

**US Army Corps
of Engineers**

APPENDIX F REAL ESTATE PLAN

**Whitney Lake Reallocation Study
Lake Whitney, Texas**

Updated: 10 July 2025

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PURPOSE

This Real Estate Plan will be Appendix F of the Whitney Lake Reallocation Study. It identifies and describes the lands, easements, rights-of-way, relocations, and disposal areas (LERRDs) required for the construction, operation, maintenance, repair, replacement and rehabilitation of the reallocation project.

Whitney Lake is located on the main stem of the Brazos River, approximately 65 miles Southwest of Fort Worth. Lake Whitney is a multi-purpose reservoir, providing flood control for the Brazos River Watershed, supplying reliable and renewable power and energy, and providing recreational benefits.

Further, Lake Whitney has a water supply intake further downstream of the dam, which supplies water to the Brazos River Authority (BRA) for distribution. The BRA is responsible for the management of water supply to the region. Due to the rising population within the area, it is expected that the municipal and industrial demands for water will outpace the available supply.

The purpose of the Whitney Lake Reallocation Study is to investigate existing and future conditions at Whitney Lake and develop alternatives to efficiently meet present and future water storage needs. The Non-Federal Sponsor is the BRA. The information in this Real Estate appendix is based on preliminary data, is tentative in nature and is for feasibility-level planning purposes only. Both the final real property acquisition information and the real estate cost estimates provided herein are subject to change after approval of the Feasibility Study. No prior Real Estate Plan (REP) has been submitted for the project. In accordance with ER 405-1-12, 12-16(c) all required assessments for scope and content are included herein. Given the unique nature of this study, no acquisition is required and all land is federally owned, any inapplicable references in the ER are left out for brevity sake.

AUTHORITY

The Authority with which the Assistant Secretary of the Army approved the undertaking of the reallocation study at Lake Whitney is:

- Water Supply Act of 1958, 43 U.S.C §390b – reallocation of existing conservation storage to water supply is contemplated without changes to FRM storage or project operations
- Section 216 if the Flood Control Act of 1970

DESCRIPTION OF LANDS, EASEMENTS, RIGHTS-OF-WAY (LERRD)

Current operational condition at Whitney Lake split the water body vertically from bottom to top between Inactive Pool, Conservation Pool, Flood Pool, and Surcharge Pool. This study primarily looked at changes to the Conservation Pool (between elevations 533' and 448.8' National Geodetic Vertical Datum of 1929), which is divided up in two sections at 520' NGVD with the bottom being designated as Powerhead Reserve and the top split between hydropower generation and water supply. Figure 1, below, details

the elevations of each section and the breakouts of how the water body is allocated.

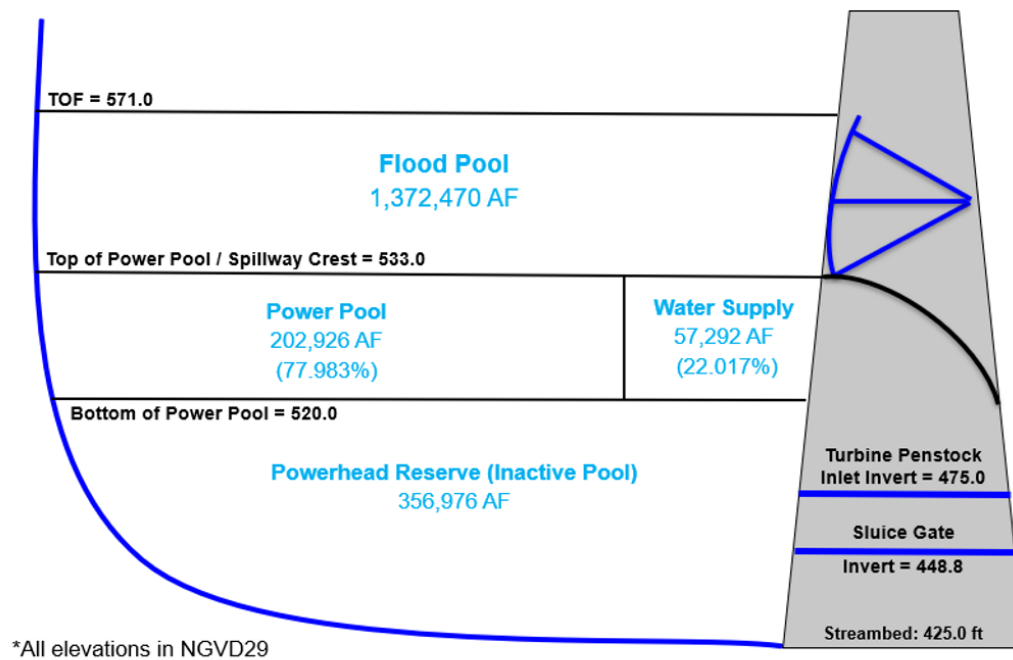


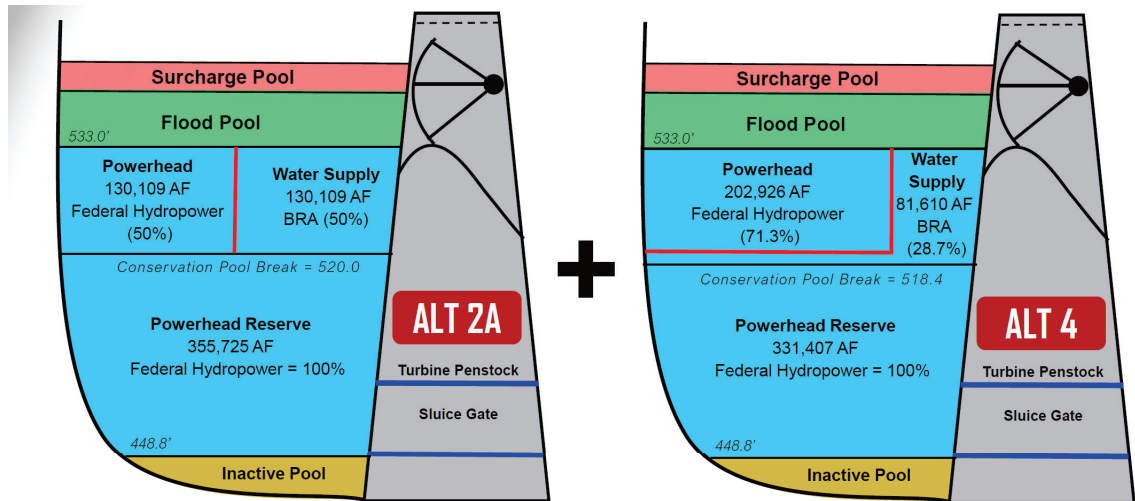
Figure 1: Current state operations

Seven alternatives were carried forward to the final array of this reallocation study. Table 1, below, illustrates the impact of these alternatives on the Conservation Pool. Most of the proposed alternatives considered during plan formulation only modify existing conditions within the current pools and, therefore, require no additional LERRDs and were not modeled for cost impacts to the project. Alternatives 3 and 5 both raise the Conservation Pool by 1.5 feet and 3 feet, respectively. These alternatives were evaluated based on a maximum elevation of 536' NGVD, as there were no differences in affected parcels and minimal differences in acreage between the two elevations. A total of 122 parcels were identified as potential fee acquisitions resulting from the proposed pool raises. Cost impacts and potential acquisition schedules are discussed in greater detail in the following sections of this real estate plan. If alternatives 3 or 5 are selected in the future, a takings analysis will be required to determine the necessary full extent of any fee acquisitions, which will in turn necessitate a re-evaluation of the impacts to real estate.

Array of Alternatives			
Alternative	Description	Conservation Pool (NGVD)	LERRDs Needs
1	No Action Alternative or Future Without Project	520.0' - 533.0'	No acquisition needs, pool levels maintained.
2	Two-Thirds Water Supply & one-Third Hydropower	520.0' - 533.0'	No acquisition needs, pool levels maintained.
2a	50/50 Split of Water Supply & Hydropower	520.0' - 533.0'	No acquisition needs, pool levels maintained.
2c	Focus on Energy Runs	520.0' - 533.0'	No acquisition needs, pool levels maintained.
3	Increase Top of Conservation Pool 3'	520.0' - 536.0'	Requires pool raise. 122 parcels identified for fee acquisition.
4	Decrease Bottom of Power Pool 1.6'	518.4' - 533.0'	No pool raise, no acquisition required.
5	Increase Top of Conservation Pool 1.5'	533.0' - 534.5'	Requires pool raise. 122 parcels identified for fee acquisition.
6	50/50 Split of Water Supply & Hydropower and Lower Conservation Pool 8'	512.0' – 533.0'	TSP: Lowers conservation pool with no pool raise. No acquisition required

Table 1: Array of Alternatives

The Tentatively Selected Plan (TSP) is a partial combination of alternatives 2a and 4, as discussed in Table 1. Under this alternative, now called alternative 6, the area between 533' and 520' NGVD would be split evenly between hydropower and water supply, providing each party with 130,109 acre-feet of usable water. Additionally, the portion from alternative 4 lowers the Conservation Pool Break to 512' (instead of the originally modeled 518.4') and allocates the resulting 111,537 acre-feet to water supply. This configuration was determined through thorough hydrology and hydraulic analyses and takes into account the original design elevations of the hydropower plant. The split above the Powerhead Reserve at 512' is effectively 65% to water supply and 35% to hydropower. The Powerhead Reserve is redefined as the region between 512' and 448.8', containing 244,188 acre-feet of water, and remains 100% allocated to hydropower generation. Figures 2 and 3 below illustrate the changes in pool allocations. The TSP does not raise the Conservation Pool elevation and, therefore, has no LERRDs implications beyond current operations. The TSP was selected for its ability to maximize available water supply while minimizing adverse impacts to real estate, recreation, and other environmental resources surrounding Whitney Lake



*All elevations in NGVD29

*Drawing Not to Scale

*Conservation/Power Pool exaggerated for dramatic purposes

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Figure 2: combination portions of alternatives 2a and 4

*All elevations in NGVD29

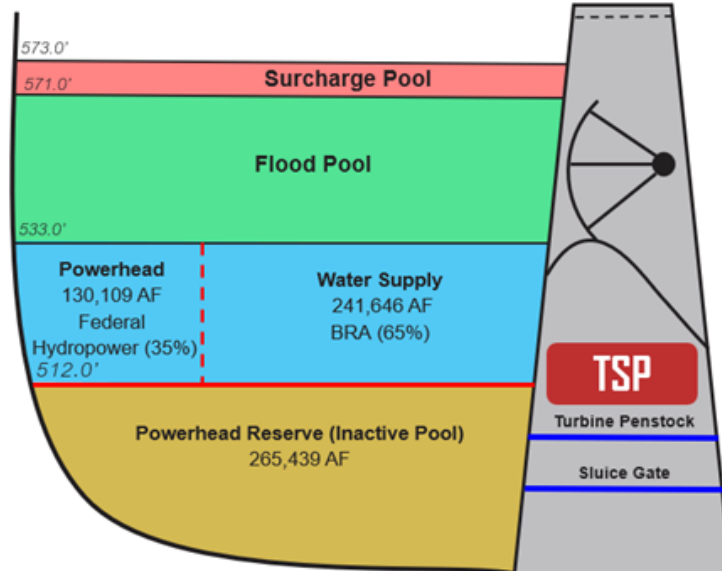


Figure 3: Tentatively selected plan

PROJECT IMPACTS OUTSIDE THE PROJECT AREA

There are no anticipated impacts outside the project area.

STANDARD ESTATES

The TSP does not require any acquisition of LERRDs outside of those already owned by USACE in fee or flowage easement. Therefore, the required estates (already acquired) are listed as such.

Fee Simple

The fee simple title to (the land described in Schedule A) (Tracts Nos.____, ____ and ____), subject, however, to existing easements for public roads highways, public utilities, railroads and pipelines.

FLOWAGE EASEMENT (Occasional Flooding).

The perpetual right, power, privilege and easement occasionally to overflow, flood and submerge (the land described in Schedule A) (Tract Nos. , and), (and to maintain mosquito control,) in connection with the operation and maintenance of the project as authorized by the Act of Congress approved , together with all right, title and interest in and to the structure; and improvements now situated on the land, except fencing (and also excepting (here identify those structures not designed for human habitation which the District Engineer determines may remain on the land)); provided that no structures for human habitation shall be constructed or maintained on the land, that no other structures shall be constructed or maintained on the land except as may be approved in writing by the representative of the United States in charge of the project, and that no excavation shall be conducted and no landfill placed on the land without such approval as to the location and method of excavation and/or placement of landfill; the above estate is taken subject to existing easements for public roads and highways, public utilities, railroads and pipelines; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used and enjoyed without interfering with the use of the project for the purposes authorized by Congress or abridging the rights and easement hereby acquired; provided further that any use of the land shall be subject to Federal and State laws with respect to pollution.

NON-STANDARD ESTATES

All project-affected lands at Whitney Lake are currently held by USACE in either fee or flowage easement. Should an alternative be selected that requires future acquisition, any such lands will be acquired in fee or flowage easement as necessary. Therefore, no non-standard estates are currently being recommended for the purposes of this real estate plan.

EXISTING FEDERAL INTERESTS

USACE owns much of the project lands in fee. Any lands required for project purposes that are not owned in fee are encumbered by a flowage easement. The Southwestern Power Association (SWPA) owns the electric power generational capacity output of Whitney Dam. The reallocation of water supply effects on available power generation were discussed within the LERRDs section of this report.

BASELINE COST ESTIMATE FOR REAL ESTATE

The TSP does not require any acquisition of LERRDs, so there are no associated costs for the current plan. Table 2, below, details the breakout of the costs to acquire the

estimated 122 parcels identified for alternatives 3 and 5 for the purposes of assisting economic analysis and selection of the TSP. If the takings analysis discussed in the LERRDs section determines a greater area of land be acquired for a pool raise, those costs would be in addition to the below.

Activity	Per Parcel	Total
Environmental Assessment		\$ 100,000.00
Mapping		\$ 40,000.00
Landowner meeting		\$ 1,500.00
Obtain ROEs	\$ 500.00	\$ 61,000.00
Obtain Title Contract		\$ 5,000.00
Obtain Title Commitment	\$ 6,000.00	\$ 732,000.00
Obtain Survey Contract		\$ 10,000.00
Conduct Boundary Survey	\$ 15,000.00	\$ 1,830,000.00
USACE Survey Review	\$ 1,000.00	\$ 122,000.00
Obtain Appraisal Contract		\$ 10,000.00
Conduct Appraisals	\$ 5,000.00	\$ 610,000.00
USACE Appraisal Review/Corrections	\$ 1,800.00	\$ 219,600.00
Land Value		\$ 3,600,000.00
Conduct Negotiations	\$ 2,000.00	\$ 244,000.00
Perform Amicable Closing	\$ 1,500.00	\$ 91,500.00
Condemnations	\$ 30,000.00	\$ 1,830,000.00
Obtain Title Contract		\$ 5,000.00
Title Policy	\$ 1,250.00	\$ 152,500.00
Subtotal		\$ 9,664,100.00
Contingency	25%	\$ 2,416,025.00
Total		\$ 12,080,125.00

Table 2: Conservation Pool Raise Buyout

Cost Assumptions:

This cost estimate assumes that half of the required parcels will go through the condemnation process, and half will close amicably. This estimate was not generated through a gross appraisal which would be necessary if an alternative requiring LERRDs acquisition were selected in the future. Surveying for utility/facility relocation was not performed at the locations of potential acquisition. Therefore, costs associated with relocating said utilities were not modeled and would need to be added should an alternative be selected that raises the pool level.

Costs for survey is an estimate for metes and bounds survey only. Should any topographical surveying also be required, there will be additional costs associated that were not included herein.

RELOCATON ASSISTANCE UNDER P.L. 91-646

No impacts to homes our businesses are currently anticipated from any of the alternatives considered including those that raised the conservation pool of the lake. As such, there was no monetary value attributed to P.L. 91-646 relocation included in the cost estimate above. Should surveying for acquisition or the takings analysis discussed above identify any impacts to homes or businesses, they will be reassessed for cost and schedule based on the magnitude of the relocation required.

MINERALS AND TIMBER

A preliminary analysis by the Fort Worth District Forester indicated that there are various areas of mature mixed hardwood tree species that would be considered merchantable timber; however, there is no timber production happening within this area.

An initial review of the Texas Railroad Commission's Geographical Information System Viewer of oil and gas wells revealed some activity within the project area, which is reflected in Figure 3, below. There are two gas lines crossing the lake, which are shown in orange on the map below. The pink dot shown in the middle of the lake is identified as a "permitted location" without any current activity. Should an alternative be chosen that requires raising the flood pool, it is possible the project would cross into the areas on the North end of the lake where blue dots are identified. Acquisition could be considered without mineral rights in these areas. Subsurface mineral exploration impact was not analyzed in this report.

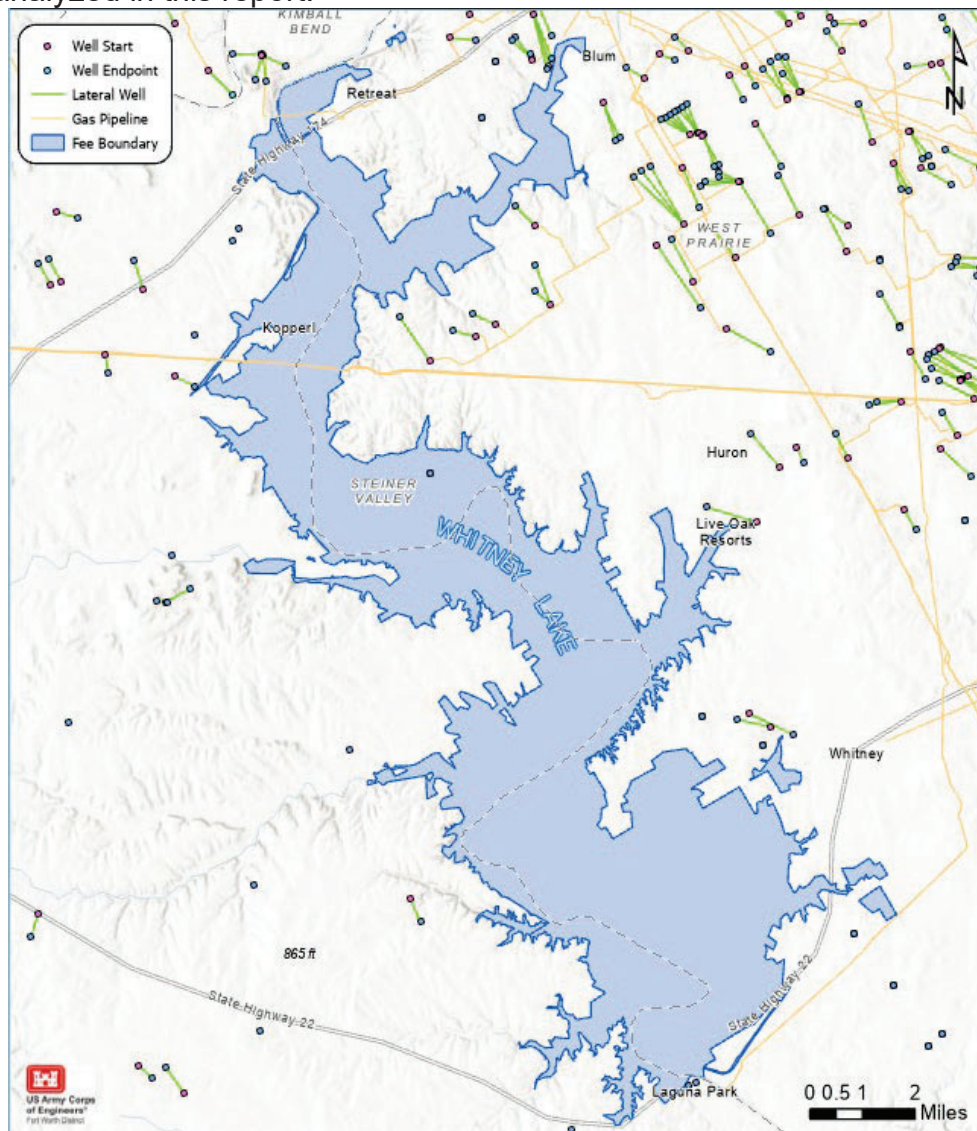


Figure 3: Mineral Activity

REAL ESTATE MILESTONE SCHEDULE

The real estate acquisition schedule below assumes that all funding is received up front. There will be impacts to schedule should the acquisition be incrementally funded.

Activity	Start	Finish
Prepare Maps	Day 1	Day 14
Notify Property Owners & Conduct Landowner Meeting	Day 14	
Obtain ROEs	Day 14	Day 104
Obtain Title Contract	Day 1	Day 30
Obtain Title Commitment	Day 30	Day 120
Obtain Survey Contract	Day 60	Day 90
Conduct Boundary Survey	Day 90	Day 150
USACE Survey Review	Day 150	Day 180
Obtain Appraisal Contract	Day 150	Day 180
Conduct Appraisals	Day 180	Day 240
USACE Appraisal Review/Corrections	Day 210	Day 270
Conduct Negotiations	Day 270	Day 360
Non-Residential Relocations per P.L. 91-646	Day 300	Day 540
Perform Amicable Closing	Day 330	Day 420
Condemnations	Day 330	Day 510
Update Final Segment Maps	Day 510	Day 540
Title Policy	Day 330	Day 540

Table 4: Schedule

UTILITY AND FACILITY RELOCATIONS

The TSP does not require installation of new pipes to reroute water, nor disrupt any above or below ground utilities. There are no facilities in the area that would be impacted by the selected alternative. If facility or utility conflicts are later discovered through a selection of another alternative, Real Estate would need to evaluate their impacts to cost and schedule.

HAZARDOUS TOXIC RADIOACTIVE WASTE (HTRW)

All project lands are currently owned by USACE in fee or encumbered by a USACE flowage easement. As such, no HTRW related issues are currently anticipated.

PROPERTY OWNER ATTITUDES

No LERRDs are required for the TSP; therefore, no property owner notifications are necessary for the project.

OTHER REAL ESTATE ISSUES

Should an alternative be selected, that would raise the flood pool level, there would likely be impacts to the recreational parks owned and operated by either USACE or agencies of the State of Texas. This could impact revenue in addition to impacting service to the public. These impacts would be in addition to those affecting private landowners discussed in the LERRDs and cost estimate sections of this appendix.

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