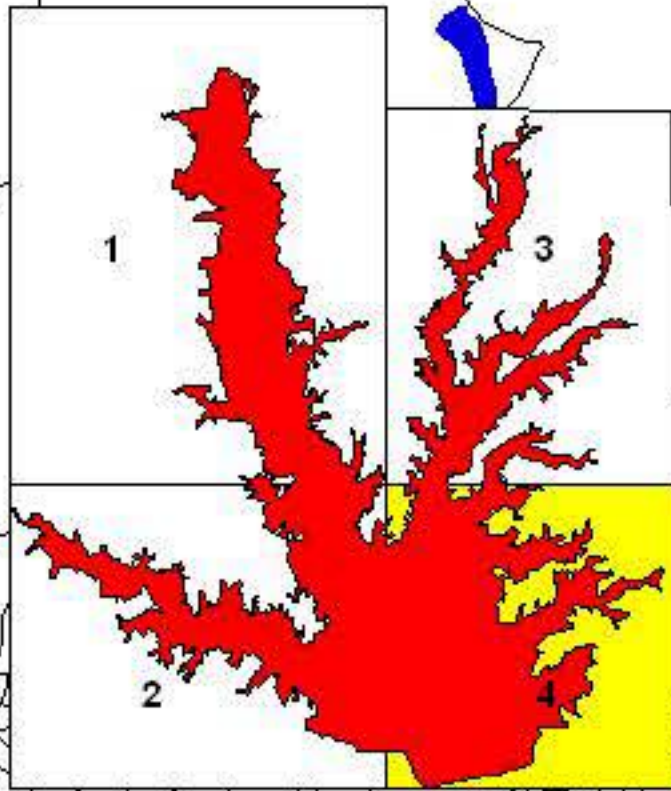




Exhibit 4. Known Storm Water Discharge Map



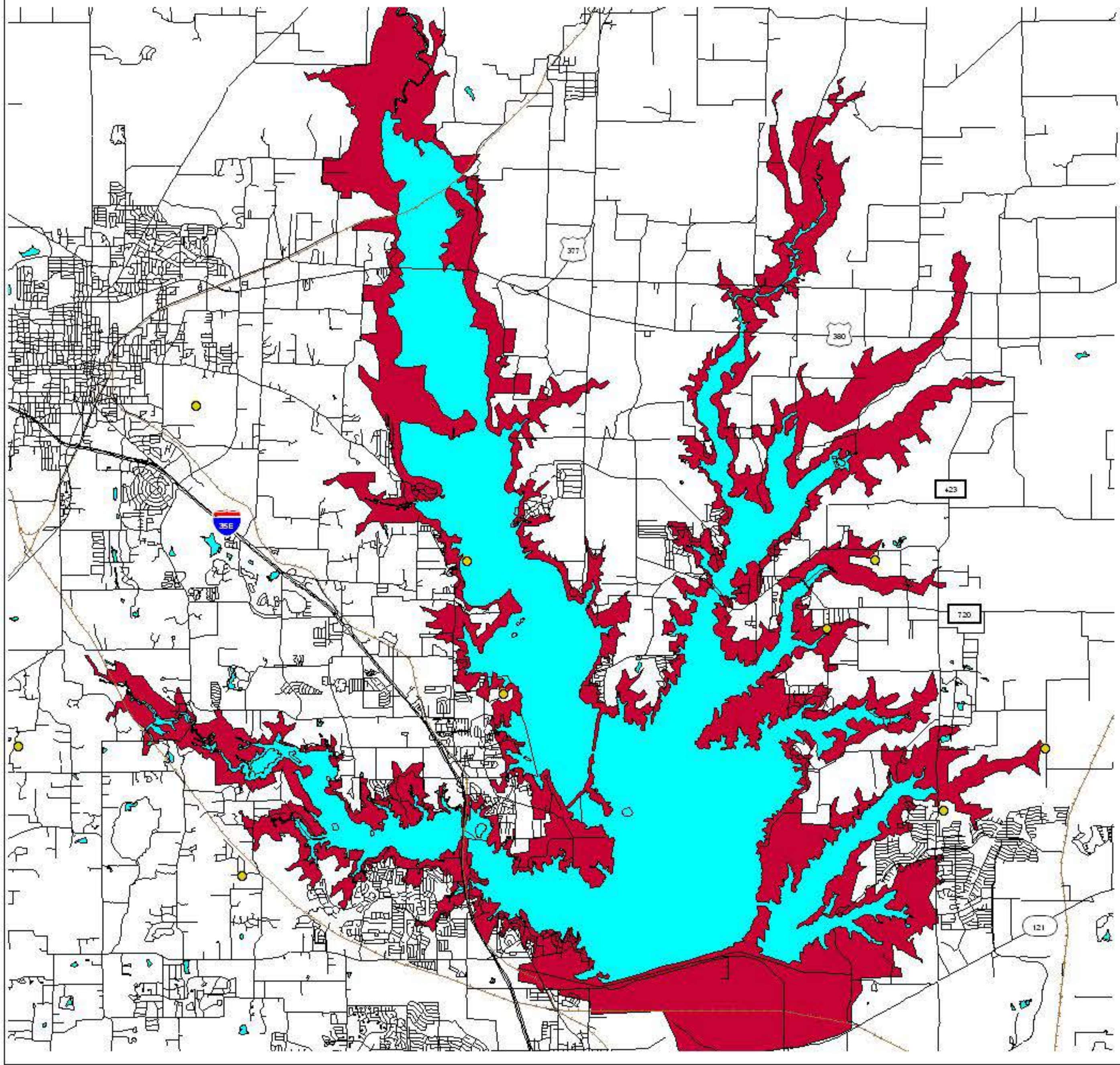
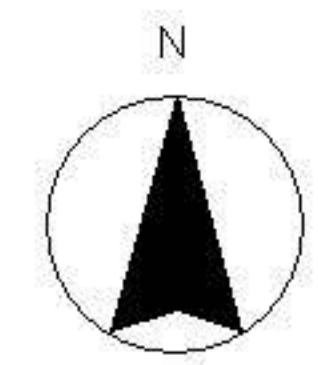


Exhibit 4	
Lewisville Lake Known Storm Water Discharge Map	
<ul style="list-style-type: none"><li>StormWater Discharge Points</li><li>Roads</li><li>Rail</li><li>Lakes</li><li>Corps Boundary</li></ul>	<p>0 4500 9000 Feet</p> <p>1:108,000</p> <p>7/22/99</p> <p>Page 1 of 1</p>



**Carter Burgess**



Data Source: Facilities operating under the NPDES Storm Water Discharge Permit in Denton County, Texas  
Note: Boundary discrepancies caused by data inconsistencies.



Exhibit 5. Wetland Map (1 2 3 4)



# Lewisville Lake Wetland Map

## Wetland Classification

- Aquatic Bed
- Lacustrine Aquatic Bed
- Lacustrine Unconsolidated Bottom/Shore
- Open Water
- Palustrine Emergent
- Palustrine Forested
- Palustrine Unconsolidated Bottom/Shoreline
- Riverine Streambed
- Riverine Unconsolidated Bottom

△ Roads

□ Corps Boundary



**Carter Burgess**

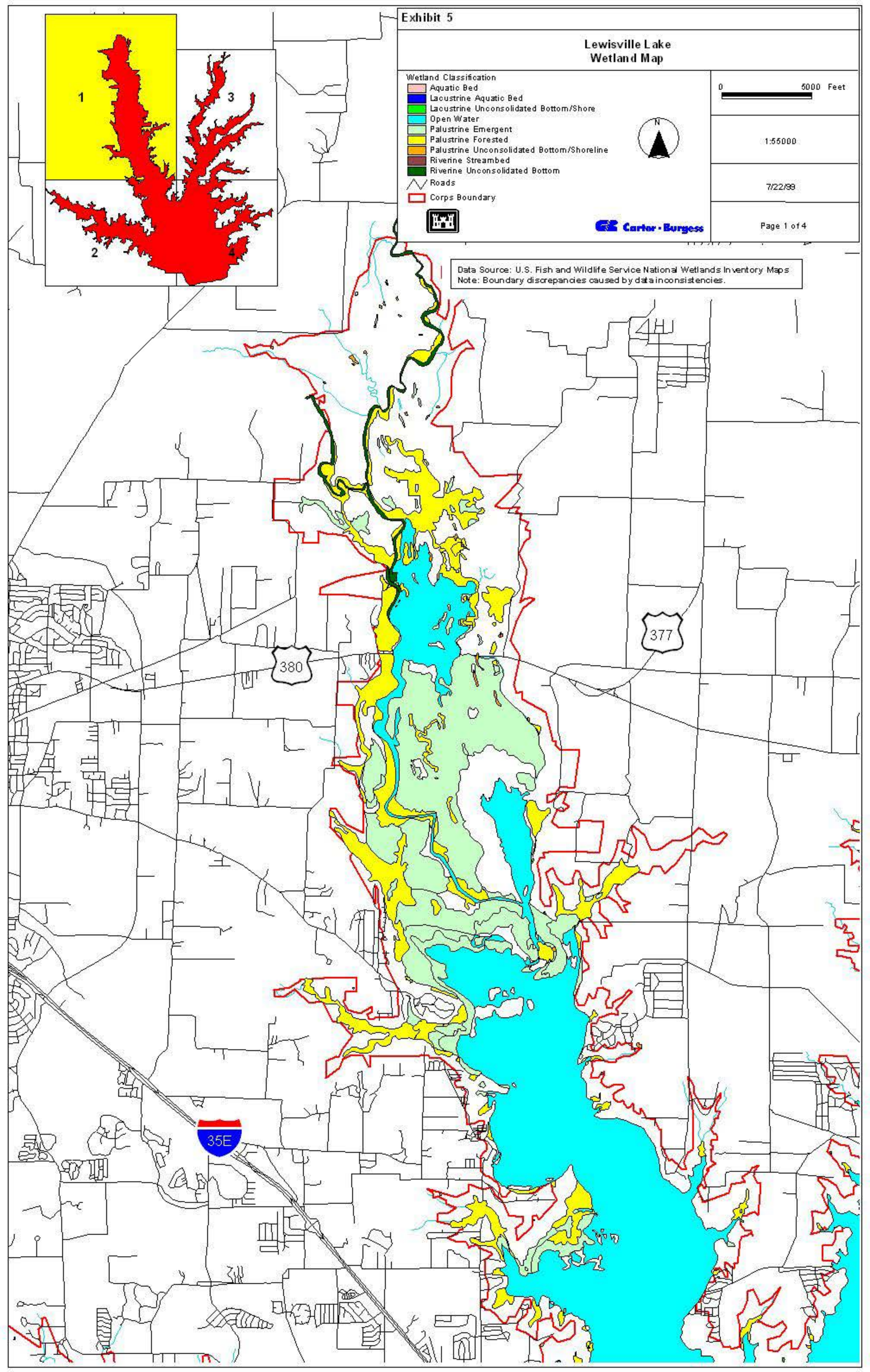
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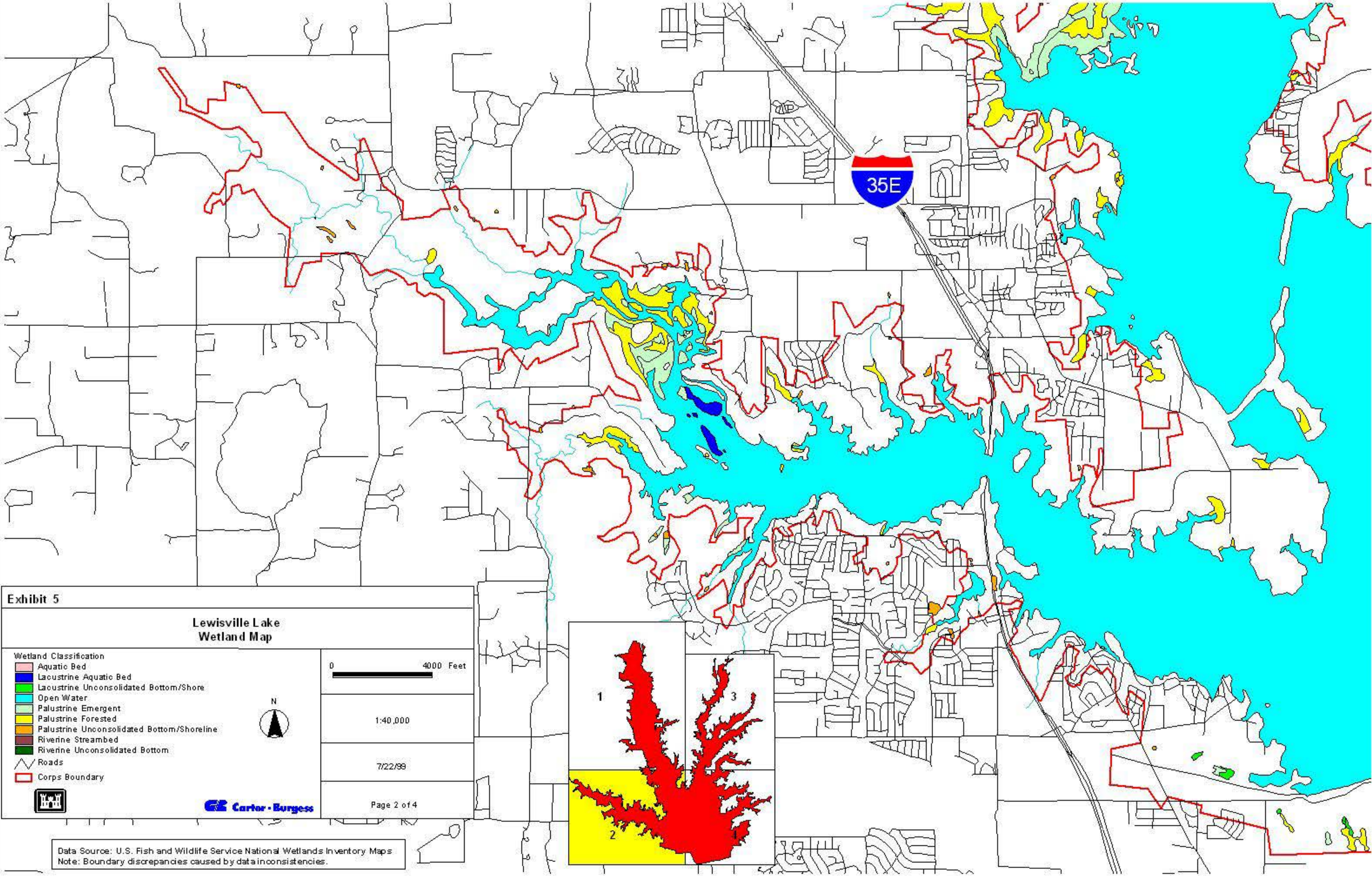
7/22/99

Page 1 of 4

Data Source: U.S. Fish and Wildlife Service National Wetlands Inventory Maps  
Note: Boundary discrepancies caused by data inconsistencies.







**Exhibit 5**

**Lewisville Lake  
Wetland Map**

**Wetland Classification**

- Aquatic Bed
- Lacustrine Aquatic Bed
- Lacustrine Unconsolidated Bottom/Shore
- Open Water
- Palustrine Emergent
- Palustrine Forested
- Palustrine Unconsolidated Bottom/Shoreline
- Riverine Streambed
- Riverine Unconsolidated Bottom

Roads

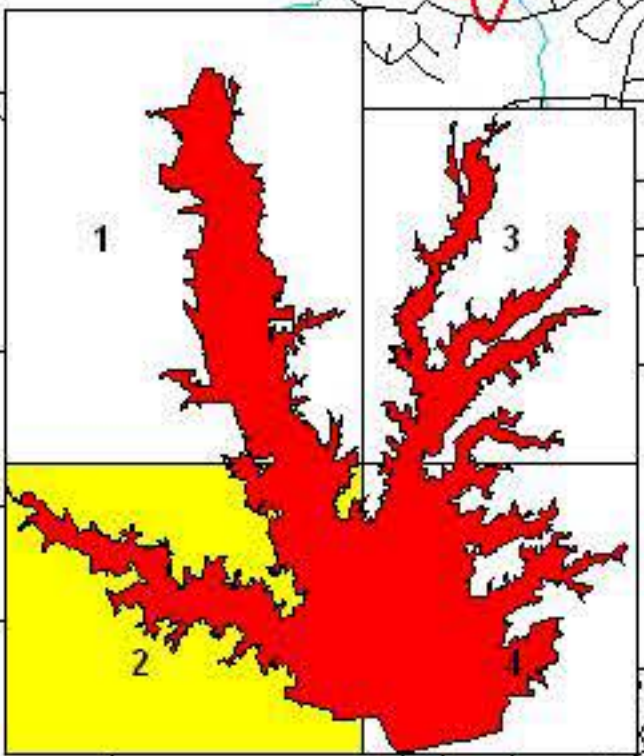
Corps Boundary

04000 Feet

1:40,000

7/22/99

Page 2 of 4



Data Source: U.S. Fish and Wildlife Service National Wetlands Inventory Maps  
Note: Boundary discrepancies caused by data inconsistencies.



Exhibit 5

Lewisville Lake  
Wetland Map

- Wetland Classification
- Aquatic Bed
  - Lacustrine Aquatic Bed
  - Lacustrine Unconsolidated Bottom/Shore
  - Open Water
  - Palustrine Emergent
  - Palustrine Forested
  - Palustrine Unconsolidated Bottom/Shoreline
  - Riverine Streambed
  - Riverine Unconsolidated Bottom
- Roads
- Corps Boundary

0 4000 Feet



1:42,000

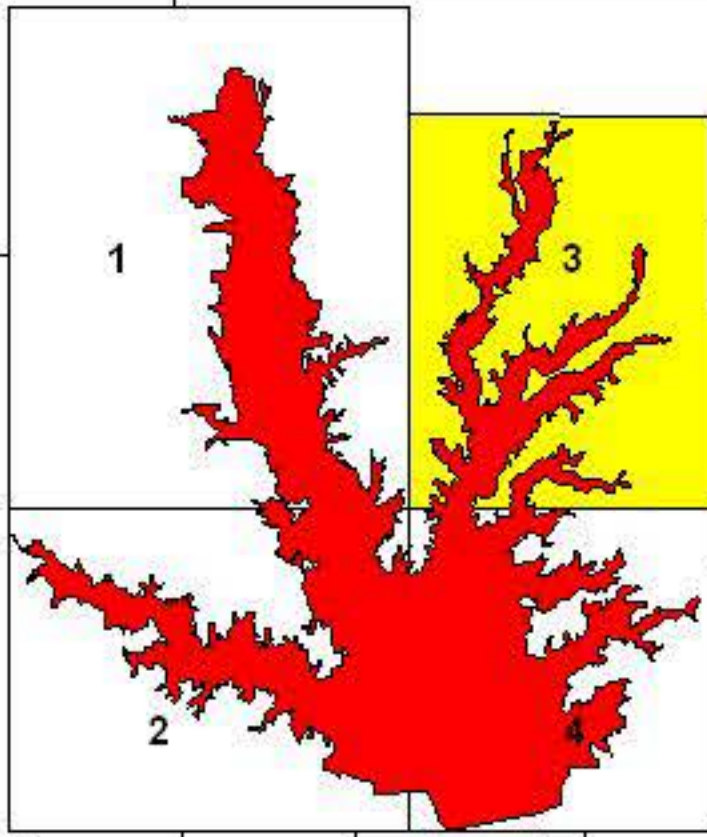
7/22/99

Page 3 of 4



**Carter Burgess**

Data Source: U.S. Fish and Wildlife Service National Wetlands Inventory Maps  
Note: Boundary discrepancies caused by data inconsistencies.

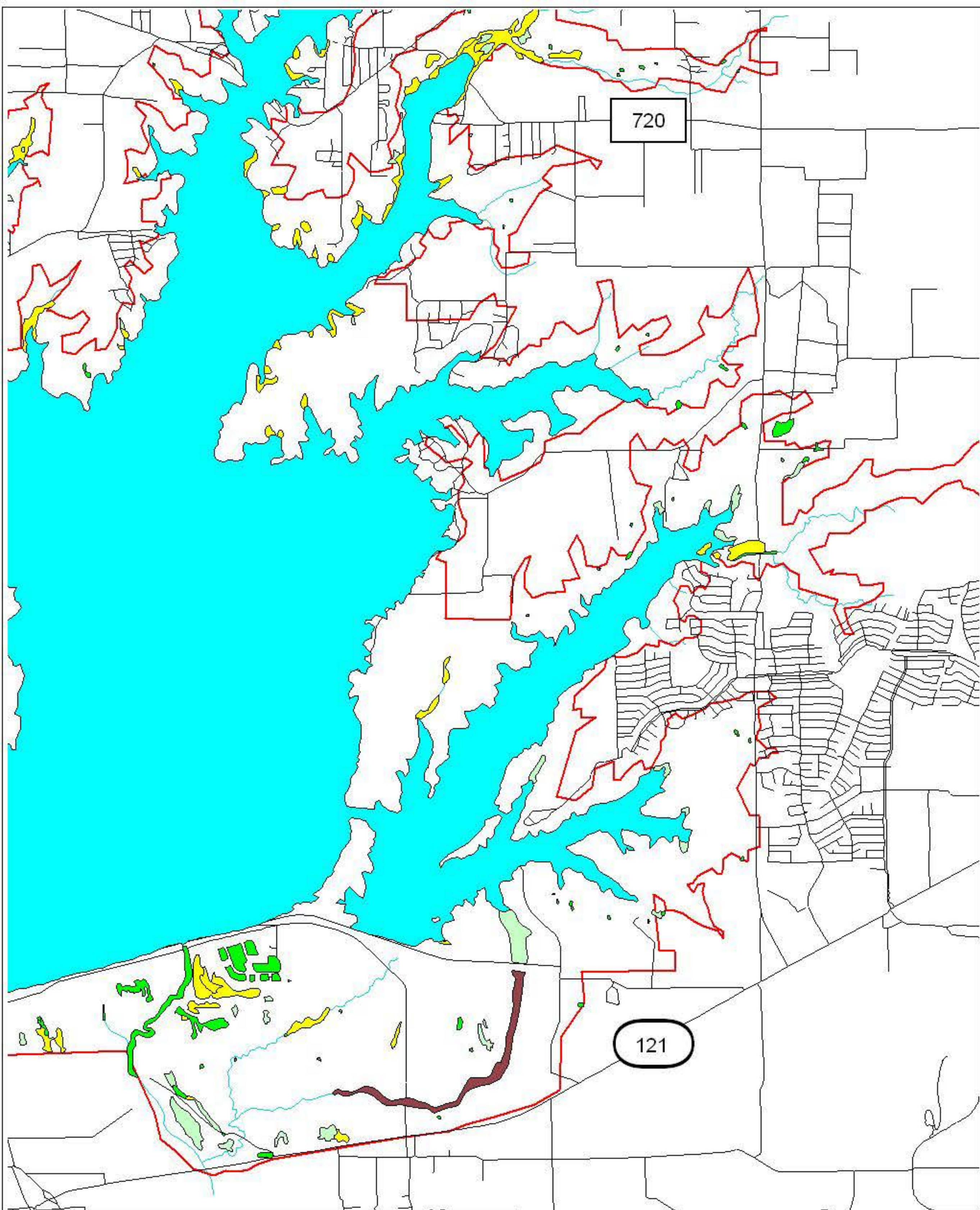


380

423

720



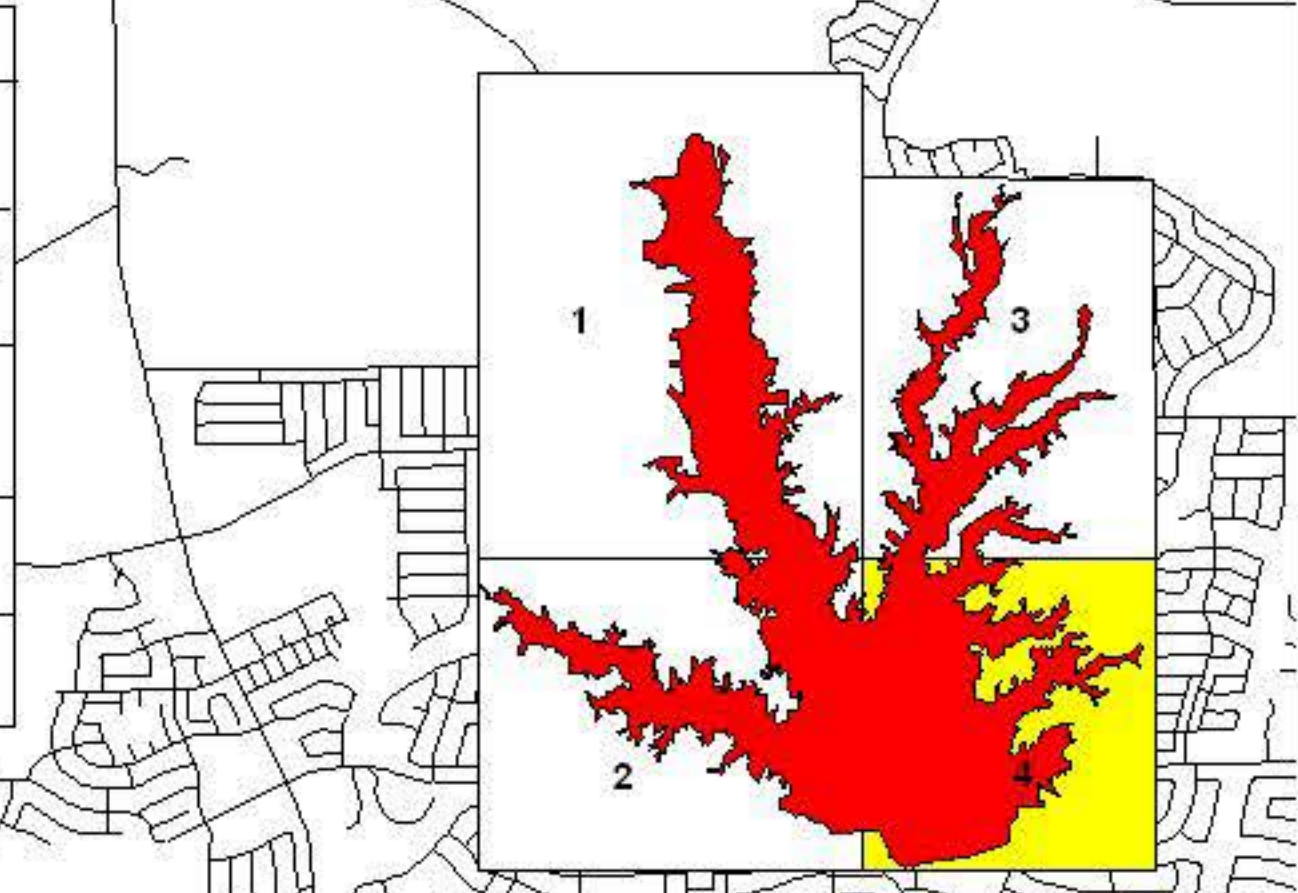


**Exhibit 5**

**Lewisville Lake Wetland Map**

<p><b>Wetland Classification</b></p> <ul style="list-style-type: none"> <li>Aquatic Bed</li> <li>Lacustrine Aquatic Bed</li> <li>Lacustrine Unconsolidated Bottom/Shore</li> <li>Open Water</li> <li>Palustrine Emergent</li> <li>Palustrine Forested</li> <li>Palustrine Unconsolidated Bottom/Shoreline</li> <li>Riverine Streambed</li> <li>Riverine Unconsolidated Bottom</li> </ul> <p>△ Roads</p> <p>□ Corps Boundary</p>	<p>0 4000 Feet</p> <p>1:42,000</p> <p>7/22/99</p> <p>Page 4 of 4</p>
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**Carter - Burgess**



Data Source: U.S. Fish and Wildlife Service National Wetlands Inventory Maps  
 Note: Boundary discrepancies caused by data inconsistencies.



## Exhibit 6. Floodplains Map



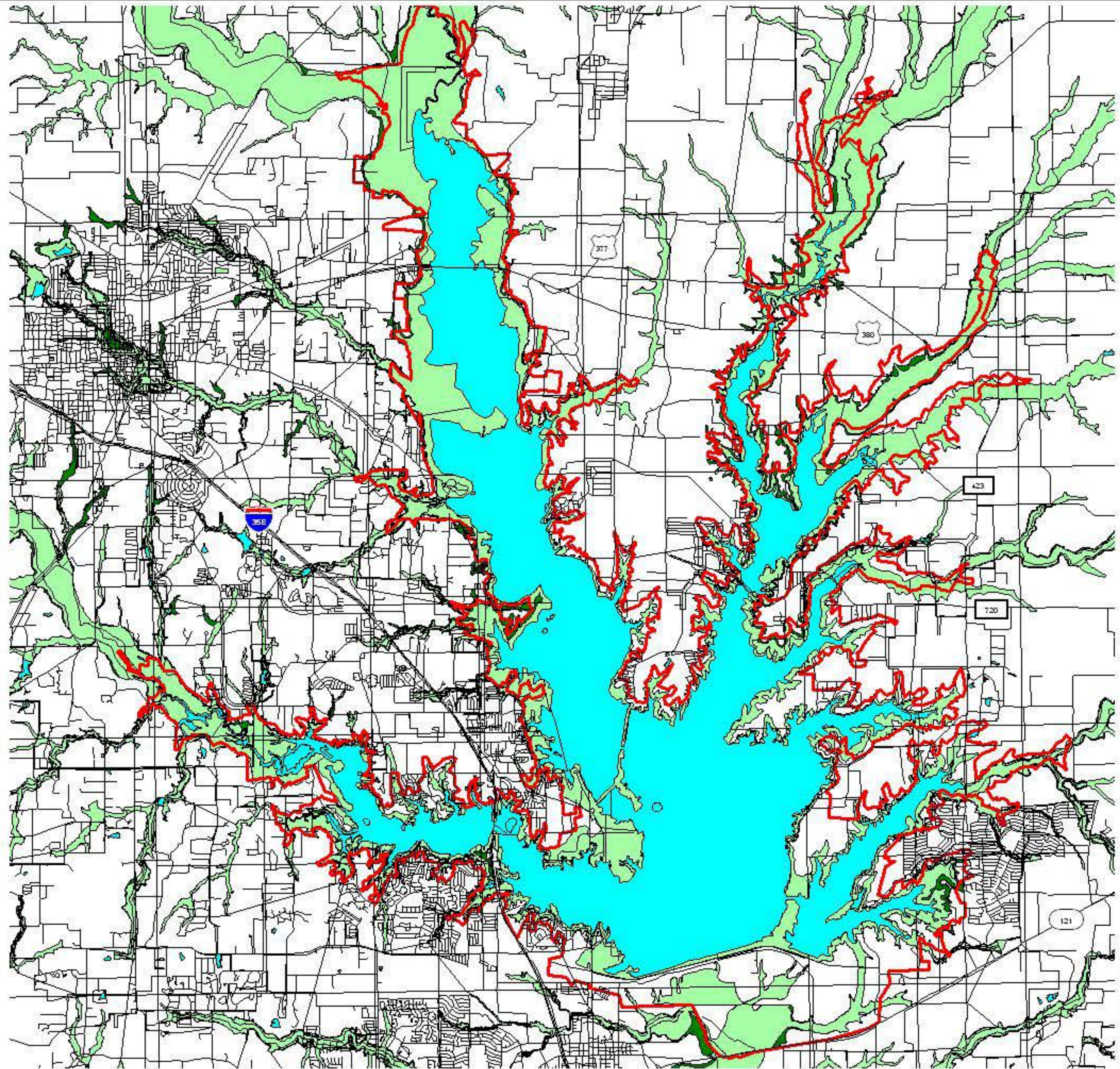


Exhibit 6

Lewisville Lake  
Floodplains Map

Roads

Corps Boundary

Lakes

Floodplain

100 Year

500 Year

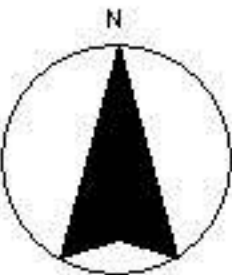
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7/22/99

Page 1 of 1

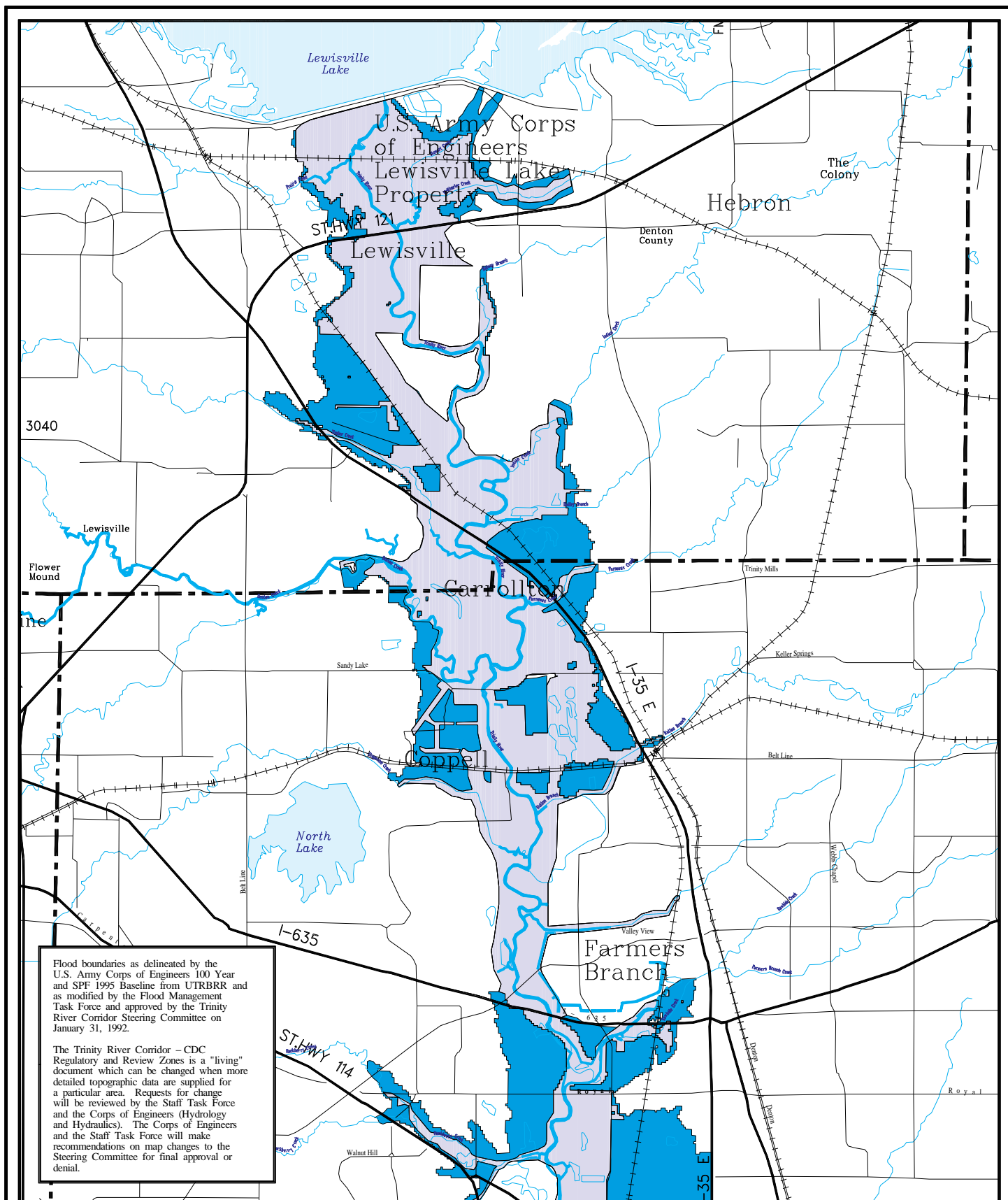
Carter-Burgess



Data Source: Flood Plain - TNRIS web site FEMA  
Flood Insurance Rate Map series  
Note: Boundary discrepancies caused by data  
inconsistencies.



Exhibit 7. Upper Trinity River Corridor Development Certificate Zones



#### CDC LEGEND

- CDC Regulatory Zone
- CDC Review Zone

Scale: 1 inch = 8500 Feet



#### UPPER TRINITY RIVER CORRIDOR CDC ZONES

#### Upper Elm Fork

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS 1-31-92

U.S. ARMY CORPS OF ENGINEERS  
NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS



Exhibit 8. Lewisville Lake Use Development Plan Guidelines

**Lewisville Lake Use Study  
Development Plan Guidelines**

14 APR 99

1. Maps prepared by the applicants should accurately depict the Government boundary, significant contours and/or elevations, proposed structures, roads, utilities, etc. Park plates (maps) which show boundaries and some of the critical contours are available from the Lewisville Lake Staff. These park plates may be utilized as base maps for development plans.

2. Lewisville Lake is a Multi-Purpose Lake with flood control as the primary mission. Development must be planned with lake elevation variances in mind.

a. Significant lake elevations:

- 1) 100 yr. flood - 537.0 msl
- 2) 50 yr. flood - 535.0 msl
- 3) Spillway Crest - 532.0 msl
- 4) 10 yr. flood - 530.0 msl
- 5) 5 yr. flood - 528.0 msl
- 6) Conservation Pool - 522.0 msl
- 7) 5 yr. drawdown - 515.0 msl
- 8) 10 yr. drawdown - 503.0 msl

b. Facility/Structural/Utility Control Elevations for fee and flowage easement properties:

- 1) Human occupancy "greater than or equal to" ( $\geq$ ) 537.0 msl - permanent structure designed for overnight occupation;
- 2) Permanent concession structures  $\geq$  532.0 msl - stores, repair shop, office buildings, etc. associated with concession or park and recreation lease.
- 3) Portable/movable structures  $\geq$  525.0 msl.
- 4) Sewage Systems - restricted zone is 75 horizontal feet from the uncontrolled spillway elevation or the 50 yr flood frequency elevation, whichever is lower. At Lewisville Lake, the spillway crest elevation of 532.0 msl elevation is the controlling elevation.
- 5) Low point (or sag) of communication and power lines must

be  $\geq$  52 feet above flood control pool elevation (spillway crest  $\geq$  532.0 msl + 52 ft. =  $\geq$  584.0 msl) or the lines must be buried.

6) Marinas - minimum suggested design depth should be 4 feet below the 10 yr. drawdown (503 msl - 4 ft. = 499 msl). Minimum allowable water depths for marinas is five feet below the 5 year drawdown (515 msl - 5 ft. = 510.0 msl). Deeper is better.

a) Natural protected embayments and coves - Provide enough detail to ensure adequate, safe, and dependable water access and moorage space. Include allowances for sediment deposits on the lake floor.

b) Artificial basins or marinas - In the absence of natural protected embayments and coves: provide enough detail such as describing required clearing, grubbing, excavation, grading and stabilization of the area or areas as required to provide adequate, safe, and dependable water access and moorage space and include allowances for sediment. In these instances, provide enough detail to determine the impact of protective groins, floating, and/or fixed breakwaters which may be constructed where needed for public safety and protection or expansion of the facility.

7) Depths for boat ramps at multiple-purpose lakes - minimum design depth should be 4 feet below the 10 yr. drawdown or 499 msl.

**3. Narrative description** - who, what, where, when, and how.

Describe the facilities/structures/activities proposed with enough detail for the Corps to be able to determine its use, size, location, and construction characteristics.

a. Who will operate the facility? (Primary lessee, 2nd or 3rd party lessee, etc.)? Who will use or be served by the facility?

b. What is the function of the proposed item?

c. Where is it located? (map)

be  $\geq$  52 feet above flood control pool elevation  
(spillway crest  $\geq$  532.0 msl + 52 ft. =  $\geq$  584.0 msl) or  
the lines must be buried.

- 6) Marinas - minimum suggested design depth should be 4 feet below the 10 yr. drawdown (503 msl - 4 ft. = 499 msl). Minimum allowable water depths for marinas is five feet below the 5 year drawdown (515 msl - 5 ft. = 510.0 msl). Deeper is better.
  - a) Natural protected embayments and coves - Provide enough detail to ensure adequate, safe, and dependable water access and moorage space. Include allowances for sediment deposits on the lake floor.
  - b) Artificial basins or marinas - In the absence of natural protected embayments and coves: provide enough detail such as describing required clearing, grubbing, excavation, grading and stabilization of the area or areas as required to provide adequate, safe, and dependable water access and moorage space and include allowances for sediment. In these instances, provide enough detail to determine the impact of protective groins, floating, and/or fixed breakwaters which may be constructed where needed for public safety and protection or expansion of the facility.
- 7) Depths for boat ramps at multiple-purpose lakes - minimum design depth should be 4 feet below the 10 yr. drawdown or 499 msl.

**3. Narrative description** - who, what, where, when, and how.

Describe the facilities/structures/activities proposed with enough detail for the Corps to be able to determine its use, size, location, and construction characteristics.

- a. Who will operate the facility? (Primary lessee, 2nd or 3rd party lessee, etc.)? Who will use or be served by the facility?
- b. What is the function of the proposed item?
- c. Where is it located? (map)

d. When is the estimated construction date within the 10 yr. plan?

e. How will it be constructed, maintained and operated?

**4. Structures - Hotels, lodges, cabins, restaurants, retail shops, conference centers, boat storage:**

a. **Hotel** - a building with several floors (3 or more) served by elevators, usually with a large open street-level lobby containing some or all of the following: chairs, a variety of compartments for eating, drinking, dancing, group meetings, shops, stores, telephone booths, etc. Hotels are authorized within the Corps= Recreation Partnership Initiative guidance - a hotel may be located within elevations designated for human occupancy ( $\geq$  537 msl) and associated with a resort type activity typically constructed in a lake setting (ie. golf course and/or marina). The use of fill material to alter ground elevation to comply with elevation requirements is not allowed. The placing or raising of a structure by use of piling or other type of foundation is prohibited.

b. **Lodge** - a small building that has no more than two (2) floors, contains a maximum of 75 units, is rustic, blends in with the natural setting, is not served by elevators. Lodges are authorized and may be located within elevations designated for human occupancy ( $\geq$  537 msl) within a high intensity park area. A lodge is not required to be associated with a marina or golf course. The use of fill material to alter ground elevation to comply with elevation requirements is not allowed. The placing or raising of a structure by use of piling or other type of foundation is prohibited.

c. **Cabins** - a small building (1 or 2 unit) that is rustic, blends in with the natural setting, has 1 to a maximum of 2 floors, is not served by elevators. Cabins are authorized and may be located within elevations designated for human occupancy ( $\geq$  537 msl) within a high intensity park area. A cabin is not required to be associated with a marina or golf course. The use of fill material to alter ground elevation to comply with elevation requirements is not allowed. However, raising the base of the structure by use of pilings to the human occupancy level ( $\geq$  537 msl) may be authorized on a case by case basis. The total height



of the structure may not exceed the 2 story level, counting the pilings.

**d. Restaurants/Concession Stands (permanent, portable, moveable and mobile)** - Not approved as stand alone facilities. Historically, restaurants and permanent concession stands have been authorized only in conjunction with and in support of other approved developments, such as marina, golf course, or lodge facilities, while portable/moveable and mobile concessions have supported activities as listed above with the addition of swimming beaches and boat ramps. Restaurants and permanent concession stands are authorized within elevations designated for permanent concession structures  $\geq 532.0$  msl within a high intensity park area. Portable/moveable concession stands are authorized within elevations designated for portable/moveable structures  $\geq 525.0$  msl. Mobile concession stands may be utilized throughout the concession lease. All of these concessions should blend in with the aesthetics of the development that they are supporting. Identify the type of establishment (restaurant, snack bar, bar, concession stand, etc.) being requesting and describe the type of food, associated sales items, and/or alcoholic drinks (if any) to be served. The use of fill material to alter ground elevation to comply with elevation requirements is not allowed. However, raising the base of the structure by use of pilings to the permanent concession level ( $\geq 532$  msl) may be authorized on a case by case basis.

**e. Retail Shops** - Not approved as stand-alone facilities. Historically, only retail facilities that support the park activity (selling items such as bait, life jackets, boat supplies, snack items, etc.) have been authorized and only in conjunction with, and in support of, other approved developments, such as marina, golf course, or lodge facilities. A retail shop should blend in with the aesthetics of the development that it is supporting. Please provide details on what type of items that would be sold. Retail shops are authorized within elevations designated for permanent concession structures  $\geq 532.0$  msl within a high intensity park area. The use of fill material to alter ground elevation to comply with elevation requirements is not allowed. However, raising the base of the structure by use of pilings may be authorized on a case by case basis.

**f. Conference Centers** - Not approved as stand-alone centers. Facilities containing conference rooms have been authorized only when they support other activities, such as marinas,

lodges/hotels, or golf courses. Address the size of the structure, location, number of rooms, and the number of stories. Conference areas are authorized within elevations designated for permanent concession structures  $\geq 532.0$  msl within a high intensity park area. The use of fill material to alter ground elevation to comply with elevation requirements is not allowed. However, raising the base of the structure by use of pilings may be authorized on a case by case basis.

**g. Boat Storage** - Not approved as a stand-alone facility. Boat storage facilities are authorized only when they support a marina. Address the size of the structure, location, number of rentals, and the number of stories (in the case of dry stacked storage). Boat Storage areas are authorized within elevations designated for permanent concession structures  $\geq 532.0$  msl within a high intensity park area. Variance in elevation may be authorized with sufficient justification. The use of fill material to alter ground elevation to comply with elevation requirements is not allowed.

**h. Recreation Vehicle (RV) Storage** - Not approved as a stand-alone facility. RV storage facilities are authorized only when they support a campground operation that include improved sites with dump station and/or hookups, minimum of 30 amp. electrical RV hookups, impact zones, shelter, potable water at electrical sites, water borne restrooms with showers, paved roadways, etc. These facilities should equate to a Corps of Engineers operated Class A Campground. Address the size of the structure, location, and identify if applicant will sell and or rent RV's. RV Storage areas are authorized within elevations designated for permanent concession structures  $\geq 532.0$  msl within a high intensity park area. Variance in elevation may be authorized with sufficient justification. The use of fill material to alter ground elevation to comply with elevation requirements is not allowed.

**i. Boat Ramps** - Development plans may include proposals for additional boat ramps and/or launching lanes (within available zone capacities). Development plans which propose to close boat ramps or launching lanes will not be favorably considered. However, relocation of public boat ramps or launching lanes may be allowed. The proposal must include documentation of an adequate public involvement process. At a minimum, the public involvement process will include public input via a press release and an information exchange meeting to outline the proposal. If deemed necessary by the Corps, other requirements may also be imposed on a case-by-case basis. Corps concurrence with the relocation

rooms, and a full service restaurant. The applicant would need to identify all businesses that rent rooms, all businesses that sell these sundries, all businesses that rent conference rooms, and/or all businesses that contain a restaurant (whether any of these activities stand alone or not) within a 10-mile radius.

**7. Policy Guidelines for Evaluating Proposed Sewerage System Installations on Government Fee-owned lands -**

a. Each portion of a proposed sewage system which crosses fee-owned land must be shown by the applicant to serve the best interest of the public.

b. Shown to be more feasible from an engineering standpoint without significant detriment to the environment.

c. Shown to not interfere with any future planned use of the area.

d. Shown to be buried not less than 3.<sup>5</sup>/<sub>8</sub> ft. below the natural ground surface unless specific circumstances justify a lesser depth.

e. Shown to meet all other applicable requirements concerning elevations and restricted zone,.

**8. Corps In-Process Review:** In the Environmental Assessment Phase of the Lake Use Study, the applicant will need to consider and discuss the full range of all reasonable economically feasible alternatives and propose mitigation plans for the selected alternative. Corps employees will assist the applicants in identifying appropriate alternatives and mitigation plans after submission of their development plans.

a. **Alternatives** - include, but will not necessarily be limited to: no action, no change in action; nonstructural; different sizes; different designs; different location; different timing for various stages; postponing action to a less sensitive time; compensation/replacement; and mitigation. The selected alternative shall ensure that project caused adverse impacts to fish and wildlife resources have been avoided and minimized to the extent practicable. The minimum following alternatives will be fully reviewed for each request and all other reasonable alternatives will be discussed:

- 1) Alternative 1 proposal following the applicant's preferred location;

- 2) Alternative 2 proposal following the government=s preferred location (if different);
- 3) Alternative 3 is a proposal off of Government Property, the no-action alternative.

**b. Mitigation Plans** - will include all or part of the following to mitigate for the impact on the biota (flora & fauna), cultural resources, visual resources, increased noise levels, socioeconomic factors, air quality, water quality, etc.:

- 1) Avoiding the impact altogether by not taking a certain action or parts of an action;
- 2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- 3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- 4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- 5) Compensating for the impact by replacing or providing substitute resources or environments.

**9. Points of Contact:** The following USACE persons shall be considered key personnel for the Lake Use Study:

a. NEPA Technical Manager, Environmental Division (Planning Section): Ms. Marcia Hackett, CESWF-EV-EE, P.O. Box 17300, Fort Worth, Texas 76102-0300, (817) 978-~~3068~~.

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b. Operations Division: Mr. Doug Cox or Mr. Ron Pivonka, U.S. Army Corps of Engineers, CESWF-OD-R, P.O. Box 17300, Fort Worth, Texas 76102-0300, (817) 978-2707 or (817) 978-2708.

c. Lake Lewisville: Mr. Don Wiese, U.S. Army Corps of Engineers, CESWF-OD-LE, 1801 N. Mill St., Lewisville, TX 75057-1821, (972) 434-1666.

d. Environmental Division (Cultural Section): Paddy Patterson, CESWF-EV-EC, P.O. Box 17300, Fort Worth, Texas 76102-0300, (817) 978-6388.

e. Real Estate Division: Mr. Jimmy Ferracci, CESWF-RE-MM,  
P.O. Box 17300, Fort Worth, Texas 76102-0300, (817) 978-4396.

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**Exhibit 9. HTRW Site Assessment Report**

# SITE ASSESSMENT - SPECIAL REPORT

PROPERTY INFORMATION	CLIENT INFORMATION
Project Name/Ref #: Not Provided BOUNSRCH STATE HWY 121 LEWISVILLE, TX 75067 Latitude/Longitude: ( 33.096146, 96.971451 )	DORCAS BURNER CARTER AND BURGESS 3880 HULEN ST FORT WORTH, TX 76107

Site Distribution Summary	<i>within 1/8 mile</i>	<i>1/8 to 1/4 mile</i>	<i>1/4 to 1/2 mile</i>	<i>1/2 to 1 mile</i>
<b>Agency / Database - Type of Records</b>				
<b>A) Databases searched to 1 mile:</b>				
US EPA      NPL      National Priority List	0	0	0	0
US EPA      CORRACTS      RCRA Corrective Actions	0	0	0	0
STATE      SPL      State equivalent priority list	0	0	0	0
<b>B) Databases searched to 1/2 mile:</b>				
US EPA      RCRA-TSD      RCRA permitted treatment, storage, disposal facilities	1	0	0	-
STATE      SCL      State equivalent CERCLIS list	0	0	0	-
US EPA      CERCLIS/ NFRAP      Sites under review by US EPA	1	0	0	-
STATE/ REG/CO      LUST      Leaking Underground Storage Tanks	17	6	4	-
STATE/ REG/CO      SWLF      Solid waste landfills, incinerators, or transfer stations	2	0	0	-
<b>C) Databases searched to 1/4 mile:</b>				
STATE/ CO      UST      Registered underground storage tanks	44	8	-	-
STATE      AST      Registered aboveground storage tanks	4	0	-	-
<b>D) Databases searched to 1/8 mile:</b>				
US EPA      GNRTR      RCRA registered small or large generators of hazardous waste	9	-	-	-
US EPA/ STATE      SPILLS      ERNS and state spills lists	2	-	-	-



## LIMITATION OF LIABILITY

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## NOTES

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



# SITE ASSESSMENT - SPECIAL REPORT

## SITE INVENTORY

MAP ID	PROPERTY AND THE ADJACENT AREA (within 1/8 mile)	VISTA ID DISTANCE DIRECTION	A			B				C		D		
			NPL	CORRACTS	SPL	TSD	SCL	CERCLIS/NFRAP	LUST	SWLF	UST	AST	GNRTR	SPILLS
1	TEXAS PARKS WILDLIFE DEPT. LEWISVILLE FISH HATCHE THE COLONY, TX 75056	1366995 0.00 MI NA									X			
2	EW JOHNSON CO INC 1495 N KEALY ST LEWISVILLE, TX 75057	5363911 0.00 MI NA											X	
2	METL-SPAN CORPORATION 1497 N KEALY LEWISVILLE, TX 75057	269663 0.00 MI NA											X	
3	DENTON COUNTY PRCNT 2 510 JONES ST LEWISVILLE, TX 75057	1386949 0.00 MI NA									X			
4	AVIS 1845 E IH--35 CARROLLTON, TX	3841956 0.00 MI NA							X					
4	BIG JACK'S GROCERY 1850 STEMMONS LEWISVILLE, TX 75067	11633595 0.00 MI NA							X					
5	NATL SWITCH GEAR SYSTEMS INC 649 FRANKLIN LEWISVILLE, TX 75057	5191433 0.00 MI NA										X		
6	DIAMOND SHAMROCK #785 4907 MAIN ST THE COLONY, TX 75056	1406082 0.00 MI NA									X			
6	THE COLONY TEXACO 4916 FM 423 THE COLONY, TX 75056	1797668 0.00 MI NA									X			
7	PIER 121 MARINA E HILL LAKE LEWISVILLE PARK THE COLONY, TX 75056	5198222 0.00 MI NA									X			
8	CALVERT'S BIG JACK 70337 LAKE PARK DR MILL ST THE COLONY, TX 75056	1369663 0.00 MI NA									X			
9	BIG JACKS I 35 @ FM 407 LEWISVILLE, TX 75067	11633286 0.00 MI NA									X			
10	LAKE PARK CONVENIENCE STORE 359 LAKE PLAZA RD LEWISVILLE, TX 75057	5737868 0.00 MI NA							X		X			



An 'X' meets search criteria; a dot exceeds search criteria.

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MAP ID	PROPERTY AND THE ADJACENT AREA (within 1/8 mile)	VISTA ID DISTANCE DIRECTION	A			B				C		D	
			NPL	CORRACTS	SPL	TSD	SCL	CERCLIS/NFRAP	LUST	SWLF	UST	AST	GNRTR
11	LEWISVILLE SERVICE OFFICE 2143 N STEMMONS LEWISVILLE, TX 75057	1405482 0.00 MI NA									X		
12	2097 N MCGEE LN LEWISVILLE, TX 75067	6640504 0.00 MI NA						X					
13	GENERAL TELEPHONE OF SOUTHWEST 1132 FM 407 N LEWISVILLE, TX 75067	169059 0.00 MI NA										X	
14	7-ELEVEN #26271 5010 MAIN ST THE COLONY, TX 75056	1804542 0.00 MI NA								X			
14	LAKESIDE CLNRS 5001 MAINE THE COLONY, TX 75056	1804541 0.00 MI NA										X	
15	SNAP-E-JACK #3 2997 STEMMONS LEWISVILLE, TX 75067	1364961 0.00 MI NA								X			
15	FORMER EZ SERVE #100100 2997 N STEMMONS LEWISVILLE, TX 75057	5110526 0.00 MI NA						X					
16	EAGLE POINT MARINA #1 EAGLE POINT DR LEWISVILLE, TX 75067	1392809 0.00 MI NA						X		X			
17	MURRAY CONSTRUCTION 249 SELMEYER LEWISVILLE, TX 75067	1377445 0.00 MI NA						X		X			
18	CITY SERVICE CENTER 948 HIGHLAND VILLAGE RD LEWISVILLE, TX 75067	5363769 0.00 MI NA								X			
18	HIGHLAND VILLAGE CITY OF 948 HIGHLAND VILLAGE RD LEWISVILLE, TX 75067	1099751 0.00 MI NA						X					
19	THE BAIT HOUSE/HAYS FINA HWY 423 STEWARTS CRE RD FRISCO, TX 75034	6641210 0.00 MI NA								X			
20	WESTLAKE PARK (LEWISVILLE LAKE) NO ADDRESS RECORDED IRVING, TX 75017	1782843 0.00 MI NA								X			
21	THOMPSON CO LAKE DALLAS SI 137 FOLLY BEACH RD LAKE DALLAS, TX 75065	423178 0.00 MI NA					X						
22	X-PRESSWAY FOOD STORE 203 MAIN ST LAKE DALLAS, TX 75065	6611581 0.00 MI NA								X			
22	CITY OF LAKE DALLAS 303 ALAMO LAKE DALLAS, TX 75065	1397951 0.00 MI NA								X			



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			NPL	CORRACTS	SPL	TSD	SCL	CERCLIS/NFRAP	LUST	SWLF	UST	AST	GNRTR
23	G G AUTO SERVICE 312 MAIN ST LAKE DALLAS, TX 75065	1403425 0.00 MI NA									X		
23	CITY OF LAKE DALLAS FIRE DEPT 275 MAIN ST LAKE DALLAS, TX 75065	5547674 0.00 MI NA									X		
23	LAKE DALLAS CAFE TRU VALU HARDWARE 301 MAIN ST LAKE DALLAS, TX 75065	2578838 0.00 MI NA							X				
24	EXXON STORE #6-0381 8100 I-35 E DENTON, TX 76205	8533544 0.00 MI NA									X		
25	KELSOE TRACTOR CO (ALLSUPS) 102 MAIN ST LAKE DALLAS, TX 75065	4557428 0.00 MI NA							X				
26	LAKE DALLAS TELEPHONE COM 450 MAIN LAKE DALLAS, TX 75065	1406536 0.00 MI NA									X		
27	CITY LAKE DALLAS MAINTENANCE DEPT 351 BETCHAN DR LAKE DALLAS, TX 75065	5363385 0.00 MI NA							X				
28	LKDL RIN LW RPTR BLDG I 35 KELTON AVE LAKE DALLAS, TX 75065	6529798 0.00 MI NA									X		
29	LONE STAR PIPELINE 619 SHORE ST LAKE DALLAS, TX 75065	8534726 0.00 MI NA											X
30	LAKE DALLAS I.S.D. 425 E HUNDLEY DR LAKE DALLAS, TX 75065	6883422 0.00 MI NA									X		
31	RESIDENTIAL LOT 307 MARINA DR LAKE DALLAS, TX 75065	5738077 0.00 MI NA									X		
31	LAKE DALLAS BOAT CO, INC 708 E NICK ST LAKE DALLAS, TX 75065	1796216 0.00 MI NA									X		
32	D J GROCERY 631 S DENTON DR LAKE DALLAS, TX 75065	1399110 0.00 MI NA									X		
32	FAST BREAK #3(LAKE DALLAS SHAMROCK 401 S DENTON LAKE DALLAS, TX 75065	11631556 0.00 MI NA							X		X		
32	LAKELAND CITIES SHOPPING CTR/SPRITZ 603 S DENTON DR LAKE DALLAS, TX 75065	4091316 0.00 MI NA							X		X		
33	BEER BARN 307 W HUNDLEY DR LAKE DALLAS, TX 75065	5547520 0.00 MI NA									X		



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			NPL	CORRACTS	SPL	TSD	SCL	CERCLIS/NFRAP	LUST	SWLF	UST	AST	GNRTR
33	SAMS GROCERY 307 W HUNDLEY DR LAKE DALLAS, TX 75065	1399105 0.00 MI NA						X					
34	PAYLESS CASHWAYS INC 500 N STEMMONS LAKE DALLAS, TX 75065	1391417 0.00 MI NA						X		X			
35	ROADIES 1002 S STEMMONS LAKE DALLAS, TX 75065	1813666 0.00 MI NA								X			
35	BOEING AEROSPACE ELECTR-CORINTH 7801 S STEMMONS LAKE DALLAS, TX 75065	52676 0.00 MI NA										X	
36	OSCAR RENDA 1500 TURBVILLE DENTON, TX 76205	8536207 0.00 MI NA									X		
37	SHAMROCK ENTERPRISES 423 BULADORA LN LITTLE ELM, TX 75068	4090941 0.00 MI NA				X						X	
38	HILLARD'S GROCERY 70334 507 SHADY SHORES RD LAKE DALLAS, TX 75065	6481432 0.00 MI NA								X			
39	VIDEO PLUS INC 200 SWISHER RD LAKE DALLAS, TX 75065	4899305 0.00 MI NA								X			
40	ROBINSON'S CONV STORE 201 KINGS RD FRISCO, TX 75034	7066281 0.00 MI NA								X			
41	LITTLE ELM ELEMENTARY MAIN STREET LAKESHORE LITTLE ELM, TX 75068	246415 0.00 MI NA								X			
42	LITTLE ELM ISD BUS FACILITY 411 LAKESHORE DR LITTLE ELM, TX 75068	6480941 0.00 MI NA									X		
43	MATLACK COMPANY *418 JONES AT UNITED RESI LONGVIEW, TX 75602	5795008 0.00 MI NA											X
44	CRAIG OLDEN INC 661 E SHAHAN'S PRAIRIE RD LITTLE ELM, TX 75068	1812473 0.00 MI NA								X			
45	STARLITE SIGN CO 7923 E MCKINNEY DENTON, TX 76208	3971154 0.00 MI NA									X	X	
46	CORPS OF ENGINEERS 1.0 MI S OF SH-380 W OF FM-424 MARSHALL, TX 75670	3050470 0.00 MI NA							X				
47	DENTON, CITY OF ADJACENT MOSELY RD, 1.2MI S OF US 38 MARSHALL, TX 75670	3048953 0.00 MI NA							X				



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MAP ID	PROPERTY AND THE ADJACENT AREA (within 1/8 mile)	VISTA ID DISTANCE DIRECTION	A			B				C		D	
			NPL	CORRACTS	SPL	TSD	SCL	CERCLIS/NFRAP	LUST	SWLF	UST	AST	GNRTR
48	NAVO GENERAL STORE 4899 HWY 380 LITTLE ELM, TX 75068	6612126 0.00 MI NA								X			
49	ABLE FUEL INJECTION SVC 1419 CRESENT AVE LEWISVILLE, TX 75053	3017141 <0.01 MI S										X	
50	LEWISVILLE WATER PROD. FACILITY 1400 N COWAN LEWISVILLE, TX 75057	1389088 0.03 MI S								X			
51	MCGEE'S COUNTRY STORE 1298 FM RD 407 LEWISVILLE, TX 75067	1797534 0.04 MI S								X			
51	THE DEPOT 1175 JUSTIN RD FLOWER MOUND, TX 75028	3668592 0.08 MI S								X			
52	PHIL DILL BOATS INC 1520 N STEMMONS LEWISVILLE, TX 75057	328522 0.07 MI S						X		X			
53	LAKE DALLAS SERVICE CENTER 3100 S GARRISON LAKE DALLAS, TX 75065	1399601 0.08 MI SW								X			
54	GTSW - LEWISVILLE PLANT FACILITY 1132 FM 407 LEWISVILLE, TX 75067	5172878 0.10 MI S								X			
54	GTE LEWISVILLE FACILITY 1132 FM 407 LEWISVILLE, TX 75067	1798130 0.10 MI S						X		X			

MAP ID	SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile)	VISTA ID DISTANCE DIRECTION	A			B			C		D		
			NPL	CORRACTS	SPL	TSD	SCL	CERCLIS/NFRAP	LUST	SWLF	UST	AST	GNRTR
55	JOE'S COUNTRY STORE 7616 N MAIN THE COLONY, TX 75056	6475880 0.13 MI SE							X		X		
56	TRINTY CAR WASH 1450 W JUSTIN RD LEWISVILLE, TX 75067	6883566 0.14 MI S									X		
56	WEST TEX AUTO TIRE 1425 JUSTIN RD #350 LEWISVILLE, TX 75067	1408958 0.15 MI S							X		X		
56	EXXON STORE 6-0357 1501 W FM 407 LEWISVILLE, TX 75067	7066672 0.17 MI S									X		



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MAP ID	SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile)	VISTA ID DISTANCE DIRECTION	A			B			C		D		
			NPL	CORRACTS	SPL	TSD	SCL	CERCLIS/NFRAP	LUST	SWLF	UST	AST	GNRTR
57	KEN'S QUIK MART FOODS 7420 MAIN ST THE COLONY, TX 75056	6883806 0.16 MI SE								X			
58	MOBIL #12-147 6262 W MAIN ST THE COLONY, TX 75056	6475878 0.17 MI SE							X				
59	LEWISVILLE CITY OF 1100 N KEALY LEWISVILLE, TX 75057	2574045 0.19 MI S							X	X			
60	UAC OF GARLAND, INC. 7228 MAIN ST THE COLONY, TX 75056	2579974 0.20 MI SE								X			
60	CLOSED FACILITY 7228 N MAIN ST THE COLONY, TX 75056	2579973 0.20 MI SE							X				
61	C B EXPRESS 4250 E UNIVERSITY DENTON, TX 76208	4555510 0.24 MI NW								X			
62	STOP N GO #1127 4610 FM 423 THE COLONY, TX 75056	5109461 0.24 MI SE							X				

MAP ID	SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile)	VISTA ID DISTANCE DIRECTION	A			B			C		D		
			NPL	CORRACTS	SPL	TSD	SCL	CERCLIS/NFRAP	LUST	SWLF	UST	AST	GNRTR
63	HOWDY DOODY GRO 1026 N MILL LEWISVILLE, TX 75057	6982928 0.28 MI S							X				
63	CLOSED HOWDY-DOODY STORE 1026 N MILL ST LEWISVILLE, TX 75057	2577973 0.28 MI S							X				
64	VILLAGE FORD 1144 N STEMMONS FRWY LEWISVILLE, TX 75057	162121 0.35 MI S							X			•	
65	NORTHWEST BUTANE 9001 FM 423 FRISCO, TX 75034	1798136 0.41 MI E							X		•		



An 'X' meets search criteria; a dot exceeds search criteria.

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MAP ID	SITES IN THE SURROUNDING AREA (within 1/2 - 1 mile)	VISTA ID DISTANCE DIRECTION	A			B			C		D			
			NPL	CORRACTS	SPL	TSD	SCL	CERCLIS/NFRAP	LUST	SWLF	UST	AST	GNRTR	SPILLS
No Records Found														



An 'X' meets search criteria; a dot exceeds search criteria.

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UNMAPPED SITES	VISTA ID	A			B					C		D	
		NPL	CORRACTS	SPL	TSD	SCL	CERCLIS/NFRAP	LUST	SWLF	UST	AST	GNRTR	SPILLS
TRU-VALU HARDWARE MAIN ST LAKE DALLAS, TX 75065	1371207									X			
LAKE CITIES MUA N END LAKEVIEW DR LAKE DALLAS, TX 75065	1796228									X			
ARGYLE ISD PO BOX 989 ARGYLE, TX 76226	1376368									X			
TECHNICIANS ON WHEELS LAKE DALLAS, TX 75065	8509811												X
H L MIZE BOX 846 LAKE DALLAS, TX 75065	196648						X						
HomeBuilders Ready Mix Inc HWY 121 CAMEY COMMUNIT LEWISVILLE, TX 75067	1794004									X			



An 'X' meets search criteria; a dot exceeds search criteria.

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# SITE ASSESSMENT - SPECIAL REPORT

## DETAILS

### PROPERTY AND THE ADJACENT AREA (within 1/8 mile)

VISTA Address*:	TEXAS PARKS WILDLIFE DEPT. LEWISVILLE FISH HATCHE THE COLONY, TX 75056	VISTA ID#:	1366995
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0003293
Agency Address:	TEXAS PARKS WILDLIFE DEPT. LEWISVILLE FISH HATCHE LEWISVILLE, TX 75067		
Underground Tanks:	1		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	1		
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	22	Tank Piping:	SINGLE WALL
Tank Size (Units):	550 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1971		
Tank Removal Date:	08/01/1993		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: US ARMY CORP OF ENGINEERS LAERFRR 3LEWISVILLE, TX 75056		

Map ID

1

VISTA Address*:	EW JOHNSON CO INC 1495 N KEALY ST LEWISVILLE, TX 75057	VISTA ID#:	5363911
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
RCRA-SmGen - RCRA-Small Generator / SRC# 5596		EPA ID:	TX0000930909
Agency Address:	SAME AS ABOVE		
Generator Class:	Generates 100 kg./month but less than 1000 kg./month of non-acutely hazardous waste		

Map ID

2

VISTA Address*:	METL-SPAN CORPORATION 1497 N KEALY LEWISVILLE, TX 75057	VISTA ID#:	269663
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
RCRA-SmGen - RCRA-Small Generator / SRC# 5596		EPA ID:	TXD102592383
Agency Address:	METL-SPAN CORPORATION 1497 N KEALY LEWISVILLE, TX 75067		
Generator Class:	Generates 100 kg./month but less than 1000 kg./month of non-acutely hazardous waste		

Map ID

2



\* VISTA address includes enhanced city and ZIP.

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Map ID

**3**

VISTA Address*:	<b>DENTON COUNTY PRCNT 2 510 JONES ST LEWISVILLE, TX 75057</b>	VISTA ID#:	1386949
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

<b>AST - Above Ground Storage Tank / SRC# 5627</b>	Agency ID:	0025456
--	------------	---------

Agency Address:	DENTON COUNTY PRCNT 2 510 JONES ST LEWISVILLE, TX 75067		
Underground Tanks:	2		
Aboveground Tanks:	1		
Tanks Removed:	NOT REPORTED		
Tank ID:	AA	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NOT AVAILABLE
Tank Age:	13	Tank Piping:	UNKNOWN
Tank Size (Units):	2500 (GALLONS)	Tank Material:	UNKNOWN
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	18	Tank Piping:	ANTI-CORROSIVE
Tank Size (Units):	3000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	18	Tank Piping:	ANTI-CORROSIVE
Tank Size (Units):	3000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	AA		
Tank Installed Date / Age:	01/01/1986		
Description / Comment:	MONITOR TYPE: NOT APPLICABLE		
Description / Comment:	OWNER: DENTON COUNTY401 W HICKORY DENTON, TX 76201		
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1981		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: DENTON COUNTY401 W HICKORY DENTON, TX 76201		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1981		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: DENTON COUNTY401 W HICKORY DENTON, TX 76201		

Map ID

**4**

VISTA Address*:	<b>AVIS 1845 E IH--35 CARROLLTON, TX</b>	VISTA ID#:	3841956
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>	EPA/Agency ID:	N/A
--	----------------	-----

Agency Address:	SAME AS ABOVE		
Facility ID:	0023809		
Leak ID#:	105220		
Leak Report Date:	11/21/92		
Region / District:	ARLINGTON		
Responsible Party:	HAYES LEASING CO INC		
Description / Comment:	MEDIA AFFECTED: GW IMPACT, PUB/DOM WATER SUPPLY WELL W/IN .25 -.5 MIREMEDIATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSED RESPONSIBLE PARTY INFO: PO BOX 569650, DALLAS, TX, 753569650, 214/574-4110		



\* VISTA address includes enhanced city and ZIP.

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

VISTA Address*:	<b>BIG JACK'S GROCERY</b> <b>1850 STEMMONS</b> <b>LEWISVILLE, TX 75067</b>	VISTA ID#:	11633595
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility ID:	0008171		
Leak ID#:	113796		
Leak Report Date:	12/4/98		
Region / District:	ARLINGTON		
Responsible Party:	METRO PETRO RENTALS INC		
Description / Comment:	MEDIA AFFECTED: GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS REMEDICATION STATUS: INCIDENT REPORTED, INITIAL DIRECTIVES NOT YET ISSUED RESPONSIBLE PARTY INFO: 728 FORT WORTH DR, DENTON, TX, 76201, 940/382-5644		

Map ID

**4**

VISTA Address*:	<b>NATL SWITCH GEAR SYSTEMS INC</b> <b>649 FRANKLIN</b> <b>LEWISVILLE, TX 75057</b>	VISTA ID#:	5191433
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>RCRA-SmGen - RCRA-Small Generator / SRC# 5596</b>		EPA ID:	TX0000237644
Agency Address:	NATIONAL SWITCH GEAR SYS INC 649 FRANKLIN LEWISVILLE, TX 75057		
Generator Class:	Generates 100 kg./month but less than 1000 kg./month of non-acutely hazardous waste		

Map ID

**5**

VISTA Address*:	<b>DIAMOND SHAMROCK #785</b> <b>4907 MAIN ST</b> <b>THE COLONY, TX 75056</b>	VISTA ID#:	1406082
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0046437
Agency Address:	DIAMOND SHAMROCK #785 4907 MAIN ST THE COLONY, TX 75086		
Underground Tanks:	3		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	13	Tank Piping:	DOUBLE WALL, SINGLE WALL
Tank Size (Units):	12000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	13	Tank Piping:	DOUBLE WALL, SINGLE WALL
Tank Size (Units):	12000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	13	Tank Piping:	DOUBLE WALL, SINGLE WALL
Tank Size (Units):	12000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	09/01/1986		
Description / Comment:	TANK MONITOR: STAT. INVENTORY RECONCILIATION (SIR) PIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: DIAMOND SHAMROCK REFINING MKTPO BOX 696000 SAN ANTONIO, TX 782696000		
Tank ID#:	U2		
Tank Installed Date / Age:	09/01/1986		
Description / Comment:	TANK MONITOR: STAT. INVENTORY RECONCILIATION (SIR) PIPE MONITOR: LINE LEAK DETECTORS		

Map ID

**6**



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Description / Comment:	OWNER: DIAMOND SHAMROCK REFINING MKTPO BOX 696000SAN ANTONIO,TX 782696000
Tank ID#:	U3
Tank Installed Date / Age:	09/01/1986
Description / Comment:	TANK MONITOR: STAT. INVENTORY RECONCILIATION (SIR)PIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: DIAMOND SHAMROCK REFINING MKTPO BOX 696000SAN ANTONIO,TX 782696000

VISTA Address*:	THE COLONY TEXACO 4916 FM 423 THE COLONY, TX 75056	VISTA ID#:	1797668
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0039401

Map ID

**6**

Agency Address:	SAME AS ABOVE		
Underground Tanks:	4		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	10000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	10000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	10000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID:	U4	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	10000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID#:	U1		
Tank Installed Date / Age:	09/01/1985		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: TRIPLE A OIL CO., INC.12342 INWOOD RDDALLAS,TX 75244		
Tank ID#:	U2		
Tank Installed Date / Age:	09/01/1985		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: TRIPLE A OIL CO., INC.12342 INWOOD RDDALLAS,TX 75244		
Tank ID#:	U3		
Tank Installed Date / Age:	09/01/1985		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: TRIPLE A OIL CO., INC.12342 INWOOD RDDALLAS,TX 75244		
Tank ID#:	U4		
Tank Installed Date / Age:	09/01/1985		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: TRIPLE A OIL CO., INC.12342 INWOOD RDDALLAS,TX 75244		



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

VISTA Address*:	<b>PIER 121 MARINA E HILL LAKE LEWISVILLE PARK THE COLONY, TX 75056</b>	VISTA ID#:	5198222
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**7**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0024943
<b>Agency Address:</b>		PIER 121 MARINA E HILL LAKE LEWISVILLE PARK LEWISVILLE, TX 75067	
<b>Underground Tanks:</b>		3	
<b>Aboveground Tanks:</b>		NOT REPORTED	
<b>Tanks Removed:</b>		NOT REPORTED	
<b>Tank ID:</b>	U1	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	33	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U2	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	33	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U3	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	33	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID#:</b>	U1		
<b>Tank Installed Date / Age:</b>	01/01/1966		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: TIGHTNESS TESTING		
<b>Description / Comment:</b>	OWNER: GARRETT PLACE, INC. 11226 INDIAN TRAIL DALLAS, TX 752293518		
<b>Tank ID#:</b>	U2		
<b>Tank Installed Date / Age:</b>	01/01/1966		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: TIGHTNESS TESTING		
<b>Description / Comment:</b>	OWNER: GARRETT PLACE, INC. 11226 INDIAN TRAIL DALLAS, TX 752293518		
<b>Tank ID#:</b>	U3		
<b>Tank Installed Date / Age:</b>	01/01/1966		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: TIGHTNESS TESTING		
<b>Description / Comment:</b>	OWNER: GARRETT PLACE, INC. 11226 INDIAN TRAIL DALLAS, TX 752293518		

VISTA Address*:	<b>CALVERT'S BIG JACK 70337 LAKE PARK DR MILL ST THE COLONY, TX 75056</b>	VISTA ID#:	1369663
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**8**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0006258
<b>Agency Address:</b>		CALVERT'S BIG JACK 70337 LAKE PARK DR MILL ST LEWISVILLE, TX 75056	
<b>Underground Tanks:</b>		3	
<b>Aboveground Tanks:</b>		NOT REPORTED	
<b>Tanks Removed:</b>		NOT REPORTED	
<b>Tank ID:</b>	U1	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	NO MONITOR
<b>Tank Age:</b>	17	<b>Tank Piping:</b>	STEEL
<b>Tank Size (Units):</b>	10000 (GALLONS)	<b>Tank Material:</b>	STEEL



\* VISTA address includes enhanced city and ZIP.

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	17	Tank Piping:	STEEL
Tank Size (Units):	10000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	17	Tank Piping:	STEEL
Tank Size (Units):	10000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1982		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: AMBREEN AFSHEEN ENT101 LAKE PARKLEWISVILLE, TX 75057		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1982		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: AMBREEN AFSHEEN ENT101 LAKE PARKLEWISVILLE, TX 75057		
Tank ID#:	U3		
Tank Installed Date / Age:	01/01/1982		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: AMBREEN AFSHEEN ENT101 LAKE PARKLEWISVILLE, TX 75057		

VISTA Address*:	<b>BIG JACKS I 35 @ FM 407 LEWISVILLE, TX 75067</b>	VISTA ID#:	11633286
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**9**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0008171
Agency Address:	SAME AS ABOVE		
Underground Tanks:	4		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	10000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	10000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U4	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1985		
Description / Comment:	TANK MONITOR: VAPOR MONITORINGPIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: METRO PETRO RENTALS INC728 F. W. DRDENTON, TX 76201		
Tank ID#:	U2		



\* VISTA address includes enhanced city and ZIP.

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Tank Installed Date / Age:	01/01/1985
Description / Comment:	TANK MONITOR: VAPOR MONITORING PIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: METRO PETRO RENTALS INC 728 F. W. DR DENTON, TX 76201
Tank ID#:	U3
Tank Installed Date / Age:	01/01/1985
Description / Comment:	TANK MONITOR: VAPOR MONITORING PIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: METRO PETRO RENTALS INC 728 F. W. DR DENTON, TX 76201
Tank ID#:	U4
Tank Installed Date / Age:	01/01/1985
Description / Comment:	TANK MONITOR: VAPOR MONITORING PIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: METRO PETRO RENTALS INC 728 F. W. DR DENTON, TX 76201

VISTA Address*:	<b>LAKE PARK CONVENIENCE STORE</b> <b>359 LAKE PLAZA RD</b> <b>LEWISVILLE, TX 75057</b>	VISTA ID#:	5737868
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**10**

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>	EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE	
Facility ID:	0020638	
Leak ID#:	113629	
Leak Report Date:	7/11/97	
Region / District:	ARLINGTON	
Responsible Party:	LAKE PARK PLAZA JOINT VENTURE	
Description / Comment:	MEDIA AFFECTED: GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS REMEDIATION STATUS: PHASE 2 IN PROGRESS RESPONSIBLE PARTY INFO: 2061 JUSTIN RD SUITE 300, LEWISVILLE, TX, 75077, 972/966-1111	

STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0020638
Agency Address:		SAME AS ABOVE	
Underground Tanks:		3	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		NOT REPORTED	
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	16	Tank Piping:	SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	16	Tank Piping:	SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	16	Tank Piping:	SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1983		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: TIGHTNESS TESTING		
Description / Comment:	OWNER: ALI, MOHAMMED359 LAKE PARK RDLEWISVILLE, TX 750572307		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1983		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: TIGHTNESS TESTING		
Description / Comment:	OWNER: ALI, MOHAMMED359 LAKE PARK RDLEWISVILLE, TX 750572307		



\* VISTA address includes enhanced city and ZIP.

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

<b>Tank ID#:</b>	U3
<b>Tank Installed Date / Age:</b>	01/01/1983
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: TIGHTNESS TESTING
<b>Description / Comment:</b>	OWNER: ALI, MOHAMMED359 LAKE PARK RDLewisville, TX 750572307

<b>VISTA Address*:</b>	<b>LEWISVILLE SERVICE OFFICE</b> <b>2143 N STEMMONS</b> <b>LEWISVILLE, TX 75057</b>	<b>VISTA ID#:</b>	1405482
		<b>Distance/Direction:</b>	0.00 MI / NA
		<b>Plotted as:</b>	Point

Map ID

**11**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		<b>Agency ID:</b>	0045796
<b>Agency Address:</b>	LEWISVILLE SERVICE OFFICE 2143 N STEMMONS LEWISVILLE, TX 75067		
<b>Underground Tanks:</b>	1		
<b>Aboveground Tanks:</b>	NOT REPORTED		
<b>Tanks Removed:</b>	1		
<b>Tank ID:</b>	U1	<b>Tank Status:</b>	REMOVED
<b>Tank Contents:</b>	DIESEL	<b>Leak Monitoring:</b>	NO MONITOR
<b>Tank Age:</b>	10	<b>Tank Piping:</b>	WALLED/DOUBLE WALLED
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	FIBERGLASS REINFORCED PLASTIC
<b>Tank ID#:</b>	U1		
<b>Tank Installed Date / Age:</b>	01/01/1988		
<b>Tank Removal Date:</b>	08/01/1998		
<b>Description / Comment:</b>	TANK MONITOR: NONEPIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: GTE SOUTHWEST, INC.500 E CARPENTER FRWYIRVING, TX 75062		

<b>VISTA Address*:</b>	<b>2097 N MCGEE LN</b> <b>LEWISVILLE, TX 75067</b>	<b>VISTA ID#:</b>	6640504
		<b>Distance/Direction:</b>	0.00 MI / NA
		<b>Plotted as:</b>	Point

Map ID

**12**

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>		<b>EPA/Agency ID:</b>	N/A
<b>Agency Address:</b>	SAME AS ABOVE		
<b>Leak ID#:</b>	091756		
<b>Leak Report Date:</b>	2/18/88		
<b>Region / District:</b>	ARLINGTON		
<b>Responsible Party:</b>	SAN JUAN POOLS OF TEXAS		
<b>Description / Comment:</b>	MEDIA AFFECTED: GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORSREMEDATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSEDRESPONSIBLE PARTY INFO: PO BOX 703301,DALLAS, TX,75370,214/242-9595		

<b>VISTA Address*:</b>	<b>GENERAL TELEPHONE OF SOUTHWEST</b> <b>1132 FM 407 N</b> <b>LEWISVILLE, TX 75067</b>	<b>VISTA ID#:</b>	169059
		<b>Distance/Direction:</b>	0.00 MI / NA
		<b>Plotted as:</b>	Point

Map ID

**13**

<b>RCRA-SmGen - RCRA-Small Generator / SRC# 5596</b>		<b>EPA ID:</b>	TXD981154644
<b>Agency Address:</b>	SAME AS ABOVE		
<b>Generator Class:</b>	Generates 100 kg./month but less than 1000 kg./month of non-acutely hazardous waste		



\* VISTA address includes enhanced city and ZIP.

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

VISTA Address*:	<b>7-ELEVEN #26271</b> <b>5010 MAIN ST</b> <b>THE COLONY, TX 75056</b>	VISTA ID#:	1804542
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
		Agency ID:	0009225

Map ID

**14**

**STATE UST - State Underground Storage Tank / SRC# 5627**

Agency Address:		7-ELEVEN #26271 5010 MAIN ST THE COLONY, TX 76056	
Underground Tanks:		3	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		NOT REPORTED	
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	12000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	12000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	12000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID#:	U1		
Tank Installed Date / Age:	05/01/1985		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: SOUTHLAND CORPORATIONPO BOX 711DALLAS, TX 75221		
Tank ID#:	U2		
Tank Installed Date / Age:	05/01/1985		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: SOUTHLAND CORPORATIONPO BOX 711DALLAS, TX 75221		
Tank ID#:	U3		
Tank Installed Date / Age:	05/01/1985		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: SOUTHLAND CORPORATIONPO BOX 711DALLAS, TX 75221		

VISTA Address*:	<b>LAKESIDE CLNRS</b> <b>5001 MAINE</b> <b>THE COLONY, TX 75056</b>	VISTA ID#:	1804541
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
		EPA ID:	TXD988022265

Map ID

**14**

**RCRA-SmGen - RCRA-Small Generator / SRC# 5596**

Agency Address:		SAME AS ABOVE	
Generator Class:		Generates 100 kg./month but less than 1000 kg./month of non-acutely hazardous waste	

VISTA Address*:	<b>SNAP-E-JACK #3</b> <b>2997 STEMMONS</b> <b>LEWISVILLE, TX 75067</b>	VISTA ID#:	1364961
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
		Agency ID:	0000960

Map ID

**15**

**STATE UST - State Underground Storage Tank / SRC# 5627**

Agency Address:		SAME AS ABOVE	
Underground Tanks:		5	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		3	



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

<b>Tank ID:</b>	U1	<b>Tank Status:</b>	REMOVED
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	18	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U1A	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	4	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	10000 (GALLONS)	<b>Tank Material:</b>	FIBERGLASS REINFORCED PLASTIC
<b>Tank ID:</b>	U2	<b>Tank Status:</b>	REMOVED
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	18	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U2A	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	4	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	10000 (GALLONS)	<b>Tank Material:</b>	FIBERGLASS REINFORCED PLASTIC
<b>Tank ID:</b>	U3	<b>Tank Status:</b>	REMOVED
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	18	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	6000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID#:</b>	U1		
<b>Tank Installed Date / Age:</b>	01/01/1976		
<b>Tank Removal Date:</b>	01/01/1994		
<b>Description / Comment:</b>	TANK MONITOR: NONEPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: SNAP-E-SACK, INC2997 N STEMMONSLEWISVILLE, TX 75067		
<b>Tank ID#:</b>	U1A		
<b>Tank Installed Date / Age:</b>	05/01/1995		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: SNAP-E-SACK, INC2997 N STEMMONSLEWISVILLE, TX 75067		
<b>Tank ID#:</b>	U2		
<b>Tank Installed Date / Age:</b>	01/01/1976		
<b>Tank Removal Date:</b>	01/01/1994		
<b>Description / Comment:</b>	TANK MONITOR: NONEPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: SNAP-E-SACK, INC2997 N STEMMONSLEWISVILLE, TX 75067		
<b>Tank ID#:</b>	U2A		
<b>Tank Installed Date / Age:</b>	05/01/1995		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: SNAP-E-SACK, INC2997 N STEMMONSLEWISVILLE, TX 75067		
<b>Tank ID#:</b>	U3		
<b>Tank Installed Date / Age:</b>	01/01/1976		
<b>Tank Removal Date:</b>	01/01/1994		
<b>Description / Comment:</b>	TANK MONITOR: NONEPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: SNAP-E-SACK, INC2997 N STEMMONSLEWISVILLE, TX 75067		



\* VISTA address includes enhanced city and ZIP.

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VISTA Address*:	<b>FORMER EZ SERVE #100100</b> <b>2997 N STEMMONS</b> <b>LEWISVILLE, TX 75057</b>	VISTA ID#:	5110526
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>		EPA/Agency ID:	N/A
Agency Address:		FORMER EZ SERVE #100100 2997 N STEMMONS LEWISVILLE, TX	
Facility ID:		0000960	
Leak ID#:		108311	
Leak Report Date:		1/12/94	
Region / District:		ARLINGTON	
Responsible Party:		E Z SERVE MANAGEMENT CO	
Description / Comment:		MEDIA AFFECTED: GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS REMEDATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSED RESPONSIBLE PARTY INFO: 2500 N LOOP W #600, HOUSTON, TX, 77092, 713/684-4300	

Map ID

**15**

VISTA Address*:	<b>EAGLE POINT MARINA</b> <b>#1 EAGLE POINT DR</b> <b>LEWISVILLE, TX 75067</b>	VISTA ID#:	1392809
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>		EPA/Agency ID:	N/A
Agency Address:		EAGLE POINT MARINA #1 EAGLE POINT DR LEWISVILLE, TX 75057	
Facility ID:		0031855	
Leak ID#:		113640	
Region / District:		ARLINGTON	
Responsible Party:		TRETT-ENTERPRISES INC	
Description / Comment:		REMEDATION STATUS: INCIDENT REPORTED, INITIAL DIRECTIVES NOT YET ISSUED RESPONSIBLE PARTY INFO: #1 EAGLE POINT DR, LEWISVILLE, TX, 75057, 972/436-6561	

Map ID

**16**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0031855
Agency Address:		EAGLE POINT MARINA #1 EAGLE POINT DR LEWISVILLE, TX 75057	
Underground Tanks:		3	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		NOT REPORTED	
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	NOT REPORTED	Tank Piping:	STEEL
Tank Size (Units):	3000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	NOT REPORTED	Tank Piping:	STEEL
Tank Size (Units):	2000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	UNKNOWN	Leak Monitoring:	NO MONITOR
Tank Age:	NOT REPORTED	Tank Piping:	STEEL
Tank Size (Units):	1000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	UNRECORDED		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: TRETT-ENTERPRISES, INC. #1 EAGLE POINT DR LEWISVILLE, TX 75057		
Tank ID#:	U2		



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Tank Installed Date / Age:	UNRECORDED
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE
Description / Comment:	OWNER: TRETT-ENTERPRISES, INC.#1 EAGLE POINT DRLEWISVILLE, TX 75057
Tank ID#:	U3
Tank Installed Date / Age:	UNRECORDED
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE
Description / Comment:	OWNER: TRETT-ENTERPRISES, INC.#1 EAGLE POINT DRLEWISVILLE, TX 75057

VISTA Address*:	<b>MURRAY CONSTRUCTION</b> <b>249 SELLMEYER</b> <b>LEWISVILLE, TX 75067</b>	VISTA ID#:	1377445
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**17**

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>		EPA/Agency ID:	N/A
Agency Address:	MURRAY CONSTRUCTION 249 SELLMEYER HIGHLAND VILLAGE, TX 0014795		
Facility ID:	0014795		
Leak ID#:	108716		
Leak Report Date:	9/22/94		
Region / District:	ARLINGTON		
Responsible Party:	MURRAY CONSTRUCTION CO INC		
Description / Comment:	MEDIA AFFECTED: GW IMPACT, PUBLIC/DOMESTIC WATER SUPPLY WELL W/IN 0.25MIREMEDIATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSEDRESPONSIBLE PARTY INFO: 515 N KEALY AVE,LEWISVILLE, TX,75067,214/436-4566		

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0014795
Agency Address:	MURRAY CONSTRUCTION CO. INC. 249 SELLMEYER HIGHLAND VILLAGE, TX 75067		
Underground Tanks:	2		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	2		
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	18	Tank Piping:	SINGLE WALL
Tank Size (Units):	5000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	18	Tank Piping:	SINGLE WALL
Tank Size (Units):	500 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1976		
Tank Removal Date:	09/01/1994		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: MURRAY CONSTRUCTION CO, INC515 N KEALY AVELEWISVILLE, TX 75067		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1976		
Tank Removal Date:	09/01/1994		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: MURRAY CONSTRUCTION CO, INC515 N KEALY AVELEWISVILLE, TX 75067		



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VISTA Address*:	<b>CITY SERVICE CENTER</b> <b>948 HIGHLAND VILLAGE RD</b> <b>LEWISVILLE, TX 75067</b>	VISTA ID#:	5363769
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**18**

**STATE UST - State Underground Storage Tank / SRC# 5627**

Agency ID: 0012894

<b>Agency Address:</b>		CITY SERVICE CENTER 948 HIGHLAND VILLAGE RD HIGHLAND VILLAGE, TX 75067	
<b>Underground Tanks:</b>		3	
<b>Aboveground Tanks:</b>		NOT REPORTED	
<b>Tanks Removed:</b>		1	
<b>Tank ID:</b>	U1	<b>Tank Status:</b>	REMOVED
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	NO MONITOR
<b>Tank Age:</b>	15	<b>Tank Piping:</b>	STEEL
<b>Tank Size (Units):</b>	2000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U1A	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	8	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	COMPOSITE,FIBERGLASS REINFORCED PLASTIC
<b>Tank ID:</b>	U2A	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	DIESEL	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	8	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	2000 (GALLONS)	<b>Tank Material:</b>	COMPOSITE,FIBERGLASS REINFORCED PLASTIC
<b>Tank ID#:</b>	U1		
<b>Tank Installed Date / Age:</b>	01/01/1976		
<b>Tank Removal Date:</b>	05/01/1991		
<b>Description / Comment:</b>	TANK MONITOR: NONEPIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: CITY OF HIGHLAND VILLAGE948 HIGHLAND VILLAGE RDHIGHLAND VILLAGE, TX 750676799		
<b>Tank ID#:</b>	U1A		
<b>Tank Installed Date / Age:</b>	05/01/1991		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: CITY OF HIGHLAND VILLAGE948 HIGHLAND VILLAGE RDHIGHLAND VILLAGE, TX 750676799		
<b>Tank ID#:</b>	U2A		
<b>Tank Installed Date / Age:</b>	05/01/1991		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: CITY OF HIGHLAND VILLAGE948 HIGHLAND VILLAGE RDHIGHLAND VILLAGE, TX 750676799		

VISTA Address*:	<b>HIGHLAND VILLAGE CITY OF</b> <b>948 HIGHLAND VILLAGE RD</b> <b>LEWISVILLE, TX 75067</b>	VISTA ID#:	1099751
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**18**

**STATE LUST - State Leaking Underground Storage Tank / SRC# 5626**

EPA/Agency ID: N/A

<b>Agency Address:</b>		CITY OF HIGHLAND VILLAGE 948 HIGHLAND VILLAGE RD HIGHLAND VILLAGE, TX 75067	
<b>Facility ID:</b>		0012894	
<b>Leak ID#:</b>		099166	
<b>Leak Report Date:</b>		6/4/91	
<b>Region / District:</b>		ARLINGTON	
<b>Responsible Party:</b>		CITY OF HIGHLAND VILLAGE	



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**Description / Comment:** MEDIA AFFECTED: GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS  
REMEDICATION STATUS: PHASE 2 IN PROGRESS  
RESPONSIBLE PARTY INFO: 948 HIGHLAND VILLAGE RD, HIGHLAND VILLAGE, TX, 750670000, 972/317-2558

VISTA Address*:	THE BAIT HOUSE/HAYS FINA HWY 423 STEWARTS CRE RD FRISCO, TX 75034	VISTA ID#:	6641210
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0049819

Map ID

**19**

<b>Agency Address:</b>		SAME AS ABOVE	
<b>Underground Tanks:</b>		4	
<b>Aboveground Tanks:</b>		NOT REPORTED	
<b>Tanks Removed:</b>		NOT REPORTED	
<b>Tank ID:</b>	U1	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	NO MONITOR
<b>Tank Age:</b>	24	<b>Tank Piping:</b>	STEEL
<b>Tank Size (Units):</b>	6000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U2	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	NO MONITOR
<b>Tank Age:</b>	24	<b>Tank Piping:</b>	STEEL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U3	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	NO MONITOR
<b>Tank Age:</b>	24	<b>Tank Piping:</b>	STEEL
<b>Tank Size (Units):</b>	2000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U4	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	DIESEL	<b>Leak Monitoring:</b>	NO MONITOR
<b>Tank Age:</b>	24	<b>Tank Piping:</b>	STEEL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID#:</b>	U1		
<b>Tank Installed Date / Age:</b>	01/01/1975		
<b>Description / Comment:</b>	TANK MONITOR: NONE PIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: LEVSEY, GLENDART 2, BOX 375-CFRISCO, TX 75034		
<b>Tank ID#:</b>	U2		
<b>Tank Installed Date / Age:</b>	01/01/1975		
<b>Description / Comment:</b>	TANK MONITOR: NONE PIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: LEVSEY, GLENDART 2, BOX 375-CFRISCO, TX 75034		
<b>Tank ID#:</b>	U3		
<b>Tank Installed Date / Age:</b>	01/01/1975		
<b>Description / Comment:</b>	TANK MONITOR: NONE PIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: LEVSEY, GLENDART 2, BOX 375-CFRISCO, TX 75034		
<b>Tank ID#:</b>	U4		
<b>Tank Installed Date / Age:</b>	01/01/1975		
<b>Description / Comment:</b>	TANK MONITOR: NONE PIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: LEVSEY, GLENDART 2, BOX 375-CFRISCO, TX 75034		



\* VISTA address includes enhanced city and ZIP.

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

VISTA Address*:	<b>WESTLAKE PARK (LEWISVILLE LAKE)</b> <b>NO ADDRESS RECORDED</b> <b>IRVING, TX 75017</b>	VISTA ID#:	1782843
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**20**

**STATE UST - State Underground Storage Tank / SRC# 5627**

Agency ID: 0006768

Agency Address:	WESTLAKE PARK (LEWISVILLE LAKE) NO ADDRESS RECORDED LEWISVILLE, TX 75017		
Underground Tanks:	1		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	1		
Tank ID:	U1	Tank Status:	ABANDONED
Tank Contents:	EMPTY	Leak Monitoring:	NO MONITOR
Tank Age:	NOT REPORTED	Tank Piping:	ANTI-CORROSIVE
Tank Size (Units):	NOT REPORTED (GALLONS)	Tank Material:	UNKNOWN
Tank ID#:	U1		
Tank Installed Date / Age:	UNRECORDED		
Tank Removal Date:	04/01/1984		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: CORPS OF ENGINEERS 1801 N MILLEWISVILLE, TX 75017		

VISTA Address*:	<b>THOMPSON CO LAKE DALLAS SI</b> <b>137 FOLLY BEACH RD</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	423178
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**21**

**NFRAP / SRC# 5595**

EPA ID: TXD980697023

Agency Address:	THOMPSON CO LAKE DALLAS SITE 137 FOLLY BEACH RD LAKE DALLAS, TX 75065		
EPA Region:	6		
Congressional District:	0		
Federal Facility:	Agency Code ( )		
Facility Ownership:	OTHER		
Site Incident Category:	unknown		
Federal Facility Docket:	SITE IS NOT INCLUDED ON THE DOCKET		
NPL Status:	NOT ON NPL		
Incident Type:	Unknown		
Proposed NPL Update #:	0		
Final NPL Update #:	0		
Financial Management System ID:	NOT REPORTED		
Latitude:	0		
Longitude:	0		
Lat/Long Source:	Agency Code ( )		
Lat/Long Accuracy:	Unknown		
Dioxin Tier:	Unknown		
USGS Hydro Unit:	12030103		
RCRA Indicator:	Unknown		
Unit Id:	0		
Unit Name:	ENTIRE SITE		
Type:	DISCOVERY	Lead Agency:	EPA FUND-FINANCED
Qualifier:	UNKNOWN	Category:	Unknown
Name:	NOT REPORTED	Actual Start Date:	NOT REPORTED
Plan Status:	Unknown	Actual Completion Date:	UNKNOWN



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Type:	PRELIMINARY ASSESSMENT	Lead Agency:	EPA FUND-FINANCED
Qualifier:	NO FURTHER REMEDIAL ACTION PLANNED	Category:	Unknown
Name:	NOT REPORTED	Actual Start Date:	UNKNOWN
Plan Status:	Unknown	Actual Completion Date:	UNKNOWN

VISTA Address*:	<b>X-PRESSWAY FOOD STORE</b> <b>203 MAIN ST</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	6611581
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0038669

Map ID

**22**

Agency Address:	SAME AS ABOVE		
Underground Tanks:	2		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	25	Tank Piping:	STEEL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	25	Tank Piping:	STEEL
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1974		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: SHUJA, KAMAL 203 MAIN ST LAKE DALLAS, TX 75065		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1974		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: SHUJA, KAMAL 203 MAIN ST LAKE DALLAS, TX 75065		

VISTA Address*:	<b>CITY OF LAKE DALLAS</b> <b>303 ALAMO</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	1397951
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0037390

Map ID

**22**

Agency Address:	SAME AS ABOVE		
Underground Tanks:	2		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	2		
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	20	Tank Piping:	STEEL
Tank Size (Units):	3000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	23	Tank Piping:	STEEL
Tank Size (Units):	2000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1975		
Tank Removal Date:	01/01/1995		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Description / Comment:	OWNER: CITY OF LAKE DALLASPO BOX 368LAKE DALLAS, TX 75065
Tank ID#:	U2
Tank Installed Date / Age:	01/01/1972
Tank Removal Date:	01/01/1995
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE
Description / Comment:	OWNER: CITY OF LAKE DALLASPO BOX 368LAKE DALLAS, TX 75065

VISTA Address*:	<b>G G AUTO SERVICE</b> <b>312 MAIN ST</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	1403425
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**23**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0043391
Agency Address:	SAME AS ABOVE		
Underground Tanks:	1		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	USED OIL	Leak Monitoring:	NO MONITOR
Tank Age:	NOT REPORTED	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	700 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	UNRECORDED		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: G G AUTO SERVICEPO BOX 1316LAKE DALLAS, TX 750651316		

VISTA Address*:	<b>CITY OF LAKE DALLAS FIRE DEPT</b> <b>275 MAIN ST</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	5547674
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**23**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0066842
Agency Address:	SAME AS ABOVE		
Underground Tanks:	1		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	1		
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	EMPTY	Leak Monitoring:	NO MONITOR
Tank Age:	NOT REPORTED	Tank Piping:	SINGLE WALL
Tank Size (Units):	3000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	UNRECORDED		
Tank Removal Date:	01/01/1995		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: CITY OF LAKE DALLASPO BOX 368LAKE DALLAS, TX 75065		

VISTA Address*:	<b>LAKE DALLAS CAFE TRU VALU HARDWARE</b> <b>301 MAIN ST</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	2578838
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**23**

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility ID:	0007909		
Leak ID#:	101074		
Leak Report Date:	12/2/91		



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

<b>Region / District:</b>	ARLINGTON
<b>Responsible Party:</b>	AMERICAN FEDERAL BANK
<b>Description / Comment:</b>	MEDIA AFFECTED: MINOR SOIL CONTAMINATION - DOES NOT REQUIRE A RAPREMEDIATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSEDRESPONSIBLE PARTY INFO: PO BOX 809094,DALLAS,TX,75380,214/450-1800

VISTA Address*:	EXXON STORE #6-0381 8100 I-35 E DENTON, TX 76205	VISTA ID#:	8533544
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0070789

Map ID

**24**

<b>Agency Address:</b>	SAME AS ABOVE		
<b>Underground Tanks:</b>	3		
<b>Aboveground Tanks:</b>	NOT REPORTED		
<b>Tanks Removed:</b>	NOT REPORTED		
<b>Tank ID:</b>	U1	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	1	<b>Tank Piping:</b>	DOUBLE WALL,DOUBLE WALL
<b>Tank Size (Units):</b>	12000 (GALLONS)	<b>Tank Material:</b>	FIBERGLASS REINFORCED PLASTIC
<b>Tank ID:</b>	U2	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	1	<b>Tank Piping:</b>	DOUBLE WALL,DOUBLE WALL
<b>Tank Size (Units):</b>	12000 (GALLONS)	<b>Tank Material:</b>	FIBERGLASS REINFORCED PLASTIC
<b>Tank ID:</b>	U3	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	1	<b>Tank Piping:</b>	DOUBLE WALL,DOUBLE WALL
<b>Tank Size (Units):</b>	12000 (GALLONS)	<b>Tank Material:</b>	FIBERGLASS REINFORCED PLASTIC
<b>Tank ID#:</b>	U1		
<b>Tank Installed Date / Age:</b>	01/01/1998		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: EXXON COMPANY USAPO BOX 4386HOUSTON,TX 772104386		
<b>Tank ID#:</b>	U2		
<b>Tank Installed Date / Age:</b>	01/01/1998		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: EXXON COMPANY USAPO BOX 4386HOUSTON,TX 772104386		
<b>Tank ID#:</b>	U3		
<b>Tank Installed Date / Age:</b>	01/01/1998		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: EXXON COMPANY USAPO BOX 4386HOUSTON,TX 772104386		

VISTA Address*:	KELSOE TRACTOR CO (ALLSUPS) 102 MAIN ST LAKE DALLAS, TX 75065	VISTA ID#:	4557428
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
STATE LUST - State Leaking Underground Storage Tank / SRC# 5626		EPA/Agency ID:	N/A

Map ID

**25**

<b>Agency Address:</b>	KELSOE TRACTOR CO (ALLSUPS) 102 MAIN ST LAKE DALLAS, TX 75065
<b>Facility ID:</b>	0045870
<b>Leak ID#:</b>	107630
<b>Leak Report Date:</b>	8/17/93
<b>Region / District:</b>	ARLINGTON
<b>Responsible Party:</b>	KELSOE TRACTOR CO INC



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

**Description / Comment:** MEDIA AFFECTED: GW IMPACT, PUBLIC/DOMESTIC WATER SUPPLY WELL W/IN 0.25MIREMEDIATION STATUS: PHASE 3 IN PROGRESS AND QUARTERLY MONITORINGIN PROGRESSRESPONSIBLE PARTY INFO: P.O. DRAWER R,DENTON,TX,76202,817/387-3804

VISTA Address*:	<b>LAKE DALLAS TELEPHONE COM</b>		VISTA ID#:	1406536
	<b>450 MAIN</b>		Distance/Direction:	0.00 MI / NA
	<b>LAKE DALLAS, TX 75065</b>		Plotted as:	Point
<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>			Agency ID:	0046936
<b>Agency Address:</b>		SAME AS ABOVE		
<b>Underground Tanks:</b>		1		
<b>Aboveground Tanks:</b>		NOT REPORTED		
<b>Tanks Removed:</b>		1		
<b>Tank ID:</b>	UCO-1	<b>Tank Status:</b>	REMOVED	
<b>Tank Contents:</b>	DIESEL	<b>Leak Monitoring:</b>	NO MONITOR	
<b>Tank Age:</b>	11	<b>Tank Piping:</b>	ANTI-CORROSIVE	
<b>Tank Size (Units):</b>	1000 (GALLONS)	<b>Tank Material:</b>	STEEL	
<b>Tank ID#:</b>	UCO-1			
<b>Tank Installed Date / Age:</b>	01/01/1980			
<b>Tank Removal Date:</b>	07/01/1991			
<b>Description / Comment:</b>	TANK MONITOR: NONEPIPE MONITOR: NONE			
<b>Description / Comment:</b>	OWNER: LAKE DALLAS TELEPHONE450 MAIN STLAKE DENTON,TX 75065			

Map ID

**26**

VISTA Address*:	<b>CITY LAKE DALLAS MAINTENANCE DEPT</b>		VISTA ID#:	5363385
	<b>351 BETCHAN DR</b>		Distance/Direction:	0.00 MI / NA
	<b>LAKE DALLAS, TX 75065</b>		Plotted as:	Point
<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>			EPA/Agency ID:	N/A
<b>Agency Address:</b>		CITY LAKE DALLAS MAINTENANCE DEPT 351 BETCHAN DR LAKE DALLAS, TX		
<b>Facility ID:</b>		0037390		
<b>Leak ID#:</b>		109035		
<b>Leak Report Date:</b>		1/13/95		
<b>Region / District:</b>		ARLINGTON		
<b>Responsible Party:</b>		CITY OF LAKE DALLAS		
<b>Description / Comment:</b>		MEDIA AFFECTED: GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORSREMEDICATION STATUS: PHASE 3 IN PROGRESSRESPONSIBLE PARTY INFO: PO BOX 368,LAKE DALLAS,TX,75065,817/497-2226		

Map ID

**27**

VISTA Address*:	<b>LKDL RIN LW RPTR BLDG</b>		VISTA ID#:	6529798
	<b>I 35 KELTON AVE</b>		Distance/Direction:	0.00 MI / NA
	<b>LAKE DALLAS, TX 75065</b>		Plotted as:	Point
<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>			Agency ID:	0019433
<b>Agency Address:</b>		SAME AS ABOVE		
<b>Underground Tanks:</b>		1		
<b>Aboveground Tanks:</b>		NOT REPORTED		
<b>Tanks Removed:</b>		1		
<b>Tank ID:</b>	U1	<b>Tank Status:</b>	REMOVED	
<b>Tank Contents:</b>	DIESEL	<b>Leak Monitoring:</b>	NO MONITOR	
<b>Tank Age:</b>	11	<b>Tank Piping:</b>	STEEL	
<b>Tank Size (Units):</b>	550 (GALLONS)	<b>Tank Material:</b>	FIBERGLASS REINFORCED PLASTIC	
<b>Tank ID#:</b>	U1			
<b>Tank Installed Date / Age:</b>	01/01/1982			

Map ID

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

<b>Tank Removal Date:</b>	11/01/1993
<b>Description / Comment:</b>	TANK MONITOR: NONE PIPE MONITOR: NONE
<b>Description / Comment:</b>	OWNER: SOUTHWESTERN BELL TELEPHONE COTHREE BELL PLAZADALLAS, TX 752655521

<b>VISTA Address*:</b>	<b>LONE STAR PIPELINE 619 SHORE ST LAKE DALLAS, TX 75065</b>	<b>VISTA ID#:</b>	8534726
		<b>Distance/Direction:</b>	0.00 MI / NA
		<b>Plotted as:</b>	Point

Map ID

**29**

<b>ERNS - Emergency Response Notification System / SRC# 5598</b>	<b>Agency ID:</b>	398866
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Agency Address:	LONE STAR PIPELINE 619 SHORE ST LAKE DALLAS, TX				
Spill Date Time:	AUGUST 11, 2000 09:00:00 AM				
Case Number:	398866				
Spill Location:	619 SHORE ST				
Discharger Name:	LONE STAR PIPELINE				
Discharger Org:	LONE STAR PIPELINE				
Material Spilled:	NATURAL GAS, 0.00 (UNK)				
Fields Not Reported:	Source Agency, Discharger Phone, Waterway Affected				
Air Release:	Land Release:	Water Release:	Ground Release:	Facility Release:	Other Release:
YES	NO	NO	NO	NO	NO

<b>VISTA Address*:</b>	<b>LAKE DALLAS I.S.D. 425 E HUNDLEY DR LAKE DALLAS, TX 75065</b>	<b>VISTA ID#:</b>	6883422
		<b>Distance/Direction:</b>	0.00 MI / NA
		<b>Plotted as:</b>	Point

Map ID

**30**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>	<b>Agency ID:</b>	0037417
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Agency Address:		SAME AS ABOVE	
Underground Tanks:		1	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		NOT REPORTED	
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	27	Tank Piping:	SINGLE WALL
Tank Size (Units):	2005 (GALLONS)	Tank Material:	COMPOSITE, FIBERGLASS REINFORCED PLASTIC
Tank ID#:		U1	
Tank Installed Date / Age:		01/01/1972	
Description / Comment:		TANK MONITOR: AUTO IN-TANK MONITORING INVENTORY CONTROL PIPE MONITOR: TIGHTNESS TESTING	
Description / Comment:		OWNER: LAKE DALLAS I.S.D. PO BOX 548 LAKE DALLAS, TX 75065	

<b>VISTA Address*:</b>	<b>RESIDENTIAL LOT 307 MARINA DR LAKE DALLAS, TX 75065</b>	<b>VISTA ID#:</b>	5738077
		<b>Distance/Direction:</b>	0.00 MI / NA
		<b>Plotted as:</b>	Point

Map ID

**31**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>	<b>Agency ID:</b>	0067459
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Agency Address:		SAME AS ABOVE	
Underground Tanks:		1	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		1	
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	UNKNOWN	Leak Monitoring:	NO MONITOR
Tank Age:	8	Tank Piping:	ANTI-CORROSIVE
Tank Size (Units):	550 (GALLONS)	Tank Material:	UNKNOWN



\* VISTA address includes enhanced city and ZIP.

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Tank ID#:	U1
Tank Installed Date / Age:	08/01/1987
Tank Removal Date:	12/01/1995
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE
Description / Comment:	OWNER: ESTATE OF J FAYE SMITH12222 MERIT DRDALLAS, TX 75251

VISTA Address*:	LAKE DALLAS BOAT CO, INC 708 E NICK ST LAKE DALLAS, TX 75065	VISTA ID#:	1796216
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0050431

Map ID

**31**

Agency Address:	SAME AS ABOVE		
Underground Tanks:	2		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	10	Tank Piping:	STEEL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	10	Tank Piping:	STEEL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1989		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: LAKEVIEW MARINA/LAKE DALLAS BOATPO BOX 397LAKE DALLAS, TX 75065		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1989		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: LAKEVIEW MARINA/LAKE DALLAS BOATPO BOX 397LAKE DALLAS, TX 75065		

VISTA Address*:	D J GROCERY 631 S DENTON DR LAKE DALLAS, TX 75065	VISTA ID#:	1399110
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0038658

Map ID

**32**

Agency Address:	SAME AS ABOVE		
Underground Tanks:	3		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	24	Tank Piping:	STEEL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	24	Tank Piping:	STEEL
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	24	Tank Piping:	STEEL
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	09/01/1975		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: KIM, EDWARD JONGP.O. BOX 1318LAKE DALLAS, TX 75065		
Tank ID#:	U2		
Tank Installed Date / Age:	09/01/1975		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: KIM, EDWARD JONGP.O. BOX 1318LAKE DALLAS, TX 75065		
Tank ID#:	U3		
Tank Installed Date / Age:	09/01/1975		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: KIM, EDWARD JONGP.O. BOX 1318LAKE DALLAS, TX 75065		

VISTA Address*:	FAST BREAK #3(LAKE DALLAS SHAMROCK 401 S DENTON LAKE DALLAS, TX 75065	VISTA ID#:	11631556
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**32**

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>	EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE	
Facility ID:	0008180	
Leak ID#:	113793	
Leak Report Date:	12/4/98	
Region / District:	ARLINGTON	
Responsible Party:	U S R COMPANY	
Description / Comment:	REMEDATION STATUS: INCIDENT REPORTED, INITIAL DIRECTIVES NOT YET ISSUEDRESPONSIBLE PARTY INFO: 728 FORT WORTH DR,DENTON,TX,76201,940/382-5644	

STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0008180
Agency Address:	FAST BREAK #3 401 S DENTON LAKE DALLAS, TX 75065		
Underground Tanks:	5		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	4		
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	26	Tank Piping:	STEEL
Tank Size (Units):	3000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U1A	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	2	Tank Piping:	SINGLE WALL
Tank Size (Units):	20000 (GALLONS)	Tank Material:	COMPOSITE,FIBERGLASS REINFORCED PLASTIC
Tank ID:	U2	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	26	Tank Piping:	STEEL
Tank Size (Units):	1000 (GALLONS)	Tank Material:	STEEL



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Tank ID:	U3	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	26	Tank Piping:	ANTI-CORROSIVE
Tank Size (Units):	3000 (GALLONS)	Tank Material:	UNKNOWN
Tank ID:	U4	Tank Status:	REMOVED
Tank Contents:	UNKNOWN	Leak Monitoring:	NO MONITOR
Tank Age:	10	Tank Piping:	ANTI-CORROSIVE
Tank Size (Units):	260 (GALLONS)	Tank Material:	UNKNOWN
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1971		
Tank Removal Date:	08/01/1997		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: DENTON TANK RENTAL INC728 F. W. DRDENTON,TX 76201		
Tank ID#:	U1A		
Tank Installed Date / Age:	08/01/1997		
Description / Comment:	TANK MONITOR: VAPOR MONITORINGPIPE MONITOR: VAPOR MONITORING		
Description / Comment:	OWNER: DENTON TANK RENTAL INC728 F. W. DRDENTON,TX 76201		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1971		
Tank Removal Date:	08/01/1997		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: DENTON TANK RENTAL INC728 F. W. DRDENTON,TX 76201		
Tank ID#:	U3		
Tank Installed Date / Age:	01/01/1971		
Tank Removal Date:	08/01/1997		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: DENTON TANK RENTAL INC728 F. W. DRDENTON,TX 76201		
Tank ID#:	U4		
Tank Installed Date / Age:	08/01/1987		
Tank Removal Date:	08/01/1997		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: DENTON TANK RENTAL INC728 F. W. DRDENTON,TX 76201		

VISTA Address*:	LAKELAND CITIES SHOPPING CTR/SPRITZ 603 S DENTON DR LAKE DALLAS, TX 75065	VISTA ID#:	4091316
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
STATE LUST - State Leaking Underground Storage Tank / SRC# 5626		EPA/Agency ID:	N/A
Agency Address:	LAKELAND CITIES SHOPPING CTR/SPRITZ 603 S DENTON DR LAKE DALLAS, TX 0053419		
Facility ID:	106674		
Leak ID#:	5/18/93		
Leak Report Date:	ARLINGTON		
Region / District:	FIRST COMMERCIAL REALTY		
Responsible Party:	MEDIA AFFECTED: GW IMPACT, PUB/DOM WATER SUPPLY WELL W/IN .25-.5 MIREMEDIATION STATUS: PHASE 3 IN PROGRESSRESPONSIBLE PARTY INFO: 2016 W JUSTIN RD,LEWISVILLE,TX,750777161,214/436-4643		
Description / Comment:			

Map ID

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<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0053419
<b>Agency Address:</b>		LAKELAND CITIES SHOPPING CENTER 603 S DENTON DR LAKE DALLAS, TX 75065	
<b>Underground Tanks:</b>		2	
<b>Aboveground Tanks:</b>		NOT REPORTED	
<b>Tanks Removed:</b>		NOT REPORTED	
<b>Tank ID:</b>	UA	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	20	<b>Tank Piping:</b>	WALLED/DOUBLE WALLED
<b>Tank Size (Units):</b>	6000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	UB	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	20	<b>Tank Piping:</b>	WALLED/DOUBLE WALLED
<b>Tank Size (Units):</b>	6000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID#:</b>	UA		
<b>Tank Installed Date / Age:</b>	06/01/1979		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROL PIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: TEXMICH, INC. 132 W MAIN ST LEWISVILLE, TX 75057		
<b>Tank ID#:</b>	UB		
<b>Tank Installed Date / Age:</b>	06/01/1979		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROL PIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: TEXMICH, INC. 132 W MAIN ST LEWISVILLE, TX 75057		

VISTA Address*:	<b>BEER BARN</b> <b>307 W HUNDLEY DR</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	5547520
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

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<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0038653
<b>Agency Address:</b>		SAME AS ABOVE	
<b>Underground Tanks:</b>		6	
<b>Aboveground Tanks:</b>		NOT REPORTED	
<b>Tanks Removed:</b>		3	
<b>Tank ID:</b>	U1	<b>Tank Status:</b>	REMOVED
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	NO MONITOR
<b>Tank Age:</b>	NOT REPORTED	<b>Tank Piping:</b>	STEEL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U1A	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	8	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	6000 (GALLONS)	<b>Tank Material:</b>	COMPOSITE, FIBERGLASS REINFORCED PLASTIC
<b>Tank ID:</b>	U2	<b>Tank Status:</b>	REMOVED
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	NO MONITOR
<b>Tank Age:</b>	NOT REPORTED	<b>Tank Piping:</b>	STEEL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U2B	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	8	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	6000 (GALLONS)	<b>Tank Material:</b>	COMPOSITE, FIBERGLASS REINFORCED PLASTIC



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<b>Tank ID:</b>	U3	<b>Tank Status:</b>	REMOVED
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	NO MONITOR
<b>Tank Age:</b>	NOT REPORTED	<b>Tank Piping:</b>	STEEL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U3C	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	8	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	6000 (GALLONS)	<b>Tank Material:</b>	COMPOSITE,FIBERGLASS REINFORCED PLASTIC
<b>Tank ID#:</b>	U1		
<b>Tank Installed Date / Age:</b>	UNRECORDED		
<b>Tank Removal Date:</b>	07/01/1991		
<b>Description / Comment:</b>	TANK MONITOR: NONEPIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: MEE-NAAR INVESTMENT INCBOX 778LAKE DALLAS,TX 75065		
<b>Tank ID#:</b>	U1A		
<b>Tank Installed Date / Age:</b>	07/01/1991		
<b>Description / Comment:</b>	TANK MONITOR: GROUNDWATER MONITORINGPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: MEE-NAAR INVESTMENT INCBOX 778LAKE DALLAS,TX 75065		
<b>Tank ID#:</b>	U2		
<b>Tank Installed Date / Age:</b>	UNRECORDED		
<b>Tank Removal Date:</b>	07/01/1991		
<b>Description / Comment:</b>	TANK MONITOR: NONEPIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: MEE-NAAR INVESTMENT INCBOX 778LAKE DALLAS,TX 75065		
<b>Tank ID#:</b>	U2B		
<b>Tank Installed Date / Age:</b>	07/01/1991		
<b>Description / Comment:</b>	TANK MONITOR: GROUNDWATER MONITORINGPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: MEE-NAAR INVESTMENT INCBOX 778LAKE DALLAS,TX 75065		
<b>Tank ID#:</b>	U3		
<b>Tank Installed Date / Age:</b>	UNRECORDED		
<b>Tank Removal Date:</b>	07/01/1991		
<b>Description / Comment:</b>	TANK MONITOR: NONEPIPE MONITOR: NONE		
<b>Description / Comment:</b>	OWNER: MEE-NAAR INVESTMENT INCBOX 778LAKE DALLAS,TX 75065		
<b>Tank ID#:</b>	U3C		
<b>Tank Installed Date / Age:</b>	07/01/1991		
<b>Description / Comment:</b>	TANK MONITOR: GROUNDWATER MONITORINGPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: MEE-NAAR INVESTMENT INCBOX 778LAKE DALLAS,TX 75065		

<b>VISTA Address*:</b>	<b>SAMS GROCERY</b> <b>307 W HUNDLEY DR</b> <b>LAKE DALLAS, TX 75065</b>	<b>VISTA ID#:</b>	1399105
		<b>Distance/Direction:</b>	0.00 MI / NA
		<b>Plotted as:</b>	Point
<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>		<b>EPA/Agency ID:</b>	N/A
<b>Agency Address:</b>	SAME AS ABOVE		
<b>Facility ID:</b>	0038653		
<b>Leak ID#:</b>	100423		
<b>Leak Report Date:</b>	9/3/91		
<b>Region / District:</b>	ARLINGTON		
<b>Responsible Party:</b>	FIRST INTERSTATE BANK (A T LEE		
<b>Description / Comment:</b>	MEDIA AFFECTED: MINOR SOIL CONTAMINATION - DOES NOT REQUIRE A RAPREMEDIATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSEDRESPONSIBLE PARTY INFO: PO BOX 650291,DALLAS,TX,752650291,214/841-3210		

Map ID

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VISTA Address*:	<b>PAYLESS CASHWAYS INC</b> <b>500 N STEMMONS</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	1391417
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

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<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>	EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE	
Facility ID:	0030351	
Leak ID#:	092857	
Leak Report Date:	4/21/89	
Region / District:	ARLINGTON	
Responsible Party:	PAYLESS CASHWAYS INC	
Description / Comment:	MEDIA AFFECTED: NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TORECEPTORSREMEDATION STATUS: INITIAL DIRECTIVES ISSUED A WAITING INITIALRESPONSERESPONSIBLE PARTY INFO: 500 N STEMMONS,LAKE DALLAS, TX, 75065, 817/430-8707	

STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0030351
Agency Address:		PAYLESS CASHWAYS, INC. 500 N STEMMONS LAKE DALLAS, TX 75065	
Underground Tanks:		1	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		NOT REPORTED	
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	16	Tank Piping:	STEEL
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL
Tank ID#:		U1	
Tank Installed Date / Age:		01/01/1983	
Description / Comment:		TANK MONITOR: NONEPIPE MONITOR: NONE	
Description / Comment:		OWNER: PAYLESS CASHWAYS, INCPO BOX 419466KANSAS CITY,MO 641410466	

VISTA Address*:	<b>ROADIES</b> <b>1002 S STEMMONS</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	1813666
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

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STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0057931
Agency Address:		SAME AS ABOVE	
Underground Tanks:		3	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		NOT REPORTED	
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	03/01/1985		



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Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: AURORA, P. S.336 PARK VALLEY DRCOPPELL, TX 75019
Tank ID#:	U2
Tank Installed Date / Age:	03/01/1985
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: AURORA, P. S.336 PARK VALLEY DRCOPPELL, TX 75019
Tank ID#:	U3
Tank Installed Date / Age:	03/01/1985
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: AURORA, P. S.336 PARK VALLEY DRCOPPELL, TX 75019

VISTA Address*:	<b>BOEING AEROSPACE ELECTR-CORINTH</b> <b>7801 S STEMMONS</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	52676
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>RCRA-LgGen - RCRA-Large Generator / SRC# 5596</b>		EPA ID:	TXD982289415
Agency Address:	BOEING DEFENSE ELECTRONICS INC 7801 S STEMMONS CORINTH, TX 75065		
Generator Class:	Generates at least 1000 kg./month of non-acutely hazardous waste ( or 1 kg./month of acutely hazardous waste).		

Map ID

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VISTA Address*:	<b>OSCAR RENDA</b> <b>1500 TURBVILLE</b> <b>DENTON, TX 76205</b>	VISTA ID#:	8536207
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>AST - Above Ground Storage Tank / SRC# 5627</b>		Agency ID:	0070718
Agency Address:	SAME AS ABOVE		
Underground Tanks:	NOT REPORTED		
Aboveground Tanks:	1		
Tanks Removed:	NOT REPORTED		
Tank ID:	A1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NOT AVAILABLE
Tank Age:	1	Tank Piping:	UNKNOWN
Tank Size (Units):	2000 (GALLONS)	Tank Material:	UNKNOWN
Tank ID#:	A1		
Tank Installed Date / Age:	04/01/1998		
Description / Comment:	MONITOR TYPE: NOT APPLICABLE		
Description / Comment:	OWNER: REEDER DISTRIBUTORS, INC.PO BOX 8237FT WORTH, TX 761240237		

Map ID

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VISTA Address*:	<b>SHAMROCK ENTERPRISES</b> <b>423 BULADORA LN</b> <b>LITTLE ELM, TX 75068</b>	VISTA ID#:	4090941
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>RCRA-SmGen - RCRA-Small Generator / SRC# 5596</b>		EPA ID:	TXD988082707
Agency Address:	SHAMROCK ENTERPRISES 423 BULADORA LITTLE ELM, TX 75068		
Generator Class:	Generates 100 kg./month but less than 1000 kg./month of non-acutely hazardous waste		

Map ID

**37**



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<b>RCRA-TSD / SRC# 5596</b>		<b>EPA ID:</b>	<b>TXD988082707</b>
<b>Agency Address:</b>	SHAMROCK ENTERPRISES 423 BULADORA LITTLE ELM, TX 75068		
<b>Off-Site Waste Received:</b>	NO		
<b>Land Disposal:</b>	NO		
<b>Incinerator:</b>	NO		
<b>Storage/Treatment:</b>	NO		

<b>VISTA Address*:</b>	<b>HILLARD'S GROCERY 70334 507 SHADY SHORES RD LAKE DALLAS, TX 75065</b>	<b>VISTA ID#:</b>	<b>6481432</b>
		<b>Distance/Direction:</b>	<b>0.00 MI / NA</b>
		<b>Plotted as:</b>	<b>Point</b>

Map ID

**38**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		<b>Agency ID:</b>	<b>0006262</b>
<b>Agency Address:</b>	SAME AS ABOVE		
<b>Underground Tanks:</b>	4		
<b>Aboveground Tanks:</b>	NOT REPORTED		
<b>Tanks Removed:</b>	NOT REPORTED		
<b>Tank ID:</b>	U1	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	14	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	5000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U2	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	25	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	4000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U3	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	14	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	2000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID:</b>	U4	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	DIESEL	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	12	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	8000 (GALLONS)	<b>Tank Material:</b>	STEEL
<b>Tank ID#:</b>	U1		
<b>Tank Installed Date / Age:</b>	01/01/1985		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: TRIPLE A OIL CO., INC. 12342 INWOOD RDDALLAS, TX 75244		
<b>Tank ID#:</b>	U2		
<b>Tank Installed Date / Age:</b>	01/01/1974		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: TRIPLE A OIL CO., INC. 12342 INWOOD RDDALLAS, TX 75244		
<b>Tank ID#:</b>	U3		
<b>Tank Installed Date / Age:</b>	01/01/1985		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: TRIPLE A OIL CO., INC. 12342 INWOOD RDDALLAS, TX 75244		
<b>Tank ID#:</b>	U4		
<b>Tank Installed Date / Age:</b>	08/01/1987		
<b>Description / Comment:</b>	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: TRIPLE A OIL CO., INC. 12342 INWOOD RDDALLAS, TX 75244		



\* VISTA address includes enhanced city and ZIP.

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VISTA Address*:	<b>VIDEO PLUS INC</b> <b>200 SWISHER RD</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	4899305
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0010680
Agency Address:		SAME AS ABOVE	
Underground Tanks:		1	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		1	
Tank ID:	U1	Tank Status:	TEMP OUT OF SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	6	Tank Piping:	ANTI-CORROSIVE
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID#:		U1	
Tank Installed Date / Age:		01/01/1984	
Tank Removal Date:		05/01/1990	
Description / Comment:		TANK MONITOR: NONE PIPE MONITOR: NONE	
Description / Comment:		OWNER: VIDEO PLUS, INC. 200 SWISHER RD LAKE DALLAS, TX 75065	

Map ID

**39**

VISTA Address*:	<b>ROBINSON'S CONV STORE</b> <b>201 KINGS RD</b> <b>FRISCO, TX 75034</b>	VISTA ID#:	7066281
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0069768
Agency Address:		SAME AS ABOVE	
Underground Tanks:		1	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		NOT REPORTED	
Tank ID:	UA	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	2	Tank Piping:	EXTERNAL JACKET SYSTEM
Tank Size (Units):	10000 (GALLONS)	Tank Material:	COMPOSITE, FIBERGLASS REINFORCED PLASTIC
Tank ID#:		UA	
Tank Installed Date / Age:		06/01/1997	
Description / Comment:		TANK MONITOR: GROUNDWATER MONITORING PIPE MONITOR: LINE LEAK DETECTORS	
Description / Comment:		OWNER: WATTS 201 KINGS RD FRISCO, TX 75034	

Map ID

**40**

VISTA Address*:	<b>LITTLE ELM ELEMENTARY</b> <b>MAIN STREET LAKESHORE</b> <b>LITTLE ELM, TX 75068</b>	VISTA ID#:	246415
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0039948
Agency Address:		LITTLE ELM GROCERY 111 MAIN ST LITTLE ELM, TX 75068	
Underground Tanks:		3	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		3	
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	13	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	2000 (GALLONS)	Tank Material:	STEEL

Map ID

**41**



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Tank ID:	U2	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	13	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	1000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	13	Tank Piping:	ANTI-CORROSIVE
Tank Size (Units):	550 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1981		
Tank Removal Date:	08/01/1994		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: MONARCH ASSOCIATES P.O. BOX 486 FRISCO, TX 75034		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1981		
Tank Removal Date:	08/01/1994		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: MONARCH ASSOCIATES P.O. BOX 486 FRISCO, TX 75034		
Tank ID#:	U3		
Tank Installed Date / Age:	01/01/1981		
Tank Removal Date:	08/01/1994		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: MONARCH ASSOCIATES P.O. BOX 486 FRISCO, TX 75034		

VISTA Address*:	LITTLE ELM ISD BUS FACILITY 411 LAKESHORE DR LITTLE ELM, TX 75068	VISTA ID#:	6480941
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
AST - Above Ground Storage Tank / SRC# 5627		Agency ID:	0050392

Map ID

**42**

Agency Address:	SAME AS ABOVE		
Underground Tanks:	2		
Aboveground Tanks:	3		
Tanks Removed:	4		
Tank ID:	A1	Tank Status:	TEMP OUT OF SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NOT AVAILABLE
Tank Age:	6	Tank Piping:	UNKNOWN
Tank Size (Units):	2000 (GALLONS)	Tank Material:	STEEL
Tank ID:	A2	Tank Status:	TEMP OUT OF SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NOT AVAILABLE
Tank Age:	2	Tank Piping:	UNKNOWN
Tank Size (Units):	2000 (GALLONS)	Tank Material:	STEEL
Tank ID:	A3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NOT AVAILABLE
Tank Age:	9	Tank Piping:	UNKNOWN
Tank Size (Units):	2000 (GALLONS)	Tank Material:	UNKNOWN
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	NOT REPORTED	Tank Piping:	STEEL
Tank Size (Units):	2000 (GALLONS)	Tank Material:	STEEL



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Tank ID:	U2	Tank Status:	REMOVED
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	NOT REPORTED	Tank Piping:	STEEL
Tank Size (Units):	2000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	A1		
Tank Installed Date / Age:	01/01/1986		
Tank Removal Date:	09/01/1992		
Description / Comment:	MONITOR TYPE: NOT APPLICABLE		
Description / Comment:	OWNER: LITTLE ELM ISD500 LOBOLITTLE ELM,TX 75068		
Tank ID#:	A2		
Tank Installed Date / Age:	01/01/1990		
Tank Removal Date:	09/01/1992		
Description / Comment:	MONITOR TYPE: NOT APPLICABLE		
Description / Comment:	OWNER: LITTLE ELM ISD500 LOBOLITTLE ELM,TX 75068		
Tank ID#:	A3		
Tank Installed Date / Age:	01/01/1990		
Description / Comment:	MONITOR TYPE: NOT APPLICABLE		
Description / Comment:	OWNER: LITTLE ELM ISD500 LOBOLITTLE ELM,TX 75068		
Tank ID#:	U1		
Tank Installed Date / Age:	UNRECORDED		
Tank Removal Date:	07/01/1990		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: LITTLE ELM ISD500 LOBOLITTLE ELM,TX 75068		
Tank ID#:	U2		
Tank Installed Date / Age:	UNRECORDED		
Tank Removal Date:	07/01/1990		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: LITTLE ELM ISD500 LOBOLITTLE ELM,TX 75068		

VISTA Address*:	MATLACK COMPANY *418 JONES AT UNITED RESI LONGVIEW, TX 75602	VISTA ID#:	5795008
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
State Spills / SRC# 4186		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Region / District:	04		
Spiller Company:	MATLACK COMPANY		
Substance:	AIR FLEX 401 RESIN		
Quantity Spilled:	50 GAL	Spilled Units:	NOT REPORTED
Spill Cause:	EQUIPMENT FAILURE		
Spill Source:	001		
Water Body Affected:	NONE		
Remedial Status:	YES	Damages:	NOT REPORTED

Map ID

**43**



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

VISTA Address*:	<b>CRAIG OLDEN INC</b> <b>661 E SHAHAN'S PRAIRIE RD</b> <b>LITTLE ELM, TX 75068</b>	VISTA ID#:	1812473
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**44**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0053336
Agency Address:	SAME AS ABOVE		
Underground Tanks:	2		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	2		
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	12	Tank Piping:	STEEL
Tank Size (Units):	3000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	12	Tank Piping:	STEEL
Tank Size (Units):	1000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1984		
Tank Removal Date:	08/01/1996		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: CRAIG OLDEN INCP O BOX 5000 LITTLE ELM, TX 75068		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1984		
Tank Removal Date:	08/01/1996		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: CRAIG OLDEN INCP O BOX 5000 LITTLE ELM, TX 75068		

VISTA Address*:	<b>STARLITE SIGN CO</b> <b>7923 E MCKINNEY</b> <b>DENTON, TX 76208</b>	VISTA ID#:	3971154
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point

Map ID

**45**

<b>RCRA-SmGen - RCRA-Small Generator / SRC# 5596</b>		EPA ID:	TXD007352230
Agency Address:	STARLITE SIGN CO 7923 E MCKINNEY DENTON, TX 76201		
Generator Class:	Generates 100 kg./month but less than 1000 kg./month of non-acutely hazardous waste		
<b>AST - Above Ground Storage Tank / SRC# 5627</b>		Agency ID:	0055248
Agency Address:	STARLITE SIGN OF DENTON, INC 7923 E MCKINNEY DENTON, TX 76208		
Underground Tanks:	NOT REPORTED		
Aboveground Tanks:	1		
Tanks Removed:	1		
Tank ID:	A1	Tank Status:	TEMP OUT OF SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NOT AVAILABLE
Tank Age:	5	Tank Piping:	UNKNOWN
Tank Size (Units):	2000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	A1		
Tank Installed Date / Age:	01/01/1990		
Tank Removal Date:	08/01/1995		
Description / Comment:	MONITOR TYPE: NOT APPLICABLE		
Description / Comment:	OWNER: C L SAND CO. INC14104 ARVIN HILL RDAUBREY, TX 76227		



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VISTA Address*:	<b>CORPS OF ENGINEERS 1.0 MI S OF SH-380 W OF FM-424 MARSHALL, TX 75670</b>	VISTA ID#:	3050470
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>STATE SWLF - Solid Waste Landfill / SRC# 5625</b>		Agency ID:	00110
Agency Address:	CORPS OF ENGINEERS 1.0 MI S OF SH-380 W OF FM-424 CROSSROADS, TX		
Facility Type:	EXPERIMENTAL FACILITY		
Facility Status:	PROPOSED		
Facility Life:	NOT REPORTED		
Permit Status:	WITHDRAWN		
Waste:	NOT REPORTED		

Map ID

**46**

VISTA Address*:	<b>DENTON, CITY OF ADJACENT MOSELY RD, 1.2MI S OF US 38 MARSHALL, TX 75670</b>	VISTA ID#:	3048953
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>STATE SWLF - Solid Waste Landfill / SRC# 5625</b>		Agency ID:	00013
Agency Address:	DENTON, CITY OF ADJACENT MOSELY RD, 1.2MI S OF US 38 CROSSROADS, TX		
Facility Type:	SANITARY LANDFILL/LANDFILL		
Facility Status:	GRANDFATHER SITE		
Facility Life:	NOT REPORTED		
Permit Status:	PERMITTED/INACTIVE		
Waste:	NOT REPORTED		

Map ID

**47**

VISTA Address*:	<b>NAVO GENERAL STORE 4899 HWY 380 LITTLE ELM, TX 75068</b>	VISTA ID#:	6612126
		Distance/Direction:	0.00 MI / NA
		Plotted as:	Point
<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0007906
Agency Address:	SAME AS ABOVE		
Underground Tanks:	3		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	16	Tank Piping:	SINGLE WALL
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	16	Tank Piping:	SINGLE WALL
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	MONITOR PRESENT
Tank Age:	16	Tank Piping:	SINGLE WALL
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1983		
Description / Comment:	TANK MONITOR: INVENTORY CONTROL PIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: TRIPWAL, L. C. 250 N MILLEWISVILLE, TX 75067		
Tank ID#:	U2		

Map ID

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Tank Installed Date / Age:	01/01/1983
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: TRIPWAL, L. C.250 N MILLEWISVILLE, TX 75067
Tank ID#:	U3
Tank Installed Date / Age:	01/01/1983
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: TRIPWAL, L. C.250 N MILLEWISVILLE, TX 75067

VISTA Address*:	ABLE FUEL INJECTION SVC 1419 CRESENT AVE LEWISVILLE, TX 75053	VISTA ID#:	3017141
		Distance/Direction:	<0.01 MI / S
		Plotted as:	Point
RCRA-LgGen - RCRA-Large Generator / SRC# 5596		EPA ID:	TXD988066866
Agency Address:	ABLE FUEL INJECTION SVC 1419 CRESENT AVE LEWISVILLE, TX 75029		
Generator Class:	Generates at least 1000 kg./month of non-acutely hazardous waste ( or 1 kg./month of acutely hazardous waste).		

Map ID

**49**

VISTA Address*:	LEWISVILLE WATER PROD. FACILITY 1400 N COWAN LEWISVILLE, TX 75057	VISTA ID#:	1389088
		Distance/Direction:	0.03 MI / S
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0027825
Agency Address:	LEWISVILLE WATER PROD. FACILITY 1400 N COWAN LEWISVILLE, TX 75067		
Underground Tanks:	1		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	25	Tank Piping:	STEEL
Tank Size (Units):	1000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1974		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: CITY OF LEWISVILLE P O BOX 299002LEWISVILLE, TX 750299002		

Map ID

**50**

VISTA Address*:	MCGEE'S COUNTRY STORE 1298 FM RD 407 LEWISVILLE, TX 75067	VISTA ID#:	1797534
		Distance/Direction:	0.04 MI / S
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0025399
Agency Address:	SAME AS ABOVE		
Underground Tanks:	4		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	16	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	10000 (GALLONS)	Tank Material:	STEEL

Map ID

**51**



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Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	22	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	10000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	22	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U4	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	22	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1983		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: BILLY BOB MCGEE1702 MCGEE LN LEWISVILLE, TX 75067		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1977		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: BILLY BOB MCGEE1702 MCGEE LN LEWISVILLE, TX 75067		
Tank ID#:	U3		
Tank Installed Date / Age:	01/01/1977		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: BILLY BOB MCGEE1702 MCGEE LN LEWISVILLE, TX 75067		
Tank ID#:	U4		
Tank Installed Date / Age:	01/01/1977		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: BILLY BOB MCGEE1702 MCGEE LN LEWISVILLE, TX 75067		

VISTA Address*:	THE DEPOT 1175 JUSTIN RD FLOWER MOUND, TX 75028	VISTA ID#:	3668592
		Distance/Direction:	0.08 MI / S
		Plotted as:	Point

Map ID

**51**

STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0062878
Agency Address:	SAME AS ABOVE		
Underground Tanks:	4		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	8000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	8000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	14	Tank Piping:	SINGLE WALL
Tank Size (Units):	10000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC



\* VISTA address includes enhanced city and ZIP.

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

<b>Tank ID:</b>	U4	<b>Tank Status:</b>	ACTIVE/IN SERVICE
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b>	MONITOR PRESENT
<b>Tank Age:</b>	14	<b>Tank Piping:</b>	SINGLE WALL
<b>Tank Size (Units):</b>	10000 (GALLONS)	<b>Tank Material:</b>	FIBERGLASS REINFORCED PLASTIC
<b>Tank ID#:</b>	U1		
<b>Tank Installed Date / Age:</b>	03/01/1985		
<b>Description / Comment:</b>	TANK MONITOR: TIGHTNESS TESTINGPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: WALIANY, HASAN1175 JUSTIN RDFLOWER MOUND, TX 75028		
<b>Tank ID#:</b>	U2		
<b>Tank Installed Date / Age:</b>	03/01/1985		
<b>Description / Comment:</b>	TANK MONITOR: TIGHTNESS TESTINGPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: WALIANY, HASAN1175 JUSTIN RDFLOWER MOUND, TX 75028		
<b>Tank ID#:</b>	U3		
<b>Tank Installed Date / Age:</b>	03/01/1985		
<b>Description / Comment:</b>	TANK MONITOR: TIGHTNESS TESTINGPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: WALIANY, HASAN1175 JUSTIN RDFLOWER MOUND, TX 75028		
<b>Tank ID#:</b>	U4		
<b>Tank Installed Date / Age:</b>	03/01/1985		
<b>Description / Comment:</b>	TANK MONITOR: TIGHTNESS TESTINGPIPE MONITOR: LINE LEAK DETECTORS		
<b>Description / Comment:</b>	OWNER: WALIANY, HASAN1175 JUSTIN RDFLOWER MOUND, TX 75028		

<b>VISTA Address*:</b>	<b>PHIL DILL BOATS INC</b> <b>1520 N STEMMONS</b> <b>LEWISVILLE, TX 75057</b>	<b>VISTA ID#:</b>	328522
		<b>Distance/Direction:</b>	0.07 MI / S
		<b>Plotted as:</b>	Point

Map ID

**52**

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>	<b>EPA/Agency ID:</b>	N/A
<b>Agency Address:</b>	PHIL DILL BOAT INC 1520 N STEMMONS LEWISVILLE, TX 75067	
<b>Facility ID:</b>	0000869	
<b>Leak ID#:</b>	102016	
<b>Leak Report Date:</b>	1/3/92	
<b>Region / District:</b>	ARLINGTON	
<b>Responsible Party:</b>	DILL PHIL BOAT INC	
<b>Description / Comment:</b>	MEDIA AFFECTED: MINOR SOIL CONTAMINATION - NO REMEDIAL ACTION REQUIRED REMEDIAL STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSED RESPONSIBLE PARTY INFO: 1520 N STEMMONS, LEWISVILLE, TX, 75067, 214/436-3581	

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>	<b>Agency ID:</b>	0000869
<b>Agency Address:</b>	PHIL DILL BOATS, INC. 1520 N STEMMONS LEWISVILLE, TX 75067	
<b>Underground Tanks:</b>	1	
<b>Aboveground Tanks:</b>	NOT REPORTED	
<b>Tanks Removed:</b>	1	
<b>Tank ID:</b>	U1	<b>Tank Status:</b> REMOVED
<b>Tank Contents:</b>	GASOLINE (UNSPECIFIED)	<b>Leak Monitoring:</b> NO MONITOR
<b>Tank Age:</b>	16	<b>Tank Piping:</b> STEEL
<b>Tank Size (Units):</b>	5000 (GALLONS)	<b>Tank Material:</b> STEEL
<b>Tank ID#:</b>	U1	
<b>Tank Installed Date / Age:</b>	01/01/1976	
<b>Tank Removal Date:</b>	01/01/1992	
<b>Description / Comment:</b>	TANK MONITOR: NONE PIPE MONITOR: NONE	
<b>Description / Comment:</b>	OWNER: PHIL DILL BOATS, INC. 1520 N STEMMONS LEWISVILLE, TX 75067	



\* VISTA address includes enhanced city and ZIP.

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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

VISTA Address*:	<b>LAKE DALLAS SERVICE CENTER</b> <b>3100 S GARRISON</b> <b>LAKE DALLAS, TX 75065</b>	VISTA ID#:	1399601
		Distance/Direction:	0.08 MI / SW
		Plotted as:	Point

Map ID

**53**

**STATE UST - State Underground Storage Tank / SRC# 5627**

Agency ID: 0039202

Agency Address:		LAKE DALLAS SERVICE CENTER 3100 S GARRISON CORINTH, TX 750650998	
Underground Tanks:		3	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		1	
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	9	Tank Piping:	STEEL
Tank Size (Units):	10000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U1A	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	7	Tank Piping:	DOUBLE WALL, SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID:	U2A	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	MONITOR PRESENT
Tank Age:	7	Tank Piping:	DOUBLE WALL, SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID#:		U1	
Tank Installed Date / Age:		01/01/1983	
Tank Removal Date:		04/01/1992	
Description / Comment:		TANK MONITOR: NONE PIPE MONITOR: NONE	
Description / Comment:		OWNER: TU ELECTRIC1601 BRYAN STDALLAS, TX 75201	
Tank ID#:		U1A	
Tank Installed Date / Age:		05/01/1992	
Description / Comment:		TANK MONITOR: AUTO IN-TANK MONITORING INVENTORY CONTROL PIPE MONITOR: INTERSTITIAL MONITORING FOR DOUBLE WALL UST	
Description / Comment:		OWNER: TU ELECTRIC1601 BRYAN STDALLAS, TX 75201	
Tank ID#:		U2A	
Tank Installed Date / Age:		05/01/1992	
Description / Comment:		TANK MONITOR: AUTO IN-TANK MONITORING INVENTORY CONTROL PIPE MONITOR: INTERSTITIAL MONITORING FOR DOUBLE WALL UST	
Description / Comment:		OWNER: TU ELECTRIC1601 BRYAN STDALLAS, TX 75201	

VISTA Address*:	<b>GTSW - LEWISVILLE PLANT FACILITY</b> <b>1132 FM 407</b> <b>LEWISVILLE, TX 75067</b>	VISTA ID#:	5172878
		Distance/Direction:	0.10 MI / S
		Plotted as:	Point

Map ID

**54**

**STATE UST - State Underground Storage Tank / SRC# 5627**

Agency ID: 0022429

Agency Address:		SAME AS ABOVE	
Underground Tanks:		4	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		2	
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	NOT REPORTED	Tank Piping:	SINGLE WALL
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Tank ID:	U1A	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	MONITOR PRESENT
Tank Age:	7	Tank Piping:	DOUBLE WALL,DOUBLE WALL
Tank Size (Units):	4000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID:	U2	Tank Status:	REMOVED
Tank Contents:	DIESEL	Leak Monitoring:	MONITOR PRESENT
Tank Age:	NOT REPORTED	Tank Piping:	SINGLE WALL
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2A	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	7	Tank Piping:	DOUBLE WALL,DOUBLE WALL
Tank Size (Units):	8000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID#:	U1		
Tank Installed Date / Age:	UNRECORDED		
Tank Removal Date:	06/01/1992		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: NONE		
Description / Comment:	OWNER: GTE SOUTHWEST, INC.500 E CARPENTER FRWYIRVING,TX 75062		
Tank ID#:	U1A		
Tank Installed Date / Age:	06/01/1992		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: GTE SOUTHWEST, INC.500 E CARPENTER FRWYIRVING,TX 75062		
Tank ID#:	U2		
Tank Installed Date / Age:	UNRECORDED		
Tank Removal Date:	06/01/1992		
Description / Comment:	TANK MONITOR: TIGHTNESS TESTINGPIPE MONITOR: NONE		
Description / Comment:	OWNER: GTE SOUTHWEST, INC.500 E CARPENTER FRWYIRVING,TX 75062		
Tank ID#:	U2A		
Tank Installed Date / Age:	06/01/1992		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: GTE SOUTHWEST, INC.500 E CARPENTER FRWYIRVING,TX 75062		

VISTA Address*:	GTE LEWISVILLE FACILITY 1132 FM 407 LEWISVILLE, TX 75067	VISTA ID#:	1798130
		Distance/Direction:	0.10 MI / S
		Plotted as:	Point

Map ID

**54**

STATE LUST - State Leaking Underground Storage Tank / SRC# 5626	EPA/Agency ID:	N/A
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Agency Address:	SAME AS ABOVE
Facility ID:	0022429
Leak ID#:	104621
Leak Report Date:	9/14/92
Region / District:	ARLINGTON
Responsible Party:	GTE SOUTHWEST INC
Description / Comment:	MEDIA AFFECTED: IMPACTED GW W/IN 500FT-0.25MI TO SW USED BY HUMAN, ENDGR SPECREMEDIATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSEDRESPONSIBLE PARTY INFO: 290 E CARPENTER FWY,IRVING,TX,75062,214/717-7840

STATE UST - State Underground Storage Tank / SRC# 5627	Agency ID:	0057484
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Agency Address:	GTE SW-LEWISVILLE GARDEN RIDGE 1128 FM 407 LEWISVILLE, TX 75067
Underground Tanks:	1
Aboveground Tanks:	NOT REPORTED
Tanks Removed:	NOT REPORTED



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**PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.**

Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	MONITOR PRESENT
Tank Age:	9	Tank Piping:	PROTECTED STEEL
Tank Size (Units):	4000 (GALLONS)	Tank Material:	COMPOSITE,FIBERGLASS REINFORCED PLASTIC
Tank ID#:	U1		
Tank Installed Date / Age:	11/01/1990		
Description / Comment:	TANK MONITOR: INTERSTITIAL MONITORING FOR DOUBLE WALL USTPIPE MONITOR: NONE		
Description / Comment:	OWNER: GTE SOUTHWEST, INC.500 E CARPENTER FRWYIRVING,TX 75062		

**SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile)**

Map ID

**55**

VISTA Address*:	JOE'S COUNTRY STORE 7616 N MAIN THE COLONY, TX 75056	VISTA ID#:	6475880
		Distance/Direction:	0.13 MI / SE
		Plotted as:	Point

STATE LUST - State Leaking Underground Storage Tank / SRC# 5626	EPA/Agency ID:	N/A
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Agency Address:	SAME AS ABOVE
Facility ID:	0058198
Leak ID#:	110351
Leak Report Date:	1/29/96
Region / District:	ARLINGTON
Responsible Party:	GITA KIANI
Description / Comment:	MEDIA AFFECTED: NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TORECEPTORSREMEDATION STATUS: INITIAL DIRECTIVES ISSUED A WAITING INITIALRESPONSERESPONSIBLE PARTY INFO: 7616 N MAIN,THE COLONY,TX,75056,972/625-6431

STATE LUST - State Leaking Underground Storage Tank / SRC# 5626	EPA/Agency ID:	N/A
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Agency Address:	SAME AS ABOVE
Facility ID:	0058198
Leak ID#:	112360
Leak Report Date:	6/6/97
Region / District:	ARLINGTON
Responsible Party:	GITA KIANI
Description / Comment:	MEDIA AFFECTED: IMPACTED GW W/IN 500FT-0.25MI TO SW USED BY HUMAN, ENDGR SPECREMEDATION STATUS: PENDING CLOSURE, WAITING FOR MONITORING CLOSURE REPORTRESPONSIBLE PARTY INFO: 7616 N MAIN,THE COLONY,TX,75056,972/625-6431

STATE UST - State Underground Storage Tank / SRC# 5627	Agency ID:	0058198
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Agency Address:		JOES COUNTRY STORE 7616 N MAIN THE COLONY, TX 75056	
Underground Tanks:		2	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		NOT REPORTED	
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	18	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	10000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	18	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		



\* VISTA address includes enhanced city and ZIP.

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**SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile) CONT.**

Tank Installed Date / Age:	01/01/1981
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE
Description / Comment:	OWNER: KIANIS-SAMADI, GITA7616 N MAINTHE COLONY, TX 75056
Tank ID#:	U2
Tank Installed Date / Age:	01/01/1981
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE
Description / Comment:	OWNER: KIANIS-SAMADI, GITA7616 N MAINTHE COLONY, TX 75056

VISTA Address*:	TRINTY CAR WASH 1450 W JUSTIN RD LEWISVILLE, TX 75067	VISTA ID#:	6883566
		Distance/Direction:	0.14 MI / S
		Plotted as:	Point

Map ID

**56**

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0068944
Agency Address:	SAME AS ABOVE		
Underground Tanks:	1		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	3	Tank Piping:	DOUBLE WALL, SINGLE WALL
Tank Size (Units):	15000 (GALLONS)	Tank Material:	FIBERGLASS REINFORCED PLASTIC
Tank ID#:	U1		
Tank Installed Date / Age:	03/01/1996		
Description / Comment:	TANK MONITOR: AUTO IN-TANK MONITORING INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: OASIS CARWASH CORPORATE OFFICEP O BOX 1187ADDISON, TX 75001		

VISTA Address*:	WEST TEX AUTO TIRE 1425 JUSTIN RD #350 LEWISVILLE, TX 75067	VISTA ID#:	1408958
		Distance/Direction:	0.15 MI / S
		Plotted as:	Point

Map ID

**56**

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility ID:	0049513		
Leak ID#:	112459		
Leak Report Date:	10/29/96		
Region / District:	ARLINGTON		
Responsible Party:	WEST TEX SERVICE STATION LTD		
Description / Comment:	MEDIA AFFECTED: A DESIGNATED MAJOR OR MINOR AQUIFER IS IMPACTEDREMEDATION STATUS: PHASE 2 IN PROGRESSRESPONSIBLE PARTY INFO: 6107 S COOPER ST, ARLINGTON, TX, 76001, 817/282-0972		

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0049513
Agency Address:	WEST-TEX TIRE AUTO 1425 JUSTIN STE 950 RD LEWISVILLE, TX 75067		
Underground Tanks:	5		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	13	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL



\* VISTA address includes enhanced city and ZIP.

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**SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile) CONT.**

Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	13	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	13	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U4	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	13	Tank Piping:	WALLED/DOUBLE WALLED
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U5	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	USED OIL	Leak Monitoring:	MONITOR PRESENT
Tank Age:	13	Tank Piping:	SINGLE WALL
Tank Size (Units):	500 (GALLONS)	Tank Material:	COMPOSITE,FIBERGLASS REINFORCED PLASTIC
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1986		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: WEST-TEX SERVICE STATION LTDP O BOX 150835ARLINGTON,TX 760156835		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1986		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: WEST-TEX SERVICE STATION LTDP O BOX 150835ARLINGTON,TX 760156835		
Tank ID#:	U3		
Tank Installed Date / Age:	01/01/1986		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: WEST-TEX SERVICE STATION LTDP O BOX 150835ARLINGTON,TX 760156835		
Tank ID#:	U4		
Tank Installed Date / Age:	01/01/1986		
Description / Comment:	TANK MONITOR: NONEPIPE MONITOR: NONE		
Description / Comment:	OWNER: WEST-TEX SERVICE STATION LTDP O BOX 150835ARLINGTON,TX 760156835		
Tank ID#:	U5		
Tank Installed Date / Age:	03/01/1986		
Description / Comment:	TANK MONITOR: GROUNDWATER MONITORINGPIPE MONITOR: NONE		
Description / Comment:	OWNER: WEST-TEX SERVICE STATION LTDP O BOX 150835ARLINGTON,TX 760156835		

VISTA Address*:	EXXON STORE 6-0357 1501 W FM 407 LEWISVILLE, TX 75067	VISTA ID#:	7066672
		Distance/Direction:	0.17 MI / S
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0069844
Agency Address:	SAME AS ABOVE		
Underground Tanks:	3		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	2	Tank Piping:	FIBERGLASS REINFORCED PLASTIC,DBL WALLED
Tank Size (Units):	12000 (GALLONS)	Tank Material:	OTHER

Map ID

**56**



\* VISTA address includes enhanced city and ZIP.

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**SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile) CONT.**

Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	2	Tank Piping:	FIBERGLASS REINFORCED PLASTIC, DBL WALLED
Tank Size (Units):	12000 (GALLONS)	Tank Material:	OTHER
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	2	Tank Piping:	FIBERGLASS REINFORCED PLASTIC, DBL WALLED
Tank Size (Units):	12000 (GALLONS)	Tank Material:	OTHER
Tank ID#:	U1		
Tank Installed Date / Age:	07/01/1997		
Description / Comment:	TANK MONITOR: AUTO IN-TANK MONITORING INVENTORY CONTROLPIPE MONITOR: INTERSTITIAL MONITORING FOR DOUBLE WALL UST		
Description / Comment:	OWNER: EXXON COMPANY USAPO BOX 4386HOUSTON, TX 772104386		
Tank ID#:	U2		
Tank Installed Date / Age:	07/01/1997		
Description / Comment:	TANK MONITOR: AUTO IN-TANK MONITORING INVENTORY CONTROLPIPE MONITOR: INTERSTITIAL MONITORING FOR DOUBLE WALL UST		
Description / Comment:	OWNER: EXXON COMPANY USAPO BOX 4386HOUSTON, TX 772104386		
Tank ID#:	U3		
Tank Installed Date / Age:	07/01/1997		
Description / Comment:	TANK MONITOR: AUTO IN-TANK MONITORING INVENTORY CONTROLPIPE MONITOR: INTERSTITIAL MONITORING FOR DOUBLE WALL UST		
Description / Comment:	OWNER: EXXON COMPANY USAPO BOX 4386HOUSTON, TX 772104386		

VISTA Address*:	KEN'S QUIK MART FOODS 7420 MAIN ST THE COLONY, TX 75056	VISTA ID#:	6883806
		Distance/Direction:	0.16 MI / SE
		Plotted as:	Point

Map ID

**57**

STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0012204
Agency Address:	SAME AS ABOVE		
Underground Tanks:	3		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	15	Tank Piping:	SINGLE WALL
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	15	Tank Piping:	SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	15	Tank Piping:	SINGLE WALL
Tank Size (Units):	NOT REPORTED (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1984		
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: TIGHTNESS TESTING		
Description / Comment:	OWNER: D. KAY JOHNSTON INC7420 MAIN THE COLONY, TX 75056		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1984		



\* VISTA address includes enhanced city and ZIP.

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**SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile) CONT.**

Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: D. KAY JOHNSTON INC7420 MAINTHE COLONY, TX 75056
Tank ID#:	U3
Tank Installed Date / Age:	01/01/1984
Description / Comment:	TANK MONITOR: INVENTORY CONTROLPIPE MONITOR: LINE LEAK DETECTORS
Description / Comment:	OWNER: D. KAY JOHNSTON INC7420 MAINTHE COLONY, TX 75056

VISTA Address*:	<b>MOBIL #12-147 6262 W MAIN ST THE COLONY, TX 75056</b>	VISTA ID#:	6475878
		Distance/Direction:	0.17 MI / SE
		Plotted as:	Point

Map ID

**58**

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>		EPA/Agency ID:	N/A
Agency Address:	MOBIL #12-147 6262 W MAIN ST LEWISVILLE, TX 0017660		
Facility ID:	0017660		
Leak ID#:	110522		
Region / District:	ARLINGTON		
Responsible Party:	MOBIL OIL		
Description / Comment:	MEDIA AFFECTED: GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS REMEDATION STATUS: PHASE 2 REPORT RECEIVED, REVIEW PENDING RESPONSIBLE PARTY INFO: 4200 SINGLETON BLVD, DALLAS, TX, 75212, 214/905-1737		

VISTA Address*:	<b>LEWISVILLE CITY OF 1100 N KEALY LEWISVILLE, TX 75057</b>	VISTA ID#:	2574045
		Distance/Direction:	0.19 MI / S
		Plotted as:	Point

Map ID

**59**

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>		EPA/Agency ID:	N/A
Agency Address:	LEWISVILLE CITY OF 1100 N KEALY LEWISVILLE, TX 75029		
Facility ID:	0027824		
Leak ID#:	101316		
Leak Report Date:	12/19/91		
Region / District:	ARLINGTON		
Responsible Party:	CITY OF LEWISVILLE		
Description / Comment:	MEDIA AFFECTED: MINOR SOIL CONTAMINATION - DOES NOT REQUIRE A RAPREMEDATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSED RESPONSIBLE PARTY INFO: 1197 W MAIN, LEWISVILLE, TX, 214/219-3520		

<b>STATE UST - State Underground Storage Tank / SRC# 5627</b>		Agency ID:	0027824
Agency Address:	CITY OF LEWISVILLE 1100 N KEALY LEWISVILLE, TX 75067		
Underground Tanks:	4		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	23	Tank Piping:	STEEL
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	23	Tank Piping:	STEEL
Tank Size (Units):	8000 (GALLONS)	Tank Material:	STEEL



\* VISTA address includes enhanced city and ZIP.

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Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	NO MONITOR
Tank Age:	23	Tank Piping:	STEEL
Tank Size (Units):	4000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U4	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	USED OIL	Leak Monitoring:	NO MONITOR
Tank Age:	23	Tank Piping:	STEEL
Tank Size (Units):	1000 (GALLONS)	Tank Material:	STEEL
Tank ID#:	U1		
Tank Installed Date / Age:	01/01/1976		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: CITY OF LEWISVILLE O BOX 299002 LEWISVILLE, TX 750299002		
Tank ID#:	U2		
Tank Installed Date / Age:	01/01/1976		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: CITY OF LEWISVILLE O BOX 299002 LEWISVILLE, TX 750299002		
Tank ID#:	U3		
Tank Installed Date / Age:	01/01/1976		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: CITY OF LEWISVILLE O BOX 299002 LEWISVILLE, TX 750299002		
Tank ID#:	U4		
Tank Installed Date / Age:	01/01/1976		
Description / Comment:	TANK MONITOR: NONE PIPE MONITOR: NONE		
Description / Comment:	OWNER: CITY OF LEWISVILLE O BOX 299002 LEWISVILLE, TX 750299002		

VISTA Address*:	UAC OF GARLAND, INC. 7228 MAIN ST THE COLONY, TX 75056	VISTA ID#:	2579974
		Distance/Direction:	0.20 MI / SE
		Plotted as:	Point
STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0059650

Map ID

**60**

Agency Address:		SAME AS ABOVE	
Underground Tanks:		2	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		2	
Tank ID:	U1	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	NOT REPORTED	Tank Piping:	SINGLE WALL
Tank Size (Units):	3000 (GALLONS)	Tank Material:	STEEL
Tank ID:	U2	Tank Status:	REMOVED
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	NO MONITOR
Tank Age:	NOT REPORTED	Tank Piping:	SINGLE WALL
Tank Size (Units):	3000 (GALLONS)	Tank Material:	STEEL
Tank ID#:		U1	
Tank Installed Date / Age:		UNRECORDED	
Tank Removal Date:		08/01/1991	
Description / Comment:		TANK MONITOR: NONEPIPE MONITOR: NONE	
Description / Comment:		OWNER: UAC OF GARLAND, INC.503 W HIGHLANDSOUTHLAKE,TX 76092	
Tank ID#:		U2	
Tank Installed Date / Age:		UNRECORDED	
Tank Removal Date:		08/01/1991	
Description / Comment:		TANK MONITOR: NONEPIPE MONITOR: NONE	



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# SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile) CONT.

Description / Comment: OWNER: UAC OF GARLAND, INC. 503 W HIGHLANDSOUTH LAKE, TX 76092

VISTA Address*:	CLOSED FACILITY 7228 N MAIN ST THE COLONY, TX 75056	VISTA ID#:	2579973
		Distance/Direction:	0.20 MI / SE
		Plotted as:	Point

Map ID

60

STATE LUST - State Leaking Underground Storage Tank / SRC# 5626		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility ID:	0059650		
Leak ID#:	100282		
Leak Report Date:	9/23/91		
Region / District:	ARLINGTON		
Responsible Party:	UAC OF GARLAND, INC.		
Description / Comment:	MEDIA AFFECTED: GW IMPACTED, NO APPARENT THREATS OR IMPACTS TO RECEPTORS REMEDICATION STATUS: PHASE 3 IN PROGRESS RESPONSIBLE PARTY INFO: 503 W HIGHLAND, SOUTH LAKE, TX, 76092, 817/481-6381		

VISTA Address*:	C B EXPRESS 4250 E UNIVERSITY DENTON, TX 76208	VISTA ID#:	4555510
		Distance/Direction:	0.24 MI / NW
		Plotted as:	Point

Map ID

61

STATE UST - State Underground Storage Tank / SRC# 5627		Agency ID:	0065157
Agency Address:	C B EXPRESS 4250 E UNIVERSITY DENTON, TX 76201		
Underground Tanks:	3		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	U1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	10	Tank Piping:	SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	COMPOSITE, FIBERGLASS REINFORCED PLASTIC
Tank ID:	U2	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	10	Tank Piping:	SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	COMPOSITE, FIBERGLASS REINFORCED PLASTIC
Tank ID:	U3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	GASOLINE (UNSPECIFIED)	Leak Monitoring:	MONITOR PRESENT
Tank Age:	10	Tank Piping:	SINGLE WALL
Tank Size (Units):	6000 (GALLONS)	Tank Material:	COMPOSITE, FIBERGLASS REINFORCED PLASTIC
Tank ID#:	U1		
Tank Installed Date / Age:	09/01/1989		
Description / Comment:	TANK MONITOR: INVENTORY CONTROL PIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: LILLARD, G T617 MAGNOLIA ST DENTON, TX 762010822		
Tank ID#:	U2		
Tank Installed Date / Age:	09/01/1989		
Description / Comment:	TANK MONITOR: INVENTORY CONTROL PIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: LILLARD, G T617 MAGNOLIA ST DENTON, TX 762010822		
Tank ID#:	U3		
Tank Installed Date / Age:	09/01/1989		
Description / Comment:	TANK MONITOR: INVENTORY CONTROL PIPE MONITOR: LINE LEAK DETECTORS		
Description / Comment:	OWNER: LILLARD, G T617 MAGNOLIA ST DENTON, TX 762010822		



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# SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile) CONT.

VISTA Address*:	STOP N GO #1127 4610 FM 423 THE COLONY, TX 75056	VISTA ID#:	5109461
		Distance/Direction:	0.24 MI / SE
		Plotted as:	Point
STATE LUST - State Leaking Underground Storage Tank / SRC# 5626		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility ID:	0039401		
Leak ID#:	107152		
Leak Report Date:	7/14/93		
Region / District:	ARLINGTON		
Responsible Party:	NATIONAL CONVENIENCE STORES		
Description / Comment:	MEDIA AFFECTED: GROUNDWATER OTHER THAN 1B, SITE CHARACTERIZATIONINCOMPLETEREMEDIATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSEDRESPONSIBLE PARTY INFO: PO BOX 758,HOUSTON,TX,770010758,713/863-2318		

Map ID

62

# SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile)

VISTA Address*:	HOWDY DOODY GRO 1026 N MILL LEWISVILLE, TX 75057	VISTA ID#:	6982928
		Distance/Direction:	0.28 MI / S
		Plotted as:	Point
STATE LUST - State Leaking Underground Storage Tank / SRC# 5626		EPA/Agency ID:	N/A
Agency Address:	HOWDY DOODY GRO 1026 N MILL LEWISVILLE, TX 75067		
Facility ID:	0007914		
Leak ID#:	091680		
Leak Report Date:	2/22/88		
Region / District:	ARLINGTON		
Responsible Party:	KELSOE OIL COMPANY		
Description / Comment:	MEDIA AFFECTED: GROUNDWATER OTHER THAN 1B, SITE CHARACTERIZATIONINCOMPLETEREMEDIATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSEDRESPONSIBLE PARTY INFO: P.O. DRAWER R,DENTON,TX,76202,817/387-3804		

Map ID

63

VISTA Address*:	CLOSED HOWDY-DOODY STORE 1026 N MILL ST LEWISVILLE, TX 75057	VISTA ID#:	2577973
		Distance/Direction:	0.28 MI / S
		Plotted as:	Point
STATE LUST - State Leaking Underground Storage Tank / SRC# 5626		EPA/Agency ID:	N/A
Agency Address:	CLOSED HOWDY-DOODY STORE 1026 N MILL ST LEWISVILLE, TX 75067		
Facility ID:	0007914		
Leak ID#:	099797		
Leak Report Date:	6/26/91		
Region / District:	ARLINGTON		
Responsible Party:	ARTIN MINASSIAN		
Description / Comment:	MEDIA AFFECTED: IMPACTED GW W/IN 500FT-0.25MI TO SW USED BY HUMAN, ENDGR SPECREMEDIATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSEDRESPONSIBLE PARTY INFO: 842 S VALLEY PKWY,LEWISVILLE,TX,75067,214/436-7250		

Map ID

63



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**SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile) CONT.**

Map ID

**64**

VISTA Address*:	<b>VILLAGE FORD</b> <b>1144 N STEMMONS FRWY</b> <b>LEWISVILLE, TX 75057</b>	VISTA ID#:	162121
		Distance/Direction:	0.35 MI / S
		Plotted as:	Point

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>	EPA/Agency ID:	N/A
Agency Address:	FRONTIER FORD INC 1144 N STEMMONS FWY LEWISVILLE, TX 75067	
Facility ID:	0012588	
Leak ID#:	095426	
Leak Report Date:	2/12/90	
Region / District:	ARLINGTON	
Responsible Party:	FRONTIER FORD WGW LTD	
Description / Comment:	MEDIA AFFECTED: SOIL CONTAMINATION ONLY, REQUIRES FULL SITE ASSESSMENT RAPREMIATION STATUS: INITIAL DIRECTIVES ISSUED A WAITING INITIALRESPONSERESPONSIBLE PARTY INFO: 900 JACKSON ST,DALLAS, TX,75202,214/747-2550	

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>	EPA/Agency ID:	N/A
Agency Address:	FRONTIER FORD 1144 STEMMONS FWY LEWISVILLE, TX 75067	
Facility ID:	0012588	
Leak ID#:	098427	
Leak Report Date:	7/24/91	
Region / District:	ARLINGTON	
Responsible Party:	FDIC	
Description / Comment:	MEDIA AFFECTED: GROUNDWATER OTHER THAN 1B, SITE CHARACTERIZATIONINCOMPLETEREMIATION STATUS: FINAL CONCURRENCE ISSUED, CASE CLOSEDRESPONSIBLE PARTY INFO: 1910 PACIFIC AVE STE 1300,DALLAS, TX,752014586,214/385-3701	

Map ID

**65**

VISTA Address*:	<b>NORTHWEST BUTANE</b> <b>9001 FM 423</b> <b>FRISCO, TX 75034</b>	VISTA ID#:	1798136
		Distance/Direction:	0.41 MI / E
		Plotted as:	Point

<b>STATE LUST - State Leaking Underground Storage Tank / SRC# 5626</b>	EPA/Agency ID:	N/A
Agency Address:	NORTHWEST BUTANE 9001 FM 423 FRISCO, TX	
Facility ID:	0055695	
Leak ID#:	108267	
Leak Report Date:	6/16/94	
Region / District:	ARLINGTON	
Responsible Party:	NORTHWEST BUTANE GAS CO	
Description / Comment:	MEDIA AFFECTED: NO GW IMPACT, NO APPARENT THREATS OR IMPACTS TORECEPTORSREMIATION STATUS: INITIAL DIRECTIVES ISSUED A WAITING INITIALRESPONSERESPONSIBLE PARTY INFO: 11551 HARRY HINES BLVD,DALLAS, TX,75229,214/247-6121	

**SITES IN THE SURROUNDING AREA (within 1/2 - 1 mile)**

No Records Found



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# UNMAPPED SITES

VISTA Address*:	H L MIZE BOX 846 LAKE DALLAS, TX 75065	VISTA ID#:	196648
NFRAP / SRC# 5595		EPA ID:	TXD981048341
Agency Address:	SAME AS ABOVE		
Site Description:	THE SITE IS THE LOCATION OF A PESTICIDE APPLICATOR WHERE HAZARDOUS WASTE MAY BE TREATED, STORED OR DISPOSED.		
EPA Region:	6		
Congressional District:	0		
Federal Facility:	Agency Code ( )		
Facility Ownership:	OTHER		
Site Incident Category:	unknown		
Federal Facility Docket:	SITE IS NOT INCLUDED ON THE DOCKET		
NPL Status:	NOT ON NPL		
Incident Type:	Unknown		
Proposed NPL Update #:	0		
Final NPL Update #:	0		
Financial Management System ID:	NOT REPORTED		
Latitude:	0		
Longitude:	0		
Lat/Long Source:	Agency Code ( )		
Lat/Long Accuracy:	Unknown		
Dioxin Tier:	Unknown		
USGS Hydro Unit:	12030103		
RCRA Indicator:	Unknown		
Unit Id:	0		
Unit Name:	ENTIRE SITE		
Type:	DISCOVERY	Lead Agency:	EPA FUND-FINANCED
Qualifier:	UNKNOWN	Category:	Unknown
Name:	NOT REPORTED	Actual Start Date:	NOT REPORTED
Plan Status:	Unknown	Actual Completion Date:	UNKNOWN
Type:	PRELIMINARY ASSESSMENT	Lead Agency:	STATE, FUND FINANCED
Qualifier:	NO FURTHER REMEDIAL ACTION PLANNED	Category:	Unknown
Name:	NOT REPORTED	Actual Start Date:	UNKNOWN
Plan Status:	Unknown	Actual Completion Date:	UNKNOWN



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# SITE ASSESSMENT - SPECIAL REPORT

## DESCRIPTION OF DATABASES SEARCHED

### A) DATABASES SEARCHED TO 1 MILE

**NPL**  
**SRC#: 5691**

VISTA conducts a database search to identify all sites within 1 mile of your property.  
**The agency release date for NPL was March, 1999.**

The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the US Dept of Health and Human Services and the US EPA in order to become an NPL site.

**SPL**  
**SRC#: 5254**

VISTA conducts a database search to identify all sites within 1 mile of your property.  
**The agency release date for State Superfund Program was July, 1998.**

This database is provided by the Natural Resource Conservation Commission. The agency may be contacted at: 512-239-2458.

**CORRACTS**  
**SRC#: 5596**

VISTA conducts a database search to identify all sites within 1 mile of your property.  
**The agency release date for HWDMS/RCRIS was February, 1999.**

The EPA maintains this database of RCRA facilities which are undergoing "corrective action". A "corrective action order" is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.

### B) DATABASES SEARCHED TO 1/2 MILE

**CERCLIS**  
**SRC#: 5594**

VISTA conducts a database search to identify all sites within 1/2 mile of your property.  
**The agency release date for CERCLIS was January, 1999.**

The CERCLIS List contains sites which are either proposed to or on the National Priorities List(NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of all pre-remedial, remedial, removal and community relations activities or events at the site, financial funding information for the events, and unrestricted enforcement activities.

**NFRAP**  
**SRC#: 5595**

VISTA conducts a database search to identify all sites within 1/2 mile of your property.  
**The agency release date for CERCLIS-NFRAP was January, 1999.**

NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.

**SCL**  
**SRC#: 5705**

VISTA conducts a database search to identify all sites within 1/2 mile of your property.  
**The agency release date for Voluntary Cleanup Program Site Listing was March, 1999.**

This database is provided by the Natural Resource Conservation Commission. The agency may be contacted at: 512-239-5891.



**RCRA-TSD**  
**SRC#: 5596**

VISTA conducts a database search to identify all sites within 1/2 mile of your property.  
**The agency release date for HWDMS/RCRIS was February, 1999.**

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA TSDs are facilities which treat, store and/or dispose of hazardous waste.

**SWLF**  
**SRC#: 5625**

VISTA conducts a database search to identify all sites within 1/2 mile of your property.  
**The agency release date for Solid Waste Facilities Permit Applications File was January, 1999.**

This database is provided by the Natural Resource Conservation Commission, Division of MSW. The agency may be contacted at: 512-239-6067.

**LUST**  
**SRC#: 5626**

VISTA conducts a database search to identify all sites within 1/2 mile of your property.  
**The agency release date for Leaking Petroleum Storage Tank Case Report was January, 1999.**

This database is provided by the Natural Resource Conservation Commission. The agency may be contacted at: 512-239-0986.

#### C) DATABASES SEARCHED TO 1/4 MILE

**UST's**  
**SRC#: 5627**

VISTA conducts a database search to identify all sites within 1/4 mile of your property.  
**The agency release date for Petroleum Storage Tank Database was January, 1999.**

This database is provided by the Natural Resource Conservation Commission. The agency may be contacted at: 512-239-0986; Caution-Many states do not require registration of heating oil tanks, especially those used for residential purposes.

**AST's**  
**SRC#: 5627**

VISTA conducts a database search to identify all sites within 1/4 mile of your property.  
**The agency release date for Aboveground Storage Tank Database was January, 1999.**

This database is provided by the Natural Resource Conservation Commission. The agency may be contacted at: 512-239-0986.

#### D) DATABASES SEARCHED TO 1/8 MILE

**ERNS**  
**SRC#: 5598**

VISTA conducts a database search to identify all sites within 1/8 mile of your property.  
**The agency release date for was December, 1998.**

The Emergency Response Notification System (ERNS) is a national database containing records from October 1986 to the release date above and is used to collect information for reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the US Coast Guard, the National Response Center and the Department of Transportation. The ERNS hotline number is (202) 260-2342.

**RCRA-LgGen**  
**SRC#: 5596**

VISTA conducts a database search to identify all sites within 1/8 mile of your property.  
**The agency release date for HWDMS/RCRIS was February, 1999.**

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Large Generators are facilities which generate at least 1000 kg./month of non-acutely hazardous waste ( or 1 kg./month of acutely hazardous waste).



**RCRA-SmGen**  
**SRC#: 5596**

VISTA conducts a database search to identify all sites within 1/8 mile of your property.  
**The agency release date for HWDMS/RCRIS was February, 1999.**

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Small and Very Small generators are facilities which generate less than 1000 kg./month of non-acutely hazardous waste.

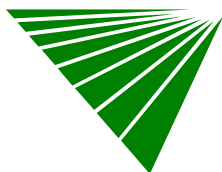
**SPILL**  
**SRC#: 4186**

VISTA conducts a database search to identify all sites within 1/8 mile of your property.  
**The agency release date for Spills Incident Information System was October, 1997.**

This database is provided by the Natural Resource Conservation Commission. The agency may be contacted at: 512-239-2446.

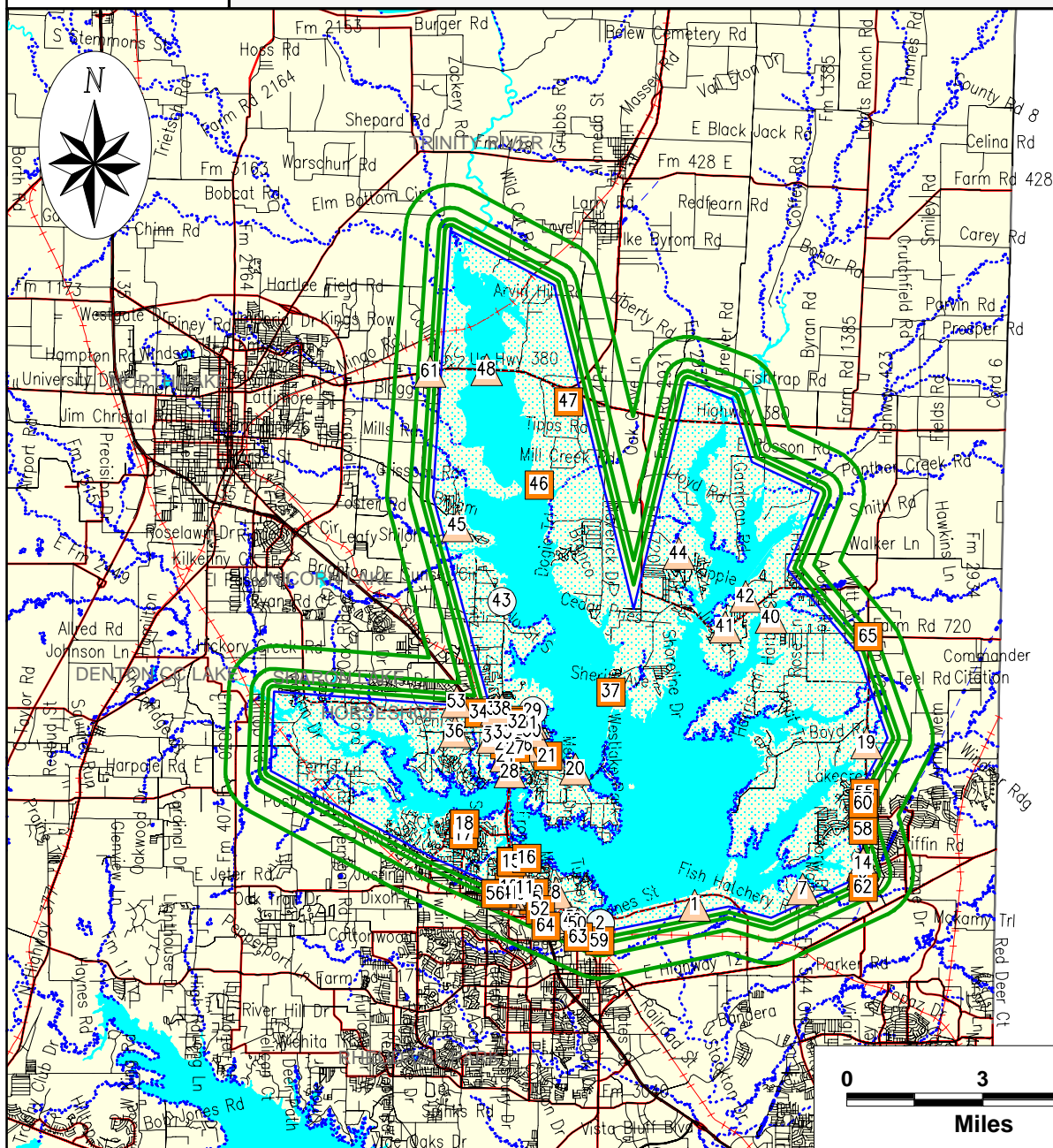
End of Report







# SITE ASSESSMENT - SPECIAL REPORT

## Overview Map



Subject  
Centerline  
  
Search Area  


Risk Sites



Risk Sites Plotted  
as Polygons

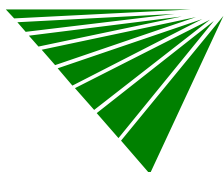


 Highways and Major Roads

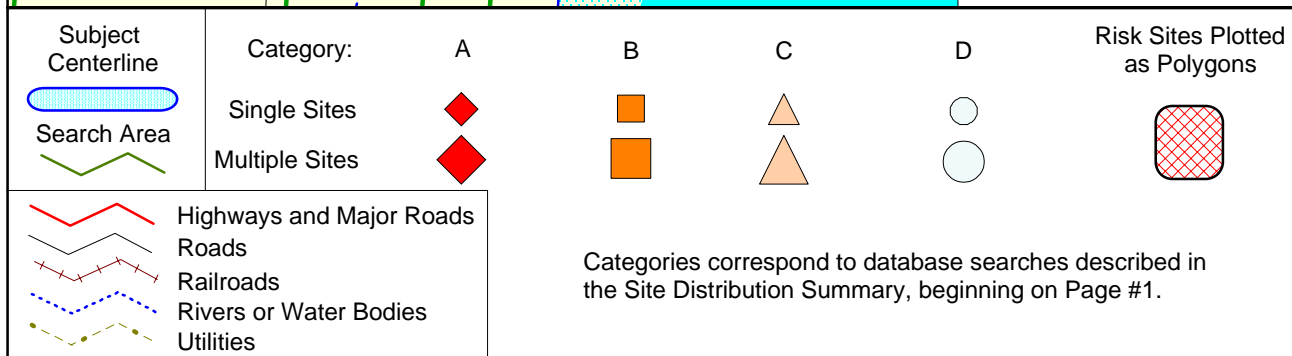
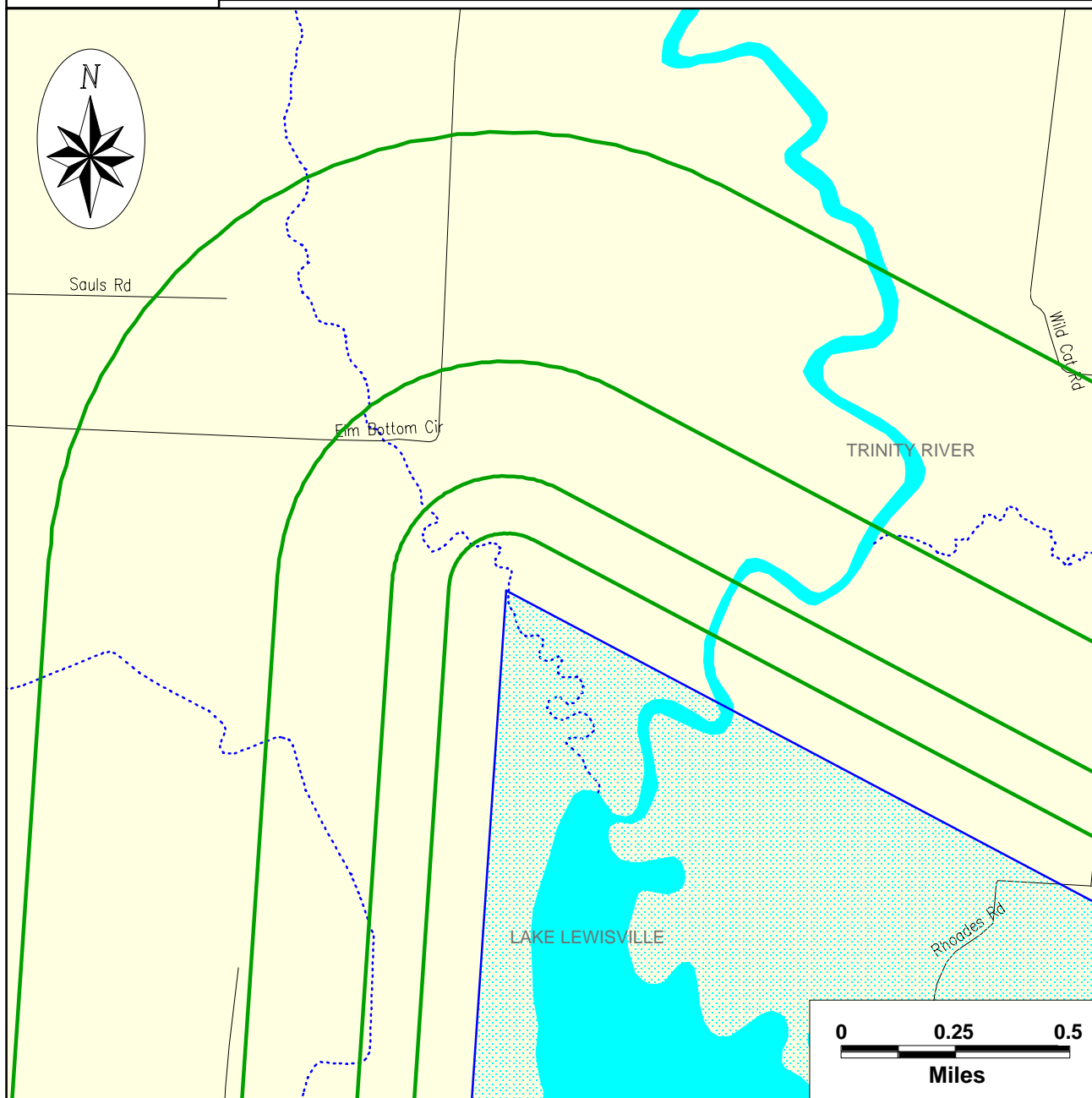
 Rivers or Water Bodies

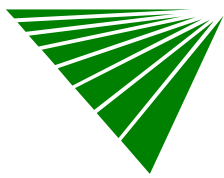
Categories correspond to database searches described in  
the Site Distribution Summary, beginning on Page #1.





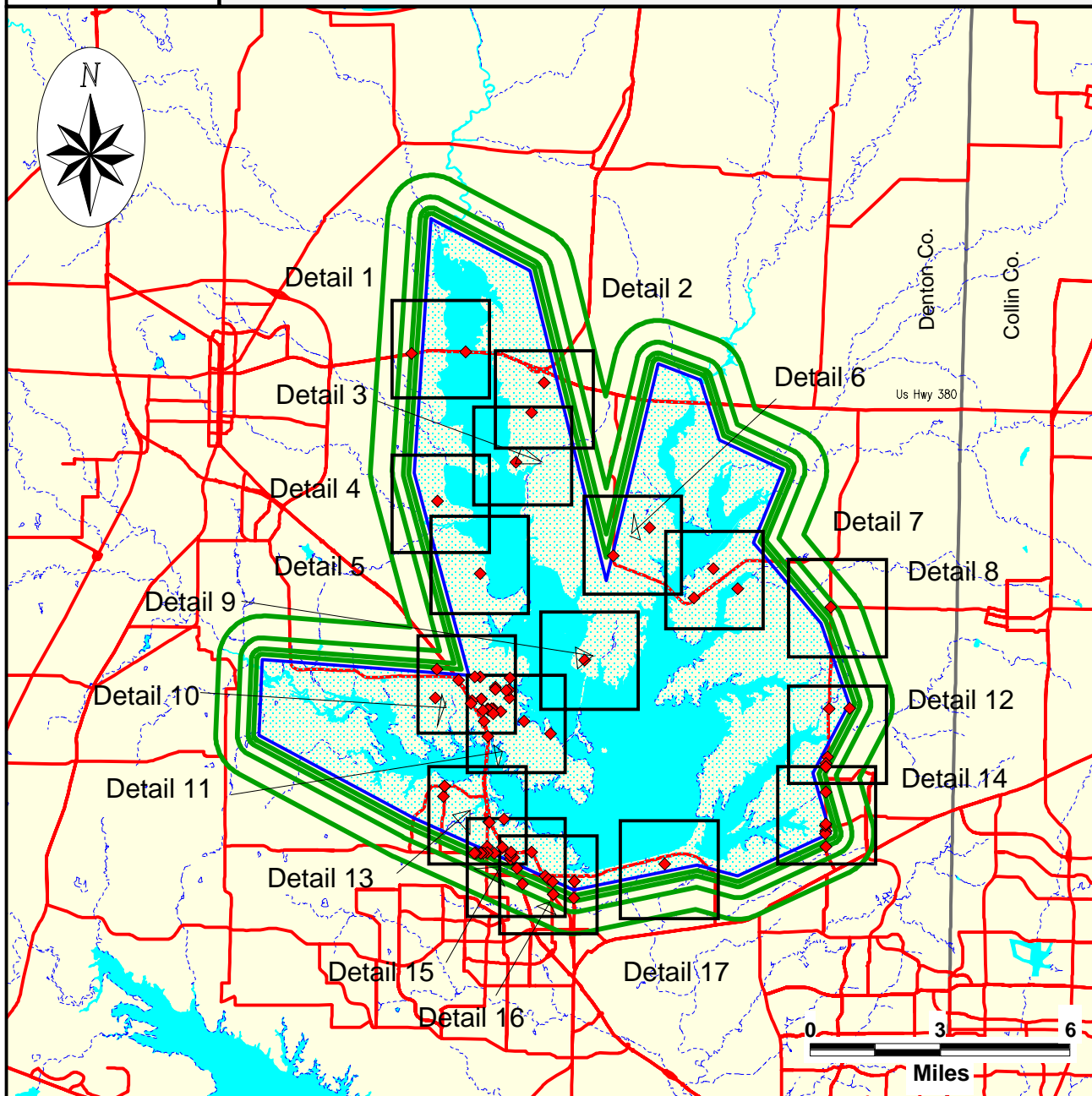
# SITE ASSESSMENT - SPECIAL REPORT



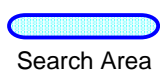


# SITE ASSESSMENT - SPECIAL REPORT

## Overview Map



Subject  
Centerline

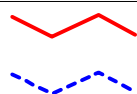


Search Area

Risk Sites



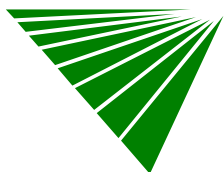
Risk Sites Plotted  
as Polygons



Highways and Major Roads

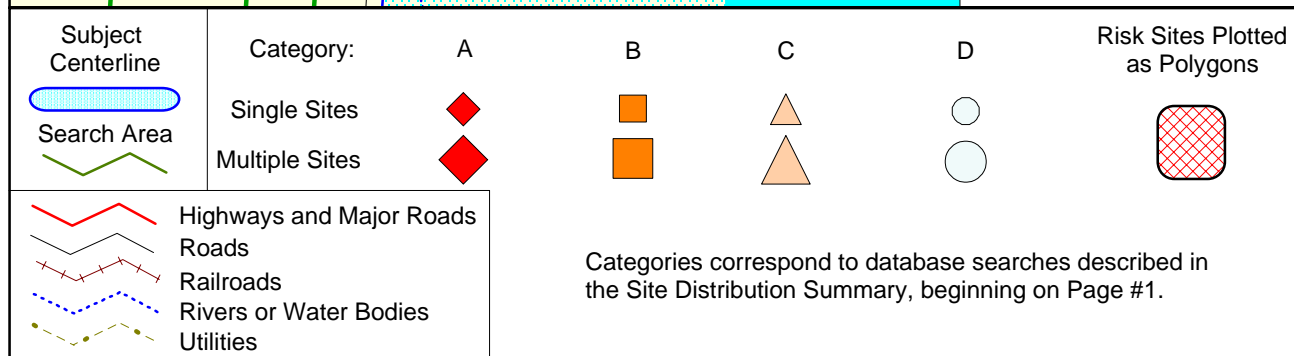
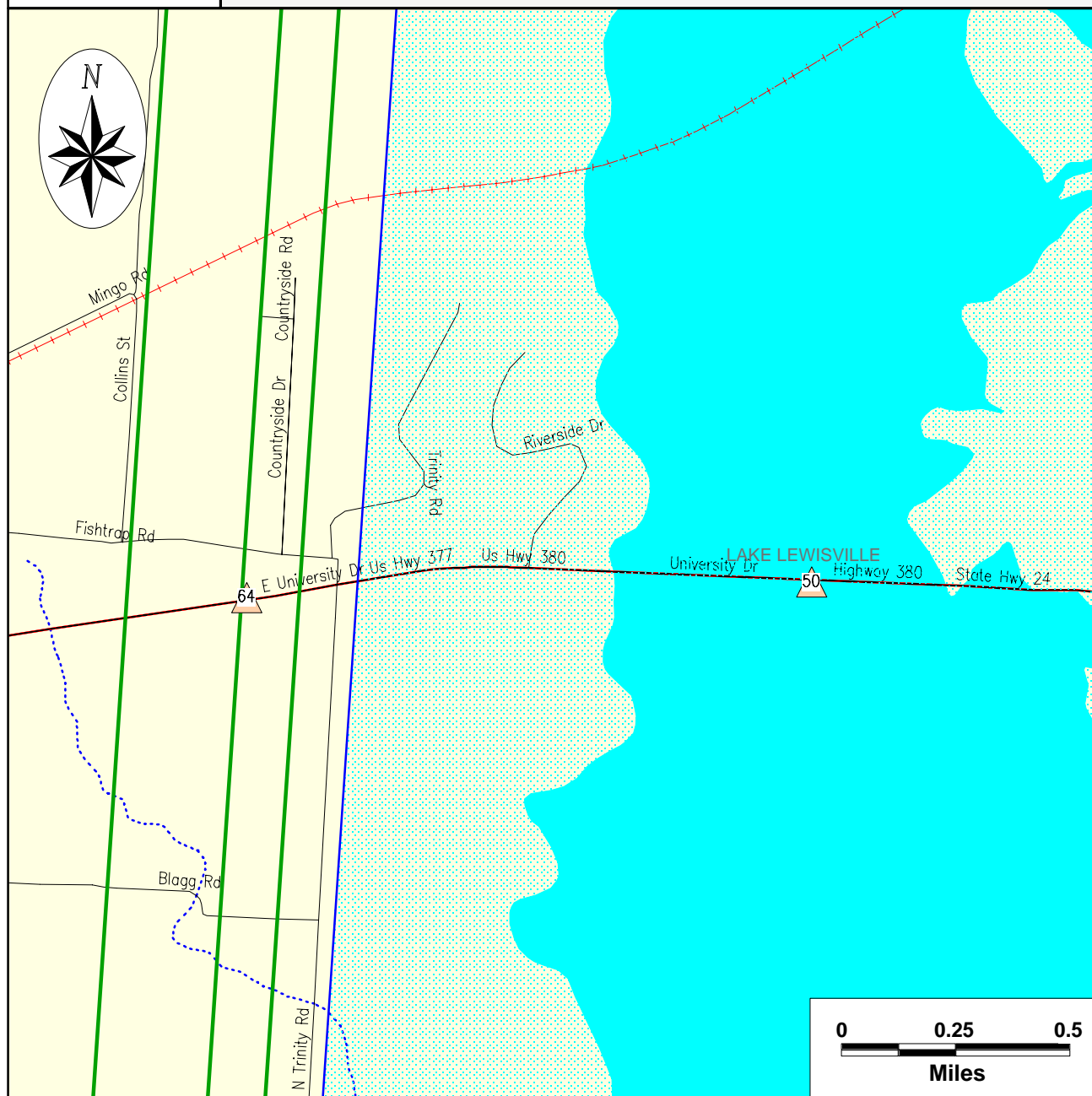
Rivers or Water Bodies

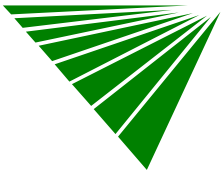
Categories correspond to database searches described in  
the Site Distribution Summary, beginning on Page #1.



# SITE ASSESSMENT - SPECIAL REPORT

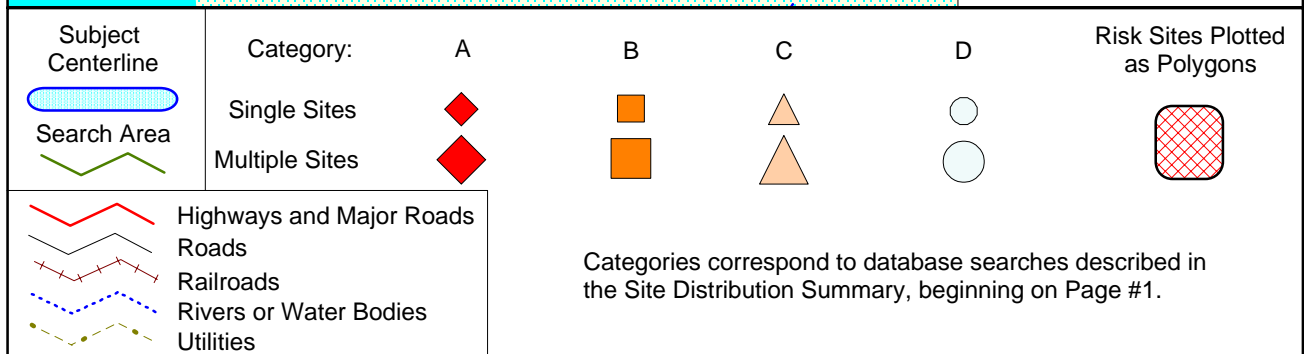
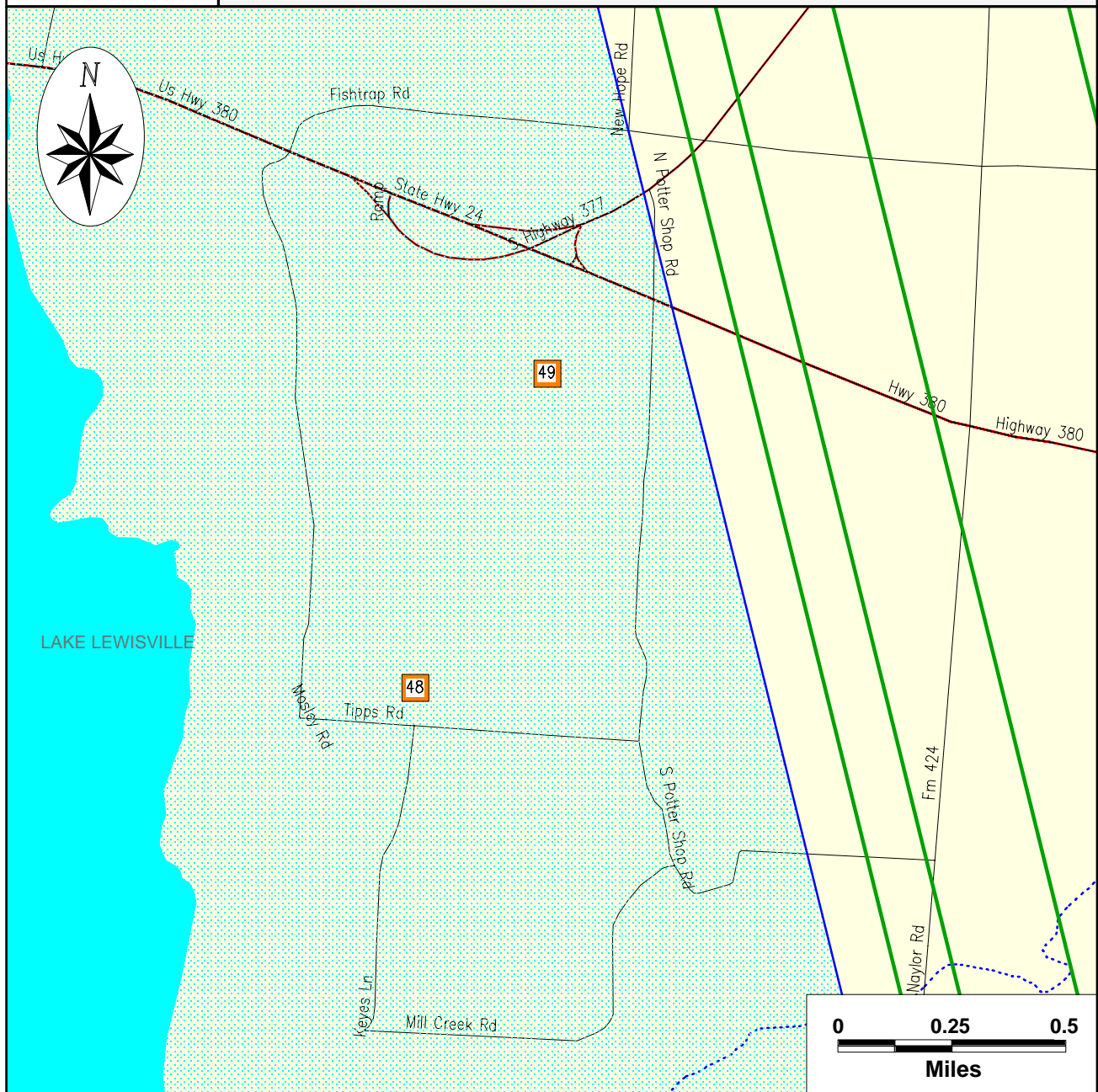
## Detail Map 1

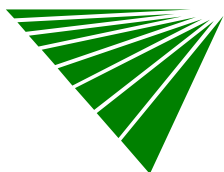




# SITE ASSESSMENT - SPECIAL REPORT

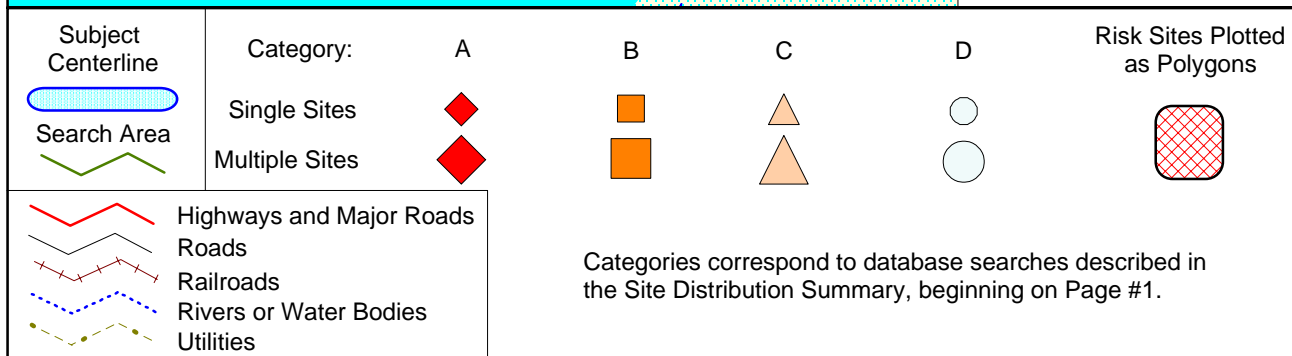
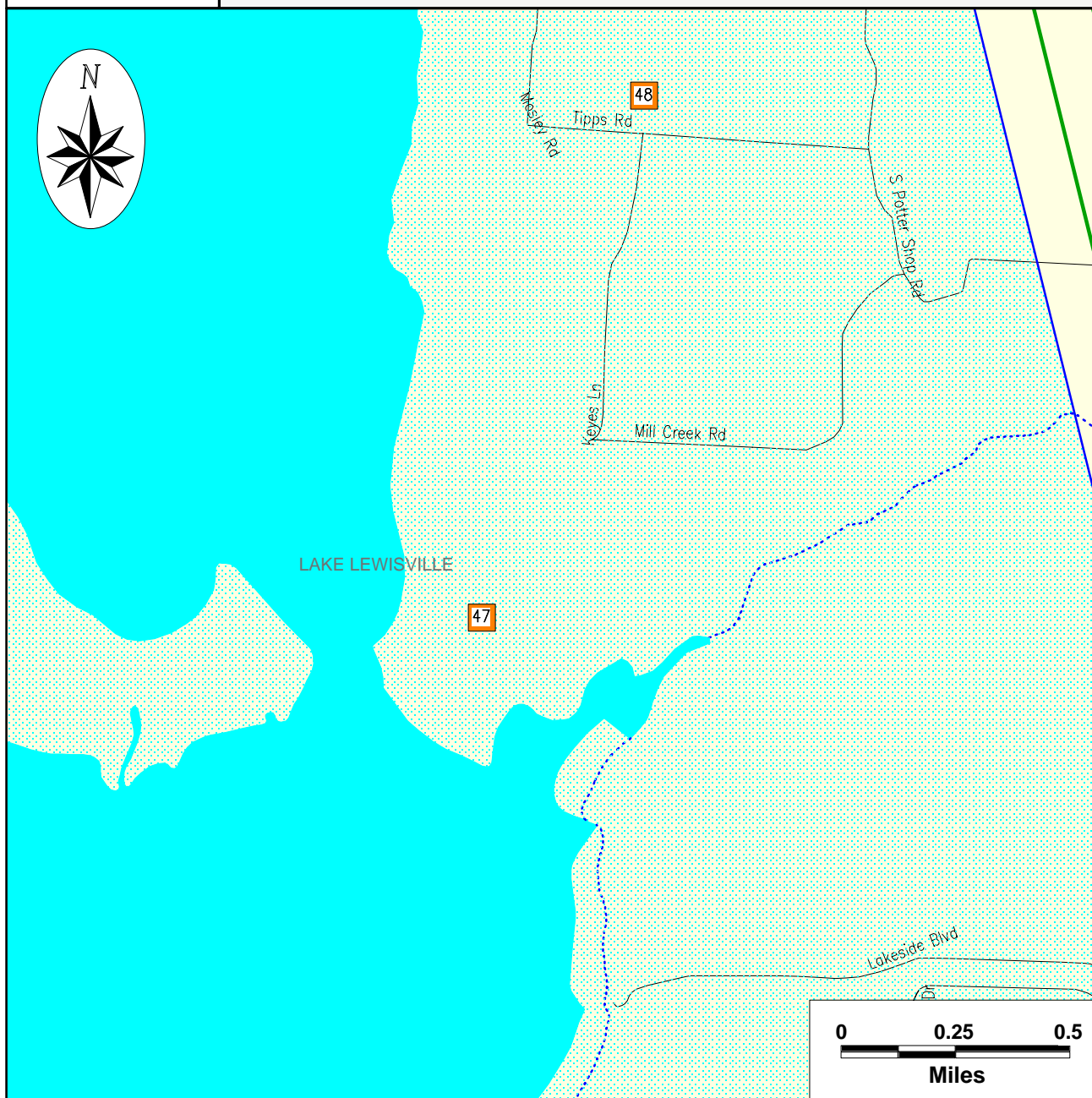
## Detail Map 2

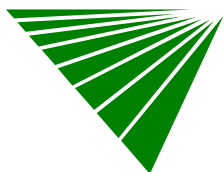




# SITE ASSESSMENT - SPECIAL REPORT

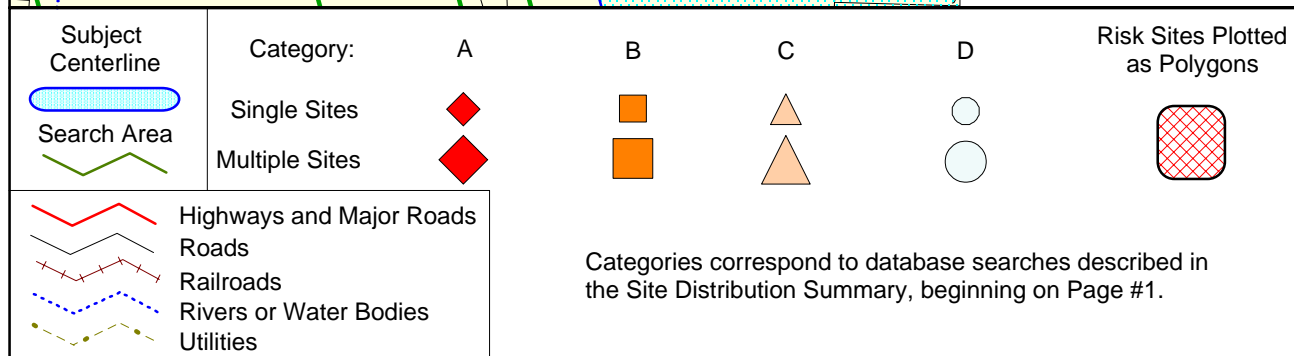
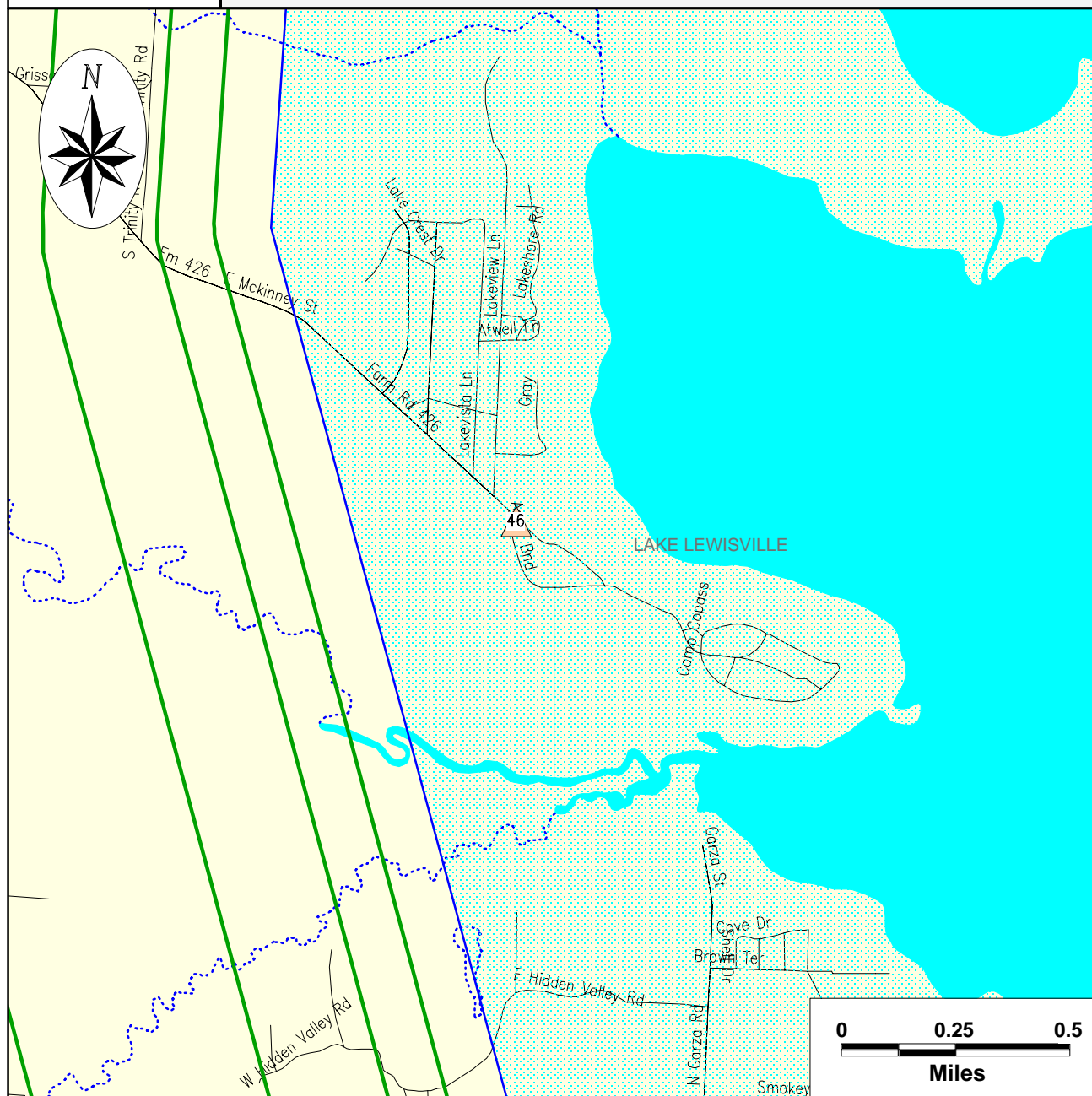
## Detail Map 3





# SITE ASSESSMENT - SPECIAL REPORT

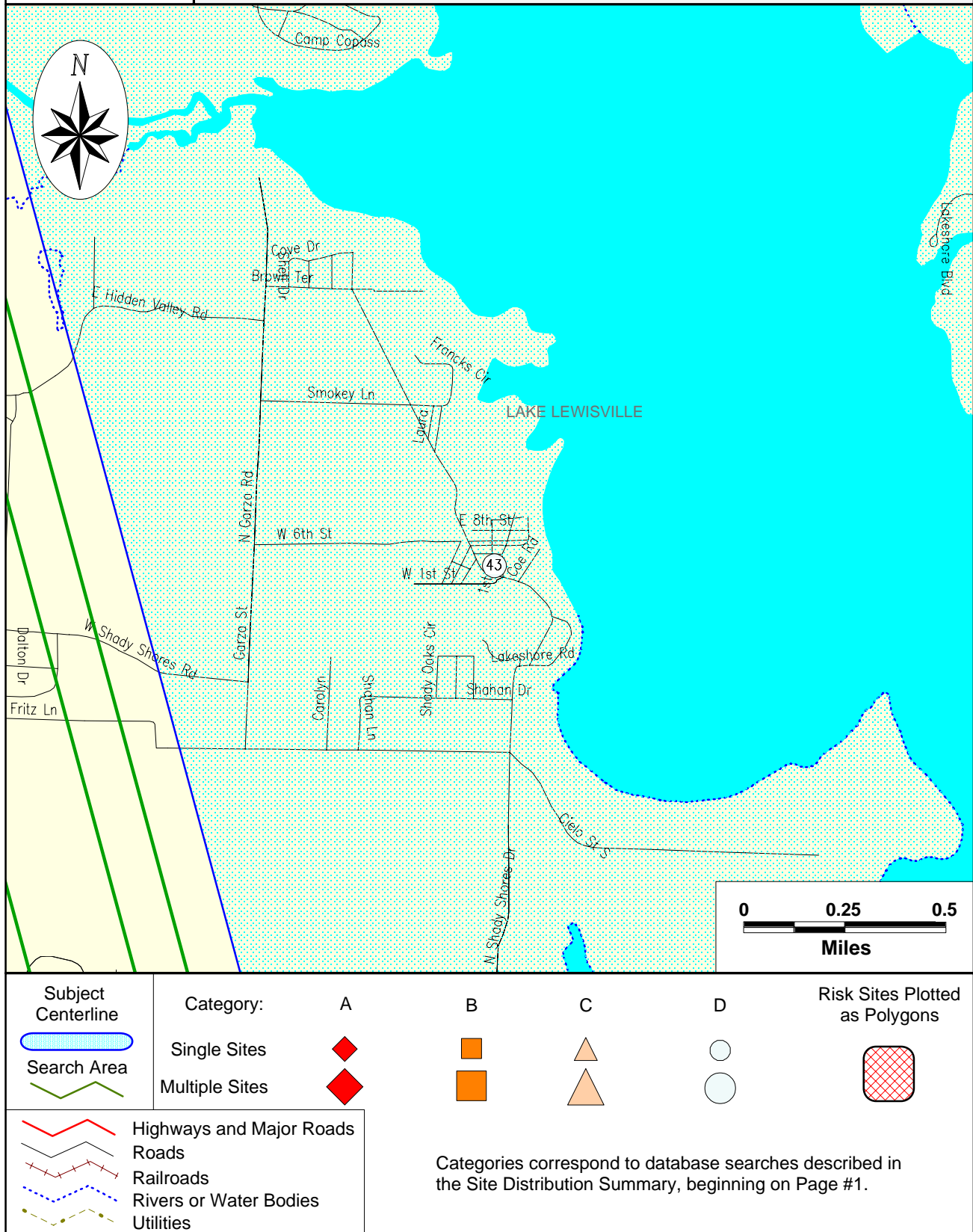
## Detail Map 4





# SITE ASSESSMENT - SPECIAL REPORT

## Detail Map 5

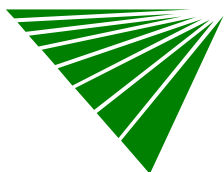


For More Information Call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403

Report ID: 243584001

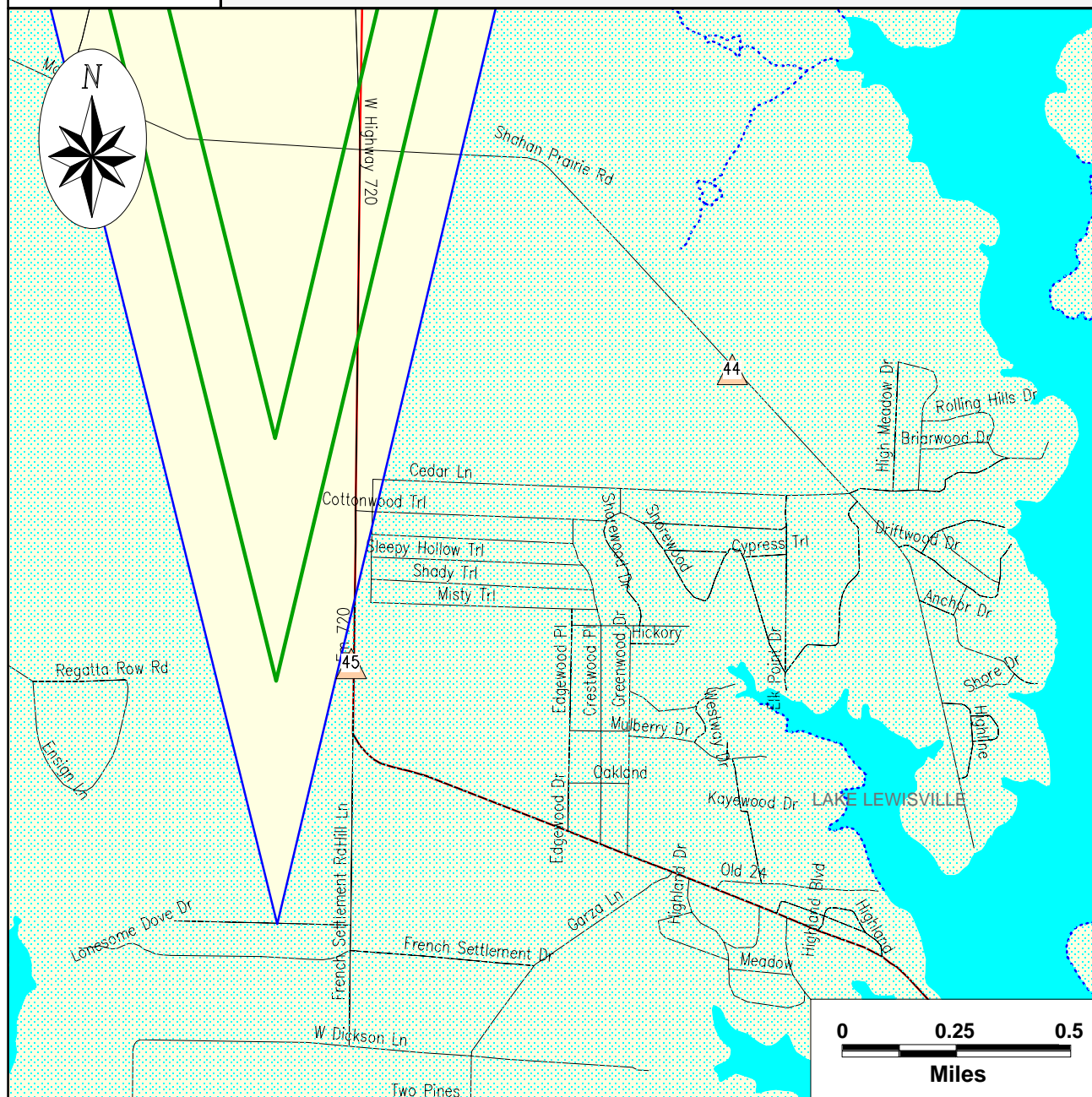
Date of Report: **August 17, 1999**

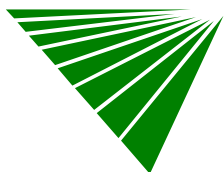
Page #4e



# SITE ASSESSMENT - SPECIAL REPORT

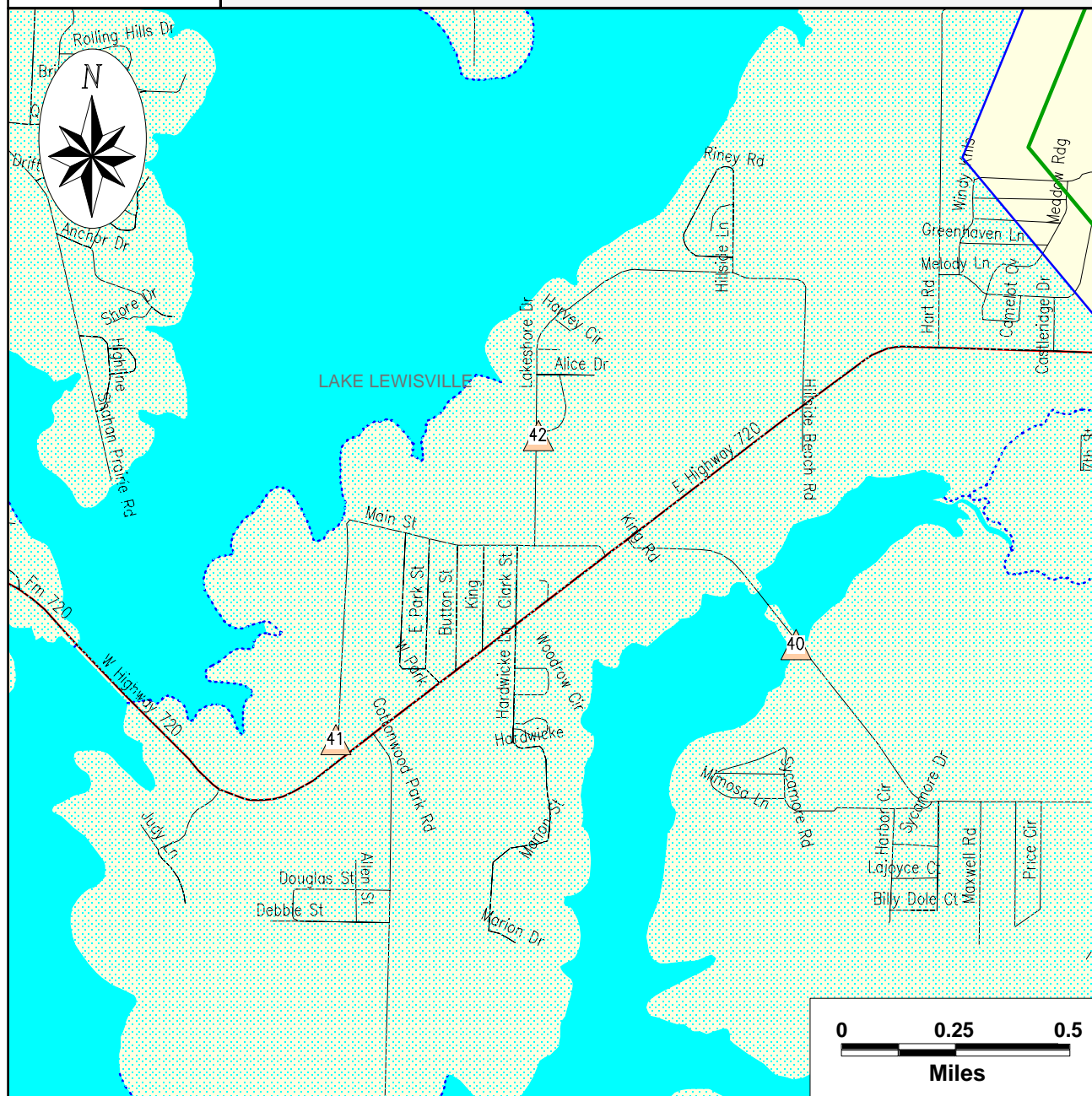
## Detail Map 6





















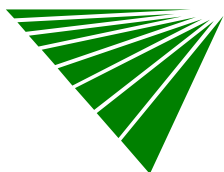
# SITE ASSESSMENT - SPECIAL REPORT

## Detail Map 7



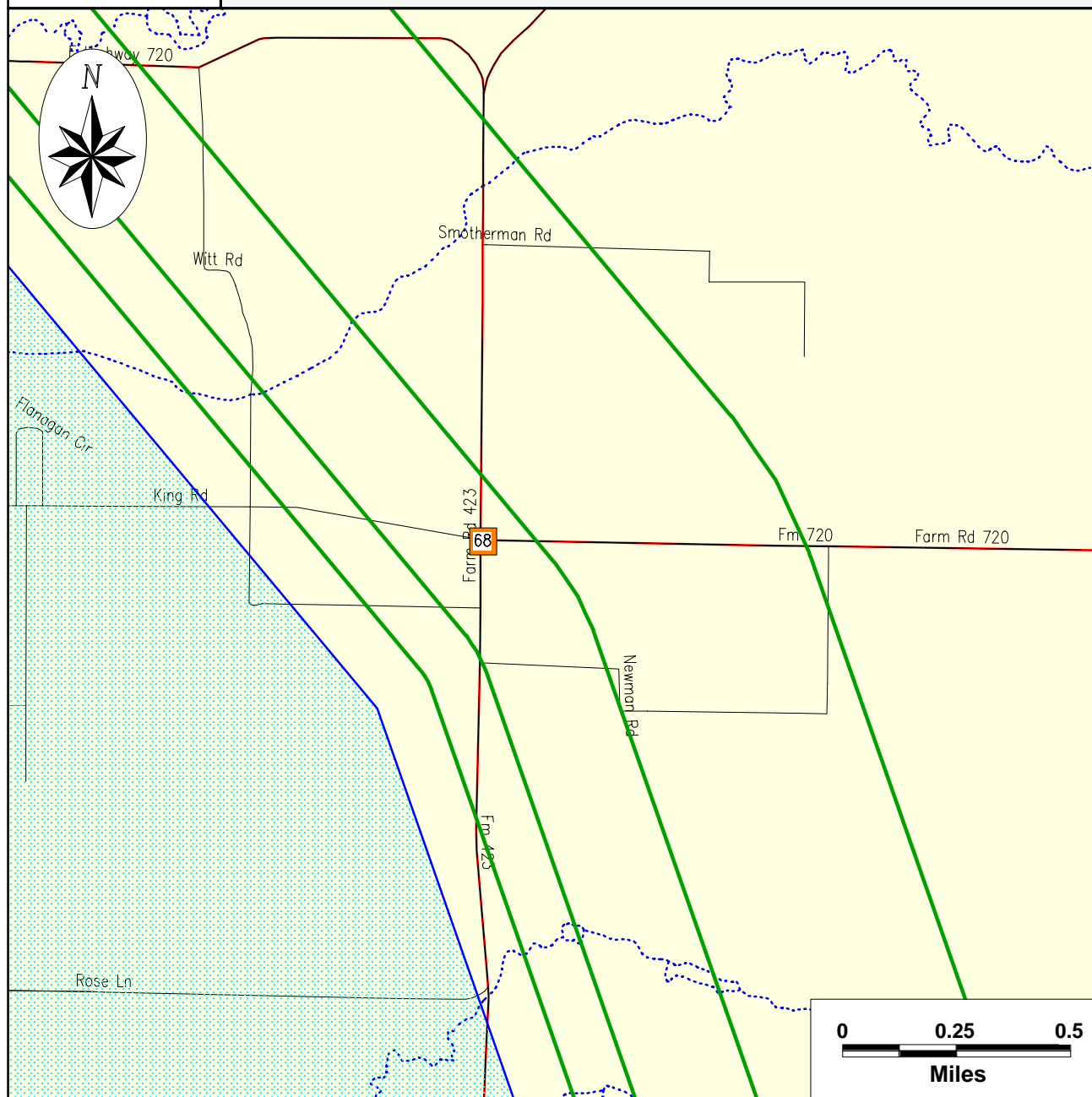
Subject Centerline	Category:	A	B	C	D	Risk Sites Plotted as Polygons
	Single Sites					
	Multiple Sites					
 Highways and Major Roads						
 Roads						
 Railroads						
 Rivers or Water Bodies						
 Utilities						

Categories correspond to database searches described in the Site Distribution Summary, beginning on Page #1.



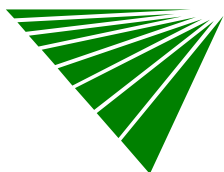
# SITE ASSESSMENT - SPECIAL REPORT

## Detail Map 8



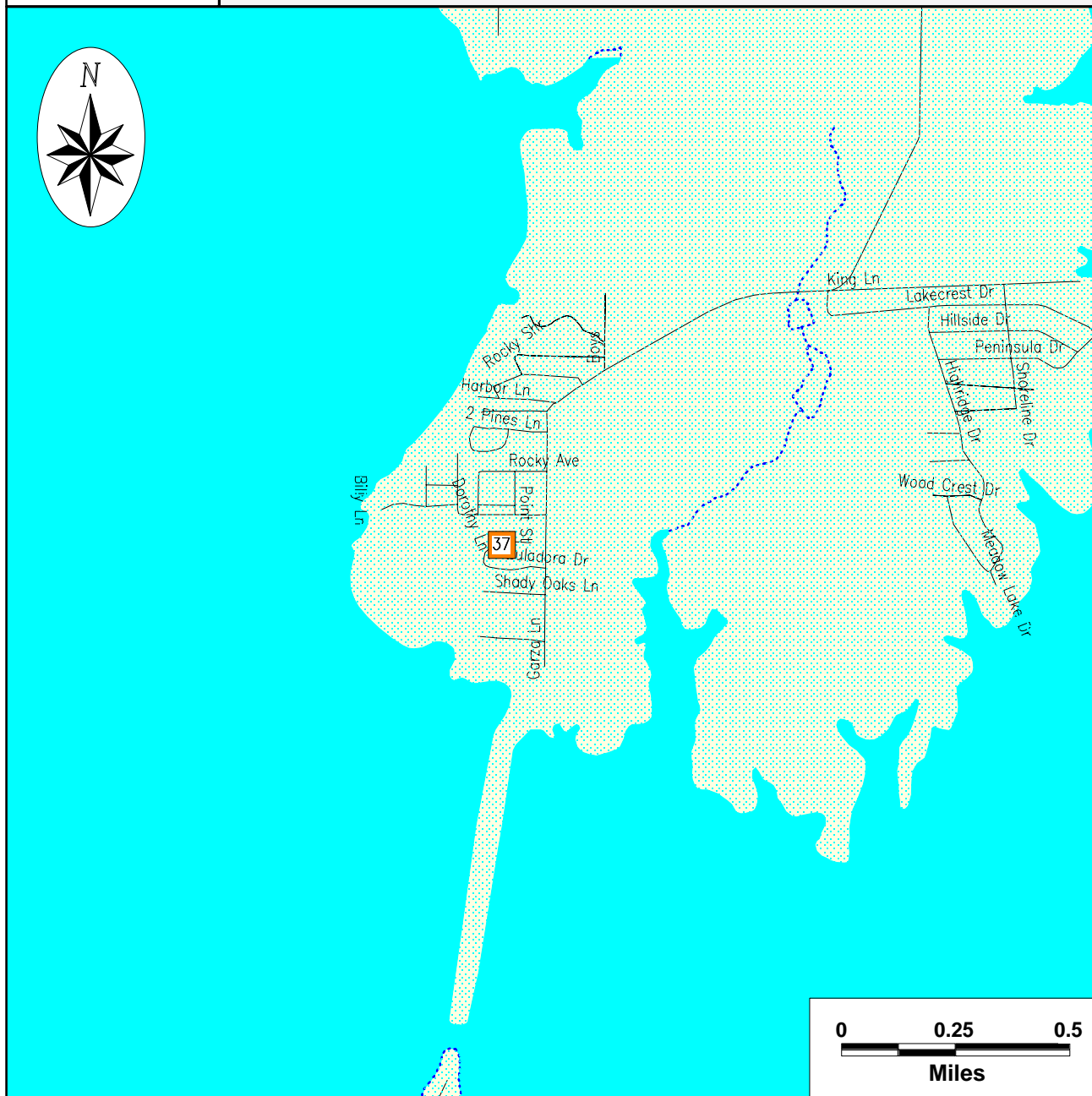
Subject Centerline	Category:				Risk Sites Plotted as Polygons
	A	B	C	D	
Search Area	Single Sites				
	Multiple Sites				
Highways and Major Roads					
Roads					
Railroads					
Rivers or Water Bodies					
Utilities					






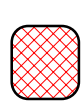










Categories correspond to database searches described in the Site Distribution Summary, beginning on Page #1.



# SITE ASSESSMENT - SPECIAL REPORT

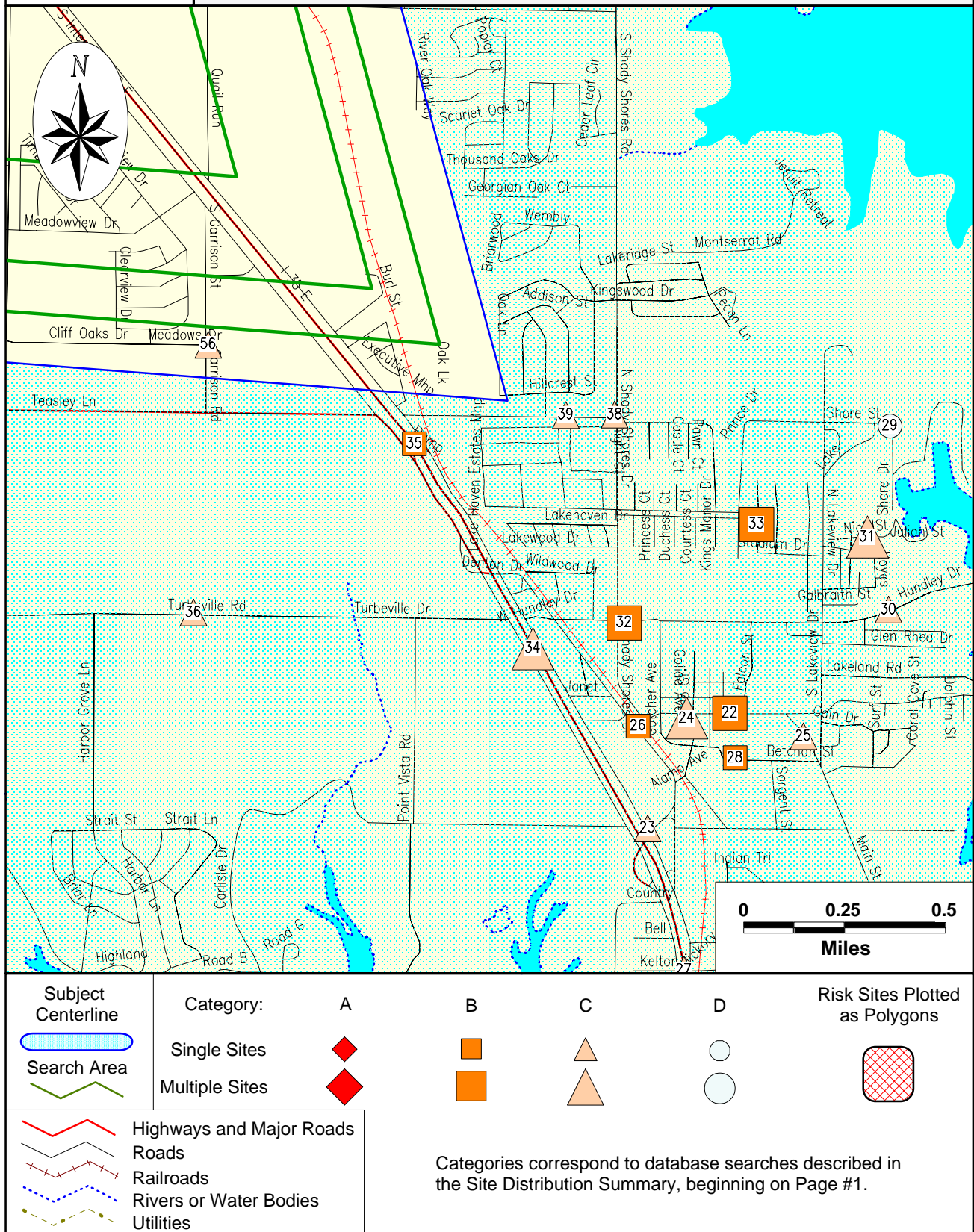
## Detail Map 9



Subject Centerline	Category:	A	B	C	D	Risk Sites Plotted as Polygons
 Search Area	Single Sites					
	Multiple Sites					
 Highways and Major Roads	Categories correspond to database searches described in the Site Distribution Summary, beginning on Page #1.					
 Roads						
 Railroads						
 Rivers or Water Bodies						
 Utilities						

# SITE ASSESSMENT - SPECIAL REPORT

## Detail Map 10



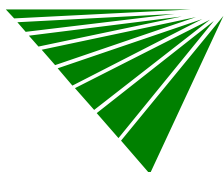
For More Information Call VISTA Information Solutions, Inc. at **1 - 800 - 767 - 0403**

Report ID: 243584001

Date of Report: **August 17, 1999**

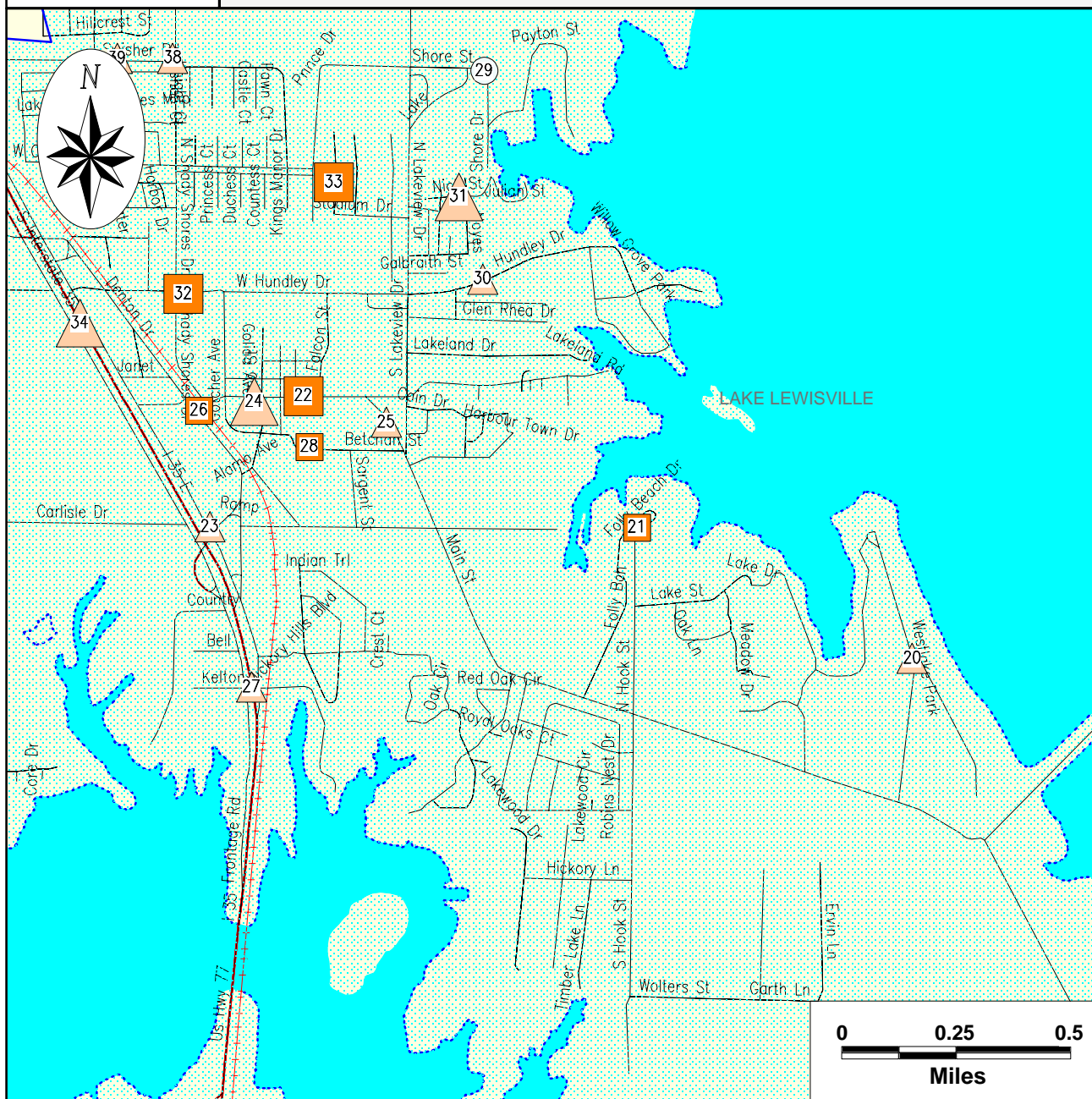
Page #4j





# SITE ASSESSMENT - SPECIAL REPORT

## Detail Map 11



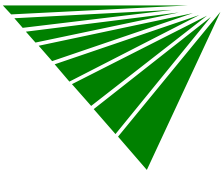
Subject Centerline	Category:	A	B	C	D	Risk Sites Plotted as Polygons
	Single Sites					
	Multiple Sites					
	Categories correspond to database searches described in the Site Distribution Summary, beginning on Page #1.					

For More Information Call VISTA Information Solutions, Inc. at 1 - 800 - 767 - 0403

Report ID: 243584001

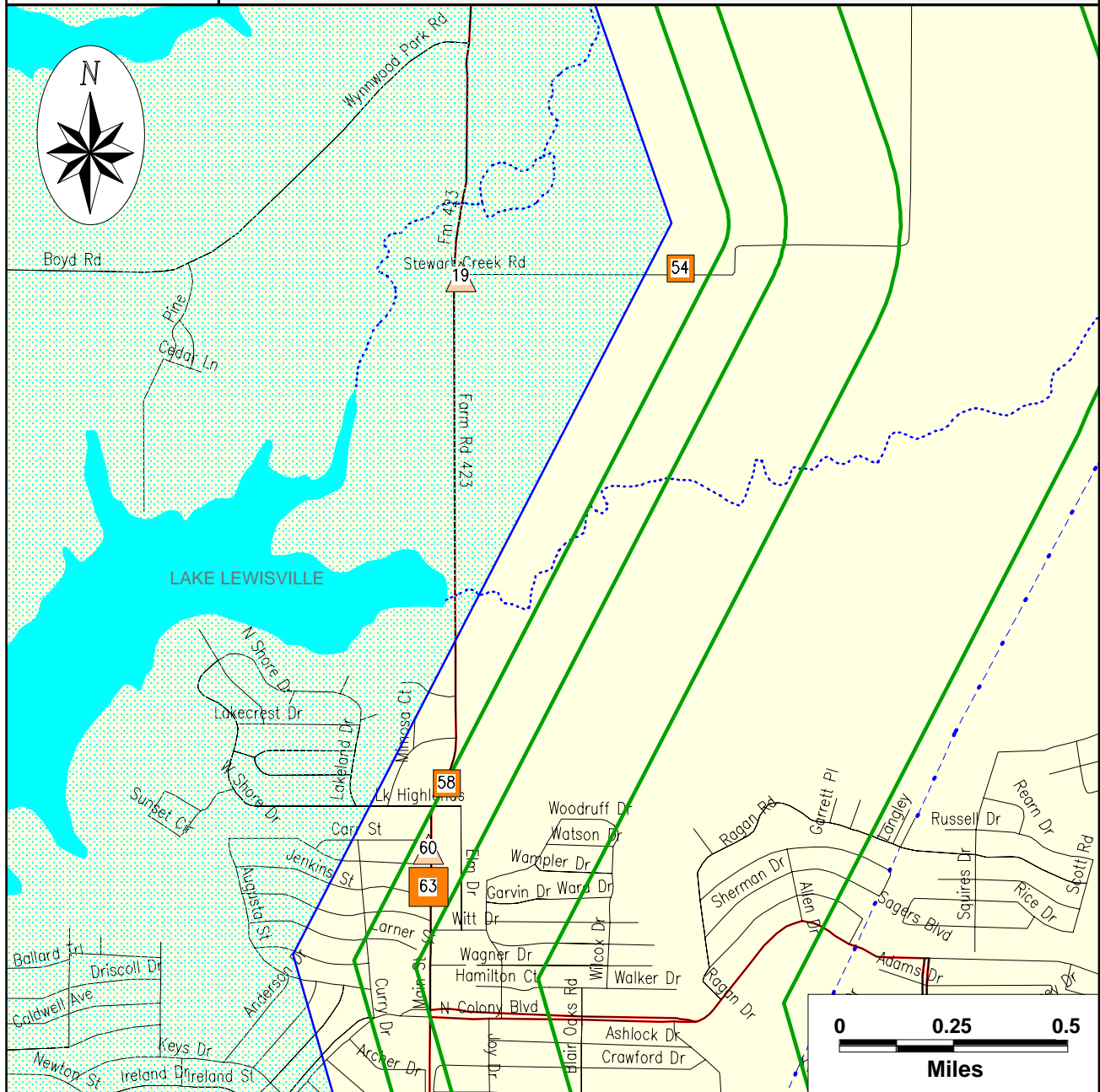
Date of Report: August 17, 1999
















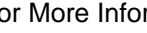
Page #4k



# SITE ASSESSMENT - SPECIAL REPORT

## Detail Map 12



Subject Centerline	Category:	A	B	C	D	Risk Sites Plotted as Polygons
	Single Sites					
	Multiple Sites					
	Highways and Major Roads					
	Roads					
	Railroads					
	Rivers or Water Bodies					
	Utilities					

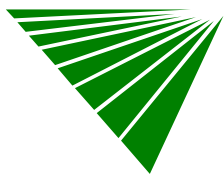
Categories correspond to database searches described in the Site Distribution Summary, beginning on Page #1.

For More Information Call VISTA Information Solutions, Inc. at **1 - 800 - 767 - 0403**

Report ID: **243584001**

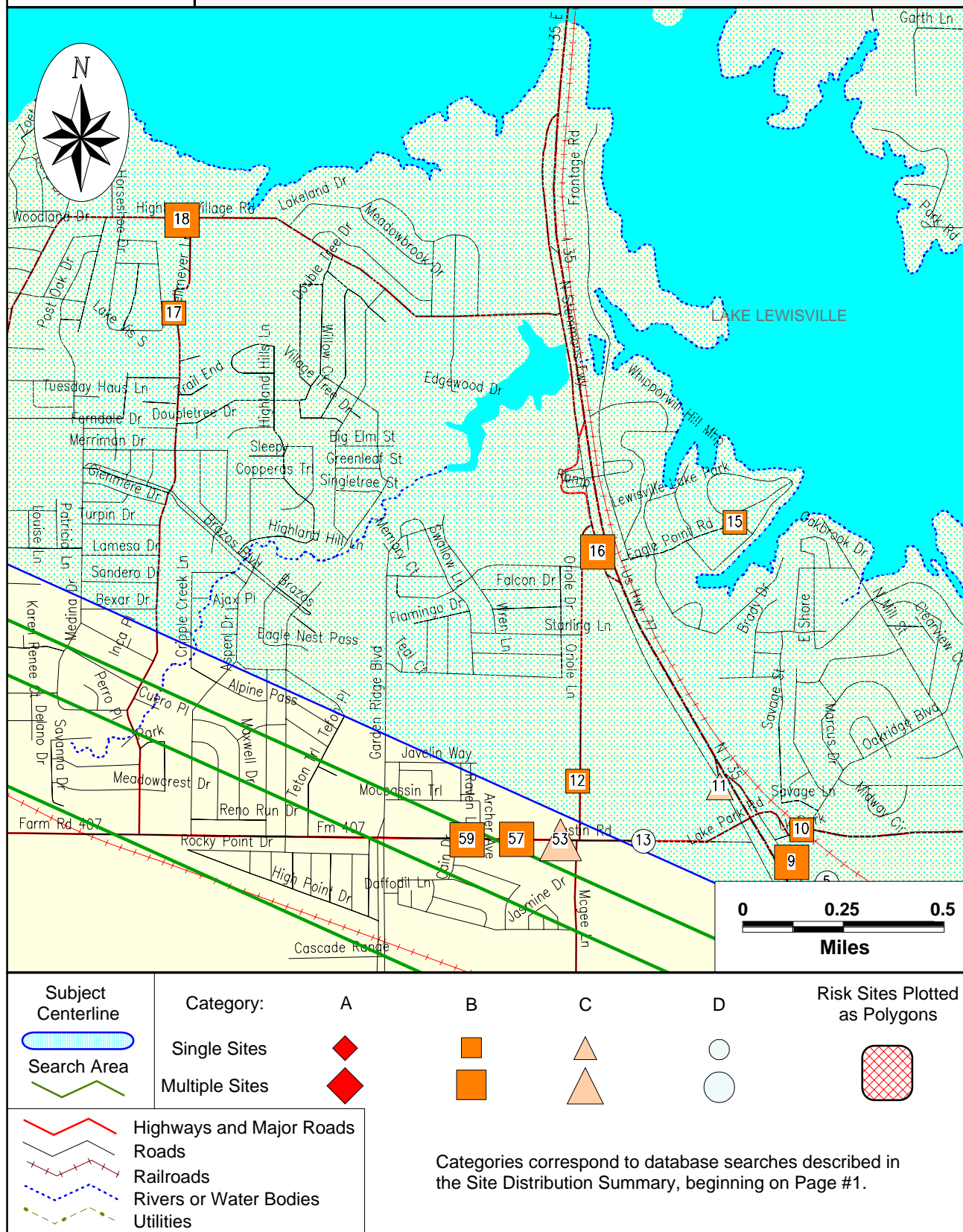
Date of Report: **August 17, 1999**

Page #41

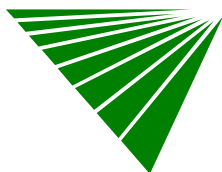


# SITE ASSESSMENT - SPECIAL REPORT

## Detail Map 13

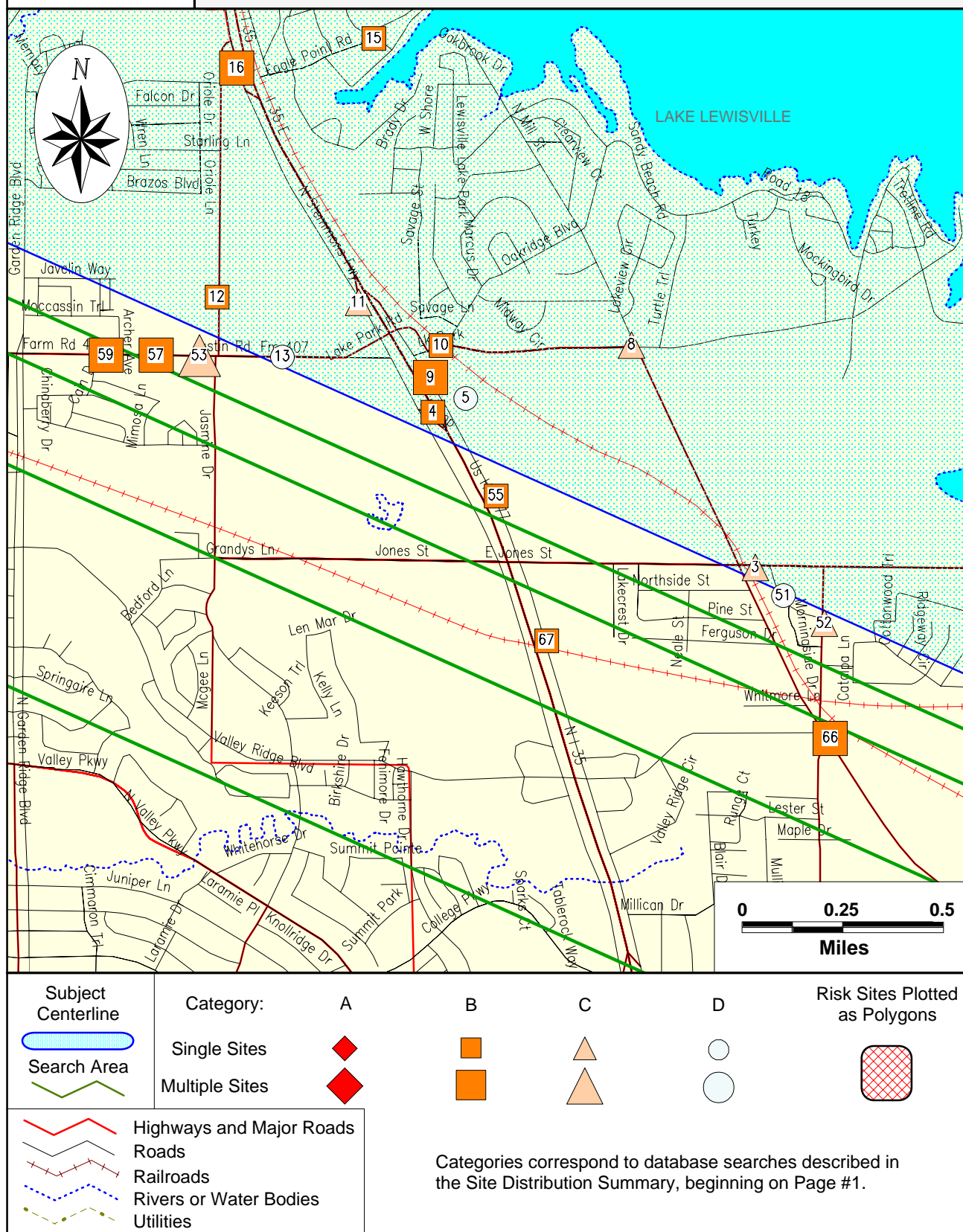




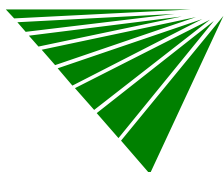


# SITE ASSESSMENT - SPECIAL REPORT

## Detail Map 15

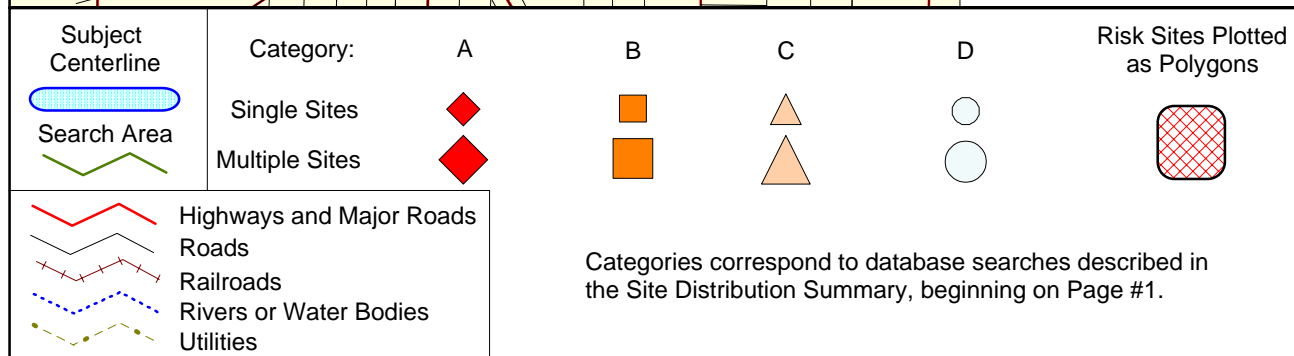
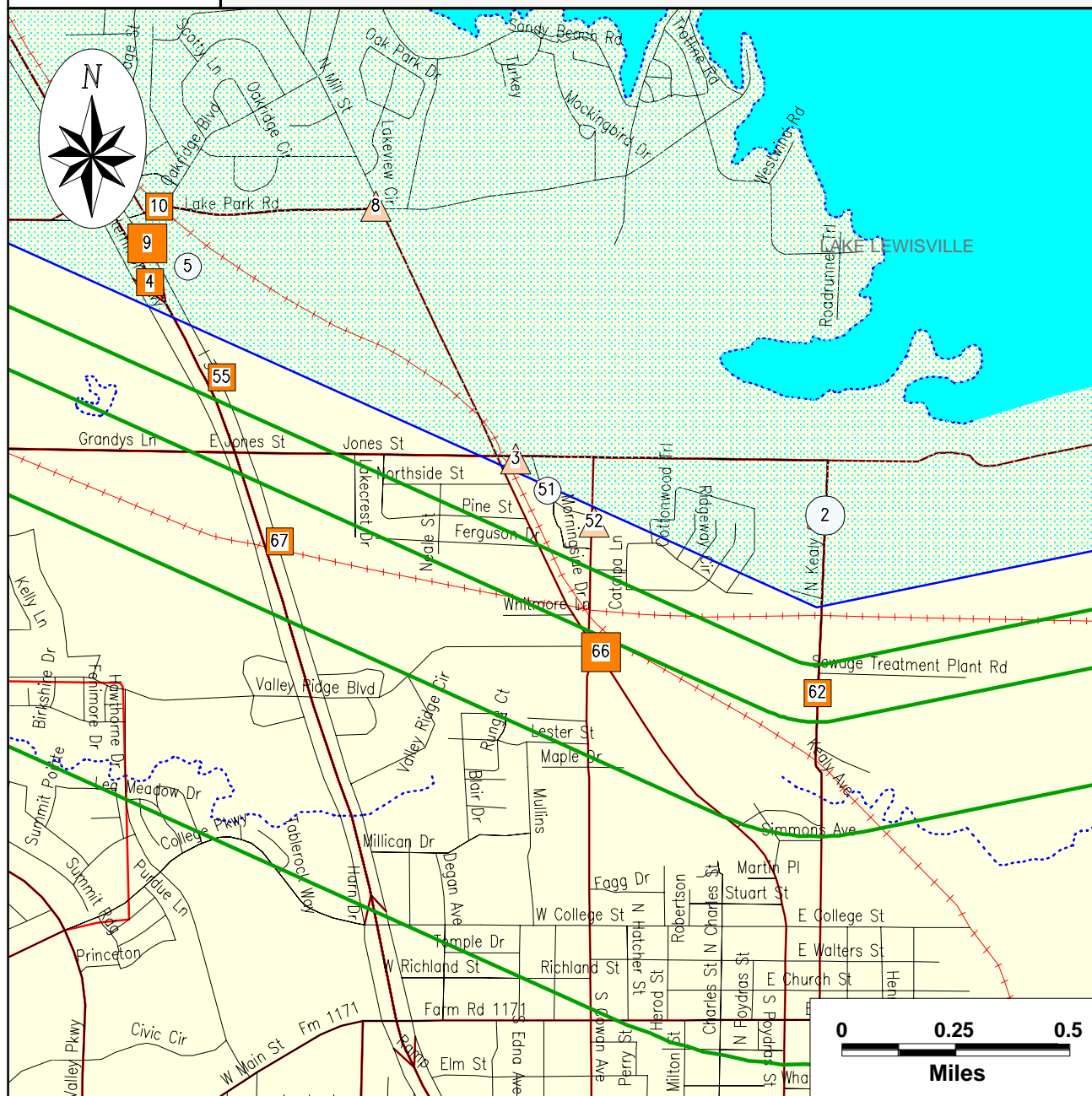




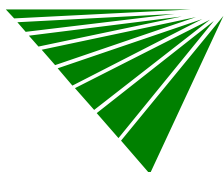


# SITE ASSESSMENT - SPECIAL REPORT

## Detail Map 16







# SITE ASSESSMENT - SPECIAL REPORT

## Detail Map 17

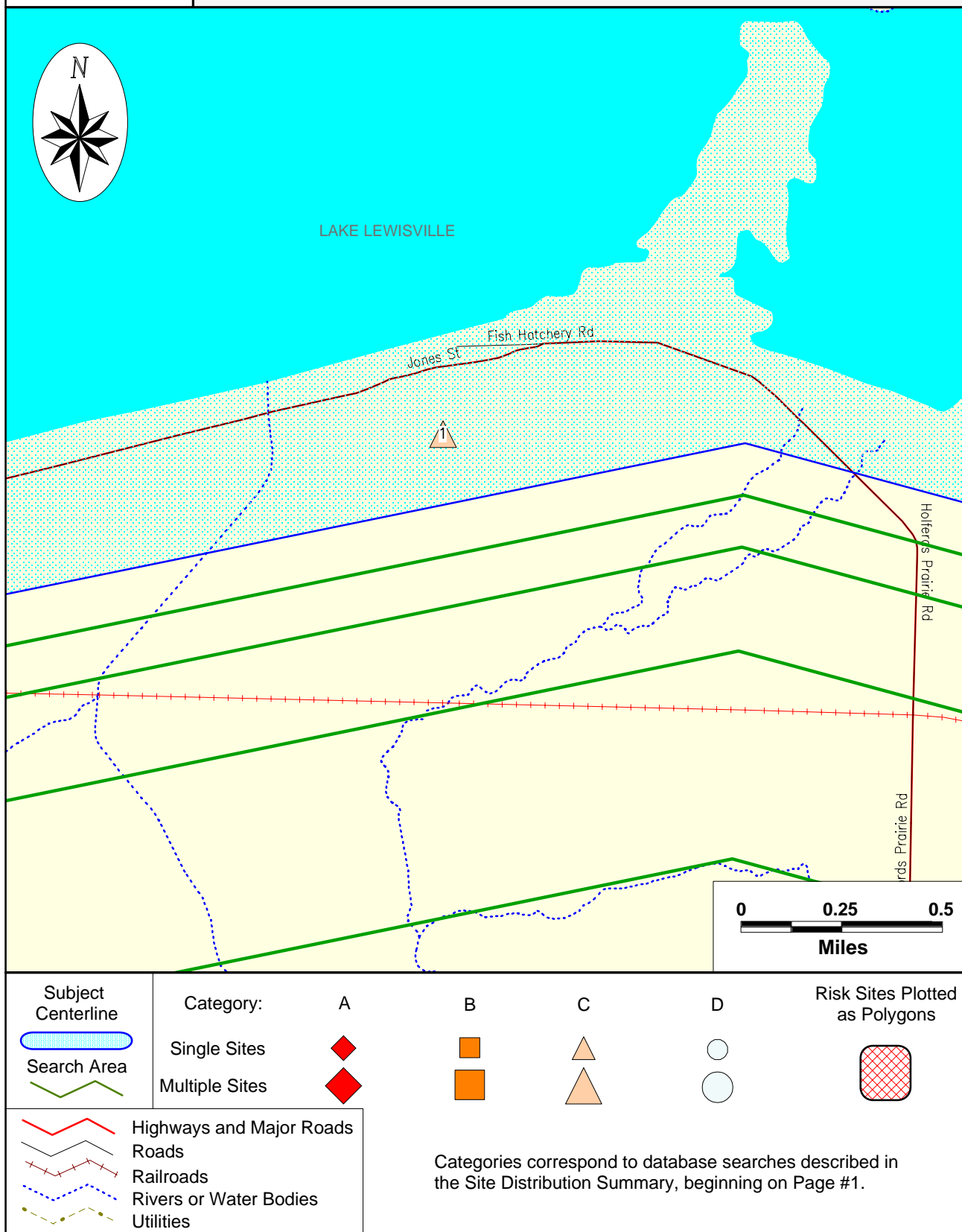


Exhibit 10. HTRW Oil and Gas Wells Survey



04 June 1999

**Carter & Burgess, Inc.**  
3880 Hulen Street  
Fort Worth, Texas 76107

Attn: Mr. Mick Brennan

Re:   **ESA SITE:**    Corp of Engineers, Lake Lewisville  
          Properties  
      **ADDRESS:**   Various Surveys in Denton & Tarrant  
          Counties, Texas  
      **PROJECT #:** 961470063

Dear Mr. Brennan

Banks Information Solutions, Inc. (Banks) has completed your research request for an oil/gas well search of all oil/gas, and Class II injection wells located within a specific boundary (site provided) surrounding the Corp of Engineers' properties in Denton & Tarrant Counties, Texas. The site covers several surveys surrounding the Lake Lewisville area. Banks researched all county base maps, historical county base maps, field maps, computer GIS maps, and the well-bore database maintained by the Texas Railroad Commission (TRC) Oil and Gas Division. After comparing all maps, and researching the TRC well-bore database, Banks has identified the following wells/drilling activity for oil/gas production or Class II waste disposal within the requested radius, as seen on the enclosed TRC GIS map(s).

**SEE ATTACHED "TABLE OF WELLS" FOR TABULATION OF WELLBORES**

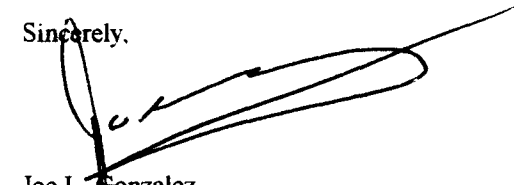
**Banks can obtain the actual construction and abandonment records from the Texas Railroad Commission. Some environmental site review projects try to identify possible sources of surface or below surface contamination and some improperly plugged or abandoned wells can contribute to the possible upward migration of subsurface drilling fluids. Obtaining the actual well records can provide closure for plugging questions, verify locations or obtain missing information for many of the historical wells.**

**B**

Banks Information Solutions, Inc. has performed a thorough and diligent search of all well site locations recorded with the Railroad Commission of Texas. All mapped locations are based on information obtained from the TRC mapping and records retention department. Although Banks performs quality assurance and quality control on all research projects, we recognize that any inaccuracies of the well locations and well data could possibly be traced to the appropriate regulatory authority. Therefore, Banks cannot guarantee the accuracy of the data or well location(s) of those maps and records maintained by the Texas Railroad Commission.

If you should have any questions or should require further research such as a Compliance Review or Water Well Inventory, please call me at 512/478-0059.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe L. Gonzalez", written over a horizontal line.

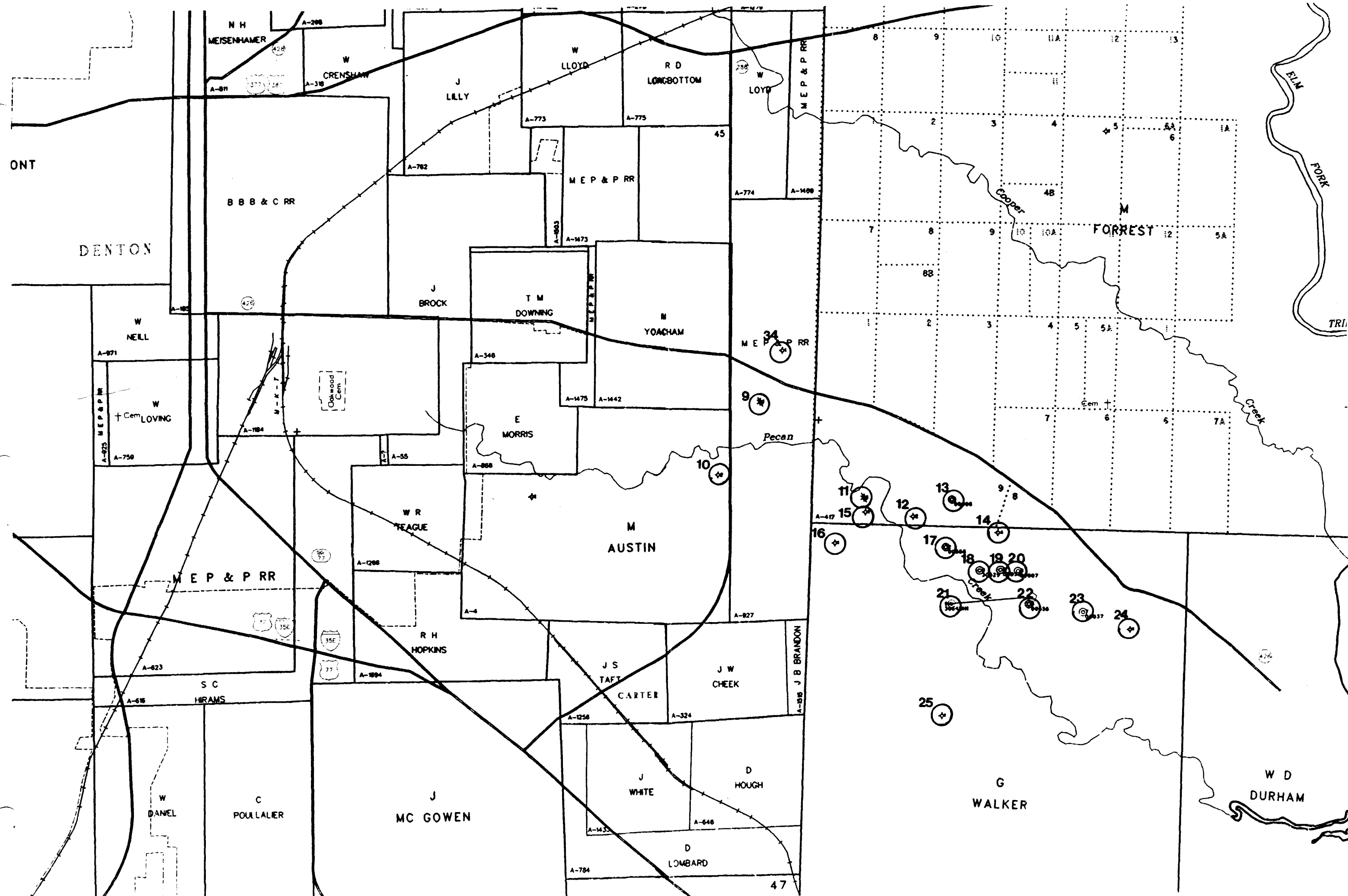
Joe L. Gonzalez  
*Vice President, Environmental Services*  
**BANKS INFORMATION SOLUTIONS, INC.**

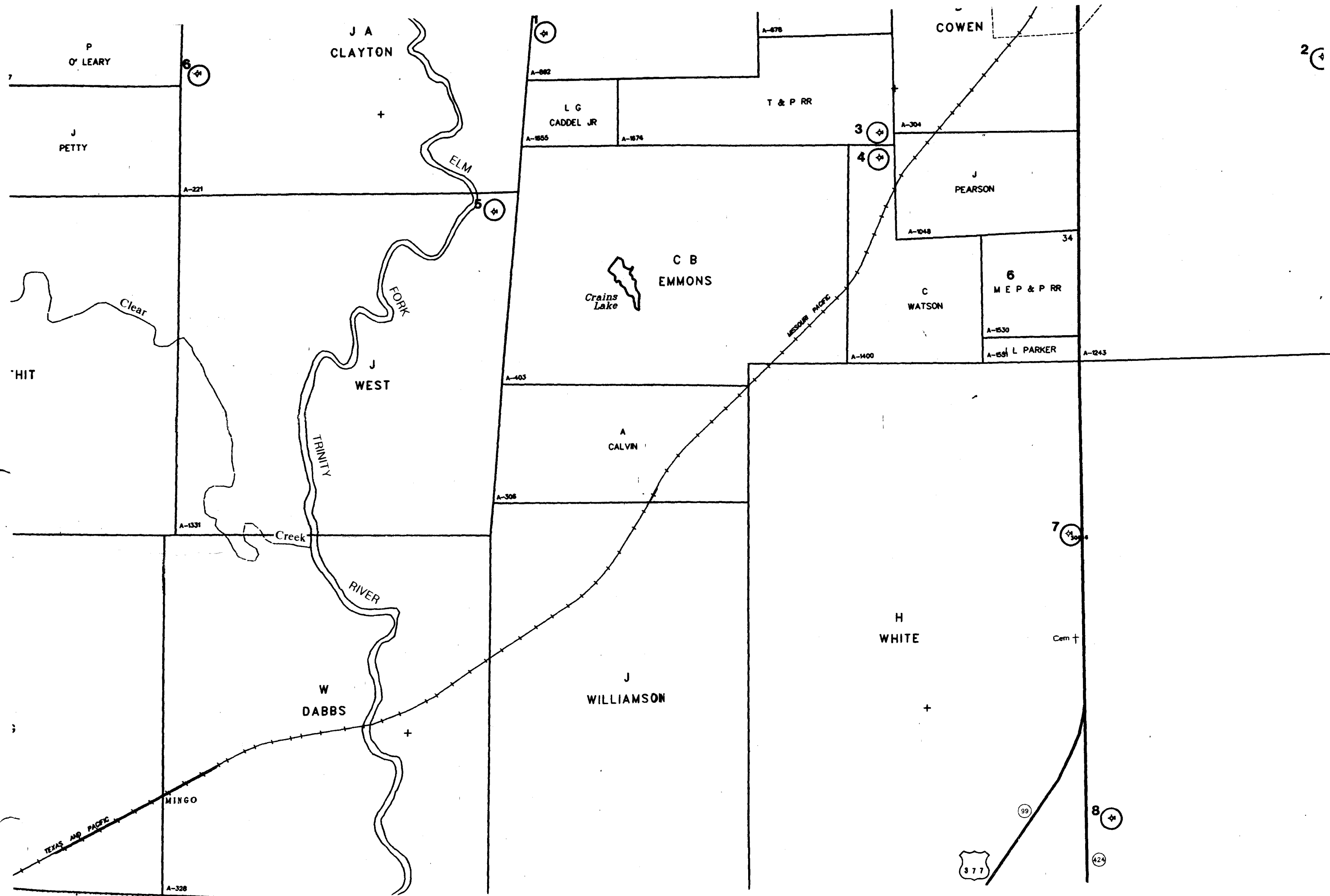
Ogesa.carterburgess.lakelewisville.6.4.99.doc

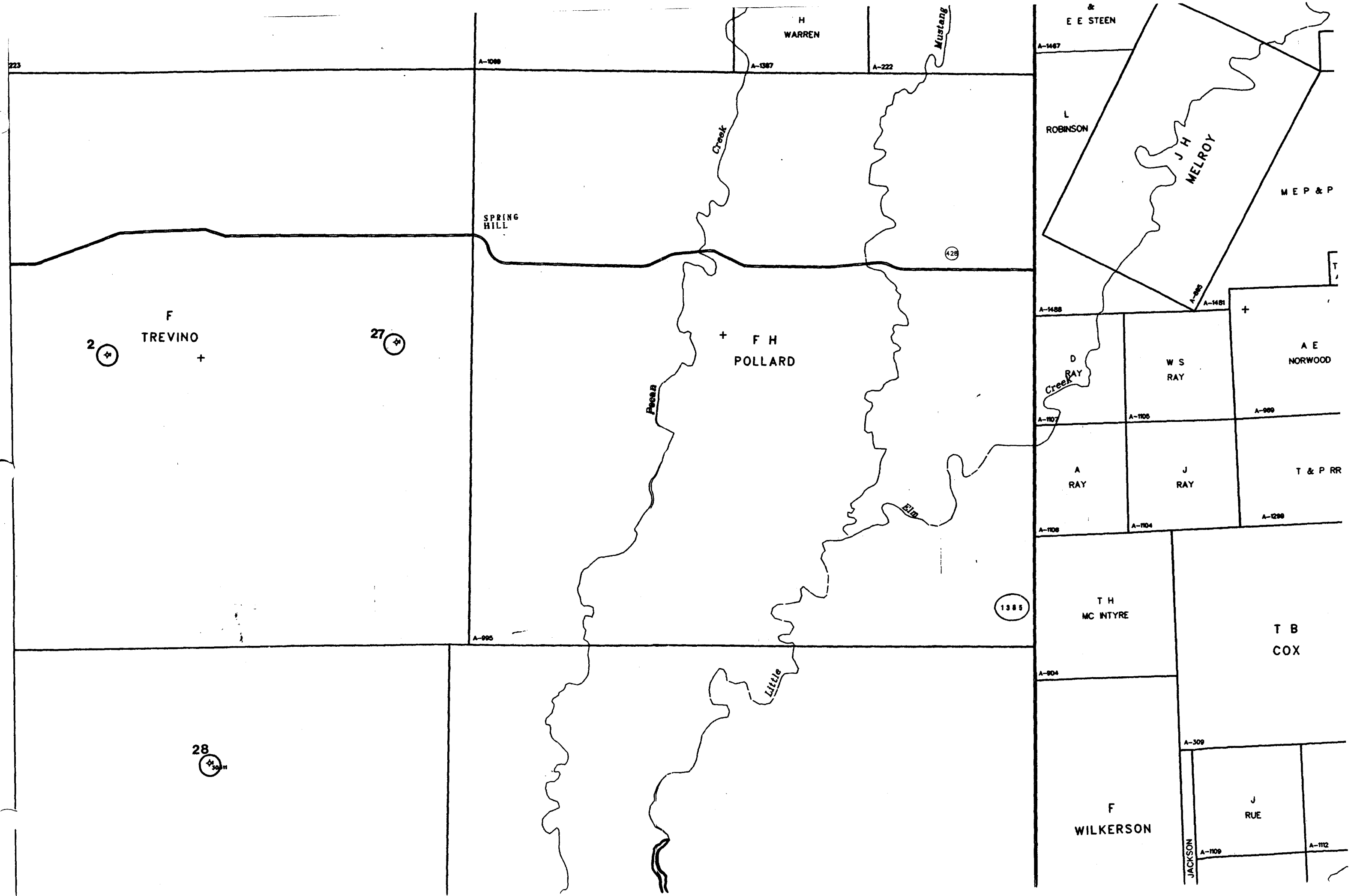
MAP ID #	OPERATOR	LEASE	WELL #	COMP. DATE	PLUG DATE	T.D.	TYPE	API #	COMMENTS
21	Lone Star Pipeline Co.	Lake Dallas Gas Storage Well	9H	12/8/97	N/A	2835	gas	unknown	Storage - injection well
22	Lone Star Pipeline Co.	Gas Storage Well	3	8/4/60	N/A	4494	gas	unknown	Storage - injection well
23	Lone Star Pipeline Co.	Gas Storage Well	7	6/24/67	N/A	2935	gas	unknown	Storage - injection well
24	Standard of Texas	Gabbert, C.	1	N/A	Prior to 1962	unknown	dry	unknown	Currently plugged and abandoned
25	Standard of Texas	Gabbert, C.	1	N/A	Prior to 1962	unknown	dry	unknown	Currently plugged and abandoned
26	Watson - Hillcrest	McColley, A. G.	1	N/A	Prior to 1962	unknown	dry	unknown	Currently plugged and abandoned
27	Texas Company	Williams, J. A.	1	N/A	3/8/47	2500	dry	unknown	Currently plugged and abandoned
28	Lock & Tracy Engineering	Thomas	1	N/A	10/17/78	3400	dry	121-30311	Currently plugged and abandoned
29	Cough Oil Company	Little, Elm	1	N/A	8/1/71	6700	dry	unknown	Currently plugged and abandoned
30	Standard of Texas	Hest, E. O.	1	N/A	Prior to 1962	7309	dry	unknown	Currently plugged and abandoned
31	Export Petroleum Corp.	Witt, J. W.	1	10/30/61	9/8/87	5300	gas	121-00012	Currently plugged and abandoned
32	Strata Petroleum Company	McCord, Ray	1	N/A	N/A	unknown	n/a	121-30367	Abandoned location
33	Carter - Gifford	Agle, J.	1	N/A	6/1/66	5323	dry	unknown	Currently plugged and abandoned
34	Connally, J. E.	Rulando, H. G.	1	N/A	8/1/56	3457	dry	N/A	Currently plugged and abandoned

MAP ID #	OPERATOR	LEASE	WELL #	COMP. DATE	PLUG DATE	T.D.	TYPE	API #	COMMENTS
1	Pure	Caddell, L. G.	1	N/A	Prior to 1962	1214	dry	unknown	Currently plugged and abandoned
2	Miller Brothers	Luster, O. H.	1	N/A	Prior to 1962	2438	dry	unknown	Currently plugged and abandoned
3	Fikes, L.	Phillips, G. W.	1	N/A	Prior to 1962	unknown	dry	unknown	Currently plugged and abandoned
4	Pure	Dozel, Mrs. W.	1	N/A	Prior to 1962	1714	dry	unknown	Currently plugged and abandoned
5	Foster	Jeffcoat, Mrs. G. T.	1	N/A	Prior to 1962	unknown	dry	unknown	Currently plugged and abandoned
6	Coke L. Gage	Higgins, R. W.	1	N/A	4/1/54	2473	dry	unknown	Currently plugged and abandoned
7	Bayveiw & Carter-Gifford	Watkins, R. E.	1	N/A	4/2/72	4386	dry	121-30646	Currently plugged and abandoned
8	Larson & Thomas	Cain, Ella	1	N/A	4/1/58	5392	dry	unknown	Currently plugged and abandoned
9	Connally, J. E.	Cruze, Deb	1	Prior to 1962	2/12/68	3767	gas	unknown	Currently plugged and abandoned
10	Connally, J. E.	Dickie, Alex	2	N/A	5/8/62	unknown	dry	unknown	Currently plugged and abandoned
11	Bayveiw et al	Evens, W. T.	1	Prior to 1962	8/25/72	3890	gas	unknown	Currently plugged and abandoned
12	Lone Star Producing Co.	Nall, E. A. Sr.	2	N/A	1/1/67	2535	dry	unknown	Currently plugged and abandoned
13	Bayveiw & Carter-Gifford	Nall, E. A. Sr.	1	4/17/60	N/A	2853	gas	unknown	Storage - injection well
14	Lone Star Producing Co.	Evens, W. T.	1	N/A	5/1/69	unknown	dry	unknown	Currently plugged and abandoned
15	Texas Company	Evens, W. T.	1	N/A	Prior to 1962	5323	dry	unknown	Currently plugged and abandoned
16	Standard of Texas	Gabbert, C.	1	N/A	12/1/52	3945	dry	unknown	Currently plugged and abandoned
17	Lone Star Pipeline Co.	Gas Storage Well	2	2/27/60	N/A	3722	gas	unknown	Storage - injection well
18	Lone Star Pipeline Co.	Gas Storage Well	8	2/6/91	N/A	3900	gas	unknown	Storage - injection well
19	Lone Star Pipeline Co.	Gas Storage Well	5	7/18/67	N/A	2935	gas	unknown	Storage - injection well
20	Lone Star Pipeline Co.	Gas Storage Well	6	7/12/67	N/A	2935	gas	unknown	Storage - injection well









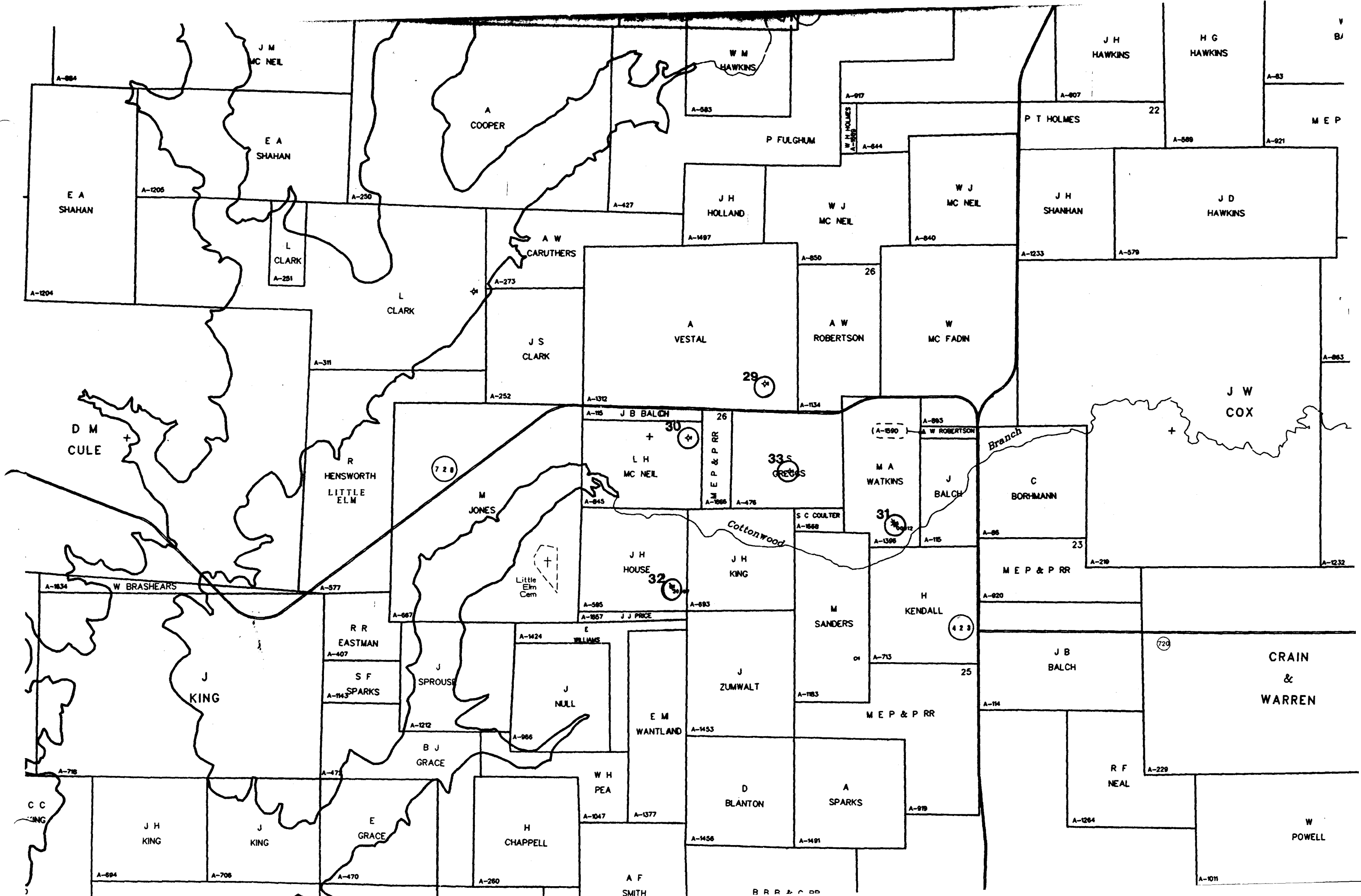


Exhibit 11. Project Location Map (1 2 3 4)



Lewisville Lake  
Project Location Map

- Activities
- Bridges and Roadways
  - Golf Courses
  - Marinas
  - Misc.
  - Parking Lots
  - Parks
  - Trails
  - Utilities
  - Water Treatment Plant
  - Lakes
  - Cops Boundary
  - Roads
  - Rail

0 4000 Feet

1:50,000

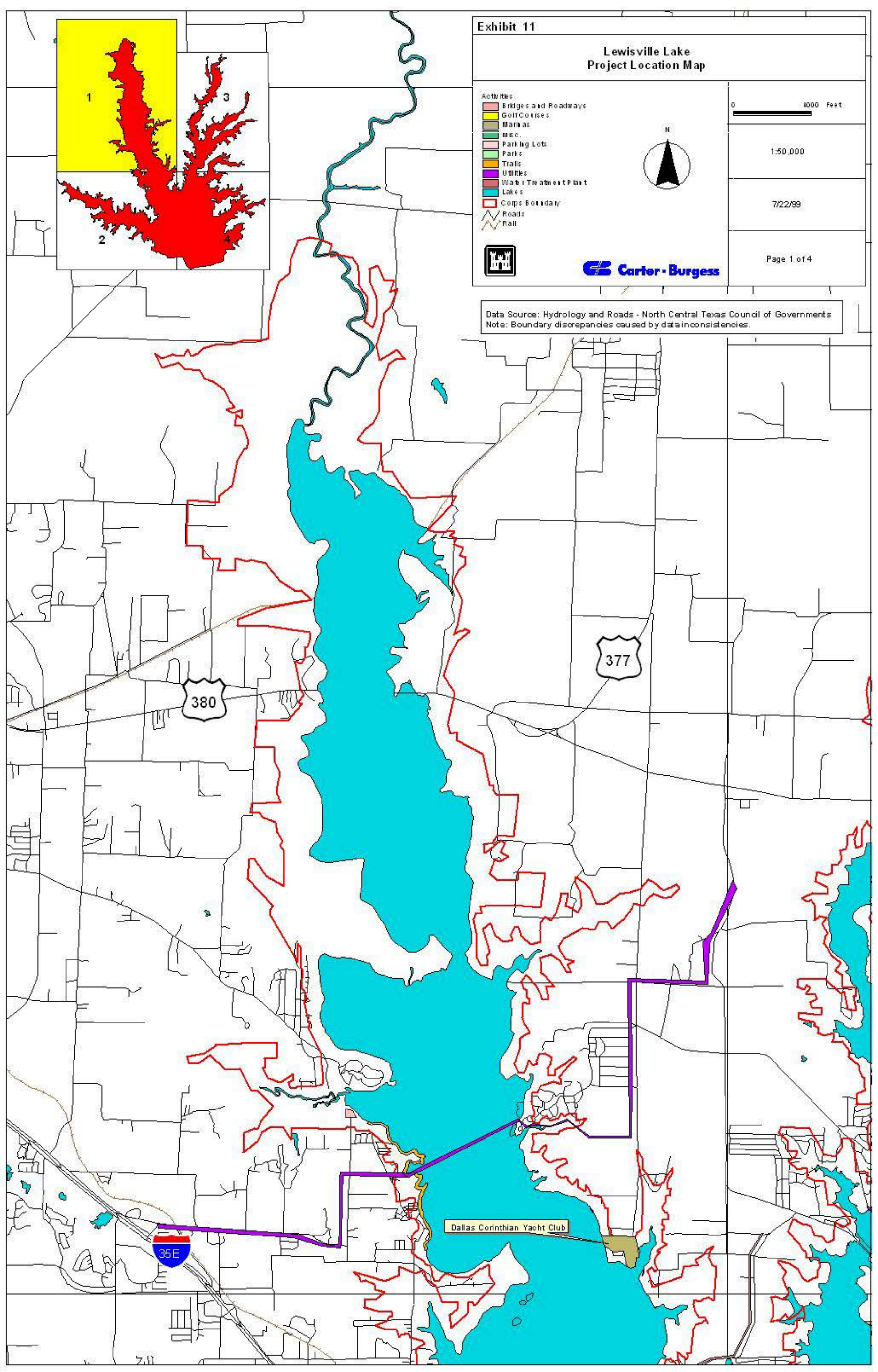
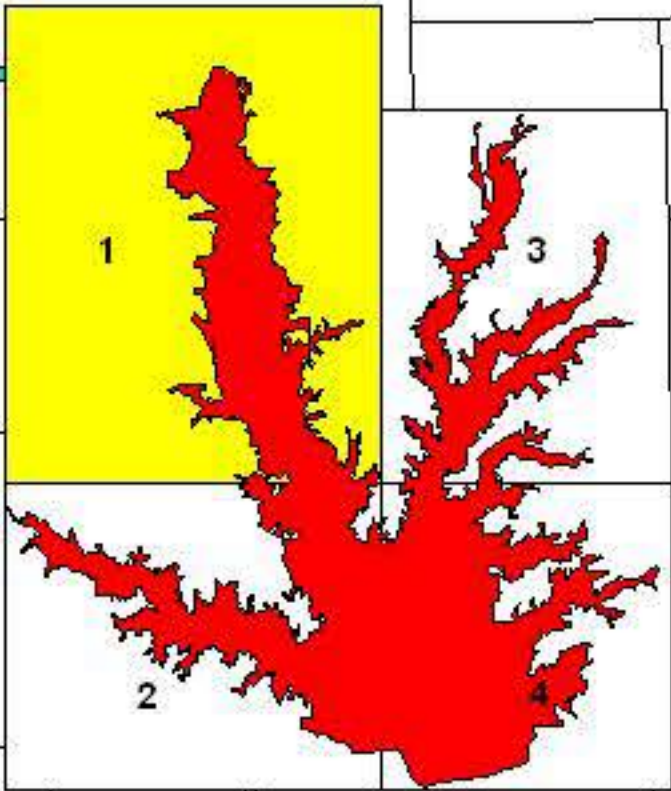
7/22/99

Page 1 of 4

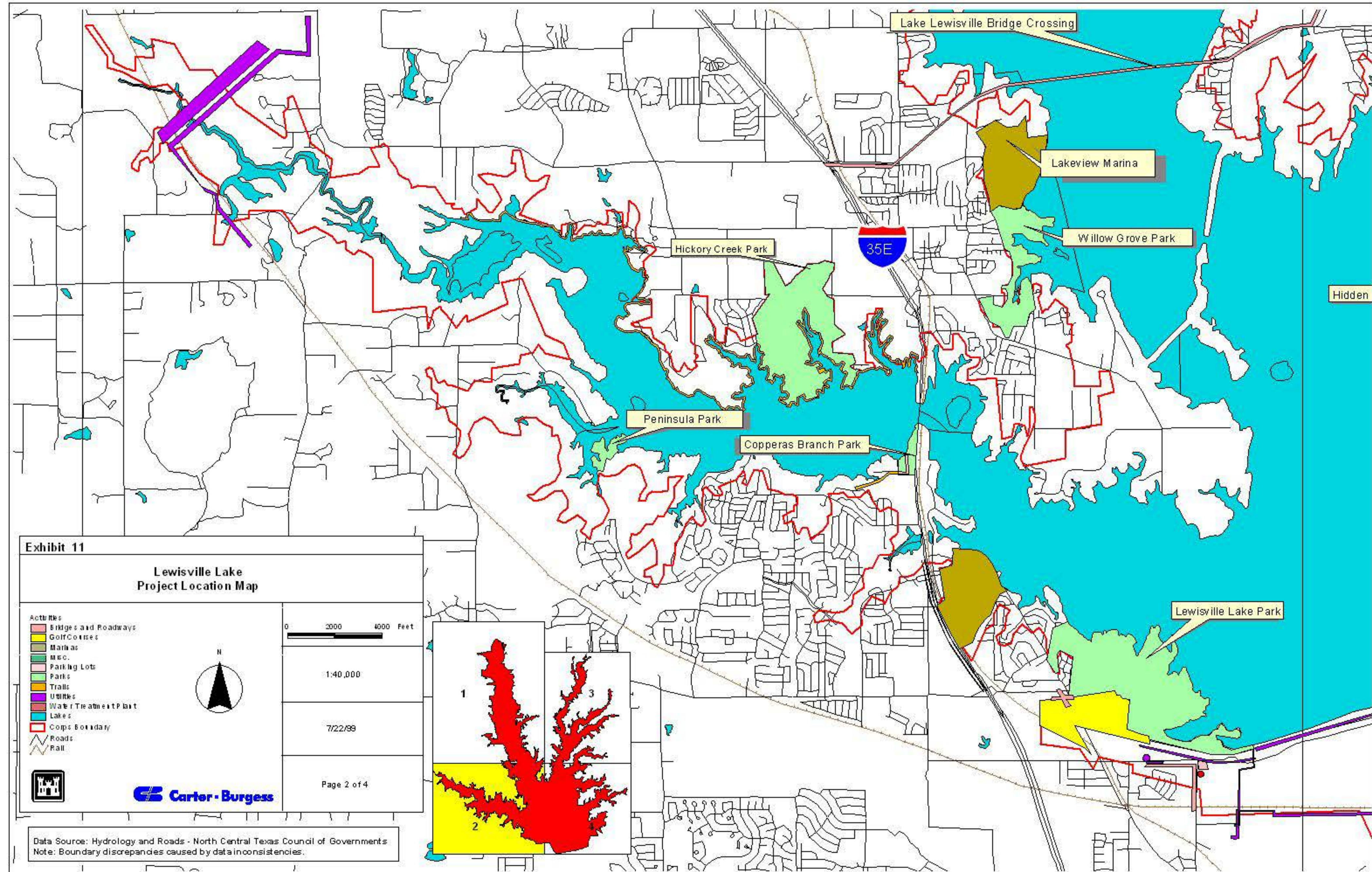


**Carter-Burgess**

Data Source: Hydrology and Roads - North Central Texas Council of Governments  
Note: Boundary discrepancies caused by data inconsistencies.









Lewisville Lake  
Project Location Map

- Activities
- Bridges and Roadways
  - Golf Courses
  - Marinas
  - Misc.
  - Parking Lots
  - Parks
  - Trails
  - Utilities
  - Water Treatment Plant
  - Lakes
  - Corps Boundary
  - Roads
  - Rail

0 2000 4000 Feet

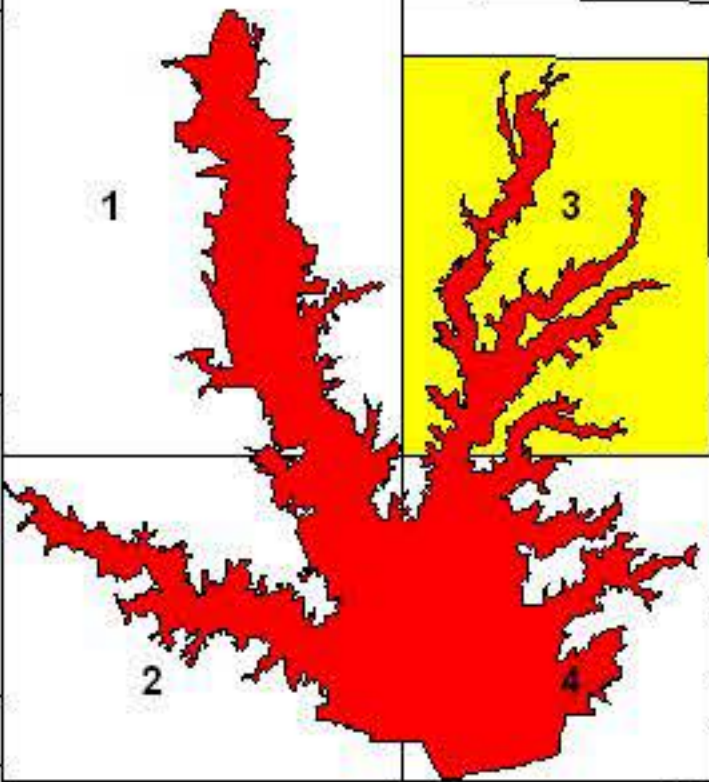


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Page 3 of 4

Data Source: Hydrology and Roads - North Central Texas Council of Governments  
Note: Boundary discrepancies caused by data inconsistencies.

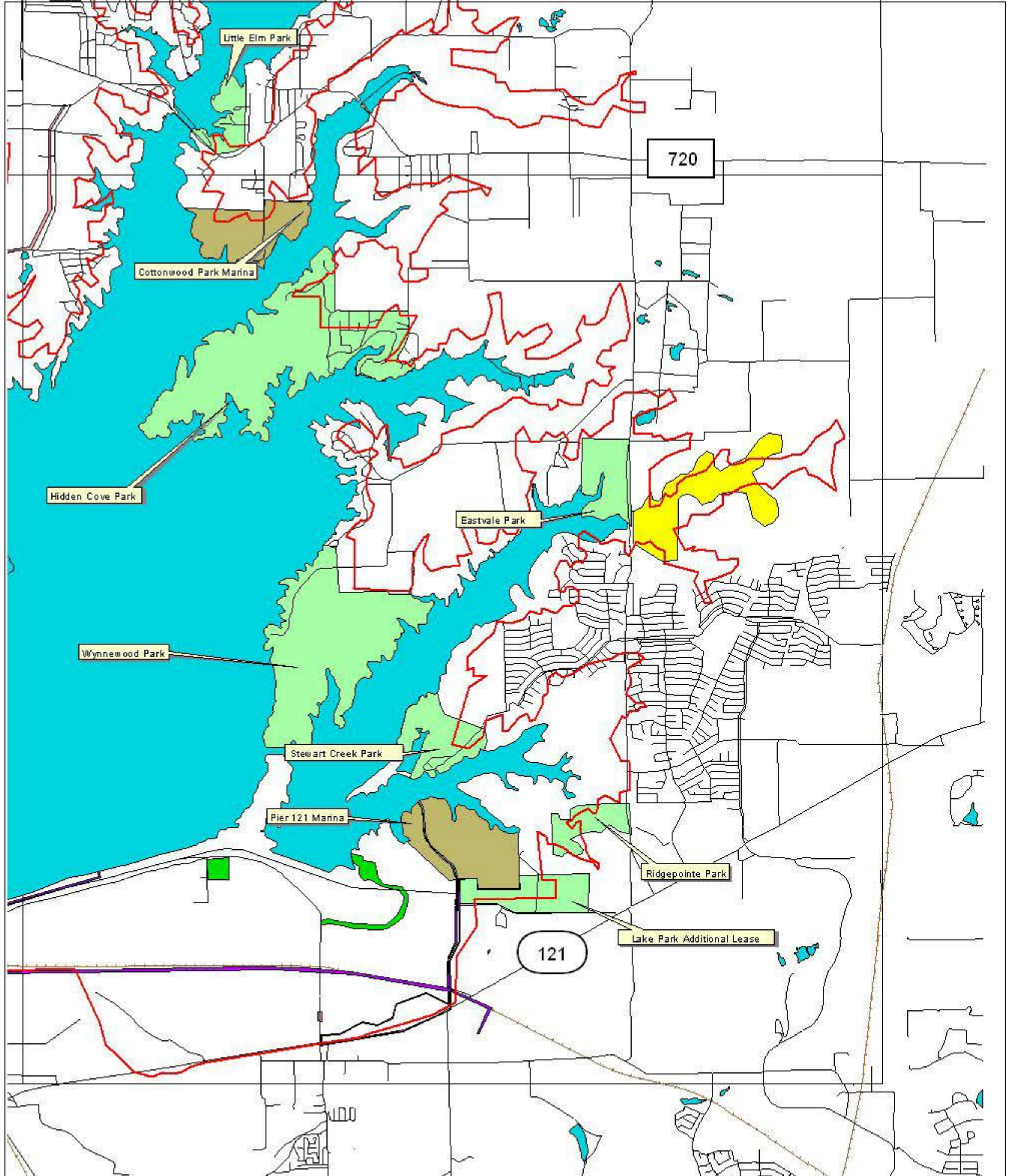


423

Little Elm Park

720





**Exhibit 11**

**Lewisville Lake Project Location Map**

**Activities**

- Bridges and Roadways
- Golf Courses
- Marinas
- Misc.
- Parking Lots
- Parks
- Trails
- Utilities
- Water Treatment Plant
- Lakes
- Corps Boundary
- Roads
- Rail

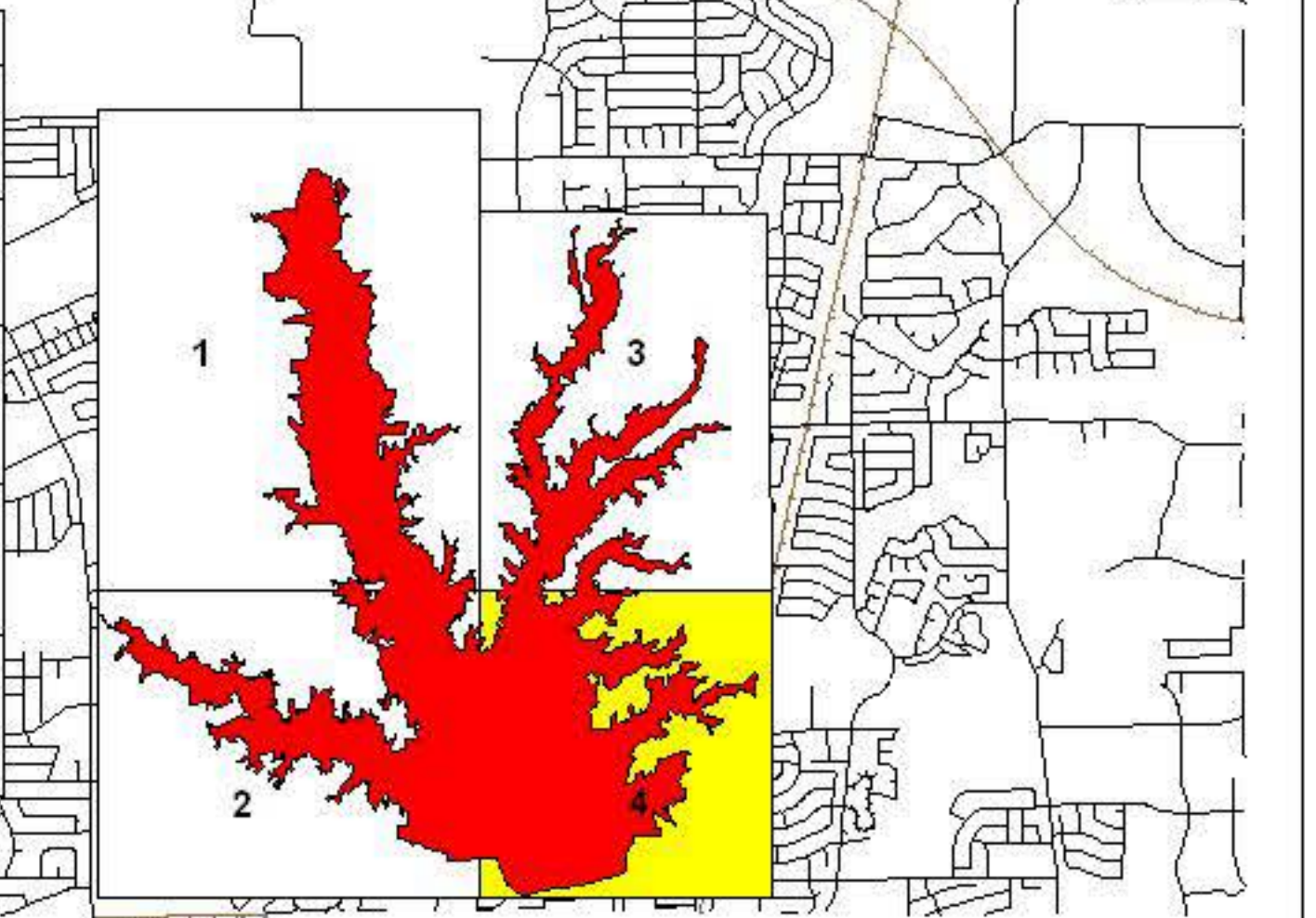
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Data Source: Hydrology and Roads - North Central Texas Council of Governments  
Note: Boundary discrepancies caused by data inconsistencies.



## Exhibit 12. Lake Lewisville Bridge Crossing Alternatives

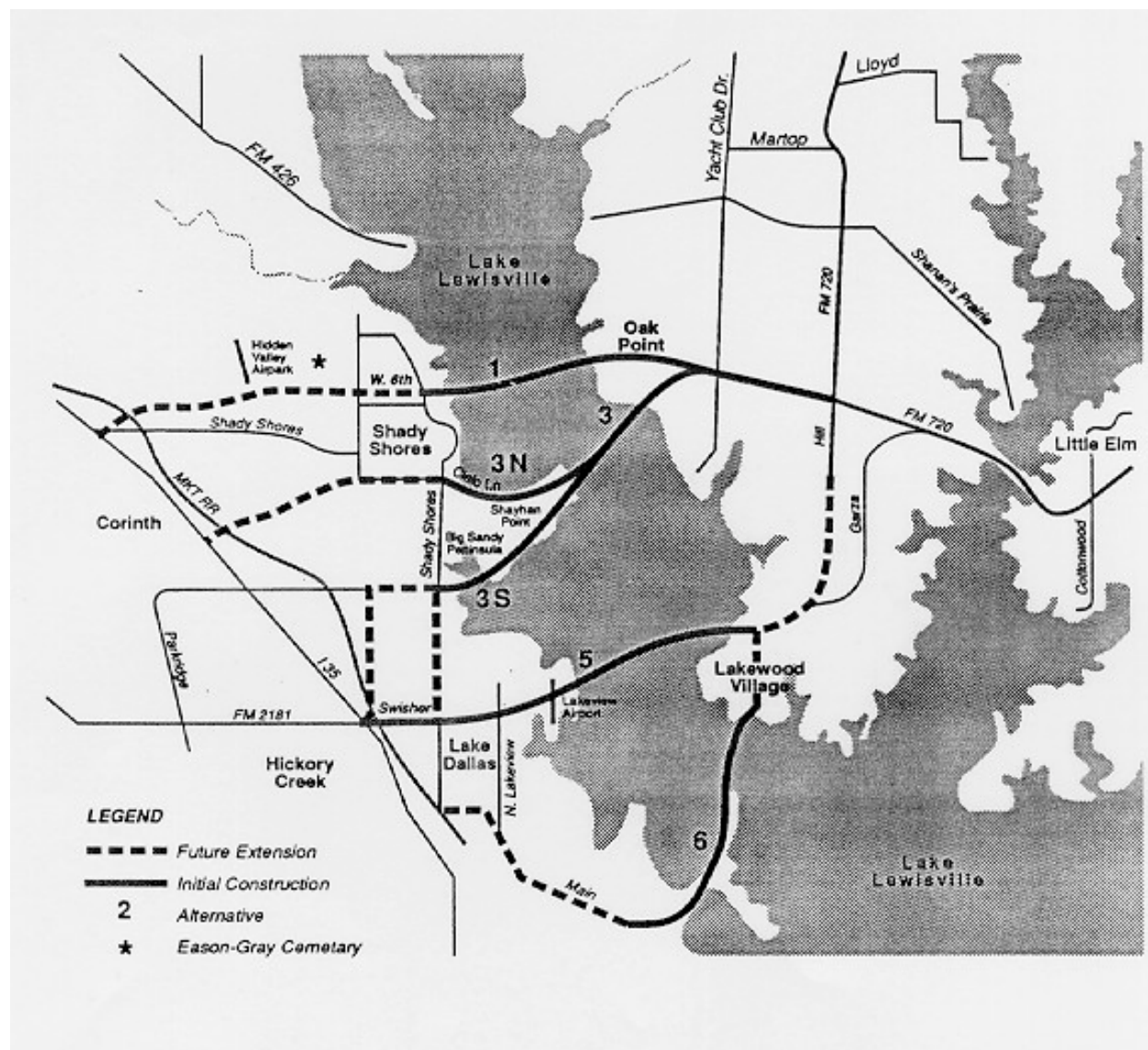


Exhibit 13. Lewisville Lake Future Water-Related Development Policy



## LEWISVILLE LAKE FUTURE WATER-RELATED DEVELOPMENT POLICY

CESWF-OD-R/CESWF-RE-M

5 February 1999

SUBJECT: Enactment of a Fort Worth District Policy for Future Water-Related Recreational Development on Federal Lands and Waters at Lewisville Lake

1. **PURPOSE:** To establish the Fort Worth District's development policy for water-related facilities on Lewisville Lake in response to the recently completed Water-Related Recreation Use Study (WRRUS), and prior to the expiration of the moratorium on construction of new marinas.

2. **APPLICABILITY:** This policy applies to the Corps of Engineers and all public entities and/or leaseholders having rights and responsibilities, now or in the future, for development of Federally-owned land and water areas at Lewisville Lake, after the date of this policy.

3. **DISCUSSION:**

a. In 1994, the cities of Little Elm and The Colony were interested in constructing two new marinas on Lewisville Lake. In compliance with EP 405-1-2, dated 1 April 1994, a Marina (Market) Demand Study was conducted. After the market study was completed, a determination was made by the District Engineer that there was enough demand for a new marina; however, that demand could be addressed by allowing expansion of existing marinas instead of creation of a new marina. A 5-year moratorium on construction of new marinas was established in August 1994. The moratorium allowed existing marinas to expand to meet demand. The Corps' news release announcing the moratorium stated that market conditions would be re-evaluated as the moratorium neared expiration. Since then, existing marinas have expanded as needed and additional expansion of these existing facilities has been approved.

b. As the end of the moratorium drew near, the Corps initiated an effort in the Fall of 1997 to facilitate a comprehensive lake use study. The Corps partnered with the North Central Texas Council of Governments (NCTCOG) which agreed to share half the cost of the lake use study. Eleven governmental entities and several leaseholders with interest in the future development of the lake participated, materially and financially, in the study effort. The effort was to consist of two phases - a Water-Related Recreation Use Study (WRRUS) and a lake-wide environmental assessment. The WRRUS was to provide base level information necessary for the Corps to determine and prudently allocate facilities and services required for potentially new water-related development, including marinas. After completion of the WRRUS, the effort will move into the second phase which involves submission of water-related recreation and other land use development plans and initiation of a lake-wide Environmental Assessment. More information about the purpose and findings of the WRRUS can be found in Appendix A.

4. **POLICY:** The Corps' moratorium on construction of new marinas at Lewisville officially expires in August 1999. Based on the data provided in the Water-Related Recreation Use Study (WRRUS), dated December 1998, the Fort Worth District hereby enacts the following policy for post-moratorium water-related development for Lewisville Lake:

a. The Corps agrees to consider requests for authorization of new marinas and other water-related development planned for construction after

August 1999. Requests must comply with the provisions of this policy. Nothing herein may be inferred to approve development requests or imply future approval of development requests. National Environmental Policy Act (NEPA) compliance will be required for any new development. The NEPA process could prescribe that this policy be adjusted for environmental reasons. Authorizations granted to requestors of new facilities will not be delayed pending fulfillment of existing wet slip and dry stack slip authorizations.

b. The Corps will utilize the following key numbers, based upon the study results, in formulating management alternatives for the lake:

(1) 84% occupancy will be considered the full occupancy rate at marinas.

(2) 66.5% of vessels on the lake are contributed from boat ramps.

(3) 33.5% of vessels on the lake are contributed from marinas.

(4) 1,112 vessels will be used as the median (multi-use alternative) physical carrying capacity that allows for some impact on the natural resources, while providing some positive degree of user enjoyment or satisfaction.

(5) 736 vessels - the number used to factor the peak daily load, instead of 788. [A 736 vessel load constitutes the maximum resource protection and user enjoyment level for the lake. A 788 vessel load is the peak daily load (one hour duration) projected for June that all calculations were based on in the WRRUS. Using the 736 number (peak daily load, three hour duration) will allow for the addition of 376 vessels instead of the 324 vessels allowed by the 788 figure.]

(1,112-736=376) (1,112-788=324)

(6) 1 additional boat ramp parking space equals one vessel on the water during peak periods.

c. Currently, there are 2,341 wet slips on the lake. There are 29 boat ramps with 710 authorized car and trailer parking spaces. In an effort to accommodate future water-related development needs, while maintaining a reasonable level of resource protection, safety, water quality and user satisfaction, the Corps will use the referenced peak-day load of 1,112 vessels as a target for Lewisville Lake. This number is at the top of the median resource protection and user enjoyment level. This target would be exceeded when lake visitation is abnormally heavy, however, during these times, the lake would still be protected at the minimum resource protection level. The Corps will regulate water-related development to allow no more than the referenced 376 additional vessels from marinas and/or boat ramps so that average peak-day load will be targeted at the median carrying capacity level on the lake.

d. Authorizations for facilities which directly impact lake carrying capacity (marina slips, dry stack slips, boat ramps and boat ramp parking spaces) will be allocated/limited by the Corps of Engineers so that on peak days the number of vessels on the lake will be targeted at the median resource protection level of 1,112.

e. Carrying capacity for each zone (A, B and C) [map attached] is targeted at:

(1) Zone A - 631 vessels (Minimum Resource Protection)

(2) Zone B - 192 vessels (Maximum Resource Protection)

(3) Zone C - 289 vessels (Median Resource Protection)

TOTAL - 1,112 vessels

Zone A is the most congested zone. Currently, an additional 327 wet slips and 450 dry stack slips are authorized for construction within this zone. With this additional development and the existing popularity of the facilities, the Corps concedes that Zone A will sometimes exceed its minimum resource protection and user enjoyment level of 606 boats. Allowing more new development within this zone would only increase boat congestion and water safety concerns. Therefore, the Corps will grant no further authorizations for development of wet slips, dry stack storage, boat ramps, or boat ramp parking within Zone A.

Zone B capacity was adjusted to the maximum resource protection level to accommodate the overage in Zone A. At this level, currently requested development may be authorized within Zone B. This will also accommodate presently authorized development in Zone A while allowing additional development within Zone C. Adjusting Zone B to a lower impact capacity allows Zone B to remain more pristine while serving as a relief valve for Zones A & C.

Zone C will maintain the median protection level to allow for the maximum development, while the overall lake capacity remains within the median protection level.

f. The Corps, in cooperation with its leaseholders, will manage water-related development programs to allocate new authorizations (wet slips, dry stack slips, ramps, parking spaces) within Zones B & C to allow for up to 274 more vessels (376 minus 102\*) to the lake capacity. These vessels can originate from wet slips, dry stack slips and/or boat ramps and boat ramp parking.

\*[NOTE: 102 equals the estimated number of boats produced by the 815 authorized slips not yet built in Zones A & B]

g. The 102 presently authorized vessels (815 additional slips) in Zones A and B, and the 274 additional vessels (2,754 additional slips, if utilized as marina slips with no growth in boat ramp/access) in Zones B & C allowed under this policy, would equate to 3,569 slips. This 3,569 slip authority will satisfy the Lewisville Lake demand, projected at 76 additional slips per year, for decades to come. Risk and responsibility for timing development to keep from exceeding demand ultimately rests with the operators, developers, and financiers who have the most exact understanding of changing market conditions.

5. **IMPLEMENTATION:** This policy will be implemented by the Operations and Real Estate elements. The term of this policy is indefinite. Changes may be enacted at the discretion of the signatories below. This policy becomes effective immediately upon the date of signature of the Chief, Operations Division and the Chief, Real Estate Division.

Dwight L. Quarles Date: 2/5/99  
Dwight L. Quarles  
Chief, Operations Division

Hyla J. Head Date: 2/5/99  
Hyla J. Head  
Chief, Real Estate Division

## **APPENDIX A**

### **LEWISVILLE LAKE FUTURE WATER-RELATED DEVELOPMENT POLICY**

#### **1. PURPOSES OF THE WRRUS:**

(1) Determine the impact of existing water-related facilities on the quality of recreation, safety, and the natural resources of Lewisville Lake;

(2) Determine the effect that marinas and boat ramps have on the carrying capacity and distribution of users on the lake;

(3) Update projections of the 1994 Marina Demand Study out to the year 2010;

(4) Evaluate the impact new marina(s) would have on the carrying capacity of the lake overall, and specifically address impacts in the congested southern region;

(5) Verify there is sufficient demand for marina facilities and services to support new or expanded water-related facilities, including marina(s), without adversely affecting the profitability of the existing marinas and the quality of recreation/natural resources of Lewisville Lake;

(6) Evaluate the suitability of marina sites 1, 2, 9, and 10 from the Marina Demand Study in the northeast portion of the lake; and

(7) If demand, carrying capacity, recreation quality, and safety warrant, determine the number and type of facilities required to keep a viable market segment in the northeast portion of the lake, thus avoiding further impacts or the use and congestion of the southern zone.

#### **2. FINDINGS OF THE WRRUS:**

(1) Boating zones A, B and C, as designated in the study, each have different carrying capacity characteristics. Dry boat storage facilities do not contribute significantly to boat traffic, but dry stack storage, for lake impact purposes, is equated to wet slip storage. Currently, peak-day boating use is below the median resource protection and user enjoyment level which has been determined to be between 800 to 1,112 boats, which is also within the optimum social carrying capacity for the lake.

(2) Study surveys demonstrated that, during peak load periods, boat ramps contribute 66.5 percent of the boats on the lake, while marinas contribute 33.5 percent. WWRUS recommendations were based on these figures and were based on the projected average peak day use load on Sundays in June of 788 vessels. This peak occurs during 1 hour of each Sunday in an average June.

(3) It is economically and physically feasible to construct and operate a marina at sites 1, 2, 9 and/or 10. Of the locations studied, site 9 was determined to be the most favored location. However, this action could not be accomplished without potential detrimental effects to the existing marinas.

(4) A new marina of 200 to 250 slips, with amenities similar to other existing marinas would be sufficient to maintain a market clientele in the northeast portion of the lake.

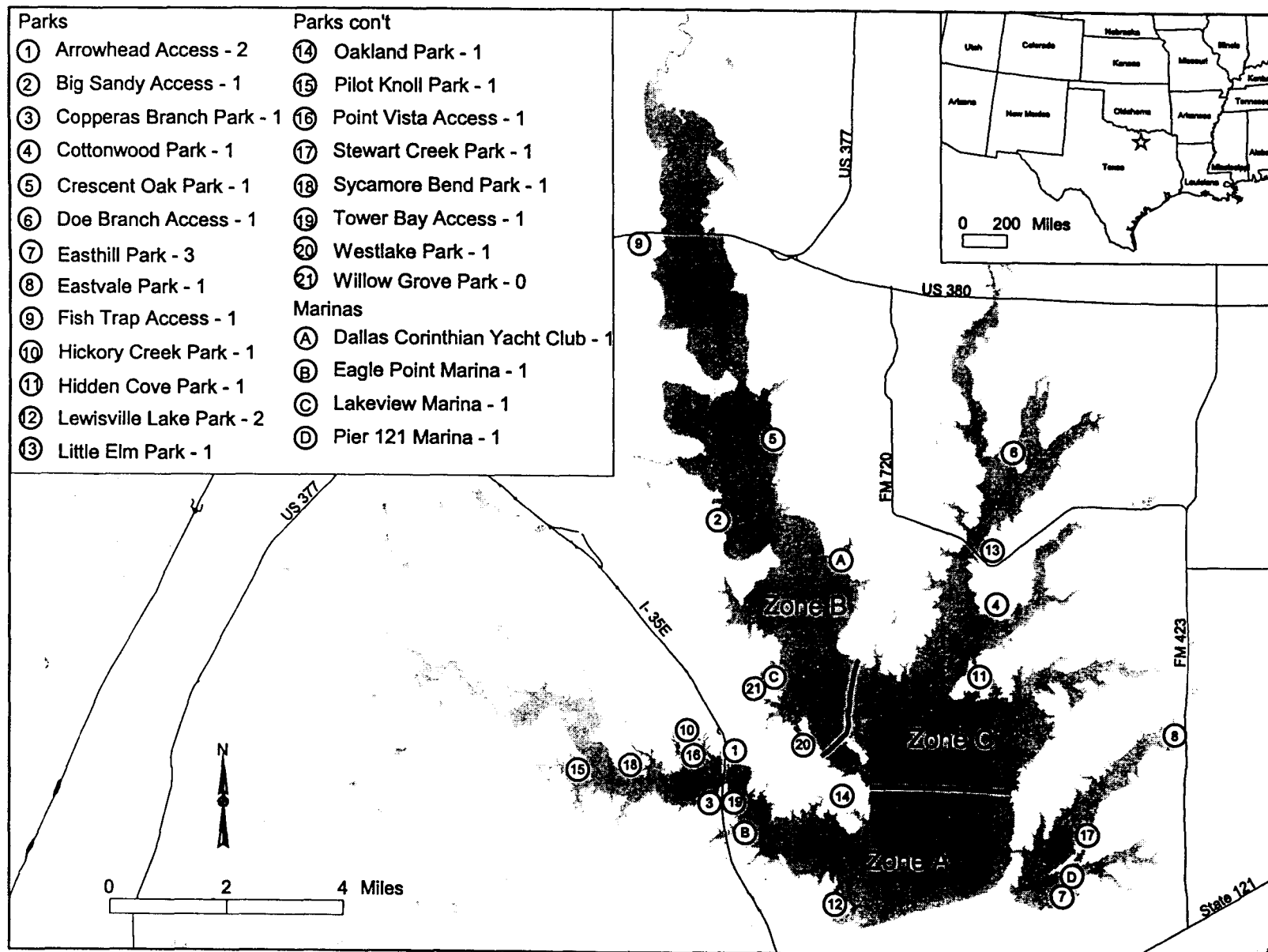


Figure 3.1 Zone Locations.



Exhibit 14. Agency Correspondence



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

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

September 10, 1999

Colonel James S. Weller  
District Engineer  
(Attn: CESWF-EV-EE)  
U.S. Army Corps of Engineers  
P.O. Box 17300  
Fort Worth, Texas 76102-0300

Dear Colonel Weller:

The United States Fish and Wildlife Service has recently reviewed the Public Notice, draft Finding of No Significant Impact (FONSI), and Programmatic Environmental Assessment (PEA) regarding the environmental impacts of more than 300 individual development actions being proposed by 18 public and private entities within the next 10 years on Federal lands around Lewisville Lake, Denton County, Texas.

It is stated in the PEA that there are no known federally listed threatened or endangered species that occur on or near Lewisville Lake. However, according to our records two federally listed species, the threatened bald eagle (*Haliaeetus leucocephalus*) and the threatened piping plover (*Charadrius melodus*), have been documented at the lake in recent years with the piping plover documented as recently as 1998. Based upon available information, the Service concurs that the anticipated cumulative impacts of the proposed actions are not likely to adversely affect any federally listed species. However, should bald eagles, piping plovers, or any other listed species be discovered utilizing areas in or near proposed or active construction/development sites, all proposed and active development should immediately cease. Further coordination with the Service would be required.

According to the PEA, environmental impacts from two proposed utility projects within existing easements would have significant impacts to vegetation and wildlife. The City of Lewisville is proposing both of these projects. One is the construction of two, five-million gallon aboveground storage tanks across from the Feaster Pump Station, while the other is the construction of a water treatment plant and ground storage facility on approximately 28 acres currently leased from the Corps by Lewisville Lake Environmental Learning Area (LLELA) on the southeast corner of Kealy and Jones Street. The proposed water tanks and water treatment plant are both located on lands designated for wildlife management with a large wooded wetland and significant stand of

mature bottomland hardwoods, respectively. We believe development on lands already designated for wildlife management which contain quality terrestrial resources such as wetlands and mature bottomland hardwoods should be avoided. If avoidance of these sites is not possible, we recommend that mitigation measures beyond those considered in the PEA be identified and implemented.

Overall, we believe the mitigation guidelines defined in the PEA are sufficient to avoid, minimize, and compensate for impacts of development activities. We commend the Corps' efforts regarding the compensatory mitigation tables developed in this PEA. However, when projects require mitigation, we request the Corps remind applicants that the suggested mitigation ratios for wetlands and vegetation/habitat are for guidance purposes only and that each project will be assessed individually. We realize the Corps wants to provide guidance to potential applicants so they recognize there would be costs for impacts to the environment, but we are also concerned applicants would expect this guidance to be followed consistently.

The Service also questions whether rating the value of vegetation/habitat by flood event frequency would provide accurate results in all locations. For example, mature bottomland hardwoods within the 5-year flood zone would only require a maximum compensatory mitigation ratio of 3:1 using the tables developed. In Texas, mature bottomland hardwoods are often given a resource category 2 habitat designation by the FWS with a mitigation goal of "no net loss" of in-kind habitat value. Therefore, if impacts are not avoidable, the Service could potentially require mitigation much higher than 3:1. Perhaps, a mitigation ratio based on a combination of habitat type, quality, and abundance would be more appropriate for determining the amount of mitigation required for development actions.

In anticipation of future utility lines being proposed around the lake, the Corps proposes to establish permanent utility easements either on or adjacent to existing easements at Lewisville Lake. We agree that using these proposed easements to place as many utilities as possible would reduce environmental impacts to these corridors and prevent future fragmentation of natural resource lands.

The existing undeveloped Corps' owned property provides (or would provide over time) some of the best wildlife habitat and open space available in the area. Therefore, the Service concurs with the Corps proposal to reallocate approximately 2,600 acres of designated low-density recreation lands to wildlife management lands. To prevent further fragmentation and provide protection to remaining Federal lands around Lewisville Lake facing the imminent threat of urban development, we recommend that the land use nomenclature of remaining fee areas not presently designated as either "Congress Authorized Parks and Recreation" or "Operation and Maintenance" should be upgraded to "Wildlife Management Lands" through a supplement to the lake master plan. Additionally, mitigation areas for development actions located within "Wildlife Management Lands" should be further designated as "Environmental Sensitive Areas" to provide further protection for fish and wildlife resources.

We appreciate the opportunity to provide input on the proposed action. If you have any questions, please contact Mike Armstrong of my staff at (817) 277-1100.

Sincerely,

A handwritten signature in cursive script that reads "Tom Cloud".

Thomas J. Cloud, Jr.  
Field Supervisor



October 7, 1999

Mr. William Fickel, Jr.  
 Chief, Environmental Division  
 Department of the Army  
 Fort Worth District, Corps of Engineers  
 P.O. Box 17300  
 Fort Worth, Texas 76102-0300

Re: Resource Document for Lewisville Lake Programmatic  
 Environmental Assessment

Dear Mr. Fickel:

Staff personnel have reviewed the above-referenced document regarding about 270 development actions being recommended for a Finding of No Significant Impact (FONSI) and being proposed for inclusion into the supplementation of the Lewisville Lake Master Plan for potential implementation of these proposed activities. These actions are being proposed by 18 public and private entities within the next 10 years on Federal lands around Lewisville Lake, Denton County, Texas.

There will be no direct impact on existing Texas Parks & Wildlife projects involving the Land and Water Conservation Fund and the Local Parks Fund (now Texas Recreation and Parks Account).

This agency concurs with assessments of the United States Fish and Wildlife Service (letter of September 10, 1999) concerning environmental impacts. They are as follows.

1. The City of Lewisville is proposing 2 utility projects within existing easements that would have significant impacts to vegetation and wildlife. One is the construction of 2, 5-million gallon aboveground water storage tanks across from Feaster Pump Station. The other is the construction of a water treatment plant and ground storage facility on about 28 acres currently leased from the US Army Corps of Engineers by Lewisville Lake Environmental Learning Area on the southeast corner of Kealy and Jones Streets. These proposed projects are on lands designated for wildlife management with a large wooded wetland and significant stand of mature

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 SAN ANTONIO  
 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.*

Mr. William Fickel, Jr.

Page 2

October 7, 1999

bottomland hardwoods. Development of these sites should be avoided or be mitigated.

2. Mitigation ratio should be based on a more appropriate rating than the value of vegetation/habitat by flood event frequency, e.g., a combination of habitat type, quality, and abundance would be more appropriate. Also, where impacts to mature bottomland hardwoods are not avoidable, a mitigation ratio should be much higher than 3:1.
3. Placement of permanent utility easements either on or adjacent to existing easements would reduce environmental impacts to these corridors and thus prevent future fragmentation of the landscape.
4. Three land use classification changes would be of benefit to fish and wildlife resources:
  - a. 50 acres leased to the City of Denton to develop a nature center with classroom facilities, labs, an auditorium, a resource library, staff offices, utilities, restrooms and a parking area.
  - b. 10 acres to support the Lewisville Lake Environmental Learning Area's proposed research laboratory/dormitory and education center building and camp sites.
  - c. 650 acres leased to the City of Denton for reforestation and a 2-cell wetland complex for their Ecosystem Restoration Program.
  - d. Reallocation of about 2,600 acres of designated low-density recreation lands to wildlife management lands.

We appreciate the opportunity to review this document.

Sincerely,

Ray C. Telfair II

Ray C. Telfair II, Ph.D.  
Natural Resource Specialist





1 Eagle Point Drive Lewisville, Texas 75057-2899 Metro (972) 436-6561

August 27, 1999

Fort Worth Corp of Engineers  
Marcia Hackett  
819 Taylor St.  
Room 3A14  
Ft. Worth, TX 76102-0300

Dear Marcia,

I would like to take this opportunity to correct some of the information in the Programmatic Environmental Assessment Report. These errors occur on page sixty-three of the Eagle Point Marina section.

The first discrepancy is with the size of the fuel tanks. The actual sizes are as follows:

Diesel – 2,000 gal

Unleaded plus – 3,000 gal

Super unleaded – 12,000 gal.

All of these tanks meet the T.N.R.C.C. requirement. This year cathodic protection was installed on all of the tanks. Also installed were overfill protection and an inventory control monitoring system which performs a tank-tightness test every twenty-four hours. In addition, a tank-tightness test has been performed on each tank every year. These tanks have never failed this test.

This past year we voluntarily had the soil tested in the tank and line area because we were told that 97% of all sites tested had failed to pass the T.N.R.C.C. standards. Our understanding was if we had the testing done after the state super fund expired, we could no longer qualify for the cleanup fund. The area did not pass the T.N.R.C.C. standard. No cleanup was required, only monitoring wells to be installed and monitored for a period of time. These wells are currently being installed.

Regarding storm water run-off, we have an approved storm water pollution prevention plan in place. Our permit number for the EPA plan is PXROSF248. We do quarterly

water samples during rain events and have passed all water sample testing. We neither use nor apply any white paint in our boatyard work.

The fifty-five gallon drums in the area of the storage tank were all old trash barrels. These barrels have been replaced with covered top dumpsters. The old barrels have been crushed and were sold as scrap metal.

I am requesting that the incorrect information in the report be removed along with the statement about our lack of compliance. If you need any paperwork or reports on either the T.N.N.R.C. or the storm water pollution plant to support the above facts, we have these documents available at the marina office.

Sincerely,

EAGLE POINT MARINA



J. Russell Trett  
President

JRT/ht

CC: Don Wiese  
Doug Cox