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FY 2016 Municipal, Industrial and Irrigation Water Supply Database Report

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of Engineers®**



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Preface and Acknowledgments

This report presents the U.S. Army Corps of Engineers' Water Supply Business Line's best available data on the Corps' water supply program through Fiscal Year 2016. The current USACE [Civil Works Strategic Plan](#) contains one objective with two performance measures related to the water supply program:

- Objective 5.4, Provide water supply storage in partnership with state and local interests;
- Measure 5.4.a, Percent of acre-feet of storage under contract versus acre-feet available; and
- Measure 5.4.b, Percent of investment costs recovered versus the total investment costs available for recovery.

The data and summaries presented in this report provide the most currently available status on these performance measures. The report is also intended to provide broader information on the operation of Corps projects as authorized for water supply purposes in recognition of ongoing interest evidenced through various public, Congressional and Administration inquiries in recent years.

This report would not be possible without the continuing efforts of many individuals in district and division offices in administering water supply agreements at Corps projects and maintaining data on the program. The authors wish to express their appreciation for the daily work that is required to deliver the benefits, meet the commitments and maintain the data associated with water supply agreements. Corps district offices in total expend on average approximately one million dollars per year for these activities. In return, water supply users reimburse the U.S. Treasury for approximately 60 million dollars per year in project investment and operating costs (see section B-10 of this report), and the water supply agreements are estimated to deliver on the order of six billion dollars annually in benefits (see [IWR Report 2013-R-09, "Value to the Nation of the U.S. Army Corps of Engineers' Civil Works Programs"](#)).

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A. Introduction

1. Background.

This report presents the status of the U.S. Army Corps of Engineers (Corps) Municipal and Industrial (M&I) water supply database. The majority of information in this report comes from the Corps' Operation and Maintenance Business Information Link (OMBIL) database. The M&I water supply information in this report is based on data for Fiscal Year (FY) 2016, and in most instances is current as of 29 September 2016. The OMBIL M&I water supply module has been under development since 2006. Quality control and updating of OMBIL data is an ongoing task. In a few cases when it is considered to be more accurate, the OMBIL data has been modified and information from internal Corps reviews has been used to supplement or replace OMBIL data. The Corps' Water Supply Business Line considers this report to be the best available data on the program.

2. Public Laws, Policies and Procedures

The Corps' basic authority for M&I water supply storage space is the 1958 Water Supply Act (Title III of Public Law 85-500), as amended. For surplus water the authority is Section 6 of the Flood Control Act of 1944 (Public Law 78-534). For irrigation water supply the basic authority is Section 8 of the 1944 Flood Control Act, and also Section 931 of WRDA 1986 (Public Law 99-662) for interim-use irrigation storage. The official policies and procedures for the Corps role in water supply can be found in Engineer Regulation 1105-2-100, "Planning Guidance Notebook," dated 22 April 2000, with the details provided in Appendix E of the regulation. Most recently, in December 2016 the Corps published a notice in the Federal Register seeking public comments on a proposed rule that would update and clarify its policies governing the use of its reservoir projects for domestic, municipal and industrial water supply pursuant to Section 6 of the Flood Control Act of 1944 and the Water Supply Act of 1958. The proposed rule would not change the terms of any existing agreements.

3. History of Previous Database Reports

a. **Historical.** The M&I water supply database was originally developed and maintained by the Corps on a continual basis beginning in the 1950s as each of the agreements was approved. This database contained information on the date of contract approval, storage space and costs, and the local sponsor. Data on irrigation storage was first compiled by the Corps in a 1982 survey of the districts. This was a one-time data call and the data on irrigation was not updated again until 2012.

b. **1996.** The first available online database of both M&I and irrigation storage is contained in the Water Supply Handbook, IWR Report 96-PS-4, dated December 1998 and is

based on a 1996 survey. This report can be found at:

<http://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/96ps4.pdf>

c. 2004. M&I water supply was established as one of the eight business programs for the Corps' budgeting purposes in the FY 2005 budget. In order to manage this business program properly it was necessary to update certain data and develop new data that could be used to assess the performance of the water supply program. The data were developed and presented in IWR Report 05-PS-1 titled "Water Supply Database 2004 Survey." This report can be found at: <http://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/IWRReport05-PS-1.pdf>

d. 2005. The data were again updated in 2005 to get a better understanding of M&I storage space for which costs were not being recovered as the basis for a water supply storage availability initiative. While the focus of this initiative was on storage not yet under contract, the storage space and costs of storage under contract were reviewed and updated as necessary. This 2005 data was presented in IWR Report 06-PS-1 dated April 2006 and can be found at: <http://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/IWRRpt06-PS-1.pdf>

e. 2009. To eliminate the need for yearly data calls to the MSCs and districts to update the water supply database, efforts were initiated in the spring of 2006 to develop a module for M&I water supply within the Corps' OMBIL database. The primary objective of OMBIL is to support results-oriented management within the O&M community of practice. The 2009 database was a combination of data loaded into OMBIL by the districts and, where not entered, the data from the previous 2006 report. The 2009 M&I Water Supply Database report can be found at: <http://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/10-R-2.pdf>

f. 2010. The 2009 database report was updated in 2010. This 2010 M&I Water Supply Database report can be found at: <http://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/2011-R-06.pdf>

g. 2011. The 2010 database report was again updated in 2011. This 2011 M&I Water Supply Database report can be found at:

<http://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/2012-R-02.pdf>

After the 2011 report was issued, efforts focused on quality control of the OMBIL water supply module as well as development of the irrigation database and migration of reporting functions from OMBIL to the Enterprise Data Warehouse (EDW) platform.

h. 2013. This year saw the first irrigation water supply database report. This report, "2012 Irrigation Water Supply Database," can be found at:

<http://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/2013-R-01.pdf>

i. 2015. The 2014 report updated the data found in the previous 2011 report and combined it with the irrigation data into a single report for the first time. This report, "2014 Municipal, Industrial and Irrigation Water Supply Database Report," dated August 2015, can be found at:

http://www.iwr.usace.army.mil/Portals/70/docs/iwrreports/2015-R-02_Municipal_Industrial_and_Irrigation_Water_Supply_Database_Report.pdf

4. Fiscal Year 2016 Database Report

This report differs from the past reports in several respects, as discussed in the following sections.

a. **Changes between 2014 and FY 2016.** The data collected for this report did not vary a great deal from that of the 2014 report. In addition to providing total numbers, the report also identifies specific differences between 2014 and FY 2016. These changes involve not only terminated and new agreements but also ongoing quality control efforts among the IWR water supply business line staff and the Corp's major subordinate command (MSC), or division, and district offices who actually interpret agreements and conform the data into standard OMBIL formats. These changes are explored in detail in **paragraph B-8** and **Appendix B**.

b. **Additional Costs.** This 2016 report also provides data on additional costs which have not been previously reported. Additional costs are normally the interest charges assigned to a user's repayment due to interest charges that accrue after the end of the ten-year interest-free period that was typically available with agreements made prior to the Water Resources Development Act of 1986. Additional costs can also include other administrative charges for the development and monitoring of an agreement and other costs borne by the user as part of implementing the agreement, such as physical modifications to existing project features and updates to the project operating plans.

c. **Conduits.** When a multipurpose dam and reservoir project was constructed to include M&I water supply storage, in some cases the user requested that a structure be constructed for the specific purpose of releasing flows for their water supply needs. These conduits become specific water supply repayment responsibilities of the user together with the joint-use costs assigned to the M&I water supply storage space. This report clearly separates conduit costs from storage space costs according to the best available information. At the Waurika Lake project in Oklahoma, the term conduit has also been applied to pumping and transmission infrastructure that the Corps constructed under specific legislation for that project. Additional information on conduits is provided in **paragraph B-6**.

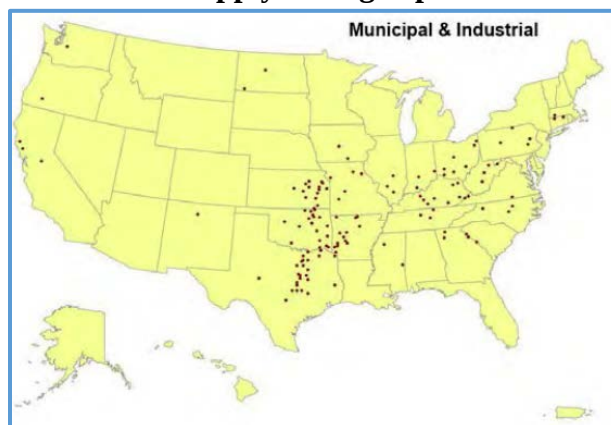
d. **Projects Not Included in Database.** This report includes discussion of projects that provide water supply benefits apart from the typical agreements that are recorded in this water supply database. These include cases where water supply benefits are provided under specific authorities for the project, as compensation for land and/or existing infrastructure that was displaced when the reservoir project was constructed, or incidentally under the current plan of operation for other authorized purposes. The Corps is often asked about these types of situations when reporting on the program and the information has been included to provide a more complete picture of water supply activities at Corps projects. This information is provided in **paragraph B-11** and **Appendix C**.

B. Municipal and Industrial Water Supply Database

1. General

Of the approximately 380¹ reservoir projects operated and maintained by the Corps, 136 currently contain storage space for M&I water supply. A list of these 136 projects by MSC and districts with corresponding water supply storage space and estimated yield data is provided at **Appendix A**. These projects, shown in **Figure 1**, are located in 23 of the Corps 38 Civil Works districts. A detailed breakdown of the M&I water supply agreements by district and project is provided in **Annex I**. For each of these agreements, data are provided on: type, date, yield and interest rate of the agreement; assigned storage space is shown by present use, future use, not under contract and total; assigned costs shown for the storage space and any added costs (conduits and/or additional cost); and remaining principal owed on the storage space. These data are also summed for each project, district and MSC.

Figure 1. Location of Corps Projects with M&I Water Supply Storage Space



2. Data Summary by MSC

The national M&I water supply totals, summarized by Corps divisions, or major subordinate commands (MSC), are shown in **Table 1**, on the following pages. The summary table has been expanded into three parts. **Table 1a** shows the number of projects, agreements, estimated yield and each of the three increments of storage space by MSC. **Table 1b** shows the cost of water supply broken down into the actual cost of the storage space to which is then added, as appropriate, any cost of conduits and any additional cost to provide a total water supply project cost by MSC. **Table 1c** shows the remaining principal owed by each MSC. The remaining principal owed is based on the total water supply project cost and not just the original cost of storage. The Pacific Ocean Division has not been included in the database as there are no water supply storage projects in that division, which includes the Hawaii and Alaska Districts.

¹ There is a wide variety of dam and reservoir projects and some have unique legal authorities, operating plans and features. Therefore counts of Corps projects often vary depending on the criteria.

Table 1a. M&I Water Supply Agreement, Yield and Storage Space Summary by MSC

MSC	WS Agreement Data			WS Storage Space Data (acre-feet)			
	No. of Projects	No. of Agreements / Future Activations	Yield (MGD)	Present	Future	Not Under Contract	Total
NAD	7	7 / 0	451	167,435	0	0	167,435
SAD	10	25 / 0	471	209,623	0	0	209,623
LRD	28	53 / 1	612	602,632	0	7,060	609,692
MVD	8	14 / 0	305	230,597	202,220	13,293	446,110
NWD	17	36 / 4	443	498,676	413,630	101,847	1,014,153
SPD	4	4 / 0	259	573,820	0	0	573,820
SWD	62	211 / 77	4,332	5,698,999	770,800	310,699	6,780,498
TOTAL	136	350 / 82	6,873	7,981,782	1,386,650	432,899	9,801,331

Table 1b. Summary of M&I Water Supply Project Costs by MSC

MSC	WS Agreement Cost of Storage (\$)				Other WS Project Costs (\$)		Total Project WS Cost (\$)
	Present	Future	Not Under Contract	Total Original Cost of Storage	Conduit Cost	Additional Cost	
NAD	141,105,681	0	0	141,105,681	161,200	0	141,266,881
SAD	35,147,822	0	0	35,147,822	0	0	35,147,822
LRD	73,541,360	0	6,467,566	80,008,926	0	294,150	80,303,076
MVD	29,919,770	16,171,287	328,749	46,419,806	0	1,012,879	47,432,685
NWD	69,391,707	38,436,832	15,106,016	122,934,555	312,448	6,198,679	129,445,682
SPD	127,706,229	0	0	127,706,229	0	0	127,706,229
SWD	690,098,258	132,255,411	32,221,029	854,574,698	28,645,075	79,967,452	963,187,225
TOTAL	1,166,910,827	186,863,530	54,123,360	1,407,897,717	29,118,723	87,473,160	1,524,489,600
Note: All cost data are original based on the date the agreement was signed. The total project investment costs allocated to water supply storage at a common FY16 price level are estimated at \$6.1 billion . See paragraph B-3 for more detail.							

Table 1c. Remaining Principal Owed by MSC

MSC	Remaining Principal Owed (\$)			Percent Owed (%)
	Present	Future	Total	
NAD	56,104,432	0	56,104,432	40
SAD	13,976,413	0	13,976,413	40
LRD	25,810,765	6,467,566	32,278,331	40
MVD	5,414,070	16,499,716	21,913,786	46
NWD	15,113,673	53,542,848	68,656,521	53
SPD	97,951,522	0	97,951,522	77
SWD	167,734,923	177,100,161	344,835,084	36
TOTAL	382,105,798	253,610,291	635,716,089	42

As shown, the 136 projects contain 9.8 million acre-feet of storage space allocated for M&I water supply with a corresponding nominal investment cost, including recorded additional costs, of \$1.5 billion, about 58% of which has been repaid. It should be noted that agreements have been signed over several decades and the costs shown throughout this report have not been updated to a common present value. Additional information on updating these costs to a common time basis is provided in the following **paragraph B-3**.

Nationwide, there are 350 separate basic repayment agreements and an additional 82 future activation agreements. A future activation agreement is where the original agreement included storage space reserved for future use and that future use has been activated into present use and is being, or has been repaid. This report includes data for only current valid agreements in force. Additional information on different types of agreements, and the differences between present and future use storage is provided in **paragraph B-4**.

3. Cost of M&I Water Supply Storage Indexed to Current Price Levels

The Corps M&I water supply database has always been kept at the original (nominal) cost of storage allocated to water supply as determined in the agreement at the time it was signed. These agreements have been signed over a wide range of years, going as far back as a 1941 agreement with the City of Grafton at Tygart Lake in the Pittsburgh District. For this report, an effort was undertaken to develop an estimate of the total cost of the current portfolio of water supply storage agreements at current price levels, using a method similar to that utilized in Corps regulations to determine the updated cost of storage at a project as part of a water supply storage reallocation study.

The Engineer News Record (ENR) construction cost index was used to update agreements signed prior to 1967 to a 1967 price level. The Corps of Engineers' Civil Works Construction Cost Index System (CWCCIS) was then used to update costs from 1967 to FY 2016. CWCCIS includes indices for specific project construction components. For this effort, an average was used of the dam; reservoir; relocation; buildings, grounds and utilities; and permanent operating equipment indices. Since this is an approximate estimate, this report does not attempt to show the cost of each agreement at current price levels. Instead the update of the individual agreement costs has been combined into a single estimate for the overall portfolio of

agreements. Using these indices, the nominal total of \$1.4 billion for the original investment cost (not including additional costs) of storage space and conduits for all agreements, shown in **Table 1b**, is estimated to be approximately \$6.1 billion at a common FY 2016 price level.

4. Storage Space Types

The term “Under Contract Present” indicates the sponsor has already repaid the investment cost owed or is in the process of repaying it, as well as repaying allocated annual costs. “Under Contract Future” indicates the sponsor has signed an agreement to repay the costs of future use storage space, but has not yet activated the storage space and begun repaying costs in accordance with the terms of the agreement. For the purposes of this database, if the sponsor has initiated payments for this future use storage space, the space is listed as present whether or not the user is actually making use of the storage space.

The “Not Under Contract” storage space was included in projects under the original project authority in accordance with the 1958 Water Supply Act prior to its amendment by Section 932 of 1986 WRDA. “Not Under Contract” is where a state or local interest gave reasonable assurances that there would be a demand in the future for the water but a repayment contract has not yet been signed. There is still 432,899 acre-feet of storage that remains in this not under contract category. This storage space is located in 16 projects in six districts and in four MSCs. The original investment cost of this not under contract storage space, including any conduit costs, is \$54.1 million. The breakdown of this information is shown in **Table 2**, on the following page. In this table, the current repayment obligation of any prospective sponsor can be greater than the original investment cost shown as interest after the 10-year interest free period must be included. While not under contract for repayment through M&I water supply agreements, the storage space may be used for other authorized purposes such as hydroelectric power, environmental purposes, recreation, etc. In the detailed **Annex I** this not under contract storage may be listed as an “Assurance” or as “Not Under Contract.”

5. Storage Reallocation

As it becomes increasingly difficult to permit and finance new reservoir projects, there is interest in reallocating storage space in existing projects to meet increasing water supply needs. The national summary of storage reallocations, summarized by MSC is provided in **Table 3**, on the following page. In some cases, storage space may have been reallocated at a project after the initial authorization from Congress, but before the project was completed and put into operation. The storage space presented as reallocated in this report was typically reallocated from some other purpose to M&I water supply uses after the project was first put into operation.

The size of the reallocation program compared to the total water supply program is shown in **Table 4**, on page 9. The data in the table shows that about one-third of the total 136 projects with M&I water supply storage have been subject to reallocations to some extent and 41% of the total 350 agreements have been reallocation agreements. However, only nine percent of the total 9.8 million acre-feet of M&I storage in Corps projects is the result of a reallocation

action and the costs are 15% of the total \$1.4 billion in assigned first costs of storage space. The costs of reallocated storage space as a percentage of the total program are proportionally greater than the amount of space due to the Corps' long-standing policy of updating the cost of reallocated storage to current price levels when an agreement is signed.

Table 2. Water Supply Storage Not Under Contract

MSC	District	Project	Total Water Supply Storage Space (acre-feet)	Water Supply Storage Space Not Under Contract (acre-feet)	Percent of Water Supply Storage Space Not Under Contract	Cost of Water Supply Storage Space Not Under Contract (\$)
LRD	Pittsburgh	Berlin, OH	6,260	4,860	78%	2,167,566
		Stonewall Jackson, WV	2,200	2,200	100%	4,300,000
MVD	Vicksburg	DeGray, AR	238,729	13,293	6%	328,749
NWD	Portland	Lost Creek, OR	10,000	6,147	61%	3,707,858
	Kansas City	Long Brach, MO	24,400	20,000	82%	5,083,005
		Smithville, MO	95,200	75,700	80%	6,315,153
SWD	Ft. Worth	Hords Creek, TX	5,780	5,780	100%	105,078
	Tulsa	Birch Lake, OK	7,630	7,630	100%	885,000
		Broken Bow, OK	152,440	144,085	95%	3,776,221
		Copan Lake, OK	7,500	2,500	33%	2,686,900
		Eufaula Lake, OK	56,909	27,636	49%	522,087
		Hugo Lake, OK	47,600	2,198	5%	126,011
		Kaw Lake, OK	171,194	80,211	47%	18,427,863
		Keystone Lake, OK	20,000	2,000	10%	203,465
		Skiatook Lake, OK	62,900	24,659	39%	5,488,404
		Tenkiller Ferry, OK[1]	23,532	14,000	59%	0
TOTAL			932,274	432,899	46%	54,123,360

Notes:
 [1] Tenkiller Ferry Lake, OK. 14,000 acre-feet previously under contract that was terminated in 2011. Draft agreements for this storage space are under review.

Table 3. Summary of Storage Reallocations by MSC

MSC	Number of Projects	Number of Agreements	Storage Space Reallocated (acre-feet)	Principal Cost of Storage Space (\$)
NAD	2	2	30,960	46,348,000
SAD	6	21	72,723	15,406,683
LRD	13	29	43,830	24,689,126
MVD	2	2	6,075	1,222,649
NWD	7	12	201,963	28,632,419
SPD	0	0	0	0
SWD	16	76	542,493	116,685,134
TOTAL	46	142	898,044	232,984,011

Table 4. Reallocations as Percentage of Total Program

Item	Total M&I WS Program	Reallocations	Reallocations as % of Total Program
Number of Projects	136	46	34%
Number of Agreements	350	142	41%
Storage Space (acre-feet)	9,801,331	898,044	9%
Assigned Cost (\$)	1,524,489,600	232,984,011	15%

Since the 2014 report was prepared, one additional major reallocation action has been completed at the Chatfield Lake project in Colorado. This action is not included in this FY16 report data as recreation facility modifications and compensatory mitigation required to implement the agreement have not begun. The agreement was executed with the Colorado Department of Natural Resources, acting on behalf of a group of local water utilities, on October 9, 2014 and was authorized by Section 808 of the Water Resources Development Act of 1986 (Public Law 99-662), as amended by Section 3042 of the Water Resources Development Act of 2007 (Public Law 110-114). When fully implemented, the reallocation will make 20,600 acre-feet of storage space in the project available to the sponsors for M&I use. The sponsors will fund the costs of required modifications to the project, mitigation, and repay the assigned cost of the storage space (\$16,285,392) as well as annual operation and maintenance expenses and allocated repair, rehabilitation, reconstruction and replacement costs when incurred.

6. Agreement Types and Counts

In addition to the originally authorized storage space and reallocated storage agreements there are four other lesser used types of agreements: surplus water, supplements or modifications to existing agreements, separate agreements for conduit features, and interim-use irrigation agreements. Water conduits are typically included as an integral part of the dam structure in order to release stored water for an M&I user or users. Costs of water supply conduits are specific to the water supply purpose and users with water supply storage agreements who make use of the conduit must also repay 100 percent of the investment and annual costs of the conduit.

A listing of the conduits in the water supply database is provided in **Table 5**, on the following page. As shown, there are 25 projects in five districts with water supply conduits. For 20 of the projects, the costs are being recovered as part of the water supply storage agreement or agreements. Costs at four of the projects are being recovered under separate conduit agreements. At all of these projects, costs are being recovered from a single user except at the Eufaula Lake project where the cost is apportioned among 18 separate agreements. The Waurika Lake project differs from the other projects in that the conduit at the Birch Lake project is not under contract.

Table 6, on the following page, provides the breakout of all agreements in the database by type as discussed in this section and the preceding sections on originally authorized and reallocated water supply storage. There are two situations where authorized M&I water supply storage space and repayment requirements are not counted as individual agreements: assurances for uncontracted storage and activations of future use storage. **Table 7**, on page 11, summarizes how agreements are counted for purposes of the total numbers presented in this report.

Table 5. Projects with Water Supply Conduits

MSC	District	Project	WS Agreement includes Conduit Cost	Separate Conduit Agreement
NAD	New England	Littleville	1	
	Philadelphia	Beltzville	1	
NWD	Kansas City	Clinton	1	
SWD	Little Rock	Millwood	1	
	Tulsa	Arcadia	1	
		Birch [1]		
		Broken Bow	1	
		Copan	1	
		Council Grove	1	
		El Dorado	1	
		Elk City	1	
		Eufaula [2]	18	
		Heyburn	1	
		Hugo	1	
		Hula	1	
		John Redmond	1	
		Kaw		1
		Keystone	1	
		Marion	1	
		Oologah		1
		Pat Mayse	1	
		Pearson-Skubitz	1	
		Sardis	1	
		Skiatook		1
		Waurika [3]		3
TOTAL	5	25	37	6
Notes: [1] The Birch project has a conduit as a part of the original project. At this project, however, none of the storage space or the conduit is under contract for repayment. [2] For the Eufaula project, there is only one conduit and although none of the users use the conduit, the cost is prorated among the users of the storage space in accordance with policy. [3] For the Waurika project, the three conduits are actually water conveyance facilities constructed in accordance with the project authorization.				

Table 6. Agreement Types and Counts

MSC	Original w/out Conduit Costs	Original w/ Conduit Costs	Reallocation	Surplus	Supplement / Modified	Separate Conduit	Interim Irrigation	Total
NAD	3	2	2					7
SAD	4		21					25
LRD	17		29	7				53
MVD	12		2					14
NWD	23	1	12					36
SPD	4							4
SWD	84	34	76	7	4	6		211
TOTAL	147	37	142	14	4	6	0	350

Table 7. Agreements Included in Agreement Count

Type of Agreement	Included in Count	Not Included in Count
Originally Authorized Storage	X	
Originally Authorized Storage with Conduit	X	
Separate Conduit	X	
Reallocation	X	
Surplus Water	X	
Supplement or Modification	X	
Interim Irrigation	X	
Activate Future		X
Assurance		X

7. Comparison of M&I Water Supply Data over the Past 20 Years

Table 8 provides a comparison of the program reporting on authorized M&I water supply storage space and agreements over the past 20 years. The changes in storage volume are due to several factors: reallocation actions, activating future use storage, expiring agreements and ongoing quality control of the data. The increase shown in storage in 2009 was primarily caused by erroneously including expired agreements in reporting at that time.

Table 8. Comparison of M&I Water Supply Storage Space Data (1996 – 2016)

Survey Date	No. of Projects	No. of Agreements	Storage Space (acre-feet)			
			Present Use	Future Use	Not Under Contract	Total
1996	117	235	6,335,393	2,410,539	778,699	9,524,631
2004	134	295	7,002,679	2,105,660	747,554	9,855,893
2005	136	307	7,185,969	2,169,670	404,837	9,760,476
2009	133	320	9,523,787	991,027	627,480	11,142,294
2010	135	326	8,004,086	1,251,865	414,709	9,670,660
2011	134	335	7,979,884	1,353,830	427,689	9,761,403
2014	136	342	7,980,896	1,386,710	434,329	9,801,935
2016	136	350	7,981,782	1,386,650	432,899	9,801,331

8. Comparison of 2014 to FY16 Data

As shown in **Table 8**, the M&I water supply storage space reporting has become relatively stable since 2010 as the use and maintenance of the OMBIL database has improved data collection and reporting. **Table 9**, on the following page, summarizes the basic data. A detailed listing of specific changes, including new and deleted agreements and other quality control actions is provided in **Appendix B**. There were no new projects added to or deleted from the database.

Table 9. Comparison of Basic M&I Water Supply Data between 2014 and FY16

Year	Projects	Agreements		Storage Space (AF)	Total Water Supply Cost (\$1,000)
		Basic	Activate Future		
2014	136	342	80	9,801,935	1,503,808
2016	136	350	82	9,801,331	1,524,490

9. Population Served

Reservoir storage space increases the reliability of varying natural river flows. The actual availability of water to M&I users under their agreements is a function of both the contracted reservoir storage space available for use, as well as inflows into the reservoir project. The combination of these two factors is expressed as reservoir yield. For water supply planning needs, yield is often measured in millions of gallons per day (mgd).

Under normal circumstances a local sponsor will request a certain yield and then the Corps computes the required acre-feet of storage space to achieve that yield based on the hydrology and operating plan of the reservoir project. In most cases the Corps and sponsor use the most critical drought in the historical record to compute the required storage. This is usually referred to as “firm yield” or “critical yield.”

It has always been a desire to arrive at the number of people Corps projects provide with M&I water. That is impossible because the Corps provides water supply storage to a wide variety of local interests and exactly how these entities parcel out the water cannot be ascertained. A proxy, however, can be developed. It takes nearly 1,200 gallons of water per person per day to meet the total needs of a city including schools, factories, offices and businesses and the many other private and governmental organizations that run a city and make it possible for our daily lives. This differs from what the typical indoor household uses in water per day, which runs from 50 to 85 gallons per person per day, or an average of 67.5 gallons. As was shown in **Table 1a**, the total storage capacity provided by the Corps reservoirs for M&I is 9.8 million acre-feet of storage space. This space is capable of reliably providing a yield of about 6,900 mgd. Based on the above numbers this yield is theoretically capable of meeting the total city needs of almost six million people or the individual indoor household needs of about 100 million people.

10. Water Supply Agreement Repayments Versus Administrative Costs

All payments received from the sponsors for M&I water supply agreement costs are deposited into the U.S. Treasury. The Corps does not retain any of this money. This requirement dates back to at least Section 6 of the 1944 Flood Control Act. Payments are comprised of the repayment of agreement first, or investment costs (listed below as principal), interest, and the assigned portion of the annual operations and maintenance (O&M) costs of the project. Most agreements also require the sponsor to repay a portion of repair, replacement and rehabilitation (RR&R) costs when incurred by the government.

There are three typical cases where interest may accrue on sponsor repayment obligations: interest on amortized repayments of principal, interest accrued after the 10-year interest-free period on future use storage when it is activated, and interest on late payments. The water supply business line does not track nor report interest as it accrues on unactivated future storage. Historically, when future use storage was activated, the interest accrued after the 10-year interest-free period was simply added to the present (principal) cost reported for the storage space when it was activated. In this FY16 report, the water supply business line has, for the first time, attempted to separate the accrued interest on activated future use storage from the original assigned cost of the storage space. This is an ongoing effort as the data is not readily available for all cases of activated future use storage. Typically there is very little interest due for late payments in any given year, and therefore the majority of the interest reported is that which is charged as part of amortized repayments of investment costs.

The Corps' administrative costs of managing these water supply agreements include the labor required by the district offices to maintain and update the agreements and this database, determine the repayment costs due each year, coordinate with and bill the sponsors, collect the billing revenue and return the revenue to the U.S. Treasury. Funding for these administrative costs is appropriated by Congress through the Corps' Operations and Maintenance account.

While sponsor payments for water supply agreements have been returned to the U.S. Treasury as far back as at least 1944, the specific tracking of these payments was only initiated in fiscal year 2003, and centralized, automated reporting was enabled in 2007. The last ten years of data are provided in **Table 10**. Annual totals vary for many reasons, including sponsors choosing to pay off the remaining balance on an agreement, and as annual repayment obligations rise and fall with the level of O&M and RR&R work performed at individual dam and reservoir projects. For example, the fiscal year 2010 and 2011 totals included large lump sum payments made for the investment costs of storage at the Sardis, Texoma and Waurika Lakes projects in Tulsa District.

Table 10. Historical Data on Water Supply Repayments Versus Administrative Costs

Fiscal Year	Sponsor Repayments (\$)				Administrative Costs (\$)
	Principal	Interest	O&M	Total	
2007	13,290,587	17,605,571	12,950,456	43,846,614	523,318
2008	15,343,450	16,756,846	10,633,173	42,733,469	524,072
2009	15,999,375	16,832,877	12,750,781	45,583,033	779,787
2010	49,235,151	33,034,364	16,996,372	99,265,887	1,257,143
2011	81,155,474	22,093,026	17,340,590	120,589,090	959,787
2012	30,959,961	16,130,127	18,618,283	65,708,371	1,005,298
2013	26,835,510	14,579,356	20,302,435	61,717,301	997,228
2014	18,639,595	14,647,736	16,425,146	49,712,477	1,334,933
2015	35,999,077	13,444,037	16,438,614	65,881,728	1,647,456
2016	16,673,986	13,051,342	25,136,869	54,862,197	939,400

11. Projects Not Included in the Water Supply Database.

Since the passage of WRDA 1986, Congress has funded the Corps to construct three multiple purpose reservoir projects that have included M&I water supply as an authorized purpose: the Little Dell project in Utah and the Cerrillos and Portugues projects in Puerto Rico. All of these projects have been, or are in the process of being turned over to local interests to operate and maintain and are not included in this database. There are also existing Corps projects which for different reasons, including specific project authorities and compensation for water withdrawals, lands and/or infrastructure pre-dating project construction, provide direct benefits to water supply users without a repayment agreement. In addition, there are several projects that, as part of operation for other authorized purposes, provide some incidental benefit to local water supply interests without a repayment agreement and typically without a formal commitment of reservoir storage space. Examples of such projects include lock and dam projects where a navigation pool is maintained and non-Federal water supply users have intakes in the pool. These latter two categories of projects were explored in depth as a result of a request from the U.S. House of Representatives Transportation and Infrastructure Committee in 2009. An edited version of the Corps' response to the committee is provided as **Appendix C**.

C. Irrigation Water Supply Database

1. Types of Irrigation Authorization and Projects

Irrigation is authorized to be an operational purpose in three general categories of multi-purpose projects in the Western United States²: joint storage, specific storage or run-of-river. Joint storage projects typically maintain a conservation pool that is operated for multiple purposes, but where specific storage amounts are not assigned to any one particular purpose. Specific storage projects also maintain a shared conservation pool, but each purpose is typically assigned a specific amount or percentage of the available storage space in the pool. Run-of-river projects are typically low-head and authorized for hydropower generation and/or navigation. Irrigation withdrawals at run-of-river projects are typically incidental to other authorized purposes. At all of these projects, the irrigation function is administered by the Bureau of Reclamation. With a few specific exceptions, the Bureau is responsible for billing irrigators and recovering assigned costs of authorized irrigation storage and projects.

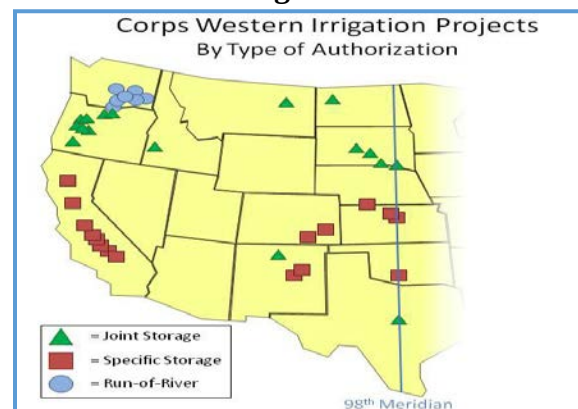
There are a total of 46 multi-purpose Corps projects in the West with irrigation authorized as a purpose. A map of these projects by type of authorization is shown on **Figure 2**, on the next page. This map graphically depicts how the type of authorization varies by region of the country. Note that the Willamette River projects in Oregon are so close together at this scale that not all are identified by a triangle. Of the 46 projects, 23 are authorized as joint storage, 16

² The Western United States is defined in Reclamation law as those states lying either wholly or partially west of the 98th meridian.

are authorized as specific storage and 7 as run-of-river. This list of projects, by type of authority is provided in **Appendix D**.

From an observation of this list, it is obvious that the type of authorization differs by the region of the country and river basin. The projects in the Missouri River, Middle Snake, Willamette and other small basins in Oregon are authorized for joint storage. The projects in the Lower Snake and the Columbia River Basins are run-of-river projects. Projects in the rest of the West are authorized with specific storage with the exception of the Belton project in Texas and Abiquiu project in New Mexico.

Figure 2. Location of Corps Projects Authorized for Irrigation in the West



2. Summary of Irrigation Data

While the irrigation water supply database was created with the intent of collecting data with some regularity, a process has not yet been developed, nor have resources been committed to update the database. As a result, no new data is available for this report. The information last presented in the 2014 water supply database report is the most recent detailed data available. The data in the 2014 report was originally compiled in 2012 (see **paragraph A-3**). **Table 11** provides an updated summary to include the total project costs for run-of-river projects which was not presented in the 2014 report.

Table 11. Summary of Storage Space and Costs for Irrigation Projects

Project Type (and Count)	Total Project Storage Space (MAF)	Total Project Cost (\$M)	Storage Space Assigned to Irrigation (MAF)	Cost Assigned to Irrigation (\$M)
Joint (23)	77.971	2,085.3	0 [1]	0 [1]
Specific (16)	6.959	457.4	3.657	54.088
Run of River (7)	0	2,422.5 [2]	0	0
Total (46)	84.930	4,965.2	3.657	54.088

[1] While the joint storage projects do not include storage space specifically set aside for irrigation, these projects do include a total of 70.969 MAF of joint-use storage space that can be used for all authorized project purposes such as Irrigation, Flood Control, Hydroelectric Power, Navigation, Recreation and/or M&I Water Supply. The cost of this storage space is \$731.831M.

[2] By district, the total project costs for run-of-river projects are \$1,222.6M for the 5 Walla Walla District projects and \$1,199.9M for the 2 Portland District projects.

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Appendix A. Total Yield and Storage by Project

MSC	District	Project	Yield (MGD)	Storage Space (acre-feet)
North Atlantic	New England	Colebrook, CT	116.30	50,200
		Littleville, MA	17.50	9,400
	Philadelphia	Beltzville, PA	42.00	27,880
		Blue Marsh, PA	35.50	8,000
	Baltimore	Cowanesque, PA	70.00	25,600
		Curwensville, PA	50.00	5,360
		Jennings Randolph, MD & WV	120.00	40,995
	Total NAD		451.30	167,435
South Atlantic	Wilmington	B. Evert Jordan, NC	100.00	45,800
		Falls Lake, NC	66.00	45,000
		John H. Kerr, VA	41.04	21,115
		W. Kerr Scott, NC	150.00	33,000
	Savannah	Hartwell, GA & SC	37.80	26,574
		J. Strom Thurmond, GA & SC	12.15	3,833
		Richard B. Russell, GA & SC	15.86	872
	Mobile	Allatoona, GA	21.37	19,511
		Carters, GA	2.00	818
		Okatibbee, MS	25.00	13,100
	TOTAL SAD		471.22	209,623
Lakes and Rivers	Huntington	Alum Creek lake, OH	40.00	79,200
		Grayson Lake, KY	7.50	657
		John W. Flannagan, VA	10.00	3,360
		North Fork of Pound Lake, VA	0.30	100
		Paint Creek, OH	1.50	721
		Paintsville, KY	6.00	3,129
		Summersville, WV	4.00	468
		Tom Jenkins	8.00	5,690
	Louisville	Barren River Lake, KY	18.00	1,050
		Brookville, Lake, IN	82.50	89,300
		Caesar Creek Lake, OH	37.00	39,100
		Carr Creek, Lake KY	2.00	2,052
		Cave Run Lake., KY	3.00	802
		Green River Lake, KY	7.50	4,315
		Monroe Lake, IN	130.00	160,000
		Nolin Lake. KY	1.00	98
	Nashville	Patoka Lake, IN	75.00	129,658
		Rough River lake, KY	4.20	522
		William H. Harsha Lake, OH	37.00	35,534
		Center Hill Lake, TN	23.59	7,880
		Dale Hollow Lake, TN & KY	2.16	2,211
		J. Percy Priest Dam & Lake, TN	63.33	17,311
		Laurel River Lake, KY	7.26	1,884

MSC	District	Project	Yield (MGD)	Storage Space (acre-feet)
Lakes and Rivers	Pittsburgh	Berlin Lake, OH	15.00	6,260
		Mosquito Creek Lake, OH	16.00	11,000
		Stonewall Jackson Lake, WV	3.60	2,200
		Tygart, WV	1.90	2,240
		Youghiogheny, PA	5.00	2,950
TOTAL LRD			612.34	609,692
Mississippi Valley	Rock Island	Saylorville, IA	13.30	14,900
	St. Louis	Carlyle Lake, IL	24.50	32,692
		Clarence Cannon Dam, Mark Twain Lake, MO	16.00	20,000
		Lake Shelbyville, IL	17.00	24,714
		Rend Lake, IL	70.00	109,000
	Vicksburg	Blakey Mt. Dam & Lake Ouachita, AR	1.00	1,575
		DeGray, AR	152.00	238,729
		Enid, MS	10.90	4,500
TOTAL MVD			304.70	446,110
Northwestern	Omaha	Bowman Haley, ND	1.90	15,500
		Garrison Dam, Lake Sakakawea, ND	18.75	54,390
	Seattle	Howard Hanson, WA	33.60	20,000
	Portland	Lost Creek, OR	20.00	10,000
	Kansas City	Clinton Lake, KS	17.40	89,200
		Harry S. Truman Dam & Res., MO	0.67	283
		Hillsdale, KS	5.16	53,000
		Kanopolis Lake, KS	19.30	12,500
		Long Branch, MO	7.10	24,400
		Melvorn Lake, KS	7.20	50,000
		Milford Lake, KS	111.00	300,000
		Perry Lake, KS	74.60	150,000
		Pomona Lake, KS	7.40	33,000
		Rathbun Lake, IA	2.04	6,680
		Smithville Lake, MO	28.80	95,200
		Stockton Lake, MO	30.00	50,000
		Tuttle Creek Lake, KS	57.83	50,000
TOTAL NWD			442.75	1,014,153
South Pacific	Albuquerque	Abiquiu, NM	0.07	186,820
	San Francisco	Coyote Valley Dam / Lake Mendocino, CA	61.97	70,000
		Dry Creek, Warm Springs Dam / Lake Sonoma, CA	186.43	212,000
	Sacramento	New Hogan, CA	10.33	105,000
TOTAL SPD			258.80	573,820

MSC	District	Project	Yield (MGD)	Storage Space (acre-feet)
Southwestern	Little Rock	Beaver, AR	132.51	160,148
		Blue Mountain Lake, AR	2.00	1,550
		Bull Shoals Lake, AR	8.00	12,613
		Dardanell Lake, AR	0.00	0
		DeQueen, Lake ,AR	22.00	17,885
		Dierks Lake, AR	13.25	10,600
		Gillham Lake, AR	42.00	20,600
		Greers ferry Lake, AR	25.63	31,134
		Millwood Lake, AR	265.00	150,000
		Nimrod Lake, AR	0.33	143
		Norfork Lake, AR	3.00	2,400
Total SWL			513.72	407,073
	Fort Worth	Aquilla Lake, TX	9.67	33,600
		Bardwell Lake, TX	11.20	42,800
		Belton Lake, TX	101.33	360,700
		Benbrook Lake, TX	6.73	72,500
		Canyon Lake, TX	89.80	366,400
		Cooper Dam, Jim Chapman Lake, TX	105.92	273,000
		Ferrell's Bridge Dam, Lake O'The Pines, TX	154.99	250,000
		Granger Dam & Lake, TX	16.16	37,900
		Grapevine Lake, TX	20.70	161,250
		Hords Creek, TX	1.10	5,780
		Joe Pool Lake, TX	14.20	142,900
		Lavon Lake, TX	92.00	380,000
		Lewisville Dam, TX	165.00	331,000
		Navarro Mills Lake, TX	15.50	53,200
		North Sam Gabriel Dam, Lake Georgetown, TX	10.30	29,198
		O. C. Fisher, TX	3.62	78,793
		Proctor Lake, TX	13.90	31,400
		Ray Roberts Lake, TX	112.46	799,600
		Sam Rayburn Dam & Reservoir, TX	1,328.70	43,000
		Somerville Lake, TX	36.19	143,900
		Stillhouse Hollow Dam, TX	63.19	204,900
		Waco Lake, TX	94.60	151,626
		Whitney Lake, TX	17.64	50,000
		Wrightman Patman Dam & Lake, TX	50.00	76,663
Total SWF			2,534.90	4,120,110

MSC	District	Project	Yield (MGD)	Storage Space (acre-feet)
Southwestern	Tulsa	Arcadia Lake, OK	11.00	23,090
		Birch Lake, OK	3.00	7,630
		Broken Bow Lake, OK	174.93	152,440
		Canton Lake, OK	4.60	90,000
		Copan Lake, OK	2.00	7,500
		Council Grove, OK	6.70	32,400
		Denison Dam, Lake Texoma, OK & TX	295.82	300,001
		El Dorado, KS	10.99	142,800
		Elk City, KS	12.20	34,300
		Eufaula Lake, OK	50.99	56,909
		Heyburn, OK	1.70	2,000
		Hugo Lake, OK	58.61	47,600
		Hula, OK	12.36	19,800
		John Redmond, KS	56.20	44,900
		Kaw Lake, OK	167.09	171,194
		Keystone Lake, OK	14.50	20,000
		Marion, KS	9.17	44,800
		Oologah Lake, OK	43.25	342,600
		Pat Mayse Lake, OK	55.00	109,600
		Pearson-Skubitz, Big Hill Lake, KS	8.50	25,700
		Pine Creek Lake, OK	48.98	28,800
		Sardis Lake, OK	140.00	297,200
		Skiatook Lake, OK	15.10	62,900
		Tenkiller Ferry Lake, OK	24.82	23,532
		Toronto, KS	0.10	400
		Waurika Lake, OK	36.20	151,400
		Wister Lake, OK	19.73	13,819
Total SWT			1,283.54	2,253,315
TOTAL SWD			4,332.16	6,780,498
NATIONAL TOTAL			6,873.27	9,801,331

Appendix B. Summary of Quality Control and Changes from 2014 to FY16

MSC / District	Project	User	Agreement Count		Quality Control Action
			Deleted	New	
NAD / NAE	Littleville	City of Springfield			Separated conduit costs from storage costs
NAP	Beltzville	Delaware River Basin Commission			Separated conduit costs from storage costs
SAD / SAS	Hartwell	Anderson Co. Joint Municipal Water System			Updated remaining principal
LRD / LRH	Grayson	Rattlesnake Ridge (2000)			Corrected storage and cost data
	Paint Creek	Highland Water Co.			Decrease storage space
LRN	Center Hill	William Shell		X	New Surplus Water agreement
	Dale Hollow	Ezall & Wilma Nevans	X		Deleted Surplus Water agreement
		Grover Brown		X	New Surplus Water agreement
		William & Robin Woody		X	New Surplus Water agreement
		Kathryn Stawicki		X	New Surplus Water agreement
		Larry Rector		X	New Surplus Water agreement
		Wilma Nevans		X	New Surplus Water agreement
	Laurel River	City of London		X	New Reallocation agreement
LRP	Berlin	Mahoning Valley San. Dist.		X	New present use agreement for storage previously not under contract
MVD / MVK	DeGray	Multiple agreements			Added additional costs
NWD / NWP	Lost Creek	Finley Bend C. LLC		X	New present use agreement for storage previously not under contract
NWK	Clinton	State of Kansas			Added conduit cost
	Hillsdale	State of Kansas			Increased costs
	Milford	State of Kansas Act Fut. 2			Added additional costs
	Pomona	State of Kansas 1 st 1995			Decreased cost
		State of Kansas 2 nd 1995			Decreased cost
	Stockton	City of Springfield			Decreased cost and separated additional costs from storage cost
SPD / SPA	Abiquiu	Albu. Bernalillo Water Util.			Increased storage space
SWD / SWL	Dierks	Tri-County Water Dist.			Increased present and decreased future storage space, and decreased costs
	Gillham	Tri-County Water Dist.			Decreased costs
	Greers Ferry	Mid Ark. Water Alliance			Decreased storage space
	Millwood	SW Ark. Water District			Corrected cost data
SWF	Bardwell	RR&R			Changed cost from Present to Additional
	Belton	RR&R			Changed cost from Present to Additional
	Cooper	Sulphur R. MWD (Act. Fur.)			Additional cost added to activate future
		RR&R			Changed cost from Present to Additional
	Hords Creek	(none)	X		Changed to Not Under Contract
	Joe Pool	RR&R			Changed cost from Present to Additional
	Lavon	Activate Future	X		Changed Supplement to Activate Future
	N. San Gabriel	Activate Future #2			Decreased space and cost
SWT	Birch	OWRB			Decreased cost
	Broken Bow	Assurance			Increased space and cost
	Eufaula	Total cost of water supply storage at project			Increased cost due to additional cost
	Hugo	City of Hugo			Increased cost due to additional cost
		Antlers PWA			Increased cost due to additional cost
		Antlers PWA			Added activate future
		RWD#3			Increased cost due to additional cost
	Hula	City of Bartlesville			Additional cost added to activate future
	John Redmond	State of Kansas			Added cost of conduit
	Kaw	Kaw Nation	X		Deleted Interim Irrigation agreement

MSC / District	Project	User	Agreement Count		Quality Control Action
			Deleted	New	
SWD/ SWT		Kaw Reservoir Authority			Decreased cost
	Keystone	OWRB Assurance			Added cost of conduit
	Marion	State of Kansas (1 st agreement)			Decreased space and increased cost
	Pat Mayse	City of Paris			Decreased cost
	Pine Creek	International Paper			Increased cost
	Skiatook	Skiatook PWA (1988)			Increased cost
	Tenkiller Ferry	Sequoyah Fuels	X		Changed terminated agreement record to not under contract storage
		Pettit Mountain Water Assoc. (2003)			Changed from Surplus Water to Reallocation
		Greenleaf Nursery	X		Deleted two Interim Irrigation agreements
	Toronto	Kansas Water Office			Decreased cost
	Waurika	Waurika Project MCD			Increased cost
	Wister	Heavener Utility			Increased cost

Appendix C. Projects Not Included in the Water Supply Database

This appendix provides information on Corps projects which for different reasons, including specific project authorities, compensation for water withdrawals, lands and/or infrastructure pre-dating project construction or operating plans, provide incidental benefits either indirectly or directly for water supply without a direct repayment agreement and typically without a commitment of reservoir storage space. The information presented in this appendix was originally prepared in response to questions received from the U.S. House of Representatives Committee on Transportation and Infrastructure in 2009. The information has been updated based on the Corps Water Supply Business Line's understanding of current conditions, however, it should not be regarded as an authoritative discussion of current legal and operational conditions at these projects.

Projects in the indirect benefits group are operated for other purposes with no special consideration for water supply. Incidental benefits may occur for water supply because water supply users can withdraw water that is normally available as the result of operation for other authorized project purposes. The direct group includes projects where relocation agreements provide compensation for real estate acquisition and/or allow water supply withdrawals that existed prior to project construction to continue, several projects in California where flood storage releases are timed to benefit ground water recharge and special cases where storage and/or operations for water supply exist but are not covered by a normal water supply agreement. These project categories are described in greater detail in the following paragraphs.

1. Indirect Benefits

a. [Lock and Dam Navigation Projects](#). The Corps has numerous lock and dam projects where a navigation pool is maintained, generally ranging from nine to twelve feet in depth. While the projects are not operated to deliberately benefit water supply, and no storage is allocated to water supply, indirect water supply benefits may result where local interests have developed intakes for M&I water withdrawals along the pools. These water supply withdrawals are dependent upon run-of-the-river flows and the existence of the navigation pool.

b. [Incidental Use of Minimum Flows, KS](#). In the Kansas City District, there are a number of projects, both with and without water supply agreements, where the Corps releases flows for authorized project purposes, such as water quality to maintain minimum stream flows set by the State of Kansas for fish & wildlife, supplemental navigation, and/or municipal and industrial water supply needs. These releases are part of the normal water control plans. Incidental to these purposes, these flows are utilized by small municipal and farming interests on a run-of-the-river basis. The projects included are: Hillsdale, Kanopolis, Milford, Perry, Pomme De Terre, Stockton and Wilson lakes.

2. Direct Benefits

a. *Water Supply Storage Releases because of Prior Withdrawals.* At some Corps reservoir projects, lake withdrawal or releases for downstream withdrawal are provided for non-federal water users because of water supply withdrawals that were being made prior to project construction, or as part of real estate acquisition and relocation for project construction. The Government's commitment to allow these prior withdrawals to continue is usually provided through relocation agreements or contracts. Relocation agreements occurred where existing public water supply facilities had to be relocated or modified due to acquisition of land for construction of the dam or impoundment of the lake. As compensation to the local water supply entity, the Corps executed agreements or contracts with the water supply entity to pay them for the land acquired and to also allow them to withdraw a designated amount of water from the lake (or make releases for downstream withdrawal), usually at no charge. These relocation agreements may be present at projects where water supply was otherwise not authorized as a purpose.

Four projects were identified in 2009 as providing water supply through relocation agreements.

(1) *Buford Dam/Lake Sidney Lanier, GA.* At this project there are two water supply users with relocation agreements executed at the time of project construction to compensate for the relocation of existing intakes and facilities: the City of Gainesville (22 June 1953) and the City of Buford (19 December 1955). The City of Gainesville currently withdraws approximately 18 million gallons per day (mgd) and returns approximately 10 mgd, for a net withdrawal of 8 mgd, and the City of Buford may withdraw up to 2 mgd.

(2) *Coldbrook Lake, SD.* The owner of the Larive Lake Resort has an agreement for up to 1.1 cfs inflow due to a water right pre-dating the project.

(3) *Stillwater Lake, PA.* A minimum flow of 1 mgd from the conservation pool directly benefits municipal and industrial users. This minimum flow is covered in the water control manual and is to allow downstream water supply withdrawals that replace prior withdrawals from a small natural lake partially inundated by construction of the project.

(4) *West Point, GA.* The City of LaGrange withdraws water pursuant to relocation agreements executed at the time of project construction to compensate for the relocation of existing intakes and facilities. A 1968 relocation agreement with the City of LaGrange provides for withdrawals of 8.35 mgd, and a relocation agreement with the now-defunct Milliken Carpet Company, which subsequently assigned its rights to the City of LaGrange, provides for withdrawals of 12.96 mgd.

b. *Flood Control Releases Timed to Benefit Ground Water Recharge.* The Corps has several flood control projects in the state of California where downstream groundwater recharge is enhanced when possible through the timing of flood control releases. These dams create reservoirs that are normally dry and only store water during and immediately after a storm event. For example, at both the Hansen and Santa Fe dams, at which there are no formal water conservation operation agreements, the Los Angeles District will release water at a rate that

facilitates downstream groundwater recharge, provided the releases do not impact flood control operations. At San Antonio Dam, the current water control plan allows reduction in releases to support downstream groundwater recharge during falling pool levels and when weather conditions are favorable.

The Prado Dam, CA project is different in that a buffer pool for water conservation has been established above the small debris pool at the project. The Corps and the Orange County Water District have entered into an agreement pursuant to statutory authorization in Section 110 of Division C, P.L. 108-447, for the purposes of water conservation storage at the project provided the Water District agrees to pay for the separable cost associated with implementation and operation and maintenance of the Prado Dam for water conservation. When conditions are favorable, water is released from the buffer pool to facilitate groundwater recharge activities downstream. Finally, the Whittier Narrows project has a defined water conservation pool, but no debris pool. There are no agreements in place at this project with downstream agencies.

c. [Central and Southern Florida \(C&SF\) Project, FL](#). The C&SF Project was authorized to provide flood control, M&I and agricultural water supply, prevention of saltwater intrusion, water supply for the Everglades, and protection of fish and wildlife resources. The primary system includes about 1,000 miles each of levees and canals, 150 water control structures and 16 major pump stations. Some project elements are operated by the local sponsor, the South Florida Water Management District, and some are operated by the Corps. Beneficiaries for flood control and water supply include the cities of Clewiston, Pahokee, and West Palm Beach, sugar cane companies, water drainage districts, Indian reservations, the Loxahatchee National Wildlife Refuge, Everglades national park and local farmers and ranchers. All operations are covered by the Water Control Manual for Lake Okeechobee and Everglades Agricultural Area. There are no standard water supply agreements. The project is cost shared between the Federal Government and the local sponsors through project agreements.

d. [Buford Dam/Lake Lanier, GA](#). The legislation authorizing construction of the Buford Dam/Lake Lanier project, as part of the plan of improvement for the Apalachicola-Chattahoochee-Flint River Basin, authorized the Corps to make releases from Buford Dam to provide for the municipal and industrial water supply needs of the Atlanta metropolitan area downstream. The Corps makes releases as needed to accommodate withdrawals of approximately 277 mgd currently at Atlanta, consistent with the project authorization in the 1946 Rivers and Harbors Act.

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Appendix D. Corps Projects Authorized for Irrigation

MSC / District	Project	State	River Basin	Joint	Specific	Run-of-River	Irrigation Agreement	M&I Storage Agreement
NWD / NWO	Ft. Peck	MT	Missouri	X				
	Garrison	ND	Missouri	X				
	Oahe	ND/SD	Missouri	X				
	Big Bend	SD	Missouri	X				
	Ft. Randall	SD	Missouri	X				
	Gavins Point	SD/NE	Missouri	X				
NWW	Lucky Peak	ID	Middle Snake	X			X	
	Ice Harbor	WA	Lower Snake			X		
	Little Goose	WA	Lower Snake			X		
	Lower Granite	WA	Lower Snake			X		
	Lower Monumental	WA	Lower Snake			X		
	Mc Nary	WA/OR	Middle Columbia			X		
NWP	John Day	WA/OR	Lower Columbia			X		
	The Dalles	OR	Lower Columbia			X		
	Lookout Point / Dexter	OR	Willamette	X			X	
	Blue River	OR	Willamette	X			X	
	Cottage	OR	Willamette	X			X	
	Cougar	OR	Willamette	X			X	
	Detroit / Big Cliff	OR	Willamette	X			X	
	Dorena	OR	Willamette	X			X	
	Fall Creek	OR	Willamette	X			X	
	Fern Ridge	OR	Willamette	X			X	
	Foster	OR	Willamette	X				
	Green Peter	OR	Willamette	X			X	
	Hills Creek	OR	Willamette	X			X	
	Applegate	OR	Rogue	X			X	
	Lost Creek	OR	Rogue	X			X	X
	Willow Creek	OR	Willow Creek	X			X	
NWK	Harlan	NE	Republican		X		X	
	Kanopolis	KS	Smoky Hill		X			
	Wilson	KS	Smoky Hill		X			
SPD / SPK	Black Butte	CA	Sacramento		X		X	
	Eastman	CA	San Joaquin		X		X	

MSC / District	Project	State	River Basin	Joint	Specific	Run-of-River	Irrigation Agreement	M&I Storage Agreement
SPD / SPK	Hensley	CA	San Joaquin		X		X	
	New Hogan	CA	San Joaquin		X		X	X
	Isabella	CA	Tulare-Buena Vista Lakes		X		X	
	Kaweah	CA	Tulare-Buena Vista Lakes		X		X	
	Pine Flat	CA	Tulare-Buena Vista Lakes		X		X	
	Success	CA	Tulare-Buena Vista Lakes		X		X	
SPA	Abiquiu	NM	Rio Grande	X				X
	Conchas	NM	Upper Canadian		X			
	John Martin	CO	Upper Arkansas		X			
	Trinidad	CO	Upper Arkansas		X		X	
	Santa Rosa	NM	Upper Arkansas		X			
SWD / SWF	Belton	TX	Lower Brazos	X				X
SWT	Waurika	OK	Red-Washita		X			X
TOTAL	46	12		23	16	7	24	5

FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs and Remaining Principal by Agreement

Table of Contents			
Division	District (s)	Item	ANNEX Page Number
NAD	New England, Baltimore, Philadelphia	Agreement Data and Storage Space	3
		Cost Data	4
		Remaining Principal	5
		Notes	6
SAD	Wilmington, Savannah, Mobile	Agreement Data and Storage Space	7
		Cost Data	9
		Remaining Principal	11
		Notes	13
LRD	Huntington, Louisville, Nashville, Pittsburgh	Agreement Data and Storage Space	14
		Cost Data	17
		Remaining Principal	20
		Notes	23
MVD	Rock Island, St. Louis, Vicksburg	Agreement Data and Storage Space	24
		Cost Data	25
		Remaining Principal	26
		Notes	27
NWD	Omaha, Seattle, Portland, Kansas City	Agreement Data and Storage Space	28
		Cost Data	30
		Remaining Principal	32
		Notes	34
SPD	Albuquerque, San Francisco, Sacramento	Agreement Data and Storage Space	35
		Cost Data	36
		Remaining Principal	37
		Notes	38
SWD	Little Rock	Agreement Data and Storage Space	39
		Cost Data	41
		Remaining Principal	43
		Notes	45
	Ft. Worth	Agreement Data and Storage Space	46
		Cost Data	50
		Remaining Principal	54
		Notes	58
	Tulsa	Agreement Data and Storage Space	60
		Cost Data	67
		Remaining Principal	74
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SAD	Wilmington, Savannah, Mobile	Agreement Data and Storage Space	7
		Cost Data	9
		Remaining Principal	11
		Notes	13
LRD	Huntington, Louisville, Nashville, Pittsburgh	Agreement Data and Storage Space	14
		Cost Data	17
		Remaining Principal	20
		Notes	23
MVD	Rock Island, St. Louis, Vicksburg	Agreement Data and Storage Space	24
		Cost Data	25
		Remaining Principal	26
		Notes	27
NWD	Omaha, Seattle, Portland, Kansas City	Agreement Data and Storage Space	28
		Cost Data	30
		Remaining Principal	32
		Notes	34
SPD	Albuquerque, San Francisco, Sacramento	Agreement Data and Storage Space	35
		Cost Data	36
		Remaining Principal	37
		Notes	38
SWD	Little Rock	Agreement Data and Storage Space	39
		Cost Data	41
		Remaining Principal	43
		Notes	45
	Ft. Worth	Agreement Data and Storage Space	46
		Cost Data	50
		Remaining Principal	54
		Notes	58
	Tulsa	Agreement Data and Storage Space	60
		Cost Data	67
		Remaining Principal	74
		Notes	81

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**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

North Atlantic Division		NAD WS Agreement Data				NAD WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
New England										
Colebrook, CT	Hartford Metro Dist.	Original	1965	116.30	3.137	50,200	0	0	50,200	50,200
Littleville, MA	City of Springfield	Original	1967	17.50	2.742	9,400	0	0	9,400	9,400
2 projects	2 agreements			133.80		59,600	0	0	59,600	59,600
Philadelphia										
Beltzville, PA	Delaware RBC	Original	1980	42.00	3.222	27,880	0	0	27,880	27,880
Blue Marsh, PA	Delaware RBC	Original	1971	35.50	3.502	8,000	0	0	8,000	8,000
2 projects	2 agreements			77.50		35,880	0	0	35,880	35,880
Baltimore										
Cowanesque, PA	Susquehanna RBC	Reallocated	1986	70.00	7.690	25,600	0	0	25,600	25,600
Curwensville, PA	Susquehanna RBC	Reallocated	1994	50.00	6.125	5,360	0	0	5,360	5,360
Jennings Randolph, MD/WV	Potomac RBC, Dist. of Col., WSSC and Fairfax Co.	Original	1982	120.00	3.253	40,995	0	0	40,995	40,995
3 projects	3 agreements			240.00		71,955	0	0	71,955	71,955
FY16 Division Summary	7 projects / 7 agreements			451.30		167,435	0	0	167,435	167,435
2014 WS Database Report	7 projects / 7 agreements			451.30		167,435	0	0	167,435	167,435

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

North Atlantic Division		NAD WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
New England									
Colebrook, CT	Hartford Metro Dist.	5,587,085	0	0	5,587,085	0	0	5,587,085	5,587,085
Littleville, MA	City of Springfield	2,171,160	0	0	2,171,160	31,000	0	2,202,160	2,202,160
2 projects	2 agreements	7,758,245	0	0	7,758,245	31,000	0	7,789,245	7,789,245
Philadelphia									
Beltzville, PA	Delaware RBC	6,457,800	0	0	6,457,800	130,200	0	6,588,000	6,588,000
Blue Marsh, PA	Delaware RBC	15,003,516	0	0	15,003,516	0	0	15,003,516	15,003,516
2 projects	2 agreements	21,461,316	0	0	21,461,316	130,200	0	21,591,516	21,591,516
Baltimore									
Cowanesque, PA	Susquehanna RBC	39,414,000	0	0	39,414,000	0	0	39,414,000	39,414,000
Curwensville, PA	Susquehanna RBC	6,934,000	0	0	6,934,000	0	0	6,934,000	6,934,000
Jennings Randolph, MD/WV	Potomac RBC, Dist. of Col., WSSC and Fairfax Co.	65,538,120	0	0	65,538,120	0	0	65,538,120	65,538,120
3 projects	3 agreements	111,886,120	0	0	111,886,120	0	0	111,886,120	111,886,120
FY16 Division Summary	7 projects / 7 agreements	141,105,681	0	0	141,105,681	161,200	0	141,266,881	141,266,881
2014 WS Database Report	7 projects / 7 agreements	141,266,881	0	0	141,266,881	0	0	141,266,881	141,266,881

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

North Atlantic Division		NAD Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District / MSC Percent Remaining
		Present	Future	Total	
New England					
Colebrook, CT	Hartford Metro Dist.	1,265,816	0	1,265,816	
Littleville, MA	City of Springfield	0	0	0	
2 projects	2 agreements	1,265,816	0	1,265,816	16%
Philadelphia					
Beltzville, PA	Delaware RBC	2,951,080	0	2,951,080	
Blue Marsh, PA	Delaware RBC	7,571,909	0	7,571,909	
2 projects	2 agreements	10,522,989	0	10,522,989	49%
Baltimore					
Cowanesque, PA	Susquehanna RBC	0	0	0	
Curwensville, PA	Susquehanna RBC	0	0	0	
Jennings Randolph, MD/WV	Potomac RBC, Dist. of Col., WSSC and Fairfax Co.	44,315,627	0	44,315,627	
3 projects	3 agreements	44,315,627	0	44,315,627	40%
FY16 Division Summary	7 projects / 7 agreements	56,104,432	0	56,104,432	40%
2014 WS Database Report	7 projects / 7 agreements	58,456,582	0	58,456,582	41%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal
by Agreement**

NAD Database Notes:

[1] Costs as recorded in the agreement when signed. Price level varies.

[2] Additional costs are normally interest costs that have accumulated on the unpaid balance after the 10-year interest free period. Other late fees and charges should be footnoted. There are no additional charges recorded for projects in the North Atlantic Division.

[3] Includes, as applicable for present use storage, interest on the unpaid balance after the end of the ten-year interest free period.

[4] Based on OMBIL run of 29 September 2016.

Additional Remarks:

1. Changes from the 2014 database report include separating conduit costs from storage costs at the Littleville and Beltzville projects, and the remaining principal owed for the division decreased from \$58.5 million to \$56.1 million (from 41% to 40% remaining).

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

South Atlantic Division		SAD Agreement Data				SAD WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Wilmington										
B. Everett Jordan, NC	State of NC	Original	1988	100.00	3.225	45,800	0	0	45,800	45,800
Falls Lake, NC	City of Raleigh	Original	1972	66.00	3.649	45,000	0	0	45,000	45,000
John H. Kerr, VA	Virginia Beach	Reallocated	1984	20.00	[5]	10,200	0	0	10,200	
	VA Dep of Corr.	Reallocated	1989	0.04	[5]	23	0	0	23	
	Mecklenburg Cogeneration	Reallocated	1991	1.00	[5]	600	0	0	600	
	City of Henderson	Reallocated	2006	20.00	4.250	10,292	0	0	10,292	21,115
W. Kerr Scott, NC	County of Wilkes & City of Winston-Salem	Original	1960	150.00	2.699	33,000	0	0	33,000	33,000
4 projects	7 agreements			357.04		144,915	0	0	144,915	144,915
Savannah										
Hartwell, GA/SC	Anderson Co. Joint Municipal Water System	Reallocated	1967	35.02	[6]	24,620	0	0	24,620	
	City of Lavonia	Reallocated	1990	0.18	8.250	127	0	0	127	
	Hart County	Reallocated	1998	2.60	6.750	1,827	0	0	1,827	26,574
J Strom Thurmond, GA/SC	City of Lincolnton	Reallocated	1964	0.29	[6]	92	0	0	92	
	City of Washington	Reallocated	1975	2.00	[6]	632	0	0	632	
	Savannah Valley Auth.	Reallocated	1989	0.30	9.250	92	0	0	92	
	Columbia County	Reallocated	1989	3.35	9.250	1,056	0	0	1,056	
	City of Lincolnton	Reallocated	1990	0.26	9.250	83	0	0	83	
	City of Thompson	Reallocated	1990	3.35	8.250	1,056	0	0	1,056	
	Town of McCormick	Reallocated	1999	1.60	[5]	506	0	0	506	
	Town of McCormick	Reallocated	2001	1.00	5.875	316	0	0	316	3,833
Richard B Russell, GA/SC	SC Public Service Auth.	Reallocated	2001	8.93	5.875	491	0	0	491	
	City of Elberton	Reallocated	1990	6.93	[5]	381	0	0	381	872
3 projects	13 agreements			65.81		31,279	0	0	31,279	31,279

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
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South Atlantic Division		SAD Agreement Data				SAD WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Mobile										
Allatoona, GA	Cobb Co. Marietta Water Auth.	Reallocated	1963	4.61	2.500	13,140	0	0	13,140	
	City of Cartersville	Reallocated	1966	5.26	2.500	1,996	0	0	1,996	
	City of Cartersville	Reallocated	1991	11.5	8.125	4,375	0	0	4,375	19,511
Carters, GA	City of Chatsworth	Reallocated	1991	2.00	9.125	818	0	0	818	818
Okatibbee, MS	Pat Harrison WS Dist.	Original	1965	25.00	3.137	13,100	0	0	13,100	13,100
3 projects	5 agreements			48.37		33,429	0	0	33,429	33,429
FY16 Division Summary	10 projects / 25 agreements			471.22		209,623	0	0	209,623	209,623
2014 WS Database Report	10 projects / 25 agreements			471.22		209,623	0	0	209,623	209,623

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

South Atlantic Division		SAD WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Wilmington									
B. Everett Jordan, NC	State of NC	4,388,000	0	0	4,388,000	0	0	4,388,000	4,388,000
Falls Lake, NC	City of Raleigh	12,170,000	0	0	12,170,000	0	0	12,170,000	12,170,000
John H. Kerr, VA	Virginia Beach	2,275,685	0	0	2,275,685	0	0	2,275,685	
	VA Dep of Corr.	5,075	0	0	5,075	0	0	5,075	
	Mecklenburg Cogeneration	150,421	0	0	150,421	0	0	150,421	
	City of Henderson	2,375,336	0	0	2,375,336	0	0	2,375,336	4,806,517
W. Kerr Scott, NC	County of Wilkes & City of Winston-Salem	1,890,838	0	0	1,890,838	0	0	1,890,838	1,890,838
4 projects	7 agreements	23,255,355	0	0	23,255,355	0	0	23,255,355	23,255,355
Savannah									
Hartwell, GA/SC	Anderson Co. Joint Municipal Water System	3,477,700	0	0	3,477,700	0	0	3,477,700	
	City of Lavonia	21,447	0	0	21,447	0	0	21,447	
	Hart County	356,867	0	0	356,867	0	0	356,867	3,856,014
J Strom Thurmond, GA/SC	City of Lincolnton	15,000	0	0	15,000	0	0	15,000	
	City of Washington	72,800	0	0	72,800	0	0	72,800	
	Savannah Valley Auth.	27,395	0	0	27,395	0	0	27,395	
	Columbia County	313,048	0	0	313,048	0	0	313,048	
	City of Lincolnton	24,608	0	0	24,608	0	0	24,608	
	City of Thompson	334,714	0	0	334,714	0	0	334,714	
	Town of McCormick	17,357	0	0	17,357	0	0	17,357	
	Town of McCormick	66,499	0	0	66,499	0	0	66,499	871,421
Richard B Russell, GA/SC	SC Public Service Auth.	1,615,243	0	0	1,615,243	0	0	1,615,243	
	City of Elberton	419,658	0	0	419,658	0	0	419,658	2,034,901
3 projects	13 agreements	6,762,336	0	0	6,762,336	0	0	6,762,336	6,762,336

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

South Atlantic Division		SAD WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Mobile									
Allatoona, GA	Cobb Co. Marietta Water Auth.	1,168,440	0	0	1,168,440	0	0	1,168,440	
	City of Cartersville	396,218	0	0	396,218	0	0	396,218	
	City of Cartersville	1,655,723	0	0	1,655,723	0	0	1,655,723	3,220,381
Carters, GA	City of Chatsworth	617,449	0	0	617,449	0	0	617,449	617,449
Okatibbee, MS	Pat Harrison WS Dist.	1,292,301	0	0	1,292,301	0	0	1,292,301	1,292,301
3 projects	5 agreements	5,130,131	0	0	5,130,131	0	0	5,130,131	5,130,131
FY16 Division Summary	10 projects / 25 agreements	35,147,822	0	0	35,147,822	0	0	35,147,822	35,147,822
2014 WS Database Report	10 projects / 25 agreements	35,147,822	0	0	35,147,822	0	0	35,147,822	35,147,822

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

South Atlantic Division		SAD Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District / MSC Percent Remaining
		Present	Future	Total	
Wilmington					
B. Everett Jordan, NC	State of NC	143,177	0	143,177	
Falls Lake, NC	City of Raleigh	8,599,785	0	8,599,785	
John H. Kerr, VA	Virginia Beach	0	0	0	
	VA Dep of Corr.	0	0	0	
	Mecklenburg Cogeneration	0	0	0	
	City of Henderson	1,669,579	0	1,669,579	
W. Kerr Scott, NC	County of Wilkes & City of Winston-Salem	131,811	0	131,811	
4 projects	7 agreements	10,544,352	0	10,544,352	45.3%
Savannah					
Hartwell, GA/SC	Anderson Co. Joint Municipal Water System	2,232,200	0	2,232,200	
	City of Lavonia	0	0	0	
	Hart County	0	0	0	
J Strom Thurmond, GA/SC	City of Lincolnton	0	0	0	
	City of Washington	0	0	0	
	Savannah Valley Auth.	0	0	0	
	Columbia County	0	0	0	
	City of Lincolnton	5,884	0	5,884	
	City of Thompson	0	0	0	
	Town of McCormick	0	0	0	
	Town of McCormick	0	0	0	
Richard B Russell, GA/SC	SC Public Service Auth.	0	0	0	
	City of Elberton	0	0	0	
3 projects	13 agreements	2,238,084	0	2,238,084	33.1%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

South Atlantic Division		SAD Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District / MSC Percent Remaining
		Present	Future	Total	
Mobile					
Allatoona, GA	Cobb Co. Marietta Water Auth.	477,724	0	477,724	
	City of Cartersville	0	0	0	
	City of Cartersville	565,778	0	565,778	
Carters, GA	City of Chatsworth	0	0	0	
Okatibbee, MS	Pat Harrison WS Dist.	150,475	0	150,475	
3 projects	5 agreements	1,193,977	0	1,193,977	23.3%
FY16 Division Summary	10 projects / 25 agreements	13,976,413	0	13,976,413	39.8%
2014 WS Database Report	10 projects / 25 agreements	11,946,974	0	11,946,974	34.0%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal
by Agreement**

SAD Database Notes:

- [1] Costs as recorded in the agreement when signed. Price level varies.
- [2] Additional costs are normally interest costs that have accumulated on the unpaid balance after the 10-year interest free period. Other late fees and charges should be footnoted. There are no additional charges recorded for projects in the South Atlantic Division.
- [3] Includes, as applicable for present use storage, interest on the unpaid balance after the end of the ten-year interest free period.
- [4] Based on OMBIL run of 29 September 2016.
- [5] Agreement first costs were repaid up front in lump sum, therefore there is no applicable interest rate.
- [6] Missing data.

Additional Remarks:

1. The only change from the 2014 database report is that the remaining principal increased from \$11.9 million to \$14.0 million (increasing from 34% to 40%), due primarily to revised data at the Hartwell project.

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Lakes and Rivers Division		LRD WS Agreement Data				LRD WS Storage Space Data (acre feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Huntington										
Alum Creek Lake, OH	State of Ohio	Original	1968	15.000	3.256	29,700	0	0	29,700	
	Activate Future		1978	25.000	3.256	49,500	0	0	49,500	79,200
Grayson Lake, KY	Rattlesnake Ridge	Reallocated	1989	1.500	10.250	30	0	0	30	
	Rattlesnake Ridge [10]	Reallocated	2000	6.000	6.625	627	0	0	627	657
John W. Flannagan, VA	John Flannagan Water	Reallocated	2004	10.000	5.656	3,360	0	0	3,360	3,360
North Fork of Pound River Lake, VA	City of Pound [5]	Original	1988	0.300	[7]	100	0	0	100	100
Paint Creek Lake, OH	Highland Water Company	Original	1986	1.500	3.222	721	0	0	721	721
Paintsville Lake, KY	Paintsville Utilities	Reallocated	2010	6.000	4.125	3,129	0	0	3,129	3,129
Summersville Lake, WV	City of Summerville	Reallocated	2001	4.000	5.875	468	0	0	468	468
Tom Jenkins Dam, OH	State of Ohio	Original	1955	8.000	[7]	5,690	0	0	5,690	5,690
8 projects	9 agreements / 1 Act Fut			77.300		93,325	0	0	93,325	93,325
Louisville										
Barren River Lake, KY	City of Glasgow	Original	1965	12.000	2.632	681	0	0	681	
	City of Scottsville	Original	1969	6.000	2.632	369	0	0	369	1,050
Brookville Lake, IN	State of Indiana	Original	1965	82.500	3.137	89,300	0	0	89,300	89,300
Caesar Creek Lake, OH	State of Ohio	Original	1970	37.000	3.253	39,100	0	0	39,100	39,100
Carr Creek Lake, KY	Carr Creek Water Comm.	Reallocated	2006	2.000	4.625	2,052	0	0	2,052	2,052
Cave Run Lake, KY	City of West Liberty	Reallocated	1996	1.000	4.625	264	0	0	264	
	Cave Run Water Comm.	Reallocated	2003	2.000	5.125	538	0	0	538	802
Green River Lake, KY	City of Campbellsville	Original	1968	6.500	2.936	3,460	0	0	3,460	
	City of Columbia	Reallocated	1992	1.000	8.125	855	0	0	855	4,315
Monroe Lake, IN	State of Indiana	Original	1960	130.000	2.670	160,000	0	0	160,000	160,000
Nolin Lake, KY	Edmonson Co. Water Dist.	Original	1988	1.000	9.250	98	0	0	98	98
Patoka Lake, IN	State of Indiana	Original	1970	75.000	3.256	129,658	0	0	129,658	129,658
Rough River Lake, KY	City of Leitchfield	Original	1966	1.600	2.584	120	0	0	120	
	City of Hardinsburg	Reallocated	1978	1.000	6.595	150	0	0	150	
	Grayson County WD	Reallocated	2002	1.600	4.625	252	0	0	252	522
William H. Harsha Lake, OH	State of Ohio	Original	1970	37.000	3.253	35,534	0	0	35,534	35,534
11 projects	16 agreements			397.200		462,431	0	0	462,431	462,431

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Lakes and Rivers Division		LRD WS Agreement Data				LRD WS Storage Space Data (acre feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Nashville										
Center Hill Lake, TN	City of Cookeville	Reallocated	2003	20.000	5.125	6,680	0	0	6,680	
	City of Smithville	Reallocated	2003	1.200	5.125	401	0	0	401	
	DeKalb Utility District	Reallocated	2010	2.000	4.375	668	0	0	668	
	William Shell [6, 9]	Surplus	2012	0.000	[8]	0	0	0	0	
	N. Alabama Bank [6]	Surplus	2013	0.390	[8]	131	0	0	131	7,880
Dale Hollow Lake, TN/KY	Trooper Island Camp	Reallocated	2004	0.002	[8]	2	0	0	2	
	City of Byrdstown	Reallocated	2005	1.800	5.125	1,841	0	0	1,841	
	Commonwealth of KY	Reallocated	2005	0.360	5.125	368	0	0	368	
	Grover Brown [6, 9]	Surplus	2014	0.000	[8]	0	0	0	0	
	William & Robin Woody [6, 9]	Surplus	2014	0.000	[8]	0	0	0	0	
	Kathryn Stawicki [6, 9]	Surplus	2014	0.000	[8]	0	0	0	0	
	Larry Rector [6, 9]	Surplus	2015	0.000	[8]	0	0	0	0	
	Wilma Nevans [6, 9]	Surplus	2016	0.000	[8]	0	0	0	0	2,211
J. Percy Priest Dam & Reservoir, TN	City of LaVergne	Reallocated	2003	10.000	5.125	2,733	0	0	2,733	
	City of Murfreesboro	Reallocated	2003	18.600	5.125	5,084	0	0	5,084	
	Consolidated Utility	Reallocated	2003	11.000	5.125	3,007	0	0	3,007	
	Consolidated Utility	Reallocated	2003	5.000	5.125	1,367	0	0	1,367	
	YMCA of Middle TN	Reallocated	2003	0.080	5.125	22	0	0	22	
	Cedar Crest Golf Ventures,	Reallocated	2004	0.350	5.500	96	0	0	96	
	Town of Smyrna	Reallocated	2008	18.300	[8]	5,002	0	0	5,002	17,311
Laurel River Lake, KY	Laurel Co. Water Dist.	Reallocated	2005	2.000	5.125	519	0	0	519	
	City of Barbourville	Reallocated	2009	1.600	4.625	415	0	0	415	
	City of Barbourville	Reallocated	2011	0.660	4.125	171	0	0	171	
	City of London	Reallocated	2015	3.000	[8]	779	0	0	779	1,884
4 projects	24 agreements			96.342		29,286	0	0	29,286	29,286

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Lakes and Rivers Division		LRD WS Agreement Data				LRD WS Storage Space Data (acre feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Pittsburgh										
Berlin Lake, OH	Mahoning Valley Sanitary Dist	Original	2016	2.000	3.000	1,400	0	0	1,400	
	Not Under Contract	Assurance		13.000	3.000	0	0	4,860	4,860	6,260
Mosquito Creek Lake, OH	City of Warren	Original	1999	16.000	3.000	11,000	0	0	11,000	11,000
Stonewall Jackson Lake, WV	Not Under Contract	Original	N/A	3.600	7.000	0	0	2,200	2,200	2,200
Tygart, WV	City of Grafton	Original	1941	1.900	3.000	2,240	0	0	2,240	2,240
Youghiogheny River Lake, PA	Municipal Auth. of Westmoreland County	Reallocated	2010	5.000	4.125	2,950	0	0	2,950	2,950
5 projects	4 agreements			41.500		17,590	0	7,060	24,650	24,650
FY16 Division Summary	28 projects / 53 agreements / 1 activate future			612.342		602,632	0	7,060	609,692	609,692
2014 WS Database Report	28 projects / 46 agreements			611.772		602,653	0	8,460	611,113	611,113

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Lakes and Rivers Division		LRD WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Huntington									
Alum Creek Lake, OH	State of Ohio	6,847,538	0	0	6,847,538	0	0	6,847,538	
	Activate Future	11,412,563	0	0	11,412,563	0	0	11,412,563	18,260,101
Grayson Lake, KY	Rattlesnake Ridge	21,930	0	0	21,930			21,930	
	Rattlesnake Ridge [10]	76,732	0	0	76,732		87,150	163,882	185,812
John W. Flannagan, VA	John Flannagan Water	162,983	0	0	162,983			162,983	162,983
North Fork of Pound River Lake, VA	City of Pound [5]	94,626	0	0	94,626			94,626	94,626
Paint Creek Lake, OH	Highland Water Company	202,650	0	0	202,650	0	0	202,650	202,650
Paintsville Lake, KY	Paintsville Utilities	4,774,940	0	0	4,774,940	0	0	4,774,940	4,774,940
Summersville Lake, WV	City of Summerville	60,828	0	0	60,828			60,828	60,828
Tom Jenkins Dam, OH	State of Ohio	785,000	0	0	785,000			785,000	785,000
8 projects	9 agreements / 1 Act Fut	24,439,790	0	0	24,439,790	0	87,150	24,526,940	24,526,940
Louisville									
Barren River Lake, KY	City of Glasgow	22,300	0	0	22,300	0	0	22,300	
	City of Scottsville	12,200	0	0	12,200	0	0	12,200	34,500
Brookville Lake, IN	State of Indiana	5,693,000	0	0	5,693,000	0	0	5,693,000	5,693,000
Caesar Creek Lake, OH	State of Ohio	5,628,800	0	0	5,628,800	0	0	5,628,800	5,628,800
Carr Creek Lake, KY	Carr Creek Water Comm.	305,563	0	0	305,563	0	0	305,563	305,563
Cave Run Lake, KY	City of West Liberty	29,000	0	0	29,000	0	0	29,000	
	Cave Run Water Comm.	72,896	0	0	72,896	0	0	72,896	101,896
Green River Lake, KY	City of Campbellsville	92,093	0	0	92,093	0	0	92,093	
	City of Columbia	88,065	0	0	88,065	0	0	88,065	180,158
Monroe Lake, IN	State of Indiana	8,015,000	0	0	8,015,000	0	0	8,015,000	8,015,000
Nolin Lake, KY	Edmonson Co. Water Dist.	11,402	0	0	11,402	0	0	11,402	11,402
Patoka Lake, IN	State of Indiana	5,602,000	0	0	5,602,000	0	0	5,602,000	5,602,000
Rough River Lake, KY	City of Leitchfield	3,648	0	0	3,648	0	0	3,648	
	City of Hardinsburg	17,781	0	0	17,781	0	0	17,781	
	Grayson County WD	34,934	0	0	34,934	0	0	34,934	56,363
William H. Harsha Lake, OH	State of Ohio	3,944,200	0	0	3,944,200	0	0	3,944,200	3,944,200
11 projects	16 agreements	29,572,882	0	0	29,572,882	0	0	29,572,882	29,572,882

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Lakes and Rivers Division		LRD WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Nashville									
Center Hill Lake, TN	City of Cookeville	2,816,877	0	0	2,816,877	0	0	2,816,877	
	City of Smithville	54,536	0	0	54,536	0	0	54,536	
	DeKalb Utility District	783,585	0	0	783,585	0	0	783,585	
	William Shell [6, 9]	9	0	0	9	0	1,000	1,009	
	N. Alabama Bank [6]	71,780	0	0	71,780	0	1,000	72,780	3,728,787
Dale Hollow Lake, TN/KY	Trooper Island Camp	916	0	0	916	0	0	916	
	City of Byrdstown	372,716	0	0	372,716	0	0	372,716	
	Commonwealth of KY	176,532	0	0	176,532	0	0	176,532	
	Grover Brown [6, 9]	34	0	0	34	0	1,000	1,034	
	William & Robin Woody [6, 9]	34	0	0	34	0	1,000	1,034	
	Kathryn Stawicki [6, 9]	37	0	0	37	0	1,000	1,037	
	Larry Rector [6, 9]	39	0	0	39	0	1,000	1,039	
	Wilma Nevans [6, 9]	30	0	0	30	0	1,000	1,030	555,338
J. Percy Priest Dam & Reservoir, TN	City of LaVergne	1,818,550	0	0	1,818,550	0	0	1,818,550	
	City of Murfreesboro	3,051,429	0	0	3,051,429	0	0	3,051,429	
	Consolidated Utility	1,804,609	0	0	1,804,609	0	0	1,804,609	
	Consolidated Utility	820,277	0	0	820,277	0	0	820,277	
	YMCA of Middle TN	16,638	0	0	16,638	0	0	16,638	
	Cedar Crest Golf Ventures,	75,951	0	0	75,951	0	0	75,951	
	Town of Smyrna	2,350,000	0	0	2,350,000	0	0	2,350,000	9,937,454
Laurel River Lake, KY	Laurel Co. Water Dist.	166,847	0	0	166,847	0	0	166,847	
	City of Barbourville	1,291,299	0	0	1,291,299	0	0	1,291,299	
	City of Barbourville	612,310	0	0	612,310	0	0	612,310	
	City of London	272,453	0	0	272,453	0	0	272,453	2,342,909
4 projects	24 agreements	16,557,488	0	0	16,557,488	0	7,000	16,564,488	16,564,488

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Lakes and Rivers Division		LRD WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Pittsburgh									
Berlin Lake, OH	Mahoning Valley Sanitary Dist	82,133	0	0	82,133	0	200,000	282,133	
	Not Under Contract	0	0	2,167,566	2,167,566	0	0	2,167,566	2,449,699
Mosquito Creek Lake, OH	City of Warren	224,500	0	0	224,500	0	0	224,500	224,500
Stonewall Jackson Lake, WV	Not Under Contract	0	0	4,300,000	4,300,000	0	0	4,300,000	4,300,000
Tygart, WV	City of Grafton	106,618	0	0	106,618	0	0	106,618	106,618
Youghiogheny River Lake, PA	Municipal Auth. of Westmoreland County	2,557,949	0	0	2,557,949	0	0	2,557,949	2,557,949
5 projects	4 agreements	2,971,200	0	6,467,566	9,438,766	0	200,000	9,638,766	9,638,766
FY16 Division Summary	28 projects / 53 agreements / 1 activate future	73,541,360	0	6,467,566	80,008,926	0	294,150	80,303,076	80,303,076
2014 WS Database Report	28 projects / 46 agreements	73,110,172	0	6,749,699	79,859,871	0	0	79,859,871	79,859,871

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Lakes and Rivers Division		LRD Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District / MSC Percent Remaining
		Present	Future	Total	
Huntington					
Alum Creek Lake, OH	State of Ohio	459,896	0	459,896	
	Activate Future	8,961,243		8,961,243	
Grayson Lake, KY	Rattlesnake Ridge	0	0	0	
	Rattlesnake Ridge [10]	52,071	0	52,071	
John W. Flannagan, VA	John Flannagan Water	122,303	0	122,303	
North Fork of Pound River Lake, VA	City of Pound [5]	0	0	0	
Paint Creek Lake, OH	Highland Water Company	154,632	0	154,632	
Paintsville Lake, KY	Paintsville Utilities	4,226,682	0	4,226,682	
Summersville Lake, WV	City of Summerville	50,136	0	50,136	
Tom Jenkins Dam, OH	State of Ohio	495,000	0	495,000	
8 projects	9 agreements / 1 Act Fut	14,521,963	0	14,521,963	59%
Louisville					
Barren River Lake, KY	City of Glasgow	0	0	0	
	City of Scottsville	0	0	0	
Brookville Lake, IN	State of Indiana	0	0	0	
Caesar Creek Lake, OH	State of Ohio	3,781,047	0	3,781,047	
Carr Creek Lake, KY	Carr Creek Water Comm.	0	0	0	
Cave Run Lake, KY	City of West Liberty	23,007	0	23,007	
	Cave Run Water Comm.	0	0	0	
Green River Lake, KY	City of Campbellsville	34,914	0	34,914	
	City of Columbia	0	0	0	
Monroe Lake, IN	State of Indiana	0	0	0	
Nolin Lake, KY	Edmonson Co. Water Dist.	0	0	0	
Patoka Lake, IN	State of Indiana	0	0	0	
Rough River Lake, KY	City of Leitchfield	0	0	0	
	City of Hardinsburg	0	0	0	
	Grayson County WD	34,934	0	34,934	
William H. Harsha Lake, OH	State of Ohio	2,759,272	0	2,759,272	
11 projects	16 agreements	6,633,174	0	6,633,174	22%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Lakes and Rivers Division		LRD Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District / MSC Percent Remaining
		Present	Future	Total	
Nashville					
Center Hill Lake, TN	City of Cookeville	1,962,604	0	1,962,604	
	City of Smithville	0	0	0	
	DeKalb Utility District	666,580	0	666,580	
	William Shell [6, 9]	0	0	0	
	N. Alabama Bank [6]	40,145	0	40,145	
Dale Hollow Lake, TN/KY	Trooper Island Camp	0	0	0	
	City of Byrdstown	0	0	0	
	Commonwealth of KY	116,550	0	116,550	
	Grover Brown [6, 9]	0	0	0	
	William & Robin Woody [6, 9]	0	0	0	
	Kathryn Stawicki [6, 9]	0	0	0	
	Larry Rector [6, 9]	0	0	0	
	Wilma Nevans [6, 9]	0	0	0	
J. Percy Priest Dam & Reservoir, TN	City of LaVergne	0	0	0	
	City of Murfreesboro	0	0	0	
	Consolidated Utility	0	0	0	
	Consolidated Utility	0	0	0	
	YMCA of Middle TN	11,380	0	11,380	
	Cedar Crest Golf Ventures,	52,388	0	52,388	
	Town of Smyrna	0	0	0	
Laurel River Lake, KY	Laurel Co. Water Dist.	123,770	0	123,770	
	City of Barbourville	1,072,502	0	1,072,502	
	City of Barbourville	532,299	0	532,299	
	City of London	0	0	0	
4 projects	24 agreements	4,578,218	0	4,578,218	28%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Lakes and Rivers Division		LRD Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District / MSC Percent Remaining
		Present	Future	Total	
Pittsburgh					
Berlin Lake, OH	Mahoning Valley Sanitary Dist	77,410	0	77,410	
	Not Under Contract	0	2,167,566	2,167,566	
Mosquito Creek Lake, OH	City of Warren	0	0	0	
Stonewall Jackson Lake, WV	Not Under Contract	0	4,300,000	4,300,000	
Tygart, WV	City of Grafton	0	0	0	
Youghiogheny River Lake, PA	Municipal Auth. of Westmoreland County	0	0	0	
5 projects	4 agreements	77,410	6,467,566	6,544,976	68%
FY16 Division Summary	28 projects / 53 agreements / 1 activate future	25,810,765	6,467,566	32,278,331	40%
2014 WS Database Report	28 projects / 46 agreements	30,013,973	6,749,699	36,763,672	46%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal
by Agreement**

LRD Database Notes:

- [1] Costs as recorded in the agreement when signed. Price level varies.
- [2] Additional costs are normally interest costs that have accumulated on the unpaid balance after the 10-year interest free period. Other late fees and charges should be footnoted.
- [3] Includes, as applicable for present use storage, interest on the unpaid balance after the end of the ten-year interest free period. This interest charge has not been shown for future use storage or for not under contract storage. For these two categories, appropriate interest will be charged once the storage is placed under a repayment agreement.
- [4] Based on OMBIL run of 29 September 2016.
- [5] Entry based on 2014 database report data, as ongoing QC issues not yet resolved.
- [6] Additional costs are for administrative fees included in these agreements.
- [7] Missing data.
- [8] Agreement first costs were repaid up front in lump sum, therefore there is no applicable interest rate.
- [9] Storage and yield amounts for these agreements are negligible.
- [10] Additional costs are for implementation costs including modifications to recreations facilities and updating the project water control manual.

Additional Remarks:

1. Differences from the 2014 database report include: the number of agreements increased by seven, storage space decreased from 611,113 to 609,692 acre-feet, total project costs increased from \$79.9 million to \$80.3 million and the remaining balance owed for the division decreased from 46% to 40%.

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Cost and Remaining Principal by Agreement**

Mississippi Valley Division		MVD WS Agreement Data				MVD WS Storage Space Data (acre-feet)				
Project Name	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Rock Island										
Saylorville, IA	State of Iowa	Original	1982	13.30	9.352	14,900	0	0	14,900	14,900
1 project	1 agreement			13.30		14,900	0	0	14,900	14,900
St. Louis										
Carlyle Lake, IL	State of Illinois	Original	1983	24.50	[5]	32,692	0	0	32,692	32,692
Clarence Cannon Dam & Mark Twain Lake, MO	State of Missouri	Original	1988	10.50	3.220	0	13,750	0	13,750	
	Clarence Cannon Wholesale Water Commission, State of Missouri	Original	1988	5.50	3.220	6,250	0	0	6,250	20,000
Lake Shelbyville, IL	State of Illinois	Original	1983	17.00	[5]	24,714	0	0	24,714	24,714
Rend Lake, IL	State of Illinois	Original	1988	70.00	[5]	109,000	0	0	109,000	109,000
4 projects	5 agreements			127.50		172,656	13,750	0	186,406	186,406
Vicksburg										
Blakey Mt. Dam, Lake Ouachita, AR	N. Garland County Reg. WD	Reallocated	1996	1.00	6.750	1,575	0	0	1,575	1,575
DeGray, AR	Ouachita RWD	Original	1988	120.00	2.742	0	188,470	0	188,470	
	Ouachita RWD	Original	1992	1.00	2.742	1,573	0	0	1,573	
	Ouachita RWD	Original	1998	0.50	2.742	787	0	0	787	
	Ouachita RWD	Original	2001	1.00	2.742	1,573	0	0	1,573	
	City of Bryant, Arkansas	Original	2010	15.00	2.742	23,595	0	0	23,595	
	Ouachita RWD	Original	2011	6.00	[5]	9,438	0	0	9,438	
	Not Under Contract	Assurance	N/A	8.50	2.742	0	0	13,293	13,293	238,729
Enid, MS	LSP Energy Limited	Reallocated	1998	10.90	6.750	4,500	0	0	4,500	4,500
3 projects	8 agreements			163.90		43,041	188,470	13,293	244,804	244,804
FY16 Division Summary	8 Projects / 14 agreements			304.70		230,597	202,220	13,293	446,110	446,110
2014 WS Database Report	8 projects / 14 agreements			304.70		230,597	202,220	13,293	446,110	446,110

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Cost and Remaining Principal by Agreement**

Mississippi Valley Division		MVD WS Cost Data (\$) [1]							
Project Name	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Rock Island									
Saylorville, IA	State of Iowa	3,869,300	0	0	3,869,300	0	0	3,869,300	3,869,300
1 project	1 agreement	3,869,300	0	0	3,869,300	0	0	3,869,300	3,869,300
St. Louis									
Carlyle Lake, IL	State of Illinois	3,635,000	0	0	3,635,000	0	0	3,635,000	3,635,000
Clarence Cannon Dam & Mark Twain Lake, MO	State of Missouri	0	11,510,424	0	11,510,424	0	0	11,510,424	
	Clarence Cannon Wholesale Water Commission, State of Missouri	6,028,180	0	0	6,028,180	0	0	6,028,180	17,538,604
Lake Shelbyville, IL	State of Illinois	4,310,000	0	0	4,310,000	0	0	4,310,000	4,310,000
Rend Lake, IL	State of Illinois	9,941,000	0	0	9,941,000	0	0	9,941,000	9,941,000
4 projects	5 agreements	23,914,180	11,510,424	0	35,424,604	0	0	35,424,604	35,424,604
Vicksburg									
Blakey Mt. Dam, Lake Ouachita, AR	N. Garland County Reg. WD	110,751	0	0	110,751	0	0	110,751	110,751
DeGray, AR	Ouachita RWD	0	4,660,863	0	4,660,863	0	0	4,660,863	
	Ouachita RWD	38,847	0	0	38,847	0	15,953	54,800	
	Ouachita RWD	19,423	0	0	19,423	0	9,989	29,412	
	Ouachita RWD	38,847	0	0	38,847	0	23,709	62,556	
	City of Bryant, Arkansas	583,316	0	0	583,316	0	680,740	1,264,056	
	Ouachita RWD	233,208	0	0	233,208	0	282,488	515,696	
	Not Under Contract	0	0	328,749	328,749	0	0	328,749	6,916,132
Enid, MS	LSP Energy Limited	1,111,898	0	0	1,111,898	0	0	1,111,898	1,111,898
3 projects	8 agreements	2,136,290	4,660,863	328,749	7,125,902	0	1,012,879	8,138,781	8,138,781
FY16 Division Summary	8 Projects / 14 agreements	29,919,770	16,171,287	328,749	46,419,806	0	1,012,879	47,432,685	47,432,685
2014 WS Database Report	8 projects / 14 agreements	29,919,770	16,171,287	329,496	46,420,553	0	0	46,420,553	46,420,553

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Cost and Remaining Principal by Agreement**

Mississippi Valley Division		MVD Remaining Principal Owed [3] [4]			
Project Name	User	Amount Owed (\$)			District / MSC Percent Remaining
		Present	Future	Total	
Rock Island					
Saylorville, IA	State of Iowa	0	0	0	
1 project	1 agreement	0	0	0	0%
St. Louis					
Carlyle Lake, IL	State of Illinois	0	0	0	
Clarence Cannon Dam & Mark Twain Lake, MO	State of Missouri	0	11,510,424	11,510,424	
	Clarence Cannon Wholesale Water Commission, State of Missouri	3,394,214	0	3,394,214	
Lake Shelbyville, IL	State of Illinois	0	0	0	
Rend Lake, IL	State of Illinois	0	0	0	
4 projects	5 agreements	3,394,214	11,510,424	14,904,638	42%
Vicksburg					
Blakey Mt. Dam, Lake Ouachita, AR	N. Garland County Reg. WD	0	0	0	
DeGray, AR	Ouachita RWD	0	4,660,863	4,660,863	
	Ouachita RWD	40,775	0	40,775	
	Ouachita RWD	22,030	0	22,030	
	Ouachita RWD	50,500	0	50,500	
	City of Bryant, Arkansas	1,067,813	0	1,067,813	
	Ouachita RWD	0	0	0	
	Not Under Contract	0	328,429	328,429	
Enid, MS	LSP Energy Limited	838,738	0	838,738	
3 projects	8 agreements	2,019,856	4,989,292	7,009,148	86%
FY16 Division Summary	8 Projects / 14 agreements	5,414,070	16,499,716	21,913,786	46%
2014 WS Database Report	8 projects / 14 agreements	5,390,495	16,500,783	21,891,278	47%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal
by Agreement**

MVD Database Notes:

- [1] Costs as recorded in the agreement when signed. Price level varies.
- [2] Additional costs are normally interest costs that have accumulated on the unpaid balance after the 10-year interest free period. Other late fees and charges should be footnoted.
- [3] Includes, as applicable for present use storage, interest on the unpaid balance after the end of the ten-year interest free period. This interest charge has not been shown for future use storage or for not under contract storage. Appropriate interest for these two categories will be charged once the storage is placed under a repayment agreement.
- [4] Based on OMBIL run of 6 October 2016.
- [5] Agreement first costs were repaid up front in lump sum, therefore there is no applicable interest rate.

Additional Remarks:

1. The changes from the 2014 database report included: additional costs of \$1.0 million entered for the DeGray project agreements and the remaining principal owed for the division decreased by 1%.

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Northwestern Division		NWD WS Agreement Data				NWD WS Storage Space Data (acre-feet)				
Project Name	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Omaha										
Bowman Haley, ND	Bowman County Water Management Dist.	Original	1981	1.90	3.046	15,500	0	0	15,500	15,500
Garrison, ND	Basin Elect. Power Coop.	Original	2005	18.75	4.125	54,390	0	0	54,390	54,390
2 projects	2 agreements			20.65		69,890	0	0	69,890	69,890
Seattle										
Howard Hanson, WA	City of Tacoma, Public Util.	Original	2003	33.60	[5]	20,000	0	0	20,000	20,000
1 project	1 agreement			33.60		20,000	0	0	20,000	20,000
Portland										
Lost Creek, OR	City of Phoenix	Original	1982	0.85	3.253	400	0	0	400	
	City of Phoenix	Original	1991	1.28	3.253	600	0	0	600	
	City of Jacksonville	Original	1995	0.85	3.253	400	0	0	400	
	City of Shady Cove	Original	1998	0.01	3.253	3	0	0	3	
	City of Ashland	Original	2002	2.13	3.253	1,001	0	0	1,001	
	City of Talent	Original	2002	2.75	3.253	1,292	0	0	1,292	
	Angler's Cove/Shady Cove	Original	2002	0.03	3.253	12	0	0	12	
	Sandy Cove Waterworks	Original	2006	0.21	3.253	100	0	0	100	
	Rogue Aggregates, Inc.	Original	2007	0.01	[5]	5	0	0	5	
	Angler's Cove/Shady Cove	Original	2007	0.01	[5]	5	0	0	5	
	Crowfoot Road Water	Original	2008	0.01	[5]	5	0	0	5	
	Finley Bend C, LLC	Original	2012	0.06	[5]	30	0	0	30	
	Not Under Contract		NA	11.80	3.253	0	0	6,147	6,147	10,000
1 project	12 agreements			20.00		3,853	0	6,147	10,000	10,000

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Northwestern Division		NWD WS Agreement Data				NWD WS Storage Space Data (acre-feet)				
Project Name	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Kansas City										
Clinton Lake, KS	State of Kansas	Original	1978	17.40	3.502	53,520	35,680	0	89,200	89,200
Harry S Truman Dam & Res., MO	Henry Co. PWSD #3	Reallocated	1994	0.41	6.125	172	0	0	172	
	Henry Co. PWSD #2	Reallocated	1997	0.26	7.125	111	0	0	111	283
Hillsdale Lake, KS	State of Kansas	Original	1974	2.92	4.012	7,500	39,750	0	47,250	
	Activate future		2009	2.24	4.012	5,750	0	0	5,750	53,000
Kanopolis Lake, KS	State of Kansas	Reallocated	2002	19.30	5.625	12,500		0	12,500	12,500
Long Branch Lake, MO	City of Macon	Original	1972	1.28	3.502	4,400	0	0	4,400	
	Not Under Contract			5.82	N/A	0	0	20,000	20,000	24,400
Melvorn Lake, KS	State of Kansas	Reallocated	1994	7.20	3.225	50,000	0	0	50,000	50,000
Milford Lake, KS	State of Kansas [6]	Original	1980	53.04	2.632	0	198,350	0	198,350	
	Activate future		1984	37.61		46,650	0	0	46,650	
	Activate future		1991	20.35		55,000	0	0	55,000	300,000
Perry Lake, KS	State of Kansas	Original	1976	74.60	3.040	25,000	125,000	0	150,000	150,000
Pomona Lake, KS	RWD #3 Osage Co.	Original	1964	0.06	2.670	230	0	0	230	
	RWD #3 Osage Co.	Original	1980	0.06	4.371	270	0	0	270	
	State of Kansas	Reallocated	1995	3.21	2.699	14,324	0	0	14,324	
	State of Kansas	Reallocated	1995	4.07	2.700	18,176	0	0	18,176	33,000
Rathbun Lake, IA	Rathbun Regional Water	Reallocated	1986	1.02	5.116	3,340	0	0	3,340	
	RRWA	Reallocated	1989	1.02	9.250	3,340	0	0	3,340	6,680
Smithville Lake, MO	City of Smithville	Original	1972	2.43	3.649	2,000	6,000	0	8,000	
	City of Plattsburg	Original	1972	3.46	3.649	2,650	8,850	0	11,500	
	Not Under Contract		N/A	22.91	N/A	0	0	75,700	75,700	95,200
Stockton Lake, MO	City of Springfield [7]	Reallocated	1993	15.00	6.125	25,000	0	0	25,000	
	Activate Future		2011	15.00	6.125	25,000	0	0	25,000	50,000
Tuttle Creek Lake, KS	State of Kansas	Reallocated	1990	31.80	2.553	27,500	0	0	27,500	
	State of Kansas	Reallocated	1994	10.03	2.553	8,650	0	0	8,650	
	State of Kansas	Reallocated	1996	16.00	2.553	13,850	0	0	13,850	50,000
13 projects	21 agreements + 4 Act. Fut.			368.50		404,933	413,630	95,700	914,263	914,263
FY16 Division Summary	17 projects / 36 agreements / 4 activate future			442.75		498,676	413,630	101,847	1,014,153	1,014,153
2014 WS Database Report	17 projects / 35 agreements / 4 activate future			433.07		498,646	413,630	101,877	1,014,153	1,014,153

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Northwestern Division		NWD WS Cost Data (\$) [1]							
Project Name	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Omaha									
Bowman Haley, ND	Bowman County Water Management Dist.	824,985	0	0	824,985	0	0	824,985	824,985
Garrison, ND	Basin Elect. Power Coop.	1,049,145	0	0	1,049,145	0	0	1,049,145	1,049,145
2 projects	2 agreements	1,874,130	0	0	1,874,130	0	0	1,874,130	1,874,130
Seattle									
Howard Hanson, WA	City of Tacoma, Public Util.	18,368,000	0	0	18,368,000	0	0	18,368,000	18,368,000
1 project	1 agreement	18,368,000	0	0	18,368,000	0	0	18,368,000	18,368,000
Portland									
Lost Creek, OR	City of Phoenix	269,650	0	0	269,650	0	0	269,650	
	City of Phoenix	404,475	0	0	404,475	0	0	404,475	
	City of Jacksonville	269,650	0	0	269,650	0	0	269,650	
	City of Shady Cove	2,022	0	0	2,022	0	0	2,022	
	City of Ashland	928,475	0	0	928,475	0	0	928,475	
	City of Talent	1,199,590	0	0	1,199,590	0	0	1,199,590	
	Angler's Cove/Shady Cove	11,142	0	0	11,142	0	0	11,142	
	Sandy Cove Waterworks	105,531	0	0	105,531	0	0	105,531	
	Rogue Aggregates, Inc.	5,449	0	0	5,449	0	0	5,449	
	Angler's Cove/Shady Cove	6,688	0	0	6,688	0	0	6,688	
	Crowfoot Road Water	6,983	0	0	6,983	0	0	6,983	
	Finley Bend C, LLC	38,858	0	0	38,858	0	0	38,858	
	Not Under Contract	0	0	3,707,858	3,707,858	0	0	3,707,858	
1 project	12 agreements	3,248,513	0	3,707,858	6,956,371	0	0	6,956,371	6,956,371

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Northwestern Division		NWD WS Cost Data (\$) [1]							
Project Name	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Kansas City									
Clinton Lake, KS	State of Kansas	4,185,857	2,269,826	0	6,455,683	312,448	0	6,768,131	6,768,131
Harry S Truman Dam & Res., MO	Henry Co. PWSD #3	44,006	0	0	44,006	0	0	44,006	
	Henry Co. PWSD #2	35,506	0	0	35,506	0	0	35,506	79,512
Hillsdale Lake, KS	State of Kansas	3,314,167	17,566,450	0	20,880,617	0	2,617,362	23,497,979	
	Activate future	2,541,058	0	0	2,541,058	0	0	2,541,058	26,039,037
Kanopolis Lake, KS	State of Kansas	4,181,167	0	0	4,181,167	0	0	4,181,167	4,181,167
Long Branch Lake, MO	City of Macon	583,203	0	0	583,203	0	0	583,203	
	Not Under Contract	0	0	5,083,005	5,083,005	0	0	5,083,005	5,666,208
Melvorn Lake, KS	State of Kansas	7,094,009	0	0	7,094,009	0	0	7,094,009	7,094,009
Milford Lake, KS	State of Kansas [6]	0	8,625,300	0	8,625,300	0	0	8,625,300	
	Activate future	2,028,587	0	0	2,028,587	0	0	2,028,587	
	Activate future	2,391,689	0	0	2,391,689	0	402,929	2,794,618	13,448,505
Perry Lake, KS	State of Kansas	1,535,030	7,673,311	0	9,208,341	0	0	9,208,341	9,208,341
Pomona Lake, KS	RWD #3 Osage Co.	13,358	0	0	13,358	0	0	13,358	
	RWD #3 Osage Co.	19,852	0	0	19,852	0	0	19,852	
	State of Kansas	1,565,619	0	0	1,565,619	0	0	1,565,619	
	State of Kansas	2,009,480	0	0	2,009,480	0	0	2,009,480	3,608,309
Rathbun Lake, IA	Rathbun Regional Water	331,019	0	0	331,019	0	0	331,019	
	RRWA	498,916	0	0	498,916	0	0	498,916	829,935
Smithville Lake, MO	City of Smithville	298,890	1,107,816	0	1,406,706	0	0	1,406,706	
	City of Plattsburg	356,954	1,194,129	0	1,551,083	0	0	1,551,083	
	Not Under Contract	0	0	6,315,153	6,315,153	0	0	6,315,153	9,272,942
Stockton Lake, MO	City of Springfield [7]	4,628,352	0	0	4,628,352	0	0	4,628,352	
	Activate Future	4,628,352	0	0	4,628,352	0	3,178,388	7,806,740	12,435,092
Tuttle Creek Lake, KS	State of Kansas	1,876,784	0	0	1,876,784	0	0	1,876,784	
	State of Kansas	648,831	0	0	648,831	0	0	648,831	
	State of Kansas	1,090,378	0	0	1,090,378	0	0	1,090,378	3,615,993
13 projects	21 agreements + 4 Act. Fut.	45,901,064	38,436,832	11,398,158	95,736,054	312,448	6,198,679	102,247,181	102,247,181
FY16 Division Summary	17 projects / 36 agreements / 4 activate future	69,391,707	38,436,832	15,106,016	122,934,555	312,448	6,198,679	129,445,682	129,445,682
2014 WS Database Report	17 projects / 35 agreements / 4 activate future	76,886,304	32,501,988	15,144,450	124,532,742	0	0	124,532,742	124,532,742

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Northwestern Division		NWD Remaining Principal Owed (\$) [3] [4]			
Project Name	User	Amount Owed (\$)			District / MSC Percent Remaining
		Present	Future	Total	
Omaha					
Bowman Haley, ND	Bowman County Water Management Dist.	122,411	0	122,411	
Garrison, ND	Basin Elect. Power Coop.	120,045	0	120,045	
2 projects	2 agreements	242,456	0	242,456	13%
Seattle					
Howard Hanson, WA	City of Tacoma, Public Util.	0	0	0	
1 project	1 agreement	0	0	0	0%
Portland					
Lost Creek, OR	City of Phoenix	137,312	0	137,312	
	City of Phoenix	0	0	0	
	City of Jacksonville	0	0	0	
	City of Shady Cove	0	0	0	
	City of Ashland	0	0	0	
	City of Talent	0	0	0	
	Angler's Cove/Shady Cove	0	0	0	
	Sandy Cove Waterworks	0	0	0	
	Rogue Aggregates, Inc.	0	0	0	
	Angler's Cove/Shady Cove	0	0	0	
	Crowfoot Road Water	0	0	0	
	Finley Bend C, LLC	0	0	0	
	Not Under Contract	0	3,707,858	3,707,858	
1 project	12 agreements	137,312	3,707,858	3,845,170	55%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Northwestern Division		NWD Remaining Principal Owed (\$) [3] [4]			
Project Name	User	Amount Owed (\$)			District / MSC Percent Remaining
		Present	Future	Total	
Kansas City					
Clinton Lake, KS	State of Kansas	1,869,461	2,269,826	4,139,287	
Harry S Truman Dam & Res., MO	Henry Co. PWSD #3	0	0	0	
	Henry Co. PWSD #2	0	0	0	
Hillsdale Lake, KS	State of Kansas	2,691,167	17,566,450	20,257,617	
	Activate future	4,062,137	0	4,062,137	
Kanopolis Lake, KS	State of Kansas	2,610,934	0	2,610,934	
Long Branch Lake, MO	City of Macon	583,203	0	583,203	
	Not Under Contract	0	5,083,005	5,083,005	
Melvorn Lake, KS	State of Kansas	0	0	0	
Milford Lake, KS	State of Kansas [6]	0	8,625,300	8,625,300	
	Activate future	0	0	0	
	Activate future	1,587,720	0	1,587,720	
Perry Lake, KS	State of Kansas	400,383	7,673,311	8,073,694	
Pomona Lake, KS	RWD #3 Osage Co.	0	0	0	
	RWD #3 Osage Co.	0	0	0	
	State of Kansas	0	0	0	
	State of Kansas	0	0	0	
Rathbun Lake, IA	Rathbun Regional Water	154,291	0	154,291	
	RRWA	0	0	0	
Smithville Lake, MO	City of Smithville	183,788	1,107,816	1,291,604	
	City of Plattsburg	590,821	1,194,129	1,784,950	
	Not Under Contract	0	6,315,153	6,315,153	
Stockton Lake, MO	City of Springfield [7]	0	0	0	
	Activate Future	0	0	0	
Tuttle Creek Lake, KS	State of Kansas	0	0	0	
	State of Kansas	0	0	0	
	State of Kansas	0	0	0	
13 projects	21 agreements + 4 Act. Fut.	14,733,905	49,834,990	64,568,895	63%
FY16 Division Summary	17 projects / 36 agreements / 4 activate future	15,113,673	53,542,848	68,656,521	53%
2014 WS Database Report	17 projects / 35 agreements / 4 activate future	22,400,950	48,068,298	70,469,248	57%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal
by Agreement**

NWD Database Notes:

- [1] Costs as recorded in the agreement when signed. Price level varies.
- [2] Additional costs are normally interest costs that have accumulated on the unpaid balance after the 10-year interest free period. Other late fees and charges should be footnoted.
- [3] Includes, as applicable for present use storage, interest on the unpaid balance after the end of the ten-year interest free period. This interest charge has not been shown for future use storage or for not under contract storage. For these two categories, appropriate interest will be charged once the storage is placed under a repayment agreement.
- [4] Based on OMBIL run of 29 September 2016.
- [5] Agreement first costs were repaid up front in lump sum, therefore there is no applicable interest rate.
- [6] Milford Lake. Original agreement consisted of all future use storage.
- [7] Stockton Lake. Agreement phased in two increments as approved by the ASA(CW).

Additional Remarks:

1. In comparison to the 2014 water supply database report the total storage space remained the same, the cost of water supply storage increased by about \$5 million, and the amount remaining to be repaid decreased by \$1.8 million, reducing the percentage remaining to be repaid from 57% to 53%.
2. New agreement with Finley Bend for 30 acre-feet was added to the Lost Creek project in the Portland District. This space was previously listed as not under contract.

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

South Pacific Division		SPD Agreement Data				SPD WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Albuquerque										
Abiquiu [5]	Albuquerque Bernalillo Co. Water Utility Auth.	Original	1986	0.07	N/A	186,820	0	0	186,820	186,820
1 project	1 agreement			0.07		186,820	0	0	186,820	186,820
San Francisco										
Coyote Valley Dam / Lake Mendocino, CA	Sonoma Co. Water Agency	Original	1959	61.97	N/A	70,000	0	0	70,000	70,000
Dry Creek, Warm Springs Dam / Lake Sonoma, CA	Sonoma Co. Water Agency	Original	1982	186.43	3.225	212,000	0	0	212,000	212,000
2 projects	2 agreements			248.4		282,000	0	0	282,000	282,000
Sacramento										
New Hogan Lake, CA	Calaveras County Water Dist., Stockton East Water District	Original	1970	10.33	N/A	105,000	0	0	105,000	105,000
1 project	1 agreement			10.33		105,000	0	0	105,000	105,000
FY16 Division Summary	4 projects / 4 agreements			258.80		573,820	0	0	573,820	573,820
2014 WS Database Report	4 projects / 4 agreements			259.43		565,000	0	0	565,000	565,000

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

South Pacific Division		SPD WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Albuquerque									
Abiquiu [5]	Albuquerque Bernalillo Co. Water Utility Auth.	0	0	0	0	0	0	0	0
1 project	1 agreement	0	0	0	0	0	0	0	0
San Francisco									
Coyote Valley Dam / Lake Mendocino, CA	Sonoma Co. Water Agency	5,598,000	0	0	5,598,000	0	0	5,598,000	5,598,000
Dry Creek, Warm Springs Dam / Lake Sonoma, CA	Sonoma Co. Water Agency	122,061,048	0	0	122,061,048	0	0	122,061,048	122,061,048
2 projects	2 agreements	127,659,048	0	0	127,659,048	0	0	127,659,048	127,659,048
Sacramento									
New Hogan Lake, CA	Calaveras County Water Dist., Stockton East Water District	47,181	0	0	47,181	0	0	47,181	47,181
1 project	1 agreement	47,181	0	0	47,181	0	0	47,181	47,181
FY16 Division Summary	4 projects / 4 agreements	127,706,229	0	0	127,706,229	0	0	127,706,229	127,706,229
2014 WS Database Report	4 projects / 4 agreements	127,706,229	0	0	127,706,229	0	0	127,706,229	127,706,229

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

South Pacific Division		SPD Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District / MSC Percent Remaining
		Present	Future	Total	
Albuquerque					
Abiquiu [5]	Albuquerque Bernalillo Co. Water Utility Auth.	0	0	0	
1 project	1 agreement	0	0	0	0%
San Francisco					
Coyote Valley Dam / Lake Mendocino, CA	Sonoma Co. Water Agency	0	0	0	
Dry Creek, Warm Springs Dam / Lake Sonoma, CA	Sonoma Co. Water Agency	97,951,522	0	97,951,522	
2 projects	2 agreements	97,951,522	0	97,951,522	77%
Sacramento					
New Hogan Lake, CA	Calaveras County Water Dist., Stockton East Water District	0	0	0	
1 project	1 agreement	0	0	0	0%
FY16 Division Summary	4 projects / 4 agreements	97,951,522	0	97,951,522	77%
2014 WS Database Report	4 projects / 4 agreements	97,951,522	0	97,951,522	77%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal
by Agreement**

SPD Database Notes:

[1] Costs as recorded in the agreement when signed. Price level varies.

[2] Additional costs are normally interest costs that have accumulated on the unpaid balance after the 10-year interest free period. Other late fees and charges should be footnoted.

[3] Includes, as applicable, for present use storage, interest on the unpaid balance after the end of the ten-year interest free period. This interest charge has not been shown for future use storage or for not under contract storage. For these two categories, appropriate interest will be charged once the storage is placed under a repayment agreement.

[4] Based on OMBIL run of 29 September 2016.

[5] SPA, Abiquiu. March 1986 contract under PL 97-140, as amended by PL 100-522 (USC 43-12B Sec. 620a). The sponsor uses the reservoir flood pool as a pass through for San Juan-Chama project water. Original user was the City of Albuquerque. There are no first costs. Yearly O&M costs are paid on a prorata basis.

Additional Remarks:

1. In comparison to the 2014 water supply database, the water supply storage space increased by 8,820 acre-feet, and all other data remained the same. This increase was at the Abiquiu project in the Albuquerque District for the agreement with the Albuquerque Bernalillo County Water Utility Authority.

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Little Rock District		SWL Agreement Data				SWL Agreement Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Beaver Lake, AR	Beaver Water District	Original	1960	30.12	2.699	31,000	0	0	31,000	
	Activate Future		1993	74.81	2.699	77,000	0	0	77,000	
	Carroll-Boone Water District	Reallocation	1977	4.74	2.699	9,000	0	0	9,000	
	Madison Co., Water District	Reallocation	1992	2.50	7.125	3,882	0	0	3,882	
	Benton/Washington Co. WD	Reallocation	1996	4.00	7.750	8,113	0	0	8,113	
	Beaver Water District [5]	Reallocation	2006	15.08	N/A	28,757	0	0	28,757	
	Carroll-Boone Water District[5]	Reallocation	2006	1.26	N/A	2,396	0	0	2,396	160,148
Blue Mountain Lake, AR	City of Danville	Reallocation	2005	2.00	5.125	1,550	0	0	1,550	1,550
Bull Shoals Lake, AR	Marion Co. Water District	Reallocation	1988	1.00	7.500	880	0	0	880	
	Marion Co. Water District	Reallocation	2010	1.00	4.125	1,698	0	0	1,698	
	Ozark Mt. RPWA	Reallocation	2010	6.00	4.125	10,035	0	0	10,035	12,613
Dardanell Lake, AR	AP&L Nuclear One [6]	Surplus	1970	0	6.000	0	0	0	0	0
DeQueen Lake, AR	Tri-Lakes Water District	Original	1995	22.00	3.222	610	17,275	0	17,885	17,885
Dierks Lake, AR	Tri-County Water Dist.	Original	1976	13.25	3.253	200	10,400	0	10,600	10,600
Gillham Lake, AR	Tri-Lakes Water District	Original	1980	41.59	2.936	123	20,277	0	20,400	
	Activate Future		1980	0.41	2.936	200	0	0	200	20,600
Greers Ferry Lake, AR	City of Herber Springs [7]	Original	1959	0.84	N/A	1,008	0	0	1,008	
	Clinton Water District	Reallocation	1970	1.00	2.591	900	0	0	900	
	Community Water System	Reallocation	1971	0.25	2.591	225	0	0	225	
	Community WS	Reallocation	1995	3.10	7.750	3,776	0	0	3,776	
	Red Apple Inn & Country Club	Reallocation	1996	0.05	6.750	66	0	0	66	
	Community WS	Reallocation	1998	3.50	2.600	4,283	0	0	4,283	
	Thunderbird Country Club	Reallocation	1998	0.07	6.750	55	0	0	55	
	Tannebaum Country Club	Reallocation	1998	0.07	6.750	90	0	0	90	
	City of Clinton	Reallocation	2005	1.75	5.125	2,175	0	0	2,175	
	Mid Arkansas Water Alliance	Reallocation	2010	15.00	4.125	18,556	0	0	18,556	31,134

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Little Rock District		SWL Agreement Data				SWL Agreement Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Millwood Lake, AR	SW Arkansas Water Dist. #1	Original	1960	164.50	2.632	6,000	87,118	0	93,118	
	Activate Future #2		1975	14.40	2.632	8,150	0	0	8,150	
	Activate Future #3		1980	25.00	2.632	14,150	0	0	14,150	
	Activate Future #4		1984	3.00	2.632	1,698	0	0	1,698	
	Activate Future #5		1986	5.00	2.632	2,830	0	0	2,830	
	Activate Future #6		1991	20.00	2.632	11,320	0	0	11,320	
	Activate Future #7		1991	0.70	2.632	396	0	0	396	
	Activate Future #8		2010	21.00	2.632	11,886	0	0	11,886	
	Activate Future #9		2012	2.00	2.632	1,132	0	0	1,132	
	Activate Future #10		2012	1.40	2.632	792	0	0	792	
	Activate Future #11		2012	8.00	2.632	4,528	0	0	4,528	150,000
Nimrod Lake, AR	City of Plainview	Reallocation	1973	0.10	4.012	33	0	0	33	
	City of Plainview	Reallocation	1995	0.23	6.125	110	0	0	110	143
Norfork Lake, AR	City of Mountain Home [8]	Reallocation	1967	1.00	2.500	800	0	0	800	
	Activate Future		1971	2.00	2.500	1,600	0	0	1,600	2,400
FY16 District Summary	11 projects / 28 agreements / 13 activate future			513.72		272,003	135,070	0	407,073	407,073
2014 WS Database Report	11 projects / 28 agreements / 13 activate future			1,613.47		272,167	134,580	0	406,747	406,747

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Little Rock District		SWL WS Cost Data (\$) [1]							
Project	User	Agreement Storage Cost				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Beaver Lake, AR	Beaver Water District	1,431,737	0	0	1,431,737	0	0	1,431,737	
	Activate Future	2,245,164	0	0	2,245,164	0	1,285,641	3,530,805	
	Carroll-Boone Water District	742,000	0	0	742,000	0	0	742,000	
	Madison Co., Water District	482,991	0	0	482,991	0	0	482,991	
	Benton/Washington Co. WD	1,097,137	0	0	1,097,137	0	0	1,097,137	
	Beaver Water District [5]	0	0	0	0	0	0	0	
	Carroll-Boone Water District[5]	0	0	0	0	0	0	0	7,284,670
Blue Mountain Lake, AR	City of Danville	226,021	0	0	226,021	0	0	226,021	226,021
Bull Shoals Lake, AR	Marion Co. Water District	84,979	0	0	84,979	0	0	84,979	
	Marion Co. Water District	280,861	0	0	280,861	0	0	280,861	
	Ozark Mt. RPWA	1,659,777	0	0	1,659,777	0	0	1,659,777	2,025,617
Dardanell Lake, AR	AP&L Nuclear One [6]	0	0	0	0	0	0	0	0
DeQueen Lake, AR	Tri-Lakes Water District	293,151	11,900,000	0	12,193,151	0	0	12,193,151	12,193,151
Dierks Lake, AR	Tri-County Water Dist.	44,100	2,332,400	0	2,376,500	0	0	2,376,500	2,376,500
Gillham Lake, AR	Tri-Lakes Water District	115,412	3,865,839	0	3,981,251	0	0	3,981,251	
	Activate Future	38,130	0	0	38,130	0	38,248	76,378	4,057,629
Greers Ferry Lake, AR	City of Herber Springs [7]	0	0	0	0	0	0	0	
	Clinton Water District	81,000	0	0	81,000	0	0	81,000	
	Community Water System	20,260	0	0	20,260	0	0	20,260	
	Community WS	457,804	0	0	457,804	0	0	457,804	
	Red Apple Inn & Country Club	8,427	0	0	8,427	0	0	8,427	
	Community WS	561,174	0	0	561,174	0	0	561,174	
	Thunderbird Country Club	6,514	0	0	6,514	0	0	6,514	
	Tannebaum Country Club	11,072	0	0	11,072	0	0	11,072	
	City of Clinton	277,423	0	0	277,423	0	0	277,423	
	Mid Arkansas Water Alliance	3,557,788	0	0	3,557,788	0	0	3,557,788	4,981,462

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Little Rock District		SWL WS Cost Data (\$) [1]							
Project	User	Agreement Storage Cost				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Millwood Lake, AR	SW Arkansas Water Dist. #1	571,900	8,304,122	0	8,876,022	110,500	0	8,986,522	
	Activate Future #2	776,800	0	0	776,800	0	0	776,800	
	Activate Future #3	1,348,700	0	0	1,348,700	0	0	1,348,700	
	Activate Future #4	161,900	0	0	161,900	0	0	161,900	
	Activate Future #5	269,800	0	0	269,800	0	0	269,800	
	Activate Future #6	1,079,100	0	0	1,079,100	0	0	1,079,100	
	Activate Future #7	37,700	0	0	37,700	0	0	37,700	
	Activate Future #8	1,132,975	0	0	1,132,975	0	1,589,814	2,722,789	
	Activate Future #9	107,902	0	0	107,902	0	0	107,902	
	Activate Future #10	75,493	0	0	75,493	0	0	75,493	
	Activate Future #11	431,608	0	0	431,608	0	0	431,608	15,998,314
Nimrod Lake, AR	City of Plainview	1,218	0	0	1,218	0	0	1,218	0
	City of Plainview	21,967	0	0	21,967	0	0	21,967	23,185
Norfork Lake, AR	City of Mountain Home [8]	65,467	0	0	65,467	0	0	65,467	
	Activate Future	130,933	0	0	130,933	0	0	130,933	196,400
FY16 District Summary	11 projects / 28 agreements / 13 activate future	19,936,385	26,402,361	0	46,338,746	110,500	2,913,703	49,362,949	49,362,949
2014 WS Database Report	11 projects / 28 agreements / 13 activate future	23,003,470	32,781,062	0	55,784,532	0	0	55,784,532	55,784,532

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Little Rock District		SWL Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District Percent Remaining
		Present	Future	Total	
Beaver Lake, AR	Beaver Water District	0	0	0	
	Activate Future	2,455,356	0	2,455,356	
	Carroll-Boone Water District	373,873	0	373,873	
	Madison Co., Water District	176,890	0	176,890	
	Benton/Washington Co. WD	707,776	0	707,776	
	Beaver Water District [5]	0	0	0	
	Carroll-Boone Water District[5]	0	0	0	
Blue Mountain Lake, AR	City of Danville	133,544	0	133,544	
Bull Shoals Lake, AR	Marion Co. Water District	0	0	0	
	Marion Co. Water District	0	0	0	
	Ozark Mt. RPWA	1,507,031	0	1,507,031	
Dardanell Lake, AR	AP&L Nuclear One [6]	0	0	0	
DeQueen Lake, AR	Tri-Lakes Water District	152,657	11,900,000	12,052,657	
Dierks Lake, AR	Tri-County Water Dist.	15,874	2,332,400	2,348,274	
Gillham Lake, AR	Tri-Lakes Water District	51,629	3,865,839	3,917,468	
	Activate Future	37,369	0	37,369	
Greers Ferry Lake, AR	City of Herber Springs [7]	0	0	0	
	Clinton Water District	17,935	0	17,935	
	Community Water System	0	0	0	
	Community WS	0	0	0	
	Red Apple Inn & Country Club	4,709	0	4,709	
	Community WS	0	0	0	
	Thunderbird Country Club	4,064	0	4,064	
	Tannebaum Country Club	6,908	0	6,908	
	City of Clinton	232,275	0	232,275	
	Mid Arkansas Water Alliance	2,251,215	0	2,251,215	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Little Rock District		SWL Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District Percent Remaining
		Present	Future	Total	
Millwood Lake, AR	SW Arkansas Water Dist. #1	26,433	8,304,122	8,330,555	
	Activate Future #2	82,791	0	82,791	
	Activate Future #3	200,699	0	200,699	
	Activate Future #4	81,026	0	81,026	
	Activate Future #5	152,007	0	152,007	
	Activate Future #6	690,677	0	690,677	
	Activate Future #7	24,806	0	24,806	
	Activate Future #8	471,367	0	471,367	
	Activate Future #9	27,316	0	27,316	
	Activate Future #10	19,112	0	19,112	
	Activate Future #11	109,266	0	109,266	
Nimrod Lake, AR	City of Plainview	0	0	0	
	City of Plainview	13,392	0	13,392	
Norfork Lake, AR	City of Mountain Home [8]	0	0	0	
	Activate Future	0	0	0	
FY16 District Summary	11 projects / 28 agreements / 13 activate future	10,027,997	26,402,361	36,430,358	74%
2014 WS Database Report	11 projects / 28 agreements / 13 activate future	11,958,714	32,781,062	44,739,776	80%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal
by Agreement**

SWL Database Notes:

- [1] Costs as recorded in the agreement when signed. Price level varies.
- [2] Additional costs are normally interest costs that have accumulated on the unpaid balance after the 10-year interest free period. Other late fees and charges should be footnoted.
- [3] Includes, as applicable, for present use storage, interest on the unpaid balance after the end of the ten-year interest free period. This interest charge has not been shown for future use storage or for not under contract storage. For these two categories, appropriate interest will be charged once the storage is placed under a repayment agreement.
- [4] Based on OMBIL run of 6 October 2016.
- [5] Beaver Lake. Per specific legislation, this storage reallocated at no cost due to change in methodology of the yield/storage relationship at the project.
- [6] Dardanell. Nuclear power plant requires 1,700 cfs for cooling. The majority of water withdrawn is returned so little storage required. The net yield is reported as zero. Annual O&M payment of \$10,600.
- [7] Greers Ferry, City of Herber Springs. Storage agreement at no cost to replace water supply lost due to construction of project.
- [8] Norfork Lake. 1967 agreement included both present and future use storage.

Additional Remarks:

1. Differences from the 2014 database report include: total yield reduced from 1,613 to 514 due to change in reporting for the yield of the Dardanell project, total storage space increased by 326 acre-feet while the cost of storage decreased by about \$6.4 million, reducing the remaining principal owed from 80% to 74%.

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF WS Agreement Data				SWF WS Storage Space Data (acre-feet)				
Project Name	User	Agreement				WS Agreement Storage Space				Project WS Storage Space
		Type	Date	Yield (MGD)	Interest Rate (%)	Present	Future	Not Under Contract	Total	
Aquilla Lake, TX	Brazos River Authority	Original	1976	0.97	5.116	3,360	0	0	3,360	
	Activate Future #2		1995	8.70	5.116	3,444	0	0	3,444	
	Activate Future #3		1999	[5]	5.116	1,856	0	0	1,856	
	Activate Future #4		2007	[5]	5.116	7,116	0	0	7,116	
	Activate Future #5		2009	[5]	5.116	6,074	0	0	6,074	
	Activate Future #6		2011	[5]	5.116	3,643	0	0	3,643	
	Activate Future #7		[5]	[5]	5.116	8,107	0	0	8,107	33,600
Bardwell Lake, TX	Trinity River Authority	Original	1963	2.80	2.936	10,700	0	0	10,700	
	Activate Future #2A		1969	2.80	2.936	10,700	0	0	10,700	
	Activate Future #2B		1969	2.80	2.936	10,700	0	0	10,700	
	Activate Future #2C		1969	2.80	2.936	10,700	0	0	10,700	
	RR&R Repayment [7]	Supplement	2011	0.00	2.936	0	0	0	0	42,800
Belton Lake, TX	Brazos River Auth.	Original	1958	35.32	2.500	125,700	0	0	125,700	
	Activate Future		1958	66.01	2.500	235,000	0	0	235,000	
	RR&R Repayment [7]	Supplement	2014	0.00	4.250	0	0	0	0	360,700
Benbrook Lake, TX	City of Ft. Worth	Surplus	1969	0.67	2.500	7,250	0	0	7,250	
	Benbrook W&SA	Surplus	1972	0.67	2.500	7,250	0	0	7,250	
	Benbrook W&SA	Surplus	1979	0.85	2.500	9,208	0	0	9,208	
	Tarrant Reg. WD	Surplus	1991	4.54	9.125	48,792	0	0	48,792	72,500
Canyon Lake, TX	Guadalupe-Blanco R. Auth.	Original	1957	89.80	2.500	366,400	0	0	366,400	366,400
Cooper Dam & Jim Chapman Lake, TX	City of Irving	Original	1968	18.46	3.253	46,200	8,225	0	54,425	
	Activate Future		1968	18.46	3.253	46,200	0	0	46,200	
	No. TX Muni. Water Dist.	Original	1968	33.77	3.253	84,525	0	0	84,525	
	Activate Future		1968	6.43	3.253	16,100	0	0	16,100	
	Sulphur R. MWD	Original	1968	7.30	3.253	17,750	0	0	17,750	
	Activate Future [8]		1968	21.50	3.253	54,000	0	0	54,000	
	RR&R Repayment [7]	Supplement	2011	0.00	4.250	0	0	0	0	273,000
Ferrell' Bridge Dam - Lake O 'The Pines, TX	N.E. Texas MWD	Original	1955	154.99	[6]	250,000	0	0	250,000	250,000

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF WS Agreement Data				SWF WS Storage Space Data (acre-feet)				
Project Name	User	Agreement				WS Agreement Storage Space				Project WS Storage Space
		Type	Date	Yield (MGD)	Interest Rate (%)	Present	Future	Not Under Contract	Total	
Granger Dam & Lake, TX	Brazos River Auth.	Original	1980	0.00	3.256	0	0	0	0	
	Activate Future #1		1991	0.04	3.256	102	0	0	102	
	Activate Future #2		1995	16.12	3.256	37,798	0	0	37,798	37,900
Grapevine, TX	City of Grapevine	Original	1953	0.16	3.130	1,250	0	0	1,250	
	City of Dallas	Original	1954	10.91	3.130	85,000	0	0	85,000	
	Dallas Co. Park Cities	Original	1955	6.42	3.130	50,000	0	0	50,000	
	City of Grapevine	Surplus	1981	3.21	8.605	25,000	0	0	25,000	161,250
Hords Creek Lake, TX	Not Under Contract	Original		1.10		0	0	5,780	5,780	5,780
Joe Pool Lake, TX	Trinity River Auth. [12]	Original	1977	6.14	5.116	0	61,746	0	61,746	
	Activate Future #1 [8]		1987	0.14	5.683	1,429	0	0	1,429	
	Activate Future #2 [8]		1987	0.14	5.683	1,429	0	0	1,429	
	Activate Future #3 [8]		1996	0.14	5.683	1,429	0	0	1,429	
	Activate Future #4 [8]		1996	1.36	5.683	13,661	0	0	13,661	
	Activate Future #5 [8]		1996	1.00	5.683	10,060	0	0	10,060	
	Activate Future #6 [8]		1996	0.85	5.683	8,574	0	0	8,574	
	Activate Future #7 [8]		1996	0.85	5.689	8,575	0	0	8,575	
	Activate Future #8 [8]		1996	3.58	5.683	35,997	0	0	35,997	
	RR&R Repayment [7]	Supplement	2011	0.00	4.250	0	0	0	0	142,900
Lavon Lake, TX	N. Texas MWD	Original	1967	24.21	2.500	100,000	0	0	100,000	
	N. Texas MWD	Original	1967	29.05	3.225	120,000	0	0	120,000	
	Activate Future		2004	38.74	3.225	160,000	0	0	160,000	380,000
Lewisville Dam, TX	City of Dallas	Original	1980	157.00	3.000	310,000	0	0	310,000	
	City of Denton	Original	1980	8.00	2.500	21,000	0	0	21,000	331,000
Navarro Mills Lake, TX	Trinity River Auth.	Original	1959	4.65	2.670	15,960	0	0	15,960	
	Activate Future		1959	10.85	2.670	37,240	0	0	37,240	53,200

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF WS Agreement Data				SWF WS Storage Space Data (acre-feet)				
Project Name	User	Agreement				WS Agreement Storage Space				Project WS Storage Space
		Type	Date	Yield (MGD)	Interest Rate (%)	Present	Future	Not Under Contract	Total	
North San Gabriel Dam & Lake Georgetown, TX	Brazos River Auth.	Original	1981	0.00	3.253	0	0	0	0	
	Activate Future (Seg #1)		[5]	0.04	3.253	101	0	0	101	
	Activate Future (Seg #2)		[5]	0.16	3.253	466	0	0	466	
	Activate Future (Seg #3)		[5]	0.53	3.253	1,559	0	0	1,559	
	Activate Future (Seg #4)		[5]	1.00	3.253	2,835	0	0	2,835	
	Activate Future (Seg #5)		[5]	2.00	3.253	5,670	0	0	5,670	
	Activate Future (Seg #6)		[5]	0.36	3.253	1,000	0	0	1,000	
	Activate Future (Seg #7)		[5]	0.50	3.253	1,416	0	0	1,416	
	Activate Future (Seg #8) [8]		[5]	1.06	3.253	3,000	0	0	3,000	
	Activate Future (Seg. #9)		[5]	0.89	3.253	2,523	0	0	2,523	
	Activate Future (Seg #10)		[5]	1.74	3.253	4,905	0	0	4,905	
	Activate Future (Seg #11)		[5]	0.38	3.253	1,084	0	0	1,084	
	Activate Future (Seg #12)		[5]	1.64	3.253	4,639	0	0	4,639	29,198
O C Fisher Dam & Lake, TX	Upper CO River Auth.	Original	1999	3.62	[6]	78,793	0	0	78,793	78,793
Proctor Lake, TX	Brazos River Auth.	Original	1960	2.78	2.700	6,280	0	0	6,280	
	Activate Future		1966	11.12	2.700	25,120	0	0	25,120	31,400
Ray Roberts Lake, TX	City of Dallas	Original	1980	83.22	7.210	591,700	0	0	591,700	
	City of Denton	Original	1980	29.24	7.210	108,100	99,800	0	207,900	799,600
Sam Rayburn Dam & Reservoir, TX	Lower Neches Valley Auth. [9]	Original	1956	1,293.00	0.000	0	0	0	0	0
	City of Lufkin	Reallocation	1969	10.70	2.591	18,000	0	0	18,000	
	Activate Future		1969	25.00	2.591	25,000	0	0	25,000	43,000
Somerville Lake, TX	Brazos River Auth.	Original	1962	1.81	2.742	7,200	129,500	0	136,700	
	Activate Future [10]		1973	34.38	2.742	7,200	0	0	7,200	143,900
Stillhouse Hollow Dam, TX	Brazos River Auth.	Original	1962	8.25	2.742	26,740	0	0	26,740	
	Activate Future		1963	54.94	2.742	178,160	0	0	178,160	204,900
Waco Lake, TX	Brazos River Auth	Original	1958	56.83	2.500	91,074	0	0	91,074	
	City of Waco [11]	Original	1958	8.12	N/A	13,026	0	0	13,026	
	Brazos River Auth.	Reallocation	1984	29.65	[5]	47,526	0	0	47,526	151,626

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF WS Agreement Data				SWF WS Storage Space Data (acre-feet)				
Project Name	User	Agreement				WS Agreement Storage Space				Project WS Storage Space
		Type	Date	Yield (MGD)	Interest Rate (%)	Present	Future	Not Under Contract	Total	
Whitney Lake, TX	Brazos River Auth.	Original	1982	17.64	3.216	50,000	0	0	50,000	50,000
Wright Patman Dam & Lake, TX	City of Texarkana	Surplus	2012	50.00	2.556	76,663	0	0	76,663	76,663
FY16 District Summary	24 projects / 41 agreements / 41 activate future			2,534.90		3,815,059	299,271	5,780	4,120,110	4,120,110
2014 WS Database Report	24 Projects / 43 agreements / 41 activate future			2,535.00		3,815,061	299,271	5,780	4,120,112	4,120,112

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF WS Cost Data (\$) [1]							
Project Name	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Aquilla Lake, TX	Brazos River Authority	1,119,445	0	0	1,119,445	0	0	1,119,445	
	Activate Future #2	1,147,431	0	0	1,147,431	0	0	1,147,431	
	Activate Future #3	618,360	0	0	618,360	0	0	618,360	
	Activate Future #4	2,370,825	0	0	2,370,825	0	0	2,370,825	
	Activate Future #5	2,023,663	0	0	2,023,663	0	0	2,023,663	
	Activate Future #6	1,213,731	0	0	1,213,731	0	0	1,213,731	
	Activate Future #7	2,700,994	0	0	2,700,994	0	0	2,700,994	11,194,449
Bardwell Lake, TX	Trinity River Authority	822,647	0	0	822,647	0	0	822,647	
	Activate Future #2A	822,647	0	0	822,647	0	0	822,647	
	Activate Future #2B	822,647	0	0	822,647	0	0	822,647	
	Activate Future #2C	822,647	0	0	822,647	0	0	822,647	
	RR&R Repayment [7]	0	0	0	0	0	699,878	699,878	3,990,466
Belton Lake, TX	Brazos River Auth.	1,524,091	0	0	1,524,091	0	0	1,524,091	
	Activate Future	3,600,909	0	0	3,600,909	0	0	3,600,909	
	RR&R Repayment [7]	0	0	0	0	0	5,439,121	5,439,121	10,564,121
Benbrook Lake, TX	City of Ft. Worth	346,000	0	0	346,000	0	0	346,000	
	Benbrook W&SA	310,000	0	0	310,000	0	0	310,000	
	Benbrook W&SA	393,800	0	0	393,800	0	0	393,800	
	Tarrant Reg. WD	2,086,600	0	0	2,086,600	0	0	2,086,600	3,136,400
Canyon Lake, TX	Guadalupe-Blanco R. Auth.	8,978,861	0	0	8,978,861	0	0	8,978,861	8,978,861
Cooper Dam & Jim Chapman Lake, TX	City of Irving	4,277,484	752,628	0	5,030,112	0	0	5,030,112	
	Activate Future	4,277,484	0	0	4,277,484	0	41	4,277,525	
	No. TX Muni. Water Dist.	16,860,995	0	0	16,860,995	0	0	16,860,995	
	Activate Future	3,211,618	0	0	3,211,618	0	0	3,211,618	
	Sulphur R. MWD	1,624,245	0	0	1,624,245	0	0	1,624,245	
	Activate Future [8]	4,941,183	0	0	4,941,183	0	5,930,125	10,871,308	
	RR&R Repayment [7]	0	0	0	0	0	133,973	133,973	42,009,776
Ferrell' Bridge Dam - Lake O 'The Pines, TX	N.E. Texas MWD	3,200,000	0	0	3,200,000	0	0	3,200,000	3,200,000

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF WS Cost Data (\$) [1]							
Project Name	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Granger Dam & Lake, TX	Brazos River Auth.	0	0	0	0	0	0	0	
	Activate Future #1	39,345	0	0	39,345	0	0	39,345	
	Activate Future #2	14,579,855	0	0	14,579,855	0	0	14,579,855	14,619,200
Grapevine, TX	City of Grapevine	22,654	0	0	22,654	0	0	22,654	
	City of Dallas	1,433,026	0	0	1,433,026	0	0	1,433,026	
	Dallas Co. Park Cities	683,547	0	0	683,547	0	0	683,547	
	City of Grapevine	683,547	0	0	683,547	0	0	683,547	2,822,774
Hords Creek Lake, TX	Not Under Contract	0	0	105,078	105,078	-	-	105,078	105,078
Joe Pool Lake, TX	Trinity River Auth. [12]	0	7,974,063	0	7,974,063	0	0	7,974,063	
	Activate Future #1 [8]	471,500	0	0	471,500	0	136,786	608,286	
	Activate Future #2 [8]	471,500	0	0	471,500	0	154,292	625,792	
	Activate Future #3 [8]	471,500	0	0	471,500	0	136,786	608,286	
	Activate Future #4 [8]	4,507,460	0	0	4,507,460	0	1,462,954	5,970,414	
	Activate Future #5 [8]	3,319,307	0	0	3,319,307	0	1,208,043	4,527,350	
	Activate Future #6 [8]	2,829,000	0	0	2,829,000	0	918,121	3,747,121	
	Activate Future #7 [8]	2,829,000	0	0	2,829,000	0	1,145,453	3,974,453	
	Activate Future #8 [8]	11,877,246	0	0	11,877,246	0	7,236,989	19,114,235	
	RR&R Repayment [7]	0	0	0	0	0	168,736	168,736	47,318,736
Lavon Lake, TX	N. Texas MWD	1,256,300	0	0	1,256,300	0	0	1,256,300	
	N. Texas MWD	12,147,801	0	0	12,147,801	0	0	12,147,801	
	Activate Future	16,185,427	0	0	16,185,427	0	0	16,185,427	29,589,528
Lewisville Dam, TX	City of Dallas	3,676,661	0	0	3,676,661	0	0	3,676,661	
	City of Denton	250,064	0	0	250,064	0	0	250,064	3,926,725
Navarro Mills Lake, TX	Trinity River Auth.	652,827	0	0	652,827	0	0	652,827	
	Activate Future	1,523,262	0	0	1,523,262	0	0	1,523,262	2,176,089

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF WS Cost Data (\$) [1]							
Project Name	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
North San Gabriel Dam & Lake Georgetown, TX	Brazos River Auth.	0	0	0	0	0	0	0	
	Activate Future (Seg #1)	20,807	0	0	20,807	0	0	20,807	
	Activate Future (Seg #2)	95,984	0	0	95,984	0	0	95,984	
	Activate Future (Seg #3)	321,131	0	0	321,131	0	0	321,131	
	Activate Future (Seg #4)	583,870	0	0	583,870	0	0	583,870	
	Activate Future (Seg #5)	1,167,680	0	0	1,167,680	0	0	1,167,680	
	Activate Future (Seg #6)	205,949	0	0	205,949	0	0	205,949	
	Activate Future (Seg #7)	291,664	0	0	291,664	0	0	291,664	
	Activate Future (Seg #8) [8]	508,131	0	0	508,131	0	109,715	617,846	
	Activate Future (Seg. #9)	519,608	0	0	519,608	0	0	519,608	
	Activate Future (Seg #10)	1,010,178	0	0	1,010,178	0	0	1,010,178	
	Activate Future (Seg #11)	223,248	0	0	223,248	0	0	223,248	
	Activate Future (Seg #12)	955,396	0	0	955,396	0	0	955,396	6,013,361
O C Fisher Dam & Lake, TX	Upper CO River Auth.	860,437	0	0	860,437	0	0	860,437	860,437
Proctor Lake, TX	Brazos River Auth.	262,765	0	0	262,765	0	0	262,765	
	Activate Future	1,051,062	0	0	1,051,062	0	0	1,051,062	1,313,827
Ray Roberts Lake, TX	City of Dallas	165,342,765	0	0	165,342,765	0	0	165,342,765	
	City of Denton	31,355,656	28,954,065	0	60,309,721	0	0	60,309,721	225,652,486
Sam Rayburn Dam & Reservoir, TX	Lower Neches Valley Auth. [9]	0	0	0	0	0	0	0	0
	City of Lufkin	220,000	0	0	220,000	0	0	220,000	
	Activate Future	305,600	0	0	305,600	0	0	305,600	525,600
Somerville Lake, TX	Brazos River Auth.	360,113	6,663,165	0	7,023,278	0	0	7,023,278	
	Activate Future [10]	360,113	0	0	360,113	0	0	360,113	7,383,391
Stillhouse Hollow Dam, TX	Brazos River Auth.	911,229	0	0	911,229	0	0	911,229	
	Activate Future	6,215,435	0	0	6,215,435	0	0	6,215,435	7,126,664
Waco Lake, TX	Brazos River Auth	39,600,000	0	0	39,600,000	0	0	39,600,000	
	City of Waco [11]	0	0	0	0	0	0	0	
	Brazos River Auth.	15,242,000	0	0	15,242,000	0	0	15,242,000	54,842,000

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF WS Cost Data (\$) [1]							
Project Name	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Whitney Lake, TX	Brazos River Auth.	1,181,440	0	0	1,181,440	0	0	1,181,440	1,181,440
Wright Patman Dam & Lake, TX	City of Texarkana	1,437,647	0	0	1,437,647	0	0	1,437,647	1,437,647
FY16 District Summary	24 projects / 41 agreements / 41 activate future	420,639,044	44,343,921	105,078	465,088,043	0	24,881,013	489,969,056	489,969,056
2014 WS Database Report	24 Projects / 43 agreements / 41 activate future	444,323,935	44,627,759	105,078	489,056,772	0	0	489,056,772	489,056,772

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF Remaining Principal Owed [3] [4]			
Project Name	User	Amount Owed (\$)			
		Present	Future	Total	District Percent
Aquilla Lake, TX	Brazos River Authority	0	0	0	
	Activate Future #2	0	0	0	
	Activate Future #3	0	0	0	
	Activate Future #4	0	0	0	
	Activate Future #5	0	0	0	
	Activate Future #6	0	0	0	
	Activate Future #7	0	0	0	
Bardwell Lake, TX	Trinity River Authority	0	0	0	
	Activate Future #2A	78,117	0	78,117	
	Activate Future #2B	97,886	0	97,886	
	Activate Future #2C	125,331	0	125,331	
	RR&R Repayment [7]	622,419	0	622,419	
Belton Lake, TX	Brazos River Auth.	0	0	0	
	Activate Future	905,148	0	905,148	
	RR&R Repayment [7]	4,431,845	0	4,431,845	
Benbrook Lake, TX	City of Ft. Worth	44,774	0	44,774	
	Benbrook W&SA	58,740	0	58,740	
	Benbrook W&SA	125,663	0	125,663	
	Tarrant Reg. WD	0	0	0	
Canyon Lake, TX	Guadalupe-Blanco R. Auth.	2,703,427	0	2,703,427	
Cooper Dam & Jim Chapman Lake, TX	City of Irving	7,228,053	752,628	7,980,681	
	Activate Future	9,674,388	0	9,674,388	
	No. TX Muni. Water Dist.	15,024,786	0	15,024,786	
	Activate Future	2,786,640	0	2,786,640	
	Sulphur R. MWD	2,777,096	0	2,777,098	
	Activate Future [8]	9,598,685	0	9,598,685	
	RR&R Repayment [7]	115,973	0	115,973	
Ferrell' Bridge Dam - Lake O 'The Pines, TX	N.E. Texas MWD	0	0	0	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF Remaining Principal Owed [3] [4]			
Project Name	User	Amount Owed (\$)			District Percent
		Present	Future	Total	
Granger Dam & Lake, TX	Brazos River Auth.	0	0	0	
	Activate Future #1	27,572	0	27,572	
	Activate Future #2	10,377,459	0	10,377,459	
Grapevine, TX	City of Grapevine	0	0	0	
	City of Dallas	0	0	0	
	Dallas Co. Park Cities	0	0	0	
	City of Grapevine	0	0	0	
Hords Creek Lake, TX	Not Under Contract	0	105,078	105,078	
Joe Pool Lake, TX	Trinity River Auth. [12]	0	20,373,487	20,373,487	
	Activate Future #1 [8]	0	0	0	
	Activate Future #2 [8]	0	0	0	
	Activate Future #3 [8]	482,015	0	482,015	
	Activate Future #4 [8]	4,845,050	0	4,845,954	
	Activate Future #5 [8]	0	0	0	
	Activate Future #6 [8]	0	0	0	
	Activate Future #7 [8]	0	0	0	
	Activate Future #8 [8]	0	0	0	
	RR&R Repayment [7]	150,099	0	150,099	
Lavon Lake, TX	N. Texas MWD	0	0	0	
	N. Texas MWD	6,080,053	0	6,080,053	
	Activate Future	7,157,900	0	7,157,900	
Lewisville Dam, TX	City of Dallas	0	0	0	
	City of Denton	0	0	0	
Navarro Mills Lake, TX	Trinity River Auth.	0	0	0	
	Activate Future	0	0	0	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF Remaining Principal Owed [3] [4]			
Project Name	User	Amount Owed (\$)			
		Present	Future	Total	District Percent
North San Gabriel Dam & Lake Georgetown, TX	Brazos River Auth.	0	0	0	
	Activate Future (Seg #1)	13,395	0	13,395	
	Activate Future (Seg #2)	63,990	0	63,990	
	Activate Future (Seg #3)	221,096	0	221,096	
	Activate Future (Seg #4)	401,990	0	401,990	
	Activate Future (Seg #5)	873,016	0	873,016	
	Activate Future (Seg #6)	23,015	0	23,015	
	Activate Future (Seg #7)	251,731	0	251,731	
	Activate Future (Seg #8) [8]	372,715	0	372,715	
	Activate Future (Seg. #9)	0	0	0	
	Activate Future (Seg #10)	0	0	0	
	Activate Future (Seg #11)	0	0	0	
	Activate Future (Seg #12)	0	0	0	
O C Fisher Dam & Lake, TX	Upper CO River Auth.	0	0	0	
Proctor Lake, TX	Brazos River Auth.	0	0	0	
	Activate Future	251,607	0	261,607	
Ray Roberts Lake, TX	City of Dallas	0	0	0	
	City of Denton	2,907,913	28,954,065	31,861,978	
Sam Rayburn Dam & Reservoir, TX	Lower Neches Valley Auth. [9]	0	0	0	
	City of Lufkin	21,949	0	21,949	
	Activate Future	0	0	0	
Somerville Lake, TX	Brazos River Auth.	81,552	6,663,165	6,744,717	
	Activate Future [10]	2,372,952	0	2,372,951	
Stillhouse Hollow Dam, TX	Brazos River Auth.	63,132	0	63,132	
	Activate Future	481,920	0	481,920	
Waco Lake, TX	Brazos River Auth	0	0	0	
	City of Waco [11]	0	0	0	
	Brazos River Auth.	0	0	0	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division - Fort Worth District		SWF Remaining Principal Owed [3] [4]			
Project Name	User	Amount Owed (\$)			
		Present	Future	Total	District Percent
Whitney Lake, TX	Brazos River Auth.	0	0	0	
Wright Patman Dam & Lake, TX	City of Texarkana	142,589	0	142,589	
FY16 District Summary	24 projects / 41 agreements / 41 activate future	94,063,681	56,848,423	150,912,104	31%
2014 WS Database Report	24 Projects / 43 agreements / 41 activate future	98,391,174	36,783,897	135,175,071	28%

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal
by Agreement**

SWF Database Notes:

- [1] Costs as recorded in the agreement when signed. Price level varies.
- [2] Additional costs are normally interest costs that have accumulated on the unpaid balance after the 10-year interest free period. Other late fees and charges should be footnoted.
- [3] Includes, as applicable for present use storage, interest on the unpaid balance after the end of the ten-year interest free period. This interest charge has not been shown for future use storage or for not under contract storage. For these two categories, appropriate interest will be charged once the storage is placed under a repayment agreement.
- [4] Based on OMBIL run of 13 October 2016.
- [5] Missing information.
- [6] Agreement first costs were repaid up front in lump sum, therefore there is no applicable interest rate.
- [7] Supplemental agreements executed for repayment of Repair, Rehabilitation & Replacement costs funded by ARRA. These costs are shown as additional costs.
- [8] Additional costs for these activate future records were calculated by IWR pending resolution of QC comments with district.
- [9] Sam Rayburn. Section 108 of the Rivers and Harbors Act of 1948 authorizes releases of up to 2,000 cubic feet per second from Town Bluff Dam, a reregulating project downstream of Lake Sam Rayburn. The sponsor contributed \$5 million to the construction of the projects.
- [10] Somerville Lake. Activate future agreement with the Brazos River Authority has unreported additional costs as the remaining amount owed is larger than that shown as the cost of storage to be repaid.
- [11] Waco Lake. The City of Waco transferred a non-federal project pre-dating construction of the federal project to the Government in return for use of the stated amount of storage in the federal project at no cost.
- [12] Joe Pool Lake. Ongoing QC of costs at this project.

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial:
Agreement Data, Storage Space and Costs, and Remaining Principal
by Agreement**

SWF Additional Remarks:

1. In comparison to the 2014 water supply database report, total project costs increased by approximately \$1M, and the remaining principal balance increased by about \$15M, due primarily to an increase in the amount of future use storage costs recorded.
2. Storage at the Hords Creek project was listed as not under contract as ongoing QC efforts have not identified a current user.
3. The activate future at Lake Lavon was mistakenly recorded as a supplemental agreement in the 2014 report.
4. The present costs listed in the 2014 report for the supplemental agreements executed for repayment of ARRA-funded project work (see note #6 above) were changed to additional costs.

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Agreement Data				SWT WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Arcadia Lake, OK	Edmond PWA	Original	1979	11.00	7.210	23,090	0	0	23,090	23,090
Birch Lake, OK	OKWRB	Assurance	N/A	3.00	3.469	0	0	7,630	7,630	7,630
Broken Bow Lake, OK	OK Tourism & Recreation	Original	1988	0.07	2.742	60	0	0	60	
	Broken Bow PWA	Original	1990	9.52	2.742	4,241	4,054	0	8,295	
	Unknown	Assurance	N/A	165.34	2.742	0	0	144,085	144,085	152,440
Canton Lake, OK	OK City Muni. Imp. Auth	Original	1991	4.60	2.500	90,000	0	0	90,000	90,000
Copan Lake, OK	Copan PWA	Original	1981	2.00	3.502	250	4,750	0	5,000	
	Unknown [5]	Assurance	N/A	N/A	3.502	0	0	2,500	2,500	7,500
Council Grove, KS	State of Kansas	Original	1976	6.00	2.699	24,400	0	0	24,400	
	State of Kansas	Reallocated	1996	0.70	2.699	8,000	0	0	8,000	32,400
Denison Dam, L. Texoma, OK/TX	City of Denison, TX	Reallocated	1953	21.30	2.500	21,300	0	0	21,300	
	TU Electric	Reallocated	1961	16.40	2.500	16,400	0	0	16,400	
	Red River Auth. of TX	Reallocated	1969	0.45	2.500	450	0	0	450	
	Red River Auth. of TX	Reallocated	1983	2.02	10.051	2,054	0	0	2,054	
	North Texas Municipal Water Dist.	Reallocated	1985	83.98	10.693	85,406	0	0	85,406	
	Buncombe Creek View Add.	Reallocated	1992	0.00	8.125	1	0	0	1	
	Greater Texoma Utility Auth.	Reallocated	1992	5.50	8.125	5,500	0	0	5,500	
	Greater Texoma Utility Auth.	Reallocated	1997	5.50	7.125	5,500	0	0	5,500	
	Commissioners Land Office, OK	Reallocated	2005	0.27	5.125	275	0	0	275	
	Greater Texoma Utility Auth.	Reallocated	2005	11.41	5.125	11,600	0	0	11,600	
	North Texas Municipal Water Dist.	Reallocated	2010	98.33	4.125	100,000	0	0	100,000	
	Greater Texoma Utility Auth.	Reallocated	2010	49.17	4.125	50,000	0	0	50,000	
	Greater Texoma Utility Auth.	Reallocated	2011	1.49	4.250	1,515	0	0	1,515	300,001
El Dorado Lake, KS	City of El Dorado	Original	1972	6.19	3.502	39,793	72,087	0	111,880	
	Activate Future		1991	1.81	3.502	11,666	0	0	11,666	
	Activate Future		2003	2.99	3.502	19,254	0	0	19,254	142,800

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Agreement Data				SWT WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Elk City, KS	State of Kansas	Original	1976	10.00	2.742	24,300	0	0	24,300	
	State of Kansas	Reallocated	1996	2.20	2.742	10,000	0	0	10,000	34,300
Eufaula Lake, OK	Pittsburg Co. Water Co.	Original	1968	0.76	2.591	850	0	0	850	
	Haskell County Water Co.	Original	1968	0.35	2.591	400	0	0	400	
	RWD #1, Haskell Co	Original	1969	0.36	2.591	50	0	0	50	
	RWD #4, Pittsburg Co.	Original	1969	0.04	2.591	50	0	0	50	
	RWD #3, Muskogee Co.	Original	1969	0.01	2.591	100	0	0	100	
	Porum PWA	Original	1969	0.11	2.591	125	0	0	125	
	City of Eufala	Original	1971	0.05	2.591	60	0	0	60	
	Lakeside Water Co., Inc.	Original	1971	0.02	2.591	20	0	0	20	
	RWD #3, Haskell County	Original	1974	0.02	2.591	25	0	0	25	
	Krebs Utility Auth.	Original	1980	0.50	2.591	280	280	0	560	
	RWD #8, McIntosh Co.	Original	1981	0.29	2.591	300	0	0	300	
	Activate Future		2008	1.07	2.591	1,200	0	0	1,200	
	Porum PWA	Original	1981	0.25	2.591	280	0	0	280	
	Activate Future		2007	0.11	2.591	120	0	0	120	
	Pittsburg Co. PWA	Original	1981	0.27	2.591	300	0	0	300	
	Activate Future		2007	0.17	2.591	190	0	0	190	
	Longtown RWD & SD #1	Original	1985	0.89	2.591	1,000	0	0	1,000	
	Public Service Co. of OK	Original	1985	0.09	2.591	0	100	0	100	
	McAlester PWA	Original	1987	5.58	2.591	6,250	0	0	6,250	
	Bristow Point Property Owners Assoc.	Original	1989	0.01	2.591	15	0	0	15	
	Warner Utilities Auth.	Original	1989	0.20	2.591	220	0	0	220	
	Twin Rivers Estates, Inc.	Original	1990	0.01	2.591	9	0	0	9	
	Bridgeport Dunes Condo	Original	1990	0.01	2.591	5	0	0	5	
	RWD #14, Pittsburg Co.	Original	1991	0.29	2.591	320	0	0	320	
	Duchess Creek Mobile Park	Original	1992	0.00	2.591	4	0	0	4	
	Warner Utilities Auth.	Original	1996	0.42	2.591	475	0	0	475	
	RWD No. 2, Onapa	Original	1998	0.89	2.591	1,000	0	0	1,000	
	Juniper Water Co.	Original	2001	10.66	2.591	12,040	0	0	12,040	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Agreement Data				SWT WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Eufaula Lake, OK (cont'd)	RWD #3 Muskogee Co.	Original	2009	0.13	2.591	150	0	0	150	
	City of Checotah	Original	2009	1.43	2.591	1,600	0	0	1,600	
	RWD #3, Muskogee Co.	Original	2009	0.05	2.591	50	0	0	50	
	B&B Gas Wells	Original	2009	0.01	2.591	12	0	0	12	
	OK Tourist & Rec. Dept., OK	Original	2010	0.01	2.591	98	0	0	98	
	OK Tourist & Rec. Dept., OK	Original	2010	0.06	2.591	75	0	0	75	
	City of Eufaula	Original	2010	0.50	2.591	511	0	0	511	
	City of Eufaula	Original	2011	0.63	2.591	709	0	0	709	
	OWRB [5]	Assurance	N/A	24.74	2.591	0	0	27,636	27,636	56,909
Heyburn, OK	Creek Co. RWD #1	Original	1964	0.26	2.500	300	0	0	300	
	Creek Co. RWD #1	Original	1968	0.51	2.500	600	0	0	600	
	Creek Co. RWD #1	Original	1978	0.93	2.500	1,100	0	0	1,100	2,000
Hugo Lake, OK	City of Hugo	Original	1974	25.01	3.225	1,640	18,880	0	20,520	
	Antlers Public Works Auth.	Original	1975	1.21	3.225	490	0	0	490	
	Activate Future		2001	0.52	3.225	430	0	0	430	
	West. Farmers Elect. Coop [5]	Original	1980	7.43	3.225	6,100	0	0	6,100	
	Activate Future [5]		2006	21.14	3.225	17,350	0	0	17,350	
	RWD #3, Pushmataha Co.	Original	1994	0.62	3.225	512	0	0	512	
	OWRB [5]	Assurance	N/A	2.68	3.25	0	0	2,198	2,198	47,600
Hula, OK	City of Bartlesville	Original	1957	9.64	2.500	15,400	0	0	15,400	
	Activate Future		1970	1.34	2.500	2,200	0	0	2,200	
	Hula Water District	Original	1970	0.06	2.500	100	0	0	100	
	City of Bartlesville [5]	Original	1982	1.32	2.500	2,100	0	0	2,100	19,800
John Redmond, KS	State of Kansas	Original	1975	53.70	2.670	34,900	0	0	34,900	
	State of Kansas	Reallocated	1996	2.50	2.670	10,000	0	0	10,000	44,900

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Agreement Data				SWT WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Kaw Lake, OK	OK Gas & Electric	Original	1980	8.93	3.222	9,150	0	0	9,150	
	Activate Future		2004	8.23	3.222	8,439	0	0	8,439	
	Activate Future		2009	21.23	3.222	21,761	0	0	21,761	
	Kaw Reservoir Auth.	Conduit	1981	0.00	3.222	0	0	0	0	
	Stillwater Utility Authority	Original	1981	50.28	3.222	6,662	44,788	0	51,450	
	Otoe-Missouria Tribe	Original	1993	0.17	3.222	183	0	0	183	
	Not Under Contract	Assurance	N/A	78.25	3.222	0	0	80,211	80,211	171,194
Keystone Lake, OK	Public Service Co. of OK	Original	1971	7.00	2.591	7,000	5,500	0	12,500	
	Activate Future		1985	5.50		5,500	0	0	5,500	
	OWRB	Assurance	N/A	2.00	N/A	0	0	2,000	2,000	20,000
Marion, KS	State of Kansas	Original	1976	6.94	3.046	32,300	0	0	32,300	
	State of Kansas	Reallocated	1996	2.23	0.000	12,500	0	0	12,500	44,800
Oologah, OK	Town of Chelsea	Original	1982	1.05	3.225	670	860	0	1,530	
	Tulsa Metro Water Authority	Conduit	1984	0.00	2.500	0	0	0	0	
	Tulsa Metro Water Authority	Original	1984	17.10	3.225	38,000	0	0	38,000	
	Activate Future - Space 2		1985	[9]	3.225	6,500	0	0	6,500	
	Activate Future - Space 3		1985	[9]	3.225	44,500	0	0	44,500	
	Activate Future - Space 4		1985	[9]	3.225	196,450	0	0	196,450	
	City of Collinsville	Original	1985	0.22	2.500	500	0	0	500	
	Activate Future - Space 2		1985	2.77	3.225	6,170	0	0	6,170	
	Public Service Co. of OK	Original	1985	2.25	2.544	5,000	0	0	5,000	
	Activate Future - Space 2		1985	7.19	3.225	15,990	0	0	15,990	
	RWD #4, Rogers Co.	Original	1985	0.13	2.500	300	0	0	300	
	Activate Future - Space 2		1985	0.58	3.225	1,290	0	0	1,290	
	RWD #3 Rogers Co.	Original	1985	0.27	2.544	600	0	0	600	
	Activate Future - Space 2		1985	2.41	3.225	5,360	0	0	5,360	
	Town of Chelsea	Original	1985	0.04	2.500	100	0	0	100	
	Activate Future - Space 2		1989	0.04	2.500	100	0	0	100	
	RWD #3, Washington Co.	Original	1992	1.87	3.225	4,170	0	0	4,170	
	Claremore Public Works Auth	Original	1988	0.20	3.225	445	0	0	445	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Agreement Data				SWT WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Oologah, OK (cont'd)	Claremore Public Works Auth	Original	1999	2.80	3.225	6,230	0	0	6,230	
	Public Service Co. of OK	Original	2009	4.33	3.225	9,365	0	0	9,365	342,600
Pat Mayse Lake, TX	City of Paris, TX	Original	1965	11.00	3.137	21,900	0	0	21,900	
	Activate Future [5]		1978	11.00	3.137	21,900	0	0	21,900	
	Activate Future [5]		2010	33.00	3.137	65,800	0	0	65,800	109,600
Pearson - Skubitz Big Hill Lake, KS	State of Kansas	Original	1973	8.50	4.012	9,200	16,500	0	25,700	25,700
Pine Creek Lake, OK	International Paper [5]	Original	1970	25.00	2.936	14,700	11,160	0	25,860	
	Activate Future [5]		1970	23.98	2.936	2,940	0	0	2,940	28,800
Sardis Lake, OK	OK Water Res. Board	Original	1974	140.00	4.012	141,700	155,500	0	297,200	297,200
Skiatook Lake, OK	RWD #15, Osage Co.	Conduit	1984	0.00	4.012	0	0	0	0	
	RWD #15, Osage Co.	Original	1987	0.44	4.012	0	2,000	0	2,000	
	Sand Springs Municipal Auth.	Original	1988	1.50	4.012	6,740	0	0	6,740	
	Sapulpa Municipal Auth.	Original	1988	0.50	4.012	2,245	0	0	2,245	
	Activate Future		1993	0.50	4.012	2,245	0	0	2,245	
	Skiatook PWA	Original	1998	0.45	4.012	2,018	0	0	2,018	
	Skiatook PWA	Original	1988	0.61	4.012	2,743	0	0	2,743	
	Sapulpa Municipal Auth.	Original	2002	1.00	4.012	4,500	0	0	4,500	
	Sands Springs Municipal Auth.	Original	2005	2.50	4.012	11,250	0	0	11,250	
	Sapulpa Municipal Auth.	Original	2005	1.00	4.012	4,500	0	0	4,500	
	OK Water Res. Board [5]	Assurance	N/A	6.60	4.012	0	0	24,659	24,659	62,900
Tenkiller Ferry Lake, OK	East Central OK Water Auth.	Reallocated	1964	0.31	2.500	300	0	0	300	
	RWD #13, Cherokee Co.	Reallocated	1967	0.11	2.500	100	0	0	100	
	RWD #2, Cherokee County	Reallocated	1967	0.10	2.500	100	0	0	100	
	Summit Water Inc.	Reallocated	1971	0.15	2.500	140	0	0	140	
	Paradise Hills, Inc.	Reallocated	1974	0.23	2.500	220	0	0	220	
	Lake Tenkiller Associates	Reallocated	1980	0.21	6.595	200	0	0	200	
	Lake Reg. Elec. Dev. Coop.	Reallocated	1989	0.04	8.250	38	0	0	38	
	Tenkiller Aqua Park	Reallocated	1990	0.02	8.250	17	0	0	17	
	Gore Public Works Auth.	Reallocated	1990	0.50	8.250	480	0	0	480	
	Mongold Water System	Reallocated	1990	0.01	8.250	5	0	0	5	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Agreement Data				SWT WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Tenkiller, OK (cont'd)	Lake Reg. Elec. Dev. Coop.	Reallocated	1991	0.04	9.125	34	0	0	34	
	Pettit Bay Water Association	Reallocated	1991	0.01	9.125	5	0	0	5	
	Fin and Feather Resort	Reallocated	1992	0.13	8.125	12	0	0	12	
	Sixshooter Water System	Reallocated	1992	0.01	8.125	2	0	0	2	
	Billy Joe Stewart	Reallocated	1992	0.01	8.125	6	0	0	6	
	Bill Richardson	Reallocated	1992	0.00	8.125	1	0	0	1	
	Indian Hills Estates Company	Reallocated	1993	0.01	7.500	3	0	0	3	
	J.R. Mosteller	Reallocated	1993	0.01	7.500	2	0	0	2	
	Lake Reg. Elec. Dev. Coop.	Reallocated	1994	0.03	6.125	30	0	0	30	
	Lake Reg. Elec. Dev. Coop.	Reallocated	1994	0.01	6.125	15	0	0	15	
	Burnt Cabin RWD Inc.	Reallocated	1994	0.01	6.125	12	0	0	12	
	Sunny Heights Water System	Reallocated	1995	0.01	7.750	10	0	0	10	
	Lake Tenkiller Develop. Co.	Reallocated	1995	0.00	6.125	3	0	0	3	
	Charles Willige	Reallocated	1996	0.01	7.625	2	0	0	2	
	Sequoyah Co. Water Assoc.	Reallocated	1998	2.31	6.750	2,200	0	0	2,200	
	RWD #13 Cherokee Co.	Reallocated	2004	0.14	5.500	132	0	0	132	
	Tahlequah PWA	Reallocated	2005	4.50	5.125	4,300	0	0	4,300	
	Stick Ross Mtn. Water Co.	Reallocated	2005	0.62	5.125	584	0	0	584	
	RWD #2, Cherokee County	Reallocated	2007	0.10	4.875	99	0	0	99	
	RWD #13, Cherokee Co.	Reallocated	2007	0.10	4.875	99	0	0	99	
	Lake Reg. Elec. Dev. Coop.	Reallocated	2012	0.39	4.125	371	0	0	371	
	Pettit Mtn. Water Assoc.	Reallocated	2012	0.01	4.125	10	0	0	10	
	Not Under Contract [6]	Reallocated		14.68		0	0	14,000	14,000	23,532
Toronto Lake, KS	Kansas Water Office	Original	1964	0.07	2.584	265	0	0	265	
	Kansas Water Office	Reallocated	1982	0.03	0.03	135	0	0	135	400

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Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Agreement Data				SWT WS Storage Space Data (acre-feet)				
Project	User	Type	Date	Yield (MGD)	Interest Rate (%)	Agreement Storage Space				Project WS Storage Space
						Present	Future	Not Under Contract	Total	
Waurika Lake, OK	Waurika Project Master	Original	1970	10.00	3.463	41,800	0	0	41,800	
	Waurika PMC Dist. Eastern	Conduit	1978	0.00	3.463	0	0	0	0	
	Waurika PMC Dist. Southern	Conduit	1978	0.00	3.463	0	0	0	0	
	Waurika PMC Dist. Western	Conduit	1978	0.00	3.463	0	0	0	0	
	Waurika PMCD	Original	2010	26.20	3.463	109,600	0	0	109,600	151,400
Wister Lake, OK	Heavener Utility Auth. [8]	Reallocated / Modified	1963 / 2007	2.52	2.500	1,766	0	0	1,766	
	Poteau Valley Improv. Auth.	Reallocated	1967	6.85	2.500	4,800	0	0	4,800	
	AES Shady Point, Inc.	Reallocated	1987	10.36	11.070	7,253	0	0	7,253	13,819
FY16 District Summary	27 projects / 143 agreements / 23 activate future			1283.54		1,611,937	336,459	304,919	2,253,315	2,253,315
2014 WS Database Report	27 projects / 140 agreements / 22 activate future			1354.27		1,619,714	337,009	304,919	2,261,642	2,261,642

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Arcadia Lake, OK	Edmond PWA	44,043,644	0	0	44,043,644	200,000	0	44,243,644	44,243,644
Birch Lake, OK	OKWRB	0	0	885,000	885,000	7,000	0	892,000	892,000
Broken Bow Lake, OK	OK Tourism & Recreation	2,063	0	0	2,063	59	0	2,122	
	Broken Bow PWA	161,281	107,585	0	268,866	8,908	0	277,774	
	Unknown	0	0	3,776,221	3,776,221	105,323	0	3,881,544	4,161,440
Canton Lake, OK	OK City Muni. Imp. Auth	2,806,884	0	0	2,806,884	0	0	2,806,884	2,806,884
Copan Lake, OK	Copan PWA	268,660	5,105,160	0	5,373,820	0	0	5,373,820	
	Unknown [5]	0	0	2,686,900	2,686,900	24,700	0	2,711,600	8,085,420
Council Grove, KS	State of Kansas	1,403,764	0	0	1,403,764	58,000	0	1,461,764	
	State of Kansas	723,218	0	0	723,218	0	0	723,218	2,184,982
Denison Dam, L. Texoma, OK/TX	City of Denison, TX	292,861	0	0	292,861	0	0	292,861	
	TU Electric	286,353	0	0	286,353	0	0	286,353	
	Red River Auth. of TX	9,100	0	0	9,100	0	0	9,100	
	Red River Auth. of TX	364,400	0	0	364,400	0	0	364,400	
	North Texas Municipal Water Dist.	16,984,605	0	0	16,984,605	0	0	16,984,605	
	Buncombe Creek View Add.	248	0	0	248	0	0	248	
	Greater Texoma Utility Auth.	1,266,081	0	0	1,266,081	0	0	1,266,081	
	Greater Texoma Utility Auth.	1,407,751	0	0	1,407,751	0	0	1,407,751	
	Commissioners Land Office, OK	87,696	0	0	87,696	0	0	87,696	
	Greater Texoma Utility Auth.	3,727,060	0	0	3,727,060	0	0	3,727,060	
	North Texas Municipal Water Dist.	38,830,547	0	0	38,830,547	0	0	38,830,547	
	Greater Texoma Utility Auth.	19,422,260	0	0	19,422,260	0	0	19,422,260	
	Greater Texoma Utility Auth.	599,123	0	0	599,123	0	0	599,123	83,278,085
El Dorado Lake, KS	City of El Dorado	10,212,200	18,500,117	0	28,712,317	838,200	0	29,550,517	
	Activate Future	2,993,915	0	0	2,993,915	0	52,427	3,046,342	
	Activate Future	4,941,268	0	0	4,941,268	0	2,463,843	7,405,111	40,001,970

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Elk City, KS	State of Kansas	2,146,666	0	0	2,146,666	68,000	0	2,214,666	
	State of Kansas	1,150,580	0	0	1,150,580	0	0	1,150,580	3,365,246
Eufaula Lake, OK	Pittsburg Co. Water Co.	75,330	0	0	75,330	0	81,972	157,302	
	Haskell County Water Co.	35,440	0	0	35,440	0	3,116	38,556	
	RWD #1, Haskell Co	4,706	0	0	4,706	0	666	5,372	
	RWD #4, Pittsburg Co.	4,420	0	0	4,420	0	380	4,800	
	RWD #3, Muskogee Co.	8,880	0	0	8,880	0	799	9,679	
	Porum PWA	11,786	0	0	11,786	0	1,685	13,471	
	City of Eufala	5,880	0	0	5,880	0	1,031	6,911	
	Lakeside Water Co., Inc.	1,970	0	0	1,970	0	354	2,324	
	RWD #3, Haskell County	2,228	0	0	2,228	0	208	2,436	
	Krebs Utility Auth.	29,116	24,760	0	53,876	0	6,489	60,365	
	RWD #8, McIntosh Co.	32,504	0	0	32,504	0	8,261	40,765	
	Activate Future	106,130	0	0	106,130	0	0	106,130	
	Porum PWA	30,063	0	0	30,063	0	7,436	37,499	
	Activate Future	10,598	0	0	10,598	0	0	10,598	
	Pittsburg Co. PWA	33,118	0	0	33,118	0	8,875	41,993	
	Activate Future	25,810	0	0	25,810	0	25,227	51,037	
	Longtown RWD & SD #1	107,474	0	0	107,474	475	26,664	134,613	
	Public Service Co. of OK	0	10,967	0	10,967	49	0	11,016	
	McAlester PWA	715,913	0	0	715,913	3,162	210,851	929,926	
	Bristow Point Property Owners Assoc.	1,823	0	0	1,823	7	603	2,433	
	Warner Utilities Auth.	26,490	0	0	26,490	118	8,712	35,320	
	Twin Rivers Estates, Inc.	135	0	0	135	13	0	148	
	Bridgeport Dunes Condo	625	0	0	625	3	221	849	
	RWD #14, Pittsburg Co.	39,914	0	0	39,914	176	14,055	54,145	
	Duchess Creek Mobile Park	505	0	0	505	2	182	689	
	Warner Utilities Auth.	68,235	0	0	68,235	104	29,850	98,189	
	RWD No. 2, Onapa	148,911	0	0	148,911	658	68,101	217,670	
	Juniper Water Co.	1,972,469	0	0	1,972,469	8,717	999,517	2,980,703	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Eufaula Lake, OK (cont'd)	RWD #3 Muskogee Co.	29,822	0	0	29,822	132	17,701	47,655	
	City of Checotah	316,504	0	0	316,504	1,400	187,209	505,113	
	RWD #3, Muskogee Co.	13,929	0	0	13,929	0	9,889	23,818	
	B&B Gas Wells	2,398	0	0	2,398	10	1,418	3,826	
	OK Tourist & Rec. Dept., OK	19,918	0	0	19,918	88	11,999	32,005	
	OK Tourist & Rec. Dept., OK	15,254	0	0	15,254	0	9,193	24,447	
	City of Eufaula	41,271	0	0	41,271	182	0	41,453	
	City of Eufaula	57,286			57,286	254	0	57,540	
	OWRB [5]	0	0	522,087	522,087	1,450	0	523,537	6,314,333
Heyburn, OK	Creek Co. RWD #1	13,395	0	0	13,395	51,250	0	64,645	
	Creek Co. RWD #1	34,374	0	0	34,374	0	0	34,374	
	Creek Co. RWD #1	73,121	0	0	73,121	0	0	73,121	172,140
Hugo Lake, OK	City of Hugo	94,010	1,082,390	0	1,176,400	32,800	13,158	1,222,358	
	Antlers Public Works Auth.	28,080	0	0	28,080	0	3,923	32,003	
	Activate Future	24,670	0	0	24,670	0	34,293	58,963	
	West. Farmers Elect. Coop [5]	320,039	0	0	320,039	0	19,309	339,348	
	Activate Future [5]	944,676	0	0	944,676	0	1,031,842	1,976,518	
	RWD #3, Pushmataha Co.	29,418	0	0	29,418	0	29,418	58,836	
	OWRB [5]	0	0	126,011	126,011			126,011	3,814,037
Hula, OK	City of Bartlesville	618,654	0	0	618,654	5,280	0	623,934	
	Activate Future	84,362	0	0	84,362	0	57,138	141,500	
	Hula Water District	4,000	0	0	4,000	0	0	4,000	
	City of Bartlesville [5]	84,362	0	0	84,362	0	57,138	141,500	910,934
John Redmond, KS	State of Kansas	4,498,911	0	0	4,498,911	10,000	0	4,508,911	
	State of Kansas	832,485	0	0	832,485	0	0	832,485	5,341,396

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Kaw Lake, OK	OK Gas & Electric	2,102,289	0	0	2,102,289	0	0	2,102,289	
	Activate Future	1,938,775	0	0	1,938,775	0	1,317,258	3,256,033	
	Activate Future	4,999,474	0	0	4,999,474	0	5,044,702	10,044,176	
	Kaw Reservoir Auth.	0	0	0	0	388,000	0	388,000	
	Stillwater Utility Authority	1,530,403	10,290,008	0	11,820,411	0	0	11,820,411	
	Otoe-Missouria Tribe	42,085	0	0	42,085	0	0	42,085	
	Not Under Contract	0	0	18,427,863	18,427,863	0	0	18,427,863	46,080,857
Keystone Lake, OK	Public Service Co. of OK	613,085	412,440	0	1,025,525	0	0	1,025,525	
	Activate Future	550,980	0	0	550,980	0	0	550,980	
	OWRB	0	0	203,465	203,465	28,300	0	231,765	1,808,270
Marion, KS	State of Kansas	1,576,327	0	0	1,576,327	9,000	0	1,585,327	
	State of Kansas	2,187,785	0	0	2,187,785	0	0	2,187,785	3,773,112
Oologah, OK	Town of Chelsea	21,650	27,725	0	49,375	0	0	49,375	
	Tulsa Metro Water Authority	0	0	0	0	409,342	0	409,342	
	Tulsa Metro Water Authority	1,485,963	0	0	1,485,963	0	0	1,485,963	
	Activate Future - Space 2	259,461	0	0	259,461	0	0	259,461	
	Activate Future - Space 3	1,642,359	0	0	1,642,359	0	0	1,642,359	
	Activate Future - Space 4	6,551,819	0	0	6,551,819	0	0	6,551,819	
	City of Collinsville	16,160	0	0	16,160	0	0	16,160	
	Activate Future - Space 2	199,490	0	0	199,490	0	0	199,490	
	Public Service Co. of OK	161,660	0	0	161,660	0	0	161,660	
	Activate Future - Space 2	538,353	0	0	538,353	0	0	538,353	
	RWD #4, Rogers Co.	9,700	0	0	9,700	0	0	9,700	
	Activate Future - Space 2	44,655	0	0	44,655	0	0	44,655	
	RWD #3 Rogers Co.	19,390	0	0	19,390	0	0	19,390	
	Activate Future - Space 2	184,118	0	0	184,118	0	0	184,118	
	Town of Chelsea	3,235	0	0	3,235	0	0	3,235	
	Activate Future - Space 2	3,356	0	0	3,356	0	0	3,356	
	RWD #3, Washington Co.	175,646	0	0	175,646	0	0	175,646	
	Claremore Public Works Auth	16,632	0	0	16,632	0	0	16,632	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Oologah, OK (cont'd)	Claremore Public Works Auth	324,284	0	0	324,284	0	0	324,284	
	Public Service Co. of OK	676,965	0	0	676,965	0	0	676,965	12,771,963
Pat Mayse Lake, TX	City of Paris, TX	679,200	0	0	679,200	10,000	0	689,200	
	Activate Future [5]	641,906	0	0	641,906	0	4,556	646,462	
	Activate Future [5]	1,925,722	0	0	1,925,722	0	16,615	1,942,337	3,277,999
Pearson - Skubitz Big Hill Lake, KS	State of Kansas	2,490,514	4,465,256	0	6,955,770	21,244	0	6,977,014	6,977,014
Pine Creek Lake, OK	International Paper [5]	1,523,506	1,158,765	0	2,682,271	0	0	2,682,271	
	Activate Future [5]	305,266		0	305,266	0	2,313	307,579	2,989,850
Sardis Lake, OK	OK Water Res. Board	18,006,221	19,760,089	0	37,766,310	602,258	0	38,368,568	38,368,568
Skiatook Lake, OK	RWD #15, Osage Co.	0	0	0	0	703,960		703,960	
	RWD #15, Osage Co.	0	563,867	0	563,867	0	0	563,867	
	Sand Springs Municipal Auth.	1,900,190	0	0	1,900,190	0	0	1,900,190	
	Sapulpa Municipal Auth.	632,924	0	0	632,924	0	0	632,924	
	Activate Future	632,924	0	0	632,924	0	0	632,924	
	Skiatook PWA	568,904	0	0	568,904	0	0	568,904	
	Skiatook PWA	890,715	0	0	890,715	0	277,630	1,168,345	
	Sapulpa Municipal Auth.	1,268,707	0	0	1,268,707	0	469,370	1,738,077	
	Sands Springs Municipal Auth.	3,171,767	0	0	3,171,767	0	1,630,709	4,802,476	
	Sapulpa Municipal Auth.	1,911,561	0	0	1,911,561	0	0	1,911,561	
	OK Water Res. Board [5]	0	0	5,488,404	5,488,404	0	0	5,488,404	20,111,632
Tenkiller Ferry Lake, OK	East Central OK Water Auth.	17,700	0	0	17,700	0	0	17,700	
	RWD #13, Cherokee Co.	2,020	0	0	2,020	0	0	2,020	
	RWD #2, Cherokee County	2,020	0	0	2,020	0	0	2,020	
	Summit Water Inc.	4,330	0	0	4,330	0	0	4,330	
	Paradise Hills, Inc.	6,039	0	0	6,039	0	0	6,039	
	Lake Tenkiller Associates	8,722	0	0	8,722	0	0	8,722	
	Lake Reg. Elec. Dev. Coop.	4,157	0	0	4,157	0	0	4,157	
	Tenkiller Aqua Park	2,043	0	0	2,043	0	0	2,043	
	Gore Public Works Auth.	51,831	0	0	51,831	0	0	51,831	
	Mongold Water System	1,167	0	0	1,167	0	0	1,167	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Tenkiller, OK (cont'd)	Lake Reg. Elec. Dev. Coop.	4,261	0	0	4,261	0	0	4,261	
	Pettit Bay Water Association	618	0	0	618	0	0	618	
	Fin and Feather Resort	1,630	0	0	1,630	0	0	1,630	
	Sixshooter Water System	256	0	0	256	0	0	256	
	Billy Joe Stewart	775	0	0	775	0	0	775	
	Bill Richardson	132	0	0	132	0	0	132	
	Indian Hills Estates Company	402	0	0	402	0	0	402	
	J.R. Mosteller	268	0	0	268	0	0	268	
	Lake Reg. Elec. Dev. Coop.	4,350	0	0	4,350	0	0	4,350	
	Lake Reg. Elec. Dev. Coop.	2,166	0	0	2,166	0	0	2,166	
	Burnt Cabin RWD Inc.	1,311	0	0	1,311	0	0	1,311	
	Sunny Heights Water System	1,372	0	0	1,372	0	0	1,372	
	Lake Tenkiller Develop. Co.	417	0	0	417	0	0	417	
	Charles Willige	286	0	0	286	0	0	286	
	Sequoyah Co. Water Assoc.	44,400	0	0	44,400	0	0	44,400	
	RWD #13 Cherokee Co.	20,532	0	0	20,532	0	0	20,532	
	Tahlequah PWA	723,274	0	0	723,274	0	0	723,274	
	Stick Ross Mtn. Water Co.	98,205	0	0	98,205	0	0	98,205	
	RWD #2, Cherokee County	19,123	0	0	19,123	0	0	19,123	
	RWD #13, Cherokee Co.	19,123	0	0	19,123	0	0	19,123	
	Lake Reg. Elec. Dev. Coop.	80,730	0	0	80,730	0	0	80,730	
	Pettit Mtn. Water Assoc.	2,070	0	0	2,070	0	0	2,070	
	Not Under Contract [6]	0	0	0	0	0	0	0	1,125,730
Toronto Lake, KS	Kansas Water Office	21,410	0	0	21,410	0	0	21,410	
	Kansas Water Office	14,965	0	0	14,965	0	0	14,965	36,375

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT WS Cost Data (\$) [1]							
Project	User	Agreement Storage Costs				Conduit Cost	Additional Cost [2]	Agreement Total	Project Total
		Present	Future	Not Under Contract	Total Original Cost of Storage				
Waurika Lake, OK	Waurika Project Master	4,393,093	0	0	4,393,093	222,991	357,776	4,973,860	
	Waurika PMC Dist. Eastern	0	0	0	0	317,806	139,780	457,586	
	Waurika PMC Dist. Southern	0	0	0	0	15,442,496	5,309,360	20,751,856	
	Waurika PMC Dist. Western	0	0	0	0	8,952,658	4,549,463	13,502,121	
	Waurika PMCD	11,592,392	0	0	11,592,392	0	27,548,051	39,140,443	78,825,866
Wister Lake, OK	Heavener Utility Auth. [8]	46,563	0	0	46,563	0	0	46,563	
	Poteau Valley Improv. Auth.	125,110	0	0	125,110	0	0	125,110	
	AES Shady Point, Inc.	1,963,800	0	0	1,963,800	0	0	1,963,800	2,135,473
FY16 District Summary	27 projects / 143 agreements / 23 activate future	249,522,829	61,509,129	32,115,951	343,147,909	28,534,575	52,172,736	423,855,220	423,855,220
2014 WS Database Report	27 projects / 140 agreements / 22 activate future	309,719,909	61,541,592	32,769,980	404,031,481	0	0	404,031,481	404,031,481

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District Percent Remaining
		Present	Future	Total	
Arcadia Lake, OK	Edmond PWA	0	0	0	
Birch Lake, OK	OKWRB	0	892,000	892,000	
Broken Bow Lake, OK	OK Tourism & Recreation	0	0	0	
	Broken Bow PWA	16,830	107,585	124,415	
	Unknown	0	3,881,544	3,881,544	
Canton Lake, OK	OK City Muni. Imp. Auth	0	0	0	
Copan Lake, OK	Copan PWA	132,107	5,105,160	5,237,267	
	Unknown [5]	0	2,711,600	2,711,600	
Council Grove, KS	State of Kansas	371,087	0	371,087	
	State of Kansas	0	0	0	
Denison Dam, L. Texoma, OK/TX	City of Denison, TX	0	0	0	
	TU Electric	0	0	0	
	Red River Auth. of TX	0	0	0	
	Red River Auth. of TX	0	0	0	
	North Texas Municipal Water Dist.	0	0	0	
	Buncombe Creek View Add.	0	0	0	
	Greater Texoma Utility Auth.	0	0	0	
	Greater Texoma Utility Auth.	0	0	0	
	Commissioners Land Office, OK	0	0	0	
	Greater Texoma Utility Auth.	2,644,151	0	2,644,151	
	North Texas Municipal Water Dist.	0	0	0	
	Greater Texoma Utility Auth.	0	0	0	
	Greater Texoma Utility Auth.	509,109	0	509,123	
El Dorado Lake, KS	City of El Dorado	0	18,500,117	18,500,117	
	Activate Future	2,068,568	0	2,068,568	
	Activate Future	6,406,252		6,406,252	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District Percent Remaining
		Present	Future	Total	
Elk City, KS	State of Kansas	548,362	0	548,362	
	State of Kansas	0	0	0	
Eufaula Lake, OK	Pittsburg Co. Water Co.	5,216	0	5,216	
	Haskell County Water Co.	3,538	0	3,538	
	RWD #1, Haskell Co	0	0	0	
	RWD #4, Pittsburg Co.	566		566	
	RWD #3, Muskogee Co.	909	0	909	
	Porum PWA	0	0	0	
	City of Eufala	0	0	0	
	Lakeside Water Co., Inc.	0	0	0	
	RWD #3, Haskell County	0	0	0	
	Krebs Utility Auth.	11,124	24,760	35,884	
	RWD #8, McIntosh Co.	15,492	0	15,492	
	Activate Future	0	0	0	
	Porum PWA	0	0	0	
	Activate Future	0	0	0	
	Pittsburg Co. PWA	13,540	0	13,540	
	Activate Future	29,428	0	29,428	
	Longtown RWD & SD #1	4,734	0	4,734	
	Public Service Co. of OK	0	11,016	11,016	
	McAlester PWA	119,590	0	119,590	
	Bristow Point Property Owners Assoc.	0	0	0	
	Warner Utilities Auth.	0	0	0	
	Twin Rivers Estates, Inc.	0	0	0	
	Bridgeport Dunes Condo	0	0	0	
	RWD #14, Pittsburg Co.	0	0	0	
	Duchess Creek Mobile Park	0	0	0	
	Warner Utilities Auth.	0	0	0	
	RWD No. 2, Onapa	0	0	0	
	Juniper Water Co.	0	0	0	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District Percent Remaining
		Present	Future	Total	
Eufaula Lake, OK (cont'd)	RWD #3 Muskogee Co.	0	0	0	
	City of Checotah	0	0	0	
	RWD #3, Muskogee Co.	0	0	0	
	B&B Gas Wells	0	0	0	
	OK Tourist & Rec. Dept., OK	0	0	0	
	OK Tourist & Rec. Dept., OK	0	0	0	
	City of Eufaula	0	0	0	
	City of Eufaula	0	0	0	
	OWRB [5]	0	523,537	523,537	
Heyburn, OK	Creek Co. RWD #1	0	0	0	
	Creek Co. RWD #1	0	0	0	
	Creek Co. RWD #1	0	0	0	
Hugo Lake, OK	City of Hugo	34,982	1,082,390	1,117,372	
	Antlers Public Works Auth.	7,737	0	7,737	
	Activate Future	38,725	0	38,725	
	West. Farmers Elect. Coop [5]	152,786	0	152,786	
	Activate Future [5]	1,044,162	0	1,044,162	
	RWD #3, Pushmataha Co.	0	0	0	
	OWRB [5]	0	126,011	126,011	
Hula, OK	City of Bartlesville	0	0	0	
	Activate Future	10,338	0	10,338	
	Hula Water District	0	0	0	
	City of Bartlesville [5]	63,704	0	63,704	
John Redmond, KS	State of Kansas	0	0	0	
	State of Kansas	0	0	0	

**FY16 Water Supply Database - ANNEX I - Municipal and Industrial
Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement**

Southwestern Division: Tulsa District		SWT Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District Percent Remaining
		Present	Future	Total	
Kaw Lake, OK	OK Gas & Electric	831,620	0	831,620	
	Activate Future	2,029,305	0	2,029,305	
	Activate Future	7,139,071	0	7,139,071	
	Kaw Reservoir Auth.	0	0	0	
	Stillwater Utility Authority	812,809	10,290,008	11,102,817	
	Otoe-Missouria Tribe	0	0	0	
	Not Under Contract	0	18,427,863	18,427,863	
Keystone Lake, OK	Public Service Co. of OK	136,066	412,440	548,506	
	Activate Future	210,160	0	210,160	
	OWRB	0	231,765	231,765	
Marion, KS	State of Kansas	510,396	0	510,396	
	State of Kansas	0	0	0	
Oologah, OK	Town of Chelsea	9,993	27,725	37,718	
	Tulsa Metro Water Authority	0	0	0	
	Tulsa Metro Water Authority	0	0	0	
	Activate Future - Space 2	99,514	0	99,514	
	Activate Future - Space 3	681,260	0	681,260	
	Activate Future - Space 4	3,007,470	0	3,007,470	
	City of Collinsville	0	0	0	
	Activate Future - Space 2	106,057	0	106,057	
	Public Service Co. of OK	0	0	0	
	Activate Future - Space 2	253,924	0	253,924	
	RWD #4, Rogers Co.	0	0	0	
	Activate Future - Space 2	22,227	0	22,227	
	RWD #3 Rogers Co.	0	0	0	
	Activate Future - Space 2	95,114	0	95,114	
	Town of Chelsea	0	0	0	
	Activate Future - Space 2	0	0	0	
	RWD #3, Washington Co.	10,283	0	10,283	
	Claremore Public Works Auth	8,532	0	8,532	

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Project	User	Amount Owed (\$)			District Percent Remaining
		Present	Future	Total	
Oologah, OK (cont'd)	Claremore Public Works Auth	0	0	0	
	Public Service Co. of OK	0	0	0	
Pat Mayse Lake, TX	City of Paris, TX	0	0	0	
	Activate Future [5]	0	0	0	
	Activate Future [5]	0	0	0	
Pearson - Skubitz Big Hill Lake, KS	State of Kansas	1,191,310	4,465,256	5,656,566	
Pine Creek Lake, OK	International Paper [5]	289,852	1,216,240	1,506,092	
	Activate Future [5]	121,580	0	121,580	
Sardis Lake, OK	OK Water Res. Board	4,659,224	19,760,089	24,419,313	
Skiatook Lake, OK	RWD #15, Osage Co.	503,925	0	503,925	
	RWD #15, Osage Co.	0	563,867	563,867	
	Sand Springs Municipal Auth.	1,270,641	0	1,270,641	
	Sapulpa Municipal Auth.	373,410	0	373,410	
	Activate Future	441,775	0	441,775	
	Skiatook PWA	358,445	0	358,445	
	Skiatook PWA	0	0	0	
	Sapulpa Municipal Auth.	270,674	0	270,674	
	Sands Springs Municipal Auth.	0	0	0	
	Sapulpa Municipal Auth.	177,079	0	177,079	
	OK Water Res. Board [5]	0	5,488,404	5,488,404	
Tenkiller Ferry Lake, OK	East Central OK Water Auth.	0	0	0	
	RWD #13, Cherokee Co.	69	0	69	
	RWD #2, Cherokee County	0	0	0	
	Summit Water Inc.	0	0	0	
	Paradise Hills, Inc.	0	0	0	
	Lake Tenkiller Associates	0	0	0	
	Lake Reg. Elec. Dev. Coop.	0	0	0	
	Tenkiller Aqua Park	671	0	671	
	Gore Public Works Auth.	0	0	0	
	Mongold Water System	0	0	0	

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Southwestern Division: Tulsa District		SWT Remaining Principal Owed [3] [4]			
Project	User	Amount Owed (\$)			District Percent Remaining
		Present	Future	Total	
Tenkiller, OK (cont'd)	Lake Reg. Elec. Dev. Coop.	0	0	0	
	Pettit Bay Water Association	0	0	0	
	Fin and Feather Resort	0	0	0	
	Sixshooter Water System	0	0	0	
	Billy Joe Stewart	0	0	0	
	Bill Richardson	0	0	0	
	Indian Hills Estates Company	0	0	0	
	J.R. Mosteller	0	0	0	
	Lake Reg. Elec. Dev. Coop.	0	0	0	
	Lake Reg. Elec. Dev. Coop.	0	0	0	
	Burnt Cabin RWD Inc.	0	0	0	
	Sunny Heights Water System	0	0	0	
	Lake Tenkiller Develop. Co.	0	0	0	
	Charles Willige	0	0	0	
	Sequoyah Co. Water Assoc.	0	0	0	
	RWD #13 Cherokee Co.	0	0	0	
	Tahlequah PWA	330,261	0	330,261	
	Stick Ross Mtn. Water Co.	69,670	0	69,670	
	RWD #2, Cherokee County	15,005	0	15,005	
	RWD #13, Cherokee Co.	15,005	0	15,005	
	Lake Reg. Elec. Dev. Coop.	73,215	0	73,215	
	Pettit Mtn. Water Assoc.	1,087	0	1,087	
	Not Under Contract [6]	0	0	0	
Toronto Lake, KS	Kansas Water Office	0	0	0	
	Kansas Water Office	0	0	0	

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Project	User	Amount Owed (\$)			District Percent Remaining
		Present	Future	Total	
Waurika Lake, OK	Waurika Project Master	0	0	0	
	Waurika PMC Dist. Eastern	300,118	0	300,118	
	Waurika PMC Dist. Southern	13,939,235	0	13,939,235	
	Waurika PMC Dist. Western	9,011,906	0	9,011,906	
	Waurika PMCD	0	0	0	
Wister Lake, OK	Heavener Utility Auth. [8]	0	0	0	
	Poteau Valley Improv. Auth.	12,250	0	12,250	
	AES Shady Point, Inc.	0	0	0	
FY16 District Summary	27 projects / 143 agreements / 23 activate future	63,643,245	93,849,377	157,492,636	37%
2014 WS Database Report	27 projects / 140 agreements / 22 activate future	68,996,590	91,449,073	160,445,663	40%

FY16 Water Supply Database - ANNEX I - Municipal and Industrial: Agreement Data, Storage Space and Costs, and Remaining Principal by Agreement

SWT Database Notes:

1. Cost of storage as recorded in the agreement. Price level varies.
2. Additional costs are normally interest costs that have accumulated on the unpaid balance after the 10-year interest free period. Other late fees and charges should be footnoted.
3. Includes, as applicable, for present use storage, interest on the unpaid balance after the end of the ten-year interest free period. This interest charge has not been shown for future use storage or for not under contract storage. Appropriate interest will be charged once the storage is placed under a repayment agreement.
4. Based on OMBIL run of 3 November 2016.
5. Some cost data calculated by IWR pending resolution of QC comments with district.
6. Tenkiller Ferry Lake. Not under contract storage space represents agreement that was terminated in 2011. Draft agreements for this space are under review.
8. Wister Lake agreement with Heavener Utility Authority. Original project constructed in 1963. A modification was finalized in 2007 that increased the storage to the user by 166 acre-feet. Cost was increased at the 1963 price levels, with the user obtaining credit for past cost reimbursements.
9. Missing data.

Additional Remarks:

1. In comparison to the 2014 WS database report, the number of agreements increased by 3, total yield decreased by 72 mgd, total WS storage space decreased by 8,327 acre-feet, total costs increased by \$19.8 million, and the percent remaining balance decreased by 3%.
2. Three interim irrigation agreements were deleted and one agreement previously reported as surplus water was converted to a permanent reallocation agreement. The 2014 report listed an agreement with Sequoyah Fuels at Tenkiller Lake for 14,000 acre-feet of storage. The agreement was terminated in 2011, as allowed for in the agreement, and the storage was listed as not under contract. In this report, this storage space is simply listed as not under contract and therefore not counted as an agreement. Requests for new agreements for this storage space are under consideration. Other changes in the agreement count were due to changes in the identification, classification and counting of conduit repayment arrangements.

