

9. Infrastructure Funding Recommendations

This plan has identified \$19.1 billion in improvements needed by 2060 to meet the projected water demands in Region C. This plan also recommends that the State of Texas provide funding for water supply to assist with development of needed projects. The infrastructure financing survey is conducted as part of the regional water planning process to better assess the state's role in financing the identified water projects. For this planning cycle, the TWDB developed the infrastructure financing survey to evaluate the amount of state funding that water users are likely to request. This chapter identifies the portion of capital improvements recommended for Region C that will require TWDB financial assistance and identifies the potential TWDB financial programs that will be used. The survey developed by the TWDB included the following five financial programs:

- WIF-Deferred
- WIF-Construction
- State Participation
- Rural
- Economically Distressed Areas Program

9.1 Infrastructure Financing Questionnaires for Recommended Water Management Strategies

The infrastructure financing surveys were sent, by either email or post office, in August 2010 to all municipal water user groups and wholesale water providers in Region C that had indicated a need for infrastructure capital spending to support identified water management strategies. Surveys were not sent to entities with no identified capital costs in the Region C plan. Most of these water user groups whom did not receive a survey were entities supplied by wholesale water providers and/or associated with regional projects. Surveys were also not mailed to aggregated water user groups: county-other, irrigation, livestock, manufacturing, mining, and steam electric power.

A total of 172 surveys were emailed/mailed – 141 to water user groups and 31 to wholesale water providers. Many of the proposed capital improvements recommended in

this plan involve one or more of the wholesale water providers. As a result, more than 93 percent of the total Region C plan costs are borne by the wholesale water providers – and over 79 percent is borne by just five regional wholesale water providers.

Water User Groups (WUGs)

Of the 141 water user groups surveyed, 58 submitted responses, resulting in an overall 41 percent participation rate in this survey. Although this is a lower response rate than desired, these 58 responders account for 53 percent of the total capital costs identified by all of the WUGs. Appendix X includes a sample copy of the survey, along with a summary of the survey responses. To help encourage additional input, the Region C Water Planning Group attempted up to two times to contact entities whose survey responses had not been received.

A few respondents to the survey indicated that they had changes to the recommended strategies or strategy costs. These comments were considered and the *Region C Initially Prepared Water Plan* was modified as appropriate.

Thirty-nine of the responding water user groups (67 percent) plan to finance 100 percent of the capital costs for improvements identified in the survey without TWDB assistance. The remaining respondents reported being able to pay for a portion of the estimated capital improvements, but would likely apply for one, or more, TWDB funding programs. A summary of the survey results for the water user groups is presented in Table 9.1.

**Table 9.1
Summary of Water User Groups Financing Needs in Region C¹**

Total Costs of Strategies – All WUGs Surveyed	\$1,300,954,000
Total Costs of Strategies - IFR Responses	\$683,008,000
Amount Likely to be Funded by TWDB WIF-Deferred Funding	\$26,452,000
Amount Likely to be Funded by TWDB WIF-Construction Funding	\$239,266,000
Amount Likely to be Funded by TWDB State Participation Funding	\$3,976,000
Amount Likely to be Funded by TWDB Rural Areas Funding	\$1,644,000
Amount Likely to be Funded by TWDB Economically Distressed Areas Program Funding	\$5,011,000
Amount from Entities Indicating "Not Applicable" to Project Costs or "Project Completed" ²	\$2,388,000
Remaining Costs ³	\$307,697,000
Amount Respondents Requested from TWDB Programs	\$276,349,000
Total Costs of Strategies – WUGs Not Responding to IFR Survey	\$617,946,000

1. The summary of costs reported in this table reflect survey responses submitted to the TWDB as of September 22, 2010. These numbers could change as additional entities continue to submit responses to the TWDB survey.
2. The City of Kennedale responded that the conveyance project has already been completed.
3. The remaining costs likely would be funded either by cash reserves, bonds, loans, or other programs.

Wholesale Water Providers (WWPs)

Twenty-nine wholesale water providers responded to the financing surveys, resulting in a 94 percent response rate. These 29 responders, though, account for 99.5 percent of the total capital costs for all WWPs. Six WWPs responded that they intend to finance 100 percent of the identified capital improvements, although some stated that they might consider using state funding in the future. The other 23 reported that it is likely they can finance a portion of the total capital improvements, but that state participation would also be required. Overall, the twenty-nine respondents indicated that they would likely request financial assistance from the TWDB for approximately 62 percent of the estimated capital costs.

Summaries of the wholesale water provider responses are included in Appendix X. Table 9.2 provides the financing needs for the wholesale water providers based on the survey results.

**Table 9.2
Summary of Wholesale Water Providers Financing Needs in Region C¹**

Total Costs of Strategies – All WWPs Surveyed	\$17,781,764,000
Total Costs of Strategies - IFR Responses	\$17,693,494,000
Amount Likely to be Funded by TWDB WIF-Deferred Funding	\$964,481,000
Amount Likely to be Funded by TWDB WIF-Construction Funding	\$8,742,306,000
Amount Likely to be Funded by TWDB State Participation Funding	\$1,260,047,000
Amount Likely to be Funded by TWDB Rural Areas Funding	\$20,000,000
Amount Likely to be Funded by TWDB Economically Distressed Areas Program Funding	\$0
Amount from Entities Indicating "Not Applicable" to Project Costs or "Project Completed"	\$0
Remaining Costs ²	\$6,794,929,000
Amount Respondents Requested from TWDB Programs	\$10,986,835,000
Total Costs of Strategies – WWPs Not Responding to IFR Survey	\$88,270,000

1. The summary of costs reported in this table reflect survey responses submitted to the TWDB as of September 22, 2010. These numbers could change as additional entities continue to submit responses to the TWDB survey.
2. The remaining costs likely would be funded either by cash reserves, bonds, loans, or other programs.

9.2 Wholesale Water Provider and Water User Group Funding Summary

Overall, the TWDB IFR survey received a 51 percent response rate (41 percent of WUGs and 94 percent of WWPs). However, on a monetary basis, the survey respondents accounted for 96 percent of the total capital costs in Region C (53 percent of WUG costs and 99.5 percent of WWP costs). Based on the survey responses, from both WUGs and WWPs, the water users in Region C are likely to request financial assistance from the TWDB to pay for approximately \$11.3 billion (62 percent) of the capital costs identified for those entities' water supply infrastructure. The results included in this report could change as additional water suppliers continue to respond to the TWDB after the publication of this report. Additionally, several factors could still impact the amount of TWDB-funding that is actually requested, including inflation, and the political and financial climate at the time funds are needed.

9.3 Additional Funding Mechanisms

To help implement water management strategies, there are numerous funding programs available for municipal and non-municipal water users with local, state and/or

federal sponsors (in addition to the five TWDB funding programs included in the TWDB IFR survey). Many of the programs target municipal entities through loan and grant programs. There are also several agricultural assistance programs that administer funds for rural and agricultural users. Some of the funding options require a political subdivision to take the lead and establish benefits to non-municipal water users. Other programs are not open to non-municipal users, but non-municipal users (particularly manufacturers) may benefit from these funding programs through purchasing water from eligible municipalities.

The current primary mechanisms for funding infrastructure projects in Region C are financing through local bank loans and municipal bonds that are repaid through increased fees and revenues. This funding mechanism places the burden of paying for the capital improvements on the beneficiaries of the project. It also provides for local control in the implementation and timing of the needed improvements. While local financing will continue to be an integral component for financing water projects in this region, other funding sources through state and federal sponsors have been utilized in the region and may be accessed more frequently in the future as the region looks to develop new water resources.

The following are potential funding mechanisms that may be available for infrastructure projects in Region C. These funding sources are discussed in more detail in Appendix X and summarized in Table 9.3. Table 9.4 shows the potential funding sources for non-municipal water users.

- Market financing (taxable and tax-exempt)
- Texas Water Development Board programs
- U.S. Department of Agriculture programs
- Texas Department of Agriculture programs
- U.S. Department of Commerce Economic Development Administration Public Works Program
- U.S. Small Business Administration programs
- Texas Department of Economic Development programs
- Corps of Engineers Sponsorship

- Local economic development incentives.
- Bureau of Reclamation Programs
- Texas Office of Rural Community Affairs

Table 9.3
Summary of Funding Programs for Water Users in Region C

Program	State/ Federal/ Local	Agency ^a	Type	Eligible Water Supply Projects
Private Financing	N/A	N/A	All	All
Fees and Tax Increases	Local	N/A	All	All
Municipal Bonds	Local	N/A	All	All
Public-Private Partnerships	Local	N/A	All	All
Drinking Water State Revolving Fund	State	TWDB	Loans	Water supply and source water protection
Water Development Fund Program	State	TWDB	Loans	Planning, acquisition and construction of water related infrastructure
Clean Water State Revolving Fund Program	State	TWDB	Loans	Wastewater recycling and reuse facilities
State Participation Program	State	TWDB	Loans	Regional water, wastewater recycling and reuse facilities
Agriculture Water Conservation Loan	State	TWDB	Loans	Install efficient irrigation equipment on private property
Water Infrastructure Fund	State	TWDB	Loans	Water management strategies recommended in state or regional water plans
Rural Water Assistance Fund	State	TWDB	Loans	Development or regionalization of rural water supplies
Economically Distressed Area Program	State	TWDB	Grants, Loans	Water and sewer service to economically distressed areas
Regional Facility Planning Grant Program	State	TWDB	Grant	Studies and analyses of regional water supply and wastewater facility needs
Farm Ownership Program	Federal	USDA	Loans, loan guarantees	Water conservation

Table 9.3, Continued

Program	State/ Federal/ Local	Agency ^a	Type	Eligible Water Supply Projects
Rural Utilities Service Water and Waste Disposal Loans and Grants	Federal	USDA	Grants, loans, loan guarantees	Drinking water, wastewater collection and treatment facilities in rural areas
Watershed Protection and Flood Prevention Program	Federal	USDA / NRCS	Grants	Plan and install watershed-based projects on private land
Texas Capital Fund Infrastructure Development Program	State	TDA	Grants	Water and sewer infrastructure improvements
Interest Rate Reduction Program	State	TDA	Interest buy-down	Water conservation, stock tanks, brush control, and dam construction
Agricultural Loan Guaranty Program	State	TDA	Loan guarantees	Non-specific
Young Farmer Interest Rate Reduction Program	State	TDA	Loan guarantees	Non-specific
Young Farmer Grant Program	State	TDA	Grants	Non-specific
Public Works Program	Federal	USDC	Grants	Water and sewer systems for industrial use
7a Loan Guaranty Program	Federal	SBA	Loan guarantees	Non-specific
Certified Development Company (504) Program	Federal	SBA	Loans	Improvements, utilities
Industrial Development Loan Program	State	TDED	Reserve account	Non-specific

Table 9.3, Continued

Program	State/ Federal/ Local	Agency ^a	Type	Eligible Water Supply Projects
Texas Industrial Bond Revenue Program	State	TDED	Bonds	Non-specific
Texas Leverage Fund	State	TDED	Loans	Non-specific
Texas Enterprise Zone Program	State	TDED	Tax refund, credits	Non-specific
Corps of Engineers	Federal	USACE	Cost sharing	Those that meet a federal purpose, such as multi-purpose reservoirs, ecosystem restoration
Local economic development incentives	Local	N/A	Tax abatement, etc.	Non-specific
WaterSMART	Federal	BR	Grants	Non-specific
Title XVI funding	Federal	BR	Grants	Reclaimed Water
Small Town Environment Program	State	TDRA	Grants	Non-specific
Renewable Energy Demonstration Pilot Program	State	TDRA	Grants	Renewable energy for water and wastewater treatment
Desalination Fund	State	TDRA	Grants	Renewable energy for desalination of brackish groundwater

Note: a. BR = Bureau of Reclamation
 NRCS = National Resources Conservation Service
 SBA = U.S. Small Business Administration
 TDA = Texas Department of Agriculture
 TDED = Texas Department of Economic Development

TDRA = Texas Department of Rural Affairs
 TWDB = Texas Water Development Board
 USACE = United States Army Corps of Engineers
 USDA = U.S. Department of Agriculture
 USDC = U.S. Department of Commerce

**Table 9.4
Applicable Funding Programs for Non-Municipal Users**

Program	State/ Federal / Local	Agency*	Non- Municipal Users Eligible to Apply**	Type	Eligible Water Supply Projects	Water Users with Potential to Receive Funding				
						Manufact- -uring	Mining	Irrigation	Livestock	Steam Electric Power
Private Financing	N/A	N/A	Yes	All	All	x	x	x	x	x
Clean Water State Revolving Fund Program	State	TWDB	No	Loans	Wastewater recycling and reuse facilities	x	x	x		x
State Participation Program	State	TWDB	No	Loans	Regional wastewater recycling and reuse facilities	x	x	x		x
Agriculture Water Conservation Loan	State	TWDB	Indirect	Loans	Install efficient irrigation equipment on private property			x		
Water Infrastructure Fund	State	TWDB	No	Loans	Water management strategies recommended in state or regional water plans	x	x	x	x	x
Rural Water Assistance Fund	State	TWDB	No	Loans	Development or regionalization of rural water supplies	x		x	x	x
Farm Ownership Program	Federal	USDA	Yes	Loans, loan guarantees	Water conservation			x	x	

Table 9.4, Continued

Program	State/ Federal / Local	Agency*	Non- Municipal Users Eligible to Apply**	Type	Eligible Water Supply Projects	Water Users with Potential to Receive Funding				
						Manufact- uring	Mining	Irrigation	Livestock	Steam Electric Power
Rural Utilities Service Water and Waste Disposal Loans and Grants	Federal	USDA	No	Grants, loans, loan guarantees	Drinking water, wastewater collection and treatment facilities in rural areas	x	x	x	x	x
Watershed Protection and Flood Prevention Program	Federal	USDA/ NRCS	Indirect	Grants	Plan and install watershed-based projects on private land	x	x	x	x	
Texas Capital Fund Infrastructure Development Fund	State	TDA	No	Grants	Water and sewer infrastructure improvements	x	x	x	x	x
Interest Rate Reduction Program	State	TDA	Yes	Interest buy-down	Water conservation, stock tanks, brush control, and dam construction			x	x	
Agricultural Loan Guaranty Program	State	TDA	Yes	Loan guarantees	Non-specific			x	x	
Young Farmer Loan Guarantee and Grant Programs	State	TDA	Yes	Loan guarantees and Grants	Non-specific			x	x	

Table 9.4, Continued

Program	State/ Federal / Local	Agency*	Non- Municipal Users Eligible to Apply**	Type	Eligible Water Supply Projects	Water Users with Potential to Receive Funding				
						Manufact- -uring	Mining	Irrigation	Livestock	Steam Electric Power
7a Loan Guaranty Program	Federal	SBA	Yes	Loan guarantees	Non-specific	x	x	x	x	
Certified Development Company (504) Program	Federal	SBA	Yes	Loans	Improvements, utilities	x	x	x	x	
Industrial Development Loan Program	State	TDED	Yes	Reserve account	Non-specific	x	x	x	x	
Texas Industrial Bond Revenue Program	State	TDED	Indirect	Bonds	Non-specific	x	x			x