



**Section 12 – Supplement to Lake Alan Henry – Year 2030 - South Fork Tributary
Option**

Content

No documentation

Summary

One alternative that has been raised is to save money by extending existing or constructing new pipelines to take reclaimed water to a South Fork tributary and then store the water in Lake Alan Henry.

While on the surface this alternative appears simple and inexpensive, a closer analysis shows that it actually has a cost similar to that of the other options under consideration. A pipeline extension may cost as much as \$20 to \$30 million and this extension would have a limitation of 9 million gallons per day. A new pipeline for additional capacity would cost \$50 million. In addition, there may be an additional \$20 million in capital costs necessary to increase the line size from Lake Alan Henry to the Post Reservoir that would not be required for the Post Reservoir project. As a result, this project, depending upon the alternatives selected, could cost \$40 to \$70 million.

The cost savings proposed by this alternative would preclude the discharge of about 50% of the City's reclaimed water if the existing pipeline is the constraining factor. A new pipeline would have costs similar to that of the Post Reservoir. Even if a new pipeline is constructed, the option would not benefit from the City's developed storm water and natural flows that now go into the North Fork. Developed storm water has been estimated at 11,000 AF annually. This water will require approval of the TCEQ in a pending water permit prior to being available for use by the City of Lubbock.

Due to water quality issues, there may also be an advantage to keeping the developed waters separate from Lake Alan Henry. The total dissolved solids (TDS) in Lake Alan Henry water is just under 600 parts per million (ppm) while the water at the FM 400 discharge site is over 1100 ppm. The drinking water standard is set at 1000 ppm. Keeping the water sources separate may help reduce or minimize future water treatment costs. A study is planned on water quality issues related to reuse and treatment.

This option also does not take into account the opportunity and need for regional cooperation. The City has expressed a desire to work with area communities, and the North Fork option would involve significant regional cooperative efforts.



Section 13 – Supplement to Lake Alan Henry – Year 2030 – Scalping Operation Option

Content

- a. Map of North Fork Scalping Operation
- b. Region O Water Supply Plan for Scalping Operation

Summary

The proposed Scalping Operation option would, like the Post Reservoir, capture developed water and natural flows in the North Fork of the Brazos River. However, the capture of water would be limited to the capacity of the pumps and pipelines, so the system would not likely benefit from all flows without significant expense.

Cost wise the project again would be comparable to the other options considered. It does not offer any significant cost savings.

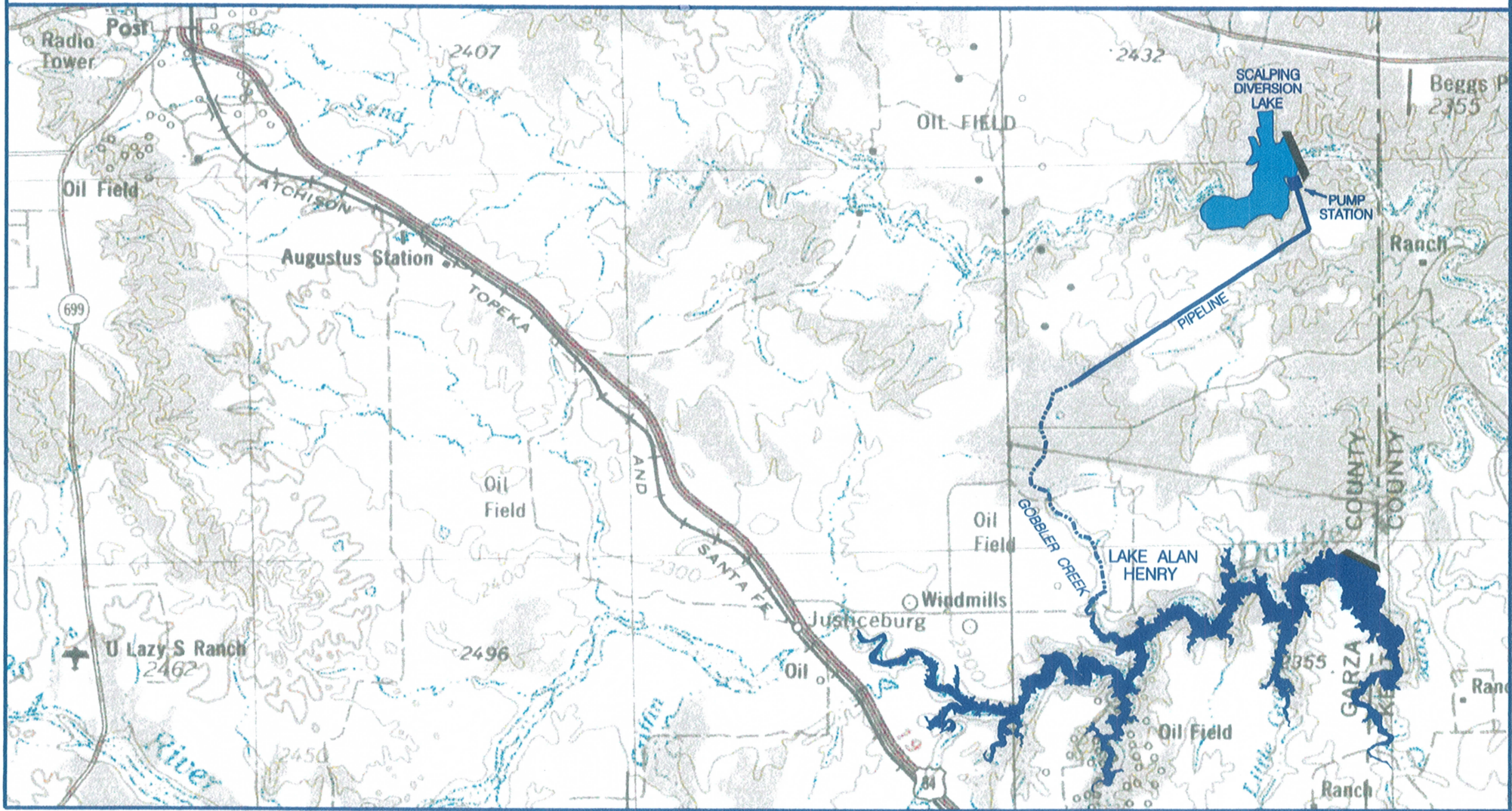
One additional concern is that the North Fork has experienced problems with golden algae and fish kills. The scalping operation would take North Fork water out of the North Fork for storage in Lake Alan Henry. This could spread the golden algae problem into Lake Alan Henry.

Due to the comparable costs, and due to the potential for golden algae, this alternative is not recommended.



PROPOSED SCALPING DIVERSION LAKE AND PUMP STATION TO LAKE ALAN HENRY

N
SCALE: 1" = 8000'
SEPTEMBER, 2005



4.4.3.8 Lubbock North Fork Scalping Operation**4.4.3.8.1 Description of Option**

This water supply strategy would involve the diversion of storm water flows (interruptible source) from the North Fork of the Double Mountain Fork of the Brazos River (the North Fork) to Lake Alan Henry to supplement its firm annual yield (Figure 4.4-9). The map shown in Figure 4.4-9 indicates a location of the diversion dam and lake in Garza County, but is only intended to serve as a general conceptual location. When this option is implemented, the specific location will be selected based upon the topography, geology, land availability, permitting, and perhaps other factors. Key components of the proposed system are:

- Diversion dam: Capacity: 1,000 acre-feet;
- Diversion rate: Annual: 30,000 acft/yr;
- Maximum flow: 250 cfs;
- Pump station & pipeline capacity: 250 cfs;
- Pipeline diameter: 96 inches; and
- Pipeline length: 32,000 feet.

Water would be pumped from the diversion lake during storm events and discharged into Gobbler Creek, which would then flow to Lake Alan Henry.

4.4.3.8.2 Quantity of Water Available

Water potentially available for diversion from the North Fork into Lake Alan Henry was estimated using Run 3 of the Brazos River Basin Water Availability Model (Brazos WAM) developed by the Texas Commission on Environmental Quality (TCEQ)¹. The model utilizes a timeframe from January 1940 through December 1997 hydrologic period of record to estimate water available to existing and potential water rights. The model assumes that existing perpetual water rights are fully utilized, reservoir storage capacity is as originally permitted, and wastewater treatment plant effluent is fully reused (zero return flows).

Available unappropriated streamflows were determined by the Brazos WAM without causing increased shortages to existing downstream rights. The firm yield of Lake Alan Henry was computed subject to the diversion having to pass natural inflows to meet Consensus Criteria for Environmental Flow Needs (CCEFN) instream flow requirements. The streamflow statistics

¹ HDR Engineering, Inc., "Water Availability in the Brazos River Basin and San Jacinto-Brazos Coastal Basin," Texas Natural Resource Conservation Commission (now TCEQ), December 1991.

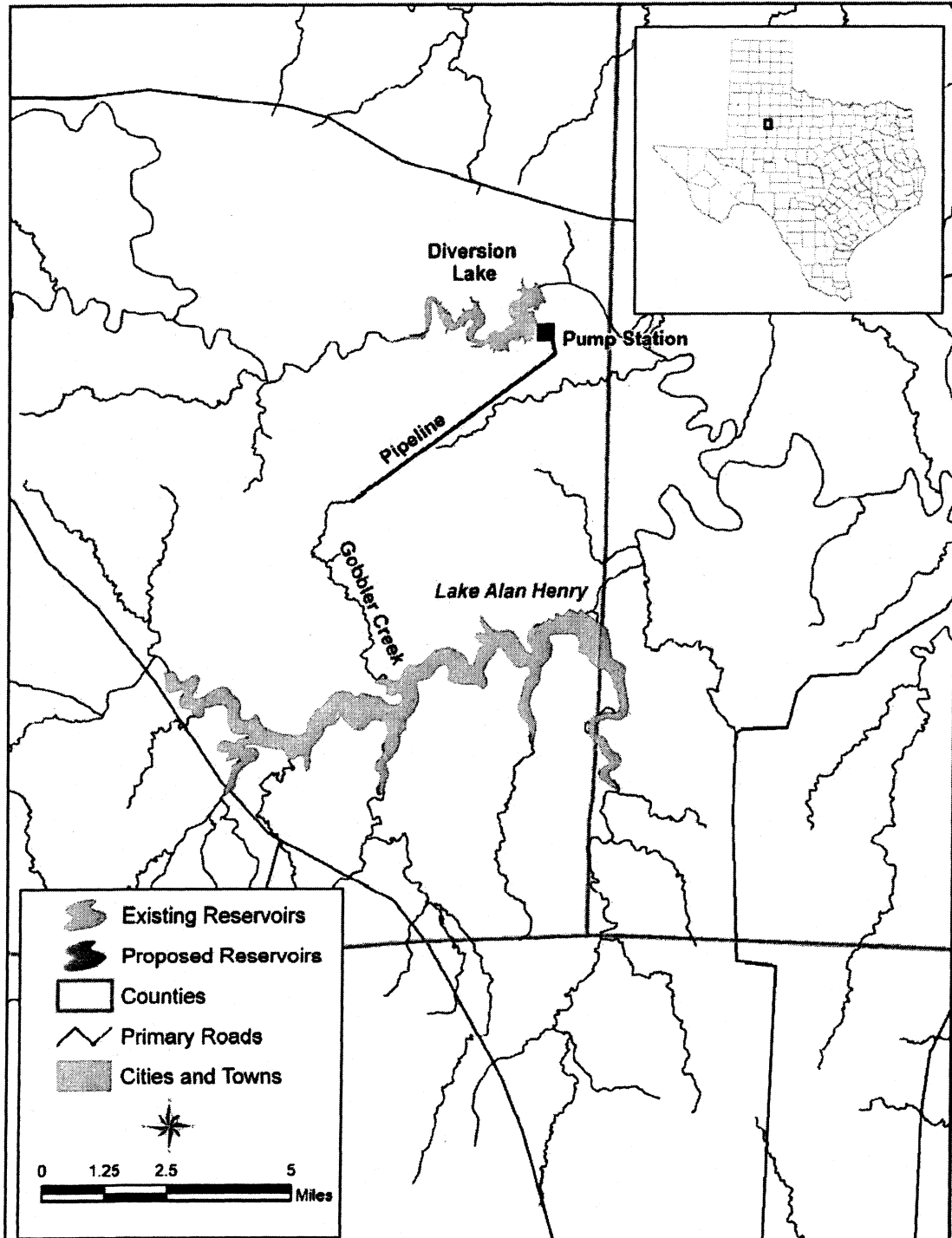


Figure 4.4-9. Lubbock North Fork Scalping Operation

used to determine the CCEFV pass-through requirements for the North Fork diversion are shown in Table 4.4-60.

Table 4.4-60.
Daily Natural Streamflow Statistics
Lubbock North Fork Scalping Operation
Llano Estacado Water Planning Region

<i>Month</i>	<i>Median Flows – Zone 1 Pass-Through Requirements (cfs)</i>	<i>25th Percentile Flows – Zone 2 Pass-Through Requirements (cfs)</i>
January	2	0
February	3	0
March	1	0
April	1	0
May	8	0
June	13	2
July	4	0
August	2	0
September	5	0
October	4	0
November	3	0
December	3	0
Zone 3 (7Q2) Pass-Through Requirement (cfs):		0.0

An estimate of the firm yield for Lake Alan Henry of 22,500 acft/yr was provided by the City of Lubbock to the Llano Estacado Regional Water Planning Group. This estimate accounts for a subordination agreement with the Brazos River Authority regarding Possum Kingdom Reservoir. The firm yield of Lake Alan Henry as computed by the Brazos WAM (accounting similarly for the subordination agreement) is 20,600 acft/yr, which is somewhat less than the yield estimate provided by the City of Lubbock. The yield analysis developed for the City of Lubbock is more detailed and in-depth than that computed by the Brazos WAM and is likely somewhat more accurate. With the North Fork diversion into Lake Alan Henry, the yield of the reservoir is increased to 24,600 acft/yr (as computed by the Brazos WAM), indicating that the yield increase due to the North Fork diversion project is approximately 4,000 acft/yr.

Figure 4.4-10 illustrates the simulated Lake Alan Henry storage levels for the 1940 to 1997 historical simulation period, subject to the enhanced firm yield of 24,600 acft/yr. Diversions of storm flows from the North Fork into the reservoir would change North Fork

streamflows, as presented in Table 4.4-61 and illustrated in Figure 4.4-11. As shown in the figure and table, monthly median streamflows at the diversion location on the North Fork would decrease, with the largest decline being about 20 cfs in June. However, inspection of the streamflow frequency graph indicates that little change in high or low streamflows would result from the diversion. Streamflows downstream of Lake Alan Henry would be changed minimally by diverting North Fork flows into the reservoir.

Streamflows in Gobbler Creek would increase by an average of about 4,000 acft/yr, with a maximum of 30,000 acft/yr, due to discharge of the North Fork flows. The instantaneous increase in streamflow in Gobbler Creek would be equal to the maximum diversion capacity of 250 cfs.

Table 4.4-61.
Median Monthly Streamflow
Lubbock North Fork Scalping Operation
Llano Estacado Water Planning Region

Month	Monthly Median Streamflow (cfs)			Percent Reduction
	Without Project	With Project	Decrease	
Jan	2.9	2.5	0.4	13%
Feb	3.8	2.7	1.1	28%
Mar	2.8	1.2	1.6	56%
Apr	6.7	2.2	4.5	67%
May	28.3	14.3	14.0	49%
Jun	37.3	16.7	20.6	55%
Jul	13.7	11.0	2.7	20%
Aug	15.0	11.3	3.7	25%
Sep	29.0	16.2	12.8	44%
Oct	8.0	5.0	3.0	37%
Nov	5.2	2.9	2.2	43%
Dec	3.4	3.1	0.4	10%

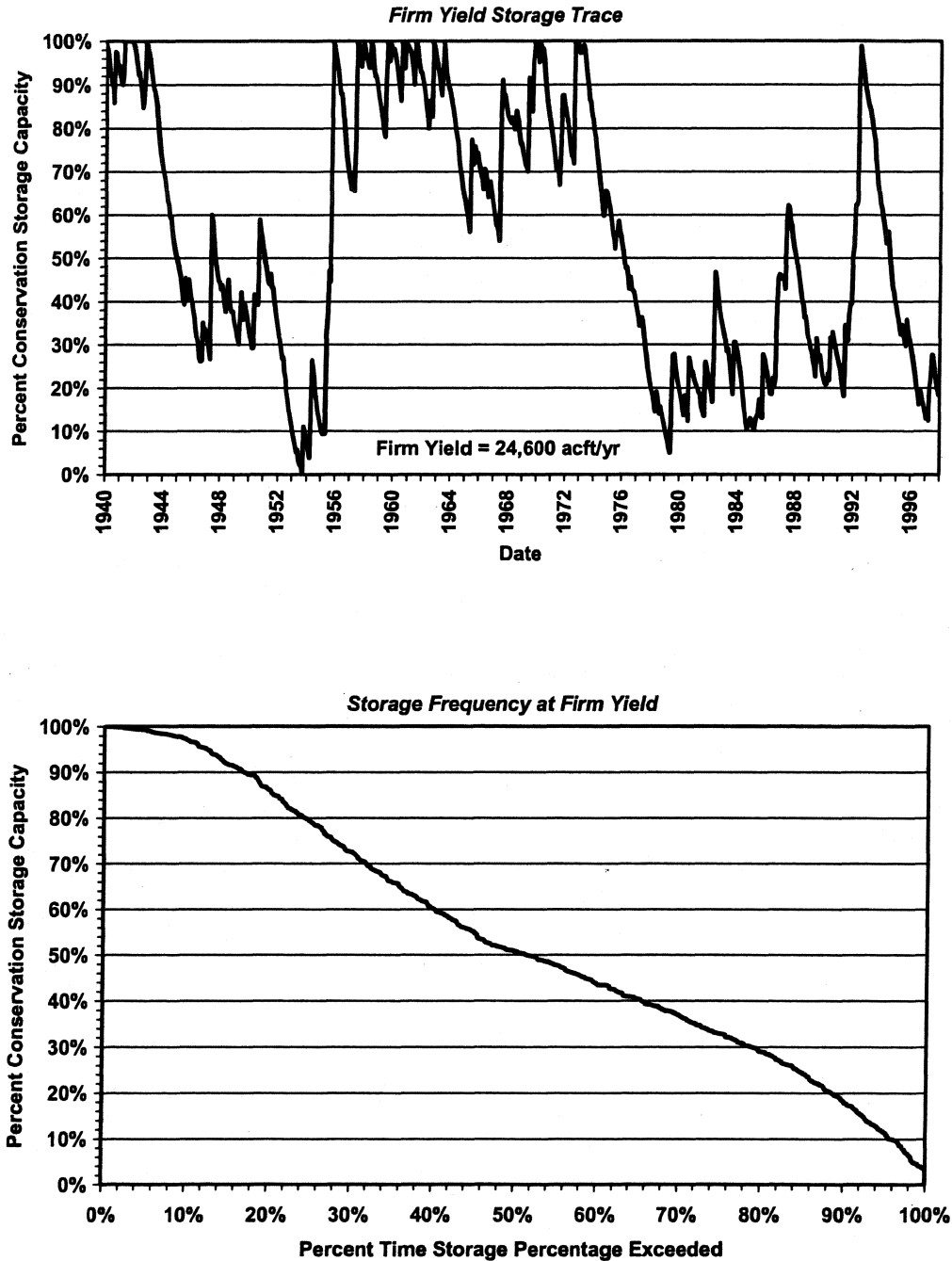


Figure 4.4-10. Lubbock North Fork Scalping Operation Storage Considerations

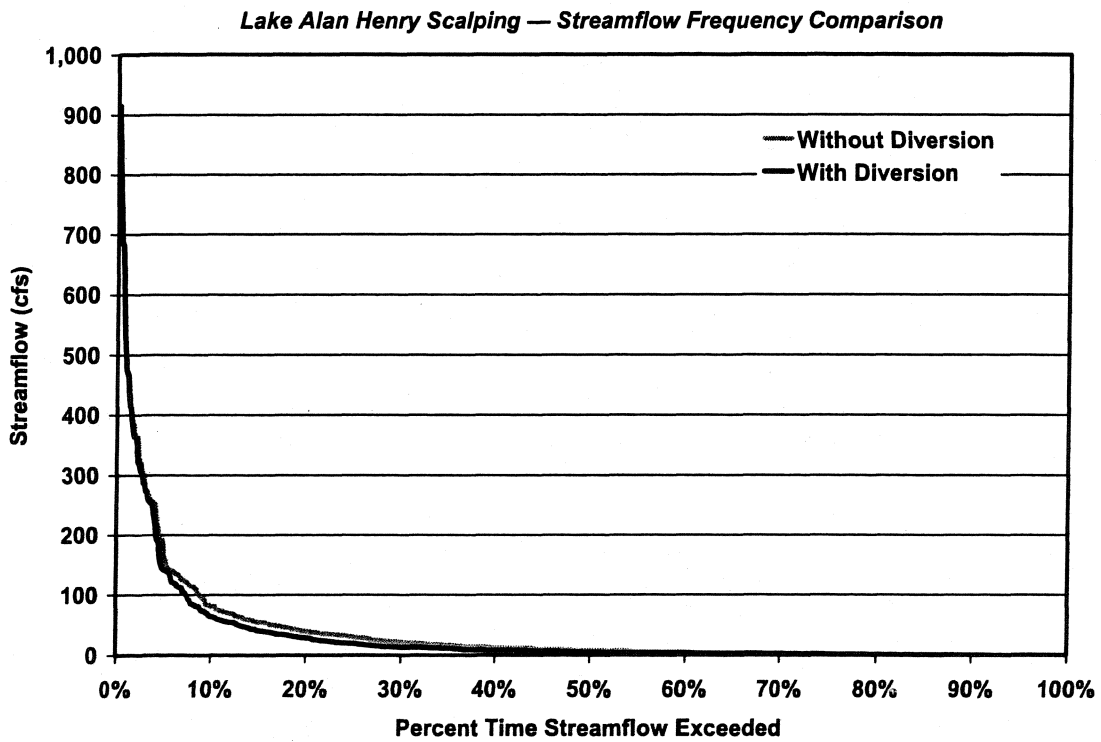
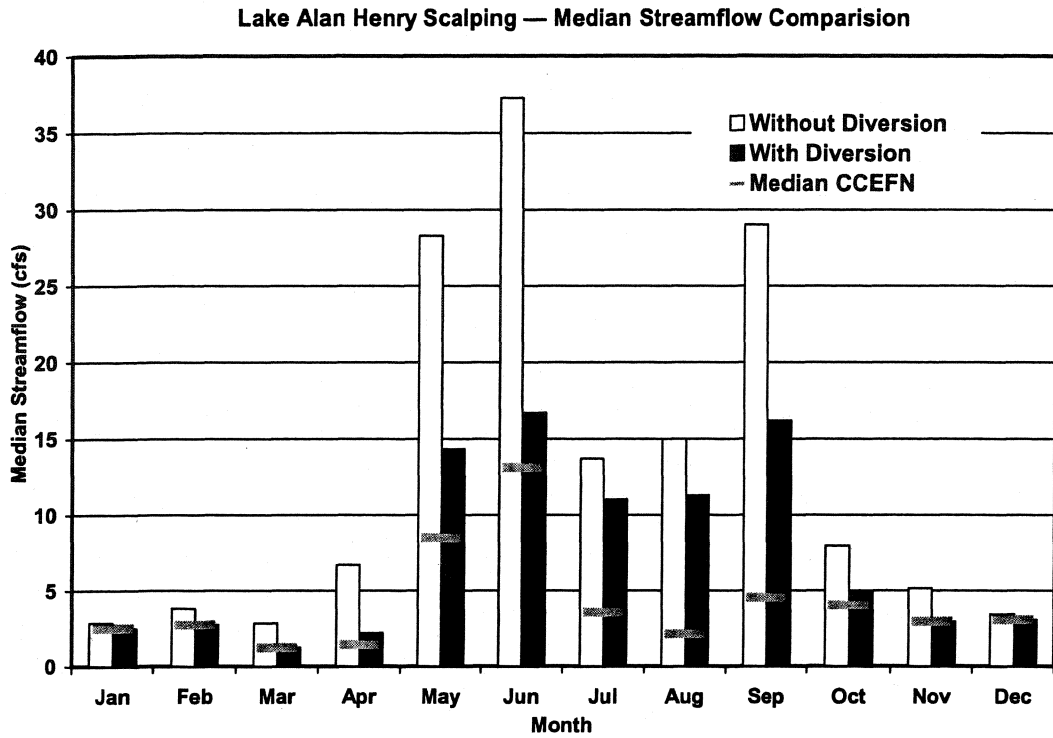


Figure 4.4-11. Lubbock North Fork Scalping Operation Streamflow Comparisons

4.4.3.8.3 Environmental Issues

The North Fork Scalping Operation to supplement the yield of Lake Alan Henry involves the construction of a diversion lake on the North Fork of the Double Mountain Fork of the Brazos River approximately 18 miles southeast of Post, Texas, a raw water intake structure and associated water transmission lines. The approximately six mile pipeline would deliver diverted water to a point on Gobbler Creek, from which it would flow an additional five miles through the existing stream channel to Lake Alan Henry on the Double Mountain Fork Brazos River. The proposed diversion lake site and Lake Alan Henry are both located in Garza County within the Southwestern Tablelands ecoregion,² in the Rolling Plains vegetational area of Texas,³ and in the Kansan biotic province.⁴

The study area is located in the Rolling Plains Ecological Region as designated by the Texas Parks and Wildlife Department (TPWD 2005). This region is characterized gently rolling hills, used primarily as rangeland, that are dissected by streams and rivers that flow from west to east. This area is bordered on the south by the Edwards Plateau Ecological Region and on the west by the High Plains Ecological Region. Vegetation in this area is generally classified as mesquite-buffalo grass. The predominant vegetation form is medium-tall grassland with a sparse shrub cover. Little bluestem (*Schizachyrium scoparium* var. *frequens*), blue grama (*Bouteloua gracilis*), sideoats grama (*Bouteloua curtipendula*), Indiangrass (*Sorghastrum nutans*), and sand bluestem (*Andropogon gerardii* var. *paucipilus*) are included in the list of native grasses in this area. Invasion of the rangeland areas in this region by annual and perennial forbs, legumes, and woody species has been facilitated by historic livestock grazing practices and a lack of naturally occurring fire in the area. Dominant woody species include redberry juniper (*Juniperus pinchotii*), yucca, mesquite (*Prosopis glandulosa*), lotebush (*Zizyphus obtusifolia* var. *obtusifolia*), hackberry (*Celtis* sp.), bumelia, pricklypear (*Opuntia* sp.), skunkbush sumac (*Rhus aromatica* var. *flabelliformis*), ephedra, plum (*Prunus* sp.), western soapberry (*Sapindus saponaria*), little leaf sumac (*Rhus microphylla*), shin oak (*Quercus sinuata* var. *breviloba*), tasajillo (*Opuntia leptocaulis*), agarito (*Berberis trifoliolata*), catclaw acacia (*Acacia greggii* var. *greggii*), lime pricklyash (*Zanthoxylum fagara*), sand sage, and others. Bottomland areas found

² Omernik, James M., "Ecoregions of the Conterminous United States," *Annals of the Association of American Geographers*, 77(1), pp. 118-125, 1986.

³ Gould, F.W., "The Grasses of Texas," Texas A&M University Press, Texas Agricultural Experiment Station, College Station, Texas, 1962.

along larger streams contain American elm (*Ulmus Americana*), button willow (*Cephalanthus occidentalis*), pecan (*Carya illinoensis*) and cottonwood (*Populus* sp.). The limestone ridges and steep terrains of this area produce a greater diversity of woody plants and wildlife habitat than would normally be expected from a plains region.

Faunal species include those suited to a semi-arid environment. Riparian zones along the Brazos River and streams and their tributaries contain important wildlife habitat for the region and support populations of white-tailed deer (*Odocoileus virginianus*) and Rio Grande turkeys (*Meleagris gallopavo intermedia*). Bobwhites (*Colinus virginianus*), scaled quail (*Callipepla squamata*), mourning dove (*Zenaida macroura*), and a variety of song birds, small mammals, waterfowl, shorebirds, reptiles, and amphibians are found in this region. Large to medium-size mammals include the coyote (*Canis latrans*), ringtail (*Bassariscus astutus*), ocelot (*Felis pardalis*), and collared peccary (*Tayassu tajacu*). Typical smaller herbivores include desert cottontail (*Sylvilagus auduboni*), hispid pocket mouse (*Perognathus hispidis*), Texas kangaroo rat (*Dipodomys elator*), Texas mouse (*Peromyscus attwateri*), desert shrew (*Notiosorex crawfordi*), and rock squirrel (*Spermophilus variegates*), Bison (*Bos bison*), and black-footed ferret (*Mustela nigripes*) are historically associated with this area.

Within the proposed diversion lake area, the General Soil Map for Garza County shows Vernon-Rough broken land associations found close to the Brazos River, and Miles associations on the upland areas on either side of the river. Vernon soils are moderately deep clay loams, with slopes ranging from gentle to steep. Rough broken land is found in areas along escarpments and in areas that are generally sloping to steep in grade. The Miles series are generally found on uplands, and are composed of deep, moderately permeable deep fine sandy soils. These soils are well-drained and have a high available water capacity.

Federal and State listed Threatened and Endangered species for Garza County are summarized in Table 4.4-62. The Texas Natural Diversity Database lists two species considered Endangered or Threatened by the US Fish and Wildlife Service in Garza County; the Whooping Crane (*Gus Americana*), Black-footed Ferret (*Mustela nigripes*) and bald eagle (*Haliaeetus leucocephalus*). In addition there are four state-listed species within the county, the Arctic Peregrine Falcon (*Falco peregrinus tundrius*), Palo Duro Mouse (*Peromyscus truei Comanche*), and Texas horned lizard (*Phrynosoma cornutum*).

⁴ Blair, W.F., "The Biotic Provinces of Texas," *Tex. J. Sci.* 2:93-117, 1950.

The Whooping Crane, Arctic Peregrine Falcon and Bald Eagle are potential migrants to Garza County which may use habitats in the area during migration. A survey of the diversion lake site may be required to determine whether populations of or potential habitats used by listed species occur in the area to be affected. The Palo Duro Mouse prefers juniper and mesquite covered slopes of steep-walled canyons of the eastern edge of the Llano Estacado. The Black-footed Ferret is generally found in areas occupied by prairie dogs, usually dry, flat short grasslands including land overgrazed by cattle, and the Texas Horned Lizard generally prefers open, arid areas with sparse vegetation. Either of these two species might be found within the area of the proposed project.

There are two fish species found in the Brazos River Basin which are candidates for Federal Listing, the sharpnose shiner (*Notropis oxyrhynchus*), and the smalleye shiner (*Notropis buccula*). Both of these species require fairly shallow water in broad, open sandy channels with moderate current. Both species are listed as occurring within Garza County. There are no Ecologically Significant River and Stream Segments within the project area.⁵

The primary impacts potentially resulting from construction and operation of the proposed scalping diversion lake and pipeline would include the temporary disturbance during construction of the dam and pipelines. Little difference is anticipated in habitat value between the existing, prevalent grasslands and the permanent pipeline rights-of-way that will be maintained free of woody vegetation. Within the proposed diversion site, the extent of habitat impact will depend on the frequency and duration of inundation events. Although the reach downstream of the diversion dam is intermittent, aquatic life in the North Fork Double Mountain Fork Brazos River may be affected to the extent that flows, or perennial pools, now persist for sufficient annual periods to provide some aquatic habitat. Changes in the size and configuration of the Gobbler Creek channel may result from the increased frequency and magnitude of peak streamflows during diversion events.

⁵ Texas Parks and Wildlife. Water Resources Branch TPWD 2005.

Table 4.4-62.
Potentially Occurring species that are Rare or Federal-and state-Listed
in Garza County near the Lubbock North Fork Scalping Operation
Llano Estacado Water Planning Region

BIRDS	Federal Status	State Status
Arctic Peregrine Falcon (<i>Falco peregrinus tundrius</i>) - potential migrant	DL	T
Baird's Sparrow (<i>Ammodramus bairdii</i>) – shortgrass prairie with scattered low bushes and matted vegetation.		
Bald Eagle (<i>Haliaeetus leucocephalus</i>) - found primarily near seacoasts, rivers, and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds.	LT-PDL	T
Ferruginous Hawk (<i>Buteo regalis</i>) – open country, primarily prairies, plains, and badlands; nests in tall trees along streams or on steep slopes, cliff ledges, river-cut banks, hillsides, power line towers.		
Mountain Plover (<i>Charadrius montanus</i>) – breeding: nests on high plains or shortgrass prairie, on ground in shallow depression; nonbreeding: shortgrass plains and bare, dirt (plowed) fields; primarily insectivorous		
Snowy Plover (<i>Charadrius alexandrinus</i>) – formerly an uncommon breeder in the Panhandle; potential migrant		
Western Burrowing Owl (<i>Athene cunicularia hypugaea</i>) - open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports; nests and roosts in abandoned burrows and man-made structures, such as culverts.		
Whooping Crane (<i>Grus americana</i>) - potential migrant; winters in and around Aransas National Wildlife Refuge and migrates to Canada for breeding; only remaining natural breeding population of this species.	LE	E
FISHES		
Sharpnose Shiner (<i>Notropis oxyrinchus</i>) – endemic to Brazos River drainage; also, apparently introduced into adjacent Colorado River drainage; large turbid river, with bottom a combination of sand, gravel, and clay-mud.	C1	
Smalleye Shiner (<i>Notropis buccula</i>) - endemic to upper two-thirds of Brazos River system and its tributaries; apparently introduced into adjacent Colorado River drainage; medium to large prairie streams with sandy substrate and turbid to clear warm water; presumably eats small aquatic invertebrates.	C1	
MAMMALS		
Black-footed Ferret (<i>Mustela nigripes</i>) – considered extirpated in Texas; potential inhabitant of any prairie dog towns in the general area.	LE	E
Black-tailed Prairie Dog (<i>Cynomys ludovicianus</i>) – dry, flat, short grasslands with low, relatively sparse vegetation, including areas overgrazed by cattle; live in large family groups.		
Cave Myotis Bat (<i>Myotis velifer</i>) – roosts colonially in caves, rock crevices, old buildings, carports, under bridges, and even in abandoned Cliff Swallow (<i>Petrochelidon pyrrhonots</i>) nests; roosts in clusters of up to thousands of individuals; hibernates in limestone caves of Edwards Plateau and gypsum caves of Panhandle during winter; opportunistic insectivore.		
Palo Duro Mouse (<i>Peromyscus truei Comanche</i>) – rocky, juniper-mesquite-covered slopes of steep-walled canyons of the eastern edge of the Llano Estacado; juniper woodlands in canyon country of the panhandle; primarily nocturnal.		T
Plains Spotted Skunk (<i>Spilogale putorius interrupta</i>) – catholic in habitat; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie.		
Swift Fox (<i>Vulpes velox</i>) – restricted to current and historic shortgrass prairie; western and northern portions of Panhandle.		

Table 4.4-62 - continued

REPTILES	Federal Status	State Status
Texas Horned Lizard (<i>Phrynosoma cornutum</i>) – open, arid and semi-arid regions with sparse vegetation, which could include grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September.		T
Status Key: LE, LT-Federally Listed Endangered/Threatened, PE, PT-Federally Proposed Endangered/Threatened, E/SA, T/SA-Federally Listed Endangered/Threatened by Similarity of Appearance, C1-Federal Candidate for Listing, E,T-State Listed Endangered/Threatened, "blank"-Rare, but with no regulatory listing status		

4.4.3.8.4 Engineering and Costing

Costs for this option include the following:

- Land and right-of-way for diversion dam and pipelines;
- Construction of diversion dam;
- Pump stations and pipelines;
- Environmental impact assessments and archeological studies and recovery, and mitigation, if needed;
- State and federal permit acquisition;
- Engineering, legal, and contingency costs, at 30 percent of the construction costs for pipelines and 35 percent for other facilities; and
- Interest during construction calculated at 6 percent interest rate, and a 4 percent annual rate of return.

The total project cost for this option was estimated at \$50,055,000 (Table 4.4-63). The total annual cost, including debt service, operation and maintenance, and power cost, is estimated to be \$4,296,000. For an annual yield increase of Lake Alan Henry of 4,000 acft/yr, the cost is \$1,074 per acft, or \$3.30 per 1,000 gallons (Table 4.4-63).

4.4.3.8.5 Implementation Issues

This water supply option has been compared to the plan development criteria, as shown in Table 4.4-64, and the option meets each criterion.

The implementation of this option to supply additional water to the City of Lubbock depends upon acquisition of the necessary permits, including water rights and those required for construction, as well as other issues as summarized below:

Potential Regulatory Requirements:

- Texas Commission on Environmental Quality Water Right and Storage permits;
- U.S. Army Corps of Engineers Permits will be required for discharges of dredge or fill into wetlands and waters of the U.S. for dam construction, and other activities (Section 404 of the Clean Water Act);
- Texas Commission on Environmental Quality administered Texas Pollutant Discharge Elimination System Storm Water Pollution Prevention Plan;
- General Land Office Easement if State-owned land or water is involved; and
- Texas Parks and Wildlife Department Sand, Shell, Gravel and Marl permit if state-owned streambed is involved.

State and Federal Permits may require the following studies and plans:

- Environmental impact or assessment studies;
- Wildlife habitat mitigation plan that may require acquisition and management of additional land;
- Flow releases downstream to maintain aquatic ecosystems;
- Assessment of impacts on Federal- and State-listed endangered and threatened species; and
- Cultural resources studies to determine resources impacts and appropriate mitigation plan that may include cultural resource recovery and cataloging; requires coordination with the Texas Historical Commission.

Land Acquisition Issues:

- Land acquired for reservoir and/or mitigation plans could include market transactions and/or eminent domain;
- Additional acquisition of rights-of-way and/or easements may be required; and
- Possible relocations or removal of residences, utilities, roads, or other structures.

**Table 4.4-63.
Cost Estimate Summary for
Lubbock North Fork Scalping Operation (10,000 acft/yr)
Llano Estacado Water Planning Region
Second Quarter 2002 Prices**

<i>Item</i>	<i>Estimated Cost</i>
Capital Costs	
Dam and Reservoir (Conservation Pool: 1,000 acft; 650 acres; 2,000 ft. msl)	\$1,761,000
Intake and Pump Station (162 MGD)	16,493,000
Transmission Pipeline (6 miles; 96 in. diameter)	14,430,000
Total Capital Cost	\$32,684,000
Engineering, Legal Costs and Contingencies (30% for pipelines & 35% for all other construction costs; zero for studies)	\$10,718,000
Environmental & Archeological Studies and Mitigation	543,000
Land Acquisition and Surveying (681 acres)	705,000
Interest During Construction (3 years @ 4 percent)	5,504,000
Total Project Cost	\$50,055,000
Annual Costs	
Debt Service (Intake, Pipelines, and Pump Stations) (6 percent for 30 years)	\$3,374,000
Reservoir Debt Service (6 percent, 40 years)	241,000
Operation and Maintenance	
Intake, Pipelines, and Pump Stations	557,000
Dam and Reservoir	26,000
Pumping Energy Costs (1,632,043 kWh @ \$0.06/kWh) (Diversion of 4,000 acft/yr)	98,000
Total Annual Cost	\$4,296,000
Quantity of Water (acft/yr)	4,000
Annual Cost of Water (\$ per acft)¹	\$1,074
Annual Cost of Water (\$ per 1,000 gallons)¹	\$3.30
¹ Annual Cost of Water is for treated water at the treated water storage tanks and does not include costs associated with distribution within municipal systems.	

**Table 4.4-64.
Comparison of Lubbock North Fork Scalping Operation
to Plan Development Criteria
Llano Estacado Water Planning Region**

Impact Category	Comment(s)
A. Water Supply 1. Quantity 2. Reliability 3. Cost	1. Sufficient to meet needs 2. High reliability 3. Reasonable to High
B. Environmental factors 1. Environmental Water Needs 2. Habitat 3. Cultural Resources 4. Bays and Estuaries 5. Threatened and Endangered Species 6. Wetlands	1. Low impact 2. Low impact 3. Low impact 4. Negligible impact 5. Possible Low impact 6. Low impact
C. Impact on Other State Water Resources	• No apparent negative impacts on state water resources; no effect on navigation
D. Threats to Agriculture and Natural Resources	• Potential impact on habitat in diversion dam area
E. Equitable Comparison of Strategies Deemed Feasible	• Option is considered to meet municipal and industrial shortages
F. Requirements for Interbasin Transfers	• Not applicable