## NCTCOG Water Quality Protection Greenprint Lake Arlington Watershed and Lewisville Lake East Watershed

## **Project Report**

Prepared by The Trust for Public Land July 1, 2011











This project is being financed through grants from the U.S. Environmental Protection Agency through the Times Commission on Environmental Quality

## **NCTCOG** Water Quality Protection Greenprint

Lake Arlington Watershed and Lewisville Lake East Watershed
Summary Report

#### **Abstract**

Increasing urbanization in North Central Texas watersheds can impact the quality of water entering local streams and may jeopardize regional drinking water reservoirs. A GIS analysis technique known as "Greenprinting", developed by The Trust for Public Land (TPL), was used in selected watersheds in North Central TX to identify land areas that, if maintained as undeveloped, would offer significant benefit for water quality protection. The Lake Arlington Watershed and eastern drainage areas within the Lewisville Lake Watershed were the focus areas for this study.

The analysis framework for the project was designed by a panel of regional technical advisers, assembled by the North Central Texas Council of Governments (NCTCOG). The technical advisers considered water quality inventories across the two watersheds, current pollutant load profiles, watershed conditions, research from universities and public/private agencies, best available data, and similar water quality protection analyses. Six key landscape criteria for prioritizing areas for water quality protection were selected: land use with natural vegetated cover, proximity to streams, water erosion potential, floodplains, proximity to the reservoir, and proximity to ponds and wetlands. Maps, statistics, and tools were generated based on this analytical framework.

Stakeholders with broad representation across the two watersheds participated in workshops to guide design and emphasis for the project, to review analysis results, and to discuss implementation strategies for protection of critical areas for water quality.

### The Case for Strategic Water Quality Protection

In the 2009 publication *Conservation: An Investment That Pays* (<a href="http://www.tpl.org/publications/books-reports/park-benefits/investment-that-pays.html">http://www.tpl.org/publications/books-reports/park-benefits/investment-that-pays.html</a> ), The Trust for Public Land states:

Watershed conservation has proved to be a cost-effective alternative to expensive water-treatment technology in keeping drinking water clean.

#### The report cites the following study:

In 2002, The Trust for Public Land and the American Water Works Association conducted a study of 27 water suppliers and discovered that the more forest cover a watershed has, the fewer dollars suppliers must spend on treatment costs. According to the study, for every 10 percent increase in the source area's forest cover, treatment and chemical costs decreased approximately 20 percent, up to about 60 percent forest cover.

The National Research Council, in its 2002 publication *Riparian Areas: Functions and Strategies for Management* tells us:

Nutrient cycling, contaminant filtration, water purification, bank stabilization, stream temperature maintenance, flow stabilization, flood attenuation, and habitat preservation are some of the numerous functions carried out by riparian zones.

Protecting land in floodplains, wetlands, and riparian corridors not only provides strategic protection for water quality, it also provides opportunities for parkland, recreational open space, wildlife habitat, and scenic quality protection. In addition, avoiding development in areas with soils that exhibit high erosion potential greatly minimizes exacerbating effects of harmful runoff.

## **Water Quality Protection Greenprint - Project Overview**

North Central Texas Council of Governments (NCTCOG), through a grant provided by the U.S. EPA through TCEQ, partnered with the Trust for Public Land (TPL) in 2010-2011 to "Greenprint" two clusters of subwatersheds (HUC12's) for North Texas. This work is part of a larger NCTCOG effort directed to the protection of the region's water supply lakes. (http://www.nctcog.org/envir/SEEscg/REF/index.asp)

The objective of the Water Quality Greenprint was to provide a strategic plan for water quality protection in selected watersheds, by identifying land conservation priorities and determining areas most vulnerable to development. Key milestones in the project process included:

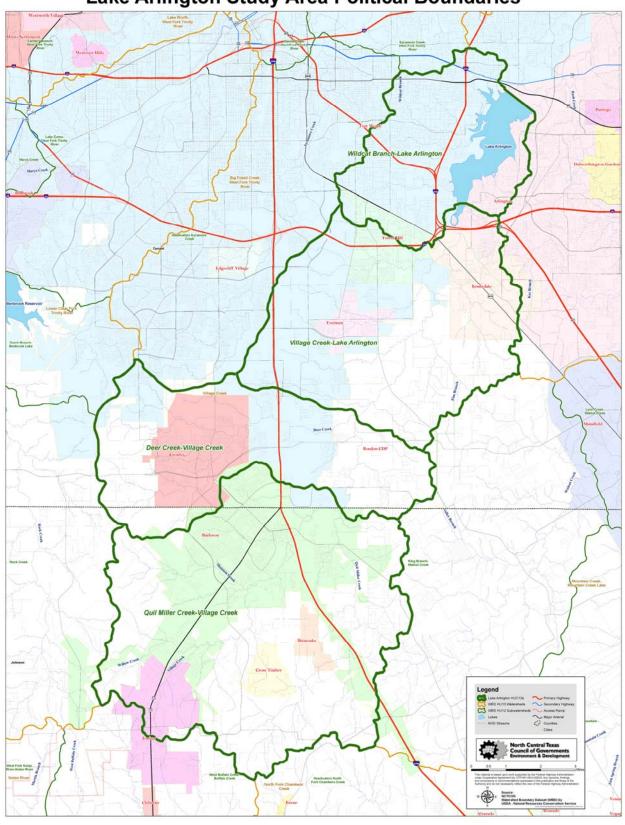
- Selection of watersheds for Greenprinting
- Regional community engagement
- Design and implementation of the analysis
- Location-specific profiling and overlay comparison
- Training on voluntary land conservation tools and strategies

#### **Selection of Watersheds for Greenprinting**

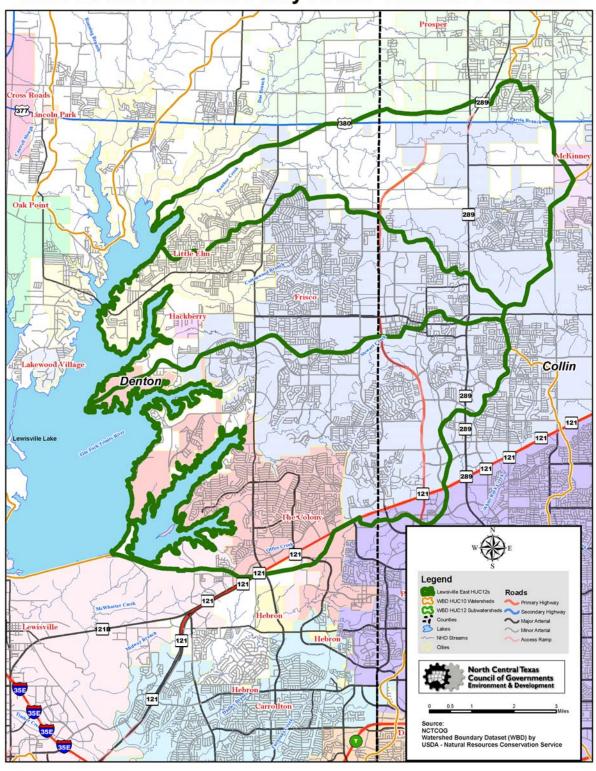
Nine clusters of subwatersheds to seven different water supply lakes in the North Central Texas region were considered for focal areas in the Greenprinting project. A structured screening process was used to identify watersheds best suited for validating the Greenprinting process in this region. Factors considered in the screening process included: subwatershed size, projected growth, jurisdictional makeup, immediate adjacency to a reservoir, land use profile, known water quality issues, extent of the floodplain, data availability, local leadership, and complimentary protection opportunities. Based on these criteria, NCTCOG's Water Resources Council selected the following subwatersheds as pilots for Greenprinting:

- Lake Arlington Quil Miller Creek subwatershed, Deer Creek subwatershed, Village Creek subwatershed, Wildcat Branch subwatershed
- Lewisville Lake East Stewart Creek subwatershed, Cottonwood Creek subwatershed, Panther Creek subwatershed

## Lake Arlington Study Area Political Boundaries



## Lake Lewisville East Study Area Political Boundaries



## **Regional Community Engagement**

A strategic plan for water quality protection can only be successful if local constituents understand the recommendations, and have the tools and capacity to begin implementation. The Water Quality Greenprint project included a number of opportunities for stakeholders in the Lake Arlington Watershed and the Lewisville Lake East Watershed to participate in the process. Participants in each watershed community included city, county, and special district staff, as well as large businesses, property owners, and interested individuals. Stakeholders were given the opportunity to guide design and emphasis for the project, to review analysis results, and to discuss implementation strategies for watershed protection. Because project boundaries were defined by watershed drainage areas rather than jurisdictional boundaries, the process provided a unique context for local communities and organizations to come together to collaborate on regional issues.

Three stakeholder workshops were conducted in each watershed study area:

## Workshop 1: Project Kickoff and Definition

In October 2010, an initial workshop was held for Lake Arlington Watershed stakeholders, and a similar workshop was conducted for Lewisville Lake East stakeholders. The purpose of these meetings was to introduce the Greenprinting project to the community, describe the baseline approach that would be used for the analysis, and ask participants for guidance on design and emphasis for the project.

At these meetings, participants discussed the complementary relationship of the Greenprint analysis as a follow-on to the Lake Arlington Master Plan in the Lake Arlington Watershed and the *Water Quality Corridor Model (WQCM)* developed by University of North Texas in the Lewisville Lake watershed. Participants encouraged consideration of local master plans and pollutant load studies. It was also recommended that the Greenprint analysis incorporate factors such as the location of wells and septic systems, natural gas drilling, local environmental assessments, and regional growth projections.

#### Workshop 2: Greenprint Draft Maps and Results Review

In April 2011, stakeholders were reconvened in each of the watershed study areas to review draft results of the Greenprint analysis. At these meetings, participants commented on the usefulness of the Greenprint to help make the case for other land protection initiatives such as shoreline protection, floodplain restrictions, and trails systems. Landowners attending the Lewisville Lake East meeting prompted discussion about potential impacts of the prioritization maps on private property. There was interest from all stakeholders in better understanding incentives and alternatives for land protection.

## Workshop 3: Training on Voluntary Land Conservation Tools

In June 2011, local government staff and land trust partners were invited to attend a training workshop on voluntary land conservation tools that can be employed to implement the Lake Arlington Watershed and Lewisville Lake East Watershed Greenprint. Guidance on mapping tools, funding options, strategies, and incentives for land conservation in Greenprint priority areas was provided.

### **Design and Implementation of the Greenprint Analysis**

Greenprinting is a unique resource analysis process developed by The Trust for Public Land (TPL). Greenprinting provides a systematic approach for identifying areas that offer the highest conservation benefit for water quality protection and other regional resource priorities. It uses GIS to make informed, strategic decisions about land conservation and resource protection priorities. The goal of the Greenprinting pilots for North Texas was to protect water quality through land conservation and strategic development considerations.

The NCTCOG Regional Ecosystem Forum (REF) provided the technical oversight for the project to ensure best available data and defensible science were used for the Greenprint analysis. Participating organizations and data providers included:

Alan Plummer Associates Bowman-Melton Associates

City of Arlington City of Fort Worth City of Denton City of Plano Freese and Nichols Halff Associates, Inc

Jacobs Engineering Group, Inc

Malcolm Pirnie

Michael Baker Corporation North Central Texas Council of

Governments

Tarrant Coalition for Environ.

Awareness

Tarrant Regional Water District Texas AgriLife Extension Service Texas Commission on Environmental

**Ouality** 

**Texas Forest Service** 

Texas Parks and Wildlife Department

Texas Railroad Commission
Texas Water Development Board

Trinity River Authority
University of North Texas
University of Texas at Arlington
Upper Trinity Regional Water District

U.S. Army Corps of Engineers

USDA Natural Resources Conservation

Service

U.S. Environmental Protection Agency

U.S. Fish and Wildlife Service U.S. Geological Survey

The Greenprint process requires the identification of measureable, mappable criteria that characterize resource goals. For the Greenprint analysis in Lake Arlington and Lewisville Lake East watersheds, technical advisers listed above assisted in defining metrics specific to water quality protection.

The REF met 4 times over a 7-month period (October 29, 2010; December 15, 2010; February 23, 2011 via conference call; and April 11, 2011). These technical advisors began by considering baseline conditions in the watershed such as the 2010 Texas Water Quality Inventory, current pollutant load profiles, watershed current conditions, and local studies and research. There are no impaired water segments in the two project areas; however, there are some water quality concerns based on screening levels for Lake Arlington (chlorophyll-a), Lewisville Lake (ammonia, phosphorus, and nitrate), and Stewart Creek (ammonia, phosphorus, and nitrate). Pollutant load profiling results were reviewed from Texas AgriLife's 2010 SWAT analysis in the Trinity River Basin for the Lewisville Lake East watershed and Malcolm Pirnie's 2010 PLOAD analysis for the Lake Arlington Master Plan. Current conditions in the watershed reviewed by technical advisers included current population and housing density, existing land use, and protected land patterns.

Baseline criteria were then adapted from the Watershed Management Priority Index (WMPI) developed by University of Massachusetts Amherst, the USDA Forest Service, and the Trust for Public Land (<a href="http://www.forest-to-faucet.org/pdf/WFMIS-overview.pdf">http://www.forest-to-faucet.org/pdf/WFMIS-overview.pdf</a>). Technical advisors reviewed this framework within the context of watershed reference conditions and available data to establish the following criteria for the Greenprint analysis framework:

- Landuse Natural Vegetated Cover
- Proximity to Streams
- Water Erosion Potential
- Floodplains
- Proximity to the Reservoir
- Proximity to Ponds and Wetlands

The following table summarizes the data sources and methodology used to translate each of the above criteria into a priorities map. Criteria maps are expressed in terms of conservation value, on a scale of 0-5, with a score of 5 representing areas with highest priority for water quality protection. Special consideration was given to the interpretation of each data set with respect to relative conservation value of landscape characteristics.

Criterion	Data	Source	Methodology
Landuse	Ecological Systems Landcover, 2007	TPWD	The more native the vegetative cover (e.g. forested riparian zones), the greater the need for protection.  5 = forested riparian and wetlands, grasslands, water 4 = shrub/brush 3 = barren, native invasive 2 = crop/pasture 0 = urban, residential
Proximity to Streams	High-resolution streams, 2010	USGS NHD	The closer to the stream the higher the need for protection. $5 = 0\text{-}100 \text{ feet}$ $4 = 100\text{-}200$ $3 = 200\text{-}300$ $0 = > 300$
Proximity to Ponds and Wetlands	Ponds, 2010 Wetlands, 2010	USGS NHD TPWD	The closer to the pond or wetland the higher the need for protection. $5 = 0\text{-}100 \text{ feet}$ $4 = 100\text{-}200$ $3 = 200\text{-}300$ $0 = > 300$
Water Erosion Potential	Soils, 2010	SURGO	The Water Erosion Potential (TX) is a qualitative interpretation which evaluates a soil's potential to erode through the action of water. The potential assumes that the area being affected is bare and smooth and is exposed to the water erosion processes. The soil water erosion potential provides the user with a qualitative rating of the vulnerability of the soil to the action of water and is not a measure of actual soil loss from erosion.  The water erosion potential of the soil is based on those soil properties or a combination of soil properties and landscape characteristics that contribute to runoff and have low resistance to water erosion processes. Those soil features that contribute to water erosivity are surface-layer particle size, saturated hydraulic conductivity, and high runoff landscapes. Conversely, soil features that resist the erosive affect of water are high surface-layer organic matter content and low runoff landscapes. The water erosion potential interpretation is a function of the interaction between those soil features that make the soil susceptible to water erosion and those that resist the water erosion process.  5 = Very high erosion potential 4 = High erosion potential 3 = Moderate erosion potential

Floodplains	100 yr. floodplain,	FEMA (MSDIS)	Floodplain forest is, by definition, important with regards to quantity, quality, and timing of flow and therefore have a higher need for protection.  5 = 100 year floodplain
Proximity to the Reservoir	Reservoirs (Lake Arlington and Lake Lewisville)	USGS NHD	The closer to the reservoir the higher the need for protection. $5 = 0.600 \text{ feet}$ $4 = 600-2000$ $3 = 2000-5000$ $0 = >5000$

A composite priorities map was then created for water quality protection by assigning relative weights to each criterion above. Technical advisers were responsible for determining the relative weights, based on their specific expertise related to the methodology and datasets. Rationale for assigning a higher or lower weight to a specific criterion included:

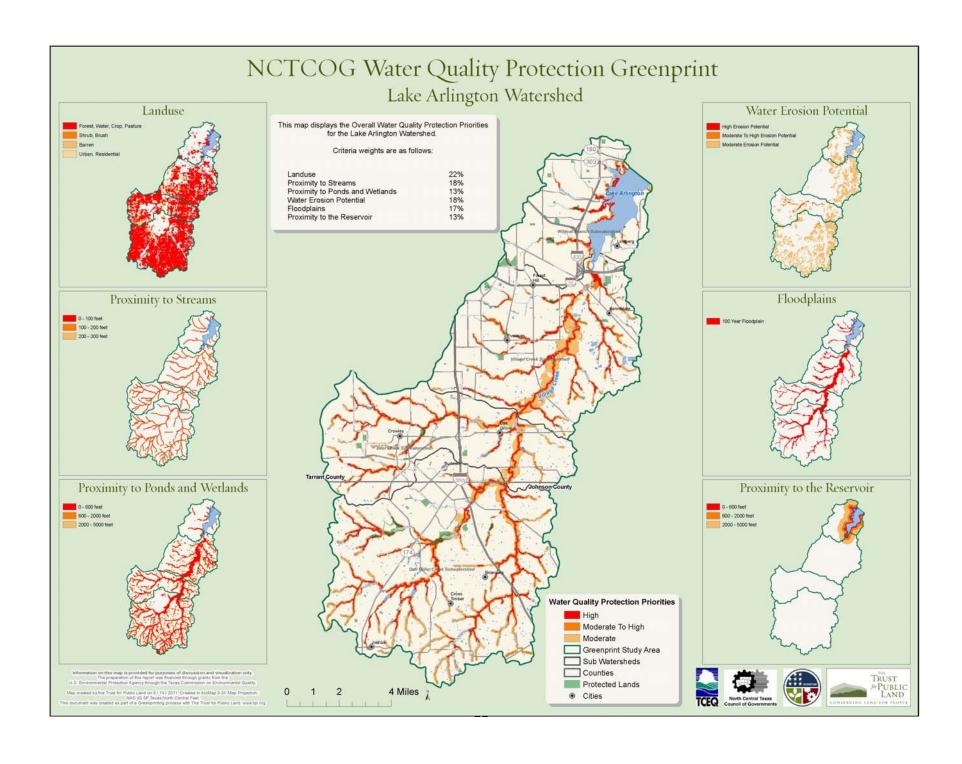
- Importance of that criterion for water quality via land protection.
- Quality or currency of the data used
- Comprehensiveness of the data and analysis methodology
- Existing regulatory protection

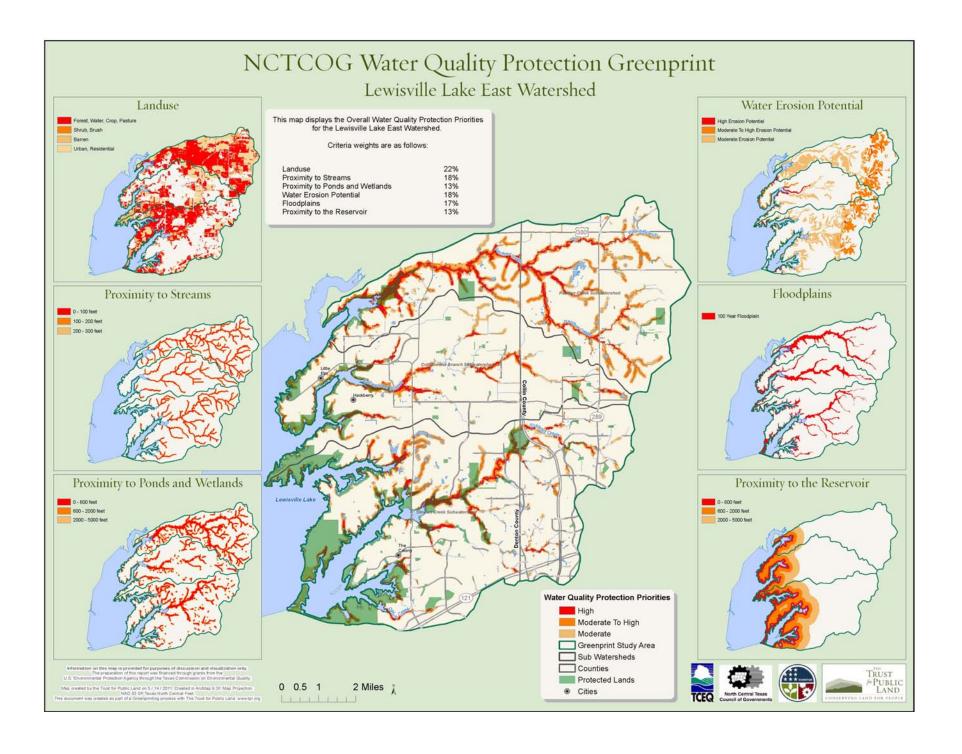
The following relative weighting strategy was recommended, emphasizing the relative importance of natural vegetated land cover for overall water quality protection:

•	Landuse - Natural Vegetated Cover	22%
•	Proximity to Streams	18%
•	Water Erosion Potential	18%
•	Floodplains	17%
•	Proximity to the Reservoir	13%
•	Proximity to Ponds and Wetlands	13%

## **Water Quality Protection Priority Maps**

The following maps depict water quality protection priorities resulting from the Greenprint analysis. Priorities are shown in shades of red, with darker shades depicting areas of highest priority for water quality protection.





## Water Quality Protection Statistics by Watershed

The following reports present a statistical analysis of priority acres identified within each watershed study area, as well as within the subwatersheds that comprise each study area. The reports identify the extent of priority areas, and the extent of priority areas that currently have no permanent land protection status.

## **Lake Arlington Watershed Statistics**

TRUST   Fr							
	Criteria	Priority Acres*	Percent of Study Area	UnProtected Priority Acres	Percent of Study Area		
Overall Greenprint Results							
	Water Quality Protection Priorities	15,253	17.1%	14,865	16.7%		
Water Quality Protection Criteria							
-	Landuse - Natural Vegetated Cover	52,572	58.9%	51,874	58.2%		
	Proximity to Streams	17,057	19.1%	16,647	18.7%		
	Proximity to Ponds and Wetlands	28,065	31.5%	27,539	30.9%		
	Water Erosion Potential	23,355	26.2%	23,252	26.1%		
	Floodplains	12,816	14.4%	12,435	13.9%		
	Proximity to the Reservoir	8,864	9.9%	8,710	9.8%		
riority Acres reflects a score of "3" or greater on a scale of 0- Protected Acres is based on Protected Land obtained from N		<b>⊗</b> 2011	The Trust for F	Public Land. All Rig	hts Reserve		

## **Subwatersheds within Lake Arlington Watershed**

TRUST  Wildcat Branch Subwatershed  June 17, 2011  Protection Statistics  Subwatershed Acreage: 12,837  Protected Land Acreage: 308**								
	Criteria	Priority Acres*	Percent of Area	UnProtected Priority Acres	Percent of Area			
Overall Greenprint Results								
	Water Quality Protection Priorities	1,237	9.6%	1,185	9.2%			
Water Quality Protection Criteria								
_	Landuse - Natural Vegetated Cover	1,734	13.5%	1,564	12.2%			
	Proximity to Streams	1,964	15.3%	1,898	14.8%			
	Proximity to Ponds and Wetlands	1,429	11.1%	1,374	10.7%			
	Water Erosion Potential	3,309	25.8%	3,274	25.5%			
	Floodplains	2,786	21.7%	2,723	21.2%			
	Proximity to the Reservoir	7,635	59.5%	7,549	58.8%			
Acres reflects a score of "3" or greater on a scale of 0-5 ted Acres is based on Protected Land obtained from No		<b>⊗</b> 2011	The Trust for F	 Public Land. All Rig	hts Reserve			

TRUST for PUBLIC LAND	Village Creek Subwatershed June 17, 2011 Protection Statistics Subwatershed Acreage: 23,238 Protected Land Acreage: 196**				
	Criteria	Priority Acres*	Percent of Area	UnProtected Priority Acres	Percent of Area
Overall Greenprint Results					
	Water Quality Protection Priorities	4,244	18.3%	4,197	18.1%
Water Quality Protection Criteria					
	Landuse - Natural Vegetated Cover	12,991	55.9%	12,864	55.4%
	Proximity to Streams	4,484	19.3%	4,429	19.1%
	Proximity to Ponds and Wetlands	7,634	32.8%	7,527	32.4%
	Water Erosion Potential	5,606	24.1%	5,579	24.0%
	Floodplains	3,885	16.7%	3,849	16.6%
	Proximity to the Reservoir	1,229	5.3%	1,161	5.0%
Priority Acres reflects a score of "3" or greater on a scale of 0-5 Protected Acres is based on Protected Land obtained from No		<b>⊗</b> 2011	The Trust for F	Public Land. All Rigi	hts Reserved

TRUST For PUBLIC LAND	Deer Creek Subwatershed  June 17, 2011  Protection Statistics Subwatershed Acreage: 18,204 Protected Land Acreage: 131**				
	Criteria	Priority Acres*	Percent of Area	UnProtected Priority Acres	Percent of Area
Overall Greenprint Results					
	Water Quality Protection Priorities	3,040	16.7%	3,001	16.5%
Water Quality Protection Criteria					
	Landuse - Natural Vegetated Cover	11,775	64.7%	11,689	64.2%
	Proximity to Streams	3,344	18.4%	3,300	18.1%
	Proximity to Ponds and Wetlands	5,581	30.7%	5,519	30.3%
	Water Erosion Potential	2,712	14.9%	2,698	14.8%
	Floodplains	2,131	11.7%	2,097	11.5%
	Proximity to the Reservoir	0	0.0%	0	0.0%
ority Acres reflects a score of "3" or greater on a scale of 0-1 otected Acres is based on Protected Land obtained from Ni		⊗ 2011	The Trust for F	 Public Land. All Rig	l hts Reserve

TRUST for PUBLIC LAND	Quil Miller Subwatershed June 17, 2011 Protection Statistics Subwatershed Acreage: 34,905 Protected Land Acreage: 421**				
	Criteria	Priority Acres*	Percent of Area	UnProtected Priority Acres	Percent of Area
Overall Greenprint Results					
	Water Quality Protection Priorities	6,732	19.3%	6,482	18.6%
Water Quality Protection Criteria					
	Landuse - Natural Vegetated Cover	26,072	74.7%	25,757	73.8%
	Proximity to Streams	7,264	20.8%	7,020	20.1%
	Proximity to Ponds and Wetlands	13,422	38.5%	13,119	37.6%
	Water Erosion Potential	11,729	33.6%	11,701	33.5%
	Floodplains	4,014	11.5%	3,766	10.8%
	Proximity to the Reservoir	0	0.0%	0	0.0%
Priority Acres reflects a score of "3" or greater on a scale of 0-1 Protected Acres is based on Protected Land obtained from No		⊗ 2011	 The Trust for F	ublic Land. All Rig	hts Reserve

## Lewisville Lake East Watershed Statistics

TRUST PUBLIC LAND  Lewisville Lake East Water Quality Protection Greenprint  June 17, 2011 Protection Statistics Study Area Acreage: 51,746 Protected Land Acreage: 5,580**							
	Criteria	Priority Acres*	Percent of Study Area		Percent of Study Area		
Overall Greenprint Results							
	Water Quality Protection Priorities	9,390	18.1%	6,811	13.2%		
Water Quality Protection Criteria							
•	Landuse - Natural Vegetated Cover	22,047	42.6%	18,039	34.9%		
	Proximity to Streams	11,107	21.5%	9,777	18.9%		
	Proximity to Ponds and Wetlands	14,499	28.0%	11,938	23.1%		
	Water Erosion Potential	14,179	27.4%	12,057	23.3%		
	Floodplains	7,141	13.8%	4,758	9.2%		
	Proximity to the Reservoir	16,037	31.0%	11,686	22.6%		
riority Acres reflects a score of "3" or greater on a scale of 0-5 Protected Acres is based on Protected Land obtained from NA		<b>⊕</b> 2011 °	The Trust for F	Public Land. All Rigi	hts Reserve		

## Subwatersheds within Lewisville Lake East Watershed

Trust for Public Land	Cottenwood Branch Subwatershed June 17, 2011 Protection Statistics Subwatershed Acreage: 14,228 Protected Land Acreage: 1,064**				
	Criteria	Priority Acres*	Percent of Area	UnProtected Priority Acres	Percent of Area
Overall Greenprint Results					
	Water Quality Protection Priorities	1,953	13.7%	1,364	9.6%
Water Quality Protection Criteria					
	Landuse - Natural Vegetated Cover	4,482	31.5%	3,768	26.5%
	Proximity to Streams	2,372	16.7%	2,113	14.8%
	Proximity to Ponds and Wetlands	3,029	21.3%	2,445	17.2%
	Water Erosion Potential	2,237	15.7%	1,645	11.6%
	Floodplains	2,115	14.9%	1,584	11.1%
	Proximity to the Reservoir	4,526	31.8%	3,709	26.1%
y Acres reflects a score of "3" or greater on a scale of 0- cted Acres is based on Protected Land obtained from N		⊗ 2011	 The Trust for F	ublic Land. All Rig	hts Reserved

TRUST  Jone 17, 2011  PUBLIC LAND  Protection Statistics Subwatershed Acreage: 15,383 Protected Land Acreage: 631**								
	Criteria	Priority Acres*	Percent of Area	UnProtected Priority Acres	Percent of Area			
Overall Greenprint Re	sults							
	Water Quality Protection Priorities	3,823	24.9%	3,456	22.5%			
Water Quality Protection Crit	teria							
	Landuse - Natural Vegetated Cover	9,007	58.5%	8,551	55.6%			
	Proximity to Streams	4,542	29.5%	4,282	27.8%			
	Proximity to Ponds and Wetlands	5,855	38.1%	5,470	35.6%			
	Water Erosion Potential	5,646	36.7%	5,374	34.9%			
	Floodplains	1,932	12.6%	1,619	10.5%			
	Proximity to the Reservoir	2,028	13.2%	1,686	11.0%			
ority Acres reflects a score of "3" or greater on a scal otected Acres is based on Protected Land obtained f		<b>⊗</b> 2011	The Trust for F	Public Land. All Rig	hts Reserved			

Trust for Public Land	Stewart Creek Subwatershed June 17, 2011 Protection Statistics Subwatershed Acreage: 22,135 Protected Land Acreage: 3,249**				
	Criteria	Priority Acres*	Percent of Area	UnProtected Priority Acres	Percen of Area
Overall Greenprint Results					
	Water Quality Protection Priorities	3,615	16.3%	2,414	10.9%
Water Quality Protection Criteria					
	Landuse - Natural Vegetated Cover	8,558	38.7%	6,249	28.2%
	Proximity to Streams	4,193	18.9%	3,527	15.9%
	Proximity to Ponds and Wetlands	5,615	25.4%	4,397	19.9%
	Water Erosion Potential	6,296	28.4%	5,239	23.7%
	Floodplains	3,094	14.0%	1,971	8.9%
	Proximity to the Reservoir	9,483	42.8%	6,928	31.3%
riority Acres reflects a score of "3" or greater on a scale of 0-4 Protected Acres is based on Protected Land obtained from Ne		<b>⊗</b> 2011 '	The Trust for F	Public Land. All Rig	hts Reserve

## **Overlay Comparisons**

Contextual overlay maps can help inform conservation priorities. Interactive mapping tools included with the Greenprint provide flexible exploration of overlay data with respect to identified priority locations for water quality protection. An extensive set of overlay data was collected as part of the Greenprint process:

Data Layer	Data Source	
100 Year Floodplain	NCTCOG, FEMA	
2005 Landuse	NCTCOG	
2007 TPWD Ecological Systems Landcover	TPWD	
City Boundaries	NCTCOG	
County Boundaries	NCTCOG	
Fort Worth WD boundary	NCTCOG	
Gas and Oil Wells	Texas Railroad Commission	
LAMP Study Area	Malcom Pirnie	
ke Arlington Future Landuse NCTCOG		
Lake Lewisville Future Landuse	NCTCOG	
Lakes and Ponds	USGS NHD	
Nitrogen Load Profile	Malcom Pirnie, Texas Agrilife	
NRCS Dams	NRCS	
NTMWD boundary	NCTCOG	
Parcels:	NCTCOG	
Collin County		
Denton County		
Johnson County		
Tarrant Couny		
Phosphorus Load Profile	Malcom Pirnie, Texas Agrilife	
Protected Lands	NCTCOG	

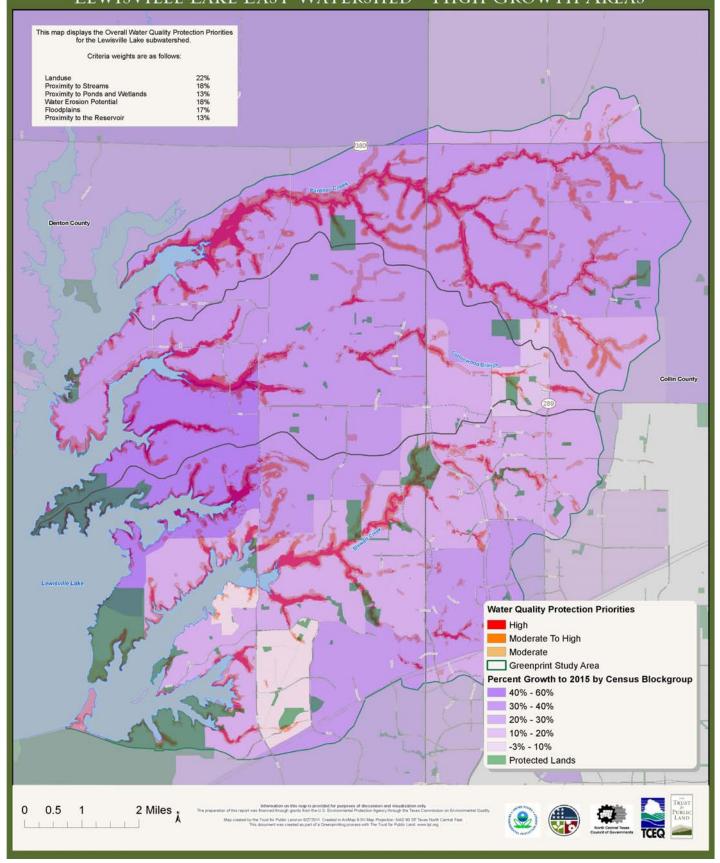
Population Density (2010 projected)	ESRI
Regional Growth Projections	NCTCOG??
Reservoirs	TWDB
Sewer Service Areas	NCTCOG, TCEQ
Subwatersheds	USGS NHD
Streams	USGS NHD
Suspended Solids Profile	Malcom Pirnie, Texas Agrilife
TCEQ Waterbodies of Concern	TCEQ
Wastewater Facilities	TCEQ
Waterbodies of Concern:	TCEQ
Village Creek (chlorophyll-a)	
Stewart Creek (ammonia, phosphorus, nitrate)	
Lake Arlington (chlorophyll-a)	
Lake Lewisville (ammonia, phosphorus, nitrate)	
Wetlands (Derived from 2007 Ecological Systems	TPWD
Landcover)	
Woodbine Outcrop (recharge)	City of Denton Water Utilities

The following sample maps illustrate the value of considering overlay data as context for water quality protection priorities, such as evaluating:

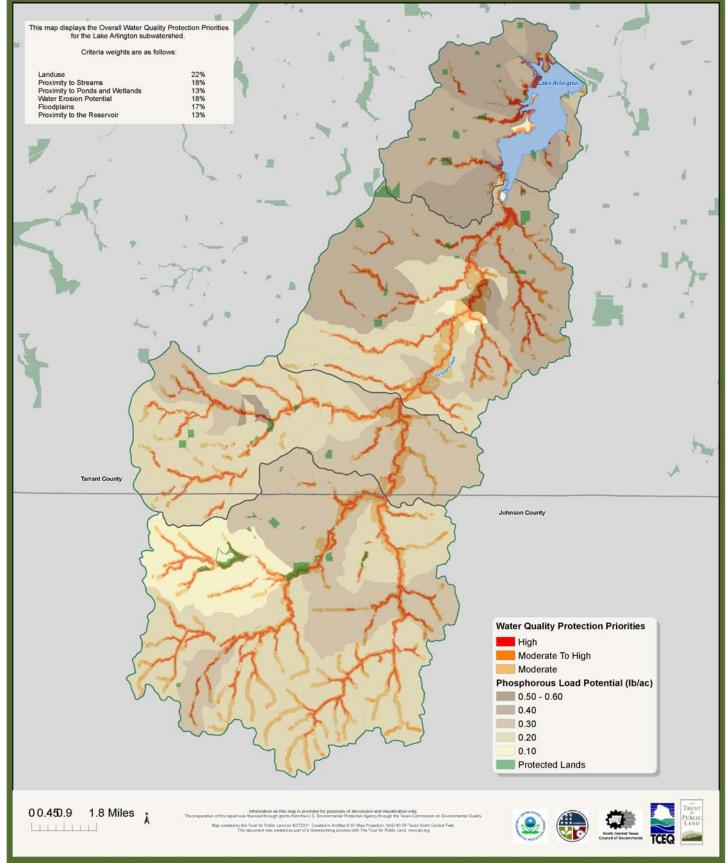
- urgency based on projected growth for the region, and,
- <u>vulnerability</u> by showing phosphorus load potential as identified by the Lake Arlington Master Plan PLOAD analysis and the Texas AgriLife SWAT analysis in the Lake Arlington and Lewisville Lake East watersheds respectively.

## NCTCOG Water Quality Protection Greenprint Lake Arlington Watershed - High Growth Areas This map displays the Overall Water Quality Protection Priorities for the Lake Arlington subwatershed. Criteria weights are as follows: 22% 18% 13% 18% 17% 13% Proximity to Streams Proximity to Ponds and Wetlands Water Erosion Potential Floodplains Proximity to the Reservoir **Tarrant County** Johnson County Water Quality Protection Priorities High Moderate To High Moderate Percent Growth to 2015 by Census Blockgroup 34.02% - 59.40% 20.82% - 34.01% 10.85% - 20.81% 4.32% - 10.84% -2.86% - 4.31% Protected Lands 0 0.450.9 1.8 Miles Å Roth Carried Texas Council of General Texas TIGUST FURITIC LAND TOTAL TOT Map created by the Trust for Public Land on 6/272011. Cleated in ArcMap 9.36 Map Projection: NAD 83 SP Texas North Central Feet. This document view created as part of a Greenpileting process with The Trust for Public Land, www.lpl.org.

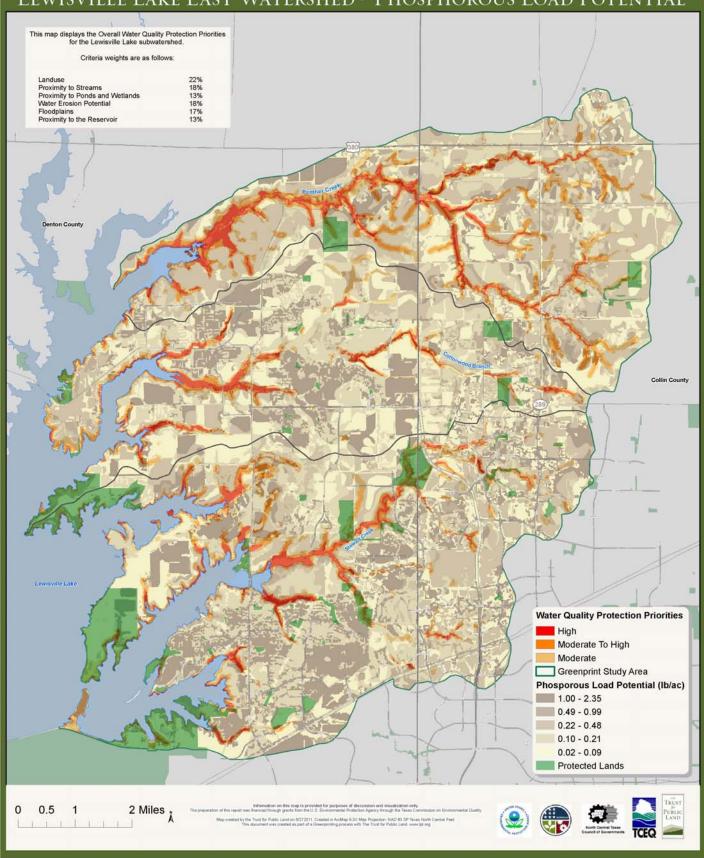
## NCTCOG WATER QUALITY PROTECTION GREENPRINT Lewisville Lake East Watershed - High Growth Areas



## NCTCOG WATER QUALITY PROTECTION GREENPRINT Lake Arlington Watershed - Phosphorous Load Potential



## NCTCOG Water Quality Protection Greenprint Lewisville Lake East Watershed - Phosphorous Load Potential



### **Training on Voluntary Land Conservation Tools**

As a final step in the Greenprinting process, local government staff and land trust partners were invited to attend a training workshop on voluntary land conservation tools that can be employed to implement the Lake Arlington Watershed and Lewisville Lake East Watershed Greenprint. Guidance on funding options and strategies for land conservation in Greenprint priority areas was provided.

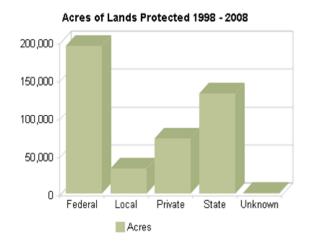
## **Funding Options**

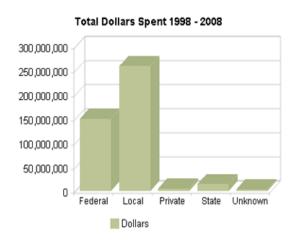
TPL's Conservation Finance Team assists communities in identifying and securing public financing. TPL is the leading source in the nation for research, education and policy information for conservation funding. Helping communities to secure dedicated conservation funding is often the tipping point that can lead to deeper ecological responsibility, including more prudent land use, better managed growth, and the increased protection of natural landscapes.

It is rare that any conservation project can be funded through a single source. TPL encourages an approach known as the "funding quilt" to describe the diverse set of reliable, long-term funding sources (local, state, federal, and private) that must come together to achieve strategic land conservation objectives. Every project's funding quilt is unique and evolves over time due to changing fiscal and political fortunes.

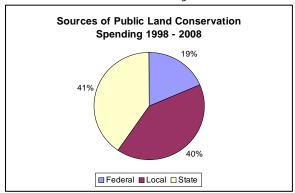
The following charts were created based on information available online through TPL's Conservation Almanac (<a href="www.conservationalmanac.org">www.conservationalmanac.org</a>). These charts depict a broad view of the funding quilt at both a national and state level for the state of Texas. Local spending results only represent County investments, and do not currently include spending data from cities and towns.

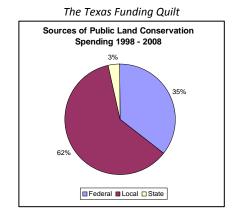
#### Texas Land Conservation Activity





The National Funding Quilt





**Appendix A** provides a summary report prepared by TPL's Conservation Funding Team, that describes funding options and opportunities that might be considered when constructing a funding quilt for protection of water quality in North Central Texas based on Greenprint priority areas.

## Strategies and Incentives for Land Protection

TPL's mission is to help conserve land for parks, greenways, recreation areas, watersheds and wilderness. To date, TPL has helped protect some 4,200 properties, totaling almost three million acres in 47 states. In Texas, TPL has helped protect 121 properties comprising almost 36,705 acres.

In the Greenprint Training Workshop for local government staff and land trusts, TPL described opportunities, constraints, and considerations for Fee Simple land protection vs. Conservation Easement land protection.

**Appendix B** provides a summary of this training discussion.

## Appendix A

CONSERVATION FINANCE FEASIBILITY RESEARCH, JUNE 2011

# NORTH CENTRAL TEXAS CONSERVATION OPTIONS





THE TRUST for PUBLIC LAND

CONSERVING LAND FOR PEOPLE



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## INTRODUCTION

The Trust for Public Land ("TPL") is a national nonprofit land conservation organization working to protect land for human enjoyment and well-being. TPL helps conserve land for parks, greenways, recreation areas, watersheds and wilderness. To date, TPL has helped protect some 4,200 properties, totaling almost three million acres in 47 states. In Texas, TPL has helped protect 121 properties comprising almost 36,705 acres.

To help public agencies or land trusts acquire land, TPL's Conservation Finance program assists communities in identifying and securing public financing. TPL offers technical assistance to elected officials, public agencies and community groups to design, pass and implement public funding measures that reflect popular priorities. Helping communities to secure dedicated conservation funding is often the tipping point that can lead to deeper ecological responsibility, including more prudent land use, better managed growth, and the increased protection of natural landscapes. To stimulate engagement across jurisdictions and constituencies, TPL has historically found effective partnerships among a broad spectrum of players from the environmental left to the fiscally conservative right and recognizes that it is important to consistently explore new tools, such as economic benefits research, that can encourage and strengthen the willpower of the voters to seek dedicated conservation funds. This focused, up-front investment pays dividends over the long-term in voter-supported funding that is dedicated to conservation. Since 1996, TPL has been involved in more than 400 successful ballot measures and twenty successful legislative campaigns that have created more than \$33 billion in new funding for land conservation. Voters have approved 82 percent of the ballot measures that have been supported by TPL.

## 2011 TEXAS WATER STEWARDSHIP AMENDMENT <sup>1</sup>

The 82nd session of the Texas Legislature began on January 11, 2011. The Legislature meets every two years for 140 days to pass the State's biennial budget and consider changes to Texas state law. On May 25, 2011, a proposed constitutional amendment was added to the November 2011 statewide ballot. SB 449 and SJR 16 and their companions would create a water stewardship valuation option in statute similar to the wildlife management valuation option. It will give landowners property tax reductions for those who set aside open space land for water conservation. This will help protect valuable open space land in Texas and keep family lands intact while also protecting water resources and advancing the State Water Plan.

The Water Stewardship valuation option that would be added to statute would include the following criteria (with the idea being that a landowner picks 3 to qualify):

- A. erosion control;
- B. habitat stewardship benefiting water quality or conservation;
- C. restoration of native aquatic and riparian animal and plant species;
- D. reductions in domestic and livestock water uses;
- E. riparian and wetland habitat and buffer restoration and protection;
- F. allowance of groundwater and surface water monitoring for data collection purposes in accordance with state water planning or groundwater management area planning;
- G. invasive aquatic plant and animal control
- H. donation of water rights to the Texas Water Trust; and
- I. amendment of a water right to dedicate all or part of the right to environmental purposes
- The proposed ballot language would read as follows:

"The constitutional amendment providing for the appraisal for ad valorem tax purposes of open-space land devoted to water stewardship purposes on the basis of its productive capacity."

Supporters of this bipartisan effort said the tax breaks would encourage water conservation without having state government spend more money. It is estimated that 90 percent of Texas water flows

<sup>&</sup>lt;sup>1</sup> http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/texas/water-stewardship-updated.pdf

through or under privately owned land. Opponents of the bill feel Texas land owners already enjoy several tax breaks. <sup>2</sup>

 $<sup>{}^{2}\,\</sup>underline{\text{http://www.statesman.com/news/texas/texas-house-approves-water-conservation-bill-1489633.html?printArticle=y}$ 

## EXISTING CONSERVATION FUNDING

## Local Conservation Funding Measures

The jurisdictions in, and around, the Lewisville Lake East and Lake Arlington Watersheds have a strong history of passing conservation funding and many had or continue to have a dedicated funding mechanism for open space acquisition including watershed protection. Voters in Collin County have been especially supportive of conservation funding as the county passed a \$17 million bond in 2007 and funds are currently being made available through 2015 for open space projects in the county.<sup>3</sup> Most

Successful Conservation Measures in Collin, Denton, Johnson, and Tarrant Counties					
Jurisdiction Name	Date	Measure	<b>Conservation Funds Approved</b>	County	% Yes
Allen	6/12/1999	Bond	\$22,000,000	Collin County	71%
Allen	5/12/2007	Bond	\$8,000,000	Collin County	71%
Arlington	5/4/1991	Bond	\$10,000,000	Tarrant County	55%
Arlington	1/18/1997	Bond	\$7,991,019	Tarrant County	81%
Arlington	5/7/2005	Bond	\$3,375,000	Tarrant County	59%
Arlington	11/4/2008	Bond	\$2,250,000	Tarrant County	58%
Collin County	2/20/1999	Bond	\$2,082,820	Collin County	75%
Collin County	11/4/2003	Bond	\$5,500,000	Collin County	63%
Collin County	11/6/2007	Bond	\$17,000,000	Collin County	68%
Corinth	9/13/1997	Bond	\$1,710,583	Denton County	57%
Denton	2/5/2005	Bond	\$7,000,000	Denton County	54%
Frisco	9/14/2002	Bond	\$5,200,000	Collin County	81%
Frisco	5/13/2006	Bond	\$22,500,000	Collin County	72%
Grapevine	3/28/1992	Bond	\$200,000	Tarrant County	63%
Highland Village	11/2/2004	Sales tax	\$3,750,000	Denton County	61%
McKinney	2/20/1999	Bond	\$561,221	Collin County	82%
McKinney	5/8/2010	Bond	\$6,000,000	Collin County	72%
Murphy	11/4/2008	Bond	\$1,900,000	Collin County	65%
Plano	5/6/1995	Bond	\$13,045,000	Collin County	58%
Plano	5/2/1998	Bond	\$8,010,018	Collin County	67%
Plano	5/7/2005	Bond	\$37,600,000	Collin County	73%
Plano	5/9/2009	Bond	\$15,200,000	Collin County	59%

<sup>&</sup>lt;sup>3</sup> http://www.courier-gazette.com/articles/2011/05/28/news\_update/394.txt

recently, the City of McKinney passed another bond measure, \$6 million of which is dedicated for open space projects. A complete list of conservation measures within the Collin, Denton, Johnson, and Tarrant Counties is above.

## State Conservation Funding Programs

The State of Texas utilizes an allocation from sales tax revenue generated by sporting goods to provide funds for park operations, restoration and acquisition throughout the state, and offers outdoor recreation grants to local governments. Voters in Texas also approved (with 63 percent "yes" votes) a \$100 million bond measure in 2001 for park facilities but the bond issuance did not include any funds for park land acquisition. Other state funding programs with a park land acquisition component receive federal funding. This section provides information on available state conservation funding programs, which are presented in alphabetical order.

## State Sporting Goods Sales Tax

Since 1993, a portion of the state sales tax revenue generated by sporting goods has been statutorily allocated to fund state park operations, capital, and local park grants.<sup>4</sup> The sales tax on sporting goods<sup>5</sup> is not a direct tax levied on purchases of sporting goods but a carve-out of the state sales tax. To estimate the amount of sales tax revenue generated by the sale of sporting goods, the Texas Tax Code instructs the Comptroller of Public Accounts to use statistical data regarding the estimated or actual total receipts from the taxable sales of sporting goods. As the basis for their estimate, the Comptroller's office uses a national survey conducted by the National Sporting Goods Association of household purchases of sporting goods items. This annual survey generates national sales statistics for 26 categories of apparel and footwear and 29 categories of sporting goods equipment.

Prior to the state sporting goods sales tax, parks in Texas were supported by a state cigarette tax. State parks and local parks were each allocated a one-penny per pack tax on cigarettes. As cigarette tax revenue declined, the sporting goods sales tax allocation was introduced at the request of the Department of Parks and Wildlife to fund state park operations, capital projects, and local park grants.

Beginning in 2007, the sporting goods sales tax was allocated such that 94 percent of the revenue went to the Texas Parks and Wildlife Department and six percent to the Texas Historical Commission, with the

<sup>&</sup>lt;sup>4</sup> Texas Tax Code, §151.801(d); <u>Joint Legislative Task Force on Use of the Sales Tax on Sporting Goods</u>, Interim Report to the 81st Legislature (Feb. 2009), at <a href="http://www.senate.state.tx.us/75r/senate/commit/c895/c895.SportingGoodsReport80.pdf">http://www.senate.state.tx.us/75r/senate/commit/c895/c895.SportingGoodsReport80.pdf</a>

<sup>5 &</sup>quot;Sporting goods" are statutorily defined as" item[s] of tangible personal property designed and sold for use in a sport or sporting activity, excluding apparel and footwear except that which is suitable only for use in a sport or sporting activity, and excluding board games, electronic games and similar devices, aircraft and powered vehicles, and replacement parts and accessories for any excluded item." Texas Tax Code, § 151.801(e)(2) (2011).

allocations limited by the General Appropriations Act.<sup>6</sup> During the 2008-2009 biennium, the General Appropriations Act limitation was \$111.8 million, of which TPWD received \$98.1 million, as detailed in the table below (note state park acquisitions received \$300,000). Had the allocation not been limited, TPWD could have received \$215.4 million in sporting goods sales tax revenue.

2008-2009 Statutory Distribution	Amount (\$ in millions)
Texas Parks and Wildlife Dept.	\$98.1
State Parks Account for	\$65.1
-state park operations and minor repair	33.6
-coastal erosion projects	25.0
-debt service	6.2
-land acquisition	0.3
Local Parks Account for	\$31.0
-Recreation & Parks	18.6
-Large County & Municipality Rec and Parks	12.4
Conservation and Capital Account	\$2.0
Texas Historical Commission	\$13.7
Total	\$111.8

For the 2012-2013 biennium, the sporting goods sales tax amount is estimated at \$251.3 million, of which TPWD will receive \$15 million.

Since 2007, the Texas Legislature has formed various joint committees in an attempt to amend the statutory definition of sporting goods. For instance, the 29 categories of sporting goods equipment does not include canoes and kayaks, which could potentially generate an additional \$1.7 million a year in the annual allocation.<sup>7</sup> As of the date of this report, the Legislature has not modified the sporting goods sales tax allocation (though House Bill 1628 was introduced this legislative session by Representatives Larson, Kuempel and Price to require that all funds generated from the sales tax on sporting goods be allocated to TPWD and the Historical Commission at the 94 percent and 6 percent allocations).

#### State Wildlife Grants & Horned Lizard License Plate Grants

To fund conservation actions identified in the 2005 Texas Wildlife Action Plan, the Texas Parks and Wildlife Department offers competitive State Wildlife Grants ("SWG") and Horned Lizard License Plate ("HLLP") grants. <sup>8</sup> However, the SWG grant program only has about \$189,000 in remaining grant funds from the Wildlife and Sport Fish Restoration program managed by the US Fish and Wildlife Service. The

9

<sup>&</sup>lt;sup>6</sup> Prior to 2007, the sporting goods sales tax allocation to the Texas Parks and Wildlife Department was capped at \$64 million per biennium from the revenue generated from the sale of sporting goods to fund the state park system and local grants program of the State Parks Division.

<sup>7 &</sup>quot;Joint Legislative Task Force on Use of the Sales Tax on Sporting Goods," Interim Report to the 81st Legislature (Feb. 2009), at Appendix E.

<sup>8</sup> http://www.tpwd.state.tx.us/business/grants/wildlife/swgrants/

HLLP grant program has about \$300,000 available in grant funding, which are generated from the Texas conservation license plate sales.

Conservation projects should contribute to threat/impact reduction to improve the condition of species of greatest conservation need, habitats/systems on which they depend, and/or natural processes that support habitat function, as defined by the 2005 Texas Wildlife Action Plan. Additional priority will be given to projects that promote collaboration with partners and emphasize conservation on private lands.

Eligible applicants include conservation practitioners from state agencies, universities, or non-governmental organizations and proposals should not exceed a maximum of \$50,000 for a one-year project. In fiscal year 2011, the non-federal match requirement of SWG is 35 percent of the requested total project cost for eligible actions.

#### Texas Historical Commission: Certified Local Government Grants

For projects with a historical preservation component, the Texas Historical Commission offers Certified Local Government ("CLG") grants to participating city and county governments to develop and sustain an effective local preservation program critical to preserving local historic resources. To participate, city and county governments must be certified by the National Park Service as CLGs. Funding for the CLG comes from annual allocations from the Historic Preservation Fund of the National Park Service, U.S. Department of the Interior, from which the Texas Historical Commission sets aside at least ten percent of for distribution solely to CLGs.

The CLG grants can be used for local historic preservation projects, including surveys of historic properties/districts, preparation of nominations to the National Register of Historic Places and other community-based preservation projects, though further research is required as to whether the grants may be used for land acquisition.

All CLG grants require a local cash match budgeted on a one-to-one (dollar for dollar) match equal to a 50-50 ratio for the total cost of the project. Proposed projects utilizing all or partial matches of verifiable in-kind services and/or goods may also qualify as long as the local match equals a 50-50 ratio for the total cost of the project. Only non-federal monies may be used as a match, with the exception of Community Development Block Grants. The CLG grant applications are typically due in the late summer of each year. CLG grant awards typically range from \$2,000 to \$30,000.

## Texas Parks & Wildlife Department: Recreation Grants Program

With proceeds from the state sporting goods sales tax allocation, the TPWD offers a number of distinct recreation grants to local governments for outdoor recreation. Program assistance may be available to acquire lands and waters or interest in lands and waters for public recreation and to develop basic recreation facilities to serve the general public. To be eligible for assistance, there must be a present or future need for the acquisition and development of the property for which the grant is requested or the use is proposed; the project must be endorsed by the regional planning commission or council having jurisdiction in the area where the project is proposed; and the project must be submitted by an eligible sponsor.

#### **Urban Outdoor Recreation Grants**

Grants are available to cities and counties with populations over 500,000 for the acquisition and development of park land. This assistance program is distributed in the form of 50 percent matching grant funds up to \$1,000,000. Local governments must apply, permanently dedicate project areas for public recreational use, and assume responsibility for operation and maintenance. The deadline for this grant is March 1st each year.

#### **Urban Indoor Recreation Grants**

Grants are available to cities and counties with populations over 500,000 for the acquisition, construction or renovation of indoor recreation facilities. This assistance is in the form of 50 percent matching grant funds up to \$1,000,000. Local governments must apply, permanently dedicate the building for public recreational use, and assume responsibility for operation and maintenance. The annual application deadline is August 1st.

#### **Regional Grants**

This grant program assists local governments with the acquisition and development of multi-jurisdictional public recreation areas in metropolitan areas. It allows cities, counties, water districts, and other units of local government to acquire and develop parkland. The program provides 50 percent matching fund, reimbursement grants to eligible local governments for both active recreation and conservation opportunities. The master plans submission deadline is 60 days prior to application deadline. Grants are awarded yearly by TPW Commission when funds are available. This grant program is currently inactive.

#### **Recreational Trail Grants**

TPWD administers the National Recreational Trails Fund in Texas under the approval of the Federal Highway Administration. This federally funded program receives its funding from a portion of federal gas taxes paid on fuel used in non-highway recreational vehicles. Grants can be up to 80 percent of project cost with a maximum of \$200,000 for non-motorized trail grants; there is no maximum for motorized trail grants. Funds can be spent on motorized and non-motorized recreational trail projects

<sup>&</sup>lt;sup>9</sup> http://www.tpwd.state.tx.us/business/grants/trpa/#trpa Another outdoor recreation grant program for boating access is not included in this report.

such as the construction of new recreational trails, to improve existing trails, to develop trailheads or trailside facilities, and to acquire trail corridors. The application deadline is February 1st each year.

TPWD also provides three more outdoor recreation grants to communities with smaller populations as follows:

#### **Outdoor Recreation Grants**

This grant program provides 50 percent matching grant funds to municipalities, counties, special districts, and other local units of government with populations less than 500,000 to acquire and develop parkland or to renovate existing public recreation areas. There are two funding cycles each year with a maximum award of \$500,000. Eligible sponsors include cities, counties, river authorities, and other special districts. Projects must be completed within three years of approval. Application deadlines are March 1st and August 1st each year (the master plans submission deadline is at least 60 days prior to the application deadline). Award notifications occur approximately six months after deadlines.

#### **Indoor Recreation Grants**

This grant provides 50 percent matching grant funds to municipalities, counties, MUDs and other local units of government with populations less than 500,000 to construct recreation centers, nature centers and other indoor recreation-related buildings. The grant maximum is \$750,000. The application deadline is August 1st each year (the master plans submission deadline is at least 60 days prior to the application deadline). Award notifications occur the following January.

### **Small Community Grants**

The Small Community grant program was created to meet the recreation needs of small Texas communities with a population of 20,000 and under. The grant provides 50 percent matching grant funds to eligible municipalities and counties. The maximum grant amount is \$75,000. Funds must be used for development or acquisition of parkland. Eligible projects include ball fields, boating, fishing, and hunting facilities, picnic facilities, playgrounds, swimming pools, trails, camping facilities, beautification, restoration, gardens, sports courts and support facilities. The deadline for this grant is March 1st each year.

### Federal Parks & Conservation Programs

The federal government is an important partner for state and local governments, parks and conservation organizations, and community advocates. This report provides a summary of numerous relevant federal conservation funds. The programs discussed are administered by federal agencies but vary in how funds are delivered for on-the-ground conservation projects. For example, some of these program funds are directed to the states, which in turn decide what projects to fund, while other program funds are granted

by a federal agency through a competitive process. In still other cases, Congress may "earmark" funds for individual projects.

Each program has different requirements and offers various partnership opportunities (e.g. applying through the state, working with private landowners, etc.) that should be further evaluated to determine most likely funding outcomes. The descriptions are meant to provide a broad overview of funding sources and are listed in alphabetical order. TPL can provide additional information on program rules and accessibility.

### **Brownfields Program**

### U.S. Environmental Protection Agency

### http://www.epa.gov/brownfields/applicat.htm

If a property identified for acquisition or redevelopment is or might be a "brownfields" site, many programs and other benefits at the local, state and federal levels encourage its redevelopment. The Environmental Protection Agency's Brownfields Program provides direct funding to eligible entities for brownfields assessment, cleanup, revolving loans, and environmental job training. In addition, legislation signed into law in 2001 limits the liability of certain contiguous property owners and prospective purchasers of brownfields properties, and innocent landowners are also afforded liability benefits to encourage revitalization and reuse of brownfield sites. EPA's brownfields program provides several types of grants:

- Assessment Grants provide funding for a grant recipient to inventory, characterize, assess, and conduct cleanup and redevelopment planning and community involvement related to brownfield sites. Eligible entities are states, local governments, regional planning and redevelopment agencies, and Indian tribes. An eligible entity may apply for up to \$200,000 to assess a site contaminated by hazardous substances, pollutants, petroleum or contaminants co-mingled with petroleum, with a waiver up to \$350,000 for site specific proposals. Such waivers must be based on the anticipated level of hazardous substances, pollutants, petroleum or contaminants (including hazardous substances co-mingled with petroleum) at a single site. Total grant fund requests must not exceed a total of \$400,000 per applicant unless the applicant requests a waiver. Due to budget limitations, no entity may apply for more than \$700,000 in assessment funding.
- Remediation grants are available for remediation of brownfield sites. These grants are limited to \$200,000 per site, with no more than three applications per entity. There is a 20 percent cost-share. Eligible entities are the same as listed above for assessment grants, with the addition of nonprofit organizations, who are eligible to apply, but must have site control of the property. One site may qualify for two grants if pollutants include petroleum and non-petroleum contaminants.
- Revolving Loan Fund grants provide funding for a grant recipient to capitalize a revolving loan fund to provide sub grants to carry out cleanup activities at brownfields sites. Grants may be

awarded up to \$1 million per eligible entity, or a group of eligible entities, with a 20 percent cost share and a five-year time frame for completion. Eligible entities are the same as those listed under assessment grants.

Annual grants are announced in approximately October of each calendar year.

## Brownfields Programs through HUD: Brownfields Economic Development Initiative (BEDI) and Section 108 Loan Program

### U.S. Dept of Housing and Urban Development

http://www.hud.gov/offices/cpd/economicdevelopment/programs/bedi/index.cfm http://www.hud.gov/offices/cpd/communitydevelopment/programs/108/index.cfm

The Brownfields Economic Development Initiative ("BEDI") is a competitive grant program that HUD administers to assist cities with the redevelopment of abandoned or underused industrial and commercial facilities where expansion and redevelopment is burdened by real or potential environmental contamination. The grant program seeks to help cities spur the return of brownfields to economic use through financial assistance to public entities to redevelop brownfields and to enhance the security or improve the viability of a project financed with Section 108-guaranteed loan authority. Therefore BEDI grants must be used in conjunction with Section 108-guaranteed loans.

Section 108 is the loan guarantee provision of the Community Development Block Grant ("CDBG") program. The BEDI funds minimize the potential loss of future CDBG allocations. Both Section 108 loans and BEDI grant funds are initially made available by HUD to public entities approved for assistance. Such public entities may re-loan the Section 108 loan proceeds and provide BEDI funds to a business or other entity to carry out an approved economic development project, or the public entity may carry out the eligible project itself.

BEDI projects must increase economic opportunity for persons of low-and moderate-income or stimulate and retain businesses and jobs that lead to economic revitalization. BEDI funds have been made available on a competitive basis. BEDI and Section 108 loan eligible recipients include CDBG entitlement communities and non-entitlement communities. BEDI and Section 108 funds must be used in conjunction with the same economic development project. (Non-entitlement communities must pledge CDBG funds as partial security for the loan.)

## Clean Water and Drinking Water State Revolving Funds U.S. Environmental Protection Agency

http://www.epa.gov/OWM/cwfinance/cwsrf/index.htm

http://www.epa.gov/safewater/dwsrf/index.html

The U.S. Environmental Protection Agency is charged with implementing both the Clean Water Act and the Safe Drinking Water Act, two landmark pieces of legislation whose respective goals are to clean up

America's waterways and to ensure safe drinking water. Conservation is an eligible activity under both laws. Both programs utilize "State Revolving Funds" ("SRFs") to fund projects that improve water quality and enhance drinking water supplies. Every year, Congress appropriates funds that are apportioned out to the states on a formula basis to fund the SRFs. The Texas Water Development Board administers both the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund.

### Clean Water State Revolving Fund

Through the Clean Water State Revolving Fund ("CWSRF") program, each state maintains a revolving loan fund to provide a source of low-cost financing for a wide range of water quality infrastructure projects. The CWSRF program is available to fund a wide variety of water quality projects including all types of nonpoint source, watershed protection or restoration, and estuary management projects, as well as more traditional municipal wastewater treatment projects. Nationwide, 95 percent of these funds go toward infrastructure projects, but watershed protection projects are increasing. Federal funds must be matched by 20 percent non-federal funds.

CWSRF programs operate much like environmental infrastructure banks that are capitalized with federal and state contributions. CWSRF monies are loaned to communities and loan repayments are recycled back into the program to fund additional water quality protection projects. The revolving nature of these programs provides for an ongoing funding source that will last far into the future.

States have the flexibility to target resources to their particular environmental needs, including contaminated runoff from urban and agricultural areas, wetlands restoration, groundwater protection, brownfields remediation, estuary management, and wastewater treatment. Land or easement acquisition is permitted with CWSRF funds as a method to reduce nonpoint source pollution.

### Drinking Water State Revolving Fund

The Drinking Water State Revolving Fund ("DWSRF") program was established by the 1996 Safe Drinking Water Act Amendments, under which EPA provides grants to states to establish revolving loan funds from which they provide loans and other types of financial assistance to public water systems for eligible infrastructure improvements. Since its inception, Congress has directed \$4.2 billion to the DWSRF, and conservation easements and fee acquisition may be funded.

Since its inception, \$2.7 million has been used for the acquisition of approximately 2,000 acres of land under the DWSRF. EPA has begun a concerted effort to focus more attention on protecting "source water," which is roughly defined as "untreated water from streams, rivers, lakes, or underground aquifers, which is used to supply private wells and public drinking water." There is growing recognition that protecting the source from contaminants is often more efficient and cost-effective than treating drinking water later.

Loans under the DWSRF are typically low-interest loans which may be repaid over 20 years. There is some flexibility given to the states to allow them to waive the principal repayment, offer negative interest rates or extend the loans to 30 years in specific hardship cases.

Up to 31 percent of these capitalization grants can be set-aside to administer the SRF and state source protection programs and to fund source water protection activities, including land acquisition. Up to 15 percent of the set-aside can be used for land conservation and voluntary, incentive-based protection measures, with no more than 10 percent used for a single type of activity, such as land protection.

### Community Development Block Grants

### U.S. Department of Housing and Urban Development

http://www.hud.gov/offices/cpd/communitydevelopment/programs/entitlement/

The Community Development Block Grant ("CDBG") program works to ensure decent affordable housing, to provide services to the most vulnerable communities, and to create jobs through the expansion and retention of businesses. The annual CDBG appropriation is allocated between states and local jurisdictions called "non-entitlement" and "entitlement" communities respectively. Entitlement communities are comprised of central cities of Metropolitan Statistical Areas; metropolitan cities with populations of at least 50,000; and qualified urban counties with a population of 200,000 or more (excluding the populations of entitlement cities). States distribute CDBG funds to non-entitlement localities not qualified as entitlement communities. In FY 2012, the Texas program is projected to receive a CDBG allocation of \$244.2 million in grants, compared to the \$266.3 the State received in FY 2010.

CDBG funds may be used for activities that include, but are not limited to, acquisition of real property; relocation and demolition; and construction of public facilities and improvements, such as water and sewer facilities, streets, neighborhood centers, and the conversion of school buildings for eligible purposes. HUD determines the amount of each grant by using a formula comprised of several measures of community need, including the extent of poverty, population, housing overcrowding, age of housing, and population growth lag in relationship to other metropolitan areas. Over a 1, 2, or 3-year period, as selected by the grantee, not less than 70 percent of CDBG funds must be used for activities that benefit low- and moderate-income persons.

CDBG entitlement communities are also eligible to apply for assistance through the Section 108 loan guarantee program. Non-entitlement communities are eligible as well, so long as their State agrees to pledge the CDBG funds necessary to secure the loan. Applicants may receive a loan guarantee directly or designate another public entity, such as an industrial development authority, to carry out their Section 108 assisted project.

<sup>10</sup> See National Priorities Project website at http://nationalpriorities.org/en/publications/2011/presidents-budget-fy2012/federal-aid/state/TX/

In addition, HUD provides CDBG grants to communities hardest hit by foreclosures and delinquencies under the Neighborhood Stabilization Program. These grants may be used to purchase, rehabilitate or redevelop homes and stabilize neighborhoods.

Finally, the Renewal Communities/Empowerment Zones/Enterprise Communities program uses an innovative approach to revitalization, bringing communities together through public and private partnerships to attract the investment necessary for sustainable economic and community development. Tax incentives for employment opportunities in all federal empowerment zones were extended retroactively through December 31, 2011, with the passage of the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Public Law 111-312). The empowerment zone tax incentives and renewal community tax incentives are worth approximately \$11 billion to eligible businesses of all sizes in Empowerment Zones and Renewal Communities. These incentives encourage businesses to open, expand, and to hire local residents. The incentives include employment credits, a 0 percent tax on capital gains, increased tax deductions on equipment, accelerated real property depreciation, and other incentives.

## Cooperative Endangered Species Conservation Fund US Fish and Wildlife Service

### http://www.fws.gov/endangered/grants/index.html

Grants offered through the Cooperative Endangered Species Conservation Fund (authorized under Section 6 of the Endangered Species Act) support participation in a wide array of voluntary conservation projects for candidate, proposed, and listed species.

### **HCP Land Acquisition Grants**

Habitat Conservation Plan ("HCP") Land Acquisition Grants provide funding to states for land acquisitions that complement approved HCPs. These grants are available only for land purchases that go above and beyond the conservation responsibilities that nonfederal partners already bear under the terms of the HCP. Specifically, the grants fund land acquisitions that complement but do not replace private mitigation responsibilities contained in HCPs; have important benefits for listed, proposed, and candidate species; and that have important benefits for the ecosystems that support those species.

### Recovery Land Acquisition Grants

Recovery Land Acquisition Grants provide funds to states and territories for the acquisition of habitat, through both fee and easement, in support of federally listed threatened and endangered species recovery. These funds must contribute to the implementation of a finalized and approved recovery plan for at least one species under the Endangered Species Act.

### Farm and Ranch Lands Protection Program Natural Resource Conservation Service

### http://www.nrcs.usda.gov/programs/frpp

The Farm and Ranch Lands Protection Program ("FRPP") provides matching funds to assist in the purchase of development rights to keep productive farm and ranchland in agricultural uses and works with state, tribal, or local governments and non-governmental entities. Grants are awarded by the NRCS to states, local governments and non-governmental entities on a competitive basis, according to national and state criteria and require up to a 50 percent non-NRCS match to cover the cost of the easement. Up to 25 percent of donated land value can be counted as the match.

## Federal Aid in Wildlife Restoration (Pittman-Robertson Act) U.S. Fish and Wildlife Service

### http://federalasst.fws.gov/wr/fawr.html

Implemented in 1938, the Federal Aid in Wildlife Restoration Act, or more commonly known as the Pittman-Robertson Act, provides funding from the Department of the Interior for the selection, restoration, rehabilitation, and improvement of wildlife habitat, wildlife management research, and the distribution of information produced by the projects. Funds are derived from an 11 percent excise tax on sporting arms, ammunition, and archery equipment and a 10 percent tax on handguns. These funds are apportioned to appropriate state agencies on a formula based on the total area of the state and the number of licensed hunters in the state.

The program is a cost-reimbursement program in which the state applies for repayment of up to 75 percent of approved project expenses. The state must provide at least 25 percent of the project costs from non-federal sources.

The Pittman-Robertson Act funds also allow the Texas Parks and Wildlife Division to offer many services, including technical guidance to private landowners (who control 94 percent of wildlife habitat in Texas), surveys and research for development of hunting regulations, operation and management of wildlife management areas in Texas, and research and development of techniques for managing wildlife populations and wildlife habitat. Most of the work done by the Wildlife Division is eligible for reimbursement under the Pittman-Robertson Act and, for every dollar spent by the Wildlife Division on approved projects, about 75 cents is returned to the Department for wildlife conservation. This amounts to approximately \$9 million annually. By law, funding is limited to wildlife management, related public use, and hunter education.

### Forest Legacy Program

### **U.S. Forest Service**

### www.fs.fed.us/spf/coop/programs/loa/aboutflp.shtml

The Forest Legacy Program ("FLP") was established in 1990 to provide federal funding to states to assist in securing conservation easements on forestlands threatened with conversion to non-forest uses. Fee transactions may also be funded under the program, either for the whole transaction or combined with easements to achieve a state's highest conservation goals. A state voluntarily enters the program by submitting an Assessment of Need to the Secretary of Agriculture for approval. These plans establish the lead state agency, the state's criteria for Forest Legacy projects, and Forest Legacy areas within which proposed Legacy projects must be located. Once the Assessment of Need is approved, the state lead agency can submit up to three grants each year for projects within the FLAs. The federal government may fund up to 75 percent of project costs, with at least 25 percent coming from private, state or local sources.

In FY10, the Forest Legacy Program was funded at \$79.5 million, providing grants to states for 36 forest conservation projects. Since the program began through February 2010, the State of Texas has protected 13,636 acres of forestlands with FLP funds.

### Land and Water Conservation Fund

### Department of the Interior (varies by agency)

### http://www.nps.gov/ncrc/programs/lwcf/

Created in 1965, the Land and Water Conservation Fund ("LWCF") is the largest source of federal money for park, wildlife, and open space land acquisition. Specifically, LWCF provides funding to assist in acquiring, preserving, developing and assuring accessibility to outdoor recreation resources, including but not limited to open space, parks, trails, wildlife lands and other lands and facilities desirable for individual active participation.<sup>11</sup> The program's funding comes primarily from offshore oil and gas drilling receipts, with an authorized expenditure of \$900 million each year, while federal recreation fees, sales of federal surplus real property, and federal motorboat fuel taxes fund also contribute to the LWCF. Under this program, a portion of the money is intended to go to federal land purchases and a portion to the states as matching grants for land protection projects.

#### LWCF - Federal

### Department of the Interior

The federal side of the Land and Water Conservation Fund provides funding for federal agencies (U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, and the Bureau of Land Management) to add land to existing recreation areas, parks, forests, refuges and other federal units. LWCF funding provides the bulk of the money available for this purpose and is typically provided

<sup>11 &</sup>lt;a href="http://www.iac.wa.gov/iac/grants/lwcf.htm">http://www.iac.wa.gov/iac/grants/lwcf.htm</a>.

through the annual federal appropriations process, with Congress making the determination of what federal land units will receive LWCF funding each year.

#### LWCF--Stateside

### National Park Service

The stateside LWCF program provides a 50 percent match to states for planning, developing and acquiring land and water areas for natural resource protection and recreation enhancement. Funds are distributed to states based on population and need. Once the funds are distributed to the states, it is up to each state to choose the projects, though the National Park Service has final approval. Eligible grant recipients include municipal subdivisions, state agencies and tribal governments, each of whom must provide at least 50 percent matching funds in either cash or in-kind contributions and a detailed plan for the proposed project. Grant applications are evaluated based on the technical merits of the project, the public/private partnerships, and how the project addresses the identified needs and priorities of a statewide comprehensive plan.

## Migratory Bird Conservation Fund U.S. Fish and Wildlife Service

### http://www.fws.gov/realty/mbcc.html

Each year, duck stamp (migratory bird and conservation stamps) revenues are deposited into the Migratory Bird Conservation Fund along with appropriations from the Wetlands Loan Act of 1961, import duties from arms and ammunitions, receipts from refuge admission fees, receipts from the sale of refuge-land crops and refuge rights-of-way, and Federal Aid funds. Administered by the USFWS, the Migratory Bird Conservation Fund is used to acquire waterfowl breeding, wintering, and migration habitat needed for maintaining optimum migratory bird population levels and to achieve desirable migration and distribution patterns. The habitat areas, acquired in fee, easement, or other interests such as leases or cooperative agreements, become units of the National Wildlife Refuge System or Waterfowl Production Areas. The Service focuses its acquisition efforts to benefit waterfowl species most in need of habitat protection. Over 5 million acres have been protected with funds from the Migratory Bird Conservation Fund.

### National Coastal Wetlands Conservation Grants U.S. Fish and Wildlife Service

http://www.fws.gov/coastal/coastalgrants/

Established by the Coastal Wetlands Planning, Protection, and Restoration Act of 1990, the National Coastal Wetlands Conservation Grant Program is a matching grant program administered by the U.S. Fish and Wildlife Service to acquire, restore, and enhance the wetland ecosystems of coastal states and territories. Funding for the program comes from excise taxes on fishing equipment and motorboat and small engine fuels. Projects in states bordering the Atlantic, Gulf of Mexico, Pacific, and Great Lakes are eligible for funding. The one exception is the State of Louisiana, which has its own coastal wetland

program administered under the Act. Projects are given priority if consistent with the criteria and considerations outlined in the National Wetlands Priority Conservation Plan; are located in states with dedicated funding programs to acquire coastal wetlands and open spaces; are located in maritime forests on barrier islands; benefit endangered species; encourage cooperative efforts among diverse partnerships; and benefit other ongoing conservation efforts.

To date, about \$183 million in grant monies have been awarded to 25 coastal states and one U.S. Territory and to acquire, protect or restore over 250,000 acres of coastal wetland ecosystems. Typically, between \$13 million and \$17 million in grants are awarded annually through a nationwide competitive process. In 2011, more than \$19 million in Coastal Wetlands grants to support 24 conservation projects benefiting fish and wildlife on more than 5,900 acres of coastal habitats in twelve states (but not Texas).

## National Fish and Wildlife Foundation-Keystone Initiative Grants & Special Grants Programs National Fish and Wildlife Foundation

### http://www.nfwf.org/programs.cfm

In 1984, Congress created the National Fish and Wildlife Foundation to benefit the conservation of fish, wildlife, plants, and the habitat on which they depend by attracting diverse investments to conservation and encouraging locally supported stewardship on private and public lands. Through their Keystone Initiatives Grant Program, NFWF funds projects to conserve and restore bird, fish, and wildlife populations and habitats. The Foundation awards matching grants to projects that address priority actions laid out by their strategic plan, work proactively to involve other conservation and community interests, leverage funding, serve multiple objectives, involve strong partnerships, and fit into a larger ecosystem approach to conservation. The most successful applications will display the long-term environmental benefits of a project that yield high quality conservation returns.

Eligible grantees include federal, tribal, state, and local governments, educational institutions, and non-profit conservation organizations. Grants can range from \$50,000 to \$300,000 and typically require a 2:1 nonfederal match. In addition to the Keystone Initiative matching grants, the Foundation administers a variety of special grant programs with specific conservation objectives, programmatic guidelines, and timelines.

## North American Wetlands Conservation Act U.S. Fish and Wildlife Service

### http://www.fws.gov/birdhabitat/Grants/NAWCA/index.shtm

The North American Wetlands Conservation Act ("NAWCA") was passed in 1989 to provide matching grants for the acquisition, restoration, and enhancement of wetland ecosystems for the benefit of waterfowl and other wetland dependent migratory species. Administered by the U.S. Fish and Wildlife Service, grants are available to nonprofit organizations, state and local agencies, tribes, and private individuals in the U.S., Canada, and Mexico. Two types of grants are awarded: small grants for up to \$75,000 and standard grants for up to \$1 million. There is a 1:1 non-federal match requirement for each grant although the average match of successful proposals is over 2:1.

In December 2002, Congress reauthorized the Act and expanded its scope to include the conservation of all habitats and birds associated with wetlands ecosystems. In 2006, Congress reauthorized the Act to extend its appropriation authorization up to \$75 million per year to 2012.

The Congressional appropriation to fund the Act's Grants Program in FY 2010 is \$47,647,000. Additional program funding comes from fines, penalties, and forfeitures collected under the Migratory Bird Treaty Act of 1918; from Federal fuel excise taxes on small gasoline engines, as directed by amendments to the Federal Aid in Sport Fish Restoration Act of 1950, to benefit coastal ecosystem projects; and from interest accrued on the fund established under the Federal Aid in Wildlife Restoration Act of 1937. These other sources provided almost \$42 million in additional grant funds.

Since 1990, some 4,500 partners in 2,067 projects have received more than \$1.1 billion in grants. They have contributed another \$2.32 billion in matching funds to affect 26.5 million acres of habitat and \$1.21 billion in nonmatching funds to affect 234,820 acres of habitat.

## Readiness and Environmental Protection Initiative Department of Defense

http://www.denix.osd.mil/sri/repi/index.cfm

The Department of Defense's Readiness and Environmental Protection Initiative ("REPI") provides funding for the military to work in partnership with state and local governments, non-governmental organizations and willing landowners to help prevent encroachment from adversely impacting military facilities. To date, the program has funded the conservation of 76,000 acres at 53 installations in 23 states.

The military services are authorized to enter into agreements with conservation organizations and public agencies to acquire land or easements around military installations. The intent of the REPI program is (1) to limit development or property use that is incompatible with a military installation's mission and (2) to preserve habitat off base to relieve current or anticipated environmental restrictions that might interfere with military training on base. The Department of Defense can share real estate acquisition costs for projects that support these purposes. The legislation does not authorize land acquisition for active military use.

In FY 2010, \$54.7 million was appropriated for this program. The military services are also authorized to use existing operations and maintenance funds for this purpose.

Between 2005 and 2008 in Texas, Fort Bliss protected 5,169 acres at a cost of \$1.3 million. Most recently, in April 2008, Fort Bliss purchased land-use restrictions from the New Mexico State Land Office ("NMSLO") on a 3,213-acre parcel that the NMSLO leased out for rights-of-way and livestock

grazing. The Army contributed \$784,540 to protect the NMSLO property through an easement that limits specified land uses for 75 years, after which time the Army has the right of first refusal to purchase the land, while the NMSLO will continue to manage the land.

### Recreational Trails Grants Program

### **US Department of Transportation**

http://www.parks.ca.gov/default.asp?page\_id=24324

The Recreation Trails Program is a federal transportation program that provides monies for the maintenance, development, acquisition and construction of new and existing trail facilities for both motorized and nonmotorized recreational trail uses. Funds are distributed to the states according to a formula. Eligible applicants include nonprofit organizations, municipal agencies, state agencies, federal government agencies and other government entities (regional governments, port districts, etc.).

Eligible projects include the following:

- maintenance and restoration of existing trails,
- development and rehabilitation of existing trails,
- construction of new recreation trails, and
- acquisition of easements and fee simple title to property.

The maximum amount of RTP funds allowed for each project is 88 percent of the total project cost. The applicant is responsible for obtaining a match amount that is at least 12 percent of the total project cost.

### Safe Routes to School Program

### US Department of Transportation

http://safety.fhwa.dot.gov/saferoutes

http://www.txdot.gov/safety/safe\_routes/default.htm

The 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users ("SAFETEA-LU") created a new program called Safe Routes to School. The goal of this program is to encourage children to walk to school by providing accessible and safe trails connecting schools to neighborhoods. Of the funds, 70 percent are used for infrastructure, 10 percent for education and enforcement, and 20 percent can be used for either category. Matching funds are not required.

In 2009, the Texas Transportation Commission approved \$54.1 million to fund 200 projects in more than 73 communities.

### **State Wildlife Grants**

### U.S. Fish and Wildlife Service

http://wsfrprograms.fws.gov/Subpages/GrantPrograms/SWG/SWG.htm

Created by Congress in 2001, the State Wildlife Grants Program is a matching grant program available to every state in support of cost-effective, on-the-ground conservation efforts aimed at restoring or

maintaining populations of native species before listing under the Endangered Species Act is required. In order to maximize the effectiveness of this program, Congress required each state to develop a comprehensive wildlife conservation strategy for the conservation of the state's full array of wildlife and the habitats they depend upon. These plans identify species and habitats of greatest conservation need and outline the steps necessary to keep them from becoming endangered. The State Wildlife Grants Program provides matching funds that are to be used to implement the conservation recommendations outlined in these state wildlife action plans. Funds appropriated under the SWG program are allocated to every state according to a formula based on a state size and population. The Texas Parks and Wildlife Department uses funds from the federal Sport Fish Restoration to fund its State Wildlife Grant program.

## Transportation and Community and System Preservation Program U.S. Department of Transportation

### http://www.fhwa.dot.gov/tcsp/

The Transportation and Community and System Preservation Program ("TCSP") was established to help communities address the linkage between transportation, land use, and quality of life. Its goals are to improve the efficiency of transportation systems, reduce transportation's environmental impacts, reduce the need for costly future public infrastructure investments, and plan for development.

After the initial competitive funding rounds, Congress began to earmark this program for a wide variety

After the initial competitive funding rounds, Congress began to earmark this program for a wide variety of transportation projects, including trails. To gain access to these funds, it has been necessary for a member of the congressional delegation to request a project during the congressional appropriations process. There was one competitive round of grants in FY 2007, when Congress failed to earmark any appropriations.

When there is a competitive process, the Federal Highway Administration will issue an RFP. Eligible entities include states, metropolitan planning organizations, local governments, and tribal governments. Nongovernmental organizations are encouraged to partner with a government agency. A 20 percent match is required. Grant proposals should address how proposed activities will meet the following:

- Improve the efficiency of the transportation system.
- Reduce the impacts of transportation on the environment.
- Reduce the need for costly future public infrastructure.
- Ensure efficient access to jobs, services and centers of trade.
- Encourage private sector development patterns.

### Transportation Enhancements

### U.S. Department of Transportation

### www.enhancements.org

The federal Surface Transportation Program provides states with funding for highway projects. States are allocated funds based on a combination of population, transportation systems, miles of roads, and other

factors. Each state must reserve at least 10 percent of its Surface Transportation Program dollars for transportation enhancement ("TE") activities, which provide opportunities for non-traditional transportation related activities. These enhancement projects include historic preservation, rails-to-trails programs, easement and land acquisition, transportation museums, water pollution mitigation, wildlife connectivity, and scenic beautification. All projects must be related, in some way, to transportation.

In each state, TE projects are selected through a competitive process. Applications are submitted by local government entities, often in partnership with nonprofit organizations. The federal government provides 80 percent of the funds and the municipalities need to contribute a 20 percent match. In Texas, the Department of Transportation ("TxDOT") administers the TE program. To be eligible for consideration, all projects must demonstrate a relationship to the surface transportation system and incorporate at least one of the following 12 categories:

- Pedestrian and bicycle facilities
- Safety and education activities for pedestrians and bicyclists
- Acquisition of scenic easements and scenic and historic properties
- Scenic or highway programs (including providing tourist and welcome center facilities)
- Landscaping and other scenic beatification
- Historic preservation
- Rehabilitation and operation of historic transportation buildings, structures or facilities (including historic railroad facilities and canals)
- Preservation of abandoned railway corridors (including conversion and use for pedestrian and bicycle facilities)
- Control and removal of outdoor advertising
- Archaeological planning and research
- Environmental mitigation to address water pollution due to highway runoff or reduce vehiclecaused wildlife mortality while maintaining habitat connectivity
- Establishment of transportation museums.

On July 29, 2010, the Texas Transportation Commission approved \$76 million in funding for 54 transportation-related enhancement projects in the state.

## U.S. Army Corps of Engineers Civil Works Programs Department of Defense

The U.S. Army Corps of Engineers has both military and civilian responsibilities. Under its civil works program, the Corps plans, constructs, operates, and maintains a wide range of water projects, headed by a

<sup>12</sup> http://www.txdot.gov/business/governments/te.htm

civilian Assistant Secretary of the Army for Civil Works. A military Chief of Engineers oversees the Corps' civil and military operations and reports on civil works matters to the Assistant Secretary for Civil Works. Projects generally originate with a request for assistance from a community or local government entity. A study of the project is often in order, allowing the Corps to investigate a problem and determine if there is a federal interest in proceeding further. The study must be authorized by Congress, usually in the biennial Water Resources Development Act, and must be funded through the annual Energy and Water Appropriations bill.

Congress also provides authorizations and appropriations to the Corps for the Continuing Authorities Programs. Two programs, Section 1135 and Section 206 are of special interest. Section 1135 provides authority for the Corps of Engineers to investigate, study, modify, and construct projects for the restoration of fish and wildlife habitats where degradation is attributable to water resource projects previously constructed by the Corps of Engineers. Project modifications are limited to a federal cost of \$5 million per project. The program limit for Section 1135 is \$25 million.

The Section 206 Aquatic Ecosystem Restoration provides authority for the Corps of Engineers to carry out aquatic ecosystem restoration and protection projects if the project will improve the quality of the environment, is in the public interest, and is cost effective. Each project is limited to a federal cost of \$5,000,000. The total program limit is \$25 million.

## Urban Park and Recreation Recovery Program National Park Service

### http://www.nps.gov/uprr/

The Urban Park and Recreation Recovery Program ("UPARR") was developed as the urban component to the Land and Water Conservation Fund in 1978. UPARR grants are given to eligible cities and counties and are meant to assist disadvantaged areas. The grants fund rehabilitation (capital funding for renovation or redesign of existing facilities), innovation (funding aimed to support specific activities that either increase recreation programs or improve the efficiency of the local government to operate recreation programs), and planning (funding for development of recovery action program plans) for recreational services in urban areas.

The program has not been funded since 2002. However, from its inception in 1978 to 2002, it has distributed approximately \$272 million for 1,460 grants to local jurisdictions in 43 states, the District of Columbia and Puerto Rico. A local match of at least 30 percent is required for most grants.

## Wetland Reserve Program Department of Agriculture

http://www.nrcs.usda.gov/PROGRAMS/wrp/

Congress created the Wetland Reserve Program ("WRP") under the Farm Bill as a means of addressing the loss of wetlands nationwide. In the recently approved 2008 Farm Bill, the program was reauthorized for another five years with a maximum of another 3 million acres enrolled. Administered through the Department of Agriculture's Natural Resources Conservation Service, WRP is a voluntary program to restore wetlands. Participating landowners can establish conservation easements of either permanent or 30-year duration or can enter restoration cost-share agreements of a minimum 10-year duration. In order for a property to be eligible for a WRP grant, the landowner must have owned the land for at least seven years, and the land must be restorable and suitable for wildlife benefits. The landowner continues to control access to the land and may lease the land for recreational activities.

The amount of funding available in a given fiscal year depends on the amount of acres Congress permits to be enrolled in the program. The funding level is dependent on the value of the land and funding occurs on a statewide basis wherein a per-acre value is assigned in each state.

### CHOOSING A LOCAL FUNDING STRATEGY

Generally, there are three broad-based types of revenue sources available to local governments to pay for parks and land conservation: discretionary annual spending (i.e. budget appropriation), creation of dedicated funding streams such as voter-approved special taxes, and the issuance of bonds. The financing options utilized by a community will depend on a variety of factors such as taxing capacity, budgetary resources, voter preferences, and political will. While most local governments can create funding for parks and open space through their budgetary process, this either happens infrequently or does not yield adequate funding.

In TPL's experience, local governments that create funding via the budget process provide substantially less funding than those that create funding through ballot measures. As elected officials go through the process of making critical budgetary decisions, funding for land conservation lags behind other public purposes and well behind what voters would support. It is often quite difficult to raise taxes without an indisputable public mandate for the intended purpose.

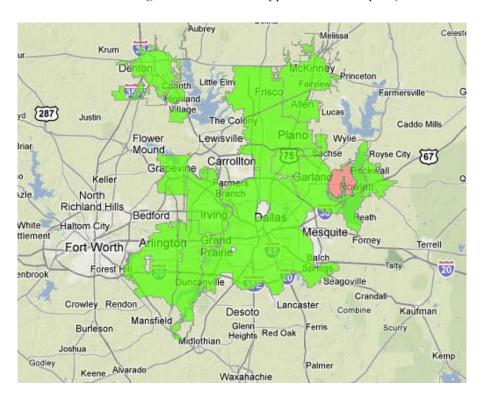
The power of conservation finance ballot measures is they provide a tangible means to implement a local government's vision. With their own funding, local governments are better positioned to secure scarce funding from state or federal governments or private philanthropic partners. Having a predictable funding source empowers the city, county, or special district to establish long-term conservation priorities that protect the most valuable resources, are geographically distributed, and otherwise meet important community goals and values.

Nationwide, a range of public financing options has been utilized by local jurisdictions to fund parks and open space, including general obligation bonds, the local sales tax, and the property tax. Less frequently used mechanisms have included real estate transfer taxes, impact fees, and income taxes. The ability of local governments and special districts to establish dedicated funding sources depends upon state enabling authority.

Conservation finance measures are not right for every local government or they might not be the best approach at the moment. Budget appropriations and other revenue mechanisms that can be implemented by the local government, such as developer incentives, may well serve as short-term funding options while parks and conservation proponents develop a strategy and cultivate broad support for longer-term financing options.

### Local Public Finance in Texas

The State of Texas authorizes and enables public bodies to acquire land and interests in land for conservation, parks, and recreational purposes. To do so, public bodies, including counties, municipalities, and flood control districts, may appropriate funds, levy taxes, and issue general obligation bonds.<sup>13</sup> Local governments in Texas enjoy one of the highest success rates for conservation finance ballot measures in the country. Roughly 89 percent of local conservation finance measures (85 of 95) on the ballot in Texas between 1990 and 2010 were approved. The most popular funding mechanism in Texas for land conservation has been general obligation bonds. The map below shows areas of local conservation finance successes since 1990 in the North Central Texas region. (For a detailed list of successful local conservation funding measures, see the Appendix to this report.)



<sup>13</sup> Texas Govt. Code § 331.001(b) ("A municipality or county may be gift, devise, purchase or eminent domain proceedings acquire (1) land and buildings to be used for public parks, playgrounds, or historical museums."); Texas Local Gov't Code § 331.004(a) ("A municipality or county may issue negotiable bonds for the purpose of acquiring or improving land, buildings, or historically significant objects for park purposes or for historic or prehistoric preservation purposes, and may assess, levy, and collect ad valorem taxes to pay the principal of and interest on those bonds and to provide a sinking fund."); Id. at (c) ("There is no limit on the amount of taxes that may be levied for the operation and maintenance expenses of parks or for the payment of the principal of and interest on the bonds except for the limits provided by the Texas Constitution."); Texas Gov't Code §1435.003 ("A municipality or county may: (1) construct, acquire, repair, improve, or enlarge a park facility; or (2) acquire additional land, if needed, for a park facility.").

This report presents a range of voter-approved funding mechanisms for local support of land acquisition. Specifically, the following pages provide general information related to the use of property taxes, general obligation bonds, sales taxes, and special purpose districts for park and open space acquisition. Appendix B to this report provides a chart summarizing these voter-approved funding mechanisms.

#### **Bond Issuances**

To raise funds for capital improvements such as land acquisition, cities and counties in Texas may issue bonds. There are two types of bonds: general obligation bonds which are secured by the full faith and credit of the local property taxing authority, and revenue bonds that are paid by project-generated revenue or a dedicated revenue stream such as a particular tax or fee. The governing body of any municipality, county or flood control district may issue bonds to acquire lands for park or historic purposes. General obligation bonds that are to be paid from property taxes require voter approval at an election. Generally, bond proceeds are limited to capital projects and may not be used for operations and maintenance purposes.

### Procedures for Issuing Municipal Bonds

Cities may issue general obligation bonds with majority approval of the qualified voters. The maturity date of the bonds may not exceed 40 years, and bonds may bear an interest not exceeding a weighted annual average of 12 percent.<sup>17</sup>

The proposition submitted to the voters must state the purpose of the bonds, the amount of the bonds, the rate of interest, the taxes needed to pay the annual interest and the maturity date of the bonds. <sup>18</sup> The governing body must order and give notice for proposition elections. The election must be held not less than 15 days and not more than 90 days from the date of the election order. Notice must be given by posting a copy of the election order at three public places holding the election and at the city hall and by publishing in a newspaper not earlier than 30 days and not later than 10 days before the election. In addition, notice must be published in a newspaper on the same days in each of two successive weeks where the first publication is not less than 14 days before the election. After the election, but before the debt may be issued, the public finance division of the Attorney General's office must approve the bond to be issued.

<sup>&</sup>lt;sup>14</sup> Texas Constitution, Article XVI, §59(c-1); Local Gov't Code § 331.004(a) and (c).

<sup>&</sup>lt;sup>15</sup> Gov't Code § 1251.001.

<sup>&</sup>lt;sup>16</sup> Federal government rules governing the issuance of tax-exempt bonds limit the use of proceeds to capital purposes such that only a small fraction of bond funds may be used for maintenance or operations of facilities. State and local laws may further limit the use of bond proceeds.

 $<sup>^{17}</sup>$  Gov't Code  $\S$  1251.002(5); Texas Const., Art. III,  $\S$  65(a).

<sup>&</sup>lt;sup>18</sup> Election Code §§ 3.004, 4.002, 4.003; Gov't Code §§1201.065, 1251.003.

All proposition elections at all levels of government must take place on either the first Saturday in May of any year, or the first Tuesday after the first Monday in November of any year.<sup>19</sup>

### **County Bonds**

Pursuant to the Texas Constitution, counties may issue general obligation bonds payable from property taxes for general fund, permanent improvement fund, road and bridge fund, and jury fund purposes.<sup>20</sup> Property taxes levied to pay the debt service on the bonds are limited to \$0.80 per \$100 of taxable value with majority approval of the qualified voters.

To acquire land for parks, counties may also issue revenue bonds with a maturity date of 40 years. The county may, without an election, issue revenue bonds payable from a pledge of net revenue from one or more of its park facilities or from leases or contracts from the operation of park facilities.<sup>21</sup> In the alternative, either through the Commissioners Court or an appointed Parks Board, park revenue bonds may be issued for acquiring, improving, equipping, maintaining, or operating public parks with majority approval of voters.<sup>22</sup> Such park revenue bonds are secured by a pledge of revenues from the operation of the parks or from the properties or facilities, but may not pledge tax revenues.

### Procedure for Issuing County Bonds

Proper notice of a bond election to be held not less than 15 days or more than 90 days from the date of an election order must be given at least 14 days before the election.<sup>23</sup> Proper notice includes posting of the election order at various public places and publication in a newspaper of general circulation. The proposition for "[t]he issuance of bonds"<sup>24</sup> must state (1) the purpose for which the bonds are to be issued; (2) the amount of the bonds; (3) the rate of interest; (4) the imposition of taxes sufficient to pay the debt service on the bonds; and (5) the maturity date of the bonds.<sup>25</sup> A majority of qualified voters must approve issuance of the bonds.

### Property Taxes

In Texas, property taxes are levied by local governments, schools, and special districts. There is no state property tax. Property taxes are levied each October 1 on the assessed value as of the preceding January 1 for all taxable real and personal property.

<sup>19</sup> Election Code §41.001

<sup>&</sup>lt;sup>20</sup> <u>Id.</u>; <u>Comprehensive Annual Financial Report</u>, at Table 13. Counties may also issue bonds payable from property taxes for the construction and maintenance of roads, which is limited to 25 percent of assessed value in the county. Texas Const., Art. III, §52.

<sup>21</sup> Id. at §1435.051.

<sup>&</sup>lt;sup>22</sup> Local Gov't Code, §§320.071 to .074.

<sup>&</sup>lt;sup>23</sup> Gov't Code §1251.003.

<sup>&</sup>lt;sup>24</sup> Election Code, §1251.005 ("At the election, the ballots shall be printed to permit voting for or against the proposition: "The issuance of bonds."). The proposition for park revenue bonds must state: "The issuance of \$\_\_\_\_ in park revenue bonds payable solely from revenue." Local Gov't Code §320.072.

<sup>&</sup>lt;sup>25</sup> Gov't Code §1251.002.

Counties, cities and towns in Texas are constitutionally permitted to levy a property tax up to \$0.80 per \$100 of taxable valuation for general fund, permanent improvement fund, road and bridge fund, and jury fund purposes. <sup>26</sup> The total amount of property taxes imposed in any year may not exceed the amount imposed in the preceding year unless the governing body gives notice of its intent to increase taxes and holds a public hearing. <sup>27</sup>

### Implementation Process for Property Tax Increase

Prior to increasing the total amount of property taxes imposed in any year over the amount imposed in the preceding year, the governing body must give notice of its intent to increase taxes and holds a public hearing.<sup>28</sup> Specifically, when a proposed tax rate exceeds the lower of the rollback tax rate (which allows an eight percent increase in revenue not devoted to debt service) or 103 percent of the effective tax rate, the governing body must pass a proposal by majority vote to increase the tax at a future meeting and schedule a public hearing.<sup>29</sup> The governing body must then publish a notice for the public hearing that comports with the requirements of Sections 26.05 and 26.06 of the Texas Property Tax Code.

### Sales Tax

The Texas state sales and use tax rate is 6.25 percent,<sup>30</sup> but local taxing jurisdictions (cities, counties, special purpose districts, and transit authorities) may also impose sales and use tax up to 2 percent for a total maximum combined rate of 8.25 percent. The tax must be approved by voters. This may be used for land conservation.

### Special Purpose Districts

Municipalities have the authority to institute a Public Improvement District or a Municipal Development District funded by a sales tax according to Chapter 372 and 377 of the Texas Local Government Code, respectively. <sup>31</sup> If either of these mechanisms were to have viability, it would be necessary to further examine the feasibility from fiscal, legal, and political perspectives. In addition, much will depend upon how the boundaries of the district would be drawn up, since sales tax capacity varies throughout the county.

There are approximately 1,100 special districts in the State of Texas.

<sup>&</sup>lt;sup>26</sup> <u>Id</u>. at §9.

 $<sup>^{27}</sup>$  <u>Id.</u> at §21.

<sup>&</sup>lt;sup>28</sup> Texas Const. Art. VIII, §21.

<sup>&</sup>lt;sup>29</sup> Property Tax Code §26.05.

<sup>&</sup>lt;sup>30</sup> Texas Tax Code, §151.051.

<sup>&</sup>lt;sup>31</sup> Personal communications with Josh Hastie, Local Sales and Use Division, and Bob Ashton Local Government Services, both with the State Comptroller of Public Accounts

Most of these special districts provide services that may include park and recreation opportunities and are governed by a board of directors, whom are usually appointed by the governing body of the relevant city. All may impose property taxes, assessments or impact fees and issue bonds, including a property tax for operation and maintenance. Before a special district may finance a service or improvement project through property taxes, assessment or impact fees, a written petition must be signed by the owners of a majority of property owners or at least 50 landowners within the district. Voter approval is required for property taxes and bond issuance. These districts are also eligible to be included in tax increment reinvestment zones and tax abatement reinvestment zones.

**Public Improvement District (Chapter 372):** If the governing body of a municipality or county finds that a Public Improvement District would promote the interests of the municipality or county, the governing body may undertake an improvement project that confers a special benefit on a definable part of the municipality or county or the municipality's extraterritorial jurisdiction. A public improvement project may include among other projects:

- landscaping;
- acquisition, construction, or improvement of water, wastewater, or drainage facilities or improvements;
- the establishment or improvement of parks;
- acquisition, by purchase or otherwise, of real property in connection with an authorized improvement;
- special supplemental services for improvement and promotion of the district, including services relating to advertising, promotion, health and sanitation, water and wastewater, public safety, security, business recruitment, development, recreation, and cultural enhancement; and
- projects similar to those listed above.

A Commissioner's Court or city council may authorize a district to impose a sales and use tax in increments of one-eighth of one percent up to a rate of two percent.

The ballot for a sales tax election shall be printed to provide for voting for or against the proposition:

A sales and use tax at a rate not to	exceed	_ [insert percentage ra	ate] in the	insert
name of district]" or "The adoption	n of a	[insert percentage rate	e] sales and use	tax in the
[insert name of district].				

Municipal Development District (Chapter 377): A municipality may call an election on the question of creating a Municipal Development District under this chapter to plan, acquire, establish, develop, construct, or renovate one or more development projects beneficial to the district.

The ballot at an election held under this section must be printed to permit voting for or against the proposition:

Authorizing the creation of the \_\_\_\_ Municipal Development District (insert name of district) and the imposition of a sales and use tax at the rate of \_\_\_\_ of one percent (insert one-eighth, one-fourth, three-eighths, or one-half, as appropriate) for the purpose of financing development projects beneficial to the district.

**County Assistance District (Chapter 387):** Under Chapter 387 of the Local Government Code the commissioner's court of the county may call an election on the question of creating a county assistance district to perform the following functions in the district:

- the construction, maintenance, or improvement of roads or highways;
- the provision of law enforcement and detention services;
- the maintenance or improvement of libraries, museums, parks, or other recreational facilities;
- the provision of services that benefit the public health or welfare, including the provision of firefighting and fire prevention services; or
- the promotion of economic development and tourism.

The ballot at the election must be printed to permit voting for or against the proposition:

Authorizing the creation of the \_\_\_\_\_ County Assistance District (insert name of district) and the imposition of a sales and use tax at the rate of \_\_\_\_\_ of one percent (insert one-eighth, one-fourth, three-eighths, or one-half, as appropriate) for the purpose of financing the operations of the district.

### Water Districts 32

A water district is a local, governmental entity that provides limited services to its customers and residents, depending on the district's type. Through "general law," a district may be created by the Texas Commission on Environmental Quality (TCEQ) or the county commissioner's court. "Special law" districts are created by or altered by an act of the Legislature.

<sup>32</sup> Excerpted from Texas Water Districts: A General Guide <a href="http://www.tceq.texas.gov/publications/gi/gi-043.html/at\_download/file">http://www.tceq.texas.gov/publications/gi/gi-043.html/at\_download/file</a>

"General law" districts must follow Chapters 49 through 66 of the Water Code. These laws describe the powers and duties of each type of district and give administrative rules that districts must follow. These districts must also comply with other laws. For example, when holding elections for board positions, districts must follow the Election Code. Districts also may have to comply with the Government Code, Health and Safety Code, Local Government Code, Penal Code, and Tax Code.

A "special law" district must comply with its enabling legislation—that is, the act that created the district or altered its powers and functions. The enabling legislation will also indicate other laws that the district must follow.

Texas has many types of districts. The four most common types of districts that provide services to residential customers are municipal utility districts (MUDs), water control and improvement districts (WCIDs), special utility districts (SUDs), and river authorities.

**MUDs**: MUDs engage in the supply of water, conservation, irrigation, drainage, fire fighting, solid waste (garbage) collection and disposal (including recycling activities), wastewater (sewage) treatment, and recreational facilities. A MUD can require its customers to use its solid waste services as a condition for receiving other MUD services. A MUD may provide solid waste and recycling services through a private company. While they can develop, maintain, or acquire parks or recreational facilities, MUDs are prohibited from issuing bonds to pay for these facilities. They can, however, set and charge user fees.

**WCIDs**: WCIDs have broad authority to supply and store water for domestic, commercial, and industrial use; to operate sanitary wastewater systems; and to provide irrigation, drainage, and water quality services.

**SUDs**: SUDs provide water, wastewater, and fire-fighting services, but cannot levy taxes.

River Authorities: River authorities are "special law" districts that operate major reservoirs and sell untreated water on a wholesale basis. They may have responsibility for flood control, soil conservation, and protecting water quality. Many river authorities also generate hydroelectric power, provide retail water and wastewater services, and develop recreational facilities. Most river authorities have no authority to levy a tax, but can issue revenue bonds based on the revenues projected to be received from the sale of water or electric power. River authorities often encompass entire river basins, reaching many counties.

State law gives districts the power to establish the authority, rights, and duties necessary to accomplish the specific purposes for which they are created. The powers of districts created under general law are determined by the type of district. A "special law" district's powers are determined by its enabling legislation. Most districts have the following powers:

- to incur debt
- to levy taxes

- to charge for services and adopt rules for those services
- to enter contracts
- to obtain easements
- to condemn property

### **Incurring Debt**

Many districts can issue bonds and other forms of debt. The Texas Constitution requires that all debt secured by tax revenues must be approved by district voters. Except for bonds issued by river authorities or bonds sold to a state or federal agency, the TCEQ must approve most district bonds.

### Levying Taxes

Not all districts have the power to levy taxes. For example, most river authorities cannot levy a tax. With voter approval, other districts may levy a maintenance tax to cover the costs of operating and maintaining the district's water and sanitary sewer system. The maintenance tax rate authorized by voters cannot be exceeded without additional voter approval.

Districts may also ask voters to authorize unlimited tax bonds. In authorizing these bonds, the voters also approve an unlimited debt service tax to pay off the bonds. After these bonds are issued, the district's board of directors must levy an annual property tax sufficient to cover the district's outstanding debt. This tax is levied on all property in the district based on appraised value—regardless of the services received by each landowner.

### **ATTACHMENTS**

### Attachment A: Texas Local Measure History

		Finance	Conservation		
Jurisdiction Name	Date	Mechanism	Funds Approved	Status	% Yes
Allen	5/12/2007	Bond	\$8,000,000	Pass	71%
Alvin	11/6/2001	Bond	\$3,150,000	Pass	63%
Arlington	5/7/2005	Bond	\$3,375,000	Pass	59%
Arlington	11/4/2008	Bond	\$2,250,000	Pass	58%
Austin	11/7/2000	Bond	\$13,400,000	Pass	65%
Austin	11/7/2006	Bond	\$20,000,000	Pass	73%
Austin	11/7/2006	Bond	\$50,000,000	Pass	69%
Bee Cave	11/7/2006	Bond	\$3,500,000	Pass	77%
Bexar County	11/4/2003	Bond	\$3,700,000	Pass	58%
Cedar Park	11/6/2001	Bond	\$10,600,000	Pass	59%
Cedar Park	11/6/2007	Bond	\$10,980,000	Pass	58%
Collin County	11/4/2003	Bond	\$5,500,000	Pass	63%
Collin County	11/6/2007	Bond	\$17,000,000	Pass	68%
Dallas	5/3/2003	Bond	\$42,874,109	Pass	82%
Dallas	5/3/2003	Bond	\$3,667,144	Pass	77%
Dallas	11/7/2006	Bond	\$36,750,000	Pass	81%
Denton	2/5/2005	Bond	\$7,000,000	Pass	54%
El Paso	5/6/2000	Bond	\$4,000,000	Pass	64%
El Paso	2/7/2004	Bond	\$2,089,198	Pass	64%
Frisco	9/14/2002	Bond	\$5,200,000	Pass	81%
Frisco	5/13/2006	Bond	\$22,500,000	Pass	72%
Georgetown	11/4/2008	Bond	\$9,000,000	Pass	58%
Harris County	11/6/2001	Bond	\$15,000,000	Pass	63%
Harris County	11/6/2007	Bond	\$38,000,000	Pass	52%
Hays County	6/2/2001	Bond	\$3,500,000	Pass	70%
Hays County	5/12/2007	Bond	\$30,000,000	Pass	68%
Highland Village	11/2/2004	Sales tax	\$3,750,000	Pass	61%
Hutto	11/3/2009	Bond	\$1,000,000	Pass	51%
Irving	11/7/2006	Bond	\$5,000,000	Pass	69%
Kendall County	11/2/2004	Bond	\$5,000,000	Pass	62%
Lubbock	5/15/2004	Bond	\$340,000	Pass	71%
McKinney	5/8/2010	Bond	\$6,000,000	Pass	72%
Missouri City	9/13/2003	Bond	\$395,000	Pass	65%
Missouri City	11/4/2008	Bond	\$5,000,000	Pass	72%
Murphy	11/4/2008	Bond	\$1,900,000	Pass	65%
Pasadena	8/1/2002	Bond	\$13,500,000	Pass	71%
Plano	5/7/2005	Bond	\$37,600,000	Pass	73%
Plano	5/9/2009	Bond	\$15,200,000	Pass	59%
Richardson	5/8/2010	Bond	\$4,083,500	Pass	57%
Rockwall	11/8/2005	Bond	\$5,955,000	Pass	59%
Round Rock	11/6/2001	Bond	\$17,300,000	Pass	68%
Rowlett	5/4/2002	Bond	\$520,000	Pass	67%
San Antonio	11/4/2003	Bond	\$3,890,000	Pass	60%
San Antonio	5/6/2000	Sales tax	\$65,000,000	Pass	56%
San Antonio	5/7/2005	Sales tax	\$90,000,000	Pass	55%
San Antonio	5/7/2005	Sales tax	\$45,000,000	Pass	54%
San Antonio	5/12/2007	Bond	\$34,918,490	Pass	69%
San Antonio	11/2/2010	Sales tax	\$90,000,000	Pass	66%
San Antonio	11/2/2010	Sales tax	\$45,000,000	Pass	67%
San Marcos	11/8/2005	Bond	\$2,000,000	Pass	68%
Seabrook	11/6/2007	Bond	\$2,150,000	Pass	60%
Travis County	11/6/2001	Bond	\$28,600,000	Pass	57%
Travis County	11/8/2005	Bond	\$40,000,000	Pass	66%
Williamson County	11/7/2006	Bond	\$10,000,000	Pass	61%

### Attachment B: Voter-Approved Revenue Options Summary

Option	Process	Comments &		
		Considerations		
Bonds	Requires majority approval by voters.	Can be used for watershed acquisition now, while land is still available.		
		Most common source of conservation funding.		
		Costs are spread out over a long time horizon.		
		Bond proceeds may not be expended for maintenance and operations.		
		Interest increases the total cost.		
Property Tax	Requires majority approval by voters	Can be used both for acquisition and maintenance purposes.		
		Funding level may be altered or eliminated by based on annual budget.		
Sales and Use Tax	Requires majority approval by voters.	Can be used both for acquisition and maintenance purposes		
		Sales tax revenues can fluctuate with changing economic conditions.		
		Not widely used for open space funding.		

## Attachment C: Public/Private Financing & Incentives

Option	Process	Comments & Considerations
Federal Conservation Tax Deduction	Appraisal required; federal income tax Form 8283.	Offers generous incentive to potential donors of property.
Dedication of Parkland and In-Lieu Fees	City council approval required.	Doesn't generate significant revenue for open space acquisition
Economic Development Office	Case-by-case basis depending on type and location of proposed development.	Any parks created would be a by-product to the development project.
Impact Fees	No impact fees for parks.	Any impact fee revenue used for parks would be ancillary to the water, wastewater, flood control or roadway project.
Land Banking	State and local enabling legislation required.	Ideal for vacant and abandoned properties.
New Market Tax Credits	Must go through a community development entity.	The Washington Canal Park in DC is the first park to use new market tax credits.
Parks Board: Ex: Houston Parks Board	Houston Parks Board was created in 1976.	The Parks Board is positioned to be the lead quasi-governmental and nonprofit partner to lead park acquisitions in the city.

Option	Process	Comments & Considerations
Private (c)(3) Partners.		Offers exemplary models of private funders working in partnership with a city.
Special Districts	Written petition by landowners required before project may be financed. Voter approval required for property taxes and bonds.	
Special Districts: Ex: Harris County Flood Control District	Voter approval generally required.	The Harris County Flood Control District has partnered in a number of park projects in the past.
Special Districts: Conservation and Reclamation Districts	May be worthwhile to conduct further research into the conservation and reclamation districts to see if they have park authorization.	Could be worthwhile partner in acquisition projects.
Water District	Requires legislative approval for taxing authority	

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For any questions or more information please contact:

Andrew du Moulin

Director, Center for Conservation Finance Research

The Trust for Public Land

33 Union Street, 5th Floor

Boston, MA 02108

Tel: (617) 371-0557

### APPENDIX B

### Fee Simple v. Conservation Easement Acquisitions NTCOG Water Quality Greenprint - Training Workshops

# Lake Arlington Watershed and Lewisville Lake East Watershed June 21, 2011 Presenter Talking Points

The session outline is chronological and follows the natural progression of project / project management steps.

Disclaimer: The presenter(s) are not offering legal or tax advice, nor should the audience act in reliance upon the representations by the presenter(s).

### I. WHAT IS ...

### A Fee Simple Acquisition?:

- It's "buying the bundle of sticks" all the seller's interests and rights in land.
- Improvements included
- All that is in the title

### **A Conservation Easement?:**

- An Agreement between a landowner and a public agency, or conservation non profit organization,
- Limits future uses of the property
- Establishes a process for enforcing limitations
- PACE (Purchase of Agricultural Conservation Easements), PDR (purchase of development rights) and CE are effectively the same animal a.k.a. "less-than-fee" acquisition

### II. GENERAL OPPORTUNITIES AND CONSTRAINTS OF FEE SIMPLE v. CE's:

### Why and when to use . . .

### **Fee Simple?:**

- Seller no longer wishes to retain any ownership or interest in the land
- Only way the Seller will sell
- Public agency wants complete management rights and/or 100% ownership
  - Usually for public access issues
  - Rarely does a CE grant access to the public
- Value difference between fee and CE is nominal
- Subject property cannot support the "mixed use" of a CE and underlying fee ownership (i.e., conflict between retained use and habitat, trails, etc.)

### **A Conservation Easement:**

- Think CE when you see one of these situations:
  - Buffer to existing public land
  - Wildlife habitat, not requiring intensive mgmt or public access

- Watershed protection for drinking water, surface water retention
- Scenic viewsheds
- Working landscapes, land needs to stay in private ownership
- Political opposition to increased public lands (mgmt) or loss of tax revenue
- LO doesn't want to sell fee

### Advantages of . . .

### **Fee Simple Acquisition:**

- Less to negotiate (no CE restrictions, management, baseline)
- No enforcement issues
- Fewer parties at the table
- Relative clarity on what's being acquired
- Conventional appraisal process and methodology
- Sale at less than FMV, or donation of land value, may offer tax benefits on highly-appreciated properties to offset capital gains
- May diminish or avoid gift tax / estate tax that may be difficult/impossible for heirs (see current tax law)

### **Conservation Easement Acquisition:**

- Greater Flexibility
  - Dealing with landowners who do not want to sell their property.
  - Purchasing a conservation easement may be the only way to counter the objection to a fee simple sale.
  - CE can be designed to protect specific portions of a property or distinct resources.
  - Seller can retain ownership and significant control.
  - Ability to control future uses, stay on the land and get compensation can be potent negotiating material.
  - "Having their cake and eating it too."
- Tax Advantages
  - Donated easements, or bargain sales, may offer income tax benefits.
  - Encumbering real estate with a CE can also reduce property taxes, but this result varies by state and sometimes by municipality.
  - Flexibility and tax advantages can be an enticing combination that convinces the landowner to donate a higher percentage of the fair market value of the CE.
- Longer option periods and terms
  - Landowners who are staying on the property don't generally need quick closings.
  - When a solution including a CE helps the seller achieve a multitude of goals it is easier to obtain a long-term option.
  - CE sellers generally have few viable alternatives.

### Issue Areas- Challenges presented by Fee Simple / CE acquisitions

- Challenges must inform project management strategy and steps
- Go in with eyes open

### Fee Simple:

- Constrained time frames / threats of loss of resource
- Seller's value expectations / demands
- Incompatible former uses / remediation problems
- Public agency / NGO management costs
- Liabilities / "attractive nuisances"

### **Conservation Easements:**

- CE's are complex documents that create a unique set of relationships
  - More extensive negotiation is necessary to complete a CE transaction than is required for fee transactions.
  - There may be an additional entity involved, if funder and easement holder are different.
  - You must obtain full buy-in from the seller and the buyer on all details, in advance of the closing.
  - You are fully involved in the future stewardship issues because they are elements of the easement document. Because the CE document commits the seller and buyer to future actions, prohibitions and expenditures, this negotiation has proven to be extremely complex and time-consuming for many of the successful transactions.
  - As a result of the future relationship between takeout entity and landowner, direct negotiations between them are often required.
     Solution: A selection of document templates and more organizational experience may help reduce the difficulties presented in the negotiations. Partnerships with more experienced non-profits, such as well-established land trusts, are valuable.
- Perpetuity is a long time
  - CE's contrast with fee transactions in that you are taking responsibility for developing a permanent land protection solution, as opposed to a document that needs to only lead to a successful conveyance to a public agency.
  - You must be vigilant in order to create strong, lasting CE's that are appropriate for the property and the participants. The document is the operating instructions for an arrangement intended to last forever.
     Solution: Collaborations with experienced land management entities and associations with reliable, specialized legal counsel, possibly on a retainer basis. Skilled practitioners can help you identify and address all currently foreseeable issues.
- Different areas of expertise required
  - Negotiating and drafting quality conservation easements demands highly specialized knowledge.
  - Foresters, ecologists, wildlife biologists and agronomists have all been recruited for assistance with various projects.
  - Appraisals of CE's require unique expertise that is sometimes hard to obtain.

    <u>Solution</u>: NGO's that are actively engaged in less-than-fee work are creating networks of skilled consultants and finding funders to assist with the attendant increase in project costs. You may need to hire individuals from these professions if CE volume increases greatly.
- Managing risk related to CE market value
  - Once separated from the fee, CE's arguably have no market value.
  - The appraisal of the underlying fee and CE value is paramount. A defensible appraisal by an appraiser skilled in CE valuations is important when government oversight is especially critical of appraisal technique and assumptions.
  - Your risk is also increased because there is no private market fallback strategy for selling development restrictions.
- It takes more time The forgoing factors often add up to lengthy multi-party negotiations with a difficult completion process.
  - Less-than-fee transactions produce more issues to confront and more parties to satisfy, as compared to fee title transactions.
  - Some CE projects require fee purchases and a subsequent sale of the CE and remainder interests separately, effectively turning one project into two.
  - A less-than-fee project will generally require greater staff resources than a fee transaction.

<u>Solution</u>: Project selection, design and budgeting need to consider the implications of CE investments.

### **III. PROJECT DESIGN CONSIDERATIONS**

### What's the right course for this project?

- Some major issues to consider at the outset:
  - What is the need for public access or high level of on-site management, ecological restoration?
  - Appropriateness of private management and control (CE model)
  - Surrounding land use compatibility
  - Risk of third party mineral rights
  - Which path best achieves the conservation goals of the project?
  - Sufficient time, money and skill available to undertake the project?

### Preparing to negotiate / structure the deal – Determining the needs and desires of the stakeholders

### **Fee Simple:**

- Up to four parties:
  - Landowner
  - NGO
  - Funding Source
  - "Takeout Agency"
- Needs of / Working with the Takeout Agency:
  - Criteria
  - Priority
  - Process / Timeline
  - Advocacy
- Securing Funding:
  - Applicability of project to funding source
  - Competition for dollars
  - Process / Timeline (especially if multiple sources of funding)
  - Advocacy for project
  - Need for lobbying, timing of appropriations?
- Working with the Landowner
  - Willingness to sell
  - The right decision makers involved?
  - Value expectations (ie understands appraisal process, which uses comparable methodology as adjusted by factors)
  - Financial needs? (ie ability to use tax benefits and estate tax assistance?)
  - Timing needs?
  - Time horizon sufficient (realistic) for funding? (18-24 mos)
  - Walk the land, be familiar with features

### **Conservation Easement:**

- Up to five parties:
  - Landowner
  - Funding source
  - Land trust / easement holder (different from fee)
  - Environmental community/advocates (may be different from fee)
  - NGO
- Working with the land trust / easement holder:
  - Land protection goals
  - Enforcement capacity
  - Template document
  - Monitoring endowment needs
  - Criteria and selection process
  - Ability to conduct baseline inventory?
  - Timing
  - Appraisal considerations
  - Who negotiates on their behalf, decision makers
  - Preparation of management plan?
- Working with the funder
  - Goals of program?
  - Specific requirements e.g. documents, language
  - Process to obtain / review appraisal?
  - Need for lobbying, timing of appropriations?
  - Approval of entity(ies) qualified to hold CE?
  - Approval of management plan?
- Working with the landowner
  - Vision and desire for protection?
  - Long-term uses and activities?
  - Reserved rights desired? Is there a reasonable balance?
  - Ability to use tax benefits and estate tax assistance?
  - Financial needs?
  - Understanding of highest/best value and potential CE valuation, before and after
  - Decision makers involved?
  - Manager, different from owner?
  - Time horizon sufficient (realistic) for CE negotiation? (9 12 mos)
  - Walk the land, be familiar with features
  - Willingness to manage with environmental sensitivity?
- Working with the Community/Advocates (stakeholders)
  - Public access and use needs?
  - Confidence about future management and oversight
  - Sufficient conservation outcome for funds invested
  - Comfort with landowner stewardship
  - Inclusion in decisions