

Rick Wymer

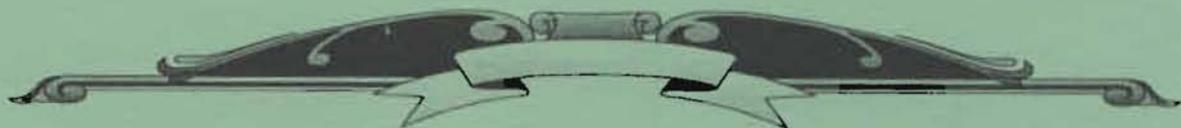
United States Department of the Interior
Bureau of Land Management
Tulsa District

May 1996



TEXAS RESOURCE MANAGEMENT PLAN RECORD OF DECISION AND PLAN





The Bureau of Land Management is responsible for the balanced management of the Public Lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield; a combination of uses that takes into account the long term needs of future generations for renewable and nonrenewable resources. The resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific and cultural values.





United States Department of the Interior

BUREAU OF LAND MANAGEMENT

221 N. Service Road
Moore, Oklahoma 73160-4946

IN REPLY REFER TO:

TX RMP/EIS
1600 (04410)

Dear Reader:

This document contains the combined Texas Resource Management Plan (RMP) and Record of Decision (ROD). The ROD and Plan are combined to streamline our mandated land-use-planning requirements and to provide the reader with a useable finished product.

The ROD records the decisions of the Bureau of Land Management (BLM) for administration of Federal mineral resources within the Texas Planning Area.

The Texas RMP and appendices provide direction and guidance to BLM Managers in the formulation of decisions effecting the management of Federal resources within the planning area for the next 20 years. The Texas RMP was extracted from the Proposed Texas RMP/Final Environmental Impact Statement.

The Planning Area encompasses BLM administered split-estate minerals as well as Federal minerals under Federal surface administered by other Federal Agencies within the State of Texas.

The issuance of this ROD and RMP completes the BLM land use planning process for the State of Texas. We now move to implementation of the plan. We wish to thank all the individuals and groups who participated in this effort these past two years, without their help we could not have completed this process.

Sincerely,

Paul Tanner
Assistant District Manager

RECORD OF DECISION

The decision is hereby made to approve the proposed decisions as described in the Proposed Texas Resource Management Plan/Final Environmental Impact Statement (RMP/FEIS February 1996).

MANAGEMENT CONSIDERATIONS

The decision to approve the Proposed Plan is based on: (1.) the input received from the public, other Federal and state agencies; (2.) the environmental analysis for the alternatives considered in the Draft RMP/Draft EIS, as well as, the Proposed Texas RMP/FEIS. By adoption of this plan, anticipated impacts as described in both the Draft and Final EIS will be minimized.

IMPLEMENTATION AND MONITORING

The approved Texas RMP provides specific management decisions for the planning area for the next 20 years. Plan monitoring will be performed by periodic managerial review to ensure that all subsequent management decisions conform to the Plan and to the established guidelines. On-the-ground actions resulting from management decisions will be monitored by agency personnel to establish how effective the management measures are at minimizing environmental impacts.

PUBLIC INVOLVEMENT

Public opinion, input and involvement has been sought throughout the planning and decision making process. Public participation was documented in detail in Chapter 5 of the Proposed RMP/FEIS. An annual RMP summary document will be prepared to inform the public of the progress made in plan implementation.

CONSISTENCY/PROTEST RESOLUTION

No inconsistencies with the plans, programs, and policies of other Federal agencies or state and local governments were identified during the planning process, including the Governors consistency review. No protests were received on the Proposed Texas RMP/FEIS

PUBLIC AVAILABILITY OF THIS DOCUMENT

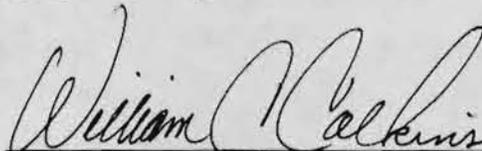
Copies of this document can be obtained by contacting the Bureau of Land Management, 221 North Service Road, Moore, Oklahoma 72160.

CONCLUSION

This Record of Decision constitutes the final Bureau action involved in the approval of the Texas Resource Management Plan. Any person adversely affected by a decision of the Bureau Officer in implementing some portion of a Resource Management Plan may appeal such action to the Interior Board of Land Appeals pursuant to 43 Code of Federal Regulations 4.400 at the time the action is proposed for implementation.

5/31/96

Date



William C. Calkins

State Director, New Mexico
Bureau of Land Management

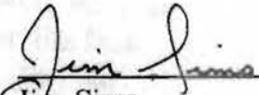
TEXAS RESOURCE MANAGEMENT PLAN

May 1996

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RESOURCE MANAGEMENT PLAN

This plan is for all Federal minerals within Texas that are under the jurisdiction of the BLM. This RMP was developed with guidance provided by the planning criteria, public consultation, coordination with other agencies and evaluation by BLM.

The Texas RMP/EIS is not a land use plan for private, state or other Federal SMA resources. BLM has no surface jurisdiction over split-estate Federal minerals administered by the agency, nor does the BLM have surface land use authority concerning Federal SMA lands. Under the various Federal mineral leasing laws, regulations and programs, the Federal SMA must grant consent to mineral leasing and subsequent minerals development prior to the BLM offering the tract(s) for lease. The SMA retains all authority to manage their programs and surface resources while management of the mineral estate is vested with the BLM.

CONTINUING MANAGEMENT GUIDANCE (CMG)

This section describes resource management guidance that is applicable to, and therefore constitutes a part of, the RMP. CMG is provided by laws, executive orders, regulations, Interior Departmental manuals, BLM manuals and BLM instruction memoranda. CMG also includes decisions from preceding land use plans, cooperative agreements or memoranda of understanding with other state and Federal agencies.

The BLM resource management programs which may be affected by management decisions resulting from this RMP and a brief description of these resource programs are: 1) the wildlife program, which includes

threatened and endangered (T&E) species responsibilities for both plants and animals; 2) the cultural resources program, which involves paleontological, archeological and historic resources management responsibilities; and 3) the minerals management program, which involves all mineral resources and their management.

Current management of these programs can best be described as responsive and custodial. Leasing of the mineral estate, specifically for oil and gas production, has been in response to industry demands. These two situations will help the reader understand the program descriptions that follow.

1. WILDLIFE (INCLUDING SSS)

The function of the BLM's wildlife management program in Texas is to provide support for mineral actions. The program activities in Texas are limited to participation in team efforts to prepare environmental analyses, special status species (SSS, state and Federal T&E species and etc.) evaluations, wetland/riparian evaluations and development of wildlife resource stipulations and conditions of approval (COA).

Federal minerals under private surface or Federal surface managed by another Federal agency or licensed by another Federal agency to a state or local agency for surface management purposes are the most common situations encountered in BLM's wildlife management program in Texas. In these situations BLM's wildlife responsibilities in Texas do not begin until a BLM mineral action (leasing and/or development) is proposed.

Wildlife habitats, common wildlife species and special status plant and animal species are very diverse and numerous in a large state such as Texas. Approximately 70 species of plants and

animals are currently Federally listed as T&E in the state. There are many more species that are Federal candidate species (category 1 and 2) and species listed by the State of Texas as T&E. Only through close site specific coordination with the four Ecological Services Offices of the U.S. Department of the Interior, Fish and Wildlife Service (FWS), FWS State Administrator's office and the Texas Parks and Wildlife Department (TPWD) is the BLM able to keep abreast of the ever changing habitat and SSS concerns throughout Texas.

Some additional wildlife agency coordination will be performed for mineral leasing after this RMP is completed. The uncertainty concerning the location of the split-estate minerals in Texas makes some pre-leasing/post-RMP wildlife agency coordination necessary. Also, every post-leasing action which would result in surface disturbing activities would be analyzed in a BLM environmental assessment (EA) and an "Evaluation of Special Status Species, Wetlands and Riparian Zones". Agency coordination letters would be mailed to the TPWD and the appropriate FWS office on all post-leasing oil and gas actions which would result in surface disturbing activities. Such surface disturbing actions would include Applications for Permit to Drill (APD) or Sundry Notices submitted for actions on Indian or Federal oil and gas leases. Site specific agency coordination would include a discussion of lease stipulations and notices.

The Endangered Species Act of 1973, as amended, the Migratory Bird Treaty Act, E.O. 11990, Protection of Wetlands, BLM policies regarding protection and management of wetlands and riparian areas and information received from the FWS and the TPWD have influenced the development and application of the stipulations and lease notices (LN). LN's are advisory in function and do not mandatorily require any action.

2. CULTURAL RESOURCES

ARCHEOLOGICAL/HISTORIC

The cultural resource program activities in Texas consist of development of environmental analysis reports; site specific evaluations or inventories of cultural resources in support of mineral leasing and development, development of terms and conditions of impact mitigation or impact avoidance, and consultations with state agencies and Indian tribes. Program involvement associated with mineral leasing under other Federal SMA properties is limited to coordination and consultation with other Federal and state agencies and Federally recognized Indian tribes.

Consultation directly with Federally recognized Indian tribes is regularly performed to comply with the American Indian Religious Freedom Act, Public Law (P.L.) 95-341. These consultations do not depend upon tribal ownership of mineral rights in a development area, but result from tribal history, sacred or ceremonial areas or unmarked graves possible in an area of development. Negotiations with specific Indian tribes will also be conducted when any newly discovered Indian graves are claimed for repatriation in accordance with the Native American Graves Protection and Repatriation Act of 1990, P.L. 101-601.

PALEONTOLOGICAL RESOURCES

The paleontological resource program activities in Texas consists of development or review of environmental analysis reports; site specific evaluations or inventories of paleontological resources in support of mineral leasing and development, and application of terms and conditions for impact mitigation or to avoid impacts.

3. MINERALS

Federal minerals occurring in commercial quantities in Texas include oil and gas and coal or lignite. Federal lignite leasing in Texas was addressed in the Draft and Final Camp Swift Lignite Leasing EIS of 1980 and is included as CMG.

At this time the BLM's fluid minerals management program consists of oil and gas leasing and the associated development and operations oversight. Currently there are approximately 350,000 acres of BLM administered Federal mineral estate in Texas under oil and gas lease. The Fluid Minerals Assessment completed by the BLM indicates that most of the state is in a moderate oil and gas development potential category.

Procedures for reviewing oil and gas lease applications vary depending upon the category of surface ownership. Proposals to lease split-estate minerals require the BLM to prepare a site-specific EA and assure that necessary surface protection stipulations are attached to the lease. Procedures for leasing on other SMA minerals are similar to split-estate procedures except that the SMA is contacted for approval to lease and also for identification of specific agency surface protection stipulations. The BLM is responsible for National Environmental Policy Act (NEPA) compliance documentation which could include preparing a site-specific EA that addresses the proposal.

All Federal oil and gas leasing and lease operations in Texas are conducted following procedures established and presented in 43 Code of Federal Regulations (CFR) 3100. Prior to operations, a site specific environmental analysis of the proposed well site may result in additional considerations before approval of an APD.

Lease activities in Texas involve on-site inspections before approving an APD, drilling plan review and lease operations inspection and enforcement. Lease operations are regulated by lease terms, regulations and stipulations that may be attached to the lease to protect specific resource values identified by an EA or EIS.

Geophysical operations within Texas are not controlled or authorized by the BLM. Each SMA and surface owner negotiates and controls surface uses which includes access for geophysical exploration activities.

RMP ACTIONS

The RMP is a comprehensive land use plan to guide future management of lands and resources. The issue addressed in the Texas RMP is the leasing and development of Federal oil and gas in Texas. The selected RMP is the "Proposed RMP" as described in the Proposed Texas RMP/Final EIS.

THE RMP FOR OIL AND GAS LEASING AND DEVELOPMENT

Split-Estate Lands

All new leases and all expired leases that are reissued would be leased with surface resource protection stipulations. Mandatory stipulations would be incorporated into each lease where those stipulations apply. In addition, optional stipulations will be included where resource values exist that warrant special protection.

SMA Lands

All new leases and all expired leases that are reissued would be leased with stipulations currently identified by the SMA. Additional stipulations may be applied to these SMA lands where the BLM determines additional

stipulations may be necessary to protect resource values warranting protection greater than provided by the SMA stipulations.

FEDERAL OIL AND GAS LEASE STIPULATIONS

A Federal oil and gas lease is a contract between the Federal government and an individual or corporation (lessee) which allows the lessee to extract oil and gas from the Federal mineral estate for a percentage (royalty) of the gross value.

The terms of the lease are considered contractual obligations of the lessee and are standardized on all Federal oil and gas leases. The terms and conditions of an oil and gas lease provide general protection of surface and subsurface resources for normal operations and are known as the Standard Terms and Conditions (STC). A copy of the STC of a Federal oil and gas lease are presented in the Appendix. The Federal government also utilizes leasing stipulations to protect unique values or important resources when it is felt that the STC are not adequate.

Proposals to lease split-estate minerals require the BLM to prepare a site specific EA and assure that necessary surface protection stipulations are attached to the lease. Procedures for leasing on other SMA minerals are similar to split estate procedures except that the SMA is contacted for consent to lease and also for identification of specific agency surface protection stipulations. Stipulations to a lease involve additional restrictions required of the lessee for conduct of operations on a lease. Stipulations are attached to a lease at the time of lease offer, providing the potential lessee the opportunity not to bid on the lease if these restrictions are not agreeable.

The Mineral Leasing Act for Acquired Lands, 30 U.S.C. 351, requires that the SMA stipulations must be included on a lease. Further, as presented in 43 CFR 3101.7-1(a) "Acquired lands shall be leased only with the consent of the surface management agency, which upon receipt of a description of the lands from the authorized officer, shall report to the authorized officer that it consents to leasing with stipulations, if any, or withholds consent or objects to leasing." Additional, more restrictive stipulations can be added by the BLM. Specific BLM action in regard to SMA stipulations is mandated by 43 CFR 3101.7-2(a) "Where the surface managing agency has consented to leasing with stipulations and the Secretary decides to issue (a lease), the authorized officer shall incorporate the stipulations into any lease which it may issue. The authorized officer may add additional stipulations."

Exceptions to a lease stipulation, waiver of a lease stipulation or modification of a lease stipulation are explained in the Federal regulations at 43 CFR 3101.1-4. Generally, an exception, waiver or modification may be approved if the record shows that circumstances or protected resource values have changed or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts and that less restrictive stipulations will protect the public interest. Exceptions, waivers and modifications can only be granted by the Authorized Officer. If the proposed exception, waiver or modification is inconsistent with the land use plan, the plan will be amended or changed or the exception, waiver or modification will be disallowed.

Exceptions are considered on a case by case basis and are subject to an environmental analysis. Exception to a leasing stipulation will be granted by the Authorized Officer if the

reason for the exception is consistent with that analysis. No public notice is required for exceptions to lease stipulations which conform to the plan. Exceptions which do not conform to the plan may be granted only upon plan amendment and public notification.

A stipulation waiver is the complete elimination of a stipulation from a particular lease contract. A stipulation is waived by the Authorized Officer after preparation of an EA and a decision is made that the stipulation in question is no longer required for a particular lease. The decision to waive a substantial stipulation requires a plan amendment and a 30 day public notice period prior to waiver.

Modifications to a lease stipulation are made if and when resource management determines the stipulation is no longer effective as written. This situation could occur when new information, obtained by inventory or monitoring, etc. indicates that the protective measure is unnecessarily restrictive. Modification of a stipulation requires the preparation of an EA to determine the potential impacts and/or plan amendment or maintenance needs. If the modification is determined to be substantial by the Authorized Officer, a 30 day public notice period prior to modifying the lease stipulation is required.

Stipulations attached to a lease as a condition of consent by a SMA are not subject to exception, waiver or modification by the BLM.

BUREAU OF LAND MANAGEMENT STIPULATIONS

Stipulations utilized within the Tulsa District include both mandatory and optional stipulations. A mandatory stipulation is one which addresses protection of a resource which the BLM is required by law, regulation or

policy to protect and which the BLM feels STC would not offer sufficient protection.

Mandatory stipulations include:

ORA-1, Floodplain Protection Stipulation

"All or portions of the lands under this lease lie in and or adjacent to a major watercourse and are subject to periodic flooding. Surface occupancy of these areas will not be allowed without the specific approval, in writing, by the Bureau of Land Management."

This stipulation is a result of Executive Order (E.O.) 11988, Floodplain Management, of May 24, 1977.

ORA-2, Wetland/Riparian Stipulation

"All or portions of the lands under this lease contain wetland and/or riparian areas. Surface occupancy of this tract will not be allowed without the specific approval, in writing of the Bureau of Land Management. Impacts or disturbance to wetlands and riparian habitats which occur on this lease, must be avoided or mitigated. The mitigation shall be developed during the application for permit to drill process."

The wetland/riparian stipulation is mandated by E.O. 11990, Protection of Wetlands, of May 24, 1977.

Optional stipulations would be applied to protect a resource value or other land use which would be potentially impacted by normal oil and gas lease operations. These stipulations are optional in the sense that they are not mandated by law or regulation. They will be used only when the value of the resource warrants protection.

Optional stipulations include:

ORA-3, Season of Use Stipulation

"Surface occupancy of this lease will not be allowed from date, through date, without the specific approval in writing, from the Authorized Officer of the Bureau of Land Management."

This stipulation restricts the time period that the lessee can be on the lease. This is usually only necessary when the restriction would result in more than a 60 day delay in commencing operations (by regulation BLM can specify up to a 60 day delay as a result of the APD analysis). Most season of use restrictions involve wildlife seasonal use requirements or recreation use conflicts with drilling activities.

ORA-4, No Surface Occupancy (NSO)

"Surface occupancy of this lease will not be allowed."

This stipulation prohibits surface use to protect a resource or use that is not compatible with oil and gas development. The tract could be leased for inclusion in a drilling unit and may be drilled directionally from an off-site location where occupancy is allowed.

NM-8, Coal Protection

This stipulation requires that any Federal oil and gas operator must coordinate development with the Federal coal lessee. This stipulation is used to protect the value of the Federal coal resource.

NM-9, No Surface Occupancy, Pooling Purposes Only

This stipulation prohibits surface use as well as directional drilling into Federal minerals. This stipulation is used to protect a resource or use that is not compatible with oil and gas development. The tract could be leased for inclusion in a drilling unit to meet an operators spacing requirements.

LEASE NOTICES (LN)

A LN provides more detailed information concerning limitations that already exist in law, lease terms, regulations or operational orders. A LN also addresses special items the lessee should consider when planning operations, but does not impose new or additional restrictions. LN's attached to leases should not be confused with Notices to Lessees (NTL).

LN-1, Threatened and Endangered Species

"According to preliminary information all or portions of this lease area could contain Federal and/or state listed threatened or endangered species and/or their habitats. Any proposed surface disturbing activity may require an inventory and consultation with the FWS and/or the state wildlife agency. The consultation could take up to 180 days to complete. Surface occupancy could be restricted or not allowed as a result of the consultation. Appropriate modifications to the imposed restrictions will be made for the maintenance and operations of producing oil and gas wells."

CONDITIONS OF APPROVAL AND GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES (KANSAS, OKLAHOMA AND TEXAS)

Additional BLM requirements to protect a resource or value that does not affect the lessee's rights or restrict location on the lease can be imposed as a COA of the APD or as a general requirement for operating a Federal oil and gas lease.

Initially these resource protection measures are developed as COAs and then, should they be found to be generally applied to all APDs, they become part of the list of General Requirements for Oil and Gas Operations on Federal Leases (Kansas, Oklahoma and Texas).

Examples of such resource protection measures are as follows:

- "All open pits and tanks being used in conjunction with the development and production of this lease will be netted or otherwise covered no later than four (4) days after final drilling depth is achieved and until such time as they are removed and/or filled and reclaimed. The recommended coverings include hard covers or a screen material of small enough mesh size so as to prevent the entry and death of migratory birds. The U.S. FWS, Division of Law Enforcement, has prepared materials which provide guidelines for covering oil field pits and tanks".

Note: The granting of four (4) working days for completion of covering or netting pits and/or tanks in no way limits your responsibility should migratory birds be found dead in the tanks or pits within the four (4) day period or during the actual drilling phase.

- "Open-vent exhaust stacks on production equipment (heater/treater, separator and dehydrator units), installed for use with this well, will be constructed, modified and/or otherwise equipped to prevent birds and bats from entering and to the extent practical, to discourage perching and nesting. These measures must be completed prior to production from this well passing through such equipment."

- "All new overhead electrical lines needed for the drilling or production phase of this well will be modified to help minimize accidental deaths of migratory birds. The poles and the wires will be modified to help minimize the likelihood of bird electrocutions and collisions. Guidelines can be found in a wide variety of publications. Two such sources of technical information are as follows: 'Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1981' and 'Mitigating Bird Collisions With Power Lines: The State of the Art in 1994'. Also, the power company or cooperative that serves your area should be able to provide technical advice."

SURFACE MANAGEMENT AGENCY STIPULATIONS

Federal mineral resources under SMA lands within Texas are subject to each SMA's specific leasing stipulations regardless of alternative. Copies of the SMAs' oil and gas leasing stipulations are contained in the Appendix. Generally, these SMA stipulations can be divided into three NSO categories; 1) NSO with no directional drilling allowed (NSO/ND), 2) NSO with directional drilling allowed (NSO/DD), and 3) NSO described by elevation or surface use if suitable non-agency lands are included in the same drilling unit (NSO/ELEV). The SMAs

normally base lease stipulations to the surface land use or allocation at the particular site or installation.

NSO/ND, No Surface Occupancy and No Drilling

This stipulation, common to the COE and the BR, is designed to protect facilities such as dams, embankments and other areas from damage by oil and gas operations. This stipulation prohibits surface occupancy and directional drilling by the lessee under restricted areas. This stipulation allows the identified area to be included in a lease for the purpose of becoming a part of a drilling unit so that the United States will share in the royalty.

NSO/DD No Surface Occupancy, Open for Directional Drilling

This stipulation is used by SMAs to protect surface resource values and uses from drilling activities. This stipulation is applied to public use areas, recreation areas, state wildlife and waterfowl refuges, historical sites, trails, roads and military training areas. Directional drilling is permitted from outside the identified areas where occupancy is allowed.

NSO/ELEV No Surface Occupancy based on Elevation

This stipulation is used by the COE in combination with, "No drilling on Government owned surface where alternative surface ownership is available within the same drilling unit" to protect the integrity of their reservoirs at a specific level based upon lake elevation. Normally, this stipulation is subject to negotiation between the SMA and the lessee at the time of operational plan development.

TABLE 1
FEDERAL LANDS OPEN FOR OIL AND GAS LEASING WITH STIPULATIONS

SMA PROJECT/AREA	ACRES	NSO/ND	NSO/DD	NSO/ELEV	ORA-1	ORA-2	ORA-3
Pat Mayse Lake	18,928	1,200	10,000				8,925
Texoma Lake	193,500	4,250	85,500				11,429
Total TD COE	212,428	5,450	95,500				20,354
Aquilla Lake	12,395	1,200	9,180				
Bardwell Lake	8,157	700	7,447				
Belton Lake	32,218	500	25,775				
Benbrook Lake	11,275	950	10,526				
B.A. Steinhagen	22,800	500	18,554				4,000
Canyon Lake	14,568	900	14,516				
Cooper Lake	57,328	1,500	37,045				
Georgetown Lake	5,830	300	4,315				
Granger Lake	15,303	2,500	12,425				6,500
Grapevine Lake	17,761	1,800	17,716				
Hords Creek Lake	3,027	500	2,475				
Joe Pool Lake	20,776	2,800	17,775				
Lake O' the Pines	45,095	1,445	38,200				
Lavon Lake	37,565	1,500	36,500				
Lewisville Lake	45,506	2,500	39,080				
Navarro Mills Lake	14,216	730	12,925				
O.C. Fisher Lake	18,140	1,500	17,155				
Proctor Lake	15,944	1,835	15,400				
Sam Rayburn Lake	159,754	2,650	146,324				
Ray Roberts Lake	48,353	2,005	39,700				
Somerville Lake	32,729	3,570	27,800				
Stillhouse Hollow Lake	16,181	2,130	13,755				
Waco Lake	21,327	3,357	21,327				
Whitney Lake	53,194	2,413	53,194				
Wright Patman Lake	157,526	2,523	157,526				
Total FW COE	886,968	42,308	796,635				10,500
Choke Canyon Reservoir	26,000	*	**				
Palmetto Bend Lake	16,985	*	**				
Lake Meredith	700	700					
Total BR	43,685	700					

- * NSO/ND restrictions will apply within area of the project where the U.S. owns 100 percent fee title mineral interest.
- ** BR Project General Stipulations will apply in project areas where less than the full mineral interest has been acquired.

TABLE 1 (Continued)
FEDERAL LANDS OPEN FOR OIL AND GAS LEASING WITH STIPULATIONS

SMA PROJECT/AREA	ACRES	NSO/ND	NSO/DD	NSO/ELEV	ORA-1	ORA-2	ORA-3
Fort Bliss	125,295		125,295				
Fort Hood	208,712	208,712					
Fort Wolters	3,985		3,985				
Camp Bowie	3,858		3,858				
Camp Bullis	27,880		27,880				
Camp Swift*	11,740		11,740				
Lone Star Army Ammunition Plant	15,546		15,546				
Longhorn Army Ammunition Plant	8,492		8,492				
Red River Army Depot	19,081						
Bergstrom AFB	3,215		3,215				
Dyess AFB	5,366		5,366				
Laughlin AFB	3,911		3,911				
Laughlin No. 1 AAF	1,200		1,200				
Randolph AFB	2,893		2,893				
Reese AFB	2,455		2,455				
Seguin AAF	961		961				
Sheppard AFB	4,160		4,160				
Cabaniss NALF	800		800				
Corpus Christi NAS	2,593		2,593				
Kingsville NAS	3,955		3,955				
McGregor NIROP	9,789		9,789				
Waldon NALF	640		640				
Total DOD	466,527	208,712	238,734				

* In addition to stipulations required under Alternative A, NM-8, Coal Protection Stipulation, would apply to 11,740 acres.

Note: All leasing would be subject to military commander stipulations.

Pecan Genetics and Improvement Research Laboratory	84		84				
Conservation and Production Research Laboratory	1,531		1,531				
Livestock Insects Laboratory	35		35				
Grassland, Soil and Water Research Laboratory	1,272		1,272				
Total ARS	2,922		2,922				

TABLE 1 (Continued)
FEDERAL LANDS OPEN FOR OIL AND GAS LEASING WITH STIPULATIONS

SMA PROJECT/AREA	ACRES	NSO/ND	NSO/DD	NSO/ELEV	ORA-1	ORA-2	ORA-3
Amistad Reservoir	65,000			**			
Falcon Reservoir	87,000	*		***			
Total USIBWC	152,000						
<p>* NSO/ND within 2,300 feet of the centerline of the dam embankment. ** NSO below the 1,144.3 foot elevation traverse (USIBWC Stip. No. 1). *** NSO below the 307 foot elevation traverse (USIBWC Stip. No. 1).</p>							
Pantex	16,000	16,000					
Total DOE	16,000	16,000					
GRAND TOTAL	1,780,530	273,170	1,133,791				30,854

PLAN APPLICATION

All Federal minerals within the planning area have been evaluated using the previously described criteria and management guidance. The following description is presented by specific location and includes a short description of how RMP guidance applies to each location. The SMA lands are grouped according to agency jurisdiction, the split-estate lands are grouped by county by ecoregion.

Federal minerals closed to leasing within Texas are listed by SMA in Table 2.

Reasons for a SMA to withhold consent to lease vary from agency to agency however,

43 CFR 3100.0-3 specifically identifies National Park Lands and areas within city limits as excluded from leasing. The fact that all acquired Federal lands in Texas were obtained for a purpose other than mineral leasing and that mineral leasing and development may not be compatible with the reason for acquisition, is sufficient to withhold consent. Additionally, it should be pointed out that while these areas are closed to leasing, if Federal mineral estate is being drained by adjacent oil and gas activities, the Federal mineral estate being drained could be leased for inclusion in a unit for royalty purposes.

**TABLE 2
FEDERAL LANDS CLOSED TO OIL AND GAS LEASING IN ACRES AS OF 1995**

PROJECT/AREA	SMA	ACRES	PROJECT/AREA	SMA	ACRES
Amistad NRA	NPS	57,292	Brooks AFB	USAF	1,310
Alibates Flint NMo	NPS	1,079	Carswell AFB	USAF	2,558
Big Bend NP	NPS	775,279	Goodfellow AFB	USAF	1,124
Big Thicket Pres.	NPS	85,873	Kelly AFB	USAF	410
Chamizal NMe	NPS	54	Lackland AFB	USAF	2,712
Fort Davis NHS	NPS	460	Camp Mabry	US Army	N/A
Guadalupe Mts. NP	NPS	76,807	Fort Sam Houston	US Army	2,997
Lake Meredith NRA	NPS	44,977	Dallas NIROP	USN	314
LBJ NHP	NPS	548	Total	DOD	11,425
Padre Island NS	NPS	130,355			
San Antonio			Big Spring Lab.	ARS	247
Missions NHP	NPS	258	College Station Lab.	ARS	60
Total	DOI/NPS	1,172,982	Lubbock Lab.	ARS	47
			Temple Lab.	ARS	451
Anahuac NWR	FWS	30,578	Weslaco Lab.	ARS	3,369
Aransas NWR	FWS	114,397	Total	USDA/ARS	4,174
Attwater Prairie					
Chicken NWR	FWS	7,984	Bastrop FCI	BP	174
Balcones			Big Spring FCI	BP	101
Canyonlands NWR	FWS	10,959	Bryan FCI	BP	37
Big Boggy NWR	FWS	4,526	Carswell FCI	BP	180
Brazoria NWR	FWS	43,388	Carswell AFB FCI	BP	94
Buffalo Lake NWR	FWS	7,664	El Paso FCI	BP	635
Laguna Grulla NWR	FWS	5	Seguinville FCI	BP	128
Hagerman NWR	FWS	12,142	Texarkana FCI	BP	320
Atascosa NWR	FWS	45,187	Three Rivers FCI	BP	302
Little Sandy NWR	FWS	3,802	Total	DOJ/BP	1,971
Lower Rio Grande					
Valley NWR	FWS	63,115			
McFaddin NWR	FWS	42,956	GRAND TOTAL		1,629,753
Moody NWR	FWS	3,517			
Muleshoe NWR	FWS	5,809			
San Bernard NWR	FWS	27,414			
Santa Ana NWR	FWS	2,087			
Texas Point NWR	FWS	8,952			
Trinity River NWR	FWS	4,400			
Inks Dam NFH	FWS	99			
San Marcos NFH	FWS	119			
Uvalde NFH	FWS	101			
Total	DOI/FWS	439,201			

SPECIFIC SITE DESCRIPTIONS

The following descriptions of the various SMA projects are general and brief. A series of corresponding maps of each SMA project follows each SMA section.

U.S. Army, COE, Tulsa District Projects

Oil and gas leasing stipulations for the Tulsa District COE projects are contained within the Districts Special Stipulations 1-A, a copy of which is contained in the Appendix. These 1-A stipulations provide for the protection of surface resources through the use of surface occupancy restrictions, drilling restrictions or consultation requirements with authorized surface lessees. Generally, 1-A requires NSO or directional drilling within 2,000 feet under restricted areas. Restricted areas include the major structures such as the dam, spillways, embankments, etc. All existing or proposed public use areas, recreation areas, wildlife and waterfowl refuges, historical sites and hiking or horseback trails are designated NSO. The 1-A stipulations are standardized and apply to all Tulsa District projects.

<u>PAT MAYSE LAKE</u>	<u>MAP 2</u>
Project area	18,928 acres
Operations	_____ acres
Wildlife Mgmt.(TPWD)	8,925 acres

Description

Pat Mayse Lake is located in the Red River Basin in Lamar County. The damsite is on Sanders Creek approximately 10 miles north of the town of Paris. The dam is an earthfill structure approximately 7,080 feet in length. At flood control elevation 460.5 feet Mean Sea Level (MSL) the lake covers a surface area of over 7,680 acres. The project was constructed for flood control, municipal and industrial

water supply as well as for recreation and fish and wildlife habitat management.

SMA Lease Stipulations

NSO/ND on approximately 1,200 acres associated with the dam and spillway and a 2,000 foot buffer. NSO on approximately 10,000 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Pat Mayse Lake be available for lease the stipulations described above would apply and ORA-3 Season of Use restrictions would apply from September 1 through March 31, on the 8,925 acres of wildlife management lands.

<u>TEXOMA LAKE</u>	<u>MAP 3</u>
Project area	193,500 acres
Operations	2,050 acres
Recreation (high density)	14,590 acres
Recreation (low density)	44,003 acres
Wildlife Mgmt. (ODWC)	25,942 acres
Wildlife Refuge (FWS)	28,049 acres

Description

Denison Dam is located on the Red River in Bryan County, Oklahoma and Grayson County, Texas approximately 5 miles northwest of Denison, Texas and 15 miles southwest of Durant, Oklahoma. Approximately 30 percent of the project area is situated within the State of Texas. Total length of the dam is 17,200 feet and maximum height above stream bed is 165 feet. Platter Dike is a small structure about 3 miles upstream from the left abutment of the dam. This dike has a total length of 6,000 feet and is similar to the main embankment in design. The Cumberland Dikes consist of two rolled earthfill levees

approximately 23,500 feet in length on the Washita River near Cumberland, Oklahoma. At flood control elevation 640 feet MSL there are 143,300 surface areas and a total storage capacity of 5,381,900 acre-feet of water. The lake has two principal arms, the Red and Washita Rivers. The lake has a maximum width of about 3 miles. The Red River arm of the lake has a length of about 60 miles and the Washita arm of the lake is about 45 miles long. There are 580 miles of shoreline at the top of power pool elevation.

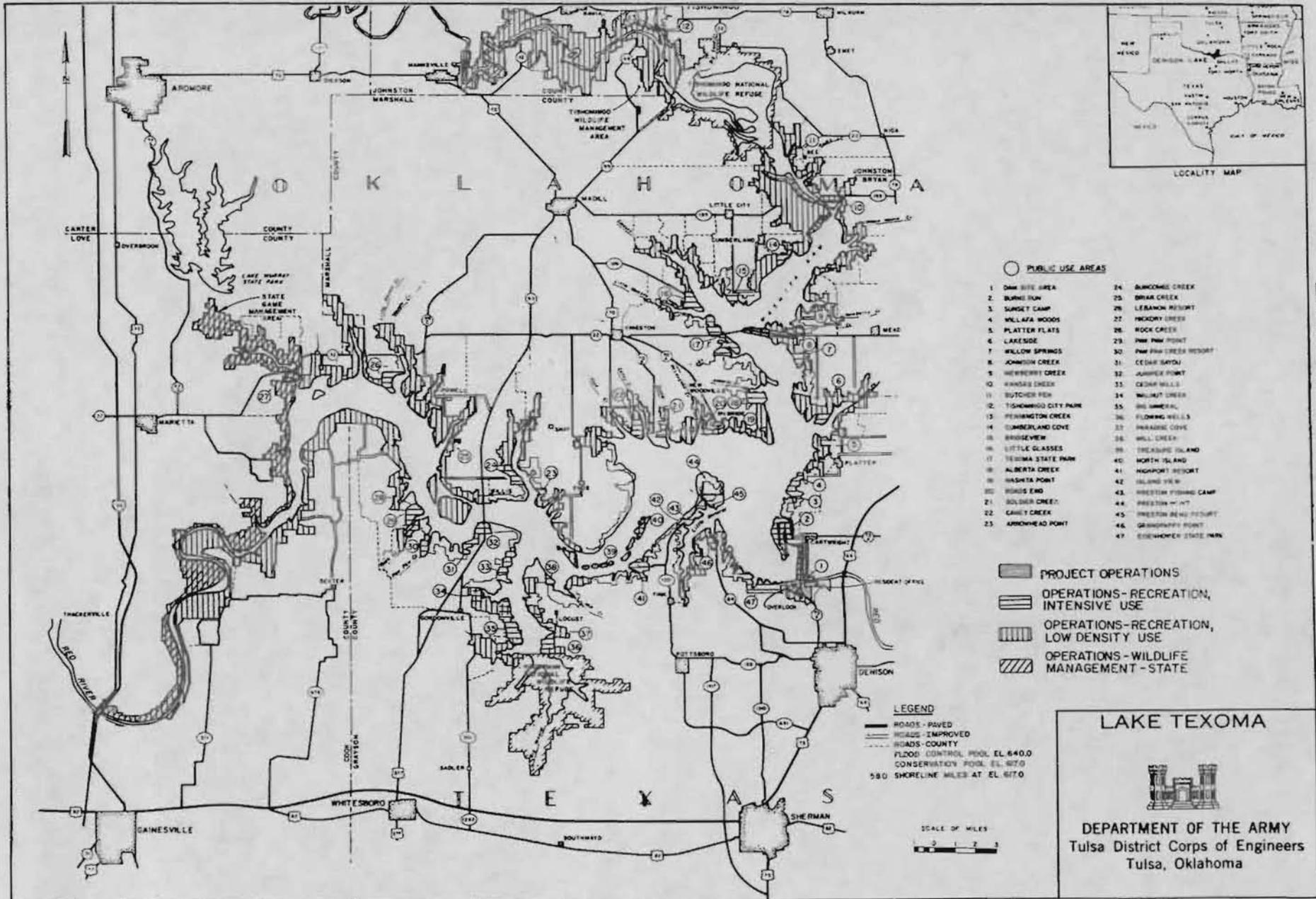
The State of Texas has one park, the State of Oklahoma has two parks and the City of Tishomingo, Oklahoma, has two parks. Existing facilities at these areas include some or all of the following: access roads, a state lodge, golf course, paved parking areas, boat launching ramps, marinas, waterborne or masonry vault toilets, potable water, picnic tables, refuse containers, fireplaces, individual campsites and sanitary trailer dump stations.

The Hagerman NWR occupies approximately 11,429 acres in Texas and the Tishomingo NWR about 28,049 acres of project lands on the Oklahoma side. About 710 wells are located in the oil and gas fields on the edges of the project, 530 of the wells are within Texas and 180 of these wells are on the Oklahoma side of the project.

SMA Lease Stipulations

NSO/ND on approximately 4,250 acres associated with the dam and spillway and a 2,000 foot buffer. NSO on approximately 85,500 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Lake Texoma be available for lease the stipulations described above would apply and ORA-3 Season of Use restrictions would apply from September 1 through March 31, on the 11,429 acres of wildlife management lands within Texas.



LAKE TEXOMA MAP 3



U.S. Army, COE, Fort Worth District Projects

Oil and gas leasing stipulations for the Fort Worth District COE projects are contained within the Districts Special Stipulations. A copy is contained in the Appendix. These stipulations provide for the protection of surface resources through the use of surface occupancy restrictions, drilling restrictions or consultation requirements with authorized surface lessees. Generally, Fort Worth District requires NSO/ND within 3,000 feet under restricted areas. Restricted areas include the major structures such as the dam, spillways, embankments, etc. A NSO restriction applies to all areas below the lakes flood elevation level and to existing or proposed public use areas, recreation areas, wildlife and waterfowl refuges, unique ecological areas, historical sites and hiking or horseback trails. The special stipulations are standardized and apply to all Fort Worth District projects.

AQUILLA LAKE	MAP 4
Project Area	12,395 acres
Operations Area	1,200 acres
Wildlife Mgmt.	9,700 acres
Conservation Pool	3,280 acres

Description

Located on the Aquilla Creek in the lower Brazos River Basin this reservoir covers a normal area of 3,280 surface acres. The main purpose for this lake is flood control. This lake has a flood control storage capacity of 86,700 acre-feet at an elevation of 551 feet MSL. The flood control pool covers an area of approximately 7,000 acres. Approximately, 9,700 acres of land and water are leased to TPWD for wildlife management purposes.

SMA Lease Stipulations

NSO/ND on approximately 1,200 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 9,180 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Aquilla Lake be available for lease the stipulations described above would apply.

BARDWELL LAKE	MAP 5
Project Area	8,157 acres
Recreation Area	1,238 acres
Operations	274 acres
Conservation Pool	3,570 acres

Description

Bardwell Lake is located at river mile 5 on Waxahachie Creek, about five miles south of Ennis, in Ellis County. Bardwell has a conservation pool of 3,570 acres and a shore line of 25 miles with a flood pool area of approximately 6,040 acres. Total storage capacity is 140,000 acre-feet of which 79,600 acre-feet is in flood control at an elevation of 425 feet MSL. There are seven public use areas on Bardwell Lake that provide facilities such as paved roads, picnic and camping sites, waterborne and vault restrooms, boat launch ramps and improved swimming beaches.

SMA Lease Stipulations

NSO/ND on approximately 700 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 7,447 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Bardwell Lake be available for lease the stipulations described above would apply.

BELTON LAKE **MAP 6**

Project Area (Texas)	30,725 acres
Recreation Area	2,980 acres
Conservation Pool	12,290 acres
Operations Area	500 acres

Description

Located in Central Texas on the Leon River, 16.7 miles upstream from its confluence with Little River and eight miles west of Temple. Belton Lake is one of six COE lakes designed to control floods and conserve water in the Brazos River Basin. The lake provides recreation and wildlife habitat, has over 136 miles of shoreline with a storage capacity of 1,097,600 acre-feet at an elevation of 591 feet MSL and has a surface area of over 12,000 acres.

Existing recreational facilities consist of roads, parking, boat launching ramps, drinking fountains, vault and waterborne toilets, picnic areas, tables and facilities to provide for the health and safety of the general public. Belton Lake holds outstanding surface use leases with the Boy Scouts of America, Girl Scouts of America and the Fort Hood Special Services.

SMA Lease Stipulations

NSO/ND on approximately 500 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 25,775 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Belton Lake be available for lease the stipulations described above would apply and ORA-3 Season of Use restrictions would apply from September 1 through March 31, on the approximately 5,000 acres of wildlife management lands.

BENBROOK LAKE **MAP 7**

Project Area	11,275 acres
Recreation Area	3,033 acres
Operations	176 acres
Conservation Pool	3,770 acres

Description

Benbrook Lake is located at river mile 15 of the Clear Fork of the Trinity River about 10 miles southwest of the City of Fort Worth. The lake has a total conservation pool of 3,770 acres and a shoreline of 40 miles. The lake provides flood control, water supply and recreation. Total storage capacity is 258,600 acre-feet with 170,350 acre-feet devoted to flood control at an elevation of 694 feet MSL. The flood control pool surface area covers approximately 7,630 acres. Facilities include paved roads, picnic and camping areas, waterborne and vault restrooms, boat launch ramps and improved swimming beaches.

SMA Lease Stipulations

NSO/ND on approximately 950 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 10,526 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Benbrook Lake be available for lease the stipulations described above would apply.

B.A. STEINHAGEN LAKE **MAP 8**

Project Area	22,800 acres
Operations	176 acres
Recreation Area	2,185 acres
Conservation Pool	13,700 acres

Description

The B.A. Steinhagen Project is located on the Neches River in Tyler and Jasper Counties, approximately .5 miles north of the town of Town Bluff. The project serves as a conservation storage site for municipal and industrial water needs for downstream communities. A small hydroelectric generating plant was completed in 1989. The lake has a water storage capacity of 94,200 acre-feet. It has a conservation pool of 13,700 acres, a flood pool of approximately 16,830 acres and controls runoff from 7,573 square miles of Neches River. The length of the shoreline is 160 miles at the top of the conservation pool. The project also has a substantial recreational program that provides facilities such as paved roads, graveled roadways, paved parking area, graveled parking areas, boat launching ramps, water wells, drinking fountains, toilets and sanitary dump station.

SMA Lease Stipulations

NSO/ND on approximately 500 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on 18,554 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at B.A. Steinhagen Lake be available for lease the stipulations described above would apply and ORA-3 Season of Use restrictions would apply from September 1 through March 31, on the approximately 13,450 acres of wildlife management lands.

CANYON LAKE **MAP 9**

Project Area	14,568 acres
Recreation Area	1,534 acres
Operations	900 acres
Conservation Pool	8,240 acres

Description

Canyon Lake is located at mile 303 of the Guadalupe River approximately 14 miles west of San Marcos and 12 miles northwest of New Braunfels. The main purpose of this project is to control flood waters on the Guadalupe River. It has a total storage capacity of 740,900 acre-feet, including 346,400 acre-feet of flood storage at an elevation of 925 feet MSL and 394,500 acre-feet of conservation and sediment reserve. This lake controls runoff from approximately 1,425 square miles. The conservation pool area of Canyon Lake is 8,240 acres and has a shoreline 80 miles long. The flood pool surface area is approximately 12,890 acres. The lake has seven developed public access areas that include such facilities as access roads, parking lots, boat launching ramps, picnic and camping sites with tables, toilets, trailer dumping sites, marine pump-out station, camping shelters, swimming beaches, public water supplies and litter barrels.

SMA Lease Stipulations

NSO/ND on approximately 900 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 14,516 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Canyon Lake be available for lease the stipulations described above would apply.

COOPER LAKE **MAP 10**

Project Area	57,328 acres
Recreation Area	6,445 acres
Operations	1,000 acres
Conservation Pool	19,280 acres

Description

Cooper Lake is located on the South Sulphur River. This lake is basically a flood control and water supply lake that controls water on the Sulphur River. It has 67,400 acre-feet of flood control at an elevation of 470.3 feet MSL and at flood elevation the surface area of the lake would be 30,600 acres. Two full-service state parks operated by TPWD are scheduled to open in 1996. Approximately 9,500 acres of perimeter lands are currently managed by TPWD for wildlife management purposes.

SMA Lease Stipulations

NSO/ND on approximately 1,000 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 37,045 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Cooper Lake be available for lease the stipulations described above would apply.

GEORGETOWN LAKE **MAP 11**

Project Area	5,830 acres
Recreation Area	1,638 acres
Operations	300 acres
Conservation Pool	1,310 acres

Description

Georgetown Lake is the second lake in the San Gabriel River System designed mainly for recreational use and emergency flood control. The lake is located 3.5 miles west of Georgetown. This lake has a total surface area of 1,310 acres and has approximately 25 miles

of shoreline. The lake has a flood storage capacity of 234,200 acre-feet at an elevation of 834 feet MSL. The flood control pool would cover approximately 3,220 acres.

Recreational facilities include park roads, parking areas, boat launching ramps, picnic and camping facilities.

SMA Lease Stipulations

NSO/ND on approximately 300 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 4,315 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Georgetown Lake be available for lease the stipulations described above would apply.

GRANGER LAKE **MAP 12**

Project Area	15,303 acres
Recreation Area	1,385 acres
Operations	2,500 acres
Conservation Pool	4,400 acres

Description

Granger Lake is part of a three reservoir system on the San Gabriel river, built for flood control, water supply and recreation. The lake is located about 10 miles northeast of the town of Taylor. The flood pool covers an area of approximately 11,040 acres.

Granger Lake, with a normal surface area of approximately 4,400 acres, lends itself to the development of recreation facilities for boating, waterskiing, fishing, swimming and other activities such as camping, picnicking, hiking, nature study and hunting. Facilities provided consist of park roads, parking areas, picnic, camping and sanitary facilities, potable water and boat launching ramps. Approximately

10,800 acres of land and water are leased to TPWD for wildlife management purposes.

SMA Lease Stipulations

NSO/ND on approximately 2,500 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 12,425 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Granger Lake be available for lease the stipulations described above would apply and ORA-3 Season of Use restrictions would apply from September 1 through March 31, on the approximately 10,800 acres of wildlife management lands.

GRAPEVINE LAKE MAP 13

Project Area 17,761 acres
Recreation Area 3,863 acres
Operations 600 acres
Conservation Pool 7,380 acres

Description

Grapevine Lake is located at river mile 11.7 on Denton creek near the City of Grapevine in Tarrant and Denton Counties, about twenty miles northwest of Dallas. Total storage capacity is 435,500 acre-feet with about 238,250 in flood control at an elevation of 535 feet MSL and a flood control surface area of approximately 13,853 acres. Grapevine has a total recreation surface area of 7,380 acres and about 60 miles of shoreline. Facilities include paved roads, picnic and camping sites, waterborne and vault restrooms, boat launch ramps and improved swimming beaches.

SMA Lease Stipulations

NSO/ND on approximately 1,800 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately

17,716 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Grapevine Lake be available for lease the stipulations described above would apply.

HORDS CREEK LAKE MAP 14

Project Area 3,027 acres
Recreation Area 1,215 acres
Operations 500 acres
Conservation Pool 510 acres

Description

Hords Creek Lake is located in the central part of Coleman County. It is 8.75 miles west of the City of Coleman. The lake was constructed for flood control, water supply and recreation. The facilities include roads, parking areas, boat launching ramps, drinking fountains, electrical outlets, vault toilets and picnic and camping facilities.

This project has a surface area of 1,260 acres and a storage capacity at flood level of 25,310 acre-feet at an elevation of 1920 feet MSL. The lake is two miles long and has 11 miles of shoreline.

SMA Lease Stipulations

NSO/ND on approximately 500 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 2,475 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Hords Creek Lake be available for lease the stipulations described above would apply.

JOE POOL LAKE

MAP 15

Project Area	17,121 acres
Recreation Area	5,000 acres
Operations	2,800 acres
Conservation Pool	7,470

Description

Joe Pool Lake is located about 7 river miles above the existing Mountain Creek Dam. The dam site is in Dallas County about 10 miles southwest of the City of Dallas with the reservoir extending into Tarrant, Ellis and Johnson Counties. The main purposes of this reservoir is flood control, water conservation, recreation and fish and wildlife habitat. The lake has a storage capacity of 304,000 acre-feet at an elevation of 536.0 feet MSL with a surface area of 10,940 acres.

The recreation and wildlife area consists of five public park areas. These areas provide for activities such as camping, picnicking, hiking, nature study and water-based activities such as boating, fishing, swimming and water skiing. Because of the lake's location near the Dallas metropolitan area, the lake is able to meet some of the cities demands for outdoor recreation. Facilities include roads, parking areas, picnicking, camping facilities, sanitary facilities, potable water and boat launching ramps.

SMA Lease Stipulations

NSO/ND on approximately 2,800 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 17,775 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Joe Pool Lake be available for lease the stipulations described above would apply.

LAKE O' THE PINES

MAP 16

Project Area	45,095 acres
Recreation Area	754 acres
Operations	1,445 acres
Conservation Pool	19,780 acres

Description

Lake O' The Pines is located largely within Marion County, but extends into the adjacent counties of Harrison, Upshur, Morris, Camp and Titus. It is approximately 65 miles northwest of Shreveport, Louisiana; 130 miles east of Dallas; 45 miles south of Texarkana; and 58 miles east of Tyler. This lake is mainly used for controlling floodwater in the Red River Basin and has a floodwater storage capacity of 587,200 acre-feet at an elevation of 249.5 feet MSL and 251,000 acre-feet of storage for conservation. It is also used for other public benefits such as recreation, conservation of fish and wildlife and the provision of domestic and industrial water supply.

Recreation facilities include roads, boat ramps, picnic units, toilets, signs and safety features. Approximately 5,000 acres of land and water are leased to TPWD for wildlife management purposes.

SMA Lease Stipulations

NSO/ND on approximately 1,445 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 38,200 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Lake O' The Pines be available for lease the stipulations described above would apply.

LAVON LAKE **MAP 17**

Project Area	38,364 acres
Recreation Area	2,834 acres
Operations	1,500 acres
Conservation Pool	21,400 acres

Description

Lavon Lake is located in North Central Texas at river mile 55.9 on the East Fork of the Trinity River approximately 25 miles northeast of Dallas in Collin County. The primary purpose of this lake is to provide flood control for East Fork farmlands and provide conservation storage for municipal and industrial purposes. Total storage on Lavon is 748,200 acre-feet at an elevation of 503.5 feet MSL with 33,500 acres in surface area and 121 miles of shoreline. In addition to the flood control objective the lake also provides for many types of water based activities such as fishing, boating, swimming, picnicking, camping, nature study, photography and hunting. Hunting and fishing are allowed in undeveloped and non-public areas on an interim basis. To complement the activities offered the COE also provides a full host of facilities such as camping areas, picnic tables, toilets, boat launching ramps and parking areas. Some limited agricultural practices are allowed on portions of the project area that are not in public use and can be a benefit of the land. Lavon Lake is unique in that the TPWD opened a fishery as a research project to study more than 10 families and 44 species of fish on the lake.

SMA Lease Stipulations

NSO/ND on approximately 1,500 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 36,500 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Lavon Lake be available for lease the stipulations described above would apply.

LEWISVILLE LAKE **MAP 18**

Project Area	51,691 acres
Recreational Area	3,934 acres
Operations	2,500 acres
Conservation Pool	28,980 acres

Description

Lewisville Lake is located on the Elm Fork of the Trinity River, 30 miles upstream from its confluence with the West Fork of the Trinity River. The entire project is within Denton County and is about 22 miles north of Dallas. The main purposes for the Lewisville Lake and Dam are flood control and water supply. The lake has a normal total surface area of 23,280 acres and approximately 183 miles of shoreline with a flood pool area of approximately 39,080 acres. Facilities on the lake include roads, parking, boat launching ramps, vault toilets, picnic units, camping units and swimming beaches.

SMA Lease Stipulations

NSO/ND on approximately 2,500 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 39,080 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Lewisville Lake be available for lease the stipulations described above would apply.

NAVARRO MILLS LAKE **MAP 19**

Project Area	14,216 acres
Recreation Area	1,195 acres
Operations	730 acres
Conservation Pool	5,070 acres

Description

Navarro Mills Lake is located at river mile 63.9 on Richland Creek, about 16 miles southwest of Corsicana, in Navarro and Hill Counties. The lake has a normal surface area of 5,070 acres and about 38 miles of shoreline with a flood pool of approximately 11,700 acres. Total storage capacity is 212,200 acre-feet with 143,200 acre-feet in flood control at an elevation of 443.0 feet MSL. The rest of the storage capacity is in sediment and conservation storage. The facilities available at the lake are paved roads, picnic and camping sites, vault restrooms, boat launch ramps and improved swimming beaches.

SMA Lease Stipulations

NSO/ND on approximately 730 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 12,925 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Navarro Mills Lake be available for lease the stipulations described above would apply.

O.C. FISHER LAKE **MAP 20**

Project Area	17,975 acres
Recreation Area	4,710 acres
Operational Area	1,500 acres
Conservation Pool	5,440 acres

Description

O.C. Fisher lake is located in the Colorado Basin about 2.3 miles northwest of the town of San Angelo, in Tom Green County. The dam

and lake provides flood control protection to San Angelo as well as water supply for the city. The project provides many different types of recreation including golfing, picnicking, camping, and boating. In addition to the recreational facilities there are facilities to provide for the safety and convenience to the general public. These include: picnic and camping tables, boat launching ramps, drinking fountains, rest rooms and roadways. Some of the lake area has been leased to various organizations. Angelo State University and Texas A&M both have large leases with 4,465 and 1,564 respectively. In April, 1995, approximately 7,063 acres of land and water were leased to TPWD for park recreation and wildlife management purposes. The reservoir provides 396,000 acre-feet of storage capacity for flood control and water conservation needs at an elevation of 1,938 feet MSL. The flood pool surface area covers approximately 12,700 acres.

SMA Lease Stipulations

NSO/ND on approximately 1,500 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 17,155 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at O.C. Fisher Lake be available for lease the stipulations described above would apply.

PROCTOR LAKE **MAP 21**

Project Area	15,944 acres
Recreation Area	1,210 acres
Operations	1,835 acres
Conservation Pool	4,610 acres

Description

Proctor Lake is located at river mile 238.9 of the Leon River in Comanche County, about

eight miles northeast of the town of Comanche. It is located in a primarily rural area with Stephenville and Brownwood being the largest cities within a 50 mile radius. The main purposes for the establishment of this impoundment are flood control, water supply and recreation. This lake has a total storage capacity of 374,200 acre-feet with 310,100 in flood control at an elevation of 1,197 feet MSL covering an area of approximately 14,010 acres. Recreation facilities include paved roads, picnic and camping areas, restrooms, boat launching ramps and water wells.

SMA Lease Stipulations

NSO/ND on approximately 1,835 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 15,400 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Proctor Lake be available for lease the stipulations described above would apply.

SAM RAYBURN LAKE **MAP 22**

Project Area 159,754 acres
 Operations 2,650 acres
 Recreation Area 3,151 acres

Description

The Sam Rayburn Project is located on the Angelina River approximately 15 miles north of the town of Jasper. The dam is located about 25 river miles above the B.A. Steinhagen Lake. The project lands are surrounded by the Angelina National Forest and a small section of the Sabine National Forest. The primary purposes of this dam and reservoir are to provide flood control, hydroelectric power generation and water conservation. This lake has a total storage capacity of 3,997,600 acre-feet, of which 1,099,400 acre-feet at an

elevation of 173 feet MSL is for flood control and provides for a flood pool of 142,700 acres. Approximately 43,000 acre-feet are reserved for water supply, 1,403,200 acre-feet for power storage and 1,452,000 acre-feet for sediment reserve and head for power generation. This lake has a shoreline of 560 miles and controls runoff from 3,449 square miles of the Angelina River. The hydroelectric plant generates 52,000 kilowatts.

Recreational activities at Sam Rayburn include sightseeing, boating, skiing, swimming, hunting and fishing. There are paved roads, parking areas, swimming areas, sanitary toilets and boat launching ramps.

SMA Lease Stipulations

NSO/ND on approximately 2,650 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 146,324 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Sam Rayburn Reservoir be available for lease the stipulations described above would apply.

RAY ROBERTS LAKE **MAP 23**

Project Area 48,353 acres
 Recreation Area 2,800 acres
 Operations 2,005 acres
 Conservation Pool 29,350 acres

Description

Ray Roberts Lake is located in parts of Denton, Cooke and Grayson counties in North Central Texas. It is approximately four miles northwest of Aubrey. The primary project purposes are flood control, water supply, recreation and wildlife. The total normal surface area is 29,350 acres and a total shoreline of approximately 207 miles with a

flood pool surface area of approximately 36,900 acres. The lake is located in the vicinity of Denton, Dallas and Fort Worth and is extremely accessible to the large metropolitan communities. Recreational facilities include park roads, parking areas, boat launching areas, picnicking and camping facilities, sanitary facilities and potable water. The project area also offers several activities such as camping, picnicking, hiking and water based activities such as boating, fishing, swimming and water-skiing. The majority of project lands and waters are leased to TPWD for fish and wildlife management and recreation.

SMA Lease Stipulations

NSO/ND on approximately 2,005 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 39,700 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Ray Roberts Lake be available for lease the stipulations described above would apply.

<u>SOMERVILLE LAKE</u>	<u>MAP 24</u>
Project Area	32,729 acres
Recreation Area	3,599 acres
Operations	3,520 acres
Conservation Area	11,460 acres

Description

Somerville Lake is located 20 river miles on the Yequa Creek about two miles south of Somerville. It includes parts of Burleson, Lee and Washington Counties. The largest cities within a 50 mile radius are Bryan, College Station and Brenham. The lake's total storage capacity is 507,500 acre-feet with 337,700 of flood control and the rest in sediment and

conservation storage. Somerville Lake has a normal surface area of 11,460 acres and 85 miles of shoreline with a flood pool covering approximately 24,400 acres. The facilities at Somerville include paved roads, camping and picnicking sites, boat launching ramps and improved swimming beaches. The upper half of project lands and waters are leased to TPWD for fish and wildlife management and recreation.

SMA Lease Stipulations

NSO/ND on approximately 3,570 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 27,800 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Somerville Lake be available for lease the stipulations described above would apply.

STILLHOUSE HOLLOW LAKE

MAP 25

Project Area	16,181 acres
Recreation Area	2,089 acres
Operations	2,130 acres
Conservation	6,430 acres

Description

Stillhouse Hollow is located on the Lampasas River in Bell County, about five miles southwest of Belton. It is located near the cities of Temple and Killeen and is within 50 miles of the metropolitan areas of Waco and Austin. The main purposes of this lake are flood control, water supply and recreation. This lake has a normal surface area of 6,430 acres and 58 miles of shoreline with a flood pool area of 11,830 acres. The storage capacity is 630,400 acre-feet with 390,600 in flood control at an elevation of 666 feet MSL.

and the rest in sediment and conservation storage. Facilities on the lake include paved roads, camping and picnicking, toilets and boat launching facilities.

SMA Lease Stipulations

NSO/ND on approximately 2,130 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 13,755 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Stillhouse Hollow Lake be available for lease the stipulations described above would apply.

WACO LAKE **MAP 26**

Project Area	21,327 acres
Recreation Area	3,590 acres
Operations	3,357 acres
Conservation Pool	7,270 acres

Description

Waco Lake is located at river mile 4.6 of the Bosque River and forms the northwest edge of the City of Waco in McLennan County. The lake provides water supply for the City of Waco, flood control and recreation. The lake has a surface area of 7,270 acres and has 60 miles of shoreline. The total storage capacity is 726,400 acre-feet with 553,300 acre-feet of flood control at an elevation of 500 feet MSL. The flood control pool covers an area of over 19,440 acres. The facilities include paved roads, toilets, concessions, boat launching ramps and camping.

SMA Lease Stipulations

NSO/ND on approximately 3,357 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 21,327 acres as buffers to recreational

facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Waco Lake be available for lease the stipulations described above would apply.

WHITNEY LAKE **MAP 27**

Project Lake	53,194 acres
Recreational Area	5,438 acres
Operations	2,413 acres
Conservation Pool	23,560 acres

Description

Whitney Lake is located at river mile 442.4 of the Brazos River about nineteen miles southwest of Hillsboro, in Hill and Bosque Counties. It is within 50 miles of Hillsboro, Waco, Cleburne and Waxabachie and is within easy driving distance of the Dallas-Fort Worth area. The primary purpose of Whitney Lake is flood control. The lake has a normal surface area of 23,560 acres and a shoreline of 190 miles. The flood pool covers approximately 49,820 acres. The storage capacity of the lake is 1,999,500 acre-feet with 1,624,000 acre-feet devoted to flood control at an elevation of 571 feet MSL and the rest in conservation and sediment reserve. The lake also has a hydroelectric plant and generates power for some of the surrounding communities. The facilities include paved roads, picnic and camping facilities, restrooms, boat ramps, water wells and improved swimming beaches.

SMA Lease Stipulations

NSO/ND on approximately 2,413 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 53,194 acres as buffers to recreational facilities, roads, trails and other developments and within the identified conservation pool.

Should COE project lands at Whitney Lake be available for lease the stipulations described above would apply.

WRIGHT PATMAN LAKE MAP 28

Project Area	157,526 acres
Recreation Area	3,075 acres
Operations	2,523 acres
Conservation Area	20,300 acres

Description

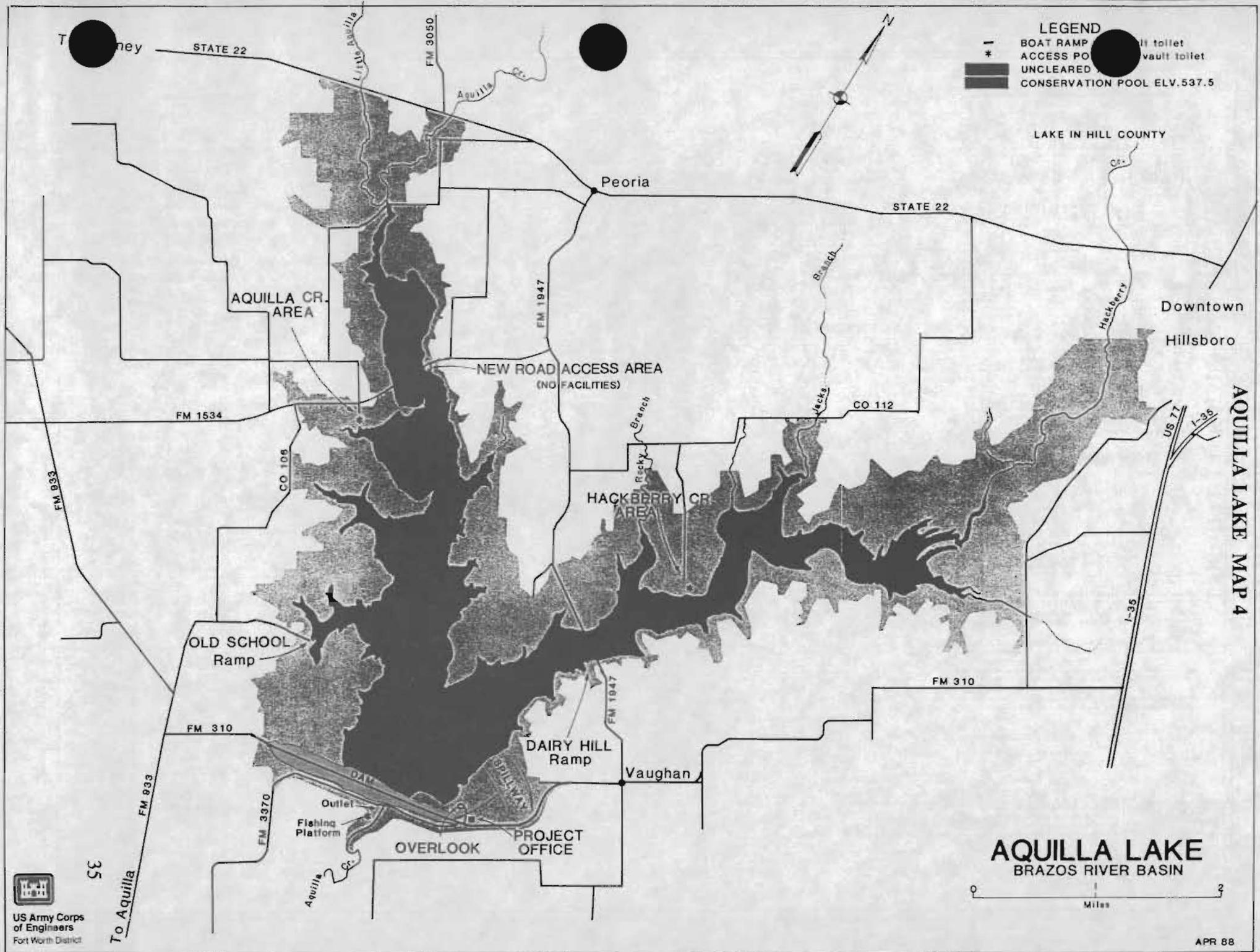
Wright Patman Lake is located southwest of Texarkana and extends throughout portions of Bowie, Cass, Morris, Titus and Red River Counties. The towns of Redwater, Maud, Atlanta and Douglasville are around the lake perimeter. Major objectives are to reduce downstream flooding, provide a municipal and industrial water source and recreation. The lake controls runoff from approximately 3,500 acres from the Sulphur River. The conservation pool has a surface area of 20,300 acres and a capacity of 145,300 acre-feet at an elevation of 259.5 feet MSL. The flood pool has a surface area of 119,700 acres.

Wright Patman Lake provides for picnicking, camping, swimming, water-skiing, boating, sightseeing, fishing and hunting. Facilities include paved roads, parking lots, boat ramps, potable water supplies, toilets, camping and picnic sites. Approximately 27,000 acres of land and water is leased to TPWD for fish and wildlife management and recreation. The majority of this land (25,500 acres) is located at the White Oak Creek Wildlife Management Area (map 29).

SMA Lease Stipulations

NSO/ND on approximately 2,523 acres associated with the dam and spillway and a 3,000 foot buffer. NSO on approximately 157,526 acres as buffers to recreational facilities, roads, trails and other developments and within the identified flood pool.

Should COE project lands at Wright Patman Lake be available for lease the stipulations described above would apply.



LEGEND

-  BOAT RAMP
-  ACCESS POINT
-  UNCLEARED
-  toilet
-  vault toilet
-  CONSERVATION POOL ELV. 537.5



US Army Corps
of Engineers
Fort Worth District

AQUILLA LAKE
BRAZOS RIVER BASIN

0 1 2
Miles

APR 88



LOCATIONS

LOWER LOVE PARK	EXISTING FACILITIES	GROUPS OF ENGINEERS
UPPER LOVE PARK	EXISTING FACILITIES	GROUPS OF ENGINEERS
LITTLE MUSTANG CR. PK.	EXISTING FACILITIES	GROUPS OF ENGINEERS
WAXAHACHIE CR. PARK	EXISTING FACILITIES	GROUPS OF ENGINEERS
HIGH VIEW PARK	EXISTING FACILITIES	GROUPS OF ENGINEERS
MOTT PARK	EXISTING FACILITIES	GROUPS OF ENGINEERS

FACILITIES FURNISHED BY THE GOVERNMENT
 FACILITIES FURNISHED BY CONCESSIONAIRE

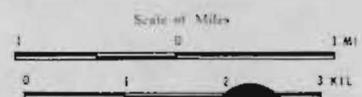
NOTE:
 FACILITIES SUCH AS PUBLIC ACCESS, PICNIC AND CAMPGROUNDS WERE CONSTRUCTED WITH YOUR TAX DOLLARS FOR YOUR ENJOYMENT — USE THEM THOUGHTFULLY.
 THE MANAGEMENT OF FISH AND WILDLIFE RESOURCES IS BEING CONDUCTED IN COOPERATION WITH THE TEXAS PARKS AND WILDLIFE COMMISSION.
 SWIMMING AREAS ARE UNSUPERVISED AND DO NOT HAVE LIFE GUARDS. BOATING, SERFING, SWIMMING, AND FISHING WILL BE DONE AT YOUR OWN RISK.
 INFORMATION ON AREAS WHERE HUNTING IS PERMITTED MAY BE SECURED AT PROJECT HEADQUARTERS.
 THIS MAP IS FURNISHED AS GENERAL INFORMATION ONLY AND IS NOT TO BE USED FOR LOCATING PROPERTY LINES AND OTHER SUCH MATTERS.
 ADDITIONAL INFORMATION MAY BE SECURED AT PROJECT HEADQUARTERS OR BY WRITING TO:

RESERVOIR MANAGER
 BARDWELL PROJECT OFFICE
 ROUTE 4 BOX 33A
 ENNIS TEXAS 75119
 TELEPHONE NO. (214) 875-5711

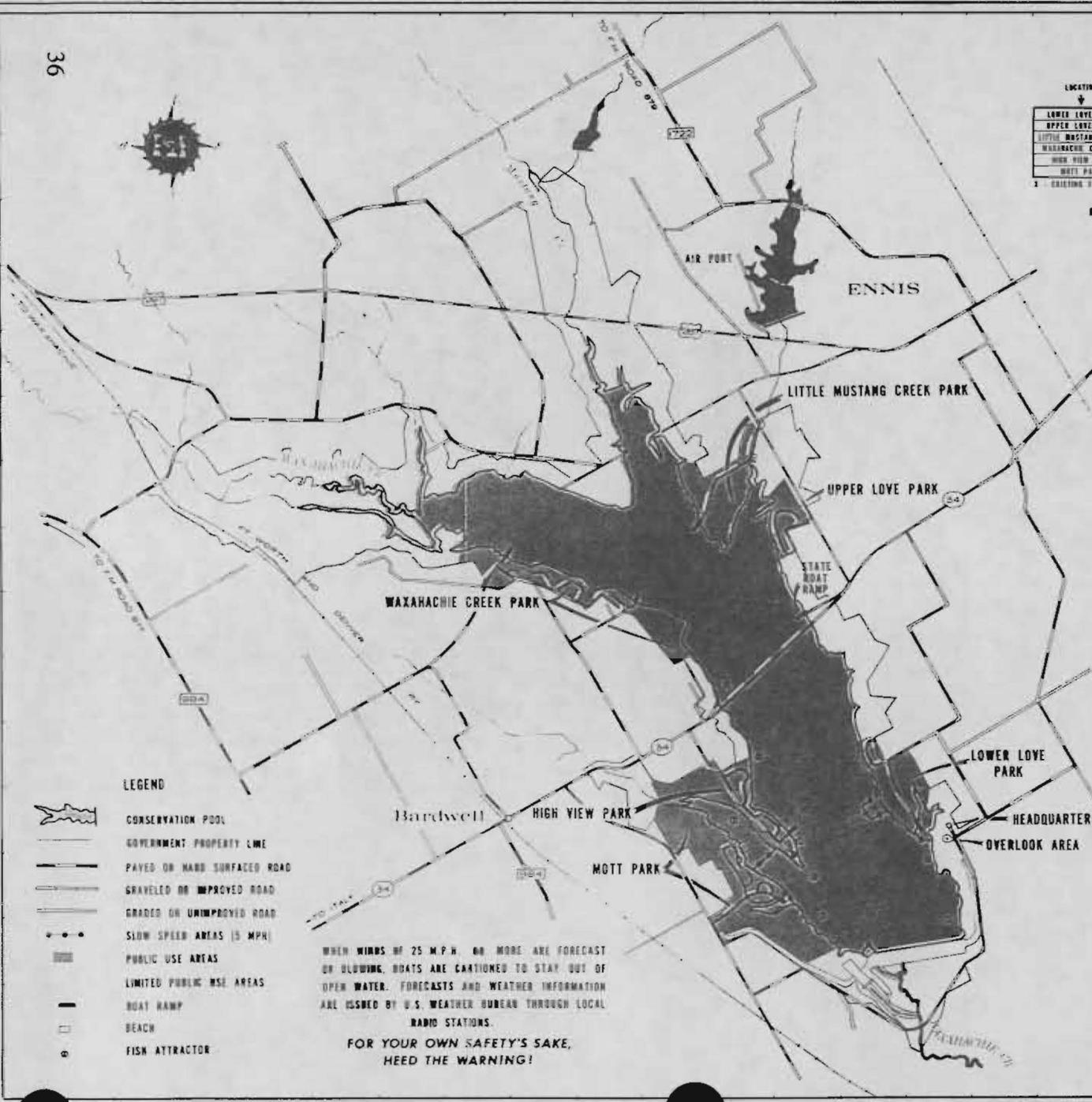
STANDARD LAKE MARKERS

BARDWELL LAKE

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



BARDWELL LAKE MAP 5



- LEGEND**
- CONSERVATION POOL
 - GOVERNMENT PROPERTY LINE
 - PAVED OR HARD SURFACED ROAD
 - GRAVELED OR IMPROVED ROAD
 - GRADED OR UNIMPROVED ROAD
 - SLOW SPEED AREAS (5 MPH)
 - PUBLIC USE AREAS
 - LIMITED PUBLIC USE AREAS
 - BOAT RAMP
 - BEACH
 - FISH ATTRACTOR

WHEN WINDS OF 25 M.P.H. OR MORE ARE FORECAST OR BLOWING, BOATS ARE CAUTIONED TO STAY OUT OF OPEN WATER. FORECASTS AND WEATHER INFORMATION ARE ISSUED BY U.S. WEATHER BUREAU THROUGH LOCAL RADIO STATIONS.

**FOR YOUR OWN SAFETY'S SAKE,
 HEED THE WARNING!**

38 Benbrook Lake

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



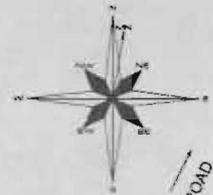
DISTANCE TO DAM

	MILES	KILOMETERS
FORT WORTH	27	43.2
GRANBURY	35	56.3
WEATHERFORD	36	57.9
CLEBURNE	38	61.2
DALLAS	49	78.6
STEPHENVILLE	54	86.9
MARCO	84	135.2
FELINE	100	161.4
AUSTIN	132	212.6



WHEN WINDS OF 25 M.P.H. OR MORE ARE FORECAST OR BLOWING, BOATS ARE CAUTIONED TO STAY OUT OF OPEN WATER. FORECASTS AND WEATHER INFORMATION ARE ISSUED BY THE U.S. WEATHER BUREAU THROUGH LOCAL RADIO STATIONS.

FOR YOUR OWN SAFETY, HEED WARNINGS!



STANDARD LAKE MARKERS

<ul style="list-style-type: none"> Standard 1 Standard 2 Standard 3 	<ul style="list-style-type: none"> Standard 4 Standard 5 Standard 6 	<ul style="list-style-type: none"> Standard 7 Standard 8 Standard 9 	<ul style="list-style-type: none"> Standard 10 Standard 11 Standard 12
<ul style="list-style-type: none"> Standard 13 Standard 14 Standard 15 	<ul style="list-style-type: none"> Standard 16 Standard 17 Standard 18 	<ul style="list-style-type: none"> Standard 19 Standard 20 Standard 21 	<ul style="list-style-type: none"> Standard 22 Standard 23 Standard 24

LEGEND

	CONSERVATION POOL EL. 694
	GOVERNMENT AREA AND PROPERTY L
	RECREATION AREAS (CORPS)
	RECREATION AREAS (BY OTHERS)
	PAVED ROADS
	TRAILS
	BOAT RAMPS
	BEACH
	UNCLEARED AREA

LAKE DEPTH
Depths are based on topographic information. In general, depths are approximate and may change due to wind, sediment, and other factors. Bathymetry is a service provided to the public under license during the life of a contract.
No change has been made to show those portions of the lake included in submerged and open water. Bathymetry is a service provided to the public under license during the life of a contract. No wind and waves are included in contact with all areas of the lake.

NOTE:
THE MANAGEMENT OF FISH AND WILDLIFE RESOURCES IS BEING CONDUCTED IN COOPERATION WITH THE TEXAS PARKS AND WILDLIFE COMMISSION.
SWIMMING AREAS ARE UNSUPERVISED AND DO NOT HAVE LIFE GUARDS. BOATING, SOAKING, SWIMMING AND FISHING WILL BE DONE AT YOUR OWN RISK.
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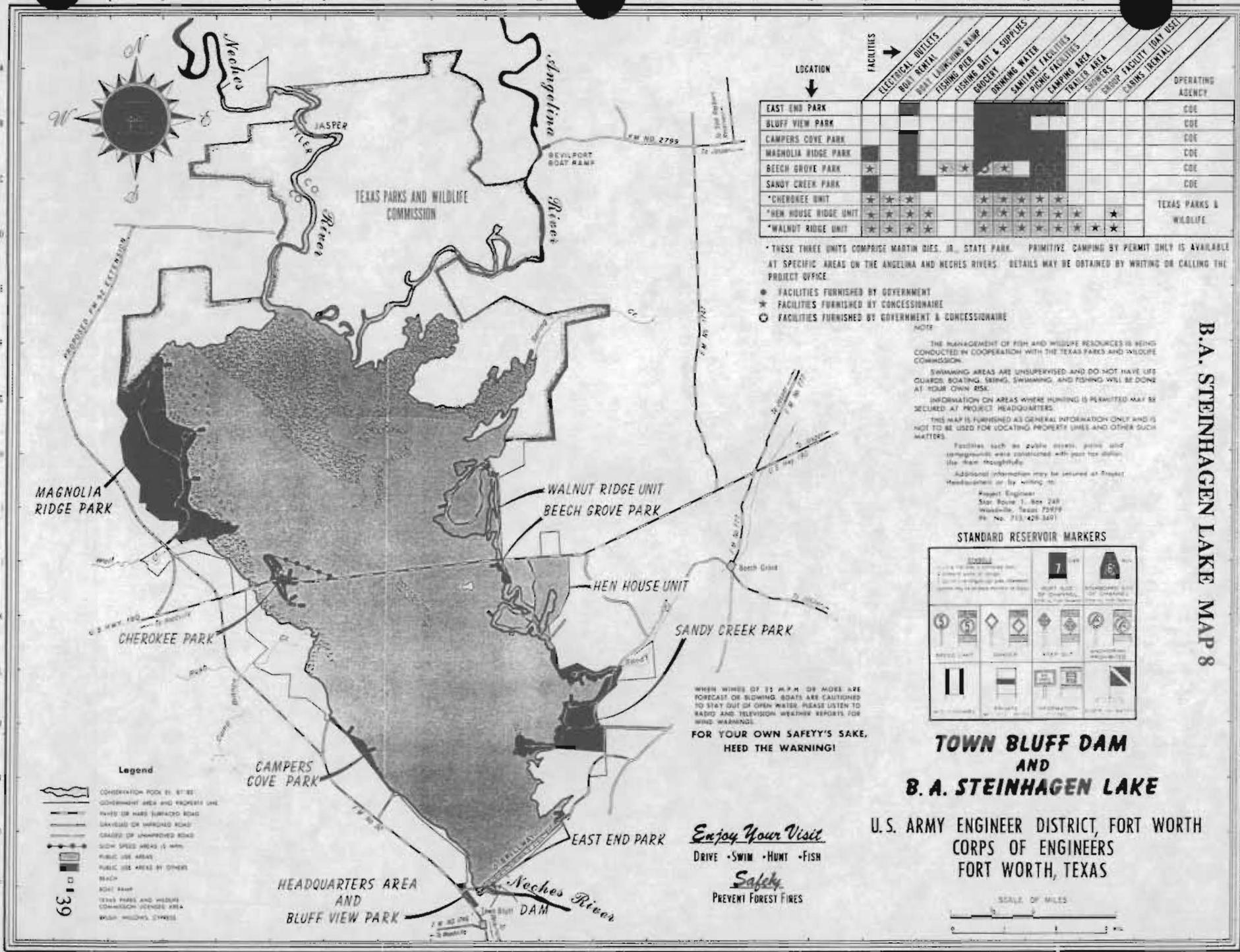
THIS MAP IS FURNISHED AS GENERAL INFORMATION ONLY AND IS NOT TO BE USED LOCATING PROPERTY LINES AND OTHER MATTERS.
ADDITIONAL INFORMATION MAY BE SECURED AT PROJECT HEADQUARTERS OR BY WRITING TO:
RESERVOIR MANAGER
BENBROOK PROJECT OFFICE
P.O. BOX 26619
FORT WORTH, TEXAS 76126-0619

FACILITIES

LOCATION	OPERATING AGENCY
LONGHORN PARK	CORPS OF ENGINEERS
PECAN VALLEY PARK	FORT WORTH (CITY)
DUTCH BRANCH PARK	BENBROOK (CITY)
HOLIDAY PARK	CORPS OF ENGINEERS
MUSTANG PARK	CORPS OF ENGINEERS
ROCKY CREEK PARK	CORPS OF ENGINEERS

FACILITIES FURNISHED BY: ■ CORPS □ CONCESSION ▣ BOTH

BENBROOK LAKE MAP 7



LOCATION	FACILITIES											OPERATING AGENCY	
	ELECTRICAL OUTLETS	BOAT RENTAL	BOAT LIFTING RAMP	FISHING PIER	FISHING BAIT & SUPPLIES	DRINKING WATER	SANITARY FACILITIES	PICNIC FACILITIES	CAMPING AREA	TRAILER AREA	SHOWERS		CABIN FACILITY (DAY USE)
EAST END PARK													CDE
BLUFF VIEW PARK													CDE
CAMPERS COVE PARK													CDE
MAGNOLIA RIDGE PARK													CDE
BEECH GROVE PARK	*			*	*	*	*	*					CDE
SANDY CREEK PARK													CDE
*CHEROKEE UNIT	*	*	*	*	*	*	*	*	*	*	*	*	TEXAS PARKS & WILDLIFE
*HEN HOUSE RIDGE UNIT	*	*	*	*	*	*	*	*	*	*	*	*	TEXAS PARKS & WILDLIFE
*WALNUT RIDGE UNIT	*	*	*	*	*	*	*	*	*	*	*	*	TEXAS PARKS & WILDLIFE

* THESE THREE UNITS COMPRISE MARTIN DIES, JR. STATE PARK. PRIMITIVE CAMPING BY PERMIT ONLY IS AVAILABLE AT SPECIFIC AREAS ON THE ANGELINA AND NECHOS RIVERS. DETAILS MAY BE OBTAINED BY WRITING OR CALLING THE PROJECT OFFICE.

- FACILITIES FURNISHED BY GOVERNMENT
- * FACILITIES FURNISHED BY CONCESSIONAIRE
- ⊙ FACILITIES FURNISHED BY GOVERNMENT & CONCESSIONAIRE

NOTE: THE MANAGEMENT OF FISH AND WILDLIFE RESOURCES IS BEING CONDUCTED IN COOPERATION WITH THE TEXAS PARKS AND WILDLIFE COMMISSION.

SWIMMING AREAS ARE UNSUPERVISED AND DO NOT HAVE LIFE GUARDS. BOATING, SKIING, SWIMMING, AND FISHING WILL BE DONE AT YOUR OWN RISK.

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Facilities such as public access, picnic and campground were constructed with your tax dollar. Use them thoughtfully.

Additional information may be obtained at Project Headquarters or by writing to:

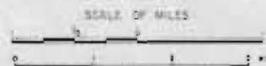
Project Engineer
 Stop Room 1 - Box 248
 Waco, Texas 76799
 Ph. No. 767-428-3401

STANDARD RESERVOIR MARKERS



TOWN BLUFF DAM AND B.A. STEINHAGEN LAKE

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



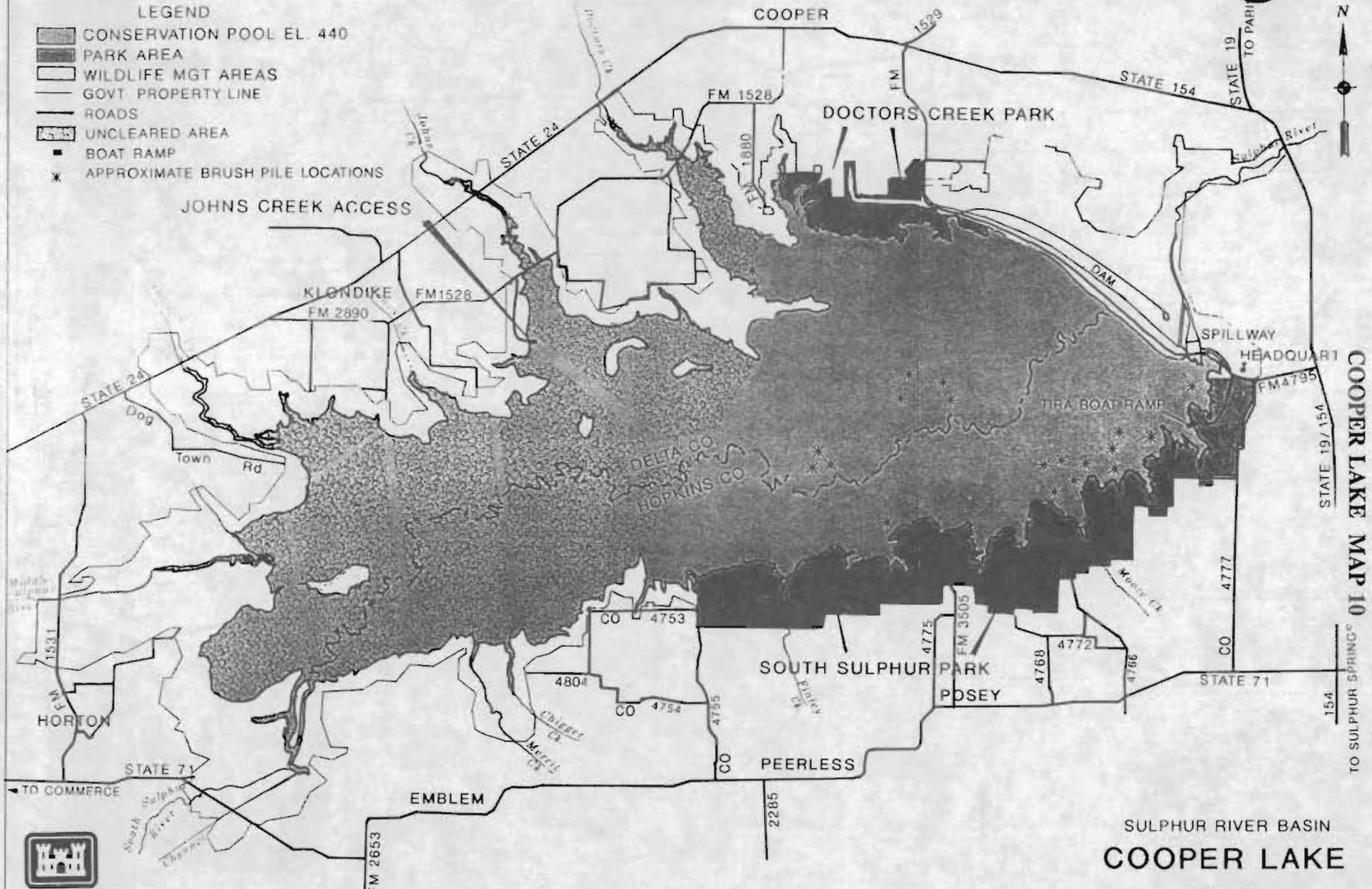
WHEN WINDS OF 25 M.P.H. OR MORE ARE FORECAST OR BLUING BOATS ARE CAUTIONED TO STAY OUT OF OPEN WATER. PLEASE LISTEN TO RADIO AND TELEVISION WEATHER REPORTS FOR WIND WARNINGS.
FOR YOUR OWN SAFETY'S SAKE, HEED THE WARNING!

Enjoy Your Visit
 DRIVE • SWIM • HUNT • FISH
 Safety
 PREVENT FOREST FIRES

B.A. STEINHAGEN LAKE MAP 8

LEGEND

-  CONSERVATION POOL EL. 440
-  PARK AREA
-  WILDLIFE MGT AREAS
-  GOVT. PROPERTY LINE
-  ROADS
-  UNCLEARED AREA
-  BOAT RAMP
-  APPROXIMATE BRUSH PILE LOCATIONS



COOPER LAKE MAP 10

TO SULPHUR SPRINGS

SULPHUR RIVER BASIN
COOPER LAKE

SEP 1994

Scale in miles

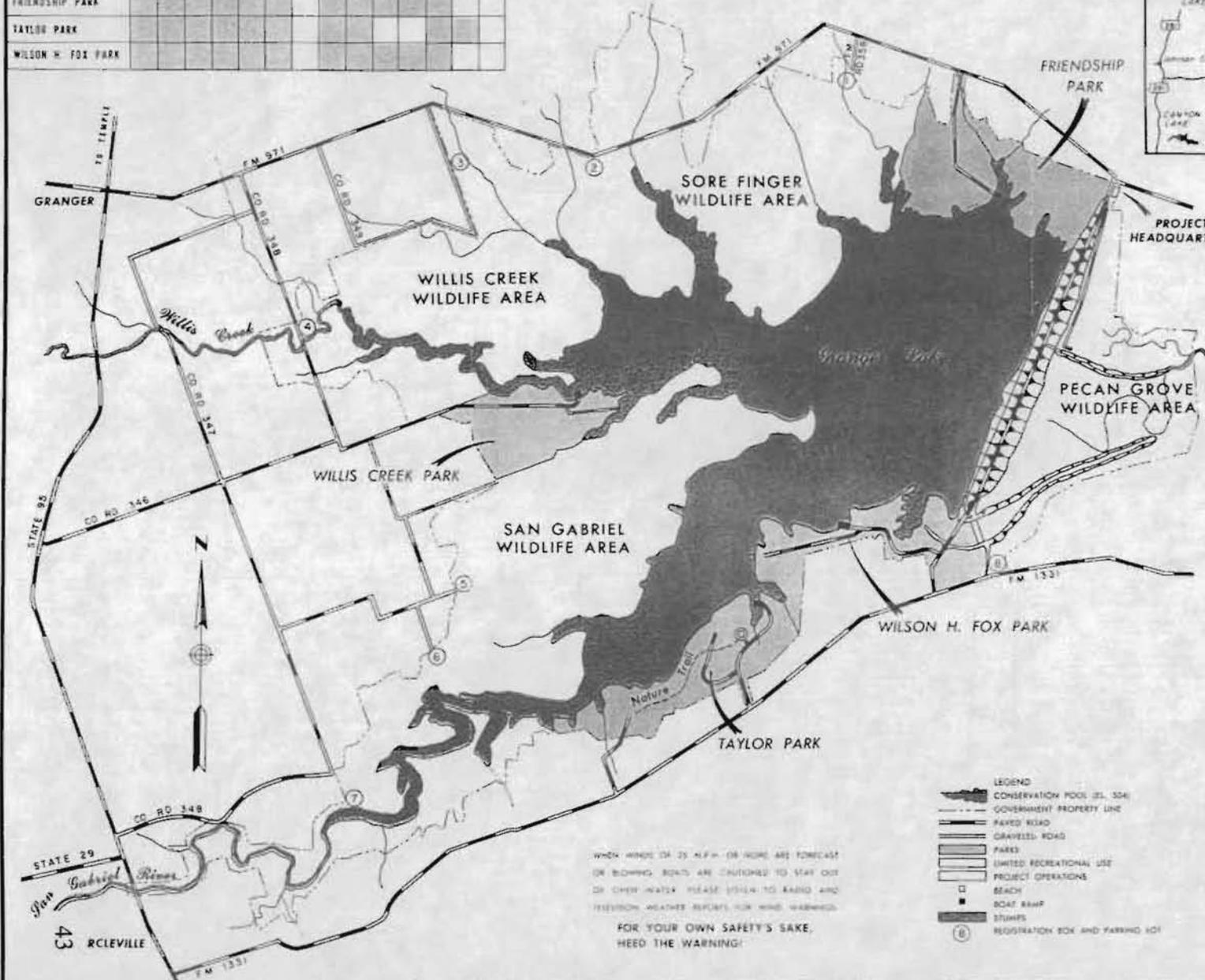


US Army Corps
of Engineers
Fort Worth District

LOCATION	FACILITIES												
	PICNIC FACILITIES	CAMPING AREA	TRAILER AREA	ELECTRICAL OUTLETS	SANITARY FACILITIES	BROWNING WATER	SANITARY HOOKUPS	TRAILER HOOKUPS	SHOWER HOOKUP STATION	GROUP SHELTER (PYPIC)	SWIMMING STRIP	BOAT LAUNCHING RAMP	NATURE TRAIL
WILLIS CREEK PARK													
FRIENDSHIP PARK													
TAYLOR PARK													
WILSON H. FOX PARK													



VICINITY MAP
NOT TO SCALE

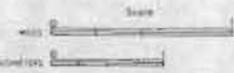


GRANGER LAKE MAP 12

A FEE MAY BE CHARGED IN SOME AREAS

FACILITIES SUCH AS PUBLIC ACCESS, PICNIC AND SHELTERS ARE FOR YOUR ENJOYMENT - USE THEM WISELY.
 THE MANAGEMENT OF BIRD AND WILDLIFE WOODS BEING CONDUCTED IN COOPERATION WITH THE TEXAS WILDLIFE COMMISSION.
 SHOOTING AREAS ARE UNDEVELOPED AND SHOULD BE USED ONLY FOR BIRDING, BANGING, BROWNING AND FISHING BE DONE AT YOUR OWN RISK.
 INFORMATION ON AREAS WHERE HUNTING IS PERMITTED MAY BE OBTAINED AT PROJECT HEADQUARTERS.
 THIS MAP IS FURNISHED AS GENERAL INFORMATION AND IS NOT TO BE USED FOR LOCATING PROPERTY IN OTHER SUCH MATTERS.
 ADDITIONAL INFORMATION MAY BE OBTAINED AT HEADQUARTERS OR BY WRITING TO:

GRANGER PROJECT OFFICE
 ROUTE 1, BOX 172
 GRANGER, TEXAS 75820
 A/C 512/839 2008



GRANGER LAKE

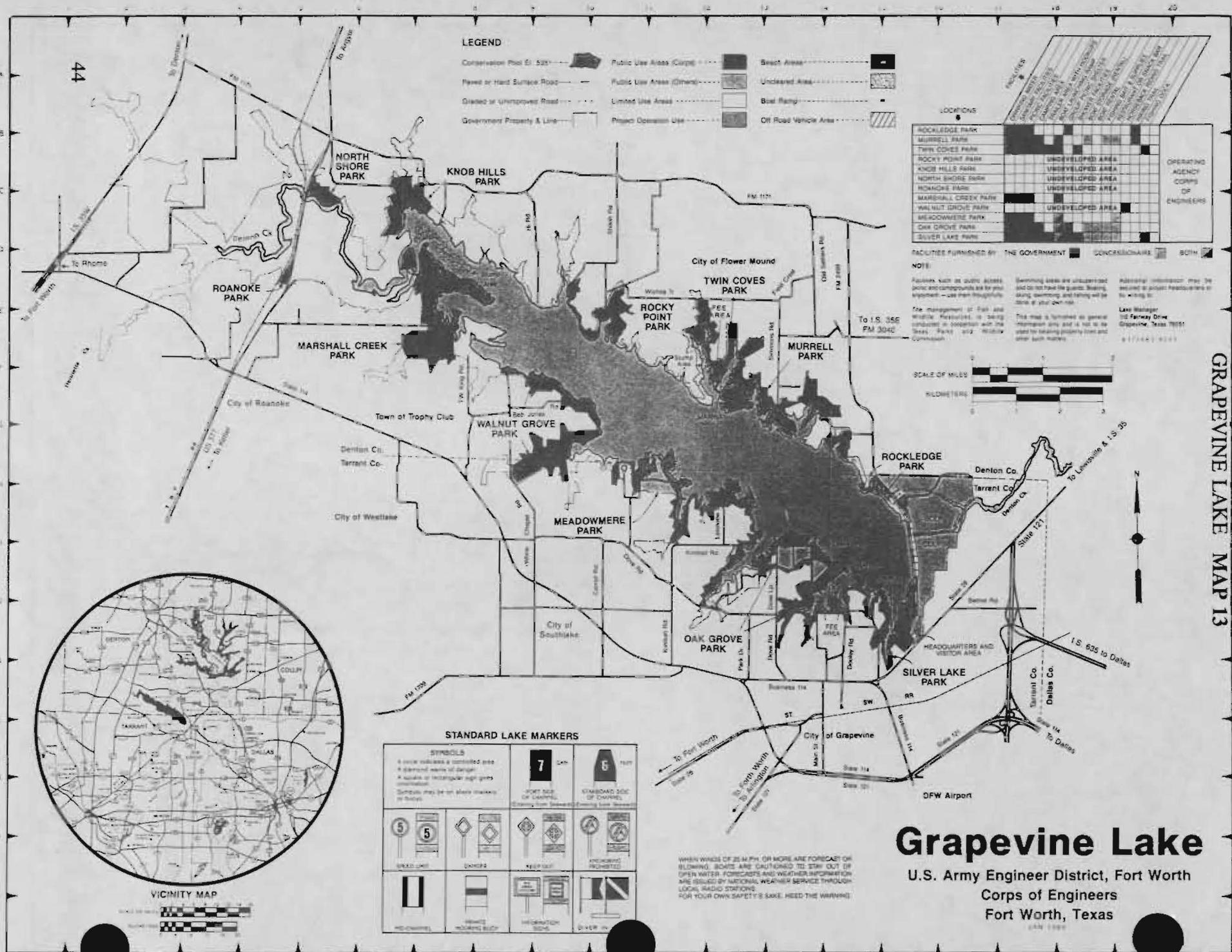


US Army Corps
 of Engineers
 Fort Worth District

- LEGEND
- CONSERVATION POOL (S.L. 304)
 - GOVERNMENT PROPERTY LINE
 - PAVED ROAD
 - GRAVELLED ROAD
 - PARKS
 - LIMITED RECREATIONAL USE
 - PROJECT OPERATIONS
 - BEACH
 - BOAT RAMP
 - STUMPS
 - REGISTRATION BOX AND PARKING LOT

WHEN WINDS OF 25 M.P.H. OR MORE ARE FORECAST OR BLOWING, BOATS ARE CAUTIONED TO STAY OUT OF CREEK WATERS. PLEASE LISTEN TO RADIO AND TELEVISION WEATHER REPORTS FOR WIND WARNINGS.
 FOR YOUR OWN SAFETY'S SAKE,
 HEED THE WARNING!

43 RCLEVILLE



LEGEND

- Conservation Pool (525)
- Paved or Hard Surface Road
- Graveled or Unimproved Road
- Government Property & Line
- Public Use Areas (Camps)
- Public Use Areas (Other)
- Limited Use Areas
- Project Ocean Use
- Street Areas
- Uncleared Area
- Basal Ramp
- Off Road Vehicle Area

LOCATIONS

ROCKLEDGE PARK	UNDVELOPED AREA	OPERATING AGENCY CORPS OF ENGINEERS
MURRELL PARK	UNDVELOPED AREA	
TWIN COVES PARK	UNDVELOPED AREA	
ROCKY POINT PARK	UNDVELOPED AREA	
KNOB HILLS PARK	UNDVELOPED AREA	
NORTH SHORE PARK	UNDVELOPED AREA	
ROANOKE PARK	UNDVELOPED AREA	
MARSHALL CREEK PARK	UNDVELOPED AREA	
WALNUT GROVE PARK	UNDVELOPED AREA	
MEADOWMERE PARK	UNDVELOPED AREA	
OAK GROVE PARK	UNDVELOPED AREA	
SILVER LAKE PARK	UNDVELOPED AREA	

FACILITIES FURNISHED BY THE GOVERNMENT ■ **CONCESSIONAIRE** □ **BOTH** □

NOTE:

Facilities such as public schools, parks and campgrounds are for your enjoyment — use them thoughtfully.

The management of Park and Wildlife Resources is being conducted in cooperation with the Texas Parks and Wildlife Commission.

Swimming areas are unattended and do not have life guards. Boating, fishing, swimming, and fishing will be done at your own risk.

This map is furnished as general information only and is not to be used for making property lines and other such matters.

Additional information may be secured at project headquarters by the writing to:

Law Manager
102 Fairway Drive
Grapevine, Texas 76041
817/442-2044



GRAPEVINE LAKE MAP 13



STANDARD LAKE MARKERS

<p>SYMBOLS</p> <p>A circle indicates a controlled area. A diamond warns of danger. A square or rectangular sign gives information. Symbols may be on shore markers or buoys.</p>		<p>7 SHIP</p> <p>PORT SIDE OF CHANNEL</p>	<p>6 SHIP</p> <p>STARBOARD SIDE OF CHANNEL</p>
<p>5 SHIP</p> <p>SHOALS</p>	<p>5 SHIP</p> <p>SHOALS</p>	<p>5 SHIP</p> <p>SHOALS</p>	<p>5 SHIP</p> <p>SHOALS</p>
<p>5 SHIP</p> <p>SHOALS</p>	<p>5 SHIP</p> <p>SHOALS</p>	<p>5 SHIP</p> <p>SHOALS</p>	<p>5 SHIP</p> <p>SHOALS</p>
<p>5 SHIP</p> <p>SHOALS</p>	<p>5 SHIP</p> <p>SHOALS</p>	<p>5 SHIP</p> <p>SHOALS</p>	<p>5 SHIP</p> <p>SHOALS</p>

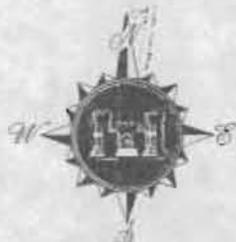
Grapevine Lake

U.S. Army Engineer District, Fort Worth
Corps of Engineers
Fort Worth, Texas
JAN 1988

WHEN WINDS OF 25 MPH OR MORE ARE FORECAST OR BLUING, BOATS ARE CAUTIONED TO STAY OUT OF OPEN WATER. FORECASTS AND WEATHER INFORMATION ARE ISSUED BY NATIONAL WEATHER SERVICE THROUGH LOCAL RADIO STATIONS. FOR YOUR OWN SAFETY'S SAKE, HEED THE WARNING.

STANDARD RESERVOIR MARKERS

STANDARDS A. CONSTRUCTION & MATERIALS B. SIGNAGE C. LOCATION & SPACING D. MAINTENANCE		
 SPEED LIMIT	 NO PARKING	 NO SWIMMING
 NO BOATING	 NO FISHING	 NO HUNTING
 NO ALCOHOL	 NO FIREARMS	 NO DOGS
 NO MOTOR VEHICLES	 NO BICYCLES	 NO MOTORCYCLES



LEGEND

	CONSERVATION POOL ELV. 1800
	GOVERNMENT PROPERTY LINE
	PAVED ROAD
	GRAVELED ROAD
	BOAT RAMP
	SLOW SPEED AREA
	PARK AREA
	LIMITED USE AREA
	RESTRICTED AREA

FACILITIES

	OPERATING AGENCY
FLAT ROCK PARK	U.S. ARMY
FRIENDSHIP PARK	CORPS OF ENGINEERS
LAKESIDE PARK	CORPS OF ENGINEERS

NOTE:

- FACILITIES SUCH AS PUBLIC ACCESS, PICNIC AND CAMPGROUNDS ARE FOR YOUR ENJOYMENT — USE THEM THOUGHTFULLY. A USER FEE MAY BE CHARGED IN SOME PARK AREAS.
- THE MANAGEMENT OF FISH AND WILDLIFE RESOURCES IS BEING CONDUCTED IN COOPERATION WITH THE TEXAS PARKS AND WILDLIFE COMMISSION.
- SWIMMING AREAS ARE UNSUPERVISED AND DO NOT HAVE LIFE GUARDS. BOATING, SKIING, SWIMMING, AND FISHING WILL BE DONE AT YOUR OWN RISK.
- INFORMATION ON AREAS WHERE HUNTING IS PERMITTED MAY BE SECURED AT PROJECT HEADQUARTERS.
- THIS MAP IS FURNISHED AS GENERAL INFORMATION ONLY AND IS NOT TO BE USED FOR LOCATING PROPERTY LINES AND OTHER SUCH MATTERS.
- ADDITIONAL INFORMATION MAY BE SECURED AT HEADQUARTERS OR BY WRITING TO:

RESERVOIR MANAGER
 HORDS CREEK LAKE
 CORPS OF ENGINEERS
 HCR 75 BOX 33
 COLEMAN, TEXAS 76834
 TELEPHONE 814-825-2322

HORDS CREEK LAKE MAP 14

**FOR YOUR OWN SAFETY'S SAKE
 HEED THE WARNING!**

WHEN WINDS OF 25 M.P.H. OR MORE ARE FORECAST
 BOATS ARE CAUTIONED TO STAY OUT
 IF YOU PLEASE LISTEN TO RADIO AND
 OTHER REPORTS FOR WIND WARNINGS

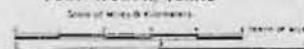
45

EMERGENCY TELEPHONE NUMBERS

SHERRY DEPARTMENT 822-2026
 FIRE DEPARTMENT 822-2024
 POLICE DEPARTMENT 822-4444

HORDS CREEK LAKE

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

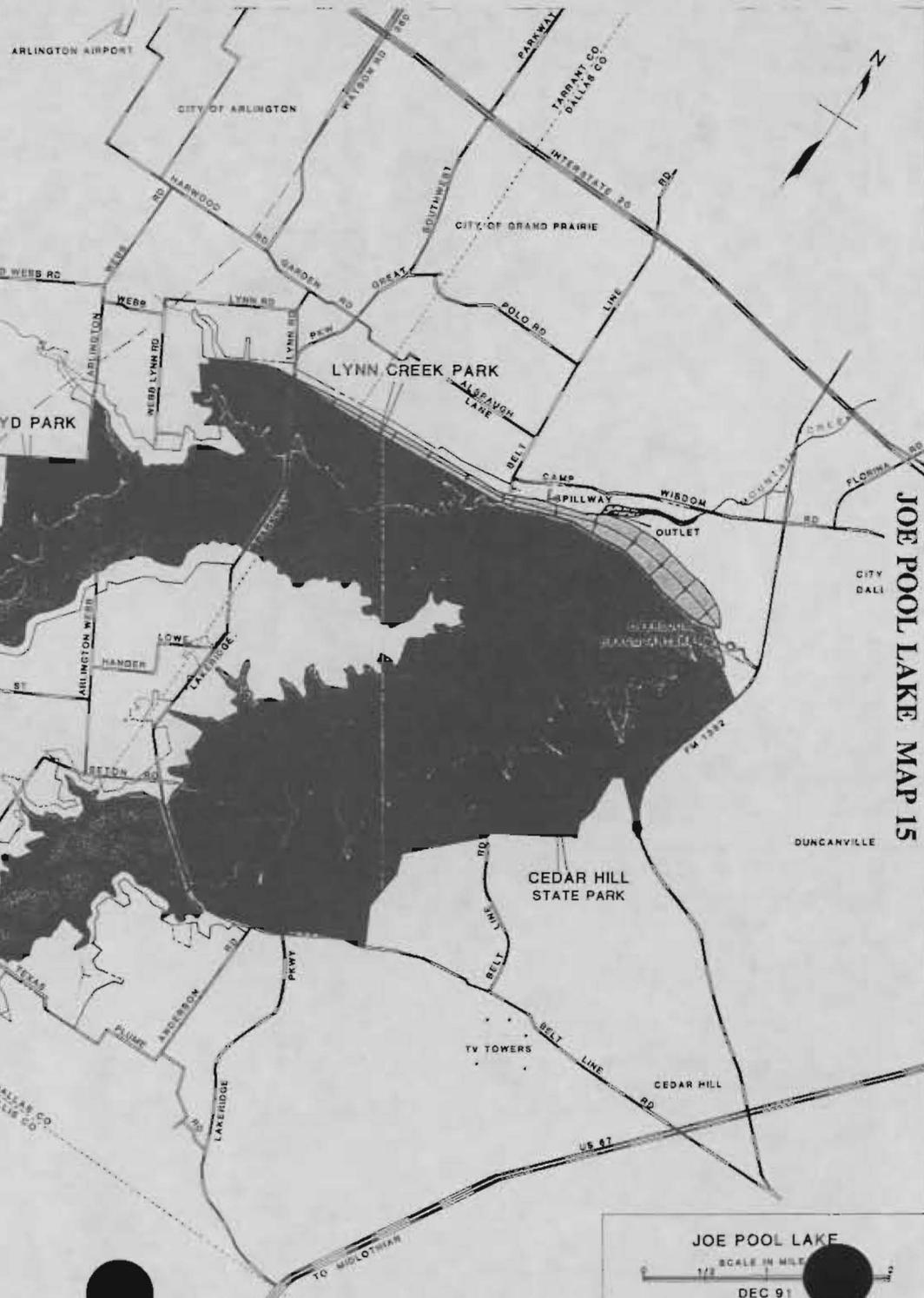


APRIL 1962

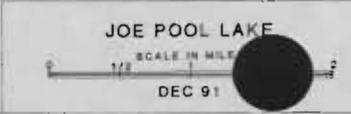
AREA	OPERATING AGENCY	TELEPHONE	STATUS
LYNN CREEK PARK	TRINITY RIVER AUTHORITY	817/467-2104	OPEN
LOYD PARK	" " " "	" " " "	"
BRITTON	" " " "	" " " "	"
46 CEDAR HILL	TEXAS PARKS AND WILDLIFE	214/291-3900	"
OTHER FORT WORTH	CORPS OF ENGINEERS	214/299-2227	"

LEGEND

-  CONSERVATION POOL (ELV 522)
-  PUBLIC USE AREA
-  LIMITED USE AREA
-  GOVERNMENT PROPERTY LINE
-  FLOWAGE EASEMENT
-  PAVED ROAD
-  GRAVELED ROAD
-  PROJECT OPERATIONS
-  STUMPS

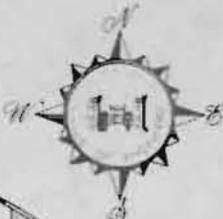


JOE POOL LAKE MAP 15



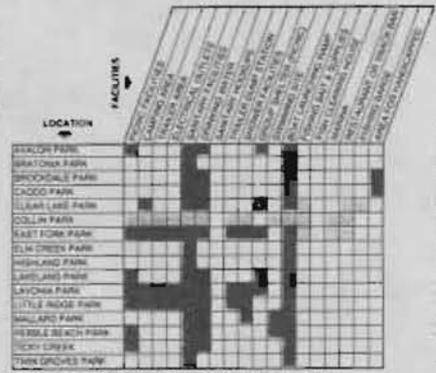
STANDARD LAKE MARKERS

<p>SYMBOLS</p> <ul style="list-style-type: none"> to show location of channel and a channel width of depth a quantity in rectangular sign given vertically surface may be an exact history or trend 	<p>1 2</p> <p>POINT BEE OF CHANNEL</p> <p>STANDARD BEE OF CHANNEL</p>
<p>3 4 5 6</p> <p>SPEED LIMIT</p> <p>WAGON</p> <p>KEEP OUT</p> <p>ANCHORING PROHIBITED</p>	<p>7 8</p> <p>NO WILDCAMPS</p> <p>PRIVATE MOORING BOYS</p> <p>INFORMATION SIGN</p> <p>OVER IN WATER</p>



HIGHWAY MILES TO DAM

McKinney, Tex.	22
Dallas, Tex.	30
Sherman, Tex.	54
Fort Worth, Tex.	62
Durant, Okla.	80
Coradonia, Tex.	86
Tyler, Tex.	96
Waco, Tex.	124
Texasland, Tex.	153
Wichita, Tex.	157
Shreveport, La.	180
Austin, Tex.	206



LAVON LAKE MAP 17

WHERE INDICATED, FOOD, CABINS, BOATS, BAY, ETC. ARE AVAILABLE AT POPULAR PRICES IN OR NEAR PARK AREAS

FACILITIES FURNISHED BY CORPS OF ENGINEERS

CONCESSIONS

NOTE

FACILITIES SUCH AS PUBLIC ACCESS, PICNIC AND CAMPGROUNDS ARE FOR YOUR ENJOYMENT - USE THEM THOUGHTFULLY

THE MANAGEMENT OF FISH AND WILDLIFE RESOURCES IS BEING CONDUCTED IN COOPERATION WITH THE TEXAS PARKS AND WILDLIFE DEPARTMENT

SWIMMING AREAS ARE UNSUPERVISED AND DO NOT HAVE LIFE GUARDS. BOATING, SKIING, SWIMMING AND FISHING WILL BE DONE AT YOUR OWN RISK

INFORMATION ON AREAS WHERE HUNTING IS PERMITTED MAY BE SECURED AT PROJECT HEADQUARTERS

THIS MAP IS FURNISHED AS GENERAL INFORMATION ONLY AND IS NOT TO BE USED FOR LOCATING PROPERTY LINES AND OTHER SUCH MATTERS

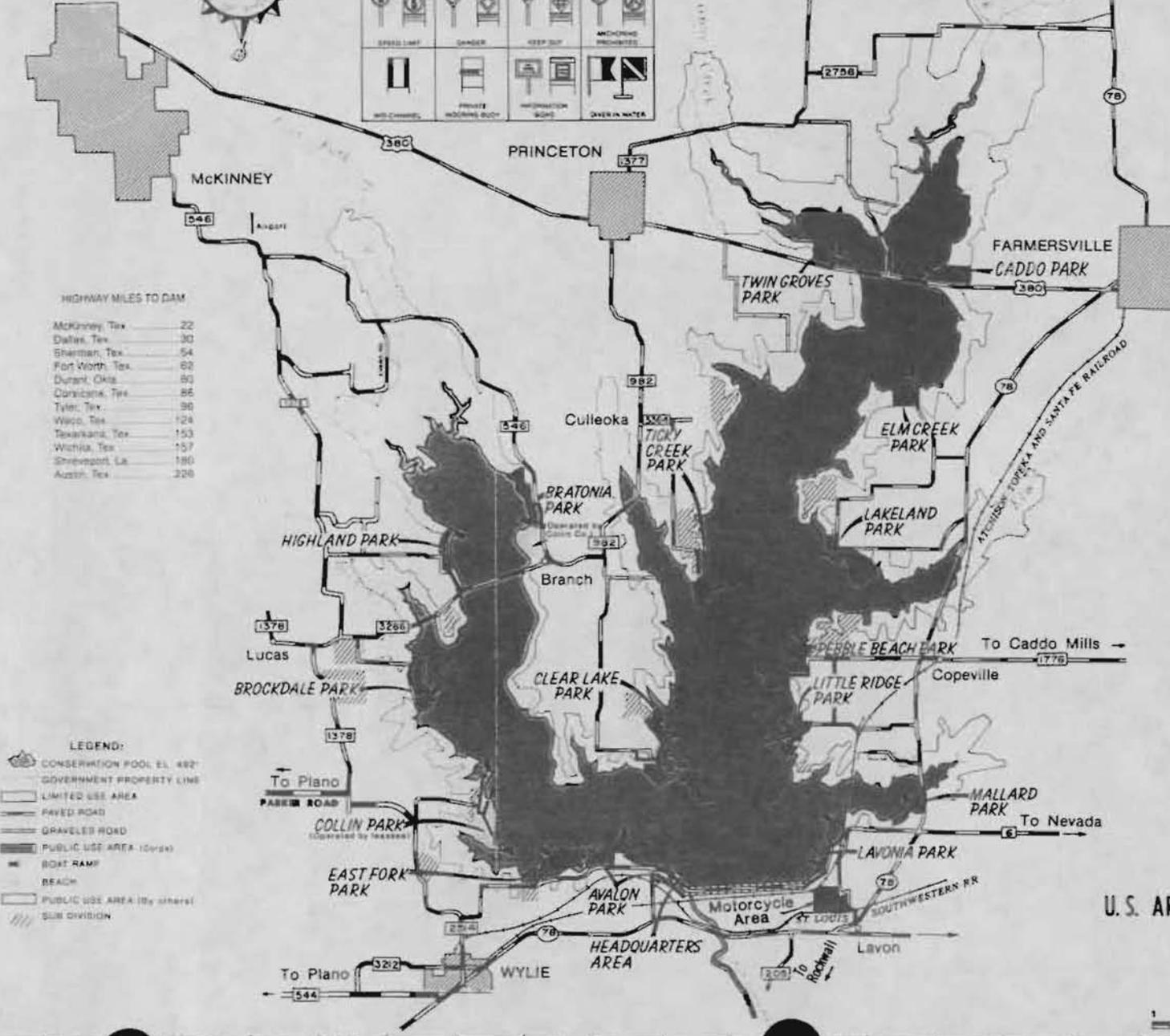
ADDITIONAL INFORMATION MAY BE SECURED AT PROJECT HEADQUARTERS OR BY WRITING TO:

RESERVOIR MANAGER
P.O. BOX 1888
WYLIE, TEXAS 75098
TEL. 814-4423141

LAVON LAKE

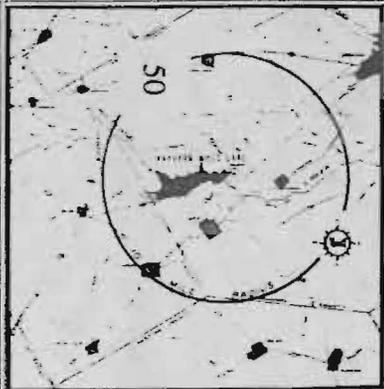
U.S. ARMY ENGINEER DISTRICT, FORT WORTH
CORPS OF ENGINEERS
FORT WORTH, TEXAS

JUN 1987
SCALE OF MILES



LEGEND:

- CONSERVATION POOL EL. 482'
- GOVERNMENT PROPERTY LINE
- LIMITED USE AREA
- PAVED ROAD
- GRAVELED ROAD
- PUBLIC USE AREA (DUSK)
- BOAT RAMP
- BEACH
- PUBLIC USE AREA (BY STREET)
- SUB DIVISION



LOCATION	FACILITIES FURNISHED				OPERATING AGENCY
	SWIMMING WATER	BEACHING	PICNIC	CAMPING	
OAK PARK	✓	✓	✓	✓	CORPS OF ENGINEERS
WOLF CREEK PARK I	✓	✓	✓	✓	CORPS OF ENGINEERS
WOLF CREEK PARK II	✓	✓	✓	✓	CORPS OF ENGINEERS
LIBERTY HILL PARK	✓	✓	✓	✓	CORPS OF ENGINEERS

FACILITIES FURNISHED BY GOVERNMENT: CONCESSORSHIP: BOTH:

NOTE: ADDITIONAL INFORMATION WILL BE SECURED AT PROJECT HEADQUARTERS, 1011 WEST 51ST STREET, RECEIVING NUMBER BY 1809 330, DALLAS, TEXAS 75214, BY TELEPHONE BY 578-1433.

FACILITIES SUCH AS PUBLIC ACCESS, PICNIC AND CAMPGROUNDS ARE FOR YOUR ENJOYMENT. USE THEM THOUGHTFULLY.

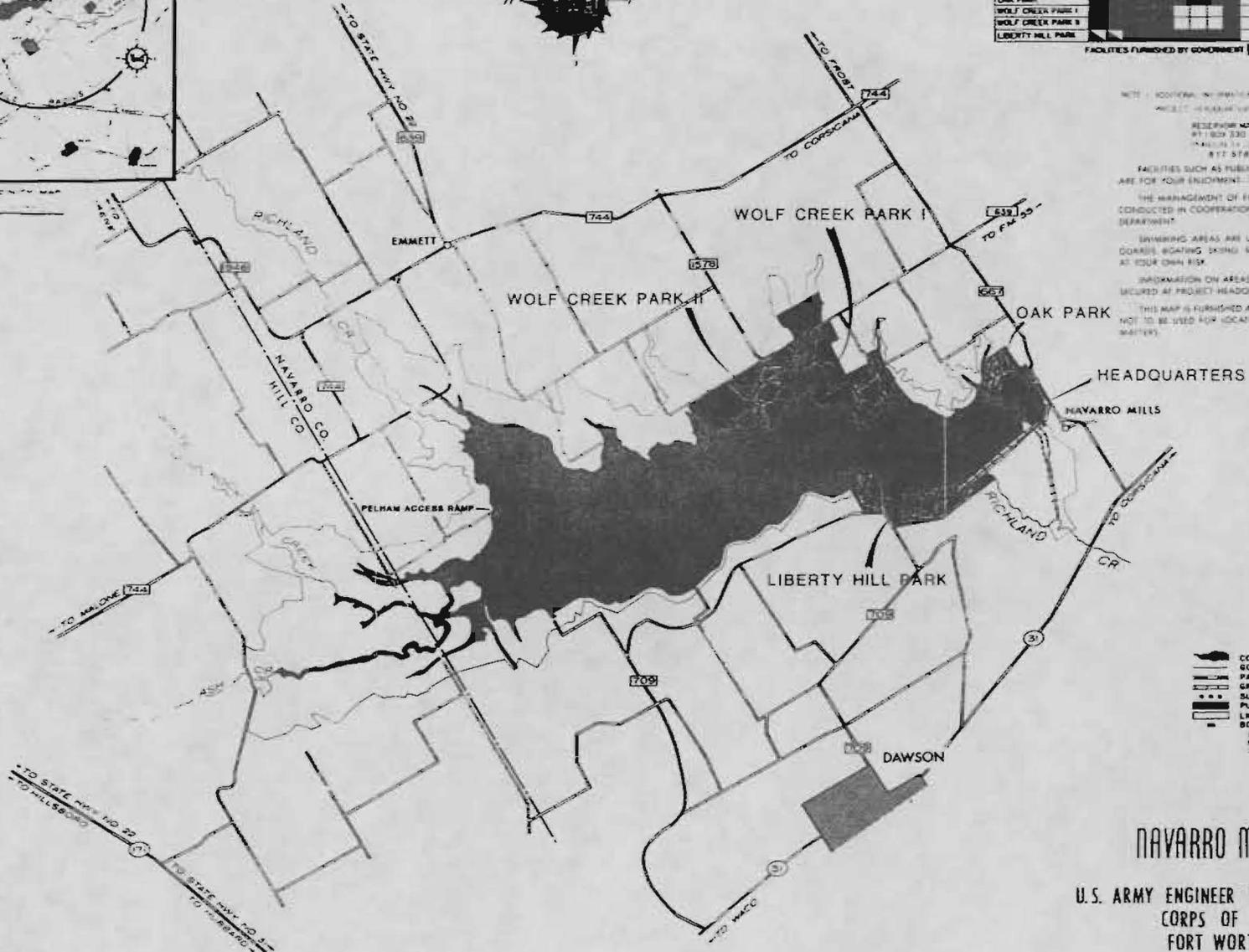
THE MANAGEMENT OF FISH AND WILDLIFE RESOURCES IS BEING CONDUCTED IN COOPERATION WITH THE TEXAS PARKS AND WILDLIFE DEPARTMENT.

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INFORMATION ON AREAS WHERE HUNTING IS PERMITTED MAY BE OBTAINED AT PROJECT HEADQUARTERS.

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NAVARRO MILLS LAKE MAP 19



LEGEND

- CONSERVATION POOL, ELEV. 424.5
- GOVERNMENT PROPERTY LINE
- PAVED ROAD
- GRAVELLED ROAD
- SLOW SPEED (50 MPH)
- PUBLIC USE AREA
- LIMITED RECREATIONAL USE
- BOAT RAMPS
- L - low
- M - medium
- S - steep

NAVARRO MILLS LAKE

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





VICINITY MAP

ONE OF SEVEN

Scale of miles

HIGHWAY MILES TO CITY

GRANT	78
SWEETWATER	78
ARLENS	81
BROWNWOOD	96
MIDLAND	111
ODessa	132
DEL RIO	157
WACO	222
LUBBOCK	187
AUSTIN	207
SAN ANTONIO	218
FORT WORTH	229
DALLAS	235

Enjoy Your Visit

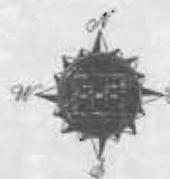
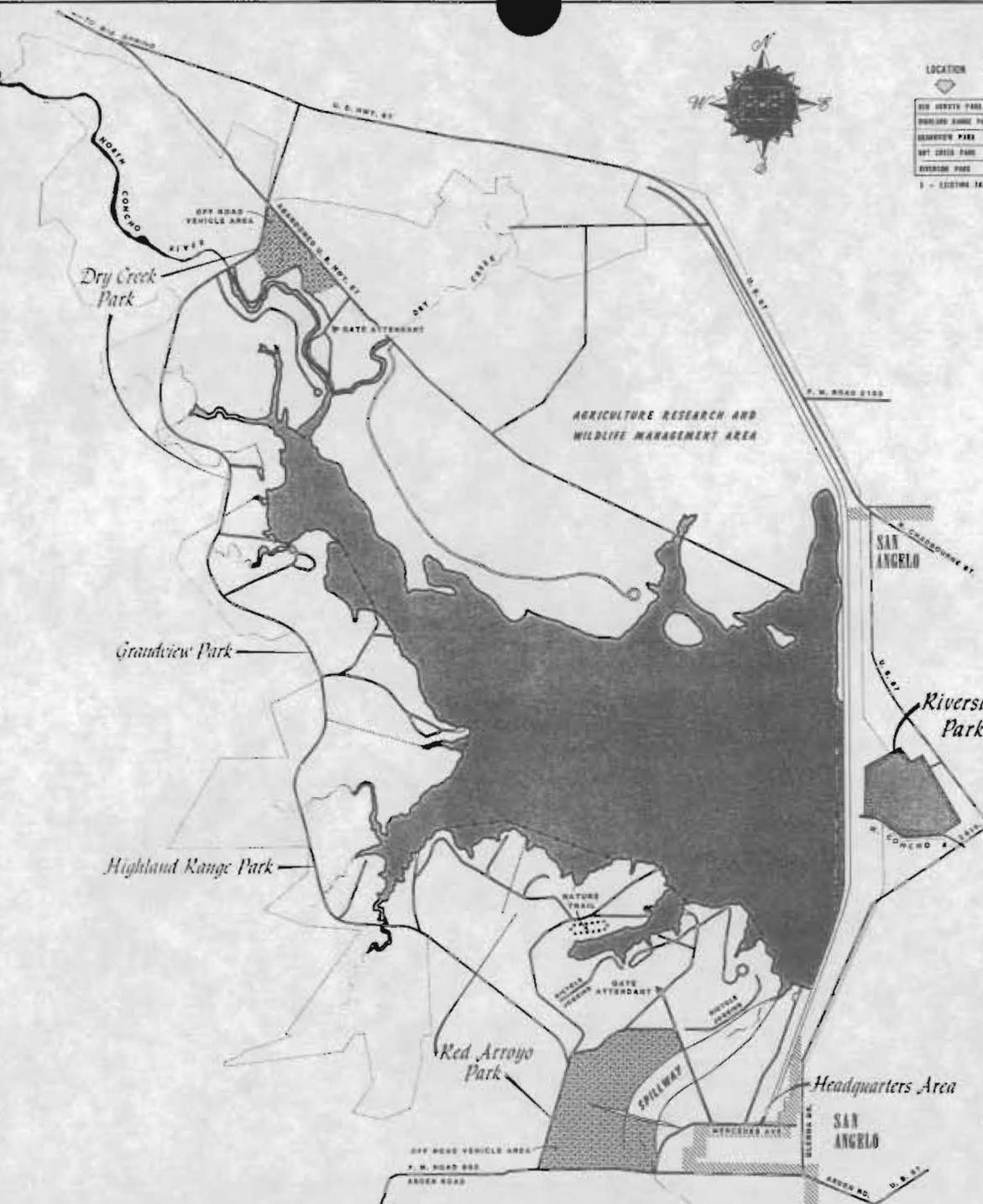
•DRIVE •SWIM •HUNT •FISH

Safety

PREVENT GRASS FIRES

Legend

- MAXIMUM CONSERVATION POOL
- GOVERNMENT AREA AND PROPERTY LINE
- PAVED OR HARD SURFACED ROAD
- GRAVELLED OR IMPROVED ROAD
- LOW SPEED AREA (5 MILES PER HOUR)
- AREAS (COMPS OF ENGINEERS)
- AREAS (BY OTHERS)



LOCATION	FACILITIES										OPERATING AGENCY	
	BOAT TRAILING MARSH											
DRY CREEK PARK	X											COMPS OF ENGINEERS
HIGHLAND RANGE PARK	X											COMPS OF ENGINEERS
GRANDVIEW PARK	X											COMPS OF ENGINEERS
RED ARROYO PARK	X											COMPS OF ENGINEERS
RIVERSIDE PARK	X											COMPS OF ENGINEERS

NOTE: THE MANAGEMENT OF FISH AND WILDLIFE RESOURCES IS BEING CONDUCTED IN COOPERATION WITH THE TEXAS PARKS AND WILDLIFE COMMISSION.

SWIMMING AREAS ARE UNSUPERVISED AND DO NOT HAVE LIFE GUARDS. BOATING, SWIMMING AND FISHING WILL BE DONE AT YOUR OWN RISK.

INFORMATION ON AREAS WHERE HUNTING AND OFF ROAD VEHICLES ARE PERMITTED MAY BE SECURED AT PROJECT HEADQUARTERS.

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ADDITIONAL INFORMATION MAY BE SECURED AT PROJECT HEADQUARTERS OR WRITING TO: RESERVOIR MANAGER, P.O. BOX 3005, SAN ANGELO, TEXAS 76902. AT 913-948-8752.

WHEN WINDS OF 25 M.P.H. OR MORE ARE FORECAST OR BLOWING, BOATS ARE CAUTIONED TO STAY OUT OF OPEN WATER. SUBCASTS AND WEATHER INFORMATION ARE ISSUED BY U.S. WEATHER BUREAU THROUGH LOCAL RADIO STATIONS.

FOR YOUR OWN SAFETY'S SAKE HEED THE WARNING!

STANDARD LAKE MARKERS

SYMBOL	7	6
A lake marker is displayed over a defined area of danger. A lake marker is displayed over the channel. Symbols may be placed outside of lake.	7	6

O.C. FISHER LAKE

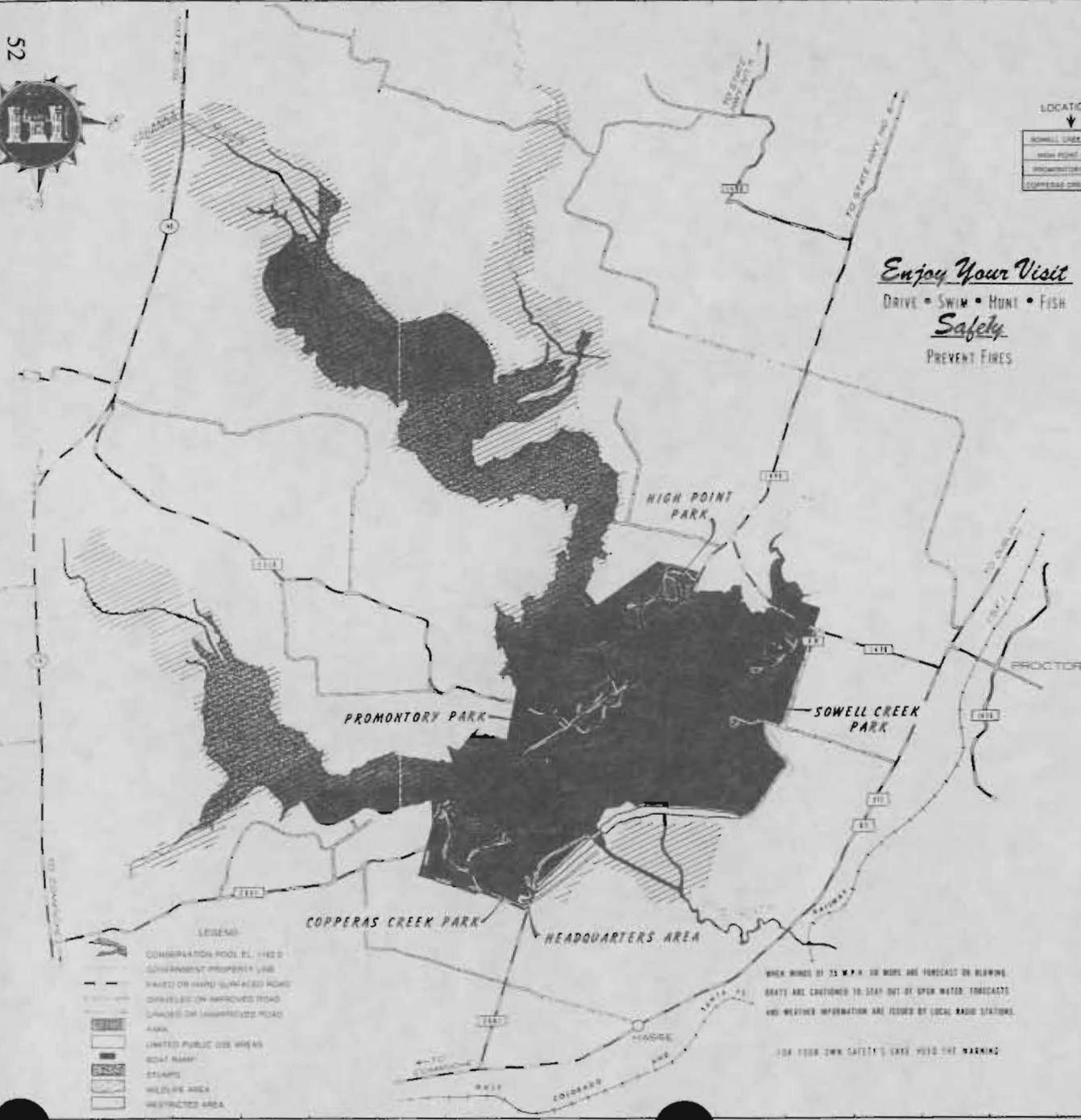
Texas

Scale of Miles



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

O.C. FISHER LAKE MAP 20



- LEGEND:
- CONSERVATION POOL EL. 1142.0
 - GOVERNMENT PROPERTY LINE
 - PAVED OR HARD SURF ACED ROAD
 - DRAWN ON IMPROVED ROAD
 - DRAWN ON UNIMPROVED ROAD
 - 4000'
 - LIMITED PUBLIC USE WEAS
 - BOAT RAMP
 - STUMP
 - WILDLIFE AREA
 - RESTRICTED AREA

LOCATIONS	FACILITIES	OPERATING AGENCY
SOWELL CREEK PARK	RESTROOMS	CORPS OF ENGINEERS
HIGH POINT PARK	RESTROOMS	CORPS OF ENGINEERS
PROMONTORY PARK	RESTROOMS	CORPS OF ENGINEERS
COPPERAS CREEK PARK	RESTROOMS	CORPS OF ENGINEERS

■ FACILITIES FURNISHED BY THE GOVERNMENT

NOTE: FACILITIES SUCH AS PUBLIC ACCESS, PICNIC AND CAMPGROUNDS ARE FOR YOUR ENJOYMENT—USE THEM THOUGHTFULLY.

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Enjoy Your Visit
 DRIVE • SWIM • HUNT • FISH
Safety
 PREVENT FIRES

NOTE—ADDITIONAL INFORMATION MAY BE SECURED AT PROJECT HEADQUARTERS OR BY WRITING:

RESERVOIR MANAGER
 ROUTE 1, BOX 11-A
 CUMMINGS, TEXAS 76440
 817-699-2044

PROCTOR LAKE MAP 21

STANDARD LAKE MARKERS

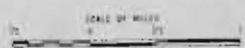


Proctor Lake
Texas

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

WHEN WINDS OF 25 M.P.H. OR MORE ARE FORECAST OR BLUING, BOATS ARE CAUTIONED TO STAY OUT OF OPEN WATER. FORECASTS AND WEATHER INFORMATION ARE ISSUED BY LOCAL RADIO STATIONS.

FOR YOUR OWN SAFETY'S SAKE, POST THE MARKING



WHEN WINDS OF 25 M.P.H. OR MORE ARE FORECAST IN BURNING, BOATS ARE CAUTIONED TO STAY OUT OF OPEN WATER. FORECASTS AND WEATHER INFORMATION ARE ISSUED BY U. S. WEATHER BUREAU THROUGH LOCAL RADIO STATIONS.

FOR YOUR OWN SAFETY'S SAKE, HEED THE WARNING.

Enjoy Your Visit

Drive • Hunt • Fish

Safety

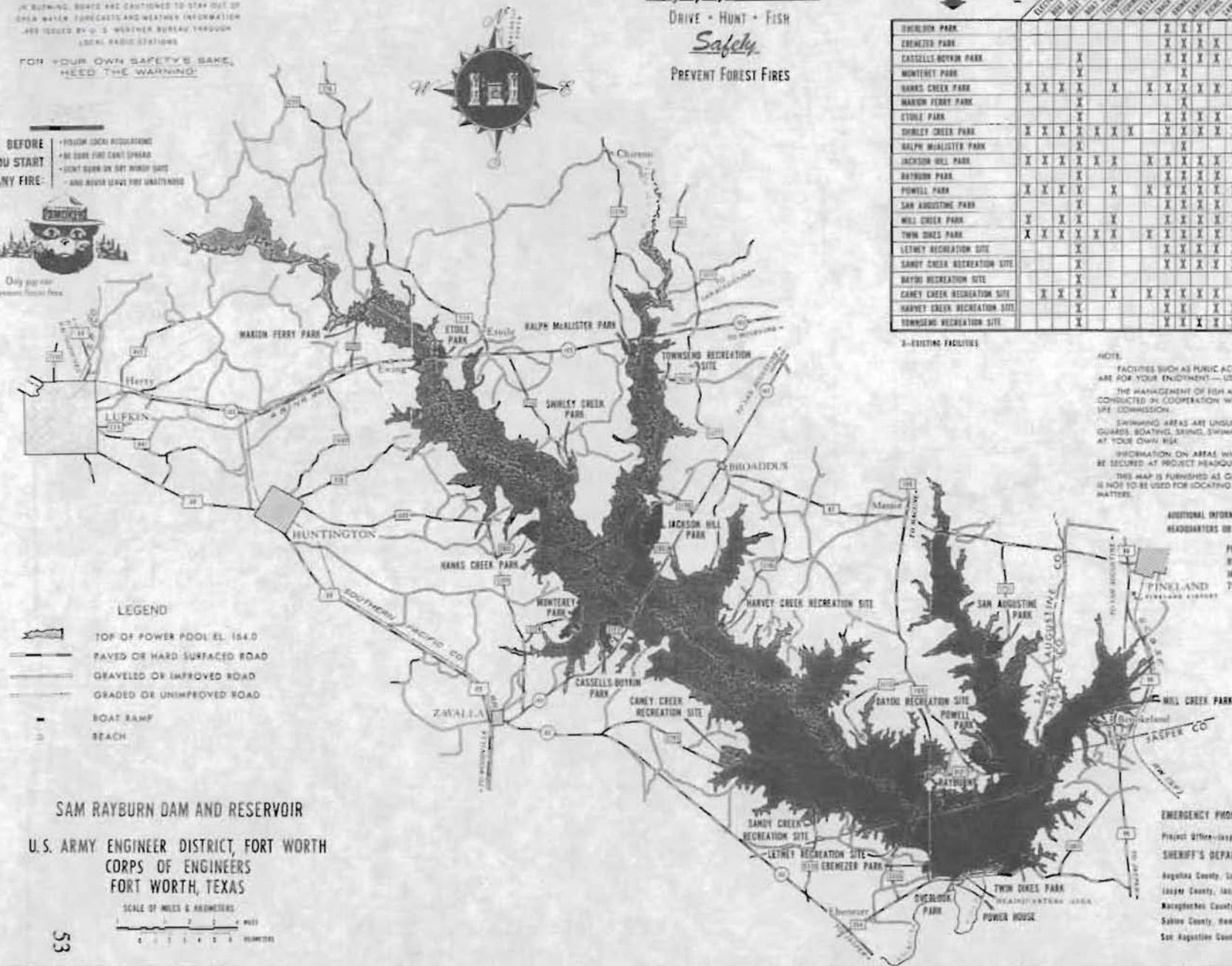
PREVENT FOREST FIRES

BEFORE YOU START ANY FIRE:

- FRESH LOGS ACQUISITION
- NO DRY FUEL CAN SPREAD
- DON'T DRINK OR GET DRUNK
- AND NEVER LEAVE FIRE UNATTENDED



Only get out
when you see
green forest fire.

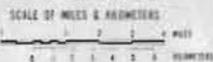


LEGEND

- TOP OF POWER POOL EL. 164.0
- PAVED OR HARD SURFACED ROAD
- GRAVELED OR IMPROVED ROAD
- GRADED OR UNIMPROVED ROAD
- BOAT RAMP
- BEACH

SAM RAYBURN DAM AND RESERVOIR

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



53

LOCATION	FACILITIES											OPERATING AGENCY	
	RESTROOM BUILDING	WATER TOWER BUILDING	BOAT RAMP	BEACH	TRUCK TRAILER								
OVERLOOK PARK													
EBREZER PARK													
CASSELLS BOTTOM PARK													
MONTELEY PARK													
HANKS CREEK PARK	X	X	X	X	X	X	X	X	X	X	X	X	
MAKIN FERRY PARK													
ETOLE PARK													
SHIRLEY CREEK PARK	X	X	X	X	X	X	X	X	X	X	X	X	
RALPH MALISTER PARK													
JACKSON HILL PARK	X	X	X	X	X	X	X	X	X	X	X	X	
BATHURST PARK													
POWELL PARK	X	X	X	X	X	X	X	X	X	X	X	X	
SAN AUGUSTINE PARK													
MILL CREEK PARK	X	X	X	X	X	X	X	X	X	X	X	X	
TWIN DIKES PARK	X	X	X	X	X	X	X	X	X	X	X	X	
LETNEY RECREATION SITE													
SANDY CREEK RECREATION SITE													
DAYTON RECREATION SITE													
CANEY CREEK RECREATION SITE	X	X	X	X	X	X	X	X	X	X	X	X	
HARVEY CREEK RECREATION SITE													
TOWNSEND RECREATION SITE													

3-EXISTING FACILITIES

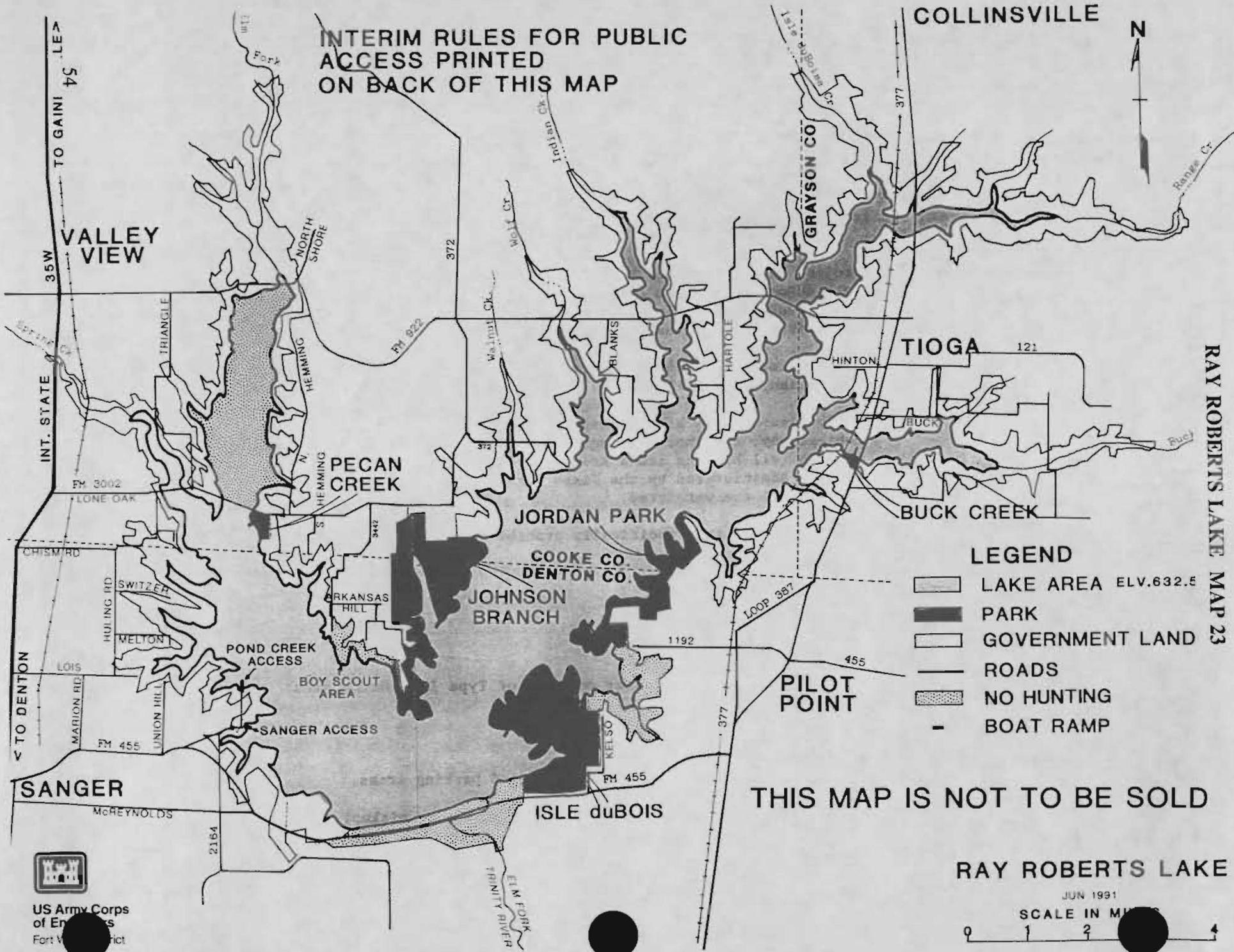
NOTE:
FACILITIES SUCH AS PUBLIC ACCESS, PICNIC AND CAMPO ARE FOR YOUR ENJOYMENT—USE THEM THOUGHTFULLY.
THE MANAGEMENT OF FISH AND WILDLIFE RESOURCES CONDUCTED IN COOPERATION WITH THE TEXAS PARKS AND GAME COMMISSION.
SWIMMING AREAS ARE UNSUPERVISED AND DO NOT HAVE GUARDS. BOATING, SKIING, SWIMMING, AND FISHING WILL AT YOUR OWN RISK.
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THIS MAP IS FURNISHED AS GENERAL INFORMATION AND IS NOT TO BE USED FOR LOCATING PROPERTY LINES AND OTHER MATTERS.

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PROJECT ENGINEER
ROUTE 2, BOX 329
JASPER, TEXAS 75851
713-264-5716

EMERGENCY PHONE NUMBERS:
Project Office/Jasper..... 364-5716
SHERIFF'S DEPARTMENT:
Angelina County, Lufkin..... 634-3331
Jasper County, Jasper..... 284-5418
Montgomery County, Montgomery..... 584-9778
Sabine County, Baytown..... 781-2266
San Augustine County, San Augustine..... 279-2422

SAM RAYBURN LAKE MAP 22

INTERIM RULES FOR PUBLIC
ACCESS PRINTED
ON BACK OF THIS MAP



RAY ROBERTS LAKE MAP 23

LEGEND

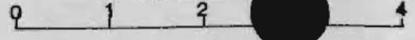
-  LAKE AREA ELV.632.5
-  PARK
-  GOVERNMENT LAND
-  ROADS
-  NO HUNTING
-  BOAT RAMP

THIS MAP IS NOT TO BE SOLD

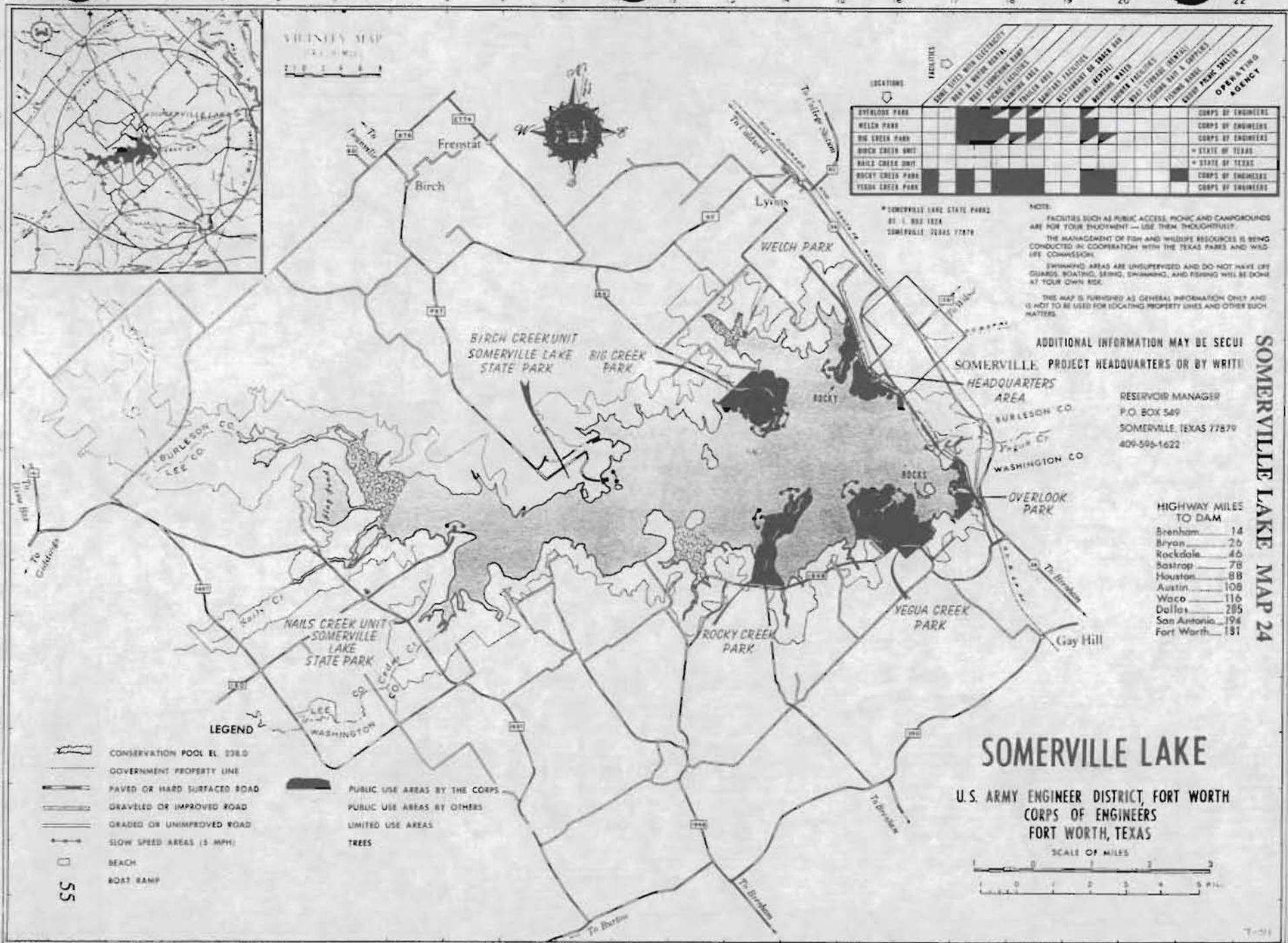
RAY ROBERTS LAKE

JUN 1991

SCALE IN MILES



US Army Corps
of Engineers
Fort Vicksburg District



VICINITY MAP
1:25,000



LOCATIONS	FACILITIES	OPERATING AGENCY
OVERLOOK PARK	SOME STATE WITH ELECTRICITY	CORPS OF ENGINEERS
WELCH PARK	WATER WITH ELECTRICITY	CORPS OF ENGINEERS
BIG CREEK PARK	WATER WITH ELECTRICITY	CORPS OF ENGINEERS
BIRCH CREEK UNIT	WATER WITH ELECTRICITY	* STATE OF TEXAS
NAILS CREEK UNIT	WATER WITH ELECTRICITY	* STATE OF TEXAS
ROCKY CREEK PARK	WATER WITH ELECTRICITY	CORPS OF ENGINEERS
YEGUA CREEK PARK	WATER WITH ELECTRICITY	CORPS OF ENGINEERS

* SOMERVILLE LAKE STATE PARKS
BY L. BOB TEXA
SOMERVILLE TEXAS 77870

NOTE:
FACILITIES SUCH AS PUBLIC ACCESS, PICNIC AND CAMPGROUNDS ARE FOR YOUR ENJOYMENT — USE THEM THOUGHTFULLY.
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ADDITIONAL INFORMATION MAY BE SECURED FROM THE
SOMERVILLE PROJECT HEADQUARTERS OR BY WRITING TO:

RESERVOIR MANAGER
P.O. BOX 549
SOMERVILLE, TEXAS 77870
409-506-1622

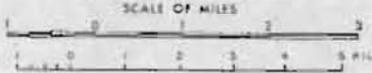
HIGHWAY MILES TO DAM

Brenham	14
Bryan	26
Rockdale	46
Bastrop	78
Houston	88
Austin	108
Waco	116
Dallas	205
San Antonio	194
Fort Worth	181

SOMERVILLE LAKE MAP 24

SOMERVILLE LAKE

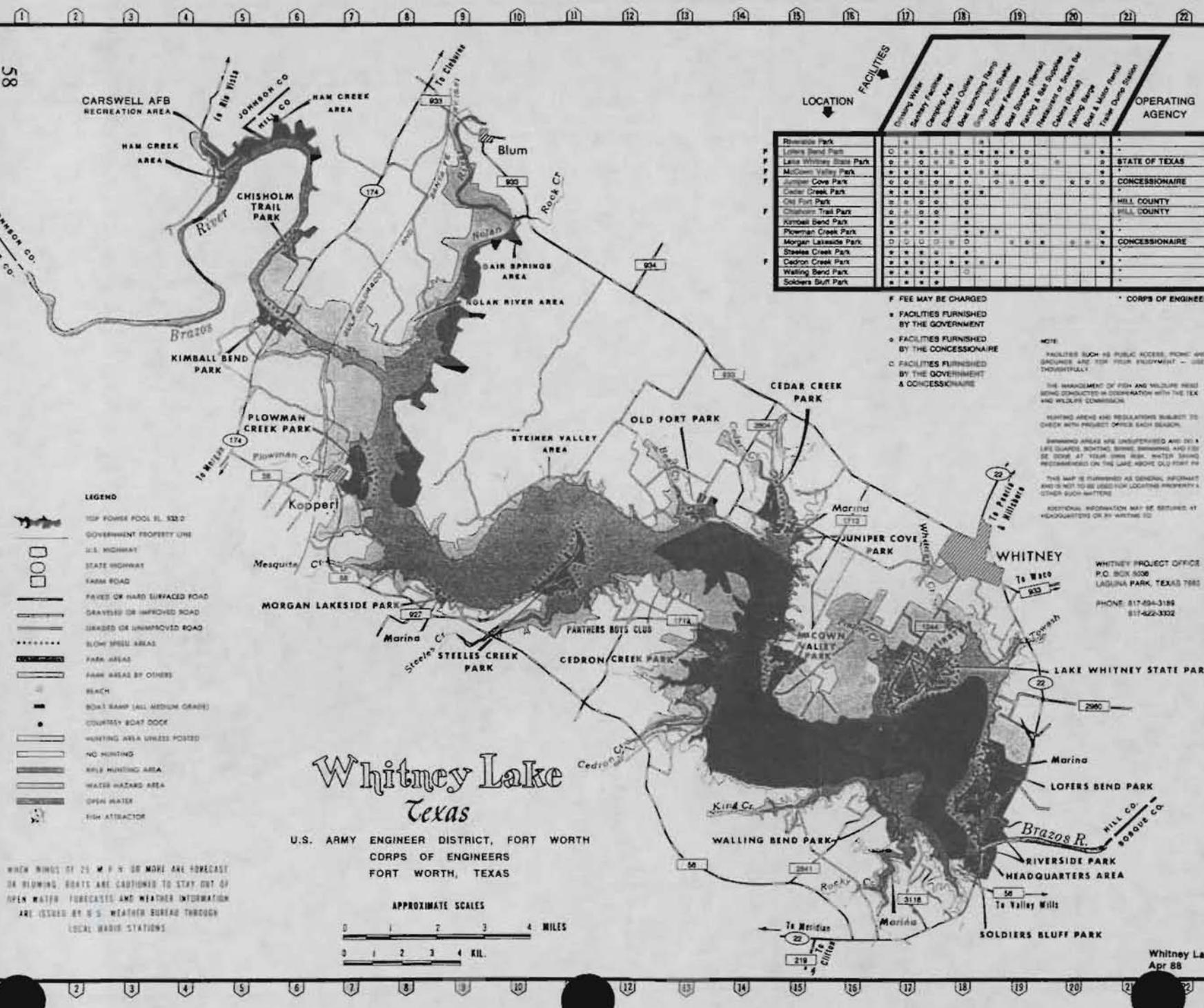
U.S. ARMY ENGINEER DISTRICT, FORT WORTH
CORPS OF ENGINEERS
FORT WORTH, TEXAS



- LEGEND**
- CONSERVATION POOL EL. 238.0
 - GOVERNMENT PROPERTY LINE
 - PAVED OR HARD SURFACED ROAD
 - GRAVELED OR IMPROVED ROAD
 - GRADED OR UNIMPROVED ROAD
 - SLOW SPEED AREAS (5 MPH)
 - BEACH
 - BOAT RAMP
 - PUBLIC USE AREAS BY THE CORPS
 - PUBLIC USE AREAS BY OTHERS
 - LIMITED USE AREAS
 - TREES

SS

58



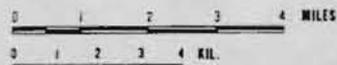
LEGEND

- TOP POWER POOL EL. 532.0
- GOVERNMENT PROPERTY LINE
- U.S. HIGHWAY
- STATE HIGHWAY
- FARM ROAD
- PAVED OR HARD SURFACED ROAD
- GRAVELLED OR IMPROVED ROAD
- GRADED OR UNIMPROVED ROAD
- SLOW SPEED AREAS
- PARK AREAS
- PARK AREAS BY OTHERS
- BEACH
- BOAT RAMP (ALL MEDIUM GRADE)
- COURTESY BOAT DOCK
- HUNTING AREA UNLESS POSTED
- NO HUNTING
- RIFLE HUNTING AREA
- WATER HAZARD AREA
- OPEN WATER
- FISH ATTRACTOR

Whitney Lake Texas

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

APPROXIMATE SCALES



WHEN WINDS OF 25 M.P.H. OR MORE ARE FORECAST OR BLUING, BOATS ARE CAUTIONED TO STAY OUT OF OPEN WATER. FORECASTS AND WEATHER INFORMATION ARE ISSUED BY U.S. WEATHER BUREAU THROUGH LOCAL MARINER STATIONS.

LOCATION	FACILITIES											OPERATING AGENCY		
	Drinking Water	Sanitary Facilities	Camping Area	Electrical Outlets	Boat Lanching Ramp	Group Picnic Shelter	Boat Storage	Boat Fuel	Restrooms or Showers	Cabins (Fishing)	Boat & Motor Rental	Fishing Boats	Trailer Ramp Station	

Riverside Park														
Lovers Bend Park														
Lake Whitney State Park														STATE OF TEXAS
McGowan Valley Park														CONCESSIONAIRE
Juniper Cove Park														CONCESSIONAIRE
Cedar Creek Park														HILL COUNTY
Old Fort Park														HILL COUNTY
Chisholm Trail Park														
Kimball Bend Park														
Ploverman Creek Park														
Morgan Lakeside Park														CONCESSIONAIRE
Steeles Creek Park														
Cedron Creek Park														
Walling Bend Park														
Soldiers Bluff Park														

- F FEE MAY BE CHARGED
- * FACILITIES FURNISHED BY THE GOVERNMENT
- o FACILITIES FURNISHED BY THE CONCESSIONAIRE
- c FACILITIES FURNISHED BY THE GOVERNMENT & CONCESSIONAIRE

* CORPS OF ENGINEERS

NOTE: FACILITIES SUCH AS PUBLIC ACCESS, POINT AND GAMP ENCLOSURES ARE TOP PRIORITY EMPLOYMENT - USE THEM THOROUGHLY.

THE MANAGEMENT OF FISH AND WILDLIFE RESS BEING CONDUCTED IN COOPERATION WITH THE TX& WILDLIFE COMMISSION.

HUNTING AREAS AND REGULATIONS SUBJECT TO CHECK WITH PROJECT OFFICE EACH SEASON.

SWIMMING AREAS ARE UNSUPERVISED AND DO A LIFE GUARDER. SWIMMING SHOULD BE LIMITED TO 100 YD. AT YOUTH SWIMMING. WATER SAFETY RECOMMENDATIONS ON THE LAKE ABOVE OLD FORT PA.

THIS MAP IS FURNISHED AS GENERAL INFORMATION AND IS NOT TO BE USED FOR LOCATING PROPERTY & OTHER SUCH MATTERS.

ADDITIONAL INFORMATION MAY BE SECURED AT HEADQUARTERS OR BY WRITING TO:

WHITNEY PROJECT OFFICE
P.O. BOX 8006
LAGUNA PARK, TEXAS 76051
PHONE: 817-694-3188
817-622-3302

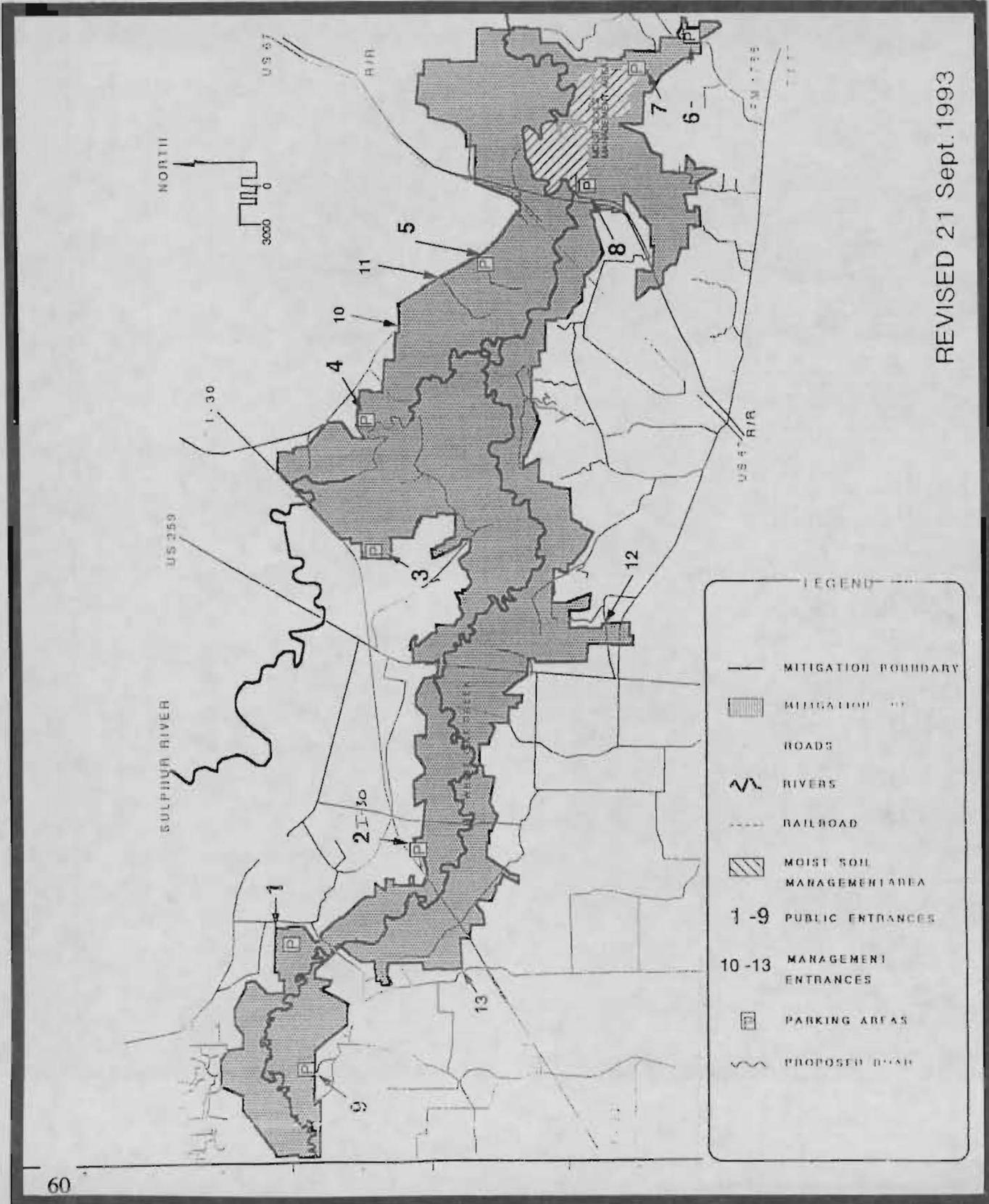
WHITNEY LAKE MAP 27

Whitney Lake
Apr 88

MAP 29

WHITE OAK CREEK WILDLIFE MANAGEMENT AREA

REVISED 21 Sept. 1993



BR Projects

Oil and gas leasing stipulations for the following reservoir sites are contained in the BR GP-135 Special Stipulations document which is contained in the Appendix. The GP-135 stipulations provide for protection of BR projects by use of buffer zones which prohibit occupancy and/or drilling for a specific distance.

Maximum project protection is provided by the use of NSO/ND to within 1000 feet under the Maximum Water Surface (MWS) by elevation as defined in Standing Operating Procedures of BR or to within 2,000 feet under dam embankments and appurtenance structures, outlet works, spillways, etc. or to within one-half mile (2,640 feet) of the centerline of any tunnel. Should the maximum project protection stipulation be waived by the BR, additional restrictions protect recreational developments, wildlife habitats, project facilities and water supplies by creating a NSO/DD buffer ranging from 200 to 500 feet around these areas. Stipulations protecting special wildlife habitats or significant surface resources have been identified by project site. The overlapping buffer zones identified for each surface resource results in special stipulations covering acreage greater than the project total.

In all cases, GP-135 requires a site specific surface use plan approved by the BR Area Manager prior to any lease development. Whenever a conflict occurs concerning the applicability of a BR stipulation, the more restrictive stipulation will apply.

CHOKO CANYON DAM AND RESERVOIR - NUECES RIVER PROJECT MAP 30

BR Project 26,000 acres

Description

The Nueces River Project is located in Live Oak and McMullen Counties, midway between the cities of San Antonio and Corpus Christi. Choke Canyon Dam is on the Frio River about 4 miles west of the town of Three Rivers named for the confluence of the Frio, Nueces and Atascosa Rivers. Low-lying hills force the three rivers into a constricted channel, thus the name Choke Canyon. Live oak and post oak trees are generally found near the rivers while mesquite, huisache, blackbrush and grasses cover most of the area. The area has long and hot summers, mild winters and erratic precipitation. Occasional hurricanes produce major storms and flooding. The Nueces River Project was authorized by P.L. 93-493, dated October 27, 1972, to develop a dependable water supply for municipal and industrial use by the City of Corpus Christi and other areas of the Coastal Bend. The multipurpose project also provides for fish and wildlife conservation and recreational opportunities.

Operation and maintenance of the project has been turned over to the City and the Nueces River Authority. Under the terms of a separate agreement, the land and water areas within the reservoir boundary are managed for recreation and fish and wildlife purposes by the TPWD except for a designated area around the dam. The dam and surrounding area are operated and maintained by the City of Corpus Christi.

SMA Lease Stipulations

NSO/ND restrictions will apply within areas of the project where the United States owns 100 percent fee title mineral interest. In project areas where less than the full mineral interest has been acquired, Nueces River Project General Stipulations will apply.

Should BR project lands at the Nueces River Project be available for lease the stipulations described above would apply.

PALMETTO BEND DAM AND LAKE TEXANA MAP 31

BR Project 16,985 acres

Description

The Palmetto Bend Project is located in the west Gulf Coastal Plain area in Jackson County, approximately 7 miles southeast of Edna. Palmetto Bend Dam is situated in the Navidad River Valley 4 miles upstream from the confluence of the Lavaca and Navidad Rivers. The reservoir, Lake Texana, includes an eighteen mile reach of the Navidad River Valley and the lower portions of the Mustang creek and Sandy Creek Valleys. Water is collected from about 1,400 square miles of the Navidad River Basin above the damsite. The Palmetto Bend Project was authorized by P.L. 90-562 dated October 12, 1968, for the primary purpose of providing a dependable municipal and industrial water supply of 75,000 acre-feet annually to the Central Gulf Coast area. Lake Texana also provides associated recreational fish and wildlife facilities to several surrounding counties. The Lavaca-Navidad River Authority is responsible for operation and maintenance of the project. The TPWD manages Texana State Park located within the Lake Texana boundary.

SMA Lease Stipulations

NSO/ND restrictions will apply within areas of the project where the United States owns 100 percent fee title mineral interest. In project areas where less than the full mineral interest has been acquired, Palmetto Bend Project General Stipulations will apply.

Should BR project lands at Lake Texana be available for lease the stipulations described above would apply.

SANFORD DAM AND LAKE MEREDITH CANADIAN RIVER PROJECT MAP 32

BR Project 700 acres

Description

Sanford Dam and Reservoir is located on the High Plains in parts of Potter, Moore, Hutchinson and Carson Counties and is approximately 40 miles northeast of the City of Amarillo. The aqueduct feature of the project is approximately 320 miles long, traverses several Texas Panhandle counties and serves 11 cities in the High Plains area. The Canadian River Project was authorized by an act dated December 29, 1950, for the purpose of delivering water for municipal and industrial use, controlling floods and providing recreation and fish and wildlife benefits. Under the terms of the repayment contract for project construction costs, operation and maintenance of Sanford Dam and Lake Meredith was originally turned over to the Canadian River Municipal Water Authority (CRMWA).

By legislation dated November 28, 1990, the lands, waters and interests therein, except for approximately 700 acres around Sanford Dam, were transferred to the NPS for administration as a NRA. The 700 acre area at the dam

remain under the jurisdiction of BR and is operated and maintained by the CRMWA.

SMA Lease Stipulations

NSO/ND stipulation will apply within the area of the dam remaining under BR jurisdiction.

Should BR project lands at Lake Meredith be available for lease the stipulations described above would apply.

**TWIN BUTTES DAM AND RESERVOIR
SAN ANGELO PROJECT MAP 33**

Description

The San Angelo Project is located in Tom Green County, approximately 7 miles southwest of the City of San Angelo. Twin Buttes Dam controls and regulates the flows of the Middle and South Concho Rivers and Spring Creek. The San Angelo Project was authorized by P.L. 85-152, dated August 16, 1957, for the purpose of providing

irrigation water to land in Tom Green County and for municipal, industrial and domestic use, controlling floods and providing recreation and fish and wildlife benefits. Under the terms of various contracts, operation and maintenance of Twin Buttes Dam and Reservoir have been turned over to the San Angelo Water Supply Corporation and the City of San Angelo. The project's irrigation facilities are operated and maintained by the Tom Green County Water Control and Improvement District No. 1, located in Veribest.

SMA Lease Stipulations

NSO/ND restrictions will apply within areas of the project where the United States owns 100 percent fee title mineral interest. In project areas where less than the full mineral interest has been acquired, San Angelo Project General Stipulations will apply.

Should BR project lands at the San Angelo Project be available for lease the stipulations described above would apply.

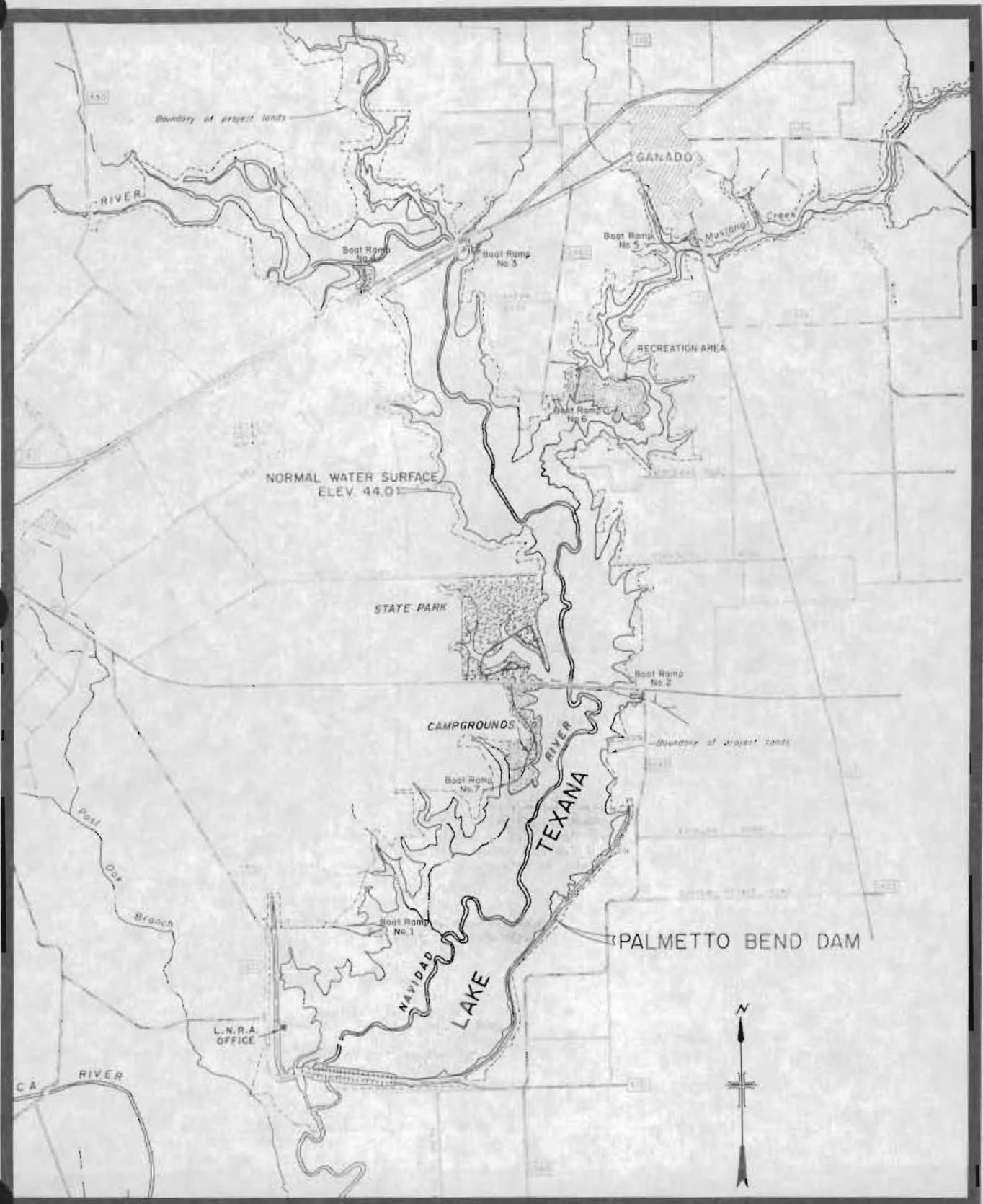
MAP 30

CHOKE CANYON DAM AND RESERVOIR - NUECES RIVER PROJECT

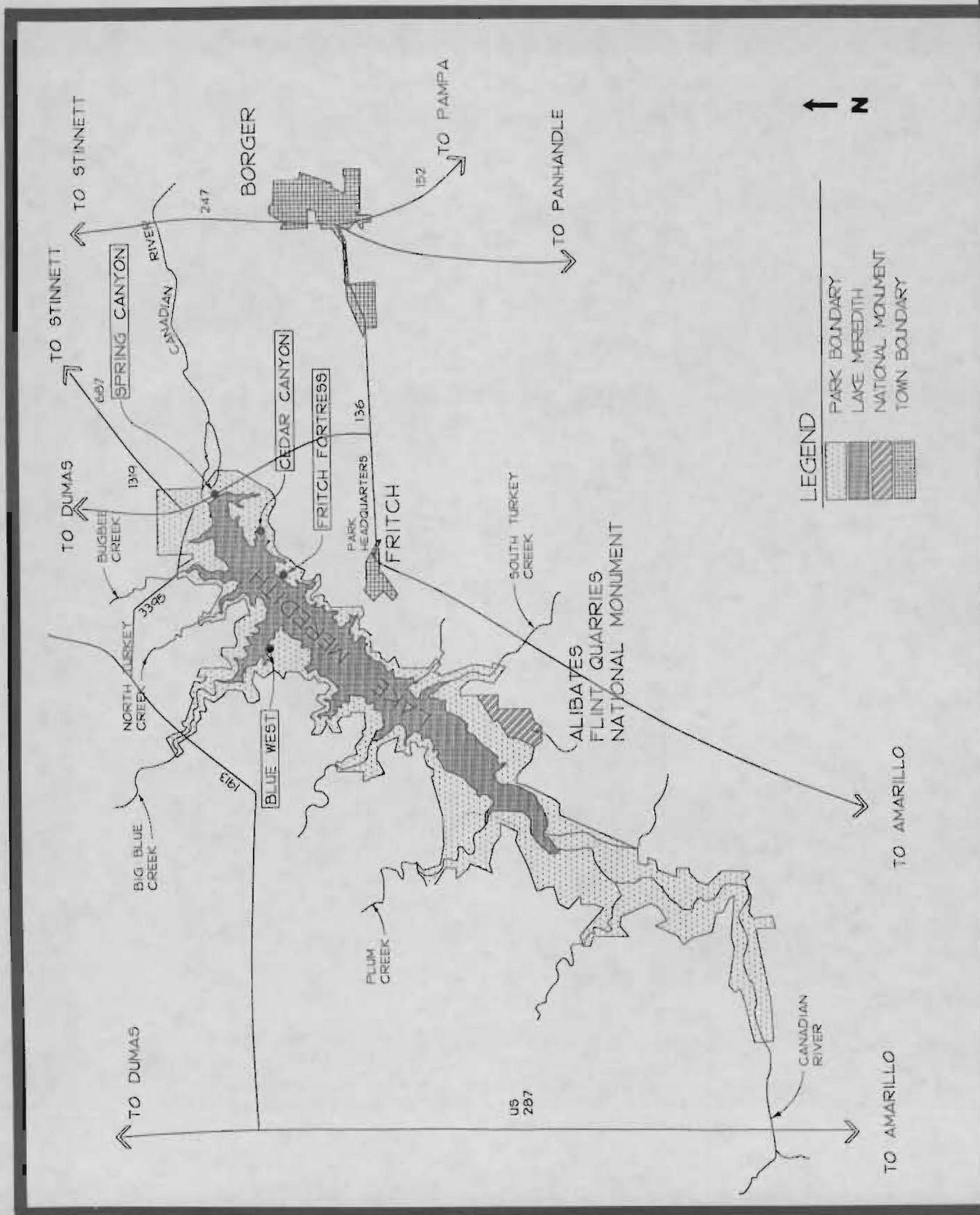


MAP 31

PALMETTO BEND DAM AND LAKE TEXANA

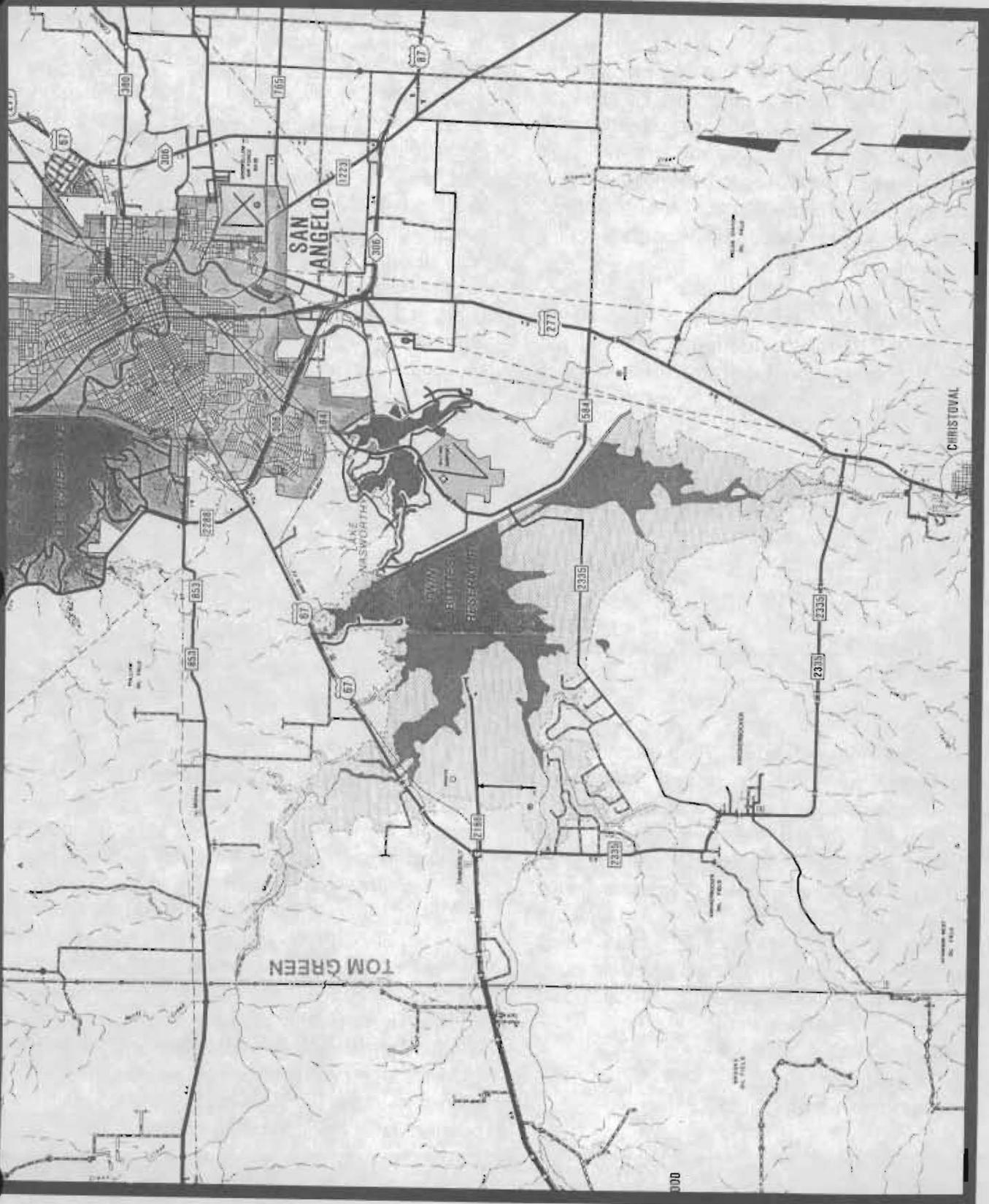


SANFORD DAM AND LAKE MEREDITH - CANADIAN RIVER PROJECT



MAP 33

TWIN BUTTES DAM AND RESERVOIR - SAN ANGELO PROJECT



**U.S. DEPARTMENT OF DEFENSE
MILITARY LANDS**

Department of Defense (DOD) lands acquired for military purposes are available for oil and gas leasing subject to DOD leasing stipulations, the approval of the base commander as well as the inclusion of base specific lease stipulations. There are numerous active military facilities located within Texas, those facilities currently available for leasing under the Acquired Minerals Leasing Act are listed below by branch of service.

Generally, DOD military lands are leased with the NSO/DD stipulation, however, the NSO/ND stipulation has been used to keep drilling rigs from impacting mission required air space.

U.S. Army: Forts Bliss, Hood and Wolters, Camps Bowie, Bullis and Swift, Lone Star and Longhorn Army Ammunition Plants and Red River Army Depot.

FORT BLISS **MAP 34**
Total Area in Texas 125,295 acres

Description

Fort Bliss located in El Paso county was established in 1848 to protect trails and settlers. Fort Bliss became a cavalry post in the early 1900's and remained so until 1942 when it became a center for anti-aircraft artillery training. The current mission, since 1957, is that of the U.S. Army Air Defense Artillery Center, where U.S. and Allied personnel are trained in the use of all types of air defense weapons, including missiles and other anti-aircraft weapons.

SMA Lease Stipulations

NSO on approximately 125,295 acres.

Should Federal minerals at Fort Bliss be available for lease the stipulations described above would apply.

FORT HOOD **MAP 35**
Total Area 208,712 acres

Description

Fort Hood is located in central Texas in Bell and Coryell Counties approximately 58 miles north of Austin. The facility supports the activities of the III Corp as well as training for Army Reserve and Army National Guard Units. Land uses at Fort Hood are divided into mission training areas, cantonments, airfields and Belton Lake Recreation Area.

SMA Lease Stipulations

NSO/ND on approximately 208,712 acres.

Should Federal minerals at Fort Hood be available for lease the stipulations described above would apply.

FORT WOLTERS **MAP 36**
Total Area 3,985 acres

Description

Fort Wolters, located in Parker and Palo Pinto counties, was originally activated in March, 1941, as an Infantry Replacement Training Center. Army recruits received basic training at Camp Wolters before being sent overseas as replacements. Camp Wolters was inactivated in 1945. After World War II, Camp Wolters was purchased from the then War Department by a group of local business men and became known as Camp Wolters Enterprises. Wolters AFB was activated in 1951 with the first contingent of aviation engineer trainees. From 1951 through 1956, the air base personnel were trained to insure the maintenance of the highest possible level of operational readiness.

In 1956, Wolters AFB was redesignated Fort Wolters and returned to the control of the U.S. Army with the primary mission of conducting training for the U.S. Army Primary Helicopter School.

SMA Lease Stipulations

NSO on approximately 3,985 acres.

Should Federal minerals at Fort Wolters be available for lease the stipulations described above would apply.

CAMP BOWIE MAP 37
Total Area 3,858 acres

Description

Camp Bowie is located in Brown County and was established as an infantry replacement training camp in 1941. In 1947, Camp Bowie was declared to the War Assets Administration for disposal as surplus property. In 1948, the Department of the Army withdrew from surplus the 104.3 acres made available for use by the Texas National Guard and 10.3 acres being used for Organized Reserve Corps in 1948.

SMA Lease Stipulations

NSO on approximately 3,858 acres.

Should Federal minerals at Camp Bowie be available for lease the stipulations described above would apply.

CAMP BULLIS MAP 38
Total Area 27,880 acres

Description

Camp Bullis, located in Bexar and Comal counties, was established in 1906 as a target range for Fort Sam Houston. The facility is currently used for field training exercises by

active Army units from Fort Sam Houston and also by Army Reserve components.

SMA Lease Stipulations

NSO on approximately 27,880 acres.

Should Federal minerals at Camp Bullis be available for lease the stipulations described above would apply.

CAMP SWIFT MAP 39
Total Area 11,740 acres

Description

Camp Swift, located in Bastrop county north of the town of Bastrop, was created in 1941 as an infantry training base. Currently the facility is used for training by the Texas Army National Guard. A complete description of Camp Swift is contained in the Draft and Final "Camp Swift Lignite Leasing EIS" of 1980 prepared by the BLM.

SMA Lease Stipulations

NSO on approximately 11,740 acres.

Should Federal minerals at Camp Swift be available for lease the stipulations described above would apply and NM-8, Coal Protection Stipulation, would apply to 11,740 acres.

LONE STAR ARMY AMMUNITION PLANT MAP 40
Total Acres 15,546

Description

Lone Star Army Ammunition Plant, located in Bowie County approximately 10 miles west of Texarkana, is part of the U.S. Army Armament, Munitions and Chemical Command. It was built in 1941. It's current mission is to load, assemble and pack

conventional ammunition. The plant is government owned and contractor operated.

SMA Lease Stipulations

NSO on approximately 15,546 acres.

Should Federal minerals at Lone Star be available for lease the stipulations described above would apply.

LONGHORN ARMY AMMUNITION PLANT **MAP 41**

Total Area 8,492 acres

Description

Longhorn Army Ammunition Plant is located in Harrison County south of Caddo Lake approximately 2 miles east of the town of Karnack. The plant is part of the U.S. Army Armament, Munitions and Chemical Command. The plant is government owned and contractor operated.

SMA Lease Stipulations

NSO on approximately 8,492 acres.

Should Federal minerals at Longhorn be available for lease the stipulations described above would apply.

RED RIVER ARMY DEPOT **MAP 40**

Total Area 19,081 acres

Description

Red River Army Depot is located approximately 18 miles west of Texarkana and is adjacent to Lone Star Army Ammunition Plant. Improved and semi-improved lands comprise 3,376 acres with a majority of the remaining balance being unimproved lands utilized to satisfy safety buffer zone requirements.

SMA Lease Stipulations

All leasing subject to base commander stipulations.

Should Federal minerals at Red River be available for lease the stipulations described above would apply.

U.S. AIR FORCE: Bergstrom, Dyess, Laughlin, Randolph, Reese and Sheppard AFBs as well as Laughlin No. 1 and Seguin AAFs.

BERGSTROM AFB **MAP 42**

Total Area 3,215 acres

Description

Bergstrom AFB is located within Travis County, southeast of, and adjoining the City of Austin.

SMA Lease Stipulations

NSO on approximately 3,215 acres.

Should Federal minerals at Bergstrom AFB be available for lease the stipulations described above would apply.

DYESS AFB **MAP 43**

Total Area 5,366 acres

Description

Dyess AFB is located within Taylor County and adjoins the Cities of Abilene and Tye.

SMA Lease Stipulations

NSO on approximately 5,366 acres.

Should Federal minerals at Dyess AFB be available for lease the stipulations described above would apply.

LAUGHLIN AFB **MAP 44**

Total Area 3,911 acres

Description

Laughlin AFB is located in Val Verde County in close proximity to the City of Del Rio.

SMA Lease Stipulations

NSO on approximately 3,911 acres.

Should Federal minerals at Laughlin AFB be available for lease the stipulations described above would apply.

LAUGHLIN NO. 1 AAF **MAP 45**

Total Area 1,200 acres

Description

Laughlin No. 1 AAF is located in Maverick County in close proximity to the towns of Quemado, Normandy and Eagle Pass.

SMA Lease Stipulations

NSO on approximately 1,200 acres.

Should Federal minerals at Laughlin No. 1 AAF be available for lease the stipulations described above would apply.

RANDOLPH AFB **MAP 46**

Total Area 2,893 acres

Description

Randolph AFB is located within Bexar County adjacent to the City of San Antonio.

SMA Lease Stipulations

NSO on approximately 2,893 acres.

Should Federal minerals at Randolph AFB be available for lease the stipulations described above would apply.

REESE AFB **MAP 47**

Total Area 2,455 acres

Description

Reese AFB is located within Lubbock County and adjoins the City of Lubbock.

SMA Lease Stipulations

NSO on approximately 2,455 acres.

Should Federal minerals at Reese AFB be available for lease the stipulations described above would apply.

SEGUIN AAF **MAP 48**

Total Area 961 acres

Description

Seguin AAF (associated with Randolph AFB) is located in Guadalupe County and adjoins the City of Seguin.

SMA Lease Stipulations

NSO on approximately 961 acres.

Should Federal minerals at Seguin AAF be available for lease the stipulations described above would apply.

SHEPPARD AFB **MAP 49**

Total Area 4,160 acres

Sheppard AFB is located in Wichita County and adjoins the City of Wichita Falls.

SMA Lease Stipulations

NSO on approximately 4,160 acres.

Should Federal minerals at Sheppard AFB be available for lease the stipulations described above would apply.

U.S. Navy: Corpus Christi and Kingsville NAS, Cabaniss and Waldon NALF and the McGregor NIROP.

CORPUS CHRISTI NAS **MAP 50**
WALDON AND CABANISS
NALF **(NO MAP)**

Total Area Corpus Christi NAS . 2,593 acres
Cabaniss NALF 800 acres
Waldon NALF 640 acres

Description

Corpus Christi NAS, Cabaniss and Waldon NALF are located in Nueces County on the southern and western edges of the City of Corpus Christi. These facilities are all located within the corporate limits of the City of Corpus Christi.

The NAS is a roughly rectangular base on the west of Corpus Christi Bay which borders the Gulf of Mexico. The Base is surrounded on three sides by water, on the west by Oso Bay, the north by Corpus Christi Bay and the east by Laguna Madre.

Note: The Federal minerals within the corporate city limits of the City of Corpus Christi are subject to leasing by special act of the U.S. Congress.

SMA Lease Stipulations

NSO on approximately 4,033 acres.

Should Federal minerals at these facilities be available for lease the stipulations described above would apply.

KINGSVILLE NAS **MAP 50**

Total Area 3,955 acres

Description

Kingsville NAS is located on the east side of the town of Kingsville in Kleburg County.

SMA Lease Stipulations

NSO on approximately 3,955 acres.

Should Federal minerals at Kingsville NAS be available for lease the stipulations described above would apply.

McGREGOR NIROP **MAP 51**

Total Area 9,789 acres

Description

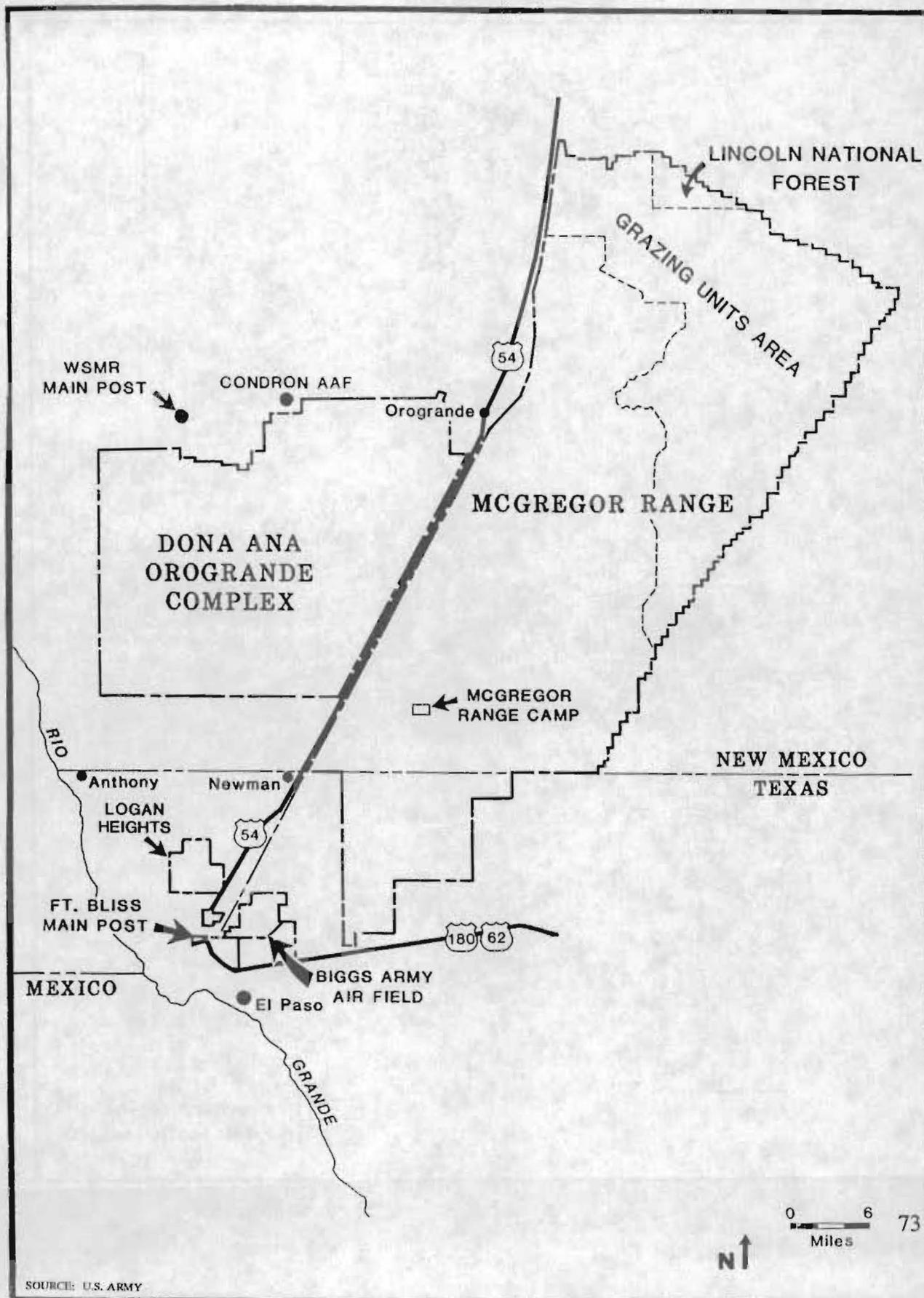
The NIROP is located near the town of McGregor in portions of McLennan and Coryell Counties.

SMA Lease Stipulations

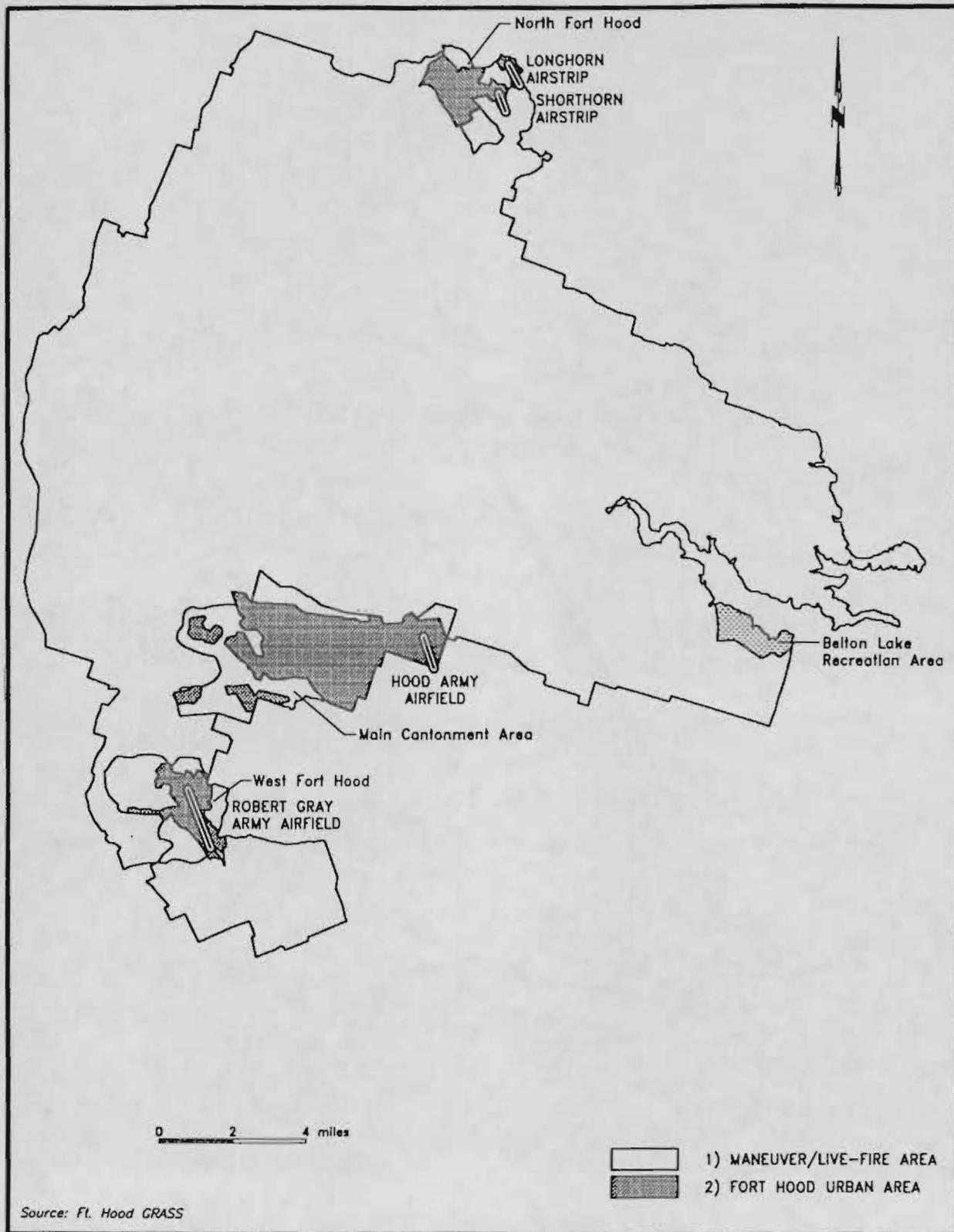
NSO on approximately 9,789 acres.

Should Federal minerals at this facility be available for lease the stipulations described above would apply.

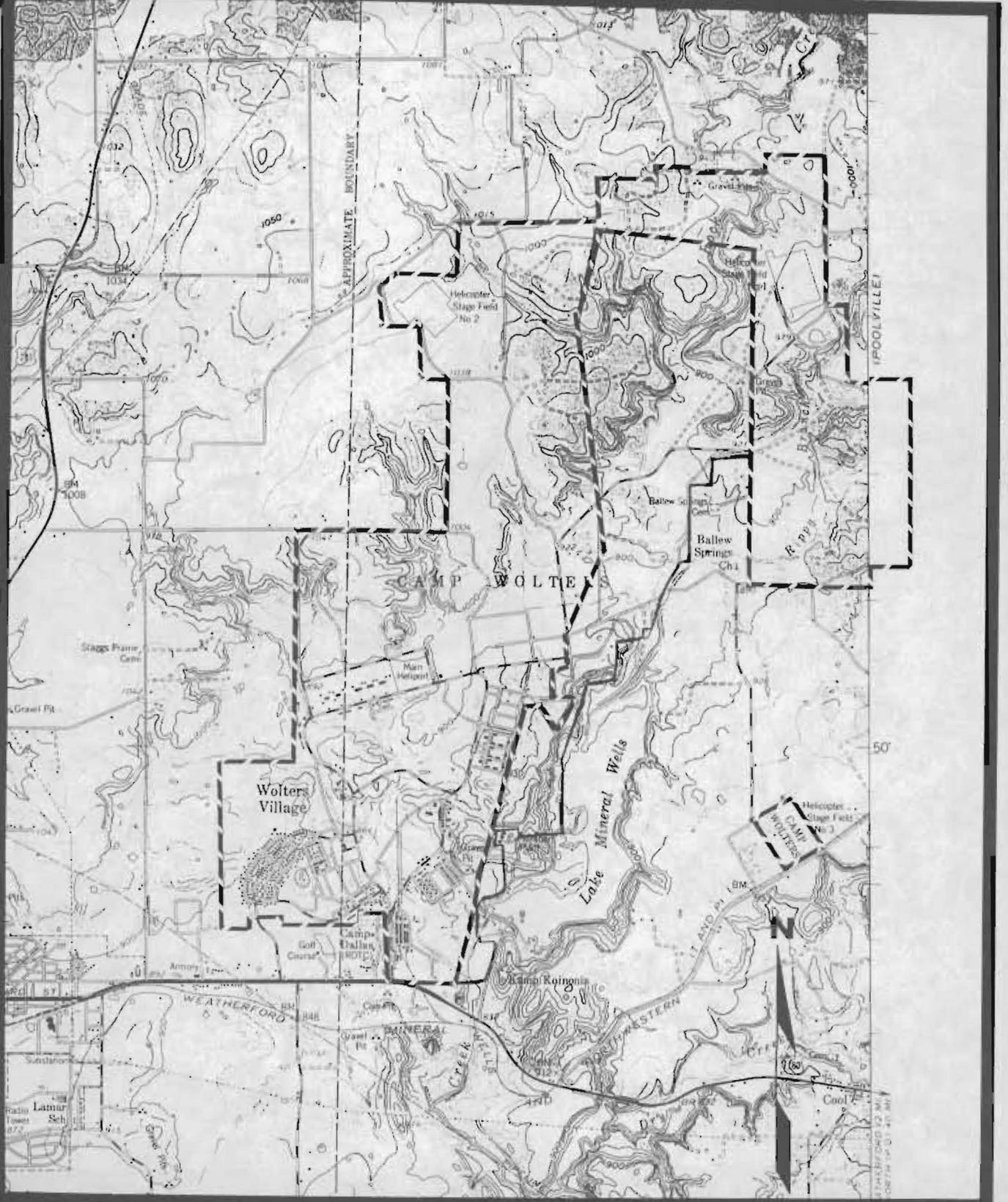
MAP 34
FORT BLISS



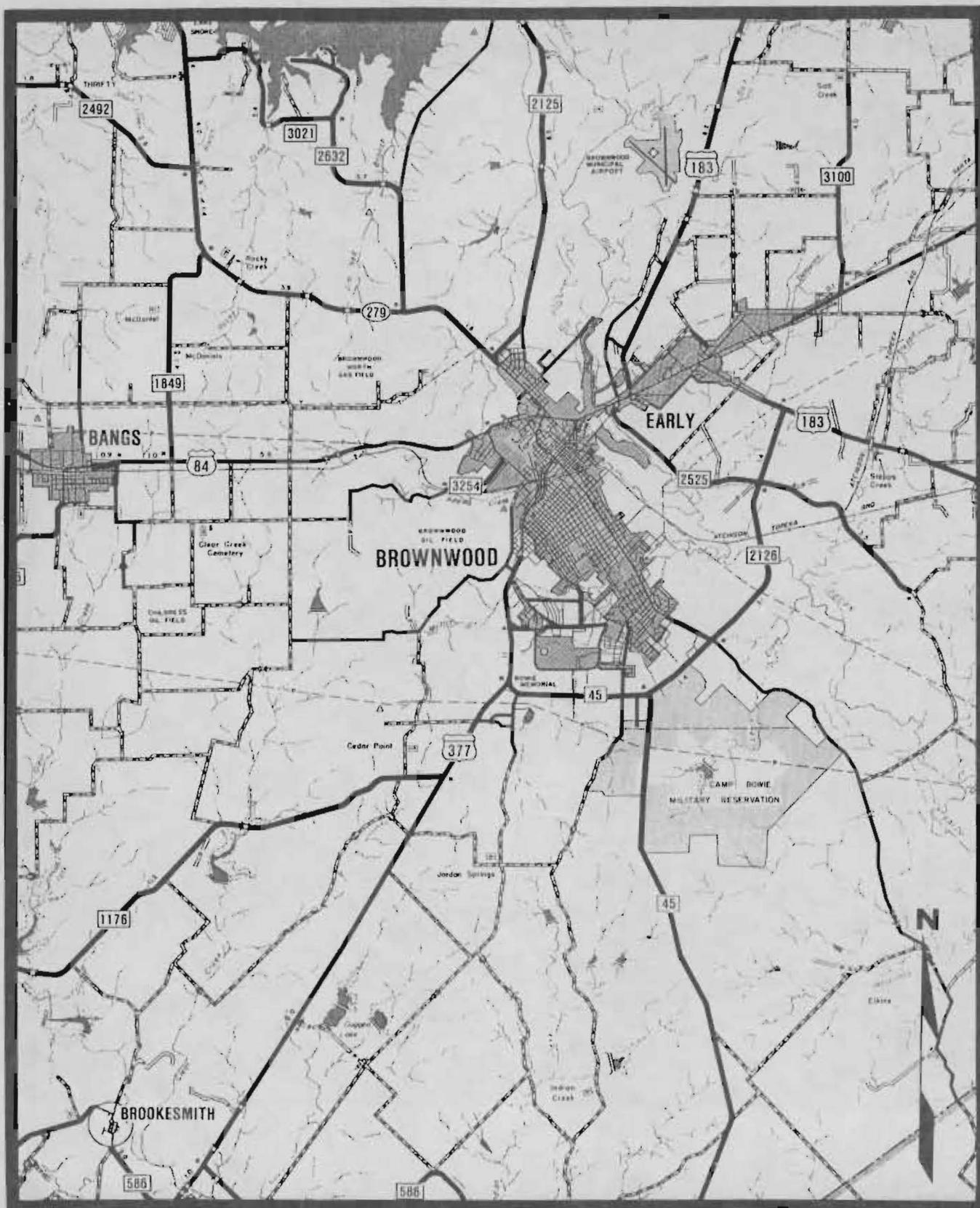
MAP 35
FORT HOOD



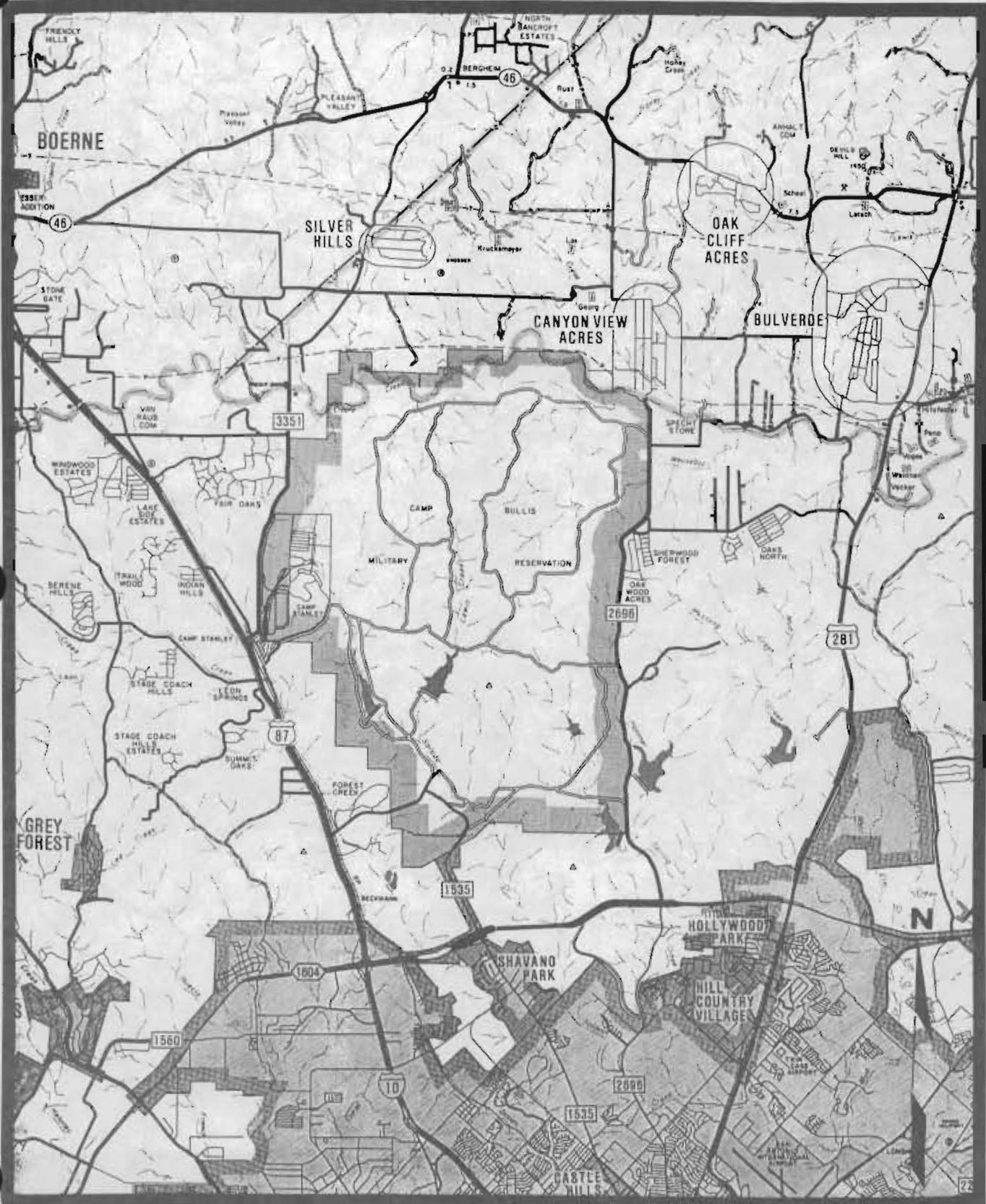
MAP 36
FORT WOLTERS



MAP 37
CAMP BOWIE



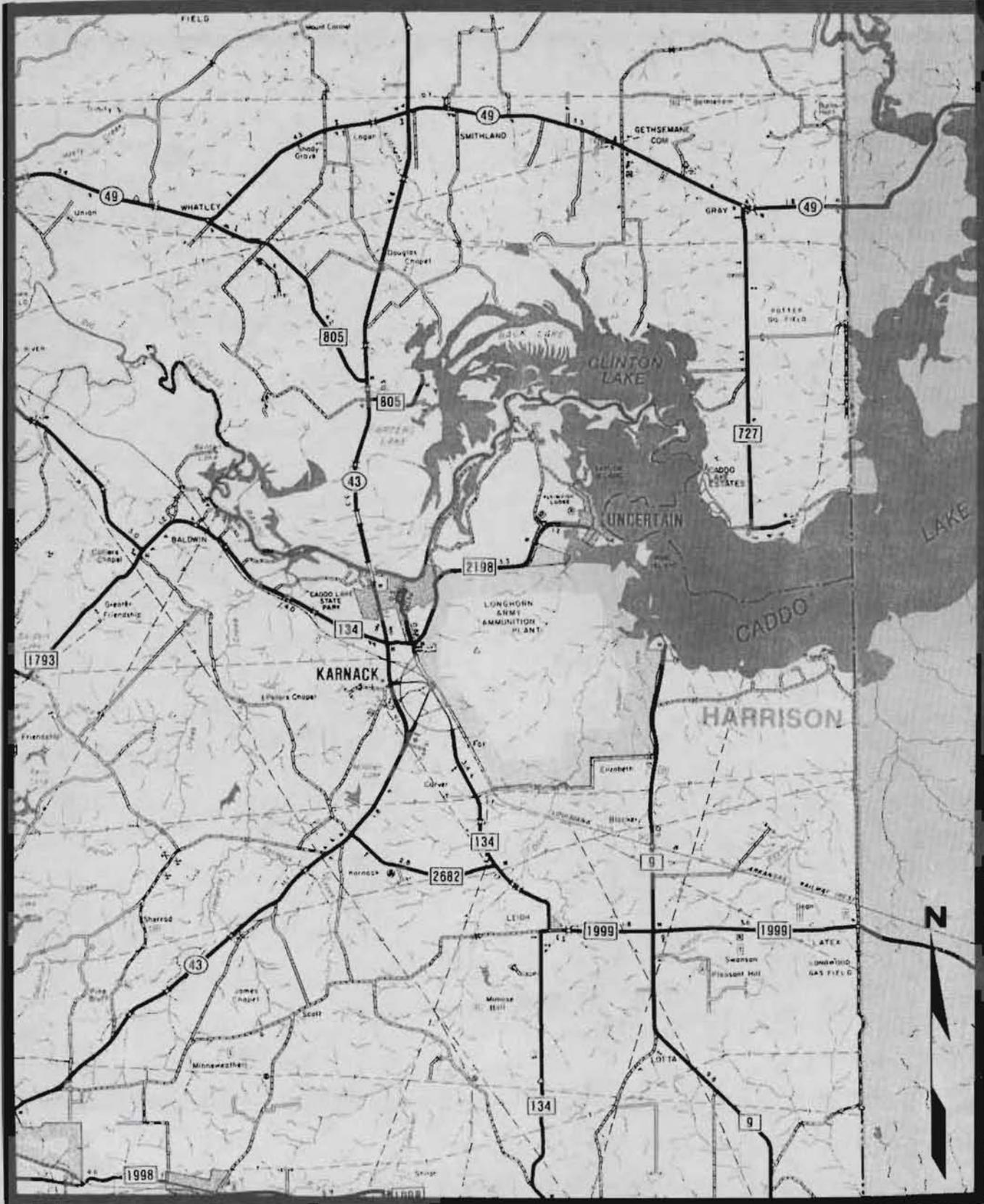
MAP 38
CAMP BULLIS



MAP 39
CAMP SWIFT



MAP 41
LONGHORN ARMY AMMUNITION PLANT

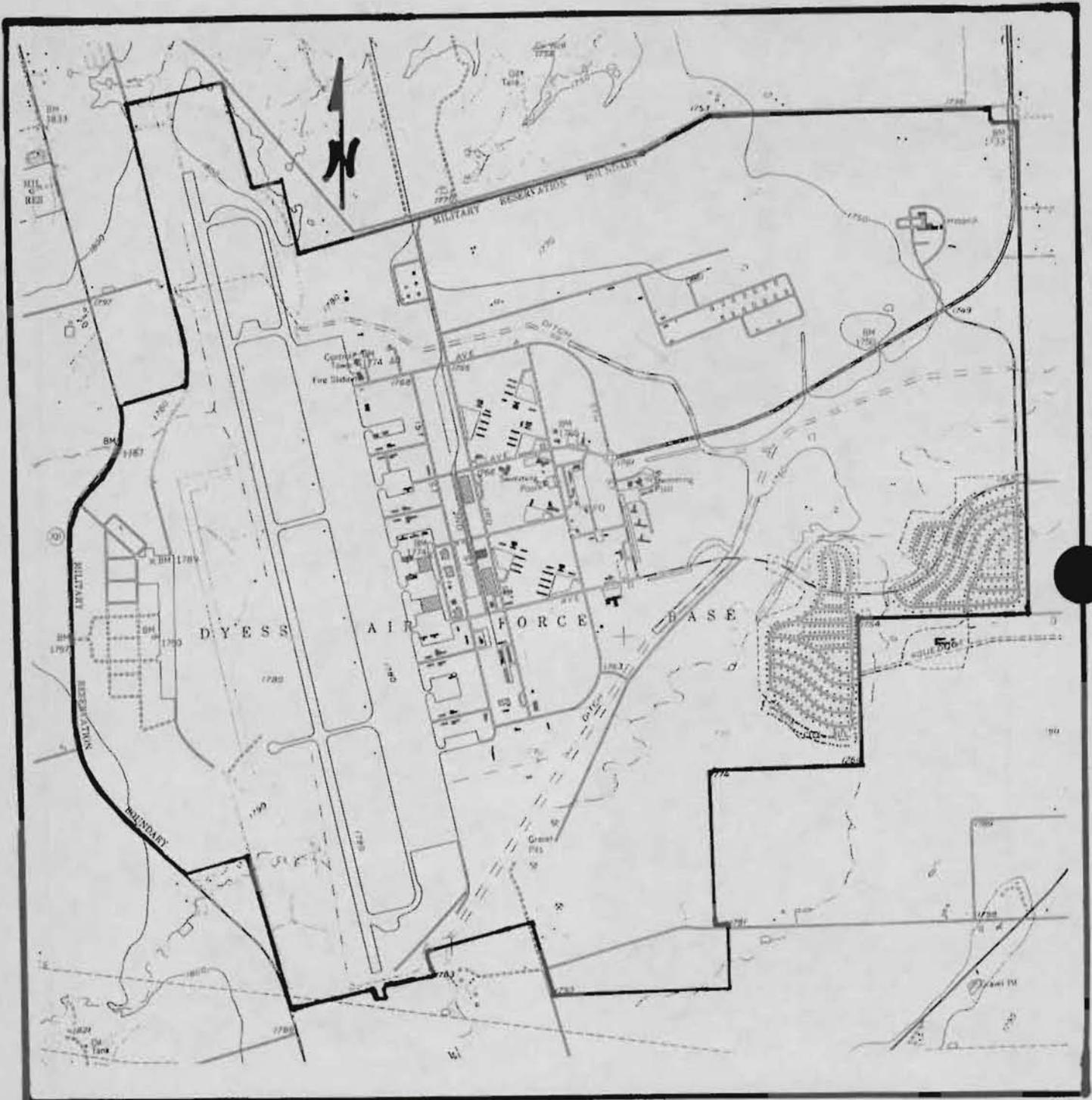


MAP 42
BERGSTROM AFB



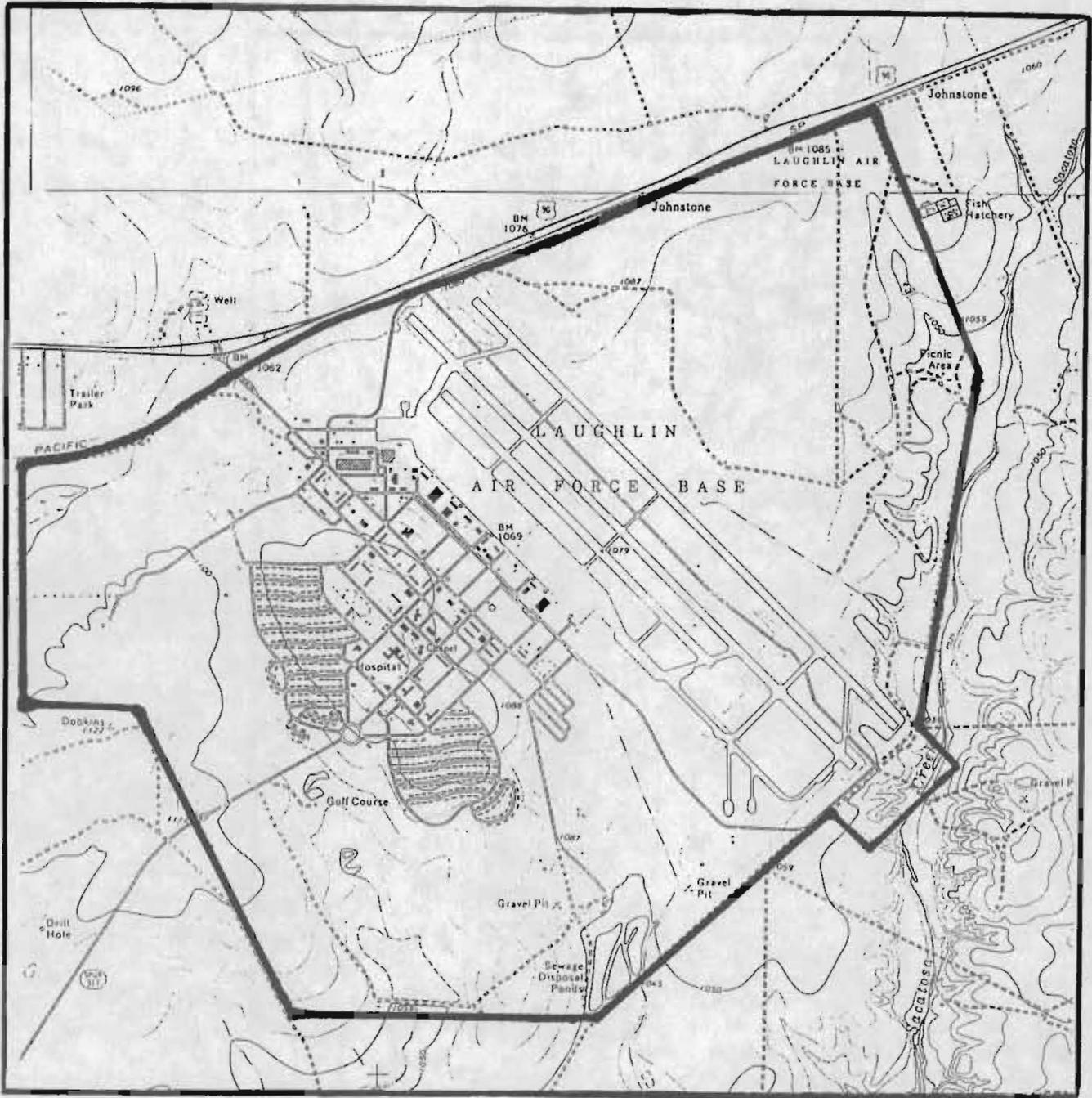
SOURCE: U.S. GEOLOGICAL SURVEY

MAP 43
DYESS AFB



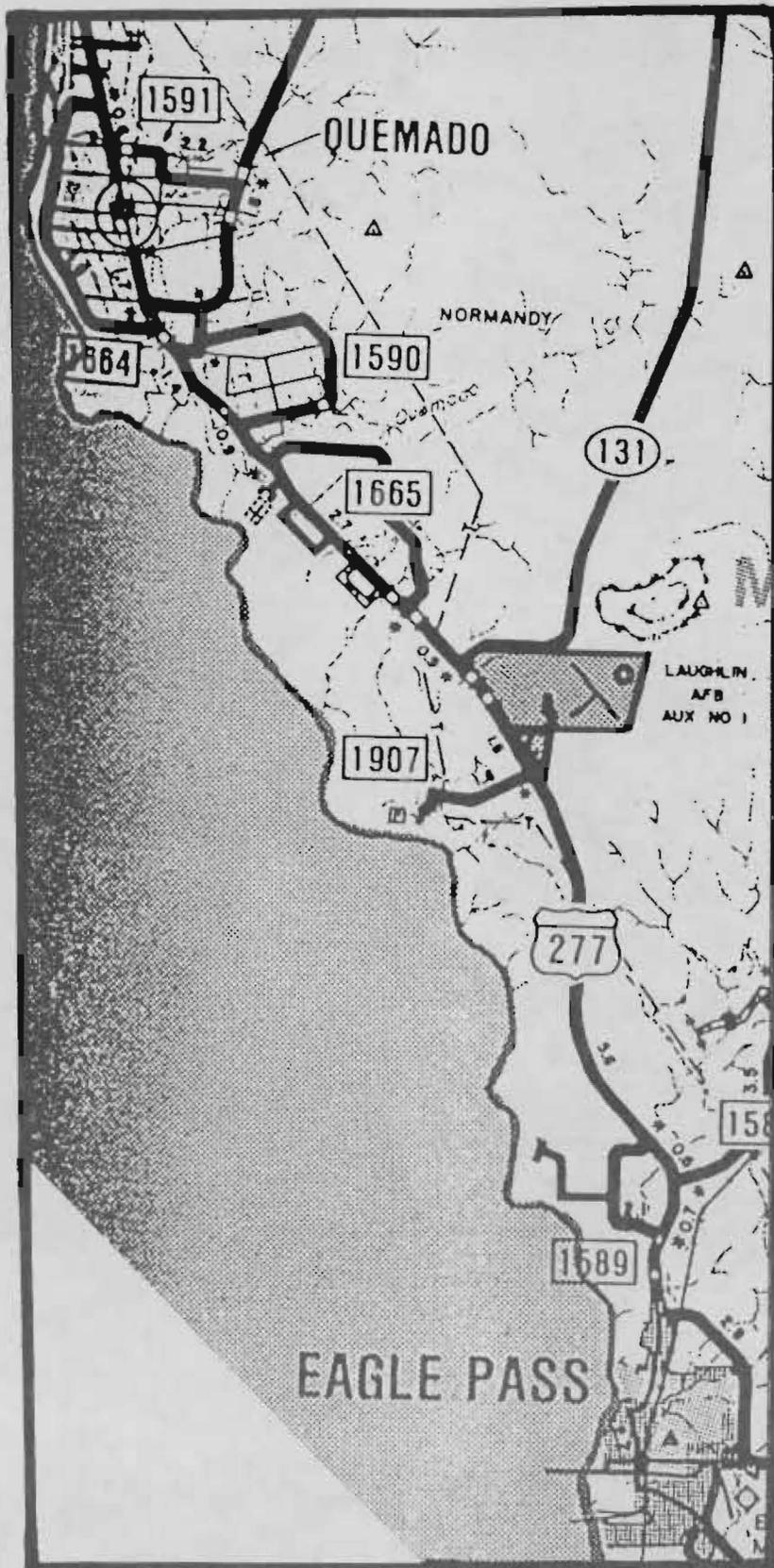
SOURCE: U.S. GEOLOGICAL SURVEY

MAP 44
LAUGHLIN AFB

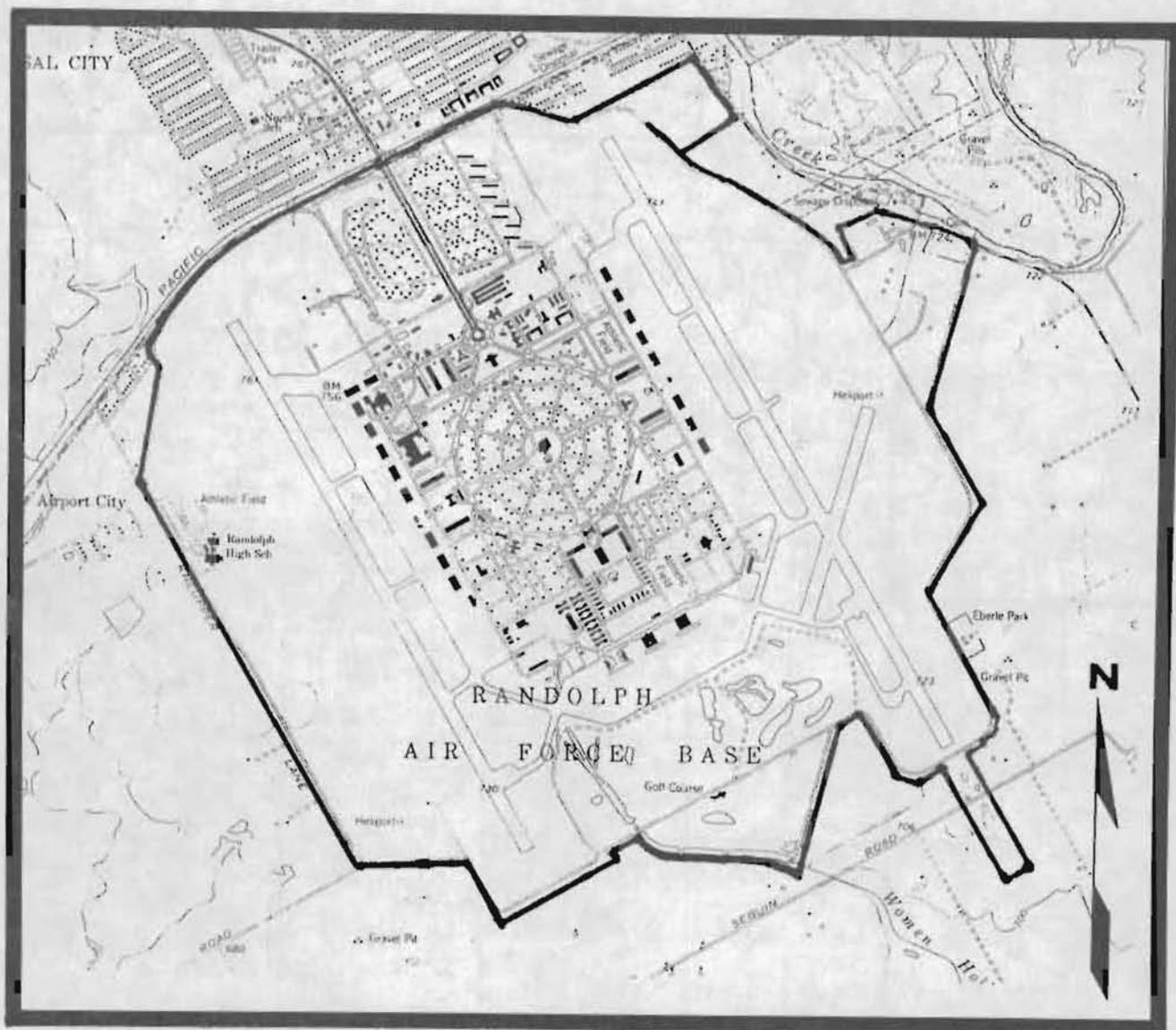


SOURCE: U.S. GEOLOGICAL SURVEY

MAP 45
LAUGHLIN #1 AAF

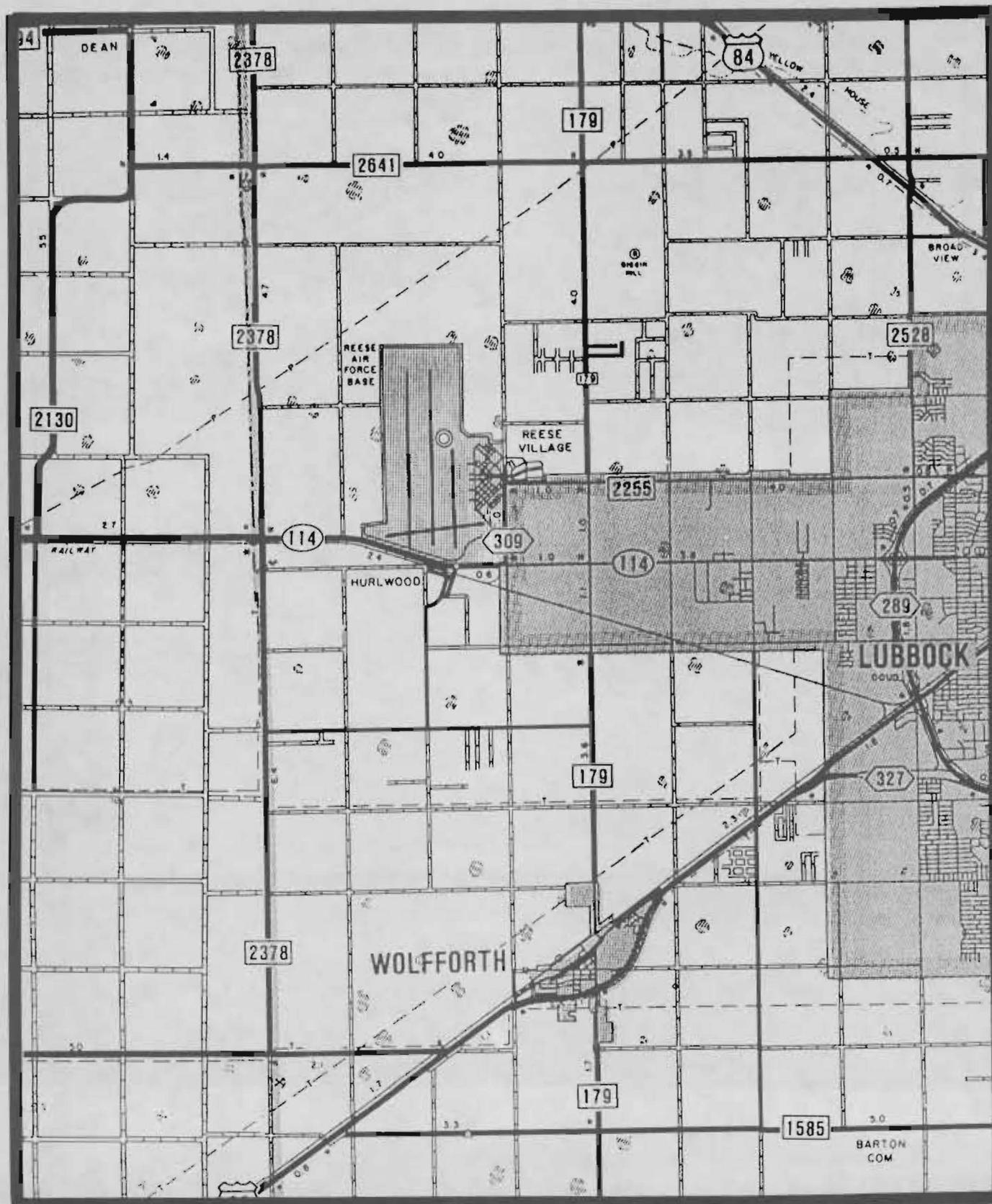


MAP 46
RANDOLPH AFB

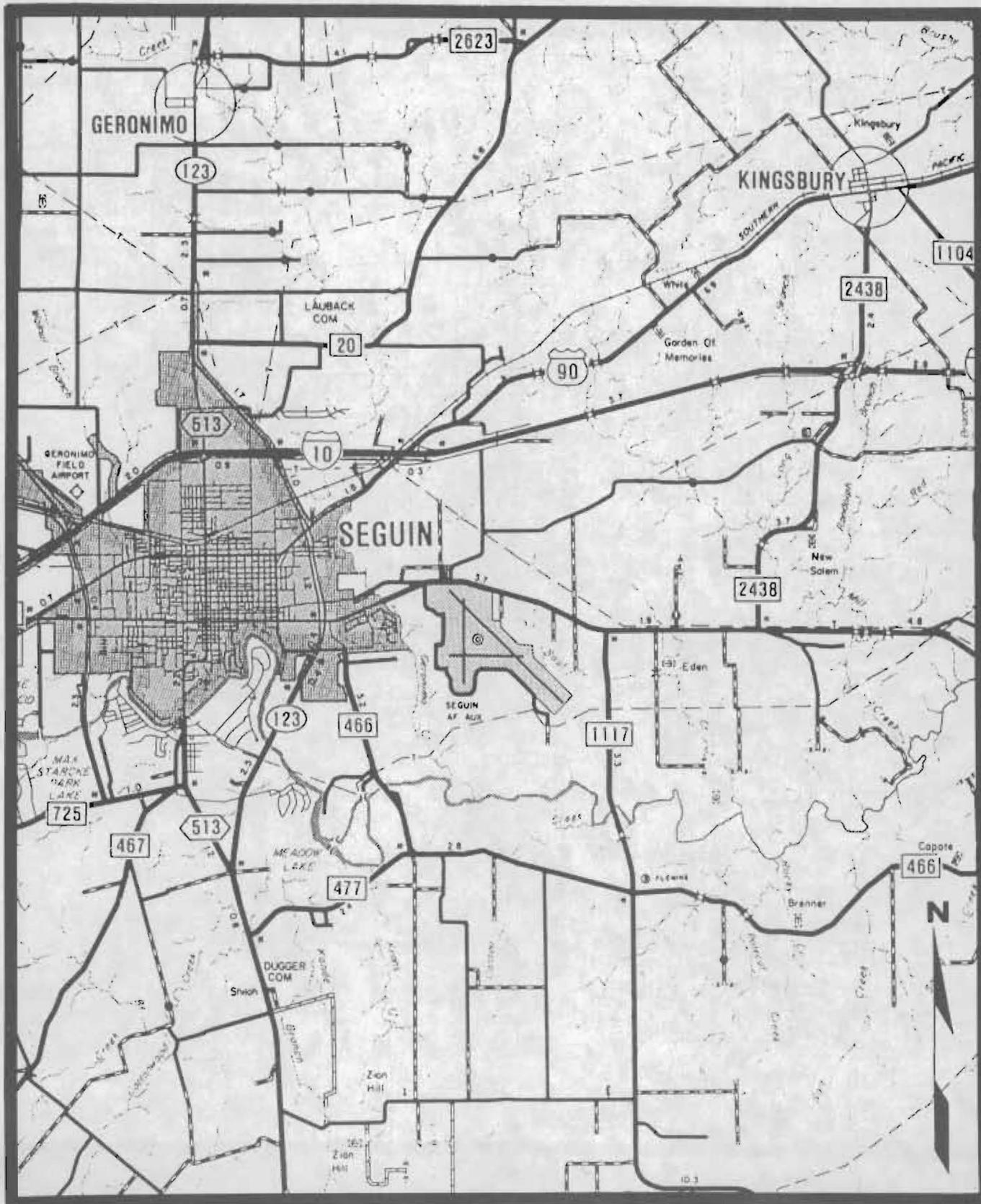


SOURCE: U.S. GEOLOGICAL SURVEY

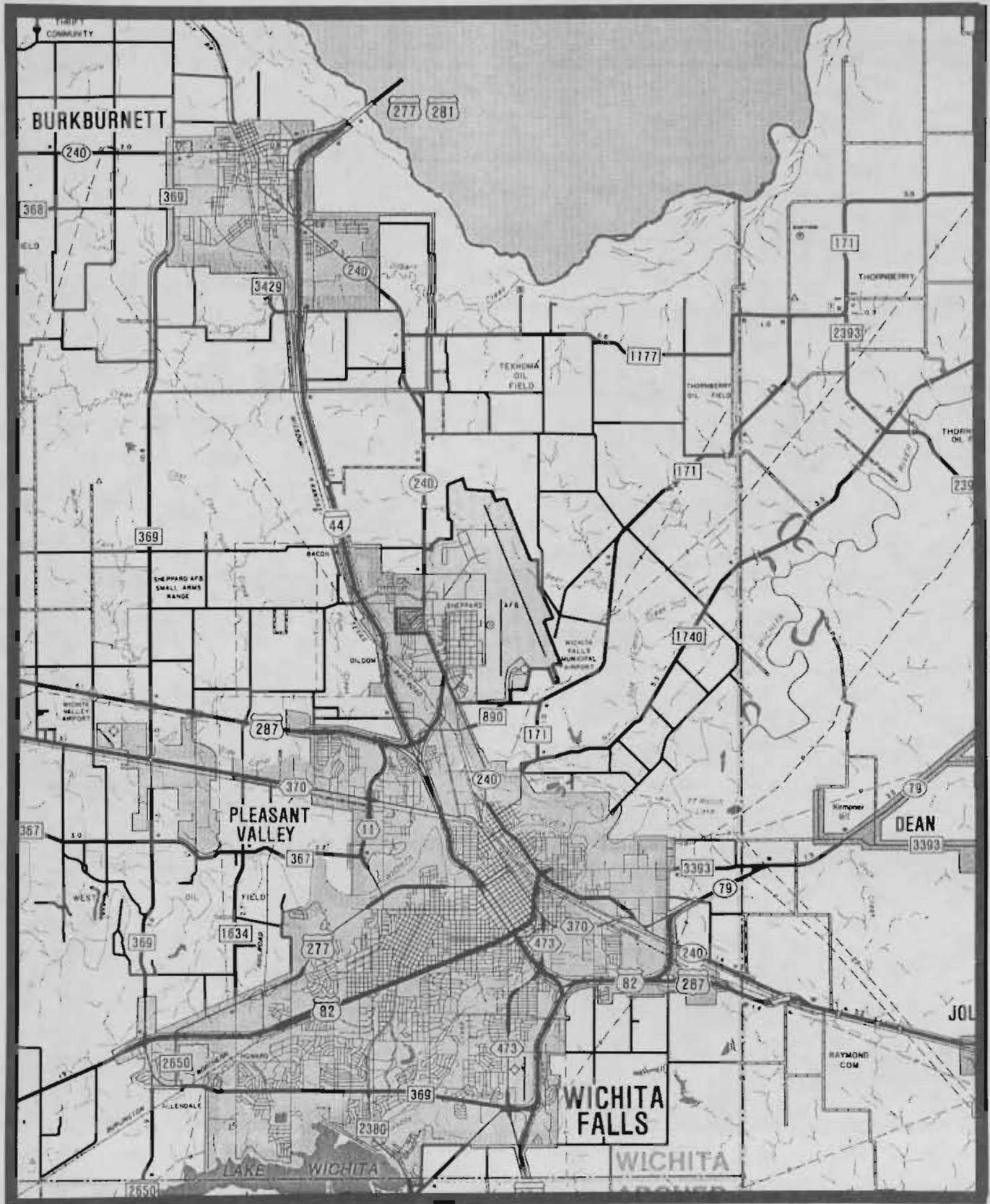
MAP 47
REESE AFB



MAP 48
SEGUIN AAF

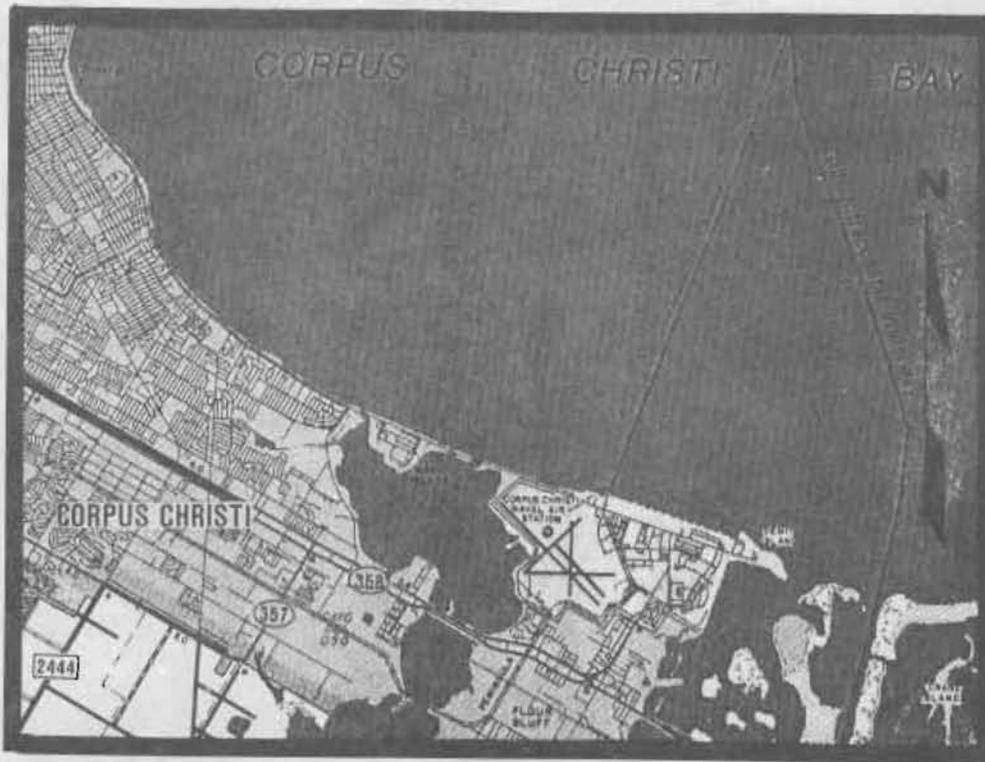


MAP 49
SHEPPARD AFB

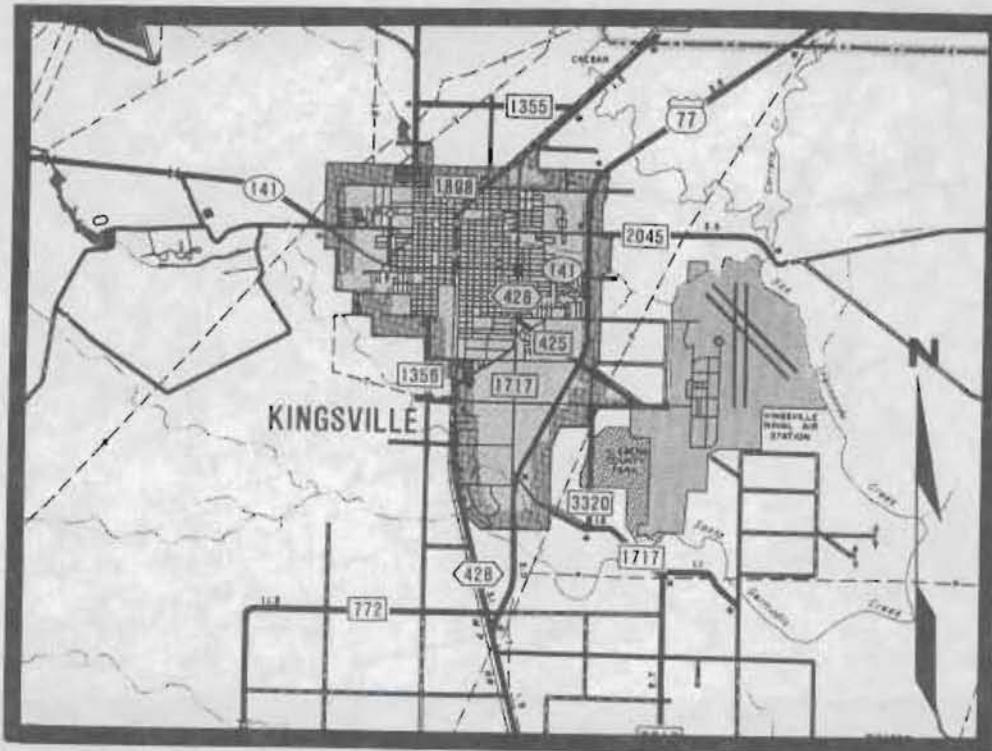


MAP 50

CORPUS CHRISTI NAVAL AIR STATION



KINGSVILLE NAVAL AIR STATION



MAP 51

McGREGOR NAVAL INDUSTRIAL
RESERVE ORDINANCE PLANT



U.S. DEPARTMENT OF AGRICULTURE

Agricultural Research Service (ARS):

Brownwood, Bushland, Kerrville and Riesel facilities.

PECAN GENETICS AND IMPROVEMENT RESEARCH LABORATORY MAP 52

Total Area 84 acres

Description

The Pecan Genetics and Improvement Research Laboratory in the City of Brownwood, works to develop superior pecan cultivars, develop superior rootstocks, determine heritability constants for superior tree and nut characteristics, develop host plant resistance to control pecan insects and diseases and to collect and maintain pecan, hickory and chestnut germplasm in the National Clonal Germplasm Repository.

SMA Lease Stipulations

NSO on approximately 84 acres.

Should Federal minerals at this facility be available for lease the stipulations described above would apply.

CONSERVATION AND PRODUCTION RESEARCH LABORATORY MAP 53

Total Area 1,531 acres

Description

Located in the town of Bushland, the Conservation and Production Research Laboratory was established in the late 1930's as a response to the devastation of the Dust Bowl era. The laboratory was a component of the Soil Conservation Service until the 1950's, when research functions were consolidated under the ARS. Research at the laboratory currently focuses on water management, soil

and crop management and bovine respiratory diseases.

SMA Lease Stipulations

NSO on approximately 1,531 acres.

Should Federal minerals at this facility be available for lease the stipulations described above would apply.

THE U.S. LIVESTOCK INSECTS LABORATORY MAP 54

Total Area 35 acres

Description

The U.S. Livestock Insects Laboratory was established in Kerrville in 1946. In 1977, the laboratory was reorganized to focus on research in applied basic aspects of veterinary entomology and to assume responsibility for scabies and mange research. Today, research continues to focus on the biology and control of parasitic insects, ticks and mites that affect livestock.

SMA Lease Stipulations

NSO on approximately 35 acres.

Should Federal minerals at this facility be available for lease the stipulations described above would apply.

GRASSLAND, SOIL AND WATER RESEARCH LABORATORY MAP 55

Total Area 1,272 acres

The USDA facility at Riesel was established in the mid-1930's to study the impact of farming systems on hydrology and sedimentation processes. In 1961, the research activities at Riesel and Temple were combined to form one unit, known since 1972 as the Grassland, Soil and Water Research Laboratory. Riesel is the

work site of the main laboratory at Temple. The present mission is to develop technology for maximizing forage and crop production; revegetating depleted, brush-infested watersheds; controlling noneconomic brush and weeds; breeding forages with increased quality and yield potential; and solving problems relating to efficient use of soil and water, crop production, soil fertility, erosion, hydrology and water quality.

SMA Lease Stipulations

NSO on approximately 1,272 acres.

Should Federal minerals at this facility be available for lease the stipulations described above would apply.

U.S. DEPARTMENT OF STATE

International Boundary and Water Commission, United States and Mexico, United States Section (USIBWC): Amistad and Falcon Reservoirs.

AMISTAD RESERVOIR **MAP 56**
Total Area 65,000 acres

Description

Amistad Dam is located on the Rio Grande, 12 miles upstream from the town of Del Rio. The Amistad Reservoir has a surface area of approximately 138 square miles. In addition to the primary functions of flood control, water conservation and power generation, Amistad Reservoir also provides recreational opportunities.

SMA Lease Stipulations

NSO below the 1144.3 foot elevation traverse. (USIBWC Stip. No. 1)

Should Federal minerals at this facility be available for lease the stipulations described above would apply.

FALCON RESERVOIR **MAP 57**
Total Area 87,000 acres

Description

Falcon Dam is located on the Rio Grande about 130 miles upstream from Brownsville. The reservoir was created in 1953 to provide power, conservation, flood control and irrigation along both sides of the border in the lower Rio Grande Valley. The 60 mile long lake is a popular recreation site and Falcon State Park is located approximately 1.5 miles from the dam site.

SMA Lease Stipulations

NSO/ND within 2300 feet of the centerline of the dam embankment. NSO below the 307 foot elevation traverse. (USIBWC Stip. No. 1)

Should Federal minerals at this facility be available for lease the stipulations described above would apply.

U.S. DEPARTMENT OF ENERGY (DOE)

DOE: Pantex

PANTEX **MAP 58**
Total Area 16,000 acres

The Pantex plant is America's only nuclear weapons assembly and disassembly facility. Located on the High Plains of the Texas Panhandle, 17 miles northeast of Amarillo, Pantex is centered on a 16,000 acre site just north of U.S. Highway 60 in Carson County.

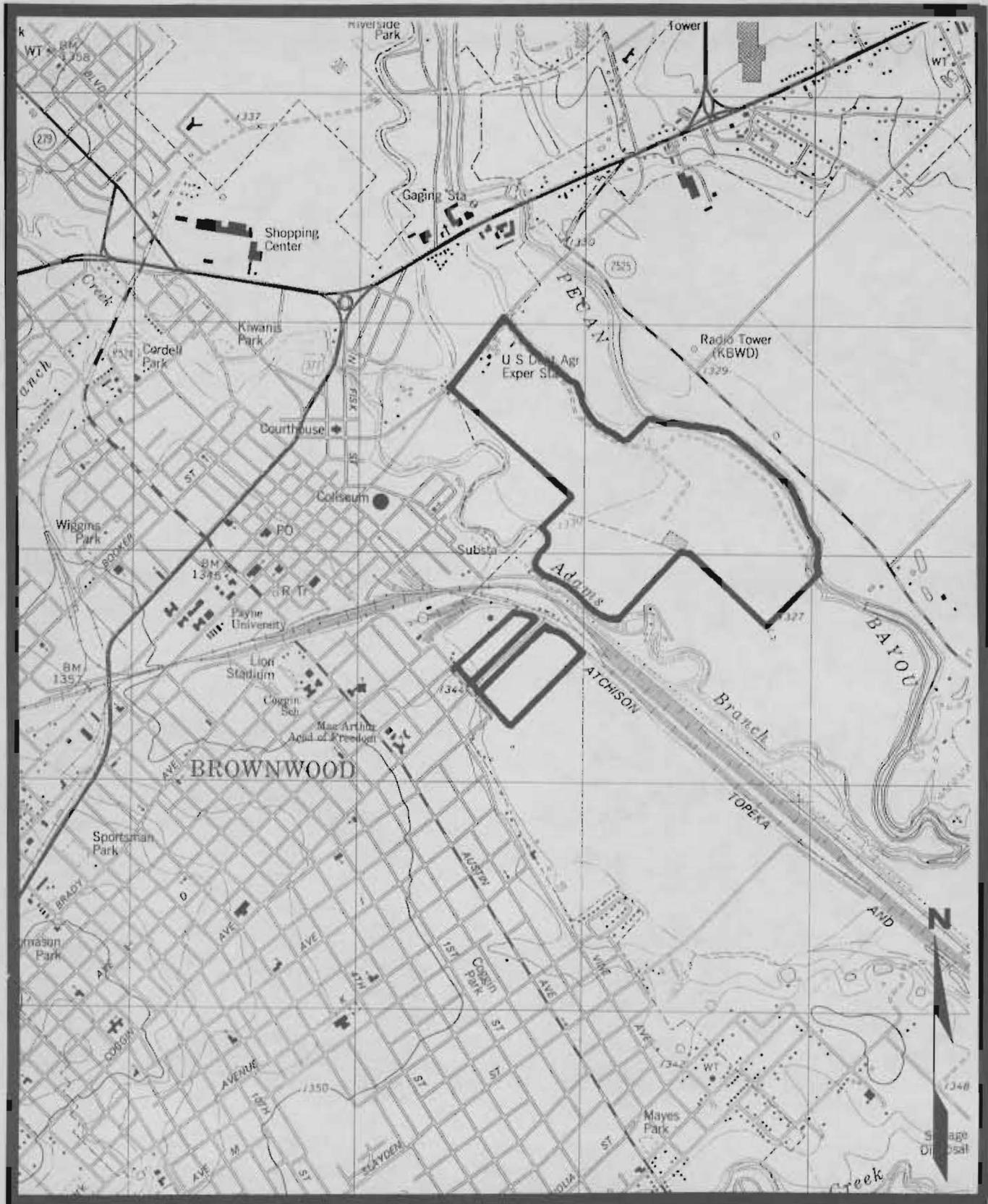
SMA Lease Stipulations

NSO/ND on the approximately 16,000 acres controlled by the Pantex facility.

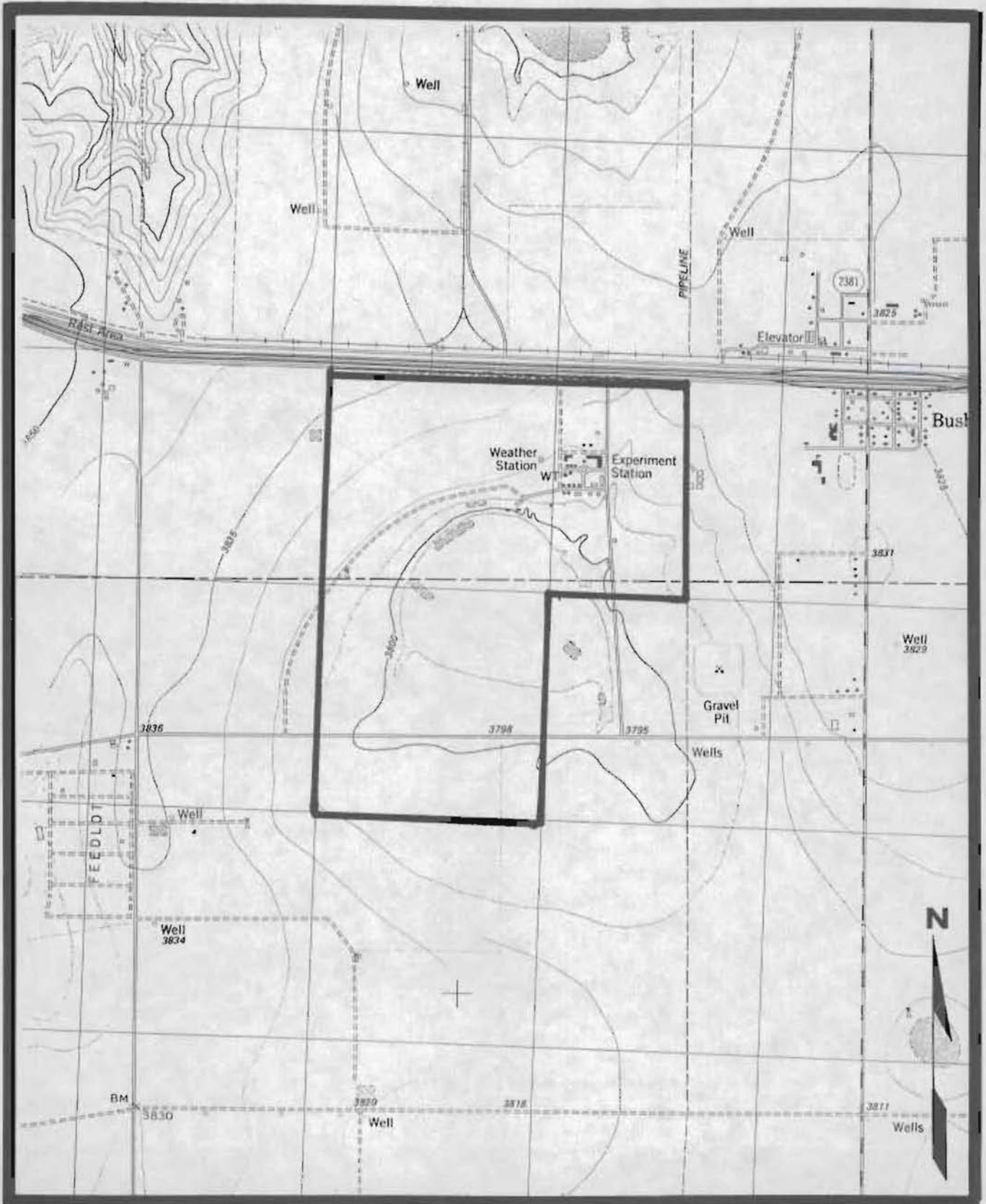
Should Federal minerals at this facility be available for lease the stipulations described above would apply.

MAP 52

PECAN GENETICS AND IMPROVEMENT RESEARCH LABORATORY

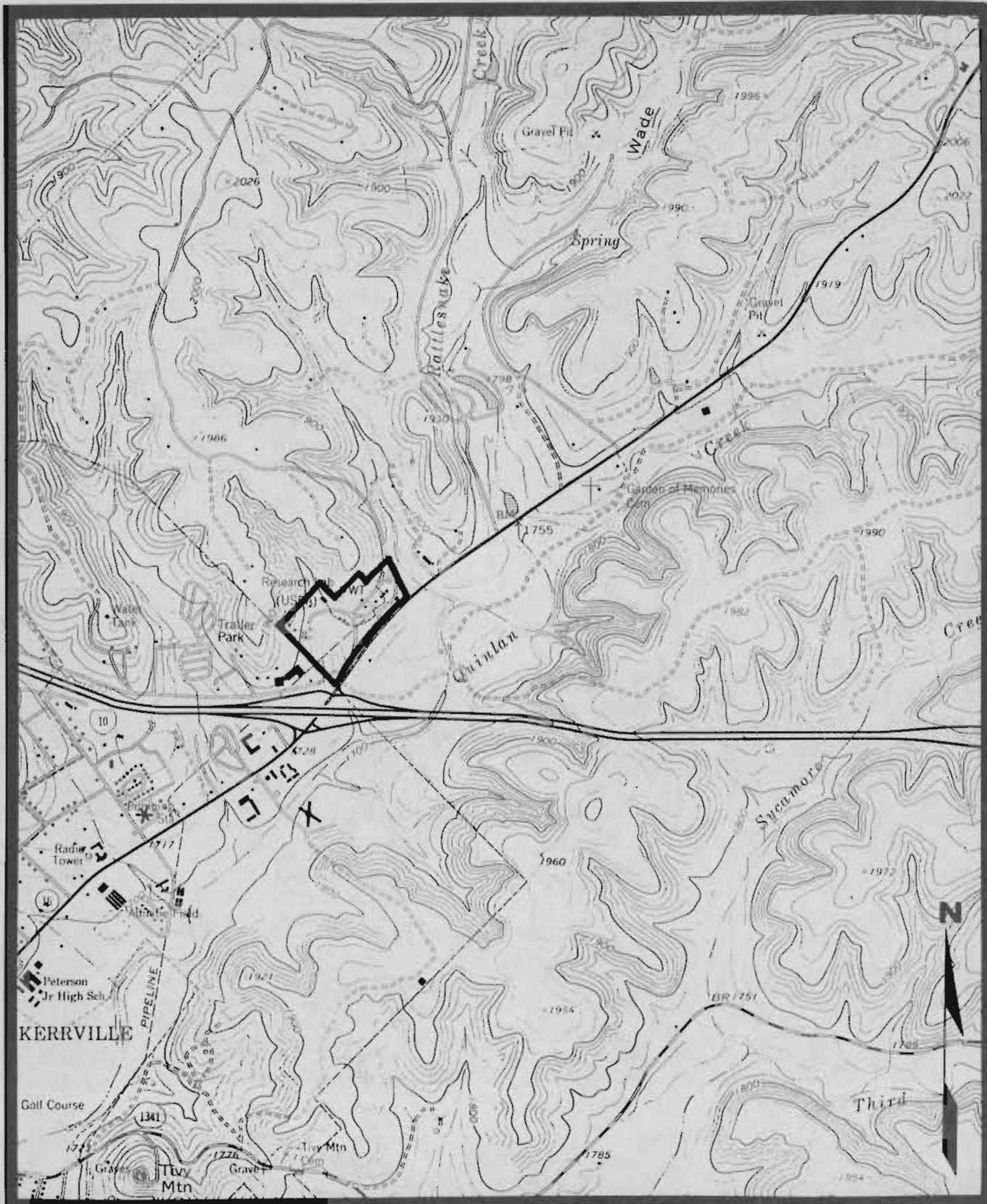


MAP 53
CONSERVATION AND PRODUCTION RESEARCH LABORATORY



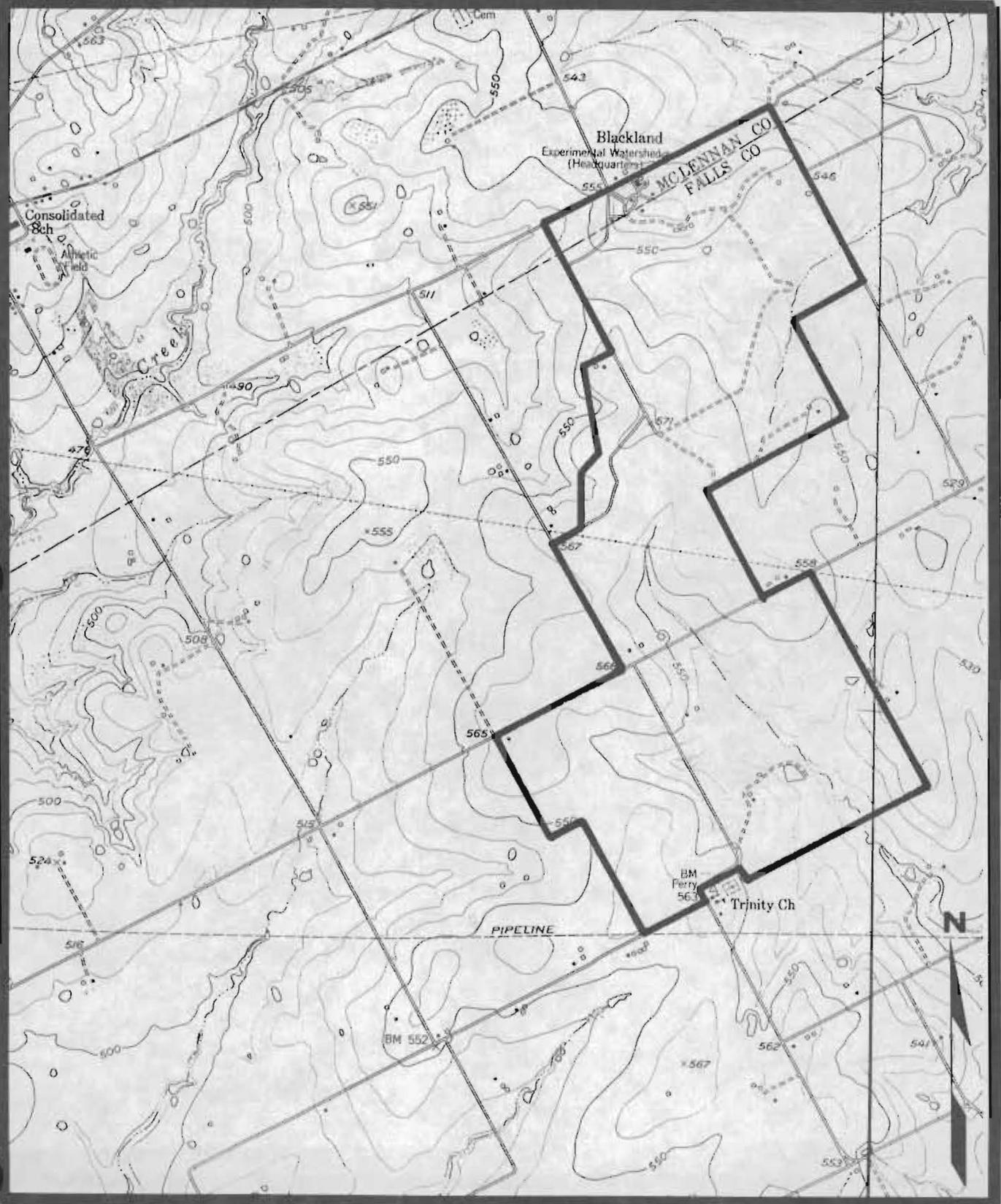
MAP 54

LIVESTOCK INSECTS LABORATORY



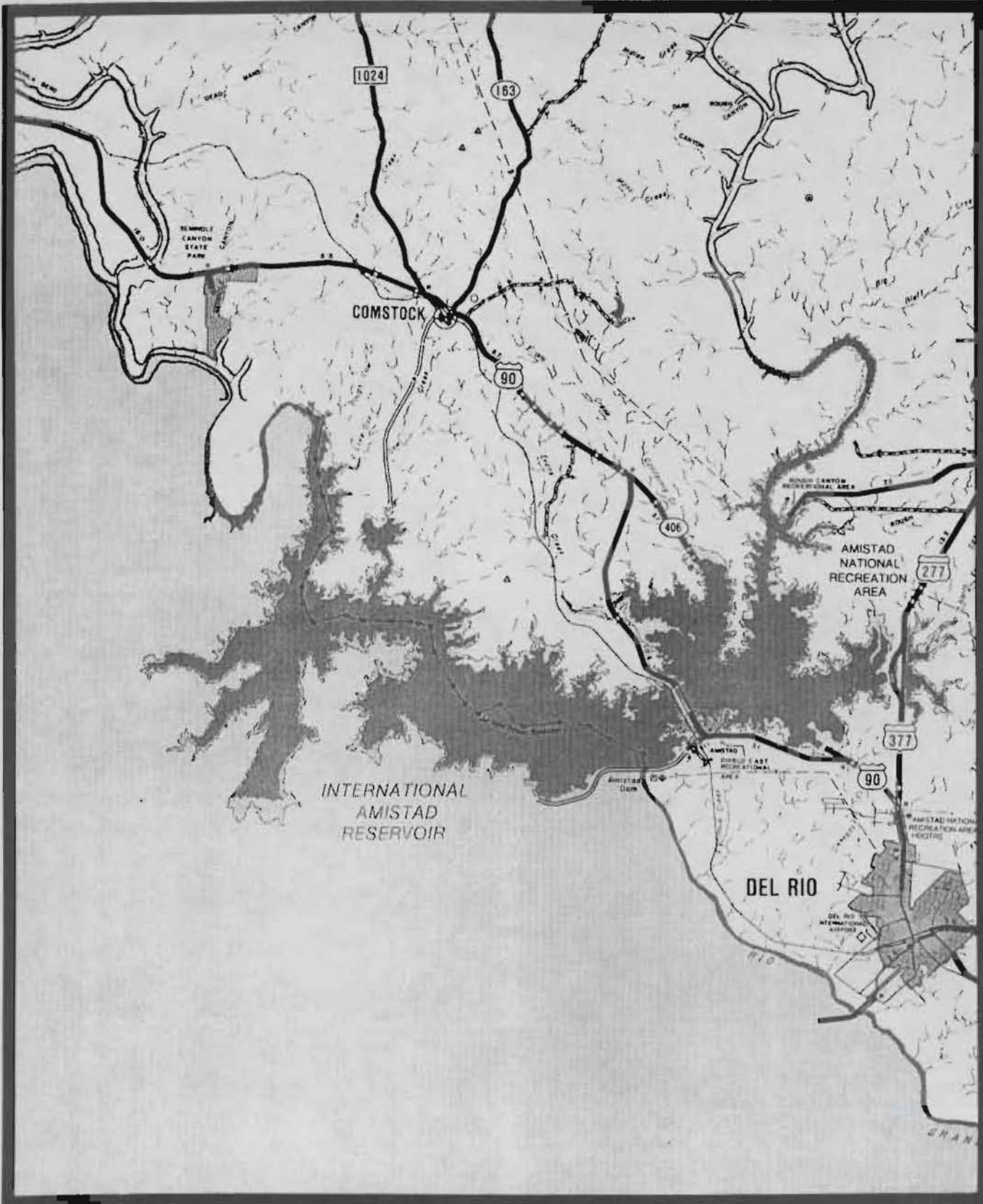
MAP 55

GRASSLAND, SOIL AND WATER RESEARCH LABORATORY



MAP 56

AMISTAD RESERVOIR



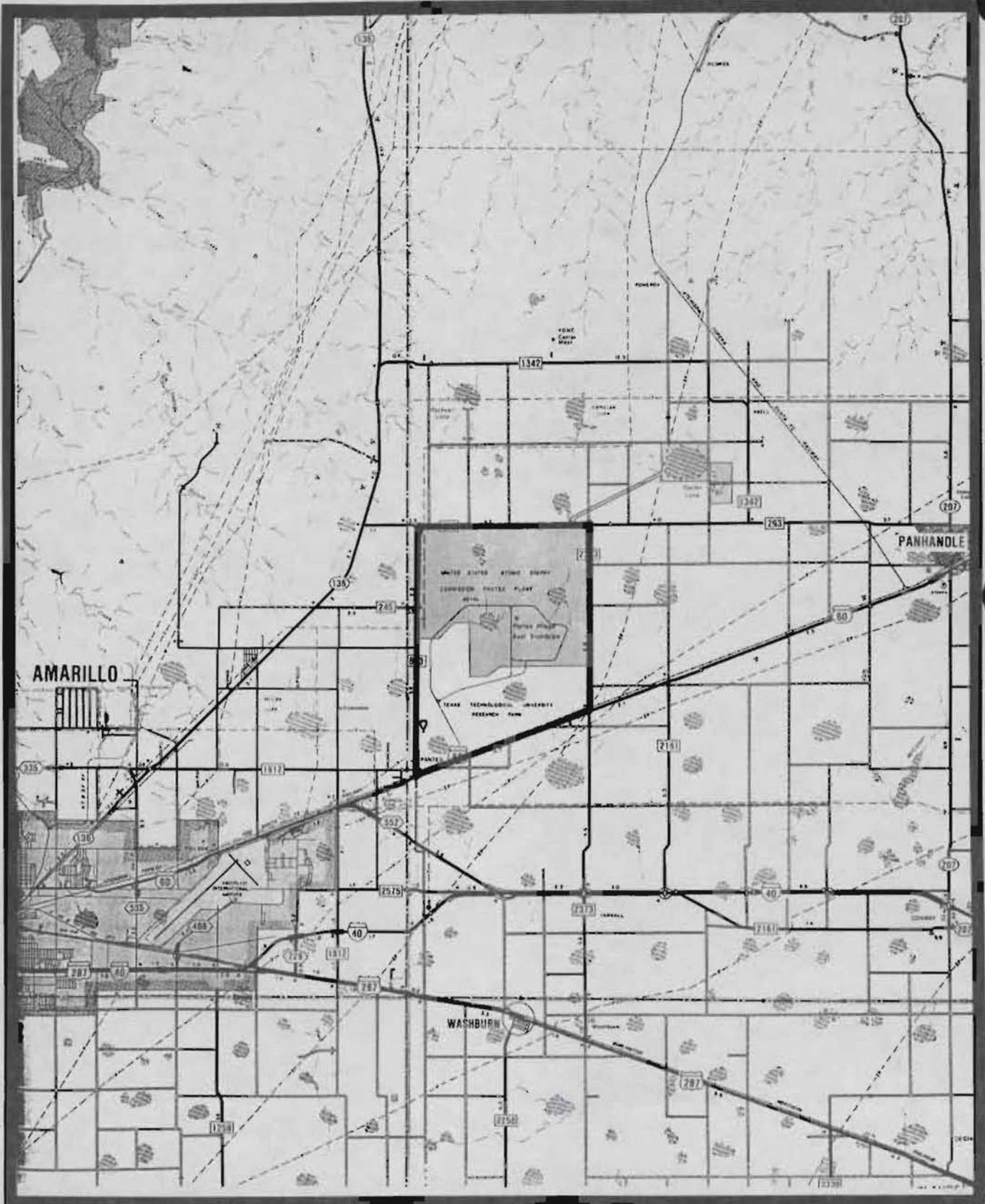
MAP 57

FALCON RESERVOIR



SOURCE: INTERNATIONAL BOUNDARY AND WATER COMMISSION

MAP 58
PANTEX



SPLIT-ESTATE TRACTS

All Federal land ownership within Texas has been acquired through purchase, foreclosure and/or donation.

When these acquired lands are no longer needed, the government disposes of these lands through transfer to non-Federal ownership. In some cases the government retains ownership of the mineral estate under those lands disposed. These severed mineral estates are known as split-estate. For oil and gas leasing purposes the BLM is the SMA for split-estate tracts within Texas.

Currently, there are approximately 30,000 acres of split-estate tracts which vary in size from less than one acre to several thousand acres, and are located throughout the state. The larger tracts result from military base closings where the minerals were retained, such as Eagle Mountain Marine Corps Air Station north of the City of Fort Worth or Ellington AFB in the City of Houston.

Split-estate acreage figures will increase with future military base closing as well as the disposal of Federal surface locations within the State.

Split-Estate Lease Stipulations

Due to the fact that the exact location of all split-estate minerals within Texas is unknown and/or unmapped, the BLM is not able to evaluate this split-estate on a site specific basis at this time for the RMP/EIS effort. All leasing of split-estate minerals to date within Texas has required the development of site specific EAs at the time of lease application/nomination. The site specific lease stipulations are developed at the time of EA preparation.

As split-estate tracts are nominated for leasing, the applicant nominating the tract will be required to provide all necessary maps and resource information needed by the BLM to complete a site specific EA/EIS at the time of application. Following the completion of the site specific EA or EIS, the BLM will either reject the nomination or allow the parcel to be placed on a sale list for competitive bid with the appropriate leasing stipulations attached.

No split-estate within city limits would be available for lease.

PLAN IMPLEMENTATION AND MONITORING

IMPLEMENTING THE PLAN

The approved Texas RMP provides the framework and guidelines for making specific management decisions for the planning area for the next 20 years. Implementation of the management decisions contained within the Texas RMP is considered complete with RMP approval. All future resource management authorizations and actions, including budget proposals, will conform with the approved Texas RMP.

MONITORING THE PLAN

Monitoring provides a record of the progress made in implementing the RMP. This monitoring record contains information for use in evaluating the Plans effectiveness and usefulness in the management of public resources. Plan monitoring will be performed by periodic managerial review to ensure that all land-use management decisions conform to the Plan and to the established guidelines. On-the-ground actions resulting from management decisions will be monitored by agency personnel to establish how effective the management measures are at minimizing environmental impacts. Where such management measures are found to be ineffective through monitoring, these measures will be revised through the RMP amendment process.

CHANGING THE PLAN

The Plan may be changed, if necessary through amendment. Monitoring and evaluation findings, new data, and new or revised policies will be evaluated to determine if there is a need for an amendment. Any change in circumstances or conditions which affect the scope, terms or conditions of the RMP may warrant an amendment. In all cases, a proposed action that does not conform to the RMP or was not addressed by the RMP and warrants further consideration before an RMP revision is scheduled would require an amendment. Generally an RMP amendment is site specific or involves only one planning issue.

A plan revision, if necessary would involve the preparation of a new RMP for the entire planning area.

PUBLIC INVOLVEMENT

Public opinion, input and involvement has been sought throughout the planning and decision making process. Public participation was documented in detail in Chapter 5 of the Proposed RMP/FEIS. An annual RMP summary document will be prepared to inform the public of the progress made in plan implementation. This summary will also describe the results of monitoring and evaluation of the effectiveness of the RMP decisions concerning protection of the environment. All persons on the RMP mailing list will be sent copies of the RMP summary documents.

APPENDIX

TEXAS OIL AND GAS LEASE STIPULATIONS

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SPECIAL STIPULATION - BUREAU OF RECLAMATION

To avoid interference with recreation development and/or impacts to fish and wildlife habitat and to assist in preventing damage to any Bureau of Reclamation dams, reservoirs, canals, ditches, laterals, tunnels, and related facilities, and contamination of the water supply therein, the lessee agrees that the following conditions shall apply to all exploration and developmental activities and other operation of the works thereafter on lands covered by this lease:

1. Prior to commencement of any surface-disturbing work including drilling, access road work, and well location construction, a surface use and operations plan will be filed with the appropriate officials. A copy of this plan will be furnished to the Area Manager, Oklahoma-Texas Area Office, Great Plains Region, Bureau of Reclamation, 420 West Main, Suite 630, Oklahoma City, Oklahoma 73102 for review and consent prior to approval of the plan. Such approval will be conditioned on reasonable requirements needed to prevent soil erosion, water pollution, and unnecessary damages to the surface vegetation and other resources, including cultural resources, of the United States, its lessees, permittees, or licensees, and to provide for the restoration of the land surface use and vegetation. The plan shall contain provisions as the Bureau of Reclamation may deem necessary to maintain proper management of the water, recreation, lands, structures, and resources, including cultural resources, within the prospecting, drilling, or construction area.

Drilling sites for all wells and associated investigations such as seismograph work shall be included in the above-mentioned surface use and operation plan.

If later explorations require departure from, or additions to the approved plan, these revisions or amendments, together with a justification statement for proposed revisions, will be submitted for approval to the Area Manager, Oklahoma-Texas Area Office, Bureau of Reclamation, or his authorized representative.

Any operations conducted in advance of approval of an original, revised, or amended prospecting plan, or which are not in accordance with an approved plan, constitute a violation of the terms of this lease. The Bureau of Reclamation reserves the right to close down operations until such corrective action, as is deemed necessary, is taken by the lessee.

2. No occupancy of the surface of the following excluded areas is authorized by this lease. It is understood and agreed that the use of these areas for Bureau of Reclamation purposes is superior to any other use. The following restrictions apply only to mineral tracts located within the boundary of Bureau of Reclamation project where the United States owns 100 percent of the fee mineral interest.

- a. Within 500 feet on either side of the centerline of any and all roads or highways within the leased area.
- b. Within 200 feet on either side of the centerline of any and all trails within the leased area.
- c. Within 500 feet of the normal high-water line of any and all live streams in the leased area.
- d. Within 400 feet of any and all recreation developments within the leased area.
- e. Within 400 feet of any improvements either owned, permitted, leased, or otherwise authorized by the Bureau of Reclamation within the leased area.
- f. Within 200 feet of established crop fields, food plots, and tree/shrub plantings within the leased area.
- g. Within 200 feet of slopes steeper than a 2:1 gradient within the leased area.
- h. Within established rights-of-way of canals, laterals, and drainage ditches within the leased area.
- i. Within a minimum of 500 feet horizontal from the centerline of the facility or 50 feet from the outside toe of the canal, lateral, or drain embankment, whichever distance is greater, for irrigation facilities without clearly marked rights-of-way within the leased area.

- j. Providing that appropriate environmental measures can be ensured, and providing further that Reclamation project works and other public interests can be protected, Reclamation may consider, on a case-by-case basis, waiving the requirements specified in Section 2 hereof. HOWEVER, LESSEES ARE ADVISED THAT OBTAINING SUCH A WAIVER CAN BE A DIFFICULT, TIME CONSUMING, AND COSTLY PROCESS WITH NO GUARANTEE THAT RECLAMATION WILL GRANT THE REQUESTED WAIVER.

3. No occupancy of the surface or surface drilling will be allowed in the following areas. In addition, no directional drilling will be allowed that would intersect the subsurface zones delineated by a vertical plane in these areas. The following restrictions apply only to minerals tracts located within the boundary of a Bureau of Reclamation project where the United States owns 100% of the fee mineral interest.

- a. Within 1,000 feet of the maximum water surface, as defined in the Standard Operating Procedures (SOP), of any reservoirs and related facilities located within the leased area.
- b. Within 2,000 feet of dam embankments and appurtenance structures such as spillway structures, outlet works, etc.
- c. Within one-half (1/2) mile horizontal from the centerline of any tunnel within the leased area.
- d. Providing that appropriate environmental compliance measures can be ensured, and providing further that Reclamation project works and other public interests can be protected, Reclamation may consider, on a case-by-case basis, waiving the requirements specified in Section 3 hereof. HOWEVER, LESSEES ARE ADVISED THAT OBTAINING SUCH A WAIVER CAN BE A DIFFICULT, TIME CONSUMING, AND COSTLY PROCESS WITH NO GUARANTEE THAT RECLAMATION WILL GRANT THE REQUESTED WAIVER.

4. The distances stated in items 2 and 3 above are intended to be general indicators only. The Bureau of Reclamation reserves the right to revise these distances as needed to protect Bureau of Reclamation facilities.

5. The use of explosives in any manner shall be so controlled that the works and facilities of the United States, its successors and assigns, will in no way be endangered or damaged. In this connection, an explosives use plan shall be submitted to, and approved by, the Area Manager, Oklahoma-Texas Office, Bureau of Reclamation, or his authorized representative.

6. The lessee shall be liable for all damage to the property of the United States, its successors and assigns, resulting from the exploration, development, or operation of the works contemplated by this lease, and shall further hold the United States, its successors and assigns, and its officers, agents, and employees, harmless from all claims of third parties for injury or damage sustained, or in any way resulting from, the exercise of the rights and privileges conferred by this lease.

7. The lessee shall be liable for all damage to crops or improvements of any entryman, non-mineral applicant, or patentee, their successors and assigns, caused by or resulting from, the drilling or other operations of the lessee, including reimbursement of any entryman or patentee, their successors and assigns, for all construction, operation, and maintenance charges becoming due on any portion of their said lands damaged as a result of the drilling or other operations of the lessee.

8. In addition to any other bond required under the provisions of this lease, the lessee shall provide such bond as the United States may at any time require for damages which may arise under the liability provisions of sections six (6) and seven (7) above.

Date

Signature of Lessee

GENERAL STIPULATIONS

1. All rights under this lease are subordinate to the right of the United States to flood and submerge the lands, permanently or intermittently, in connection with the construction and operation and maintenance of the _____ Dam and Reservoir, _____ Project, _____.

2. All surface work performed by the lessee on the lands shall be under the general supervision of the Area Manager, Bureau of Reclamation (Reclamation) in direct charge of the project, and shall be subject to such conditions and regulations as he may prescribe. Detailed plans and location for all structures, appurtenances thereto, and surface disturbance work on the leased lands shall be submitted to the said Area Manager for approval in advance of commencement of any surface work on the said leased lands. At least 60 days or more lead time is preferred. All oil or gas drilling and producing operations shall be under the supervision of the District Manager, Bureau of Land Management (BLM), in accordance with 43 CFR 3160. The authorized representatives of Reclamation and BLM shall have the right to enter on the leased premises at any time to inspect both the installation and operational activities of the lessee.

A. Predrilling Conditions:

1. No exploratory drilling, pit construction, or site clearing will occur until approval is granted by the appropriate Reclamation representatives in consultation with the local managing agency(s).

2. No well shall be drilled for oil or gas below the surface elevation of _____ feet. (This elevation restriction does not apply to areas downstream of the dam.) No drilling will be allowed within _____ feet of any developed recreation area.

3. All storage tanks shall be constructed outside the flood plain above elevation _____ feet (maximum water surface). This elevation restriction does not apply to areas downstream of the dam. Berms shall be constructed around storage batteries, tanks, and separators to contain their entire volume should an accidental spill or rupture occur.

4. Drilling a well for oil and gas is prohibited within _____ feet of any dam, dike, or other major structures, unless otherwise approved by the Area Manager in consultation with the local managing agency(s).

5. No well shall be drilled within 1/8 mile (660 feet) of a river, channel, permanent stream, tributary, or marsh site unless otherwise approved by the Area Manager in consultation with the local managing agency(s). To protect watersheds, slopes in excess of 40 percent (2.5:1) should be avoided where possible.

6. All drilling operations shall be conducted in accordance with the applicable State laws relative to municipal water supplies.

7. No surface disturbance shall occur until completion of an environmental analysis of the proposed drilling activity by Reclamation and all coordination matters are completed. This analysis will involve review of federally listed threatened and endangered plant and animal species, protection of wetlands, cultural resources, and water quality associated concerns. Certain data needs may be requested from the applicant proposing a surface disturbance action.

8. Where surface operations and facilities could reasonably be expected to discharge petroleum products into navigable waters and should oil or petroleum products be stored onsite and facilities have an aggregate storage of 1,320 gallons or more or single containers with capacity of 660 gallons or more, a "Spill Prevention Control and Counter Measure Plan" shall be prepared and must be maintained and kept available for inspection onsite (if manned) or at the nearest field office if unmanned. In the event of a spill or leakage, the lessee assumes all responsibility for cleanup and damages.

9. At lessee's expense, a cultural resource survey of lands that may be disturbed must be completed prior to any surface disturbance. If during operations the Lessee or any person working in his behalf discovers any historic or prehistoric ruin, monument or site, or any object of antiquity subject to the Archeological Resource Protection Act of 1979 or the National Historic Preservation Act of 1966, as amended, and Reclamation Instructions 376.11, then work shall be suspended and the discovery promptly reported to Reclamation. When directed by Reclamation's authorized representative, the Lessee shall obtain at his expense a qualified archeologist to examine and, if necessary, excavate or gather such ruins or objects.

10. No "mud pits" shall be constructed below elevation _____ feet. (This elevation restriction does not apply to areas downstream of the dam.) Pits shall be well constructed in such a manner to prevent leaching of chemicals into the water table and under no circumstances shall they be allowed to leak or be cut to drain. Lining mud pits with plastic may be required. They shall not be located on natural drainages. In some situations, such as drilling in a flood plain, a closed mud system may be required with containerization of drill cuttings. Waste or discharge of any kind shall not be allowed to enter any drainage. Any plastic material used to line pits and/or sumps shall be cut off below ground level, as far down as possible, and disposed of before the pits are covered. All unattended pits containing liquids shall be fenced, and the liquid portion shall be allowed to evaporate before the pits are broken.

11. The derrick shall not be located closer than one and one-half times its height from any electrical power transmission line unless prior approval is obtained from the owner of the power company. Signs shall be posted warning the public to prevent entry to the jobsite. Also, adequate blowout preventers shall be properly maintained.

12. All aboveground structures, not subject to applicable safety requirements, shall be painted to blend with the natural surroundings. The paint used shall be lusterless, nonreflective, flat, or semigloss color that blends with the area.

B. Roads

1. The Lessee shall observe the following restrictions during exploration:

a. Wherever possible, existing roads and trails are to be used as access to the drilling site. New road construction will be kept to a minimum, and new construction will not begin until the location is approved by the local managing agency.

b. Each existing fence to be crossed by the lessee shall be braced and tied off before cutting so as to prevent slacking of the wire. The opening shall be protected as necessary during construction and well operation to prevent the escape of livestock. Upon completion of construction, the fence shall be repaired to the original standard of the existing fence.

c. Cleared trees and shrubs will be removed and/or piled as brush piles for wildlife shelter as designated by the local managing agency. Available topsoil will be removed from the road right-of-way and stored in a topsoil stockpile.

d. New access roads shall normally be a maximum of 30 feet wide including drainage ditches and culverts. Road surface shall be graveled to a thickness identified as suitable for the safe operation of the vehicles and equipment at speeds proposed. The road shall be posted with curve signs and maximum speed limits. Speeds shall be limited on curves and posted to speeds that will permit a vehicle to be stopped within one-half the minimum sight distance. The road shall be maintained in safe condition.

e. At the request of the local managing agency, on new access roads the Lessee shall construct cattle guards or install gates with locks which will be maintained by the Lessee during drilling operations and all such times thereafter as production continues. Fencing of roads may be required.

f. Roads shall be maintained in suitable condition for vehicle passage during the duration of drilling activities with special consideration given to erosion control during wet and muddy periods.

g. Existing roads shall be returned to original or equivalent condition after drilling equipment has been removed.

h. All roads shall be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, culverts, and/or any other measures deemed necessary by Reclamation representatives. The following is a general guide for the spacing of water bars:

<u>Present Slope</u>	
less than 2 percent	200 feet
2 to 4 percent	100 feet
4 to 5 percent	75 feet
more than 5 percent	50 feet

i. In the event of a "dry hole", any new road construction sites will be revegetated by the drilling company, with native and/or adapted grasses, forbs, and shrubs as requested by Reclamation, unless the local managing agency indicates in writing that the road is to remain. Revegetation is to be accomplished by seeding and fertilizing the area within 1 year of completion at recommended seeding rates and dates.

2. The Lessee shall observe the following stipulations should oil or gas be found and production activities occur:

a. Production company shall maintain road in suitable condition for vehicle passage. Public will be permitted to use road where existing road was originally open to such use. New road construction, if needed, can be exempt from public use.

b. Should the local managing agency deem it necessary to control vehicle traffic into the area during any season of the year, the production company will provide a metal gate and lock.

C. Drilling Pad and Reserve Pit:

1. Area cleared for the drilling pad site and reserve pit shall be the absolute minimum required for operations.

2. All trees and shrubs removed from the pad site shall be piled near the site at places designated by the local managing agency for use as wildlife shelters.

3. Available topsoil shall be removed from the drilling pad and pit site and stored in a topsoil stockpile.

4. Diesel fuel tanks and other potential pollution sources will be surrounded by an earthen berm of sufficient height to contain their entire volume in the event of an accidental leak or rupture.

5. The area will be kept well policed and free of trash and litter at all times, including access roads used solely by the Lessee. Litter blown out of the work area must be picked up. All waste associated with the drilling operations shall be removed and deposited in an approved sanitary landfill within 1 month after removal of the drilling rig. The Lessee shall comply with all State laws and regulations pertaining to the disposal of human waste.

6. For the protection of livestock and wildlife, all pits containing toxic liquids shall be fenced and covered with a fine mesh netting (i.e., hardware cloth) with openings being of one-half inch or less.

7. The Lessee will remove fluids and trash from all pits. The sludge pit will be pumped after drilling activities are completed and, following adequate drying, reshaped to original contours and covered with topsoil. This restoration must be accomplished within 90 days of completion of drilling. The area must then be revegetated as requested by Reclamation.

D. Actions with a Producing Well:

1. A minimum service area will be developed around the well head. No permanent material storage will be allowed on the lease. The remainder of the drilling pad will be covered with topsoil from the stockpile and restored to vegetation by tilling, fertilizing, and seeding. Specific seed types will be determined on a case-by-case basis by Reclamation in consultation with the local managing agency.
2. The Lessee may be required to utilize electric or submersible pumps, where feasible, rather than fuel-powered pumps (or other machinery). All electric lines must be buried to a depth of 15-18 inches.
3. All transfer lines from well site to tank battery, saltwater disposal well, or the like, must be buried 3 feet below the surface and a minimum depth of 4 feet at stream, creek, and river channel crossings.
4. When possible, a common point of collection shall be established to minimize the number of tank batteries.

E. Actions with a Nonproducing Well:

1. All disturbed areas will be recontoured, covered with topsoil, and revegetated. All trash will be removed from the lease site.
2. Gates and cattle guards shall be removed where requested by the local managing agency. Any openings in fences will be restored to original condition.

F. General:

1. The Lessee shall limit access to well and storage locations on the leased property to authorized personnel.
2. The Lessee agrees to cease all operations and make all necessary corrections to the satisfaction of the representative of Reclamation in consultation with the local managing agency before resuming any operations should any violations of the terms of this lease occur.
3. The Lessee shall not permit any nuisance to be maintained on the premises and shall not use said premises for any purposes other than those authorized in the lease. Before abandoning any well, the Lessee shall securely plug the same so as to effectually shut off water from the oil-bearing stratum.
4. The Lessee shall carry on the development and/or operation of the leased premises in a workmanlike manner and shall not commit or suffer to be committed waste upon the lands in his occupancy and use. In drilling operations, the Lessee shall only use so much of the land as is

necessary; shall safeguard the lakes and streams from any pollution; and shall not permit oil, saltwater, drilling mud, or other deleterious substances to escape onto the land, but the same shall be retained in proper tanks, receptacles, or in pits prepared for such purpose; and after the termination of drilling operations, any such pits shall be filled and land properly restored to its original condition, and only so much thereof shall be used in the production of the leased premises as is reasonably necessary to operate any well or wells thereon.

5. Lessee shall provide all subcontractors and assigns, especially the dirt contractor, with a copy of the above stipulations prior to construction of the road, pad, or associated developments.

Area Manager
Oklahoma-Texas Area Office
Bureau of Reclamation
420 West Main, Suite 630
Oklahoma City, Oklahoma 73102

U.S. ARMY COE
SPECIAL STIPULATIONS 1-A

1. All oil and gas drilling and production operations shall be under the supervision of the District Manager, Bureau of Land Management (BLM), in accordance with 43 Code of Federal Regulations 3160.
2. The Secretary of the Army or designee reserves the right to require cessation of operations if a national emergency arises or if the Army needs the leased property for a mission incompatible with lease operations. On approval from higher authority, the District Engineer will give notice of the required suspension. The lessee agrees to this condition and waives compensation for its exercise.
3. If the District Engineer or his authorized representative discovers an imminent danger to safety or security which allows no time to consult BLM, that person may order such activities stopped immediately. The District Manger, BLM, will be notified immediately, will review the order, and will determine the need for further remedial action.
4. Lessee liability for damage to improvements shall include improvements of the Department of Defense. Lessee shall be liable for pollution and other damages, as a result of their operations, to Government-owned land and property and to the property of the Government's authorized surface user.
5. Before beginning to drill, the lessee must consult with third parties authorized to use real estate in the lease area and must consider programs for which third parties have contractual responsibility.
6. A license to conduct geophysical test on the leased area must be obtained separately from the District Engineer.
7. That all rights under this lease are subordinate to the rights of the United States to flood and submerge the lands, permanently or intermittently, in connection with the operation and maintenance of the above-named project.
8. That the United States shall not be responsible for damages to property or injuries to persons which may arise from or be incident to the use and occupation of the said premises, or for damages to the property of the lessee, or for injuries to the person of the lessee's officers, agents, servants, or employees, or others who may be on said premises at their invitation or the invitation of any one of them arising from or incident to the flooding of the said premises by the Government or flooding from any other cause, or arising from or incident to any other governmental activities; and the lessee shall hold the United States harmless from any and all such claims.
9. That the work performed by the lessee on the lands shall be under the general supervision of the District Engineer, Corps of Engineers in direct charge of the project and subject to such conditions and regulations as may be prescribed by him, and the plans and locations for all structures, appurtenances thereto, and work on said lands shall be submitted to the said District Engineer for approval in advance of commencement of any work on said lands. The District Engineer shall have the right to enter on the premises, at any time, to inspect both the installation and operational activities of the lessee.
10. That no structure or appurtenance thereto shall be of a material or construction determined to create floatable debris.
11. That the construction and operation of said structures and appurtenances thereto shall be of such a nature as not to cause pollution of the soils and the waters of the project.
12. That the United States reserves the right to use the land jointly with the lessee in connection with the construction, operation, and maintenance of the Government project and to place improvements thereon or to remove materials therefrom, including sand and gravel and other construction material, as may be necessary in connection with such work, and the lessee shall not interfere in any manner with such work, and the lessee shall not interfere in any manner with such work or do any act which may increase the cost of performing such work. If the cost of the work performed on land outside the property included in the lease is made more expensive by reason of improvements constructed on the leased property by the lessee, the lessee shall pay to the United States money in the amount, as estimated by the Chief of Engineers, sufficient to compensate for the additional expense involved.

13. All areas within 2,000 feet of any major structure, including but not limited to the dam, spillway, or embankment, are restricted areas. The lessee, his operators, agents, or employees shall not utilize the surface of restricted areas for any purpose. Drilling operations in, on, or under the restricted areas, including drilling outside of the restricted areas which would cause a bore hole to be under the restricted area, will not be permitted. The restricted areas are included in the lease for the sole purpose of becoming part of a drilling unit so that the United States will share in the royalty of the unit.

14. All existing or proposed public use areas, recreation areas, wildlife and waterfowl refuges, historical sites, and hiking and horseback trail areas may be leased for the sole purpose of becoming a part of a drilling unit. The lessee, his operators, agents, or employees will not use or enter upon the surface for any purpose. Directional drilling from non-public areas is permitted if not otherwise restricted.

15. No drilling will be permitted from Government-owned surface where alternate surface use is available within the same drilling unit.

16. All storage tanks and slush pits will be protected by dikes of sufficient capacity to protect the reservoir from pollution to flood pool elevation ____ feet, National Geodetic Vertical Datum.

17. It is the responsibility of the lessee to identify and be aware of areas where entry is prohibited. There will be no surface or subsurface entry within 2,000 feet of the dam structure. A portion of the lease includes the ____ Public Use Area, therefore, stipulation _ is applicable. Stipulation _ also applies to portions of the lease area.

18. The operator will immediately stop work and advise the District Engineer or his authorized representative if contamination is found in the operating area.

LONE STAR ARMY AMMUNITION PLANT

MINERAL LEASING STIPULATIONS

Subject Lease No. _____

It is understood by all parties that the following fifteen (15) mineral leasing stipulations are a part of subject lease and may be waived or modified only upon the written concurrence of the installation commander, Lone Star Army Ammunition Plant, Texas (LSAAP), (hereinafter "Commander") and the written approval of the Department of the Interior's Bureau of Land Management (hereinafter "BLM"), or authorized representatives. Compliance with these stipulations will be at no cost to the United States:

1. The Lessee understands that its activity on LSAAP requires prior approval of the BLM, and that BLM approval requires the concurrence of the Commander, where necessary. Requirements which may be imposed include but are not limited to prohibitions or specifications on:

a. access (e.g., time of year, gates, roads, construction, maintenance, pipelines, vegetation disposal);

b. exploration activities;

c. location, design, and timing of construction of drilling, collection, and storage facilities (e.g., burial of wellhead and equipment in underground bunkers, depth of burial of flow lines);

d. use and protection of LSAAP water supply (e.g., water quality testing);

e. protection of the environment (e.g., hazardous waste areas, endangered species, erosion control, pollution prevention) and protection of objects of historic and scientific significance;

f. safety and fire protection measures (e.g., use of explosives, safe working distances from ammunition and explosives, construction and maintenance of firebreaks, development of contingency plans in the event of danger to persons or property, posting of signs);

- g. use of communication and transportation systems;
- h. LSAAP security (e.g., authorized operation hours, worker identification);
- i. management of production area (e.g., size, fencing, gates, cattle guards, interim revegetation);
- j. reclamation measures; or
- k. attendance at meetings (e.g., pre-operations conference, post-operations conference).

2. The Lessee may only occupy the surface of the lands that are cross-hatched identified on the attached map, Exhibit "A"; the remaining areas identified on Exhibit "A" are only available for directional drilling.

3. The Lessee will make every effort to locate pipeline and access routes in existing utility and road corridors. The Lessee will furnish as-built drawings of completed pipelines at a scale and detail specified by the Commander.

4. The Lessee in accepting this lease understands that the leased lands are part of LSAAP, a military installation. Mineral exploration and development in any restricted impact areas or areas involving ammunition or explosives is prohibited; however, these lands may be explored and produced by directional drilling at a safe distance from outside the areas as prescribed by Department of Defense ("DOD") or Department of the Army ("Army") regulations. Furthermore, the Lessee understands that future increased production, testing or storage of ammunition or explosives may further restrict the surface area available for lease operations. Safe distances from ammunition and explosive facilities are based on the quantity and type of explosive present or authorized and the proposed use (e.g., above or below ground, continuous or temporary presence of personnel). The Lessee may obtain pertinent information on this subject from the LSAAP safety office.

5. Before beginning any approved operations on LSAAP the Lessee must consult with third parties authorized to use real estate in the leased area and must document in any proposals for development the manner in which consideration is being given to programs for which third parties have contractual rights or responsibility. The Lessee may consult the records of the District Engineer, Forth Worth, Texas (hereinafter

"District Engineer") to determine what real estate interests have been granted to third parties on LSAAP. On request of the BLM, the Commander may seek to resolve disputes between the Lessee and third parties if they cannot reach agreement. Resolutions will be coordinated with contracting officers or representatives of all parties involved. The Lessee shall hold the United States harmless for claims by such third parties arising from the Lessee's activities, including damage to pasture and cropland capabilities.

6. Merchantable timber cleared from roads, pipeline rights of way, or drill sites will be disposed of in accordance with the Commander's instructions.

7. The Lessee shall bear all costs of the following:

a. Increased Army costs for its projects which are incurred by reason of the Lessee's activity on LSAAP. Such costs will be paid when demanded on a one time basis as a condition of approval of proposed operations.

b. Any Army costs to administer and ensure lease compliance not otherwise funded by the Congress.

c. The Lessee's share of road and bridge maintenance costs for use of LSAAP roads and bridges in accordance with a maintenance agreement. In calculating such costs, the drilling and production area, pipeline right-of-way, lengths of roads and bridges, and so forth will be considered. Payments shall be made in advance as a result of negotiations between LSAAP and the Lessee.

d. Repair or restoration for damage or degradation of land or facilities, including that caused by subsidence and pollutant spills, resulting from the Lessee's activities. Where conditions of urgency exist as determined by the Commander and time is of the essence, the Lessee shall repair damages or degradation in a timely fashion in the manner specified by the Commander without awaiting confirmation from BLM. The Commander shall subsequently confirm oral orders to the Lessee in writing with copy furnished BLM and the District Engineer. If the Lessee cannot or will not immediately comply, the Commander may immediately act, and the Lessee shall be liable for reimbursement to the Army for all damages and costs of such action, including administrative costs and any surcharges that may be deemed appropriate.

8. The Lessee shall not pollute the air, ground, or water (including ground water) or create a public nuisance:

a. Before beginning operations, the Lessee shall retain a local agent who may be served notice on these matters and who shall notify the Commander immediately of spills, or other unexpected threats or hazards to the environment.

b. The Lessee shall hold the United States harmless for any claim, including equitable claims, court or legal expenses incurred by the United States, and fines or penalties imposed upon the United States which are related to unlawful pollution arising from the Lessee's use of the property.

9. The United States reserves the option to purchase up to one-hundred percent (100%) of the natural gas or oil refined, at the price defined below, under a utility service contract to be negotiated prior to the exercise of this right in accordance with present or future DOD or Army regulations. Any product purchased by the Government shall be for the sole use of Army or DOD installation tenants located within a one-hundred fifty (150) mile radius of Headquarters, LSAAP and not for resale to the public. The Lessee shall include this paragraph in any contract or sale of natural gas or oil to other parties.

a. The Lessee shall, in its sole discretion, determine whether oil or gas reserves are present on LSAAP in sufficient quantities to permit commercial development. After the Lessee has determined and declared that commercial production is possible, the Government and Lessee will have four (4) months in which to negotiate the specific terms of any sale and begin delivery of production. Except during mobilization or surge periods, the Commander shall have the right to change its election under this option, but in no case more often than once every twelve (12) months.

b. The price paid to the Lessee by the United States shall be the average of the three lowest publicly-posted or "spot" prices for the delivered, refined product as announced monthly by the three largest purchasers in Texas Railroad Commission District-6. Specific details of the price and actual quantity of product shall be negotiated during sales contract procedures. The sale price may be adjusted to reflect

any unusual (unanticipated) capital investment and transportation costs incurred by the Lessee. Such costs should be negotiated in paragraph 9a. In all cases, the Lessee shall bear all costs on a nonreimbursable basis associated with maintaining the well site (including meters) during the producing life of the well and salvaging such facilities when production is ended.

c. The Lessee shall routinely inspect and calibrate equipment involved with the exercise of this option with (BLM). BLM may require the Lessee at least annually to engage an independent party acceptable to BLM to test meters for accuracy and to furnish written findings to BLM.

10. Notwithstanding any other stipulation, or condition of the lease, the United States and its officers, agents, servants and employees ("the released parties") shall not be responsible for damages to property, injury to persons, or any other cause of action ("released actions") which may arise from or be incident to this lease or the Lessee's use and occupation of the leased premises. Released actions include, without limitations, damages to the Lessee's property, injury to the Lessee's person, or other cause of action of the Lessee, or such damage, injury or other cause of action of the Lessee's officers, agents, servant employees, invitees of any of these, or anyone else otherwise on or off said premises incident to the lease. Released actions include any actions arising from flooding of the lease premises. The Lessee shall hold harmless and indemnify the released parties for released actions which may arise from or be incident to this lease or the Lessee's use or occupation of the leased premises.

11. The Lessor's rights described in the printed BLM lease form include the rights of the Army.

12. The Secretary of the Army or designee reserves the right to require cessation of operation if a national emergency arises or if the Army needs the leased premises for a mission incompatible with lease operations. On approval from higher authority, the Commander will give the Lessee written notice or, if time permits, request the BLM to give notice of the required cessation. The Lessee understands the lease rights granted by this instrument do not include the period of any such cessation and the United States has no obligation to compensate the Lessee for damages (including contractual losses) resulting from the

exercise of this stipulation. The Lessee shall include this stipulation in contracts with third parties to supply oil and gas. This stipulation shall not affect the Lessee's right to seek suspension of the lease term from the BLM. Whether or not a suspension is granted will have no effect on cessation of operations as stipulated herein.

13. If the Commander or the authorized representative discovers an imminent danger to safety or security which allows no time to consult BLM, that person may order such activities stopped immediately. The authorized officer of BLM shall review the order and determine the need for further remedial action.

14. If military or explosive contamination is found in the operating area, the operator shall immediately stop work, leave the area, notify the Commander and not return until the Commander advises that it is safe to return.

15. It is in the best interest of LSAAP to determine if commercial deposits of oil or gas exist within LSAAP boundaries. The Authorized Officer (AO) of the BLM may specify rates of development and production pursuant to Section 4 of the Lease Terms and the Oil and Gas Operations Regulations at 43 CFR 3162.2(c). Accordingly, the operator will commence drilling within thirty-six (36) months of the effective date of this lease on acreage available for occupancy on this lease, or within an approved exploratory unit which includes this lease. Drilling operations shall be diligently prosecuted until a well capable of adequately testing, at a minimum, Paluxy, Moorings Port, and the Smackover Formations has been drilled. The operator shall not in any event be required to drill said well to a depth in excess of 8,500 feet. With the approval of the AO, a completion to a lesser depth than the Smackover may be made. However, not later than twelve (12) months after said completion to a lesser depth, the operator shall commence drilling a well to test, at a minimum, the Formations mentioned above. Additional wells may be drilled as deemed necessary by the AO, after consultation with the Lessee, based on test results and well spacing rules.

Failure to comply with this stipulation will result in an assessment, civil penalty, or lease cancellation pursuant to 43 CFR 3162. The Lessee has the option to voluntarily cancel the lease in lieu of the assessment or civil penalty.

Date

Lessee's Signature

LONE STAR ARMY AMMUNITION PLANT
INSTALLATION CONDITIONS FOR SITE APPROVAL

Subject Lease No. _____

It is understood by all parties that the following sixteen (16) installation conditions for site approval (the "Conditions") are a part of subject lease and may be waived or modified only upon the written concurrence of the installation commander, Lone Star Army Ammunition Plant, Texas (LSAAP), (hereinafter "Commander") and the written approval of the Department of the Interior's Bureau of Land Management (hereinafter "BLM"), or authorized representatives. The Lessee's compliance with these Conditions will be at no cost to the United States:

1. The routing of all supply pipelines, as well as material workmanship specifications shall be approved in advance by LSAAP. Pipeline access routes have yet to be determined by LSAAP.
2. The Lessee's access to LSAAP shall be through existing gates and roads as approved in advance by the Commander. No temporary gates shall be installed in LSAAP's perimeter fence.
3. New road routes, if any, will be approved by LSAAP before the start of construction. Such roads shall be properly drained, terraced to prevent erosion, compacted and surfaced to provide for all weather access to wells and equipment. The Lessee will maintain these roads for the duration of the underlying lease. Roads to drilling sites of wells with no production capability shall be restored to original condition immediately after the site is abandoned unless LSAAP Commander accepts the road and the maintenance responsibility for it.
4. Proposed activities have been reviewed and approved by the appropriate safety offices to include site approval by the Department of Defense Explosive Safety Board. Any and all changes to activities must have prior approval by the appropriate Safety Office.
5. Producing wells shall be enclosed with a permanent fence which shall enclose an area not to exceed the minimum required for operation and maintenance of the well as mutually determined by LSAAP and the Lessee.

The fencing shall be 72" chain link utilizing steel posts. Fence gates shall be kept locked and the Lessee shall furnish LSAAP Commander with keys to all locks.

6. Lessee is required to comply with security regulations as stipulated in DARCOM-R 190-3 as well as any and all LSAAP security regulations and the LSAAP Protection Plan.

7. Lessee is required to comply with fire and safety regulations in accordance with AMC-R 385-100, Safety Manual, as well as any and all plant safety and fire regulations. Firebreaks (50' minimum clear zone) are required around drilling sites, fences, pipelines, and as required by the Commander.

8. The LSAAP underground water table must not be contaminated nor disturbed or disrupted. The Lessee shall not contaminate any surface water, soil, air, or groundwater.

9. Hazardous and non-hazardous waste material will be disposed of in accordance with LSAAP, State of Texas, and Federal regulations; disposal of hazardous materials will be off LSAAP.

10. Charges for any administrative assistance, monitoring, or relocation of explosives will be assessed by LSAAP at a man-hour plant rate determined by the activity involved (guards, production, engineering, etc.). These charges will be reviewed annually and will be changed when necessary to reflect the Government's cost for providing these services. A separate negotiated agreement will be required for these services. Advance payment, at the discretion of the Commander, may be required as part of the contract.

11. Drilling on or under any lease, license, permit or easement stated in the report of Availability is permitted so long as the use granted thereunder is not disturbed. Known easements on LSAAP consist of, but are not limited to:

a. Access to families of individuals buried on the 5.5 acres of cemeteries maintained by LSAAP.

b. Approximately 13 SF in the telephone communications building (1-4) for General Telephone (GTE) to supply switch gear.

c. Lake Texarkana Water Supply Corporation for a 30" line along the northern border.

d. Southwestern Electric Power Company for a transmission line along the southwestern border.

12. The Lessee shall provide completely installed, maintained, and operable supply systems from the wellhead to existing LSAAP distribution lines if and when the Government exercises its option to purchase up to One-Hundred Percent (100%) of the well's natural gas or oil production. The supply systems shall meet the following requirements, or current industry standards:

a. Materials - All piping shall be schedule 40 steel. Welded joints are required for underground piping and for piping 2-1/2" diameter or more if above ground. Above ground piping of 2" diameter or less may be screw joints. All piping, valves and fittings shall meet existing E.P.A. requirements for high pressure gas distribution systems, as well as American National Standards Institute Specification B31.8 (latest edition) for Gas Transmission and Distribution Piping Systems.

b. Coating - All underground piping shall be coated with coal tar enamel and glass fiber reinforced felt or suitable factory applied polyethylene or plastic coating (tape rapped at joints) to fully meet all E.P.A. recommendations/requirements for gas distribution lines. Cathodic protection shall be provided by magnesium anodes or rectifier/ground-bed systems. The Government shall review and approve proposed systems and shall perform quality control testing and inspection of piping, coating and cathodic protection systems.

c. Welding and General Workmanship - Welding and general workmanship shall be in accordance with all E.P.A. and A.N.S.I. requirements for high pressure gas distribution systems.

d. Size of Piping - Size of piping shall be sufficient to convey 50 percent of the well's production capacity, to the specified delivery point with a minimum delivery pressure of 50 PSIG and a maximum line pressure of 15 PSIG. Sizing shall be approved in advance by the Government.

e. Meters - Meters shall be provided, installed, maintained, and calibrated by the Lessee, and shall be of type and quality equivalent to those used by the alternative non-Government gas purchaser. Meters shall be installed at the point of entry into the Government

gas distribution system.

f. Pressure Regulators and Accessories - Pressure regulators and accessories shall be provided and maintained by the Lessee to automatically pass gas into LSAAP distribution system as required to maintain a system pressure of 50 PSIG at the delivery point.

13. The Lessee is required to provide all necessary data to LSAAP to permit development of a Safety Site Plan which must be approved at all necessary Army command levels prior to the Army concurring with either a Notice of Staking or an Application for Permit to Drill.

14. Herbicides may be used by the Lessee to maintain clear zones. Any herbicides proposed for use must be coordinated with LSAAP pest management coordinated through AMCCOM prior to use. Only those herbicides approved by the Environmental Protection Agency are acceptable. The Lessee will report to LSAAP pest management coordinator monthly herbicide usage not later than the third working day after the end of the month of use. Negative reports are not required.

15. The Lessee shall not establish any drill site, pipeline, or any other facilities within 200 feet of any cemetery or other potential historical site (see Exhibit F) within LSAAP. Explosive or seismic methods will not be employed within 500 feet of any cemetery or other historic site unless otherwise approved by the Commander. The Lessee will be responsible for any damages to headstones, markers, fences, or other property in area of the historic site, or access roads to same, that result from its operations. Exploration or exploitation actions proposed in the vicinity of historic sites will require coordination with, and approval by, the State Historic Preservation Office.

16. Leasing is permitted for oil and natural gas only.

Date

Lessee's Signature

**UNITED STATES SECTION
INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES & MEXICO**

SPECIAL STIPULATIONS FOR FALCON DAM & RESERVOIR

1. The lessee understands and agrees that a negative easement is imposed in and upon said land to prohibit the drilling or deepening of any well for the purpose of producing oil and /or gas and other minerals provided, however, that exploration and development of oil and/or gas and other minerals under said land will be permitted by directional drilling from locations off the said land and above the 307-foot elevation traverse.
2. No drilling operations are permitted which will cause contamination of the Falcon Reservoir, or the Rio Grande. Before drilling operations commence, works, including but not limited to, a reserve pit, satisfactory to and as required by the United States Commissioner, United States Section , International Boundary and Water Commission, United States and Mexico, shall be constructed of sufficient size and maintained so as to hold all contaminants, well cuttings, trash, debris, refuse, etc., and to prevent them from getting into Falcon Reservoir or into the Rio Grande; and further, the lessee shall be liable for all damages due to any contamination of the Falcon Reservoir, or the Rio Grande, resulting from his operations.
3. The lessee agrees that all drilling, exploration, development and producing operations will be in conformance with the requirements of the Texas Railroad Commission and agencies of the State of Texas responsible for environmental concerns.
4. The lessee agrees not to subdivide or assign this lease without the prior written approval of the said United States Commissioner, 4171 North Mesa, Suite C-310, El Paso, Texas 79902, first had and obtained prior to submission for approval to the Department of the Interior.

**UNITED STATES SECTION
INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES & MEXICO**

SPECIAL STIPULATIONS FOR AMISTAD DAM & RESERVOIR

1. The lessee understands and agrees that a negative easement is imposed in and upon said land to prohibit the drilling or deepening of any well for the purpose of producing oil and/or gas and other mineral provided, however, that exploration and development of oil and /or gas and other minerals under said land will be permitted by directional drilling from locations off the said land and above the 1144.3-foot elevation contour.
2. No drilling operations are permitted which will cause contamination of the Amistad Reservoir, or the Rio Grande, Pecos or Devils Rivers. Before drilling operations commence, works, including but not limited to, a reserve pit, satisfactory to and as required by the United States Commissioner, United States Section, International Boundary and Water Commission, United States and Mexico, shall be constructed of sufficient size and maintained so as to hold all contaminants, well cuttings, trash, debris, refuse, etc., and to prevent them from getting into Amistad Reservoir or into the Rio Grande, Devils or Pecos Rivers; and further, the lessee shall be liable for all damages due to any contamination of the Amistad Reservoir, or the Rio Grande, Pecos or Devils Rivers resulting from his operations.
3. Upon completion of the well, all pits--after settling or drying--shall be filled and the location area shall be graded so as to resemble, as nearly as practicable, the land conditions prior to drilling.
4. The lessee agrees not to subdivide or assign this lease without the prior written approval of the said United States Commissioner, 4171 North Mesa, Suite C-310, El Paso, Texas 79902, first had and obtained prior to submission for approval to the Department of the Interior.

LEASE STIPULATIONS
OIL & GAS LEASING
RANDOLPH AIR FORCE BASE, TEXAS

No surface occupancy permitted. Pooling of minerals or extraction of minerals via slant drilling or other methods is permitted provided that such activity does not detrimentally impact the flying training mission at Randolph Air Force Base, Texas. The 12th Civil Engineer Squadron, Randolph AFB, TX 78150-4513 must approve all drilling locations prior to the BLM approving any applications for permits to drill.

LEASE STIPULATIONS
OIL & GAS LEASING
SEGUIN AIR FORCE AUXILIARY AIRFIELD, TEXAS

No surface occupancy permitted. Pooling of minerals or extraction of minerals via slant drilling or other methods is permitted provided that such activity does not detrimentally impact the flying training mission at Seguin Air Force Auxiliary Field. The 12th Civil Engineer Squadron, Randolph AFB, TX 78150-4513 must approve all drilling locations prior to the BLM approving any applications for permits to drill.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Serial No.

OFFER TO LEASE AND LEASE FOR OIL AND GAS

The undersigned (*reverse*) offers to lease all or any of the lands in Item 2 that are available for lease pursuant to the Mineral Leasing Act of 1920, as amended and supplemented (30 U.S.C. 181 et seq.), the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351-359), the Attorney General's Opinion of April 2, 1941 (40 Op. Atty. Gen. 41), or the

READ INSTRUCTIONS BEFORE COMPLETING

1. Name
Street
City, State, Zip Code

2. This application/offer/lease is for: (Check only One) PUBLIC DOMAIN LANDS ACQUIRED LANDS (percent U.S. interest _____)
Surface managing agency if other than BLM: _____ Unit/Project _____
Legal description of land requested: _____ *Parcel No.: _____ *Sale Date (m/d/y): _____ / _____ / _____

*SEE ITEM 2 IN INSTRUCTIONS BELOW PRIOR TO COMPLETING PARCEL NUMBER AND SALE DATE.

T. _____ R. _____ Meridian _____ State _____ County _____

Amount remitted: Filing fee \$ _____ Rental fee \$ _____ Total acres applied for _____
Total \$ _____

DO NOT WRITE BELOW THIS LINE

3. Land included in lease:

T. _____ R. _____ Meridian _____ State _____ County _____

Total acres in lease _____
Rental retained \$ _____

This lease is issued granting the exclusive right to drill for, mine, extract, remove and dispose of all the oil and gas (*except helium*) in the lands described in Item 3 together with the right to build and maintain necessary improvements thereupon for the term indicated below, subject to renewal or extension in accordance with the appropriate leasing authority. Rights granted are subject to applicable laws, the terms, conditions, and attached stipulations of this lease, the Secretary of the Interior's regulations and formal orders in effect as of lease issuance, and to regulations and formal orders hereafter promulgated when not inconsistent with lease rights granted or specific provisions of this lease.

NOTE: This lease is issued to the high bidder pursuant to his/her duly executed bid or nomination form submitted under 43 CFR 3120 and is subject to the provisions of that bid or nomination and those specified on this form.

Type and primary term of lease: THE UNITED STATES OF AMERICA

Noncompetitive lease (ten years) by _____ (Signing Officer)

Competitive lease (five years) _____ (Title) _____ (Date)

C A-24 _____ EFFECTIVE DATE OF LEASE _____

4. (a) Undersigned certifies that (1) offeror is a citizen of the United States; an association of such citizens; a municipality, or a corporation organized under the laws of the United States or of any State or Territory thereof; (2) all parties holding an interest in the offer are in compliance with 43 CFR 3100 and the leasing authorities; (3) offeror's chargeable interests, direct and indirect in either public domain or acquired lands do not exceed 246,080 acres in Federal oil and gas leases in the same State, of which not more than 200,000 acres are held under option, or 300,000 acres in leases and 200,000 acres in options in either leasing District in Alaska; (4) offeror is not considered a minor under the laws of the State in which the lands covered by this offer are located; (5) offeror is in compliance with qualifications concerning Federal coal lease holdings provided in sec. 2(a)(2)(A) of the Mineral Leasing Act; (6) offeror is in compliance with reclamation requirements for all Federal oil and gas lease holdings as required by sec. 17(g) of the Mineral Leasing Act; and (7) offeror is not in violation of sec. 41 of the Act.

(b) Undersigned agrees that signature to this offer constitutes acceptance of this lease, including all terms, conditions, and stipulations of which offeror has been given notice, and any amendment to this lease that may include any land described in this offer open to leasing at the time this offer was filed but omitted for any reason from this lease. The offeror further agrees that this lease shall not be withdrawn, either in whole or in part, unless the withdrawal is received by the proper BLM State Office before this lease, an amendment to this lease, or a separate lease, whichever covers the land described in the withdrawal, has been signed on behalf of the United States.

This offer will be rejected and will afford offeror no priority if it is not properly completed and executed in accordance with the regulations, or if it is not accompanied by the required payments. 18 U.S.C. Sec. 1001 makes it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Duly executed this _____ day of _____, 19 _____
(Signature of Lessee or Attorney-in-fact)

LEASE TERMS

Sec. 1. Rentals—Rentals shall be paid to proper office of lessor in advance of each lease year. Annual rental rates per acre or fraction thereof are:

- Noncompetitive lease, \$1.50 for the first 5 years; thereafter \$2.00;
- Competitive lease, \$1.50; for primary term; thereafter \$2.00;
- Other, see attachment, or as specified in regulations at the time this lease is issued.

If this lease or a portion thereof is committed to an approved cooperative or unit plan which includes a well capable of producing leased resources, and the plan contains a provision for allocation of production, royalties shall be paid on the production allocated to this lease. However, annual rentals shall continue to be due at the rate specified in (a), (b), or (c) for those lands not within a participating area.

Failure to pay annual rental, if due, on or before the anniversary date of this lease (or next official working day if office is closed) shall automatically terminate this lease by operation of law. Rentals may be waived, reduced, or suspended by the Secretary upon a sufficient showing by lessee.

Sec. 2. Royalties—Royalties shall be paid to proper office of lessor. Royalties shall be computed in accordance with regulations on production removed or sold. Royalty rates are:

- Noncompetitive lease, 12½%;
- Competitive lease, 12½%;
- Other, see attachment; or as specified in regulations at the time this lease is issued.

Lessor reserves the right to specify whether royalty is to be paid in value or in kind, and the lessee shall establish reasonable minimum values on products after giving lessee notice and an opportunity to be heard. When paid in value, royalties shall be due and payable on the last day of the month following the month in which production occurred. When paid in kind, production shall be delivered, unless otherwise agreed to by lessor, in merchantable condition on the premises where produced without cost to lessor. Lessee shall not be required to hold such production in storage beyond the last day of the month following the month in which production occurred, nor shall lessee be held liable for loss or destruction of royalty oil or other products in storage from causes beyond the reasonable control of lessee.

Minimum royalty in lieu of rental of not less than the rental which otherwise would be required for that lease year shall be payable at the end of each lease year beginning on or after a discovery in paying quantities. This minimum royalty may be waived, suspended, or reduced, and the above royalty rates may be reduced, for all or portions of this lease if the Secretary determines that such action is necessary to encourage the greatest ultimate recovery of the leased resources, or is otherwise justified.

An interest charge shall be assessed on late royalty payments or underpayments in accordance with the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA) (30 U.S.C. 1701). Lessee shall be liable for royalty payments on oil and gas lost or wasted from a lease site when such loss or waste is due to negligence on the part of the operator, or due to the failure to comply with any rule, regulation, order, or citation issued under FOGRMA or the leasing authority.

Sec. 3. Bonds—A bond shall be filed and maintained for lease operations as required under regulations.

Sec. 4. Diligence, rate of development, unitization, and drainage—Lessee shall exercise reasonable diligence in developing and producing, and shall prevent unnecessary damage to, loss of, or waste of leased resources. Lessor reserves right to specify rates of development and production in the public interest and to require lessee to subscribe to a cooperative or unit plan, within 30 days of notice, if deemed necessary for proper development and operation of area. Field, or pool embracing these leased lands. Lessee shall drill and produce wells necessary to protect leased lands from drainage or pay compensatory royalty for drainage in amount determined by lessor.

Sec. 5. Documents, evidence, and inspection—Lessee shall file with proper office of lessor, not later than 30 days after effective date thereof, any contract or evidence of other arrangement for sale or disposal of production. At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing amounts and quality of all products removed and sold, proceeds therefrom, and amount used for production purposes or unavoidably lost. Lessee may be required to provide plats and schematic diagrams showing development work and improvements, and reports with respect to parties in interest, expenditures, and depreciation on the form prescribed by lessor. Lessee shall keep a daily drilling record, a log, information on surveys and tests, and a record of subsurface investigations and furnish copies to lessor when required. Lessee shall keep open at all reasonable times for inspection by any authorized officer of lessor, the leased premises and all wells, improvements, machinery, and fixtures thereon, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or in the leased lands. Lessee shall maintain copies of all contracts, sales agreements, accounting records, and documentation such as billings, invoices, or similar documentation that supports

costs claimed as manufacturing, preparation, and/or transportation costs. All such records shall be maintained in lessee's accounting offices for future audit by lessor. Lessee shall maintain required records for 6 years after they are generated or, if an audit or investigation is underway, until released of the obligation to maintain such records by lessor.

During existence of this lease, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

Sec. 6. Conduct of operations—Lessee shall conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. Lessor reserves the right to continue existing uses and to authorize future uses upon or in the leased lands, including the approval of easements or rights-of-way. Such uses shall be conditioned so as to prevent unnecessary or unreasonable interference with rights of lessee.

Prior to disturbing the surface of the leased lands, lessee shall contact lessor to be apprised of procedures to be followed and modifications or reclamation measures that may be necessary. Areas to be disturbed may require inventories or special studies to determine the extent of impacts to other resources. Lessee may be required to complete minor inventories or short term special studies under guidelines provided by lessor. If in the conduct of operations, threatened or endangered species, objects of historic or scientific interest, or substantial unanticipated environmental effects are observed, lessee shall immediately contact lessor. Lessee shall cease any operations that would result in the destruction of such species or objects.

Sec. 7. Mining operations—To the extent that impacts from mining operations would be substantially different or greater than those associated with normal drilling operations, lessor reserves the right to deny approval of such operations.

Sec. 8. Extraction of helium—Lessor reserves the option of extracting or having extracted helium from gas production in a manner specified and by means provided by lessor at no expense or loss to lessee or owner of the gas. Lessee shall include in any contract of sale of gas the provisions of this section.

Sec. 9. Damages to property—Lessee shall pay lessor for damage to lessor's improvements, and shall save and hold lessor harmless from all claims for damage or harm to persons or property as a result of lease operations.

Sec. 10. Protection of diverse interests and equal opportunity—Lessee shall: pay when due all taxes legally assessed and levied under laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at least twice each month in lawful money of the United States; maintain a safe working environment in accordance with standard industry practices; and take measures necessary to protect the health and safety of the public.

Lessor reserves the right to ensure that production is sold at reasonable prices and to prevent monopoly. If lessee operates a pipeline, or owns controlling interest in a pipeline or a company operating a pipeline, which may be operated accessible to oil derived from these leased lands, lessee shall comply with section 28 of the Mineral Leasing Act of 1920.

Lessee shall comply with Executive Order No. 11246 of September 24, 1965, as amended, and regulations and relevant orders of the Secretary of Labor issued pursuant thereto. Neither lessee nor lessee's subcontractors shall maintain segregated facilities.

Sec. 11. Transfer of lease interests and relinquishment of lease—As required by regulations, lessee shall file with lessor any assignment or other transfer of an interest in this lease. Lessee may relinquish this lease or any legal subdivision by filing in the proper office a written relinquishment, which shall be effective as of the date of filing, subject to the continued obligation of the lessee and surety to pay all accrued rentals and royalties.

Sec. 12. Delivery of premises—At such time as all or portions of this lease are returned to lessor, lessee shall place affected wells in condition for suspension or abandonment, reclaim the land as specified by lessor and, within a reasonable period of time, remove equipment and improvements not deemed necessary by lessor for preservation of producible wells.

Sec. 13. Proceedings in case of default—If lessee fails to comply with any provisions of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation unless or until the leasehold contains a well capable of production of oil or gas in paying quantities, or the lease is committed to an approved cooperative or unit plan or communitization agreement which contains a well capable of production of unitized substances in paying quantities. This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver shall not prevent later cancellation for the same default occurring at any other time. Lessee shall be subject to applicable provisions and penalties of FOGRMA (30 U.S.C. 1701).

Sec. 14. Heirs and successors-in-interest—Each obligation of this lease shall extend to and be binding upon, and every benefit hereof shall inure to the heirs, executors, administrators, successors, beneficiaries, or assignees of the respective party.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

LEASE STIPULATIONS
BUREAU OF RECLAMATION

The lessee agrees to maintain, if required by the lessor during the period of this lease, including any extension thereof, an additional bond with qualified sureties in such sum as the lessor, if it considers that the bond required under Section 2(a) is insufficient, may at any time require:

(a) to pay for damages sustained by any reclamation homestead entryman to his crops or improvements caused by drilling or other operations of the lessee, such damages to include the reimbursement of the entryman by the lessee, when he uses or occupies the land of any homestead entryman, for all construction and operation and maintenance charges becoming due during such use or occupation upon any portion of the land so used and occupied;

(b) to pay any damage caused to any reclamation project or water supply thereof by the lessee's failure to comply fully with the requirements of this lease; and

(c) to recompense any nonmineral applicant, entryman, purchaser under the Act of May 16, 1930 (46 Stat. 367), or patentee for all damages to crops or to tangible improvements caused by drilling or other prospecting operations, where any of the lands covered by this lease are embraced in any non-mineral application, entry, or patent under rights initiated prior to the date of this lease, with a reservation of the oil deposits, to the United States pursuant to the Act of July 17, 1914 (38 Stat. 509).

As to any lands covered by this lease within the area of any Government reclamation project, or in proximity thereto, the lessee shall take such precautions as required by the Secretary to prevent any injury to the lands susceptible to irrigation under such project or to the water supply thereof; *provided* that drilling is prohibited on any constructed works or right-of-way of the Bureau of Reclamation, and *provided, further*, that there is reserved to the lessor, its successors and assigns, the superior and prior right at all times to construct, operate, and maintain dams, dikes, reservoirs, canals, wasteways, laterals, ditches, telephone and telegraph lines, electric transmission lines, roadways, appurtenant irrigation structures, and reclamation works, in which construction, operation, and maintenance, the lessor, its successors and assigns, shall have the right to use any or all of the lands herein described without making compensation therefor, and shall not be responsible for any damage from the presence of water thereon or on account of ordinary, extraordinary, unexpected, or unprecedented floods. That nothing shall be done under this lease to increase the cost of, or interfere in any manner with, the construction, operation, and maintenance of such works. It is agreed by the lessee that, if the construction of any or all of said dams, dikes, reservoirs, canals, wasteways, laterals, ditches, telephone or telegraph lines, electric transmission lines, roadways, appurtenant irrigation structures or reclamation works across, over, or upon said lands should be made more expensive by reason of the existence of the improvements and workings of the lessee thereon, said additional expense is to be estimated by the

Secretary of the Interior, whose estimate is to be final and binding upon the parties hereto, and that within thirty (30) days after demand is made upon the lessee for payment of any such sums, the lessee will make payment thereof to the United States, or its successors, constructing such dams, dikes, reservoirs, canals, wasteways, laterals, ditches, telephone and telegraph lines, electric transmission lines, roadways, appurtenant irrigation structures, or reclamation works, across, over, or upon said lands; *provided, however*, that subject to advance written approval by the United States, the location and course of any improvements or works and appurtenances may be changed by the lessee; *provided, further*, that the reservations, agreements, and conditions contained in the within lease shall be and remain applicable notwithstanding any change in the location or course of said improvements or works of lessee. The lessee further agrees that the United States, its officers, agents, and employees, and its successors and assigns shall not be held liable for any damage to the improvements or workings of the lessee resulting from the construction, operation, and maintenance of any of the works hereinabove enumerated. Nothing in this paragraph shall be construed as in any manner limiting other reservations in favor of the United States contained in this lease.

THE LESSEE FURTHER AGREES That there is reserved to the lessor, its successors and assigns, the prior right to use any of the lands herein leased, to construct, operate, and maintain dams, dikes, reservoirs, canals, wasteways, lateral ditches, telephone and telegraph lines, electric transmission lines, roadways, or appurtenant irrigation structures, and also the right to remove construction materials therefrom, without any payment made by the lessor or its successors for such right, with the agreement on the part of the lessee that if the construction of any or all of such dams, dikes, reservoirs, canals, wasteways, laterals, ditches, telephone and telegraph lines, electric transmission lines, roadways, or appurtenant irrigation structures across, over, or upon said lands or the removal of construction materials therefrom, should be made more expensive by reason of the existence of improvements or workings of the lessee thereon, such additional expense is to be estimated by the Secretary of the Interior, whose estimate is to be final and binding upon the parties hereto, and that within thirty (30) days after demand is made upon the lessee for payment of any such sums, the lessee will make payment thereof to the United States or its successors constructing such dams, dikes, reservoirs, canals, wasteways, laterals, ditches, telephone and telegraph lines, electric transmission lines, roadways, or appurtenant irrigation structures across, over, or upon said lands or removing construction materials therefrom. The lessee further agrees that the lessor, its officers, agents, and employees and its successors and assigns shall not be held liable for any damage to the improvements or workings of the lessee resulting from the construction, operation, and maintenance of any of the works herein above enumerated. Nothing contained in this paragraph shall be construed as in any manner limiting other reservations in favor of the lessor contained in this lease.

To insure against the contamination of the waters of the _____ Reservoir,
_____ Project, State of _____, the lessee agrees that
the following further conditions shall apply to all drilling and operations on lands covered by this lease, which lie
within the flowage or drainage area of the _____ Reservoir, as such area
is defined by the Bureau of Reclamation:

1. The drilling sites for any and all wells shall be approved by the Superintendent, Bureau of
Reclamation, _____ Project, _____ before
drilling begins. Sites for the construction of pipe-line rights-of-way or other authorized facilities shall
also be approved by the Superintendent before construction begins.

2. All drilling or operation methods or equipment shall, before their employment, be inspected
and approved by the Superintendent of the _____ Project,
_____, and by the Supervisor of the U. S. Geological Survey having jurisdiction
over the area.

CORPS OF ENGINEERS, FORT WORTH DISTRICT, STIPULATIONS

1. NSO/ND - No Surface Occupancy and No Drilling

This stipulation applies to all Corps of Engineers (COE) fee ownership within 3,000 horizontal feet of prime facilities critical to the operation of a project. These facilities include the dam, spillway, outlet structure, levees and related structures. This stipulation allows the identified area to be included in a lease for the purpose of becoming a part of a drilling unit so that the United States will share in the royalty.

2. NSO/DD - No Surface Occupancy, Open for Directional Drilling

This stipulation applies to all designated parks, recreation areas, public use areas, wildlife management areas, archeological and historical sites, trails and roads, and the lake surface at the conservation pool elevation. Directional drilling is permitted from outside the identified areas where occupancy is allowed.

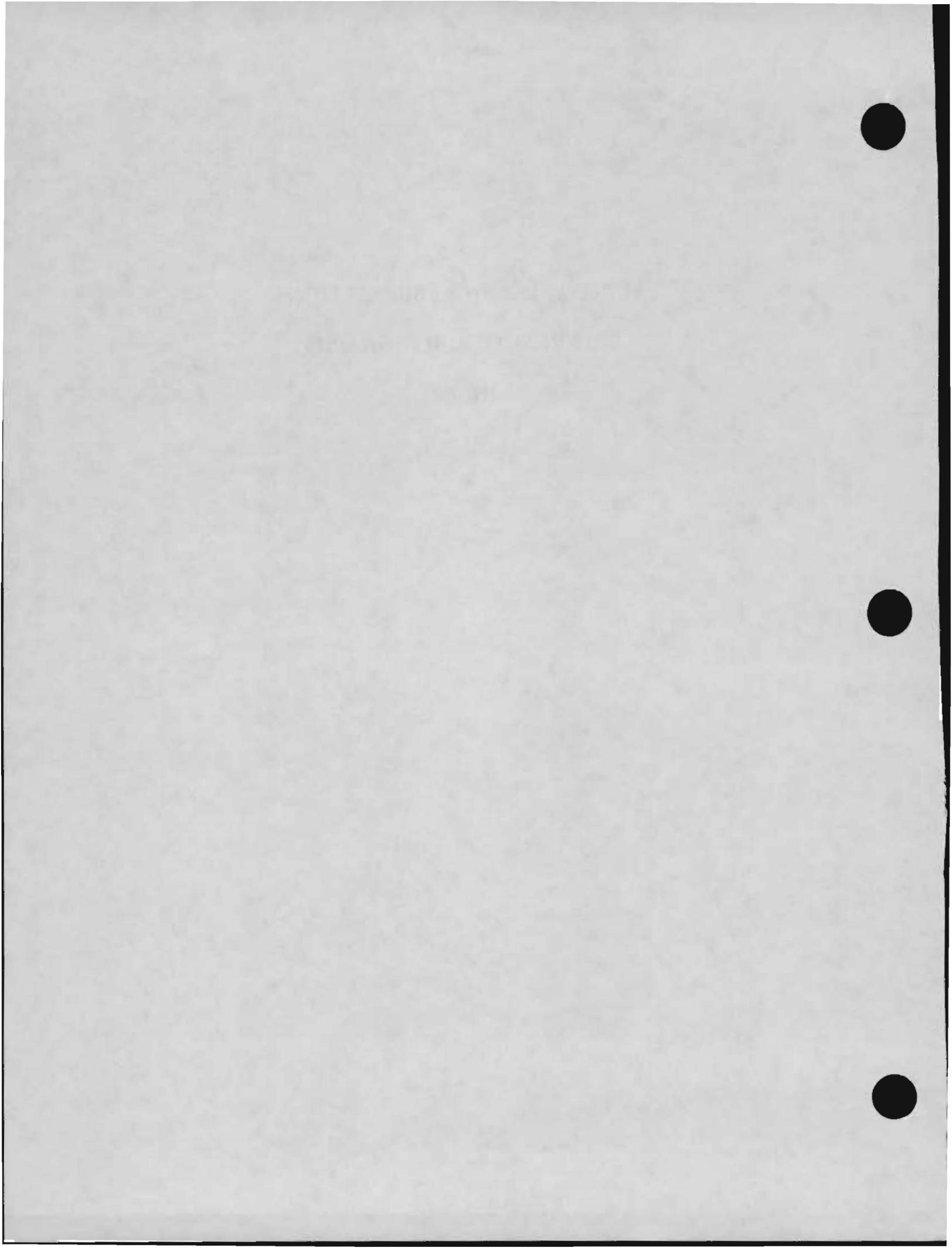
3. NSO/ELEV - No surface Occupancy Based on Elevation

This stipulation prohibits surface occupancy on all lands lying at or below the elevation of the spillway crest or tainter gate sill where alternative surface ownership is available within the same drilling unit. If no alternative surface ownership is available, in no case will surface occupancy be permitted below the 25-year frequency pool (as calculated by COE hydraulics engineering staff) or within 1,000 horizontal feet from the lake surface at the conservation pool elevation. The purpose of this stipulation is to protect the integrity of project land and water resources.

ACRONYMS AND ABBREVIATIONS

REFERENCES/BIBLIOGRAPHY

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ACRONYMS AND ABBREVIATIONS

AAF	Auxiliary Air Field	NHP	National Historic Park
AFB	Air Force Base	NHS	National Historic Site
APD	Application for Permit to Drill	NP	National Park
ARS	Agricultural Research Service	NPS	National Park Service
BLM	Bureau of Land Management	NRA	National Recreation Area
BP	Bureau of Prisons	NS	National Seashore
BR	Bureau of Reclamation	NSO	No Surface Occupancy
CFR	Code of Federal Regulations	NSO/ND	No Surface Occupancy, No Directional Drilling
CMG	Continuing Management Guidance	NSO/DD	No Surface Occupancy Directional Drilling
COA	Condition(s) of Approval	NSO/ELEV	No Surface Occupancy, based on elevation or surface use if suitable non-agency lands are included in the same drilling unit
COE	Corps of Engineers		
CRMWA	Canadian River Municipal Water Authority		
DOD	Department of Defense	NTL	Notice to Lessees
DOE	Department of Energy	NWR	National Wildlife Refuge
DOI	Department of the Interior	ODWC	Oklahoma Department of Wildlife Conservation
DOJ	Department of Justice	P.L.	Public Law
EA	Environmental Assessment	RMP	Resource Management Plan
EIS	Environmental Impact Statement	SMA	Surface Management Agency
E.O.	Executive Order	SSS	Special Status Species
FCI	Federal Correctional Institution	STC	Standard Terms and Conditions
FLPMA	Federal Land Policy and Management Act of 1976	T&E	Threatened and Endangered
FWS	U.S. Department of the Interior, Fish and Wildlife Service	TPWD	Texas Parks and Wildlife Department
LN	Lease Notice	USAF	U.S. Air Force
MSL	Mean Sea Level	U.S.C.	United States Code
MWS	Maximum Water Surface	USDA	U.S. Department of Agriculture
NALF	Naval Auxiliary Landing Field	USFS	U.S. Forest Service
NAS	Naval Air Station	USGS	U.S. Geological Survey
NEPA	National Environmental Policy Act	USIBWC	International Boundary and Water Commission, United States and Mexico, United States Section
NFH	National Fish Hatchery		
NIROP	Naval Industrial Reserve Ordnance Plant	USN	U.S. Navy
NMe	National Memorial		
NMo	National Monument		

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