



Institute for Water Resources

January 2010

2009 Municipal and Industrial Water Supply Database

10-R-2



US Army Corps
of Engineers®



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U.S. Army Institute for Water Resources

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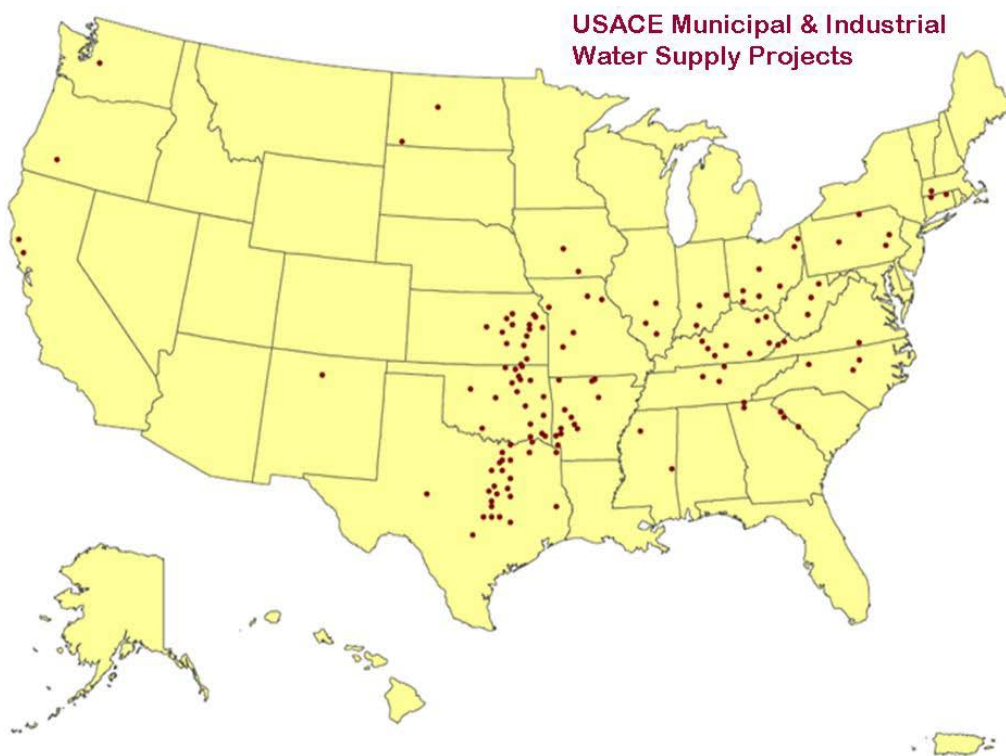
The U.S. Army Corps of Engineers Water Supply program has periodically produced the Water Supply Database. This document revises a 2006 report. Future reports are anticipated to be published yearly. For further information on the U.S. Army Corps of Engineers M&I Water Supply Database please contact Mr. Ted Hillyer at 703-428-6140 or via e-mail at: Theodore.M.Hillyer@usace.army.mil

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2009 M&I Water Supply Database

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IWR Report 10-R-02

January 2010

Benbrook Lake, Texas

The Benbrook Lake project is operated and maintained by the Ft. Worth District and includes about 87,000 acre-feet of storage space for municipal and industrial water supply. The district has repayment agreements for this storage space with the City of Ft. Worth, the Benbrook Water and Sewer Authority and the Tarrant Regional Water District. For this storage space the local sponsors have agreed to reimburse the Federal Government \$3.1 million plus the annual operation and maintenance expense. Of the \$3.1 million investment cost, approximately \$1.3 million has been repaid.



Preface and Acknowledgement

PREFACE

This report provides data on projects operated and maintained by the U. S. Army Corps of Engineers which contain storage space for municipal and industrial (M&I) water supply. Data are limited to those projects where storage has been authorized and/or is under a repayment through either a storage or surplus water agreement. The data are current as of 30 September 2009 and updates the 2005 data contained in IWR Report 06-PS-1 dated April 2006. The data in this report have been in the process of being developed through the Corps' Operation & Maintenance Business Information Link (OMBIL). Developing the data in the automated OMBIL eliminates the need to update the data through yearly paper data calls. The development of the water supply module has been a difficult process and resulted in several meetings where district and MSC representatives met with the contactor (CDM of Carbondale, IL) and IWR to go over the procedures and actually load the data from their water supply agreements. It is anticipated the original loading of the data into OMBIL will be finalized this year at which time it is the intent to issue a water supply database report on an annual basis. New data will be required to be loaded into OMBIL only when an existing agreement is terminated or modified, new agreements are initiated, projects are modified and for the yearly revenue and expense data.

Water supply has recently received the attention of Congress due to the legal issues surrounding the Buford Dam Lake Sidney Lanier project in northern Georgia. Between 1973 and 1990, the Corps entered into a series of contracts for withdrawals of water from Lake Lanier or from the Chattahoochee River downstream. These contracts did not, by their terms, provide for storage space, and the Corps has never formally reallocated storage for water supply at Lake Lanier. In 1989 the Corps prepared a draft post-authorization change report that recommended reallocation of 207,000 acre-feet for water supply. Litigation halted the reallocation proposal, the withdrawal contracts expired and the status quo was preserved through memorandums of understanding and compacts. While water is being supplied from Lake Lanier for M&I purposes, as there are no water storage agreements, as noted above, the data are not included in the database.

This report provides an update of data contained in the 2006 report collected through OMBIL as well as from additional data collected as a result of the recent Congressional interest. This report is intended for use by district and division personnel to assist in the management of their M&I water supply program and for Washington level personnel in preparation of yearly progress reports and for responding to requests from the public, Congress and the Administration.

ACKNOWLEDGEMENT

Many individuals in the USACE's MSCs and districts are to be thanked for their actions in the development of the water supply module of OMBIL, in the additional detailed drills required to respond to the recent concerns of Congress and in the review of this report. Of particular note are the MSC Water Supply Business Program Managers: William Sutyak (NAD), Terry Stratton (SAD), Ronny Sadri (LRD), Kevin Curran (MVS), Jim Fredericks (NWD), S.T.

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Su (SPD) and Adrienne Carter and her replacement Gloria Pena (SWD) and Helen Stupplebeen (POD). There are many additional division and district individuals who assisted these program managers, many of which I am not even aware. To these individuals, I want to provide my thanks and appreciation for a job well done.

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A. BACKGROUND

1. Federal Interest. The national policy of the United States regarding water supply as defined by Congress, has been developed over a number of years beginning with the War Department Civil Appropriations Act of 1938 followed by the 1944 Flood Control Act and the 1958 Water Supply Act, as amended. This policy recognizes that states and non-Federal entities have the primary responsibility in the development and management of their water supplies and assigns the financial burden of supplies to these users. The Corps may, however, participate in developing water supplies in connection with resource improvements for construction, operation, maintenance, and modification of Federal navigation, flood control or multiple purpose projects when certain conditions of non-Federal participation are met.

2. Definitions.

a. Municipal and Industrial. The term “municipal and industrial” (M&I), while not defined in legislative history, have been defined by the Corps to mean supply for uses customarily found in the operation of municipal water systems and for uses in industrial processes. Industrial processes can include thermal power generation and mining operations. Under the terms of the 1958 Water Supply Act the Corps enters into agreements for water supply storage space. The term “storage” conveys the right to store a resource (water) in a Corps reservoir project. The right to withdraw water from the storage space is a separate water rights issue that is the responsibility of the water user. Agricultural irrigation is not ordinarily found among customers of a municipal system and, therefore, is not eligible to be included in a project under the M&I authority unless so specifically authorized by Congress.

b. Agricultural. The Reclamation Act of 1902 established irrigation in the West as a national policy. For purposes of Reclamation Law, the West is defined as those 17 contiguous states lying west of the 98th meridian. Section 8 of the 1944 Flood Control Act provides that Corps reservoirs may include irrigation as a purpose upon the recommendation of the Secretary of the Interior. Section 8 also provides Interior (in those 17 Western States) with the authority to provide the irrigation works needed to make use of the irrigation storage. It is Interior's responsibility to construct, operate and maintain the additional irrigation works and to contract for the storage space. In areas outside the western states, the Corps is responsible and the policies established by subsection 103(c)(3) of WRDA '86 are followed for cost and repayment responsibilities

3. Database History. The M&I water supply database was originally developed and maintained by HQUSACE on a continual basis as the agreements were approved. The database consisted of the date of contract approval, storage space and costs and the local sponsor. Data on irrigation storage was first compiled in a 1982 survey of the districts by HQUSACE. This was a onetime data call and the data were never updated. The first available on line 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/docs/iwrreports/96ps4.pdf>. Municipal and industrial water supply was established as one of the eight business programs for Corps' budgeting purposes in the fiscal year 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. By memorandum dated 6 May 2004, the Chief of the Programs, Directorate of Civil Works called for an update of this 1996 data as well as the collection of new data. The data were developed and is 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/docs/iwrreports/IWRReport05-PS-1.pdf>. The data were again updated in 2005 as a result of a 15 March 2005 memorandum from the Chief of Programs Integration Division, Directorate of Civil Works. The purpose of this memorandum was to get a better understanding of M&I storage space for which costs were not being recovered and directed the districts to initiate a 4-phase water availability initiative. While the focus of this initiative was on storage not yet under contract, by that action, the storage space and costs of storage under contract was reviewed and updated as necessary. This 2005 data were presented in IWR Report 06-PS-1 dated April 2006 and can be found at: <http://www.iwr.usace.army.mil/docs/iwrreports/IWRRpt06-PS-1.pdf>.

4. Current Database. To eliminate the need for yearly data calls to the MSCs and districts to update the water supply database, in the spring of 2006 efforts were initiated to develop within the Operation and Maintenance Business Information Link (OMBIL), a module for M&I water supply. A module for irrigation water supply will be considered after the M&I module is up and running satisfactorily. The OMBIL system uses automated tools to extract information from existing databases that are maintained for specific tracking and reporting purposes. The primary objective of OMBIL is to support results-oriented management within the O&M community. The framework is intended to reduce entry of like information into multiple systems and form a consistent basis for decision-making. By automating the data elements necessary to evaluate effectiveness and efficiency, O&M project and program managers have ready access to the data required to evaluate activities and results, relevant to their business and program/project goals. Because of the development of the module and the conversion of the data into the module, a water supply database report has not been prepared since the April 2006 report. For OMBIL reports on water supply go to: <https://ombil.usace.army.mil/MainFrames/BusinessFrame.htm>. At this site, click on the water supply tab and then the green box by Business Function Reports to observe various reports. Please note that this site is still under review.

B. MUNICIPAL AND INDUSTRIAL WATER SUPPLY 2009 DATABASE

1. Projects, Agreements and Storage Space. Of the approximately 380 Corps of Engineers reservoir projects operated and maintained by the Corps of Engineers, 133 contain 11.1 million acre-feet of storage space allocated for M&I water supply. A list of these 133 projects by MSC and district with corresponding M&I water supply storage space is provided at **Appendix A**. These projects are located in 22 of the Corps 38 Civil Works districts. Of the total 11.1 million acre-feet of storage, 10.5 million acre-feet is under contract for repayment by non-Federal water supply users in 320 agreements plus 46 supplemental agreements. Most of these supplemental agreements converted future use storage to present use storage, but most require its own agreement for repayment purposes. Five of the 133 agreements (all located the Tulsa District) are just for water conduits. The remaining 0.6 million acre-feet are not yet under contract and not currently used for water supply storage.

2. Investment Cost and Repayment. The total investment cost for the 11.1 million acre-feet of allocated M&I storage is \$1.453 billion. This cost includes the construction cost and the interest during construction. It does not include interest accumulated after the end of the ten-year period or late interest. Of the \$1.453 billion, \$808 million has been repaid by non-Federal water supply users. Of the remaining \$645 million of unpaid costs, \$471 million is the balance to be repaid under the terms of present use contracts, \$90 million for repayment under future use arrangements and \$84 million has not yet been placed under contract for repayment.

3. Data Summary by MSC. The national M&I water supply totals, summarized by Major Subordinate Command are shown in **Table 1**. A breakout by district, project and agreement is provided as **Appendix B**. There are no water supply storage projects in the Pacific Ocean Division. This table only includes the data for agreements in force under the 1958 Water Supply Act, as amended and the 1944 Flood Control Act. It does not include projects where incidental benefits occur for water supply because water supply users can withdraw water that is normally available for other purposes without a direct repayment agreement. Such projects include Buford Dam/Lake Lanier, GA, the Central and Southern Flood Control project in Florida, the six Missouri Main Stem Reservoirs, several projects in Kansas, and lock and dam projects where a navigation pool is maintained and non-Federal water supply users have intakes in the pool.

Table 1: M&I Water Supply Storage Summary by Division

MSC	No. of Projects	No. of Agreements	Storage Space (acre-feet)				Investment Cost (\$000)	
			Under Contract Present	Under Contract Future	Not Under Contract	Total	Total Costs Owed	Remaining Balance to be Repaid
NAD	8	8	168,575	0	0	168,575	145,665.4	41,178.9
SAD	10	25	209,623	0	0	209,623	34,093.4	16,684.8
LRD	26	39	595,432	0	21,600	617,032	76,020.6	38,293.8
MVD	8	11	211,314	188,470	46,326	446,110	35,970.6	12,579.9
NWD	17	37	440,269	496,080	81,729	1,018,078	146,621.8	96,815.6
SPD	3	3	323,000	0	0	323,000	122,161.0	97,411.3
SWD	61	197 + 46 supplemental	7,575,574	306,477	477,825	8,359,876	892,429.4	342,032.9
Total	133	320 + 46 supplemental	9,523,787	991,027	627,480	11,142,294	1,452,962.2	644,997.2

The term “Under Contract Present” indicates the sponsor has already repaid the investment cost owed or is in the process of repaying. “Under Contract Future” indicates the sponsor has a signed an agreement to repay the costs, but has not yet initiated payments. “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 contact has not yet been signed. Additional information on the not under contact category is provided in following paragraph 5. From this table it is obvious that Corps projects with M&I water supply storage are centralized in our Southwestern Division. The distribution of the percent of projects and storage space by Corps MSC is shown in **Table 2**. Again it must be recognized that this distribution does not recognize the indirect water withdrawals identified above which impact primarily SAD, LRD and NWD.

Table 2: Distribution of M&I Water Supply Projects by MSC

MSC	Percent of M&I Projects (%)	Percent of M&I Storage (%)
NAD	6.0	1.5
SAD	7.5	1.9
LRD	19.5	5.5
MVD	6.0	4.0
NWD	12.8	9.1
SPD	2.3	2.9
SWD	45.9	75.1

4. Comparison to Earlier Data. The comparison of storage volumes between the four data bases (1996, 2004, 2005 and 2009) is provided in **Table 3**. The changes in the storage volume are due to several factors: reallocation actions, supplementing future use agreements into present use agreements, expiring agreements and the necessity (required by OMBIL) of district representatives getting back into old agreements and actually loading data into the module rather than relying on paper updates.

Table 3: Comparison of Storage Space

Survey Date	Storage Space (acre-feet)			
	Present Use	Future Use	Not Under Contract	Total
1996	6,335,393	2,410,539	778,699	9,524,631
2004	7,002,679	2,105,660	747,554	9,855,893
2005	7,185,969	2,169,670	404,837	9,760,476
2009	9,523,787	991,027	627,480	11,142,294

5. Not under Contract. Not under contract is M&I storage space included in projects under project authority and in accordance with the 1958 Water supply Act prior to its amendment by Section 932 of the 1986 Water Resources Development Act. Some 627,480 acre-feet of storage remains in this not under contract category. This storage is located in seven districts, four MSCs and 16 projects. The total allocated storage of 627,480 acre-feet has a corresponding repayment investment cost of \$84 million. These data are shown in **Table 4**. In this table, the total actual repayment by any prospective sponsor can be greater than the investment cost shown as interest after the 10-year interest free period must be included.

Table 4: Storage Not Under Contract

MSC	District	Project	Storage Space (acre-feet)	Investment Cost (\$)
LRD	LRP	Berlin Lake, OH	19,400	1,366,300
		Stonewall Jackson, WV	2,200	4,300,000
MVD	MVK	DeGray, AR	46,326	1,519,493
NWD	NWK	Smithville Lake, MO	75,547	14,873,000
	NWP	Lost Creek, OR	6,182	4,168,152
SWD	SWL	DeQueen Lake, AR	17,275	11,900,000
	SWF	Grapevine, TX	60,000	2,573,695
	SWT	Birch Lake, OK	7,630	885,000
		Broken Bow Lake, OK	144,085	3,881,544
		Eufaula Lake, OK	27,916	4,009,866
		Hugo Lake, OK	2,198	125,990
		Kaw Lake, OK	80,217	18,373,933
		Keystone OK	2,000	203,500
		Pearson Skubitz – Big Hill Lake, KS (conduit)	0	21,244
		Skiatook Lake, OK	26,904	4,021,250
		Waurika Lake, OK	109,600	11,790,671
TOTAL		16 Projects	627,480	84,013,638

6. Location of Projects. The 133 Corps multipurpose reservoir projects that contain storage space for M&I water supply are located in 26 states. This distribution by state is provided in **Table 5**. Note that in Table 5, the number of projects exceeds 133 as some projects are located on the border of two states.

Table 5: Distribution of M&I Water Supply Projects by State

State	Number	State	Number	State	Number
Arkansas	13	Massachusetts	2	Oregon	1
California	2	Maryland	1	Pennsylvania	5
Connecticut	1	Missouri	5	South Carolina	3
Georgia	5	Mississippi	2	Tennessee	3
Iowa	2	North Carolina	3	Texas	25
Illinois	3	North Dakota	2	Virginia	3
Indiana	3	New Mexico	1	Washington	1
Kansas	15	Ohio	7	West Virginia	5
Kentucky	10	Oklahoma	20		

7. Reallocations.

a. National Summary by District. As the Corps is generally not constructing new multipurpose reservoir projects that could include M&I water supply storage, an increasing necessity to meet the demands of state and local interests is through reallocations. The national summary of our reallocations, summarized by district is shown in **Table 6**. A detailed summary of reallocations by agreement is provided in **Appendix C**. The appendix provides this detailed breakout by district, date of agreement, source of reallocated storage and method employed to determine the cost. See following paragraph d for a definition of “Agreement Cost.”

Table 6: Reallocations by District

MSC	District	Projects (Number)	Agreements (Number)	Years Reallocated (Between)	Storage Space Reallocated (acre feet)	Agreement Cost (\$)
NAD	NAB	2	2	1986 - 1994	30,960	50,753,000
SAD	SAW	1	4	1984 - 2006	21,115	4,806,517
	SAS	3	12	1964 - 2002	30,773	6,744,279
	SAM	2	4	1963 - 1991	20,329	3,729,712
LRD	LRH	3	3	2000 - 2004	6,336	300,543
	LRL	4	6	1968 - 2006	6,716	542,017
	LRN	4	14	2003 - 2008	27,253	13,622,653
	LRP	1	1	1999	11,000	224,500
MVD	MVK	2	2	1996 - 1998	6,075	1,222,649
NWD	NWK	7	10	1986 - 2002	179,463	26,888,944
SWD	SWL	6	19	1970 - 2006	68,691	4,276,387
	SWF	1	1	1984	91,074	5,793,449
	SWT	7	46	1953 - 2007	222,785	32,710,495
Total	13	43	124	1953 - 2008	722,570	151,615,145

As shown in the table, between 1953 and 2008 we have signed 124 agreements for 722,570 acre-feet of storage space with a repayment value of \$151.6 million. These numbers represent 34% of our agreements, 6% of the storage space and 10% of the investment cost owed.

b. Progression of Reallocations by Decade. While our water supply reallocation activity dates back to the 1950s, it has become more prevalent since the mid-1980s after enactment of the Water Resources Development Act of 1986 and the policies that have emanated from that Act. The progression by decade of the contracts signed, the storage space and assigned costs as a result of reallocations, are shown in **Table 7**. Over the past few years it has become increasingly difficult to perform reallocation studies due to the limitations on the Corps' operation and maintenance budget. Actions are underway to correct this difficulty through the National Portfolio Assessment for Reallocations. This national study, originally included in the President's FY 2008 budget, is supported by both the Administration and Congress. Funding to continue the study as well as additional activities has been included in subsequent budgets. The National Portfolio portion of the study is scheduled for completion this fiscal year.

Table 7: Reallocations by Decade

Decade	No. of Agreements Signed	Storage Space (acre-feet)	Total Agreement Cost to be Repaid (\$)
1950s	1	21,300	292,861
1960s	10	41,538	2,195,402
1970s	12	42,400	3,917,192
1980s	14	229,250	68,064,305
1990s	51	251,464	45,912,164
2000s	36	136,638	31,2632,221
TOTAL	124	722,570	151,615,145

c. Source. Reallocations come from various pools within the reservoir. This breakout by the reallocated purpose and the corresponding storage space and cost to be recovered is shown in **Table 8**.

Table 8: Source of Reallocated Storage

Source of Reallocated Storage	No. of Agreements Signed	Storage Space Reallocated	Total Agreement Cost (\$)
Flood Pool	47	96,884	46,951,619
Hydropower Pool	46	246,932	53,409,997
Water Quality Pool	9	153,860	17,592,530
Conservation Pool	14	64,018	17,819,312
Multipurpose Pool	1	50,000	9,256,704
Not Available	7	110,896	6,583,983
TOTAL	124	722,570	151,615,145

d. Cost Determination. Various means are employed to determine the cost assigned to the reallocated storage. These differing means have evolved over the years as a result of policy. Originally, when storage was reallocated to M&I, the assigned cost was normally determined based on the use-of-facilities cost allocation method applied to the original project cost. In 1977 the Corps policy changed to adjusting the repayment cost to the highest of benefits or revenues foregone, replacement cost or the updated cost of storage. There are also several reallocations performed as a result of specific or generic authorization. The summary of these methods used to determine costs is provided in **Table 9**.

Table 9: Method Used to Determine Cost of Storage

Method Used to Determine Cost	No. of Agreements Signed	Storage Space Reallocated (acre-feet)	Total Agreement Cost (\$)
Original Cost	11	61,703	2,620,253
Benefits Foregone	12	37,476	9,001,668
Revenues Foregone	2	5,512	386,046
Replacement Cost	4	1,204	155,971
Updated Cost of Storage	77	417,762	121,653,929
Kansas MOU ¹¹	8	150,500	17,429,547
Reduced FC Costs	8	17,260	367,731
Special Authorization at no charge	2	31,153	0
TOTAL	124	722,570	151,615,145

8. Revenues Received Versus Costs of Collection. All revenues received from the sponsors for M&I water supply are deposited into the U.S. Treasury. This requirement dates back to at least

¹ Costs developed under a MOU with the State of Kansas. Storage costs based on original construction or sunk costs of the reallocated water quality storage. There were a number of terms to the MOU that made the utilization of this cost possible.

Section 6 of the 1944 Flood Control Act (33 U.S.C. § 708) (58 Stat. 890). Revenues are comprised of the repayment of investment costs, interest, and the assigned portion of the yearly operation, maintenance, repair, replacement and rehabilitation (O&M) costs. There are several categories of interest: (1) on principal, (2) charged after the 10-year interest free period (when applicable), (3) additional interest if the above interest “(2)” is capitalized, and (4) interest on late payments. Costs of collection include the manpower required by the districts to determine these costs, bill the sponsor, collect the revenue and return the revenue to the U.S. Treasury. Data obtained from Corps of Engineers Financial Management System is provided in **Table 10**. While water supply revenues have been returned to the U.S. Treasury as far back as at least 1944, the tracking of these revenues to water supply was only initiated in fiscal year 2005 when water supply was instituted as a business line. The last three years of the data are provided in the table.

Table 10: CEFMS Revenues and Cost of Collections for Water Supply

FY	Revenues (\$)				Costs of Collection (\$)	\$ Returned to Treasury per \$ Expended
	Principal	Interest	O&M	Total		
07	14,987,409	16,796,990	13,914,392	45,698,791	821,632	55
08	15,843,266	16,286,546	11,647,090	43,776,902	1,227,171	35
09	16,573,811	16,213,881	13,433,483	46,221,175	1,059,683	44
Average	15,801,495	16,432,472	12,998,321	45,232,288	1,036,162	44

9. Local Sponsors. Corps water supply agreements are with a variety of local sponsors: states (including commonwealths), river basin commissions, counties, cities, industry, private individuals and Indian Tribes. A summary of the M&I storage distribution by local sponsor is provided as **Table 11**. In the table, River Basin Commissions are located in two states, Pennsylvania and Texas. While the majority of the storage is with River Basin Commissions, the majority of our agreements are with utilities and water districts. Cities rank second in both acre-feet of storage and number of agreements. In this table the “other” includes combinations of city/county/water districts, Boy Scout camps, private individuals and Indian Tribes.

Table 11: Storage Distribution by Non-Federal Sponsor

Type of Sponsor	Storage Space (acre-feet)		No. of Agreements	
	Acre-feet	%	Number	%
River Basin Commissions	3,733,313	36	36	10
Cities	2,484,412	23	92	25
States / Commonwealths	1,946,692	19	38	11
Utilities / Water Districts	1,813,795	17	132	36
Industries / Corporations	339,995	3	38	9
County	99,583	1	7	2
Other	97,024	1	23	7
TOTAL	10,514,814	100	366	100

10. People Served. The Corps sells storage space and not water. Under normal circumstances a local sponsor will request a certain yield in perhaps million gallons of water per day and then the Corps computes the required acre-feet of storage based on certain dependability. It has always been a desire to arrive at the number of people Corps projects provide with M&I water. That is impossible because, as noted above, we 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. Based on the various project yields as provided in **Appendix D, Table 12** presents an approximation of total city and indoor household needs that could be met by Corps projects if all storage were utilized. The total storage of about 11.1 million acre-feet will provide a yield of about 5.4 billion gallons of water per day. This yield is theoretically capable of meeting the total city needs of about 4.5 million people or the individual indoor household needs of about 80.8 million people.

Table 12: Population Served by Corps M&I Water Supply

Office	Total M&I Storage Space (acre-feet)	Yield from the Storage Space (MGD)	Population Served	
			Total Requirements	Indoor Household
North Atlantic Division				
New England	60,740	156.40	130,333	2,317,037
Philadelphia	35,880	57.40	47,833	850,370
Baltimore	71,955	240.00	200,000	3,555,555
Total	168,575	453.80	378,166	6,722,962
South Atlantic Division				
Wilmington	144,915	220.01	183,342	3,259,407
Savannah	31,279	65.81	54,842	974,963
Mobile	33,429	78.25	65,209	1,159,259
Total	209,623	364.392	303,392	5,393,629
Lakes and River Division				
Huntington	92,366	124.17	103,475	1,839,556
Louisville	462,573	397.10	330,917	5,882,963
Nashville	27,253	89.28	74,400	1,322,667
Pittsburgh	34,840	53.80	59,000	1,048,889
Total	617,032	664.35	567,792	10,094,075
Mississippi Valley Division				
Rock Island	14,900	48.47	40,392	718,074
St. Louis	186,406	127.50	106,254	1,888,955
Vicksburg	244,804	163.90	136,583	2,428,148
Total	446,110	339.87	283,229	5,035,177
Northwestern Division				
Kansas City	915,788	400.55	333,792	5,934,074
Omaha	69,890	17.06	14,217	252,741
Portland	10,000	8.93	7,442	132,296
Seattle	22,400	Not available	Not available	Not available
Total	1,018,078	426.54	355,451	6,319,111
South Pacific Division				
San Francisco	323,000	288.41	240,342	4,272,741
Total	323,000	288.41	240,342	4,272,741
Southwestern Division				
Little Rock	376,284	484.08	397,800	7,072,000
Ft. Worth	5,878,836	1,102.19	933,402	16,587,407
Tulsa	2,104,756	1,301.16	1,084,300	19,276,444
Total	8,359,876	2,895.07	2,415,142	42,935,851
National Total	11,142,294	5,426.47	4,543,514 [1]	80,773,546

[1] Yield is theoretically capable of meeting the total city needs of about 4.5 million people

[2] Yield is theoretically capable of meeting the indoor household needs of about 80.8 million people.

11. Percent of National Needs Met. As shown in Table 12, M&I storage space in Corps projects is capable of providing approximately 5.4 billions gallons of water per day. The United States Geologic Survey estimated total offstream withdrawals of 410 billion gallons per day of water for the year 2005 (<http://water.usgs.gov/watuse/>). Offstream withdrawals occurs when water is

withdrawn or diverted from a ground or surface water source for public water supply, industry, irrigation, livestock, cooling for thermoelectric power generation, mining and domestic purposes. The USGS report subdivides the water use into several categories which can be summarized into three main groupings and are shown in **Table 13**.

Table 13: USGS Water use Categories

Public Supplies		Industrial		Agricultural	
Item	Million gallons/day	Item	Million gallons/day	Item	Million gallons/day
<i>Domestic</i>	44,200	<i>Self-supplied Industrial</i>	18,200	Irrigation	128,000
Self-supplied domestic	3,830	<i>Mining</i>	4,020	Livestock watering	2,140
		<i>Thermoelectric</i>	201,000	Aquaculture	8,780
Total	48,030		223,220		138,920

From the Corps’ definition of M&I water supply as developed in above paragraph A2a, municipal is shown by italics in the above table as Domestic under “Public Supplies” and industrial by the three items identified by italics in the “Industrial” column. Based on these values, the 5.4 billion gallons of water per day from Corps reservoirs could provide 12 percent of the domestic needs, 2 percent of total M&I needs or 1 percent of total offstream needs.

12. New M&I Projects. Since the passage of the 1986 Water Resources Development Act there has been three multipurpose projects that have included M&I water supply: the Little Dell project in Salt Lake City, Utah and the Cerrillos and Portugues projects in Puerto Rico. All projects have been or are in the process of being turned over to the local sponsor for operation and maintenance and are not included in this database. There have, however, been a number of reallocations and project modifications. These actions, to the extent reported, are included in the database.

C. AGRICULTURAL WATER SUPPLY (2004)

1. Introduction. Corps lakes in the 17 contiguous Western States in which Reclamation Law applies may include irrigation as a project purpose upon the recommendation of the Secretary of the Interior (Section 8 of Public Law 78-534, the 1944 Flood Control Act). Agricultural water supply is included in Corps reservoir projects in the Western states under repayment agreements between the Bureau of Reclamation and local sponsors. To date, there are no agricultural water supply agreements in Corps reservoir projects in the Eastern states, although “irrigation” can be an authorized project purpose (see following paragraph 3).

2. Irrigation Storage in the West. Data on Corps projects with irrigation storage in the West (and under the repayment principles of the Bureau of Reclamation) was originally compiled by Planning Division, Headquarters USACE, in a 1982 survey in response to an inquiry from the

U.S. Senate. These data, updated in 1996 are contained in the *Water Supply Handbook*, IWR Report 96-PS-6, dated December 1998 and then further updated for the 2004 water supply database update and are contained in IWR Report 05-PS-1. This latest data can be found online at: <http://www.iwr.usace.army.mil/docs/iwrreports/IWRReport05-PS-1.pdf>. A summary of the 2004 data are provided in **Table 14**. This information shows there are 48 completed projects that include agricultural water supply in some form. Thirty-seven of the projects include storage for “joint” and/or “specific” use. The remaining 10 projects are utilized for irrigation purposes, but contain no storage. The joint storage, listed as approximately 56 million acre-feet, can normally be used for flood control, navigation, recreation and/or hydroelectric power as well as for irrigation purposes. The total Federal cost allocated to the irrigation purpose, less the reimbursable cost, is listed as about \$1.7 billion. The “Total Federal Cost” in the 4th column is less reimbursable costs. These data were not updated in this current data call. According to the best available information, there are no storage projects currently under construction in the West where with irrigation as a purpose.

Table 14: Summary of Irrigation Data in the West (2004)

Division	Number of Projects	Total Project Cost (\$1000)	Total Federal Cost to Irrigation (\$1000)	Storage Reserved for Irrigation	
				Joint (1000AF)	Specific (1000 AF)
Northwestern	30	3,563,099	1,159,697	50,496	NA
Southwestern	2	85,500	42,100	0	64
South Pacific	16	868,070	525,039	5,490	577
TOTAL	48	4,516,669	1,726,836	55,986	NA

3. Irrigation outside of the West. There are no Corps reservoir projects with irrigation storage outside of the 17 Western states. There are, however, some Corps projects with an irrigation purpose.

a. Central and Southern Florida Project. The most noticeable project with irrigation outside the West is the Central and Southern Florida Project. This project was authorized by Public Law 80-858 (the 1948 Flood control Act) to provide multi-purpose use to include flood control, municipal, industrial 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 levees and canals, 150 water control structures and 16 major pump stations. Some project elements are operated by the sponsor, the South Florida Water Management District, and some are operated by the Corps. Beneficiaries for flood control and water supply include three cities, sugar cane companies, water drainage districts, Indian reservations, a National Wildlife Refuge, the Everglades National Park and local farmers and ranchers. There are no standard water supply agreements and the project is cost- shared between the Federal Government and the local sponsor through project agreements.

b. Grand Prairie, Arkansas. Another project in the East with irrigation as a purpose is the Grand Prairie, AR Area Demonstration Project. This project is a comprehensive water management plan designed to protect and preserve the Alluvial and Sparta Aquifers. The project, authorized by Public Law 104-303 (the 1966 WRDA) also allows the continued irrigation of current agricultural crops and reduces further depletion of groundwater aquifers, while

continuing to provide critical benefits for the millions of waterfowl, which annually migrate through the region. The project utilizes excess surface water and water from the White River to supplement a network of on-farm tailwater recovery systems. This supplemental system will be used to fill on-farm reservoirs that store the water, which supplies at least a portion of each farmer's irrigation needs. There are no standard water supply agreements, but the project will be cost-shared between the Federal Government and the local sponsor.

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Appendix A: Water Supply Storage Space by Project

Appendix A: Water Supply Storage Space by Project

MSC	District	Project	Storage Space (acre-feet)	
North Atlantic	New England	Colebrook, CT	50,200	
		East Brimfield, MA	1,140	
		Littleville, MA	9,400	
	Philadelphia	Beltzville, PA	27,880	
		Blue Marsh, PA	8,000	
		Baltimore	Cowanesque, PA	25,600
	South Atlantic	Wilmington	Curwensville, PA	5,360
			Jennings Randolph, MD/ WV	40,995
			B. Evert Gordan, NC	45,800
			Falls Lake, NC	45,000
Savannah		John H. Kerr, VA	21,115	
		W. Kerr Scott, NC	33,000	
		Hartwell, GA & SC	26,574	
		J. Strom Thurmond, GA & SC	3,833	
		Richard B. Russell, GA & SC	872	
		Mobile	Allatoona, GA	19,511
Lakes & Rivers	Huntington	Carters, GA	818	
		Okatibbee, MS	13,100	
		Alum Creek Lake, OH	79,200	
		Grayson Lake, KY	2,508	
		John W. Flannagan, VA	3,360	
		North Fork of Pound Lake, VA	100	
		Paint Creek, OH	1,040	
		Summersville	468	
	Louisville	Tom Jenkins Dam, OH	5,690	
		Barren River Lake, KY	1,050	
		Brookville Lake, IN	89,300	
		Caesar Creek Lake, OH	39,100	
		Carr Creek Lake, KY	2,052	
		Cave Run Lake, KY	802	
		Green River Lake, KY	4,315	
		Monroe Lake IN	160,000	
		Nolin Lake, KY	98	
		Patoka Lake, IN	129,800	
	Nashville	Rough River Lake, KY	522	
		William H. Harsha Lake, OH	35,534	
		Center Hill Lake, TN	7,212	
		Dale Hollow Lake, TN & KY	2,211	
		J Percy Priest Dam & Reservoir, TN	17,311	
		Laurel River Lake, KY	519	
		Pittsburgh	Berlin Lake, OH	19,400
		Mosquito Creek Lake, OH	11,000	
		Stonewall Jackson Lake, WV	2,200	
		Tygart, WV	2,240	
Mississippi Valley	Rock Island	Saylorville	14,900	
		St. Louis	Carlyle Lake, IL	32,692
			Clarence Cannon Dam, Mark Twain Lake, MO	20,000
	Lake Shelbyville, IL		24,714	
	Vicksburg	Rend Lake, IL	109,000	
		Blakey M. Dam, Lake Ouachita, AR	1,575	
		DeGray, AR	238,729	
		Enid, MS	4,500	

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MSC	District	Project	Storage Space (acre-feet)	
Northwestern	Kansas City	Clinton Lake, KS	89,200	
		Harry S. Truman Dam & Res., MO	283	
		Hillsdale, KS	53,000	
		Kanopolis Lake, KS	12,925	
		Long Branch Lake, MO	24,400	
		Melvorn Lake, KS	50,000	
		Milford Lake, KS	300,000	
		Perry Lake, KS	151,100	
		Pomona Lake, KS	33,000	
		Rathbun Lake, IA	6,680	
		Smithville Lake, MO	95,200	
		Stockton Lake, MO	50,000	
		Tuttle Creek Lake, KS	50,000	
		Omaha	Bowman Haley , ND	15,500
			Garrison Dam, Lake Sakakawea, ND	54,390
		Portland	Lost Creek	10,000
		Seattle	Howard Hanson	22,400
	South Pacific	San Francisco	Dry Creek, Warm Springs Dam / Lake Sonoma, CA	212,000
			Coyote Valley Dam / Lake Mendocino, CA	111,000
		Albuquerque	Abiqui, NM	0
Southwestern	Little Rock	Beaver, AR	160,148	
		Blue Mountain Lake, AR	1,550	
		Bull Shoals Lake, AR	880	
		Dardanell Lake, AR	0	
		DeQueen Lake, AR	17,885	
		Dierks Lake, AR	10,100	
		Gillham Lake, AR	20,600	
		Greers Ferry Lake, AR	12,578	
		Millwood Lake, AR	150,000	
		Nimrod Lake, AR	143	
		Norfork Lake,, AR	2,400	
		Ft. Worth	Aquilla Lake, TX	33,600
			Bardwell Lake, TX	42,800
			Belton Lake, TX	360,700
			Benbrook Lake, TX	86,884
			Canyon Lake, TX	366,400
			Cooper Dam, Jim Chapman Lake, TX	273,000
		Ferrell's Bridge Dam, Lake O'The Pines, TX	250,000	
		Granger Dam & Lake, TX	37,900	
		Grapevine Lake, TX	136,250	
		Joe Pool Lake, TX	142,900	
		Lavon Lake, TX	380,000	
		Lewisville Dam, TX	436,000	
		Navarro Mills Lake, TX	53,200	
		N. San Gabriel D&L (Georgetown), TX	29,200	
		O. C. Fisher, TX	78,793	
		Proctor Lake, TX	31,400	
		Ray Roberts Lake, TX	799,600	
		Sam Rayburn Dan & Reservoir, TX	1,489,200	
		Somerville Lake, TX	143,900	
		Stillhouse Hollow Dam , TX	204,900	
		Waco Lake, TX	151,626	
		Whitney Lake, TX	50,000	
		Wightman Patman Dam & Lake, TX	300,583	

Appendix A: Water Supply Storage Space by Project

MSC	District	Project	Storage Space (acre-feet)
Southwestern (continued)	Tulsa	Arcadia Lake, OK	23,090
		Birch Lake , OK	7,630
		Broken Bow, Lake, OK	152,440
		Canton Lake, OK	90,000
		Copan Lake, OK	5,000
		Council Grove Lake, KA	32,400
		Denison Dam, Lake Texoma, OK & TX	147,179
		El Dorado Lake, KA	142,800
		Elk City, KA	34,300
		Eufaula Lake, OK	55,720
		Heyburn, OK	2,000
		Hugh Lake, OK	47,600
		Hula, OK	19,800
		John Redmond, KA	44,900
		Kaw Lake, OK	171,206
		Keystone Lake, OK	20,000
		Marion ,KA	50,800
		Oologah Lake, OK	342,600
		Pat Mayse Lake, TX	109,600
		Pearson – Skubitz, Big Hill Lake, KS	25,700
		Pine Creek, Lake, OK	28,800
		Sardis Lake, OK	297,200
		Skiatook Lake, OK	62,900
		Tenkiller Ferry Alake, OK	25,472
		Toronto Lake, KS	400
		Waurika Lake, OK	151,400
		Wister Lake, OK	13,819

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

North Atlantic Division			NAD WS Storage Space				
Project	User	Date of Agreement	WS Agreement Storage Space (acre-feet)				Project WS Storage Space (acre-feet)
			Present	Future	Not Under Contract	Total	
New England							
Colebrook, CT	Hartford Metro Dist. Comm. [1]	1965	50,200	0	0	50,200	50,200
East Brimfield, MA	American Optical Co.	1962	1,140	0	0	1,140	1,140
Littleville, MA	City of Springfield	1967	9,400	0	0	9,400	9,400
3 projects	3 agreements		60,740	0	0	60,740	60,740
Philadelphia							
Beltzville, PA	Delaware RBC	2006	27,880	0	0	27,880	27,880
Blue Marsh, PA	Delaware RBC [2]	1971	8,000	0	0	8,000	8,000
2 projects	2 agreements		35,880	0	0	35,880	35,880
Baltimore							
Cowanesque, PA	Susquehanna RBC	1986	25,600	0	0	25,600	25,600
Curwensville, PA	Susquehanna RBC	1994	5,360	0	0	5,360	5,360
Jennings Randolph, MD & WV	Dist. of Col. WSSC and Fairfax Co.	1982	40,995	0	0	40,995	40,995
3 projects	3 agreements		71,955	0	0	71,955	71,955
Division Summary	8 projects / 8 agreements		168,575	0	0	168,575	168,575
[1] NAE, Colebrook. Surplus water contract. The project has been identified as an alternate drinking source. The project was never completed with the installation of a conduit. No water from this reservoir is presently used for metered human consumption. Water is used for hydro-electric.							
[2] NAP, Blue Marsh. The 4,000 AF of future water supply, while not in use, the sponsor has chosen to pay P&I. O&M share not yet being repaid.							
[3] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.							

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

North Atlantic Division		NAD WS Storage Cost				
Project	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
New England						
Colebrook, CT	Hartford Metro Dist. Comm. [1]	5,587,085	0	0	5,587,085	5,587,085
East Brimfield, MA	American Optical Co.	24,500	0	0	24,500	24,500
Littleville, MA	City of Springfield	2,171,160	0	0	2,171,160	2,171,160
3 projects	3 agreements	7,782,745	0	0	7,782,745	7,782,745
Philadelphia						
Beltzville, PA	Delaware RBC	6,588,000	0	0	6,588,000	6,588,000
Blue Marsh, PA	Delaware RBC [2]	15,003,516	0	0	15,003,516	15,003,516
2 projects	2 agreements	21,591,516	0	0	21,591,516	21,591,516
Baltimore						
Cowanesque, PA	Susquehanna RBC	39,414,000	0	0	39,414,000	39,414,000
Curwensville, PA	Susquehanna RBC	11,339,000	0	0	11,339,000	11,339,000
Jennings Randolph, MD & WV	Dist. of Col. WSSC and Fairfax Co.	65,538,120	0	0	65,538,120	65,538,120
3 projects	3 agreements	116,291,120	0	0	116,291,120	116,291,120
Division Summary	8 projects / 8 agreements	145,665,381	0	0	145,665,381	145,665,381
[1] NAE, Colebrook. Surplus water contract. The project has been identified as an alternate drinking source. The project was never completed with the installation of a conduit. No water from this reservoir is presently used for metered human consumption. Water is used for hydro-electric.						
[2] NAP, Blue Marsh. The 4,000 AF of future water supply, while not in use, the sponsor has chosen to pay P&I. O&M share not yet being repaid.						
[3] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

North Atlantic Division			NAD Remaining Principal Owed [3]			
Project	User	Agreement Interest Rate (%)	Amount Owed (\$)			District / MSC Percent
			Present	Future	Total	
New England						
Colebrook, CT	Hartford Metro Dist. Comm. [1]	3.137	2,214,142	0	2,214,142	
East Brimfield, MA	American Optical Co.	2.742	3,178	0	3,178	
Littleville, MA	City of Springfield	2.740	0	0	0	
3 projects	3 agreements		2,217,320	0	2,217,320	28%
Philadelphia						
Beltzville, PA	Delaware RBC	3.222	3,374,927	0	3,374,927	
Blue Marsh, PA	Delaware RBC [2]	3.502	5,793,706	0	5,793,706	
2 projects	2 agreements		9,168,633	0	9,168,633	42%
Baltimore						
Cowanesque, PA	Susquehanna RBC	7.690	0	0	0	
Curwensville, PA	Susquehanna RBC	6.125	0	0	0	
Jennings Randolph, MD & WV	Dist. of Col. WSSC and Fairfax Co.	3.253	29,792,941	0	29,792,941	
3 projects	3 agreements		29,792,941	0	29,792,941	26%
Division Summary	8 projects / 8 agreements		41,178,894	0	41,178,894	28%
[1] NAE, Colebrook. Surplus water contract. The project has been identified as an alternate drinking source. The project was never completed with the installation of a conduit. No water from this reservoir is presently used for metered human consumption. Water is used for hydro-electric.						
[2] NAP, Blue Marsh. The 4,000 AF of future water supply, while not in use, the sponsor has chosen to pay P&I. O&M share not yet being repaid.						
[3] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

North Atlantic Division		
Project	User	(This page intentionally leftblank)
New England		
Colebrook, CT	Hartford Metro Dist. Comm. [1]	
East Brimfield, MA	American Optical Co.	
Littleville, MA	City of Springfield	
3 projects	3 agreements	
Philadelphia		
Beltzville, PA	Delaware RBC	
Blue Marsh, PA	Delaware RBC [2]	
2 projects	2 agreements	
Baltimore		
Cowanesque, PA	Susquehanna RBC	
Curwensville, PA	Susquehanna RBC	
Jennings Randolph, MD & WV	Dist. of Col. WSSC and Fairfax Co.	
3 projects	3 agreements	
Division Summary	8 projects / 8 agreements	
[1] NAE, Colebrook. Surplus water contract. The project has been identified as an alternate drinking source. The project was never completed with the installation of a conduit. No water from this reservoir is presently used for metered human consumption. Water is used for hydro-electric.		
[2] NAP, Blue Marsh. The 4,000 AF of future water supply, while not in use, the sponsor has chosen to pay P&I. O&M share not yet being repaid.		
[3] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.		

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

South Atlantic Division		SAD WS Storage Space					
Project	User	Date of Agreement	WS Agreement Storage Space (acre-feet)				Project WS Storage Space (acre-feet)
			Present	Future	Not Under Contract	Agreement Storage Space (acre-feet)	
Wilmington							
B. Evertt Jordan, NC	State of NC	1988	45,800	0	0	45,800	45,800
Falls Lake, NC	City of Raleigh	1972	45,000	0	0	45,000	45,000
John H. Kerr, VA	Mecklenburg Cogeneration	1991	600	0	0	600	
	VA Dep of Corr.	1989	23	0	0	23	
	City of Henderson	2006	10,292	0	0	10,292	
	Virginian Beach	1984	10,200	0	0	10,200	21,115
W. Kerr Scott, NC	County of Wilkes & City of Winston-Salem	1960	33,000	0	0	33,000	33,000
4 projects	7 agreements		144,915	0	0	144,915	144,915
Savannah							
Hartwell, GA & SC	Anderson Co. Joint Municipal Water System (mod)	2002	24,620	0	0	24,620	
	City of Lavonia	1990	127	0	0	127	
	Hart County	1998	1,827	0	0	1,827	26,574
J Strom Thurmond, GA & SC	City of Washington	1975	632	0	0	632	
	Town of McCormick	1999	506	0	0	506	
	City of Lincolnton	1990	83	0	0	83	
	City of Thompson	1990	1,056	0	0	1,056	
	Town of McCormick	2001	316	0	0	316	
	Savannah Valley Auth.	1989	92	0	0	92	
	Columbia County	1989	1,056	0	0	1,056	
	City of Lincolnton	1964	92	0	0	92	3,833
Richard B Russell, GA & SC	SC Public Service Auth.	2001	491	0	0	491	
	City of Elberton	1990	381	0	0	381	872
3 projects	13 agreements		31,279	0	0	31,279	31,279
Mobile							
Allatoona, GA	Cobb Co. - Marietta Water Auth.	1963	13,140	0	0	13,140	
	City of Cartersville	1966	1,996	0	0	1,996	
	City of Cartersville	1991	4,375	0	0	4,375	19,511
Carters, GA	City of Chatsworth	1991	818	0	0	818	818
Okatibbee, MS	Pat Harrison WS Dist.	1965	13,100	0	0	13,100	13,100
3 projects	5 agreements		33,429	0	0	33,429	33,429
Division Summary	10 projects / 25 agreements		209,623	0	0	209,623	209,623
[1] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.							

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

South Atlantic Division		SAD WS Storage Cost				
Project	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
Wilmington						
B. Evertt Jordan, NC	State of NC	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	12,170,000
John H. Kerr, VA	Mecklenburg Cogeneration	150,241	0	0	150,241	
	VA Dep of Corr.	5,075	0	0	5,075	
	City of Henderson	2,375,336	0	0	2,375,336	
	Virginian Beach	2,275,685	0	0	2,275,685	4,806,337
W. Kerr Scott, NC	County of Wilkes & City of Winston-Salem	945,419	0	0	945,419	945,419
4 projects	7 agreements	22,309,756	0	0	22,309,756	22,309,756
Savannah						
Hartwell, GA & SC	Anderson Co. Joint Municipal Water System (mod)	3,477,000	0	0	3,477,000	
	City of Lavonia	21,447	0	0	21,447	
	Hart County	356,867	0	0	356,867	3,855,314
J Strom Thurmond, GA & SC	City of Washington	72,800	0	0	72,800	
	Town of McCormick	17,357	0	0	17,357	
	City of Lincolnton	24,608	0	0	24,608	
	City of Thompson	334,714	0	0	334,714	
	Town of McCormick	66,499	0	0	66,499	
	Savannah Valley Auth.	27,395	0	0	27,395	
	Columbia County	313,048	0	0	313,048	
	City of Lincolnton	15,000	0	0	15,000	871,421
Richard B Russell, GA & SC	SC Public Service Auth.	1,615,243	0	0	1,615,243	
	City of Elberton	419,658	0	0	419,658	2,034,901
3 projects	13 agreements	6,761,636	0	0	6,761,636	6,761,636
Mobile						
Allatoona, GA	Cobb Co. - Marietta Water Auth.	1,197,952	0	0	1,197,952	
	City of Cartersville	396,217	0	0	396,217	
	City of Cartersville	1,518,094	0	0	1,518,094	3,112,263
Carters, GA	City of Chatsworth	617,449	0	0	617,449	617,449
Okatibbee, MS	Pat Harrison WS Dist.	1,292,301	0	0	1,292,301	1,292,301
3 projects	5 agreements	5,022,013	0	0	5,022,013	5,022,013
Division Summary	10 projects / 25 agreements	34,093,405	0	0	34,093,405	34,093,405
[1] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

South Atlantic Division			SAD Remaining Principal Owed [1]			
Project	User	Agreement Interest Rate (%)	Amount Owed (\$)			District / MSC Percent
			Present	Future	Total	
Wilmington						
B. Evertt Jordan, NC	State of NC	3.225	2,381,554	0	2,381,554	
Falls Lake, NC	City of Raleigh	3.649	9,714,406	0	9,714,406	
John H. Kerr, VA	Mecklenburg Cogeneration	Prepaid	0	0	0	
	VA Dep of Corr.	Prepaid	0	0	0	
	City of Henderson	4.625	2,114,175	0	2,114,175	
	Virginian Beach	Prepaid	0	0	0	
W. Kerr Scott, NC	County of Wilkes & City of Winston-Salem	2.699	326,227	0	326,227	
4 projects	7 agreements		14,536,362	0	14,536,362	65%
Savannah						
Hartwell, GA & SC	Anderson Co. Joint Municipal Water System (mod)	6.130	212,400	0	246,400	
	City of Lavonia		0	0	0	
	Hart County		0	0	0	
J Strom Thurmond, GA & SC	City of Washington	6.130	0	0	0	
	Town of McCormick		0	0	0	
	City of Lincolnton		13,521	0	13,524	
	City of Thompson		0	0	0	
	Town of McCormick		0	0	0	
	Savannah Valley Auth.		0	0	0	
	Columbia County		0	0	0	
	City of Lincolnton	2,100	0	2,100		
Richard B Russell, GA & SC	SC Public Service Auth.	6.130	0	0	0	
	City of Elberton		0	0	0	
3 projects	13 agreements		228,021	0	262,024	4%
Mobile						
Allatoona, GA	Cobb Co. - Marietta Water Auth.	2.500	469,505	0	469,505	
	City of Cartersville	2.500	158,436	0	158,436	
	City of Cartersville	8.125	1,030,513	0	1,030,513	
Carters, GA	City of Chatsworth	9.125	0	0	0	
Okatibbee, MS	Pat Harrison WS Dist.	3.137	227,967	0	227,967	
3 projects	5 agreements		1,886,421	0	1,886,421	38%
Division Summary	10 projects / 25 agreements		16,650,804	0	16,684,807	49%
[1] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Lakes and Rivers Division	Project	User	Date of Agreement	LRD WS Storage Space				Project WS Storage Space (acre-feet)
				WS Agreement Storage Space (acre-feet)				
				Present	Future	Not Under Contract	Total	
Huntington								
Alum Creek Lake, OH	State of OH (1968)	1968	79,200	0	0	79,200	79,200	
Grayson Lake, KY	Rattlesnake Ridge	2000	2,508	0	0	2,508	2,508	
John W. Flannagan, VA	John Flannagan Water Auth	2004	3,360	0	0	3,360	3,360	
North Fork of Pound River Lake	City of Pound	1968	100	0	0	100	100	
Paint Creek Lake, OH	Highland Co.	1968	1,040	0	0	1,040	1,040	
Summersville Lake, WV	City of Summersville	2001	468	0	0	468	468	
Tom Jenkins Dam, OH	State of OH [1]	1948	5,690	0	0	5,690	5,690	
7 projects	7 agreements		92,366	0	0	92,366	92,366	
Louisville								
Barren River Lake, KY	City of Glasgow	2009	681	0	0	681		
	City of Scottsville	1969	369	0	0	369	1,050	
Brookville Lake, IN	State of IN	1965	89,300	0	0	89,300	89,300	
Caesar Creek Lake, OH	State of OH	1970	39,100	0	0	39,100	39,100	
Carr Creek Lake,	Carr Creek Water Comm.	2006	2,052	0	0	2,052	2,052	
Cave Run Lake, KY	Cave Run Water Comm.	2003	538	0	0	538		
	City of West Liberty	1996	264	0	0	264	802	
Green River Lake, KY	City of Campbellsville	1968	3,460	0	0	3,460		
	City of Columbia	1992	855	0	0	855	4,315	
Monroe Lake, IN	State of IN	1988	160,000	0	0	160,000	160,000	
Nolin Lake, KY	Edmonson Co. Water Dist.	1988	98	0	0	98	98	
Patoka Lake, IN	State of IN	1970	129,800	0	0	129,800	129,800	
Rough River Lake, KY	Leitchfield	1966	120	0	0	120		
	Hardinsburg	1978	150	0	0	150		
	Grayson County WD	2002	252	0	0	252	522	
William H. Harsha Lake, OH	State of OH	1970	35,534	0	0	35,534	35,534	
11 projects	16 agreements		462,573	0	0	462,573	462,573	
Nashville								
Center Hill Lake, TN	Cookeville	2003	6,680	0	0	6,680		
	Smithville	2003	401	0	0	401		
	Riverwatch Golf	2003	131	0	0	131	7,212	
Dale Hollow Lake, TN & KY	City of Byrdstown	2005	1,841	0	0	1,841		
	Commonwealth of Kentucky	2005	368	0	0	368		
	Trooper Island	2004	2	0	0	2	2,211	
J. Percy Priest Dam & Reservoir	LaVergne	2003	2,733	0	0	2,733		
	Murfreesboro	2003	5,084	0	0	5,084		
	Consolidated Utility	2003	3,007	0	0	3,007		
	Consolidated Utility	2003	1,367	0	0	1,367		
J. Percy Priest, TN (continued)	YMCA of Middle TN	2003	22	0	0	22		
	Cedar Crest Golf Ventures, LLD.	2004	96	0	0	96		
	Town of Smyrna	2008	5,002	0	0	5,002	17,311	
Laurel River Lake, KY	Laurel Co. Water Dist.	2005	519	0	0	519	519	
4 projects	14 agreements		27,253	0	0	27,253	27,253	
Pittsburgh								
Berlin Lake, OH	<i>Not Under Contract</i>	<i>NA</i>	<i>0</i>	<i>0</i>	<i>19,400</i>	<i>19,400</i>	<i>19,400</i>	
Mosquito Creek Lake, OH	City of Warren	1999	11,000	0	0	11,000	11,000	
Stonewall Jackson Lake, WV	<i>Not Under Contract</i>	<i>NA</i>	<i>0</i>	<i>0</i>	<i>2,200</i>	<i>2,200</i>	<i>2,200</i>	
Tygart, WV	City of Grafton [2]	1941	2,240	0	0	2,240	2,240	
4 projects	2 agreements		13,240	0	21,600	34,840	34,840	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Lakes and Rivers Division	Project	User	Date of Agreement	LRD WS Storage Space				Project WS Storage Space (acre-feet)
				WS Agreement Storage Space (acre-feet)				
				Present	Future	Not Under Contract	Total	
Division Total	26 projects / 39 agreements			595,432	0	21,600	617,032	617,032
	[1] LRH, North Fork of Pound. Agreements form do not match Periodic Project Site Characteristics form. Storage space and costs from Periodic Project Site Characteristics.							
	[2] LRP, Tygart. The agreement allowed the City to withdraw 1.9 mgd at no cost in return for donated real estate.							
	[3] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.							

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Lakes and Rivers Division		LRD WS Storage Cost				
Project	User	WS Agreement Storage Cost (\$) [3]				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
Huntington						
Alum Creek Lake, OH	State of OH (1968)	25,619,243	0	0	25,619,243	25,619,243
Grayson Lake, KY	Rattlesnake Ridge	76,732	0	0	76,732	76,732
John W. Flannagan, VA	John Flannagan Water Auth	162,983	0	0	162,983	162,983
North Fork of Pound River Lake	City of Pound	37,900	0	0	37,900	37,900
Paint Creek Lake, OH	Highland Co.	202,650	0	0	202,650	202,650
Summersville Lake, WV	City of Summersville	60,828	0	0	60,828	60,828
Tom Jenkins Dam, OH	State of OH [1]	785,000	0	0	785,000	785,000
7 projects	7 agreements	26,945,336	0	0	26,945,336	26,945,336
Louisville						
Barren River Lake, KY	City of Glasgow	22,300	0	0	22,300	
	City of Scottsville	12,200	0	0	12,200	34,500
Brookville Lake, IN	State of IN	5,693,000	0	0	5,693,000	5,693,000
Caesar Creek Lake, OH	State of OH	5,628,000	0	0	5,628,000	5,628,000
Carr Creek Lake,	Carr Creek Water Comm.	305,563	0	0	305,563	305,563
Cave Run Lake, KY	Cave Run Water Comm.	72,896	0	0	72,896	
	City of West Liberty	30,360	0	0	30,360	103,256
Green River Lake, KY	City of Campbellsville	80,483	0	0	80,483	
	City of Columbia	88,065	0	0	88,065	168,548
Monroe Lake, IN	State of IN	8,015,000	0	0	8,015,000	8,015,000
Nolin Lake, KY	Edmonson Co. Water Dist.	11,402	0	0	11,402	11,402
Patoka Lake, IN	State of IN	5,602,000	0	0	5,602,000	5,602,000
Rough River Lake, KY	Leitchfield	3,648	0	0	3,648	
	Hardinsburg	17,781	0	0	17,781	
	Grayson County WD	34,934	0	0	34,934	56,363
William H. Harsha Lake, OH	State of OH	3,944,200	0	0	3,944,200	3,944,200
11 projects	16 agreements	29,561,832	0	0	29,561,832	29,561,832
Nashville						
Center Hill Lake, TN	Cookeville	2,816,877	0	0	2,816,877	
	Smithville	54,536	0	0	54,536	
	Riverwatch Golf	96,775	0	0	96,775	2,968,188
Dale Hollow Lake, TN & KY	City of Byrdstown	372,716	0	0	372,716	
	Commonwealth of Kentucky	176,532	0	0	176,532	
	Trooper Island	916	0	0	916	550,164
J. Percy Priest Dam & Reservoir	LaVergne	1,818,550	0	0	1,818,550	
	Murfreesboro	3,051,429	0	0	3,051,429	
	Consolidated Utility	1,804,609	0	0	1,804,609	
	Consolidated Utility	820,277	0	0	820,277	
J. Percy Priest, TN (continued)	YMCA of Middle TN	16,638	0	0	16,638	
	Cedar Crest Golf Ventures, LLD.	75,951	0	0	75,951	
	Town of Smyrna	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	166,847
4 projects	14 agreements	13,622,653	0	0	13,622,653	13,622,653
Pittsburgh						
Berlin Lake, OH	<i>Not Under Contract</i>	<i>0</i>	<i>0</i>	<i>1,366,300</i>	<i>1,366,300</i>	<i>1,366,300</i>
Mosquito Creek Lake, OH	City of Warren	224,500	0	0	224,500	224,500
Stonewall Jackson Lake, WV	<i>Not Under Contract</i>	<i>0</i>	<i>0</i>	<i>4,300,000</i>	<i>4,300,000</i>	<i>4,300,000</i>
Tygart, WV	City of Grafton [2]	0	0	0	0	0
4 projects	2 agreements	224,500	0	5,666,300	5,890,800	5,890,800

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Lakes and Rivers Division	Project	User	LRD WS Storage Cost				Project WS Storage Cost (\$)
			WS Agreement Storage Cost (\$) [3]				
			Present	Future	Not Under Contract	Total	
Division Total	26 projects / 39 agreements		70,354,321	0	5,666,300	76,020,621	76,020,621
	[1] LRH, North Fork of Pound. Agreements form do not match Periodic Project Site Characteristics form. Storage space and costs from Periodic Project Site Characteristics.						
	[2] LRP, Tygart. The agreement allowed the City to withdraw 1.9 mgd at no cost in return for donated real estate.						
	[3] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Lakes and Rivers Division	Project	User	Agreement Interest Rate (%)	LRD Remaining Principal Owed [3]			
				Amount Owed (\$)			
				Present	Future	Total	District / MSC Percent
Huntington							
Alum Creek Lake, OH	State of OH (1968)	3.256	21,484,592	0	21,484,592		
Grayson Lake, KY	Rattlesnake Ridge	6.625	60,904	0	60,904		
John W. Flannagan, VA	John Flannagan Water Auth	5.625	0	0	0		
North Fork of Pound River Lake	City of Pound	3.222	0	0	0		
Paint Creek Lake, OH	Highland Co.	3.222	138,643	0	138,643		
Summersville Lake, WV	City of Summersville	5.875	50,136	0	50,136		
Tom Jenkins Dam, OH	State of OH [1]	Prepaid	0	0	0		
7 projects	7 agreements		21,734,275	0	21,734,275	81%	
Louisville							
Barren River Lake, KY	City of Glasgow	2.632	0	0	0		
	City of Scottsville	2.632	0	0	0		
Brookville Lake, IN	State of IN	3.137	0	0	0		
Caesar Creek Lake, OH	State of OH	3.253	4,352,594	0	4,352,594		
Carr Creek Lake,	Carr Creek Water Comm.	4.625	0	0	0		
Cave Run Lake, KY	Cave Run Water Comm.	5.125	0	0	0		
	City of West Liberty	4.625	30,360	0	30,360		
Green River Lake, KY	City of Campbellsville	2.936	39,843	0	39,843		
	City of Columbia	8.125	0	0	0		
Monroe Lake, IN	State of IN	2.670	0	0	0		
Nolin Lake, KY	Edmonson Co. Water Dist.	9.250	0	0	0		
Patoka Lake, IN	State of IN	3.256	0	0	0		
Rough River Lake, KY	Leitchfield	2.584	0	0	0		
	Hardinsburg	6.595	0	0	0		
	Grayson County WD	4.625	34,934	0	34,934		
William H. Harsha Lake, OH	State of OH	3.253	3,176,358	0	3,176,358		
11 projects	16 agreements		7,634,089	0	7,634,089	26%	
Nashville							
Center Hill Lake, TN	Cookeville	5.125	2,460,891	0	2,460,891		
	Smithville	5.125	0	0	0		
	Riverwatch Golf	5.125	86,201	0	86,201		
Dale Hollow Lake, TN & KY	City of Byrdstown	5.125	338,060	0	338,060		
	Commonwealth of Kentucky	5.125	143,117	0	143,117		
	Trooper Island	5.500	0	0	0		
J. Percy Priest Dam & Reservoir	LaVergne	5.125	0	0	0		
	Murfreesboro	5.125	0	0	0		
	Consolidated Utility	5.125	0	0	0		
	Consolidated Utility	5.125	0	0	0		
J. Percy Priest, TN (continued)	YMCA of Middle TN	5.125	14,537	0	14,537		
	Cedar Crest Golf Ventures, LLD.	5.500	67,673	0	67,673		
	Town of Smyrna	5.125	0	0	0		
Laurel River Lake, KY	Laurel Co. Water Dist.	5.125	148,617	0	148,617		
4 projects	14 agreements		3,259,096	0	3,259,096	24%	
Pittsburgh							
Berlin Lake, OH	<i>Not Under Contract</i>	<i>NA</i>	<i>0</i>	<i>1,366,300</i>	<i>1,366,300</i>		
Mosquito Creek Lake, OH	City of Warren	6.875	0	0	0		
Stonewall Jackson Lake, WV	<i>Not Under Contract</i>	<i>NA</i>	<i>0</i>	<i>4,300,000</i>	<i>4,300,000</i>		
Tygart, WV	City of Grafton [2]	NA	0	0	0		
4 projects	2 agreements		0	5,666,300	5,666,300	96%	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Lakes and Rivers Division			LRD Remaining Principal Owed [3]			
Project	User	Agreement Interest Rate (%)	Amount Owed (\$)			
			Present	Future	Total	District / MSC Percent
Division Total	26 projects / 39 agreements		32,627,460	5,666,300	38,293,760	50%
[1] LRH, North Fork of Pound. Agreements form do not match Periodic Project Site Characteristics form. Storage space and costs from Periodic Project Site Characteristics.						
[2] LRP, Tygart. The agreement allowed the City to withdraw 1.9 mgd at no cost in return for donated real estate.						
[3] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Mississippi Valley Division			MVD WS Storage Space				
Project Name	User	Date of Agreement	WS Agreement Storage Space (acre-feet)				Project WS Storage Space (acre-feet)
			Present	Future	Not Under Contract	Total	
Rock Island							
Saylorville, IA	State of Iowa	1982	14,900	0	0	14,900	14,900
1 project	1 agreement		14,900	0	0	14,900	14,900
St. Louis							
Carlyle Lake, IL	State of IL	1983	32,692	0	0	32,692	32,692
Clarence Cannon Dam & Mark Twain Lake., MO	Wholesale Water Commission State of MO	1988	20,000	0	0	20,000	20,000
Lake Shelbyville, IL	State of IL	1983	24,714	0	0	24,714	24,714
Rend Lake, IL	State of IL	1988	109,000	0	0	109,000	109,000
4 projects	4 agreements		186,406	0	0	186,406	186,406
Vicksburg							
Blakey Mt, Dam, Lake Ouachita, AR	N. Garland County Reg. WD	1996	1,575	0	0	1,575	1,575
DeGray, AR	Ouachita RWD	1992	1,573	0	0	1,573	
	Ouachita RWD	1998	787	0	0	787	
	Ouachita RWD	2001	1,573	0	0	1,573	
	Ouachita RWD [1]	1988	0	188,470	0	188,470	
	Not Under Contract	NA	0	0	46,326	46,326	238,729
Enid, MS	LSP Energy Limited	1998	4,500	0	0	4,500	4,500
3 projects	6 agreements		10,008	188,470	46,326	244,804	244,804
8 projects	11 agreements		211,314	188,470	46,326	446,110	446,110
[1] MVD, DeGray. In accordance with a 4 April 1988 MOA, the ORWD obtained the right of first refusal for all water supply storage in DeGray, estimated at a152 mgd. For this right of first refusal, the ORWD agreed to pay the annual interest attributable to 120 mgd. Annual interest payment estimated at \$154,426 has a been paid by ORWD since signing of the MOA. Since storage costs have not been repaid classify as future.							
[2] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.							

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Mississippi Valley Division		MVD WS Storage Cost				
Project Name	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
Rock Island						
Saylorville, IA	State of Iowa	3,869,300	0	0	3,869,300	3,869,300
1 project	1 agreement	3,869,300	0	0	3,869,300	3,869,300
St. Louis						
Carlyle Lake, IL	State of IL	3,635,000	0	0	3,635,000	3,635,000
Clarence Cannon Dam & Mark Twain Lake., MO	Wholesale Water Commission State of MO	5,144,600	0	0	5,144,600	5,144,600
Lake Shelbyville, IL	State of IL	4,310,000	0	0	4,310,000	4,310,000
Rend Lake, IL	State of IL	9,941,000	0	0	9,941,000	9,941,000
4 projects	4 agreements	23,030,600	0	0	23,030,600	23,030,600
Vicksburg						
Blakey Mt, Dam, Lake Ouachita, AR	N. Garland County Reg. WD	110,751	0	0	110,751	110,751
DeGray, AR	Ouachita RWD	54,800	0	0	54,800	
	Ouachita RWD	29,412	0	0	29,412	
	Ouachita RWD	62,556	0	0	62,556	
	Ouachita RWD [1]	0	6,181,816	0	6,181,816	
	Not Under Contract	0	0	1,519,493	1,519,493	7,848,077
Enid, MS	LSP Energy Limited	1,111,898	0	0	1,111,898	1,111,898
3 projects	6 agreements	1,369,417	6,181,816	1,519,493	9,070,726	9,070,726
8 projects	11 agreements	28,269,317	6,181,816	1,519,493	35,970,626	35,970,626
[1] MVD, DeGray. In accordance with a 4 April 1988 MOA, the ORWD obtained the right of first refusal for all water supply storage in DeGray, estimated at a152 mgd. For this right of first refusal, the ORWD agreed to pay the annual interest attributable to 120 mgd. Annual interest payment estimated at \$154,426 has a been paid by ORWD since signing of the MOA. Since storage costs have not been repaid classify as future.						
[2] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Mississippi Valley Division			MVD Remaining Principal Owed [2]			
Project Name	User	Agreement Interest Rate (%)	Amount Owed (\$)			
			Present	Future	Total	District / MSC Percent
Rock Island						
Saylorville, IA	State of Iowa	9.352	0	0	0	
1 project	1 agreement		0	0	0	0%
St. Louis						
Carlyle Lake, IL	State of IL	Prepaid	0	0	0	
Clarence Cannon Dam & Mark Twain Lake., MO	Wholesale Water Commission State of MO	3.220	3,831,468	0	3,831,468	
Lake Shelbyville, IL	State of IL	Prepaid	0	0	0	
Rend Lake, IL	State of IL	Prepaid	0	0	0	
4 projects	4 agreements		3,831,468	0	3,831,468	17%
Vicksburg						
Blakey Mt, Dam, Lake Ouachita, AR	N. Garland County Reg. WD	6.750	0	0	0	
DeGray, AR	Ouachita RWD	2.742	44,118	0	44,118	
	Ouachita RWD	2.742	23,927	0	23,927	
	Ouachita RWD	2.742	54,639	0	54,639	
	Ouachita RWD [1]	2.742	0	6,181,816	6,181,816	
	Not Under Contract	NA	0	1,519,493	1,519,493	
Enid, MS	LSP Energy Limited	6.750	924,460	0	924,460	
3 projects	6 agreements		1,047,144	7,701,309	8,748,453	96%
8 projects	11 agreements		4,878,612	7,701,309	12,579,921	35%
[1] MVD, DeGray. In accordance with a 4 April 1988 MOA, the ORWD obtained the right of first refusal for all water supply storage in DeGray, estimated at a152 mgd. For this right of first refusal, the ORWD agreed to pay the annual interest attributable to 120 mgd. Annual interest payment estimated at \$154,426 has a been paid by ORWD since signing of the MOA. Since storage costs have not been repaid classify as future.						
[2] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Mississippi Valley Division			
Project Name	User	(This page intentionally left blank)	
Rock Island			
Saylorville, IA	State of Iowa		
1 project	1 agreement		
St. Louis			
Carlyle Lake, IL	State of IL		
Clarence Cannon Dam & Mark Twain Lake., MO	Wholesale Water Commission State of MO		
Lake Shelbyville, IL	State of IL		
Rend Lake, IL	State of IL		
4 projects	4 agreements		
Vicksburg			
Blakey Mt, Dam, Lake Ouachita, AR	N. Garland County Reg. WD		
DeGray, AR	Ouachita RWD		
	Ouachita RWD		
	Ouachita RWD		
	Ouachita RWD [1]		
	Not Under Contract		
Enid, MS	LSP Energy Limited		
3 projects	6 agreements		
8 projects	11 agreements		
<p>[1] MVD, DeGray. In accordance with a 4 April 1988 MOA, the ORWD obtained the right of first refusal for all water supply storage in DeGray, estimated at a152 mgd. For this right of first refusal, the ORWD agreed to pay the annual interest attributable to 120 mgd. Annual interest payment estimated at \$154,426 has a been paid by ORWD since signing of the MOA. Since storage costs have not been repaid classify as future.</p>			
<p>[2] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.</p>			

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Northwestern Division			NWD WS Storage Space				
Project Name	User	Date of Agreement	WS Agreement Storage Space (acre-feet)				Project WS Storage Space (acre-feet)
			Present	Future	Not Under Contract	Total	
Kansas City							
Clinton Lake, KS	State of Kansas	1978	53,520	35,680	0	89,200	89,200
Harry S Truman Dam & Res.	Henry Co. PWSD #3	1994	172	0	0	172	
	HST PWSD #2	1997	111	0	0	111	283
Hillsdale Lake, KS	State of Kansas	1980	7,500	45,500	0	53,000	53,000
Kanopolis Lake, KS	State of Kansas	2002	12,500		0	12,500	
	Post Rock RW	1984	425		0	425	12,925
Long Branch Lake, MO	City of Macon	1972	11,300	13,100	0	24,400	24,400
Melvorn Lake, KS [1]	State of Kansas	1994	50,000	0	0	50,000	50,000
Milford Lake, KS	State of Kansas	1980	55,000	245,000	0	300,000	300,000
Perry Lake, KS	State of Kansas	1976	33,050	116,950	0	150,000	
	Jefferson County	1973	1,100	0	0	1,100	151,100
	RWD#3	1980	270	0	0	270	
	RWD#3 Osage Co.	1964	230	0	0	230	
Pomona Lake, KS	State of Kansas	1995	14,324	0	0	14,324	
	State of Kansas	1995	18,176	0	0	18,176	33,000
	State of Kansas	1995	18,176	0	0	18,176	
Rathbun Lake, IA	Rathbun Regional Water Assoc, Inc. (RRWA)	1986	3,340	0	0	3,340	
	RRWA	1989	3,340	0	0	3,340	6,680
Smithville Lake, MO	City of Smithville	1972	2,000	6,000	0	8,000	
	City of Plattsburg	1972	2,650	8,850	0	11,500	
	Clay County	1990	153	0	0	153	
	Not Under Contract	NA	0	0	75,547	75,547	95,200
Stockton Lake, MO	City of Springfield	1993	25,000	25,000	0	50,000	50,000
Tuttle Creek Lake, KS	State of Kansas	1996	13,850	0	0	13,850	
	State of Kansas	1991	27,500	0	0	27,500	
	State of Kansas	1994	8,650	0	0	8,650	50,000
13 projects	24 agreements		344,161	496,080	75,547	915,788	915,788
Omaha							
Bowman Haley, ND	Bowman County Water Management Dist.	1981	15,500	0	0	15,500	15,500
Garrison, ND	Basin Elect. Power Coop.	2005	54,390	0	0	54,390	54,390
2 projects	2 agreements		69,890	0	0	69,890	69,890
Portland							
Lost Creek, OR	City of Phoenix	1982	400	0	0	400	
	Cit of Phoenix	1991	600	0	0	600	
	City of Jacksonville	1995	400	0	0	400	
	City of Shady Cove	1998	3	0	0	3	
	City of Ashland	2002	1,001	0	0	1,001	
Lost Creek, OR (continued)	City of Talent	2002	1,292	0	0	1,292	
	City of Shady Cove	2002	12	0	0	12	
	Sandy Cove Waterworks	2006	100	0	0	100	
	Rogue Aggeates	2007	5	0	0	5	
	Angler's Cove/Shady Cove Heights Water Co.	2007	5	0	0	5	
	Not Under Contract	NA	0	0	6,182	6,182	10,000
1 project	10 agreements		3,818	0	6,182	10,000	10,000
Seattle							
Howard Hanson, WA [2]	City of Tacoma, Public Util.	2003	22,400	0	0	22,400	22,400
1 project	1 agreement		22,400	0	0	22,400	22,400

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Northwestern Division			NWD WS Storage Space				
Project Name	User	Date of Agreement	WS Agreement Storage Space (acre-feet)				Project WS Storage Space (acre-feet)
			Present	Future	Not Under Contract	Total	
Divison Total	17 projects / 37 agreements		440,269	496,080	81,729	1,018,078	1,018,078
[1] NWK Melvern. Cost developed under a MOU with the state of KS. Storage costs based on original construcion or sunk costs of the reallocated water							
[2] NWS Howard Hanson. The Non-Federal sponsor shall pay a share of the existing project investment costs as required by law, equal to one half the difference of the least cost alternative of providing equivalent water supply less the present-worth cost of the total project modification costs for Municipal and Industrial Water Supply. The City is contributing their share of construction funds during the period of construction.							
[3] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.							

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Northwestern Division		NWD WS Storage Cost					Project WS Storage Cost (\$)
Project Name	User	WS Agreement Storage Cost (\$)					
		Present	Future	Not Under Contract	Total		
Kansas City							
Clinton Lake, KS	State of Kansas	4,185,857	2,269,826	0	6,455,683	6,455,683	
Harry S Truman Dam & Res.	Henry Co. PWSD #3	50,120	0	0	50,120		
	HST PWSD #2	35,506	0	0	35,506	85,626	
Hillsdale Lake, KS	State of Kansas	8,472,587	32,346,221	0	40,818,808	40,818,808	
Kanopolis Lake, KS	State of Kansas	4,181,167	0	0	4,181,167		
	Post Rock RW	18,004	0	0	18,004	4,199,171	
Long Branch Lake, MO	City of Macon	1,118,261	1,294,044	0	2,412,305	2,412,305	
Melvorn Lake, KS [1]	State of Kansas	7,094,009	0	0	7,094,009	7,094,009	
Milford Lake, KS	State of Kansas	4,823,205	8,222,371	0	13,045,576	13,045,576	
Perry Lake, KS	State of Kansas	1,535,030	7,673,270	0	9,208,300		
	Jefferson County	1,760	0	0	1,760	9,210,060	
Pomona Lake, KS	RWD#3	19,852	0	0	19,852		
	RWD#3 Osage Co.	13,358	0	0	13,358		
	State of Kansas	1,555,242	0	0	1,555,242		
	State of Kansas	2,009,480	0	0	2,009,480	3,597,932	
Rathbun Lake, IA	Rathbun Regional Water Assoc, Inc. (RRWA)	331,019	0	0	331,019		
	RRWA	498,916	0	0	498,916	829,935	
Smithville Lake, MO	City of Smithville	298,890	808,926	0	1,107,816		
	City of Plattsburg	721,989	2,426,626	0	3,148,615		
	Clay County	37,459	0	0	37,459		
	Not Under Contract	0	0	14,873,000	14,873,000	19,166,890	
Stockton Lake, MO	City of Springfield	4,628,352	4,628,352	0	9,256,704	9,256,704	
Tuttle Creek Lake, KS	State of Kansas	591,634	0	0	591,634		
	State of Kansas	1,876,748	0	0	1,876,748		
	State of Kansas	368,699	0	0	368,699	2,837,081	
13 projects	24 agreements	44,467,144	59,669,636	14,873,000	119,009,780	119,009,780	
Omaha							
Bowman Haley, ND	Bowman County Water Management Dist.	824,985	0	0	824,985	824,985	
Garrison, ND	Basin Elect. Power Coop.	1,049,145	0	0	1,049,145	1,049,145	
2 projects	2 agreements	1,874,130	0	0	1,874,130	1,874,130	
Portland							
Lost Creek, OR	City of Phoenix	269,950	0	0	269,950		
	Cit of Phoenix	404,475	0	0	404,475		
	City of Jacksonville	269,650	0	0	269,650		
	City of Shady Cove	2,000	0	0	2,000		
	City of Ashland	928,475	0	0	928,475		
Lost Creek, OR (continued)	City of Talent	1,199,590	0	0	1,199,590		
	City of Shady Cove	11,142	0	0	11,142		
	Sandy Cove Waterworks	105,531	0	0	105,531		
	Rogue Aggeates	5,449	0	0	5,449		
	Angler's Cove/Shady Cove Heights Water Co.	5,449	0	0	5,449		
	Not Under Contract	0	0	4,168,152	4,168,152	7,369,863	
1 project	10 agreements	3,201,711	0	4,168,152	7,369,863	7,369,863	
Seattle							
Howard Hanson, WA [2]	City of Tacoma, Public Util.	18,368,000	0	0	18,368,000	18,368,000	
1 project	1 agreement	18,368,000	0	0	18,368,000	18,368,000	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Northwestern Division		NWD WS Storage Cost				
Project Name	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
Divison Total	17 projects / 37 agreements	67,910,985	59,669,636	19,041,152	146,621,773	146,621,773
[1] NWK Melvern. Cost developed under a MOU with the state of KS. Storage costs based on original construcion or sunk costs of the reallocated water						
[2] NWS Howard Hanson. The Non-Federal sponsor shall pay a share of the existing project investment costs as required by law, equal to one half the difference of the least cost alternative of providing equivalent water supply less the present-worth cost of the total project modification costs for Municipal and Industrial Water Supply. The City is contributing their share of construction funds during the period of construction.						
[3] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Northwestern Division			NWD Remaining Principal Owed (\$)				
Project Name	User	WS Agreement Interest Rate (%)	Amount Owed (\$)				
			Present	Future	Total	District / MSC Percent	
Kansas City							
Clinton Lake, KS	State of Kansas	3.502	2,313,187	2,269,826	4,583,013		
Harry S Truman Dam & Res.	Henry Co. PWSD #3	6.125	0	0	0		
	HST PWSD #2	7.125	0	0	0		
Hillsdale Lake, KS	State of Kansas	4.012	6,976,131	32,346,221	39,322,352		
Kanopolis Lake, KS	State of Kansas	5.625	2,983,419	0	2,983,419		
	Post Rock RW	10.051	0	0	0		
Long Branch Lake, MO	City of Macon	3.502	662,435	1,294,044	1,956,479		
Melvorn Lake, KS [1]	State of Kansas	3.225	0	0	0		
Milford Lake, KS	State of Kansas	2.632	2,070,984	8,222,371	10,293,355		
Perry Lake, KS	State of Kansas	3.040	447,582	7,673,270	8,120,852		
	Jefferson County	Prepaid	0	0	0		
	Pomona Lake, KS	RWD#3	7.210	0	0	0	
		RWD#3 Osage Co.	2.670	0	0	0	
	State of Kansas	2.699	0	0	0		
	State of Kansas	2.700	0	0	0		
Rathbun Lake, IA	Rathbun Regional Water Assoc, Inc. (RRWA)	5.116	215,987	0	215,987		
	RRWA	9.250	0	0	0		
Smithville Lake, MO	City of Smithville	3.649	188,764	808,926	997,690		
	City of Plattsburg	3.649	641,722	2,426,626	3,068,348		
	Clay County	8.250	0	0	0		
	Not Under Contract	NA	0	14,873,000	14,873,000		
Stockton Lake, MO	City of Springfield	6.125	0	4,628,352	4,628,352		
Tuttle Creek Lake, KS	State of Kansas	2.553	0	0	0		
	State of Kansas	2.553	0	0	0		
	State of Kansas	2.553	0	0	0		
13 projects	24 agreements		16,500,211	74,542,636	91,042,847	77%	
Omaha							
Bowman Haley, ND	Bowman County Water Management Dist.	3.046	794,091	0	794,091		
Garrison, ND	Basin Elect. Power Coop.	4.125	554,527	0	554,527		
2 projects	2 agreements		1,348,618	0	1,348,618	72%	
Portland							
Lost Creek, OR	City of Phoenix	3.253	165,637	0	165,637		
	Cit of Phoenix	3.253	49,637	0	49,637		
	City of Jacksonville	3.253	40,408	0	40,408		
	City of Shady Cove	3.253	336	0	336		
	City of Ashland	3.253	0	0	0		
Lost Creek, OR (continued)	City of Talent	3.253	0	0	0		
	City of Shady Cove	3.253	0	0	0		
	Sandy Cove Waterworks	3.253	0	0	0		
	Rogue Aggeates	3.253	0	0	0		
	Angler's Cove/Shady Cove Heights Water Co.		0	0	0		
	Not Under Contract	NA	0	4,168,152	4,168,152		
1 project	10 agreements		256,018	4,168,152	4,424,170	60%	
Seattle							
Howard Hanson, WA [2]	City of Tacoma, Public Util.	NA	0	0	0		
1 project	1 agreement		0	0	0	0%	

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Northwestern Division	Project Name	User	WS Agreement Interest Rate (%)	NWD Remaining Principal Owed (\$)			
				Amount Owed (\$)			
				Present	Future	Total	District / MSC Percent
Divison Total	17 projects / 37 agreements			18,104,847	78,710,788	96,815,635	66%
[1] NWK Melvern. Cost developed under a MOU with the state of KS. Storage costs based on original construcion or sunk costs of the reallocated water							
[2] NWS Howard Hanson. The Non-Federal sponsor shall pay a share of the existing project investment costs as required by law, equal to one half the difference of the least cost alternative of providing equivalent water supply less the present-worth cost of the total project modification costs for Municipal and Industrial Water Supply. The City is contributing their share of construction funds during the period of construction.							
[3] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.							

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

South Pacific Division			SPD WS Storage Space				
Project	User	Date of Agreement	WS Agreement Storage Space (acre-feet)				Project WS Storage Space (acre-feet)
			Present	Future	Not Under Contract	Total	
San Francisco							
Dry Creek, Warm Springs dam / Lake Sonoma, CA [1]	Sonoma Co. Water Agency	1964 amended 1Oct 1982	212,000	0	0	212,000	212,000
Coyote Valley dam / Lake Mendocino, CA	Sonoma Co. Water Agency	1956	111,000	0	0	111,000	111,000
2 projects	2 agreements		323,000	0	0	323,000	323,000
Albuquerque							
Abiqui [2]	Albuquerque Bernalillo Co. Water Utility Auth.	1986	0	0	0	0	
1 project	1 agreement		0	0	0	0	0
Dvision Totals	3 projects / 3 agreements		323,000	0	0	323,000	323,000
<p>[1]SPN Dry Creek. The contract is for four blocks of storage: 44,000, 44,000, 44,000 and 80,000. The first block was to due and payable in 1992, the 2nd in 1995, the 3rd in 2000 and the 4th in 2005. Since all dates have passed, it is assumed all storage is under present use. If this is not the case and only interest on the principal is accruing, then a change must be made to the present and future spaces and costs.</p>							
<p>[2]SPA Abiqui. March 1986 contract under PL 97-140. The Albuquerque Bernalillo County Water Utility Authority uses the reservoir as a pass through for San Juan Chama water being stored in the flood control storage pool. Original user was the City of Albuquerque.</p>							
<p>[3] Remaining Prinicipal (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.</p>							

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

South Pacific Division		SPD WS Storage Cost				
Project	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
San Francisco						
Dry Creek, Warm Springs dam / Lake Sonoma, CA [1]	Sonoma Co. Water Agency	122,061,048	0	0	122,061,048	122,061,048
Coyote Valley dam / Lake Mendocino, CA	Sonoma Co. Water Agency	100,000	0	0	100,000	100,000
2 projects	2 agreements	122,161,048	0	0	122,161,048	122,161,048
Albuquerque						
Abiqui [2]	Albuquerque Bernalillo Co. Water Utility Auth.	0	0	0	0	0
1 project	1 agreement	0	0		0	0
Dvision Totals	3 projects / 3 agreements	122,161,048	0		122,161,048	122,161,048
<p>[1]SPN Dry Creek. The contract is for four blocks of storage: 44,000, 44,000, 44,000 and 80,000. The first block was to due and payable in 1992, the 2nd in 1995, the 3rd in 2000 and the 4th in 2005. Since all dates have passed, it is assumed all storage is under present use. If this is not the case and only interest on the principal is accruing, then a change must be made to the present and future spaces and costs.</p>						
<p>[2]SPA Abiqui. March 1986 contract under PL 97-140. The Albuquerque Bernalillo County Water Utility Authority uses the reservoir as a pass through for San Juan Chama water being stored in the flood control storage pool. Original user was the City of Albuquerque.</p>						
<p>[3] Remaining Prinicipal (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.</p>						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

South Pacific Division			SPD Remaining Principal Owed [3]			
Project	User	Agreement Interest Rate (%)	Amount Owed (\$)			
			Present	Future	Total	District / MSC Percent
San Francisco						
Dry Creek, Warm Springs dam / Lake Sonoma, CA [1]	Sonoma Co. Water Agency	3.225	97,411,273	0	97,411,273	
Coyote Valley dam / Lake Mendocino, CA	Sonoma Co. Water Agency	Fully paid	0	0	0	
2 projects	2 agreements		97,411,273	0	97,411,273	80%
Albuquerque						
Abiqui [2]	Albuquerque Bernalillo Co. Water Utility Auth.	0	0	0	0	
1 project	1 agreement		0	0	0	0%
Dvision Totals	3 projects / 3 agreements		97,411,273		97,411,273	80%
<p>[1]SPN Dry Creek. The contract is for four blocks of storage: 44,000, 44,000, 44,000 and 80,000. The first block was to due and payable in 1992, the 2nd in 1995, the 3rd in 2000 and the 4th in 2005. Since all dates have passed, it is assumed all storage is under present use. If this is not the case and only interest on the principal is accruing, then a change must be made to the present and future spaces and costs.</p>						
<p>[2]SPA Abiqui. March 1986 contract under PL 97-140. The Albuquerque Bernalillo County Water Utility Authority uses the reservoir as a pass through for San Juan Chama water being stored in the flood control storage pool. Original user was the City of Albuquerque.</p>						
<p>[3] Remaining Prinicipal (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.</p>						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

South Pacific Division		
Project	User	(This page intentionally left blank)
San Francisco		
Dry Creek, Warm Springs dam / Lake Sonoma, CA [1]	Sonoma Co. Water Agency	
Coyote Valley dam / Lake Mendocino, CA	Sonoma Co. Water Agency	
2 projects	2 agreements	
Albuquerque		
Abiqui [2]	Albuquerque Bernalillo Co. Water Utility Auth.	
1 project	1 agreement	
Dvision Totals	3 projects / 3 agreements	
<p>[1]SPN Dry Creek. The contract is for four blocks of storage: 44,000, 44,000, 44,000 and 80,000. The first block was to due and payable in 1992, the 2nd in 1995, the 3rd in 2000 and the 4th in 2005. Since all dates have passed, it is assumed all storage is under present use. If this is not the case and only interest on the principal is accruing, then a change must be made to the present and future spaces and costs.</p>		
<p>[2]SPA Abiqui. March 1986 contract under PL 97-140. The Albuquerque Bernalillo County Water Utility Authority uses the reservoir as a pass through for San Juan Chama water being stored in the flood control storage pool. Original user was the City of Albuquerque.</p>		
<p>[3] Remaining Prinicipal (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.</p>		

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division			SWL Agreement Storage Space (acre-feet)				Project WS Storage Space (acre-feet)
Project	User	Date of Agreement	WS Agreement Storage Space				
			Present	Future	Not Under Contract	Total	
Little Rock							
Beaver Lake, AR	Beaver Water District	1960	31,000	0	0	31,000	
	Supplement	1993	77,000	0	0	77,000	
	Beaver Water District	2006	28,757	0	0	28,757	
	Carroll-Boone Water District	1977	9,000	0	0	9,000	
	Carroll-Boone Water District	2006	2,396	0	0	2,396	
	Madison Co., Water District	1992	3,882	0	0	3,882	
	Benton/Washington Co. WD	1996	8,113	0	0	8,113	160,148
Blue Mountain Lake, AR	City of Danville	2005	1,550	0	0	1,550	1,550
Bull Shoals Lake, AR	Marion Co. Water District	1988	880	0	0	880	880
Dardanell Lake, AR	AP&L NuclearOne [1]	1970	0	0	0	0	0
DeQueen Lake, AR	Tri-Lakes Water District	1995	610	0	0	610	
	Not Under Contract	NA	0	0	17,275	17,275	17,885
Dierks Lake, AR	Marion Tri-County Water Dist.	1976	190	9,910	0	10,100	10,100
Gillham Lake, AR	Tri-Lakes Water District [space	1996	123	0	0	123	
	Tri-Lakes Water District [space	1996	20,477	0	0	20,477	20,600
Greers Ferry Lake, AR	City of Herber Springs [2]	1959	1,008	0	0	1,008	
	Tannebaum Golf Course	1998	90	0	0	90	
	Clinton Water District	1970	900	0	0	900	
	Community Water System	1971	225	0	0	225	
	Community WS Phase 1	1995	3,776	0	0	3,776	
	Community WS Phase 2	1998	4,283	0	0	4,283	
	Thunderbird Golf Course	1998	55	0	0	55	
	Red Apple Inn & Country Club	1996	66	0	0	66	
	City of Clinton [3]	2005	2,175	0	0	2,175	12,578
Millwood Lake, AR	SW Arkansas Water Dist.	1965	6,000	0	0	6,000	
	Supp #2	1975	8,150	0	0	8,150	
	Supp #3	1980	14,150	0	0	14,150	
	Supp #4	1984	1,698	0	0	1,698	
	Supp #5	1986	2,830	0	0	2,830	
	Supp #6	1991	11,320	0	0	11,320	
	Supp #7	1991	396	0	0	396	
	Remaining storage under contract		0	105,456	0	105,456	150,000
Nimrod Lake, AR	City of Plainview	1973	33	0	0	33	
	City of Plainview	1995	110	0	0	110	143
Norfolk Lake, AR	City of Mountain Home	1969	800	0	0	800	
	Supplement	1971	1,600	0	0	1,600	2,400
Distirct Total	11 projects / 26 agreements + 8 supplements		243,643	115,366	17,275	376,284	376,284
[1] SWL Dardanell - Surplus Water Contract. No storage. Water withdrawn from Dardanelle for cooling. Much water returned to the Arkansas River. They pay only for what evaporates and is not returned to the river. Count as a contract, with zero storage.							
[2] SWL Greers Ferry - City of Herber Springs, storage replaces water supply lost due to construction of project, no cost to the city.							

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division			SWL Agreement Storage Space (acre-feet)				
Project	User	Date of Agreement	WS Agreement Storage Space				Project WS Storage Space (acre-feet)
			Present	Future	Not Under Contract	Total	
[3] SWL Greers Ferry - City of Clinton. Water supply agreement was lost by City due to change in City Government. SWL working with City to get up to date on payment schedule.							
[4] Remaining Principal owed (as applicable) includes, for the present storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.							

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division		SWL WS Storage Cost				Project WS Storage Cost (\$)
Project	User	WS Agreement Storage Cost (\$)				
		Present	Future	Not Under Contract	Total	
Little Rock						
Beaver Lake, AR	Beaver Water District	1,431,737	0	0	1,431,737	
	Supplement	3,530,805	0	0	3,530,805	
	Beaver Water District		0	0		
	Carroll-Boone Water District	742,000	0	0	742,000	
	Carroll-Boone Water District		0	0		
	Madison Co., Water District	482,991	0	0	482,991	
	Benton/Washington Co. WD	1,097,137	0	0	1,097,137	7,284,670
Blue Mountain Lake, AR	City of Danville	226,021	0	0	226,021	226,021
Bull Shoals Lake, AR	Marion Co. Water District	84,979	0	0	84,979	84,979
Dardanell Lake, AR	AP&L NuclearOne [1]	0	0	0	0	0
DeQueen Lake, AR	Tri-Lakes Water District	293,151	0	0	293,151	
	Not Under Contract	0	0	11,900,000	11,900,000	12,193,151
Dierks Lake, AR	Marion Tri-County Water Dist.	44,100	4,462,747	0	4,506,847	4,506,847
Gillham Lake, AR	Tri-Lakes Water District [space	115,412	0	0	115,412	
	Tri-Lakes Water District [space	7,795,449	0	0	7,795,449	7,910,861
Greers Ferry Lake, AR	City of Herber Springs [2]	0	0	0	0	
	Tannebaum Golf Course	11,072	0	0	11,072	
	Clinton Water District	81,000	0	0	81,000	
	Community Water System	20,260	0	0	20,260	
	Community WS Phase 1	457,804	0	0	457,804	
	Community WS Phase 2	561,174	0	0	561,174	
	Thunderbird Golf Course	6,514	0	0	6,514	
	Red Apple Inn & Country Club	8,427	0	0	8,427	
	City of Clinton [3]	277,423	0	0	277,423	1,423,674
Millwood Lake, AR	SW Arkansas Water Dist.	783,760	0	0	783,760	
	Supp #2	742,910	0	0	742,910	
	Supp #3	1,348,700	0	0	1,348,700	
	Supp #4	161,900	0	0	161,900	
	Supp #5	269,800	0	0	269,800	
	Supp #6	1,079,100	0	0	1,079,100	
	Supp #7	77,346	0	0	77,346	
	Remaining storage under contract	0	20,597,366	0	20,597,366	25,060,882
Nimrod Lake, AR	City of Plainview	1,218	0	0	1,218	
	City of Plainview	21,967	0	0	21,967	23,185
Norfolk Lake, AR	City of Mountain Home	65,467	0	0	65,467	
	Supplement	130,933	0	0	130,933	196,400
Distirct Total	11 projects / 26 agreements + 8 supplements	21,950,557	25,060,113	11,900,000	58,910,670	58,910,670
[1] SWL Dardanell - Surplus Water Contract. No storage. Water withdrawn from Dardanelle for cooling. Much water returned to the Arkansas River. They pay only for what evaporates and is not returned to the river. Count as a contract, with zero storage.						
[2] SWL Greers Ferry - City of Herber Springs, storage replaces water supply lost due to construction of project, no cost to the city.						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division		SWL WS Storage Cost				
Project	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
[3] SWL Greers Ferry - City of Clinton. Water supply agreement was lost by City due to change in City Government. SWL working with City to get up to date on payment schedule.						
[4] Remaining Principal owed (as applicable) includes, for the present storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division		Agreement Interest Rate (%)	SWL Remaining Principal Owed [4]			
Project	User		Amount Owed (\$)			
			Present	Future	Total	District Percent
Little Rock						
Beaver Lake, AR	Beaver Water District	2.699	363,494		363,494	
	Supplement	2.699	2,832,284		2,832,284	
	Beaver Water District		0		0	
	Carroll-Boone Water District	2.699	477,256		477,256	
	Carroll-Boone Water District		0		0	
	Madison Co., Water District	7.125	309,004		309,004	
	Benton/Washington Co. WD	7.750	688,339		688,339	
Blue Mountain Lake, AR	City of Danville	5.125	202,949		202,949	
Bull Shoals Lake, AR	Marion Co. Water District	7.500	45,535		45,535	
Dardanell Lake, AR	AP&L NuclearOne [1]	6.000	0		0	
DeQueen Lake, AR	Tri-Lakes Water District	3.222	284		284	
	Not Under Contract	NA	0	11,900,000	11,900,000	
Dierks Lake, AR	Marion Tri-County Water Dist.	3.253	0	4,462,747	4,462,747	
Gillham Lake, AR	Tri-Lakes Water District [space	2.936	71,260		71,260	
	Tri-Lakes Water District [space	2.936	0		0	
Greers Ferry Lake, AR	City of Herber Springs [2]	0.000	0		0	
	Tannebaum Golf Course	6.750	7,142		7,142	
	Clinton Water District	2.591	32,931		32,931	
	Community Water System	2.591	0		0	
	Community WS Phase 1	7.750	0		0	
	Community WS Phase 2	2.600	0		0	
	Thunderbird Golf Course	6.750	5,180		5,180	
	Red Apple Inn & Country Club	6.750	6,353		6,353	
	City of Clinton [3]	5.125	277,423		277,423	
Millwood Lake, AR	SW Arkansas Water Dist.	2.632	197,073		197,073	
	Supp #2	2.632	252,615		252,615	
	Supp #3	2.632	505,431		505,431	
	Supp #4	2.632	103,624		103,624	
	Supp #5	2.632	186,843		186,843	
	Supp #6	2.632	816,251		816,251	
	Supp #7	2.632	0		0	
	Remaining storage under contract			20,597,366	20,597,366	
Nimrod Lake, AR	City of Plainview	4.012	0		0	
	City of Plainview	6.125	15,824		15,824	
Norfolk Lake, AR	City of Mountain Home	2.500	23,100		23,100	
	Supplement	2.500	61,758		61,758	
Distirct Total	11 projects / 26 agreements + 8 supplements		7,481,953	36,960,113	44,442,066	75%
[1] SWL Dardanell - Surplus Water Contract. No storage. Water withdrawn from Dardanelle for cooling. Much water returned to the Arkansas River. They pay only for what evaporates and is not returned to the river. Count as a contract, with zero storage.						
[2] SWL Greers Ferry - City of Herber Springs, storage replaces water supply lost due to construction of project, no cost to the city.						

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division			SWL Remaining Principal Owed [4]			
Project	User	Agreement Interest Rate (%)	Amount Owed (\$)			
			Present	Future	Total	District Percent
[3] SWL Greers Ferry - City of Clinton. Water supply agreement was lost by City due to change in City Government. SWL working with City to get up to date on payment schedule.						
[4] Remaining Principal owed (as applicable) includes, for the present storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division			SWF WS Storage Space				
Project Name	User	Date of Agreement	WS Agreement Storage Space (acre-feet)				Project WS Storage Space (acre-feet)
			Present	Future	Not Under Contract	Total	
Fort Worth							
Aquilla Lake, TX	Brazos River Authority	1976	3,360	0	0	3,360	
	Supp (Future to Present)	1993	30,240	0	0	30,240	33,600
Bardwell Lake, TX	Trinity River Authority	1963	10,700	0	0	10,700	
	Supp (F to P) (Seg #2A)	1963	10,700	0	0	10,700	
	Supp (F to P) (Seg #2B)	1963	10,700	0	0	10,700	
	Supp (F to P) (Seg #2C)	1963	10,700	0	0	10,700	42,800
Belton Lake, TX	Brazos River Auth.	1957	125,700	0	0	125,700	
	Supp (F to P) (Space 2)	1978	235,000	0	0	235,000	360,700
Benbrook Lake, TX [1]	City of Ft. Worth	1969	7,250	0	0	7,250	
	Benbrook W&SA	1979	23,592	0	0	23,592	
	Benbrook W&SA	2009	7,250	0	0	7,250	
	Tarrant Reg. WD	1991	48,792	0	0	48,792	86,884
Canyon Lake, TX	Guadalupe-Bianco R. Auth.	1957	366,400	0	0	366,400	366,400
Cooper Dam & Jim Chapman Lake, TX	City of Irving	1968	100,625	0	0	100,625	
	N. Texas Muni. Water Dist.	1968	100,625	0	0	100,625	
	Sulphur R. MWD	1868	17,750	0	0	17,750	
	Supplement (F to P)	1868	54,000	0	0	54,000	273,000
Ferrells Bridge Dam, Lake O'The Pines, TX	N.E. Texas MWD	1955	250,000	0	0	250,000	250,000
Granger Dam & Lake, TX	Brazos River Auth.	1981	37,900	0	0	37,900	37,900
Grapevine Lake, TX	Dallas Co. Park	1955	50,000	0	0	50,000	
	City of Grapevine	1953	1,250	0	0	1,250	
	City of Grapevine	1981	25,000	0	0	25,000	
	Not Under Contract	NA	0	0	60,000	60,000	136,250
Joe Pool Lake, TX	Trinity River Auth.	1977	142,900	0	0	142,900	142,900
Lavon Lake, TX	N. Texas MWD	1954 renewed 2004	100,000	0	0	100,000	
	N. Texas MWD	1967	120,000	0	0	120,000	
	N. Texas MWD	1967	160,000	0	0	160,000	380,000
Lewisville Dam, TX	City of Dallas	1953	415,000	0	0	415,000	
	City of Denton	1953	21,000	0	0	21,000	436,000
Navarro Mills Lake, TX	Trinity River Auth.	1959	53,200	0	0	53,200	53,200
N. San Gabriel D&L (Georgetown), TX	Brazos River Auth. (Remain Future)	1981	0	14,631	0	14,631	
	Supplement (Seg #1)	1981	101	0	0	101	
	Supplement (Seg #2)	1981	466	0	0	466	
	Supplement (Seg #3)	1981	1,559	0	0	1,559	
	Supplement (Seg #4)	1981	2,835	0	0	2,835	
	Supplement (Seg #5)	1981	5,670	0	0	5,670	
	Supplement (Seg #6)	1981	142	0	0	142	
	Supplement (Seg #7)	1981	1,530	0	0	1,530	
	Supplement (Seg #8)	1981	2,266	0	0	2,266	29,200
O C Fisher Dam & Lake, TX	Upper CO River Auth.	1999	78,793	0	0	78,793	78,793
Proctor Lake, TX	Brazos River Auth.	1960	6,280	0	0	6,280	
	[2] Supp (Mod #1)		25,120	0	0	25,120	31,400
Ray Roberts Lake, TX	City of Dallas	1980	591,700	0	0	591,700	
	[3] City of Denton '80	1980	207,900	0	0	207,900	799,600

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division			SWF WS Storage Space				
Project Name	User	Date of Agreement	WS Agreement Storage Space (acre-feet)			Project WS Storage Space (acre-feet)	
			Present	Future	Not Under Contract		Total
Sam Rayburn Dam & Reservoir, TX	Lower Neches Valley Auth.	1956	1,446,200	0	0	1,446,200	
	City of Lufkin	1969	43,000	0	0	43,000	1,489,200
Somerville Lake, TX	Brazos River Auth.	1962	143,900	0	0	143,900	143,900
Stillhouse Hollow Dam,	Brazos River Auth.	1962	26,740	0	0	26,740	
	Supplement (F to P)	1962	178,160	0	0	178,160	204,900
Waco Lake, TX	Brazos River Auth	1958	91,074	0	0	91,074	
	[4] City of Waco	1958	13,026	0	0	13,026	
	Brazos River Auth.	1984	47,526	0	0	47,526	151,626
Whitney Lake, TX	Brazos River Auth.		50,000	0	0	50,000	50,000
Wright Patman Dam & Lake, TX	City of Texarkana Cont. #C-2033 Original Auth.	1968	13,400	0	0	13,400	
	No user provided Cont. # I-0103 Supplanted	1968	139,320	0	0	139,320	
	[5] City of Texarkana Cont # C-0019 Surplus Water	1968	76,663	0	0	76,663	
	[6] City of Texarkana Cont. #A-0'07 Surplus Water	1964	71,200	0	0	71,200	300,583
District Totals	23 projects / 40 contracts + 16 supplements		5,804,205	14,631	60,000	5,878,836	5,878,836
[1] SWF, Benbrook: All contracts are surplus. Storage is from navigation pool and will be used by M&I until needed for navigation.							
[2] SWF, Proctor: User has not activated storage but is paying P&I.							
[3] SWF, Ray Roberts: On 6/18/98, city \$26,828,840 in principal and \$1,062,312 in interest. Additional payments not due at this time.							
[4] SWF, Waco, City of Waco. The City transferred existing Lake Waco to the Government in return for use of the storage in the project at no cost.							
[5] SWF, Wright Patman. This contract was suppose to expire upon completion of Cooper Lake or the date of completion of all mods to Wright Patman							
[6] SWF, Wright Patman. To be utilized until Cooper Lake is impounded							
[7] Remaining Principal owed (as applicable) includes, for the present use storage interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.							

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division		SWF WS Storage Cost				
Project Name	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
Fort Worth						
Aquilla Lake, TX	Brazos River Authority	1,119,445	0	0	1,119,445	
	Supp (Future to Present)	10,754,007	0	0	10,754,007	11,873,452
Bardwell Lake, TX	Trinity River Authority	825,360	0	0	825,360	
	Supp (F to P) (Seg #2A)	822,647	0	0	822,647	
	Supp (F to P) (Seg #2B)	822,647	0	0	822,647	
	Supp (F to P) (Seg #2C)	822,647	0	0	822,647	3,293,301
Belton Lake, TX	Brazos River Auth.	1,524,091	0	0	1,524,091	
	Supp (F to P) (Space 2)	3,600,909	0	0	3,600,909	5,125,000
Benbrook Lake, TX [1]	City of Ft. Worth	310,000	0	0	310,000	
	Benbrook W&SA	393,800	0	0	393,800	
	Benbrook W&SA	310,000	0	0	310,000	
	Tarrant Reg. WD	2,086,600	0	0	2,086,600	3,100,400
Canyon Lake, TX	Guadalupe-Bianco R. Auth.	8,080,490	0	0	8,080,490	8,080,490
Cooper Dam & Jim Chapman Lake, TX	City of Irving	20,939,506	0	0	20,939,506	
	N. Texas Muni. Water Dist.	20,077,613	0	0	20,077,613	
	Sulphur R. MWD	5,105,428	0	0	5,105,428	
	Supplement (F to P)	10,871,316	0	0	10,871,316	56,993,863
Ferrells Bridge Dam, Lake O'The Pines, TX	N.E. Texas MWD	3,200,000	0	0	3,200,000	3,200,000
Granger Dam & Lake, TX	Brazos River Auth.	14,619,200	0	0	14,619,200	14,619,200
Grapevine Lake, TX	Dallas Co. Park	683,547	0	0	683,547	
	City of Grapevine	19,987	0	0	19,987	
	City of Grapevine	683,547	0	0	683,547	
	Not Under Contract	0	0	2,573,695	2,573,695	3,960,776
Joe Pool Lake, TX	Trinity River Auth.	66,609,478			66,609,478	66,609,478
Lavon Lake, TX	N. Texas MWD	1,445,262	0	0	1,445,262	
	N. Texas MWD	15,839,705	0	0	15,839,705	
	N. Texas MWD	21,381,300	0	0	21,381,300	38,666,267
Lewisville Dam, TX	City of Dallas	3,676,661	0	0	3,676,661	
	City of Denton	250,064	0	0	250,064	3,926,725
Navarro Mills Lake, TX	Trinity River Auth.	2,176,089	0	0	2,176,089	2,176,089
N. San Gabriel D&L (Georgetown), TX	Brazos River Auth. (Remain Future)	0	3,572,818	0	3,572,818	
	Supplement (Seg #1)	24,671	0	0	24,671	
	Supplement (Seg #2)	113,801	0	0	113,801	
	Supplement (Seg #3)	380,762	0	0	380,762	
	Supplement (Seg #4)	692,288	0	0	692,288	
	Supplement (Seg #5)	1,384,505	0	0	1,384,505	
	Supplement (Seg #6)	34,582	0	0	34,582	
	Supplement (Seg #7)	373,632	0	0	373,632	
	Supplement (Seg #8)	553,317	0	0	553,317	7,130,376
O C Fisher Dam & Lake, TX	Upper CO River Auth.	860,437	0	0	860,437	860,437
Proctor Lake, TX	Brazos River Auth.	262,765	0	0	262,765	
	[2] Supp (Mod #1)	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	
	[3] City of Denton '80	60,309,721	0	0	60,309,721	225,652,486

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division		SWF WS Storage Cost				
Project Name	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
Sam Rayburn Dam & Reservoir, TX	Lower Neches Valley Auth.	3,000,000	0	0	3,000,000	
	City of Lufkin	3,267,000	0	0	3,267,000	6,267,000
Somerville Lake, TX	Brazos River Auth.	7,197,452	0	0	7,197,452	7,197,452
Stillhouse Hollow Dam,	Brazos River Auth.	911,229	0	0	911,229	
	Supplement (F to P)	6,215,435	0	0	6,215,435	7,126,664
Waco Lake, TX	Brazos River Auth	5,793,000	0	0	5,793,000	
	[4] City of Waco	0	0	0	0	
	Brazos River Auth.	15,242,000	0	0	15,242,000	21,035,000
Whitney Lake, TX	Brazos River Auth.	1,181,440	0	0	1,181,440	1,181,440
Wright Patman Dam & Lake, TX	City of Texarkana Cont. #C-2033 Original Auth.	350,000	0	0	350,000	
	No user provided Cont. # I-0103 Supplanted	6,198,969	0	0	6,198,969	
	[5] City of Texarkana Cont # C-0019 Surplus Water	1,437,647	0	0	1,437,647	
	[6] City of Texarkana Cont. #A-0'07 Surplus Water	6,198,969	0	0	6,198,969	14,185,585
District Totals	23 projects / 40 contracts + 16 supplements	507,428,795	3,572,818	2,573,695	513,575,308	513,575,308
[1] SWF, Benbrook: All contracts are surplus. Storage is from navigation pool and will be used by M&I until needed for navigation.						
[2] SWF, Proctor: User has not activated storage but is paying P&I.						
[3] SWF, Ray Roberts: On 6/18/98, city \$26,828,840 in principal and \$1,062,312 in interest. Additional payments not due at this time.						
[4] SWF, Waco, City of Waco. The City transferred existing Lake Waco to the Government in return for use of the storage in the project at no cost.						
[5] SWF, Wright Patman. This contract was suppose to expire upon completion of Cooper Lake or the date of completion of all mods to Wright Patman						
[6] SWF, Wright Patman. To be utilized until Cooper Lake is impounded						
[7] Remaining Principal owed (as applicable) includes, for the present use storage interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division			SWF Remaining Principal Owed [7]			
Project Name	User	Agreement Interest Rate (%)	Amount Owed (\$)			District Percent
			Present	Future	Total	
Fort Worth						
Aquilla Lake, TX	Brazos River Authority	5.116	841,446	0	841,446	
	Supp (Future to Present)	5.116	8,569,594	0	8,569,594	
Bardwell Lake, TX	Trinity River Authority	2.936	174,661	0	174,661	
	Supp (F to P) (Seg #2A)	2.936	349,062	0	349,062	
	Supp (F to P) (Seg #2B)	2.936	437,398	0	437,398	
	Supp (F to P) (Seg #2C)	2.936	652,934	0	652,934	
Belton Lake, TX	Brazos River Auth.	2.500	0	0	0	
	Supp (F to P) (Space 2)	2.500	1,645,500	0	1,645,500	
Benbrook Lake, TX [1]	City of Ft. Worth	2.500	122,501	0	122,501	
	Benbrook W&SA	6.595	233,321	0	233,321	
	Benbrook W&SA	2.500	124,675	0	124,675	
	Tarrant Reg. WD	9.125	1,348,789	0	1,348,789	
Canyon Lake, TX	Guadalupe-Bianco R. Auth.	2.500	4,999,249	0	4,999,249	
Cooper Dam & Jim Chapman Lake, TX	City of Irving	3.253	19,025,788	0	19,025,788	
	N. Texas Muni. Water Dist.	6.502	20,072,613	0	20,072,613	
	Sulphur R. MWD	3.253	3,397,506	0	3,397,506	
	Supplement (F to P)	3.253	10,684,298	0	10,684,298	
Ferrells Bridge Dam, Lake O'The Pines, TX	N.E. Texas MWD	13.400	0	0	0	
Granger Dam & Lake, TX	Brazos River Auth.	3.256	12,409,873	0	12,409,873	
Grapevine Lake, TX	Dallas Co. Park	8.605	0	0	0	
	City of Grapevine	3.130	0	0	0	
	City of Grapevine	3.130	0	0	0	
	Not Under Contract	NA	0	2,573,695	2,573,695	
Joe Pool Lake, TX	Trinity River Auth.	5.116	0		0	
Lavon Lake, TX	N. Texas MWD	2.500	0	0	0	
	N. Texas MWD	3.225	8,978,986	0	8,978,986	
	N. Texas MWD	3.225	11,470,899	0	11,470,899	
Lewisville Dam, TX	City of Dallas	3.000	0	0	0	
	City of Denton	2.500	0	0	0	
Navarro Mills Lake, TX	Trinity River Auth.	2.670	116,490	0	116,490	
N. San Gabriel D&L (Georgetown), TX	Brazos River Auth. (Remain Future)		0	2,709,633	2,709,633	
	Supplement (Seg #1)		16,895	0	16,895	
	Supplement (Seg #2)		81,752	0	81,752	
	Supplement (Seg #3)	3.253	270,677	0	270,677	
	Supplement (Seg #4)		492,135	0	492,135	
	Supplement (Seg #5)		1,032,160	0	1,032,160	
	Supplement (Seg #6)		26,712	0	26,712	
	Supplement (Seg #7)		289,784	0	289,784	
	Supplement (Seg #8)		437,529	0	437,529	
O C Fisher Dam & Lake, TX	Upper CO River Auth.	5.837	0	0	0	
Proctor Lake, TX	Brazos River Auth.	5.166	53,503	0	53,503	
	[2] Supp (Mod #1)	6.089	477,437	0	477,437	
Ray Roberts Lake, TX	City of Dallas	7.210	82,407,725	0	82,407,725	
	[3] City of Denton '80	7.210	0	0	0	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division		SWF Remaining Principal Owed [7]				
Project Name	User	Agreement Interest Rate (%)	Amount Owed (\$)			District Percent
			Present	Future	Total	
Sam Rayburn Dam & Reservoir, TX	Lower Neches Valley Auth.	2.500	0	0	0	
	City of Lufkin	2.591	3,056,000	0	3,056,000	
Somerville Lake, TX	Brazos River Auth.	2.742	0	0	0	
Stillhouse Hollow Dam,	Brazos River Auth.	2.742	332,287	0	332,287	
	Supplement (F to P)	2.742	2,536,523	0	2,536,523	
Waco Lake, TX	Brazos River Auth	7.229	2,970,000	0	2,970,000	
	[4] City of Waco	14.607	0	0	0	
	Brazos River Auth.	2.087	0	0	0	
Whitney Lake, TX	Brazos River Auth.	3.216	0	0	0	
Wright Patman Dam & Lake, TX	City of Texarkana Cont. #C-2033 Original Auth.	3.620	0	0	0	
	No user provided Cont. # I-0103 Supplanted	3.620	0	0	0	
	[5] City of Texarkana Cont # C-0019 Surplus Water	3.620	510,949	0	510,949	
	[6] City of Texarkana Cont. #A-0'07 Surplus Water	3.620	0	0	0	
District Totals	23 projects / 40 contracts + 16 supplements		200,647,651	5,283,328	205,930,979	40%
[1] SWF, Benbrook: All contracts are surplus. Storage is from navigation pool and will be used by M&I until needed for navigation.						
[2] SWF, Proctor: User has not activated storage but is paying P&I.						
[3] SWF, Ray Roberts: On 6/18/98, city \$26,828,840 in principal and \$1,062,312 in interest. Additional payments not due at this time.						
[4] SWF, Waco, City of Waco. The City transferred existing Lake Waco to the Government in return for use of the storage in the project at no cost.						
[5] SWF, Wright Patman. This contract was suppose to expire upon completion of Cooper Lake or the date of completion of all mods to Wright Patman						
[6] SWF, Wright Patman. To be utilized until Cooper Lake is impounded						
[7] Remaining Principal owed (as applicable) includes, for the present use storage interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Project	User	Date of Agreement	SWT WS Storage Space				Project WS Storage Space (acre-feet)
			WS Agreement Storage Space (acre-feet)				
			Present	Future	Not Under Contract	Total	
Arcadia Lake, OK	Edmond PWA	1979	23,090	0	0	23,090	23,090
Birch	Not Under Contract	NA			7,630	7,630	7,630
Broken Bow Lake, OK	OK Tourism & Recreation	1988	60	0	0	60	
	Broken Bow PWA (includes conduit)	1990	4,241	0	0	4,241	
	Broken Bow PWA Future to Present	1990	4,054	0	0	4,054	
	Not Under Contract	NA	0	0	144,085	144,085	152,440
Canton Lake, OK	OK City Muni. Imp. Auth	1991	90,000	0	0	90,000	90,000
Copan Lake, OK	Copan PWA	1981	5,000	0	0	5,000	5,000
Council Grove, KA	KS Water Res. Board	1976	24,400	0	0	24,400	
	State of KS - Reallocation [1]	1996	8,000	0	0	8,000	32,400
Denison Dam, L. Texoma, OK & TX	City of Denison, TX	1953	21,300	0	0	21,300	
	TX Power & Light	1961	16,400	0	0	16,400	
	Red River Auth. of TX [2]	1969	450	0	0	450	
	Red River Auth. of TX	1983	2,054	0	0	2,054	
	N. Texas MWD	1985	84,099	0	0	84,099	
	Greater Texoma Utility Auth.	1992	5,500	0	0	5,500	
	Greater Texoma Utility Auth.	1979	5,500	0	0	5,500	
	Commissioner of the Land	2005	275	0	0	275	
	Greater Texoma Utility Auth.	2005	11,600	0	0	11,600	
	Buncombe Creek View Ad	1992	1	0	0	1	147,179
El Dorado Lake, KA	City of El Dorado (original) [3]	1972	39,793	0	0	39,793	
	(Space 2)	1972	11,666	0	0	11,666	
	(Space 3)	1972	91,341	0	0	91,341	142,800
Elk City, KA	KS Water Res. Board	1970	24,300	0	0	24,300	
	State of KS [1]	1996	10,000	0	0	10,000	34,300
Eufaula Lake, OK	Haskell County Water Co.	1968	400	0	0	400	
	Pittsburg Co. Water Co.	1968	850	0	0	850	
	Haskell Co. RWD #1	1969	50	0	0	50	
	Haskell Co., RWD #3	1974	25	0	0	25	
	Pittsburg Co. RWD #4	1969	50	0	0	50	
	Muskogee Co. MWD #3	1969	100	0	0	100	
	Porum PWA	1969	125	0	0	125	
	Lakeside Water Co., Inc	1971	20	0	0	20	
	Sherwood Forrest Co.	1971	60	0	0	60	
	Krebs Utility Auth.	1980	280	0	0	280	
	RWD #8 McIntosh Co.#8	1981	300	0	0	300	
	Activate Future	1981	1,200	0	0	1,200	
	Porum PWA	1981	280	0	0	280	
	Activate Future	1981	120	0	0	120	
	Pittsburg Co. PWA	1981	300	0	0	300	
	Activate Future	1981	190	0	0	190	
	Longtown RWD & SD #1	1985	1,000	0	0	1,000	
	Public Service Co. of OK	1985	0	100	0	100	
	McAlester PWA	1987	6,250	0	0	6,250	
	Bristow Point Property Owners Assoc.	1989	15	0	0	15	
	Twin Rivers Estates, Inc.	1990	9	0	0	9	
	Bridgeport Dunes Condo Assoc.	1990	5	0	0	5	
	Pittsburg Co. RWD #14	1991	320	0	0	320	
	Warner Utilities Auth.	1996	475	0	0	475	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Project	User	Date of Agreement	SWT WS Storage Space				Project WS Storage Space (acre-feet)
			WS Agreement Storage Space (acre-feet)				
			Present	Future	Not Under Contract	Total	
(Eufalula continued)	RWD No. 2, Onapa	1998	1,000	0	0	1,000	
	Juniper Water Co.	2001	12,040	0	0	12,040	
	Pittsburg Co. PWA	1981	490	0	0	490	
	RWD #3 Muskogee Co.	2009	150	0	0	150	
	City of Checotah	2009	1,600	0	0	1,600	
	Not Under Contract	NA	0	0	27,916	27,916	55,720
Heyburn, OK	Creek Co. RWD #1	1964	300	0	0	300	
	Creek Co. RWD #1	1968	600	0	0	600	
	Creek Co. RWD #1	1978	1,100	0	0	1,100	2,000
Hugo Lake, OK	Western Farmers Elect. Coop	1980	6,100	0	0	6,100	
	Space #2	2006	17,350	0	0	17,350	
	City of Checotah	1975	920	0	0	920	
	City of Hugo (includes \$32,800 for conduit present use)	1974	1,640	18,880	0	20,520	
	Pushmataha Co. RWD #3	1994	512	0	0	512	
	Not Under Contract [4]	NA	0	0	2,198	2,198	47,600
Hula, OK	City of Bartlesville	1957	15,400	0	0	15,400	
	City of Bartlesville Mod.	1970	2,200	0	0	2,200	
	Hula Water District	1970	100	0	0	100	
	City of Bartlesville	1982	2,100	0	0	2,100	19,800
John Redmond, KA	KS Water Res. Board	1975	34,900	0	0	34,900	
	State of KS [1]	1996	10,000	0	0	10,000	44,900
Kaw Lake, OK	OK Gas & Electric	2007	9,150	0	0	9,150	
	Supplement Space #2	2007	30,200	0	0	30,200	
	Kaw Reservoir Auth. (Conveyance Facilities)	1980	0	0	0	0	
	Stillwater Utility Authority	1981	51,450	0	0	51,450	
	Kaw Nation	2003	6	0	0	6	
	Otoe-Missouria	1993	183	0	0	183	
	Not Under Contract [5]	NA	0	0	80,217	80,217	171,206
Keystone Lake, OK	Public Service Co. of OK	1971	7,000	0	0	7,000	
	Supp Space #2	1971	11,000	0	0	11,000	
	Not Under Contract		0	0	2,000	2,000	20,000
Marion, KA	KS Water Res. Board	1976	38,300	0	0	38,300	
	Kansas Water Office [1]	1996	12,500	0	0	12,500	50,800
Oologah Lake, OK	City of Tulsa (conduit)	1985	0	0	0	0	
	City of Tulsa	1985	38,000	0	0	38,000	
	Supplement Space #2	1985	6,500	0	0	6,500	
	Supplement Space #3	1985	44,500	0	0	44,500	
	Supplement Space #4	1985	196,450	0	0	196,450	
	City of Collinsville	1985	500	0	0	500	
	Supplement Space #2	1985	6,170	0	0	6,170	
	Public Service Co. of OK	1985	5,000	0	0	5,000	
	Supplement Space #2	1985	15,990	0	0	15,990	
	Rogers Co., RWD #4	1985	300	0	0	300	
	Supplement Space #2	1985	1,290	0	0	1,290	
	Rogers Co., RWD #3	1985	600	0	0	600	
	Supplement Space #2	1985	5,360	0	0	5,360	
	Supp. L. went to ultimate dev.	1985	5,360	0	0	5,360	
	Washington Co., RWD #3	1992	4,170	0	0	4,170	
	Town of Chelsea	1982	1,530	0	0	1,530	
	Town of Chelsea from Nowata	1985	100	0	0	100	

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Project	User	Date of Agreement	SWT WS Storage Space				Project WS Storage Space (acre-feet)
			WS Agreement Storage Space (acre-feet)				
			Present	Future	Not Under Contract	Total	
(Oologah continued)	Supplemental Space #2	1985	100	0	0	100	
	Claremore Public Works Auth	1988	445	0	0	445	
	Claremore Public Works	1999	6,230	0	0	6,230	
	PSO	2009	4,005	0	0	4,005	342,600
Pat Mayse Lake, TX	City of Paris	1965	21,900	0	0	21,900	
Pat Mayse (continued)	Supplement #1	1978	87,700	0	0	87,700	109,600
Pearson - Skubitz Big Hill Lake, KS	State of KS	1973	25,700	0	0	25,700	25,700
	Conduit Not Under Contract			0	0	0	0
Pine Creek Lake, OK	Weyerhaeuser	1970	14,700	0	0	14,700	
	Supplement #1	1970	14,100	0	0	14,100	28,800
Sardis Lake, OK	OK Water Res. Board (includes conduit under present use) [6]	1974	141,700	155,500	0	297,200	297,200
Skiatook Lake, OK	Osage Co., RWD #15 (Conveyance Facilities)	1984	0	0	0	0	0
	RWD #15, Osage Co	1987	0	2,000	0	2,000	0
	Sand Springs Municipal Auth.	1988	6,740	0	0	6,740	
	Sand Springs Municipal Auth.	1988	2,245	0	0	2,245	
	Sapulpa Municipal Auth.	2005	4,500	0	0	4,500	
	Sapulpa Municipal Auth.	2002	4,500	0	0	4,500	
	Skiatook PWA	1988	2,018	0	0	2,018	
	Sands Springs	2005	11,250	0	0	11,250	
	Skiatook PWA	1998	2,743	0	0	2,743	
	Not Under Contract	NA	0	0	26,904	26,904	62,900
Tenkiller Ferry Lake, OK	East Central OK Water Auth.	1964	300	0	0	300	
	Cherokee Co., RWD #13 [7]	2007	100	0	0	100	
	Cherokee Co., RWD #2 [7]	1967	100	0	0	100	
	Sequoyah Co. Water Assoc. [7]	1998	2,200	0	0	2,200	
	Sequoyah Fules Corp. [7]	1970	14,000	0	0	14,000	
	Summit Water Inc. [7]	1971	140	0	0	140	
	Paradise Hills, Inc. [7]	1974	220	0	0	220	
	Lake Tenkiller Associates [7]	1980	200	0	0	200	
	Greenleaf Nursery Co. [8]	2004	2,120	0	0	2,120	
	Greenleaf Nursery Co. [8]	2005	300	0	0	300	
	L. Reg. Elec. Dev. Coop. Inc.	1989	38	0	0	38	
	L. Reg. Elec. Dev. Coop. Inc.	1994	15	0	0	15	
	L. Reg. Elec. Dev. Coop. Inc.	1991	34	0	0	34	
	L. Reg. Elec. Dev. Coop. Inc.	1994	30	0	0	30	
	Mongold Water System	1990	5	0	0	5	
	Tenkiller Aqua Park	1990	17	0	0	17	
	Gore Public Works Auth.	1990	480	0	0	480	
	Pettit Bay Water Association	1991	5	0	0	5	
	Fin and Feather Resort	1992	12	0	0	12	
	Sixshooter Water System	1992	2	0	0	2	
	Indian Hills Estates Company	1993	3	0	0	3	
	Bill Richardson	1992	1	0	0	1	
	Charles Willige	1996	2	0	0	2	
	J.R. Mosteller	1993	2	0	0	2	
	Burnt Cabin RWD Inc.	1994	12	0	0	12	
	Sunny Heights Water System	1995	10	0	0	10	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Project	User	Date of Agreement	SWT WS Storage Space				Project WS Storage Space (acre-feet)
			WS Agreement Storage Space (acre-feet)				
			Present	Future	Not Under Contract	Total	
(Tenkiller continued)	Tenkiller Development Co.	1995	3	0	0	3	
	RWD #13 Cherokee Co.	2004	132	0	0	132	
	Stick Ross Mountain Water Co.	2005	584	0	0	584	
	Tahlequah PWA	2005	4,300	0	0	4,300	
	Billy Joe Stewart	1992	6	0	0	6	
	RWD #2, Cherokee Co	2007	99	0	0	99	25,472
Toronto Lake, KS	City of Toronto	1965	265	0	0	265	
	Activate Future	1998	135	0	0	135	400
Waurika Lake, OK	Waurika Project Master Conservation District	1970	41,800	0	0	41,800	
	Waurika PMC Dist Eastern (Conveyance Facil)	1978	0	0	0	0	
	Waurika PMC Dist Southern (ConveyanceFacil)	1978	0	0	0	0	
	Waurika PMC Dist Western (Conveyance Facil)	1978	0	0	0	0	
	Not Under Contract		0	0	109,600	109,600	151,400
Wister Lake, OK	Heavener Utility Auth. [9]	2007	1,766	0	0	1,766	
	Poteau Valley Improvement Dist.	1967	4,800	0	0	4,800	
	Poteau Valley Improvement Dist.	1987	7,253	0	0	7,253	13,819
27 projects	27 projects / 131 agreements + 22 supplements		1,527,726	176,480	400,550	2,104,756	2,104,756
[1] SWT, Council Grove, Elk City, John Redmond, Marion, Water quality storage was reallocated and costs in this agreement developed under the MOU with the State of Kansas. Storage costs based on original construction or sunk costs of the reallocated water quality storage							
[2] SWT, Denison Dam, No cost computations included in the 1969 contract. The practice at that time, however, was to use original or sunk costs on a use-of-facilities cost allocation basis.							
[3] SWT, El Dorado. City traded lands for the project, they pay							
[4] SWT, Hugo, NUC. TMH assumed \$57.32/AF for price							
[5] SWT, Kaw Lake, NUC. TMH assumed \$229.74/AF for price							
[6] SWT, Sardis Lake. Agreement has been in litigation since							
[7] SWT, Tenkiller Lake, East Central OK Water Auth, Cherokee Co., RWD #13 & #2, Sequoyah County Water Assn, Sequoia Fules, Summit Water Inc., Paradise Hills and Lake Tenkiller Associates. Costs based on revision to the 1969 cost allocation; flood control costs were reduced and assigned to water supply since storage was reassigned from the flood control pool.							
[8] SWT, Tenkiller Lake, Greenleaf Nursery (both contracts). Assigned to WS under Sec 931, PL 99-662 (interim use of water supply for irrigation). Cost based on original cost of storage.							

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa			SWT WS Storage Space				
Project	User	Date of Agreement	WS Agreement Storage Space (acre-feet)				Project WS Storage Space (acre-feet)
			Present	Future	Not Under Contract	Total	
[9] SWT, Wister, Heavener Utility Auth. This 2007 agreement replaced the original 1963 agreement. Total amount of agreement, total repaid and amount remaining have been adjusted to show the sum of the two agreements.							
[10] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.							

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa	Project	User	SWT WS Storage Cost				Project WS Storage Cost (\$)
			WS Agreement Storage Cost (\$)				
			Present	Future	Not Under Contract	Total	
	Arcadia Lake, OK	Edmond PWA	44,310,244	0	0	44,310,244	44,310,244
	Birch	Not Under Contract	0	0	885,000	885,000	885,000
	Broken Bow Lake, OK	OK Tourism & Recreation	2,662	0	0	2,662	
		Broken Bow PWA (includes conduit)	170,189	0	0	170,189	
		Broken Bow PWA Future to Present	107,585	0	0	107,585	
		Not Under Contract	0	0	3,881,544	3,881,544	4,161,980
	Canton Lake, OK	OK City Muni. Imp. Auth	2,806,900	0	0	2,806,900	2,806,900
	Copan Lake, OK	Copan PWA	5,373,820	0	0	5,373,820	5,373,820
	Council Grove, KA	KS Water Res. Board	1,461,764	0	0	1,461,764	
		State of KS - Reallocation [1]	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	
		TX Power & Light	286,353	0	0	286,353	
		Red River Auth. of TX [2]	9,100	0	0	9,100	
		Red River Auth. of TX	359,455	0	0	359,455	
		N. Texas MWD	16,984,605	0	0	16,984,605	
		Greater Texoma Utility Auth.	1,266,081	0	0	1,266,081	
		Greater Texoma Utility Auth.	1,407,751	0	0	1,407,751	
		Commissioner of the Land	87,696	0	0	87,696	
		Greater Texoma Utility Auth.	3,727,060	0	0	3,727,060	
		Buncombe Creek View Ad	248	0	0	248	24,421,210
	El Dorado Lake, KA	City of El Dorado (original) [3]	11,050,000	0	0	11,050,000	
		(Space 2)	3,046,527	0	0	3,046,527	
		(Space 3)	23,441,207	0	0	23,441,207	37,537,734
	Elk City, KA	KS Water Res. Board	2,146,666	0	0	2,146,666	
		State of KS [1]	1,150,580	0	0	1,150,580	3,297,246
	Eufaula Lake, OK	Haskell County Water Co.	35,440	0	0	35,440	
		Pittsburg Co. Water Co.	75,330	0	0	75,330	
		Haskell Co. RWD #1	4,706	0	0	4,706	
		Haskell Co., RWD #3	0	0	0	0	
		Pittsburg Co. RWD #4	4,420	0	0	4,420	
		Muskogee Co. MWD #3	8,880	0	0	8,880	
		Porum PWA	11,786	0	0	11,786	
		Lakeside Water Co., Inc	1,970	0	0	1,970	
		Sherwood Forrest Co.	5,880	0	0	5,880	
		Krebs Utility Auth.	29,116	0	0	29,116	
		RWD #8 McIntosh Co.#8	32,504	0	0	32,504	
		Activate Future	262,290	0	0	262,290	
		Porum PWA	30,063	0	0	30,063	
		Activate Future	24,726	0	0	24,726	
		Pittsburg Co. PWA	33,118	0	0	33,118	
		Activate Future	40,581	0	0	40,581	
		Longtown RWD & SD #1	107,949	0	0	107,949	
		Public Service Co. of OK	0	11,016	0	11,016	
		McAlester PWA	719,075	0	0	719,075	
		Bristow Point Property Owners Assoc.	1,823	0	0	1,823	
		Twin Rivers Estates, Inc.	148	0	0	148	
		Bridgeport Dunes Condo Assoc.	628	0	0	628	
		Pittsburg Co. RWD #14	40,090	0	0	40,090	
		Warner Utilities Auth.	68,339	0	0	68,339	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa		SWT WS Storage Cost				
Project	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
(Eufalula continued)	RWD No. 2, Onapa	140,569	0	0	140,569	
	Juniper Water Co.	1,981,186	0	0	1,981,186	
	Pittsburg Co. PWA	58,928	0	0	58,928	
	RWD #3 Muskogee Co.	29,954	0	0	29,954	
	City of Checotah	317,904	0	0	317,904	
	Not Under Contract	0	0	4,009,866	4,009,866	8,088,285
Heyburn, OK	Creek Co. RWD #1	64,645	0	0	64,645	
	Creek Co. RWD #1	34,374	0	0	34,374	
	Creek Co. RWD #1	73,121	0	0	73,121	172,140
Hugo Lake, OK	Western Farmers Elect. Coop	349,710	0	0	349,710	
	Space #2	2,026,518	0	0	2,026,518	
	City of Checotah	52,750	0	0	52,750	
	City of Hugo (includes \$32,800 for conduit present use)	126,810	1,082,390	0	1,209,200	
	Pushmataha Co. RWD #3	29,418	0	0	29,418	
	Not Under Contract [4]	0	0	125,990	125,990	3,793,586
Hula, OK	City of Bartlesville	401,320	0	0	401,320	
	City of Bartlesville Mod.	88,270	0	0	88,270	
	Hula Water District	4,000	0	0	4,000	
	City of Bartlesville	141,500	0	0	141,500	635,090
John Redmond, KA	KS Water Res. Board	4,498,911	0	0	4,498,911	
	State of KS [1]	832,485	0	0	832,485	5,331,396
Kaw Lake, OK	OK Gas & Electric	2,102,289	0	0	2,102,289	
	Supplement Space #2	6,938,145	0	0	6,938,145	
	Kaw Reservoir Auth. (Conveyance Facilities)	395,975	0	0	395,975	
	Stillwater Utility Authority	11,724,193	0	0	11,724,193	
	Kaw Nation	265	0	0	265	
	Otoe-Missouria	42,085	0	0	42,085	
	Not Under Contract [5]	0	0	18,373,933	18,373,933	39,576,885
Keystone Lake, OK	Public Service Co. of OK	613,085	0	0	613,085	
	Supp Space #2	1,032,690	0	0	1,032,690	
	Not Under Contract	0	0	203,500	203,500	1,849,275
Marion, KA	KS Water Res. Board	1,576,327	0	0	1,576,327	
	Kansas Water Office [1]	2,187,785	0	0	2,187,785	3,764,112
Oologah Lake, OK	City of Tulsa (conduit)	409,342	0	0	409,342	
	City of Tulsa	1,485,962	0	0	1,485,962	
	Supplement Space #2	259,471	0	0	259,471	
	Supplement Space #3	1,642,359	0	0	1,642,359	
	Supplement Space #4	6,551,819	0	0	6,551,819	
	City of Collinsville	16,160	0	0	16,160	
	Supplement Space #2	199,490	0	0	199,490	
	Public Service Co. of OK	161,660	0	0	161,660	
	Supplement Space #2	538,353	0	0	538,353	
	Rogers Co., RWD #4	9,700	0	0	9,700	
	Supplement Space #2	44,655	0	0	44,655	
	Rogers Co., RWD #3	19,390	0	0	19,390	
	Supplement Space #2	184,118	0	0	184,118	
	Supp. L. went to ultimate dev.	173,310	0	0	173,310	
	Washington Co., RWD #3	175,646	0	0	175,646	
	Town of Chelsea	49,375	0	0	49,375	
	Town of Chelsea from Nowata	3,235	0	0	3,235	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa		SWT WS Storage Cost				
Project	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
(Oologah continued)	Supplemental Space #2	3,356	0	0	3,356	
	Claremore Public Works Auth	16,632	0	0	16,632	
	Claremore Public Works	324,284	0	0	324,284	
	PSO	168,695	0	0	168,695	12,437,012
Pat Mayse Lake, TX	City of Paris	689,200	0	0	689,200	
Pat Mayse (continued)	Supplement #1	2,588,796	0	0	2,588,796	3,277,996
Pearson - Skubitz Big Hill Lake, KS	State of KS	6,955,770	0	0	6,955,770	
	Conduit Not Under Contract	0	0	21,244	21,244	6,977,014
Pine Creek Lake, OK	Weyerhaeuser	1,523,506	0	0	1,523,506	
	Supplement #1	1,461,051	0	0	1,461,051	2,984,557
Sardis Lake, OK	OK Water Res. Board (includes conduit under present use) [6]	18,608,479	19,760,089	0	38,368,568	38,368,568
Skiatook Lake, OK	Osage Co., RWD #15 (Conveyance Facilities)	703,960	0	0	703,960	
	RWD #15, Osage Co	0	563,867	0	563,867	
	Sand Springs Municipal Auth.	1,900,190	0	0	1,900,190	
	Sand Springs Municipal Auth.	632,924	0	0	632,924	
	Sapulpa Municipal Auth.	1,911,561	0	0	1,911,561	
	Sapulpa Municipal Auth.	1,738,077	0	0	1,738,077	
	Skiatook PWA	568,904	0	0	568,904	
	Sands Springs	4,802,475	0	0	4,802,475	
	Skiatook PWA	890,715	0	0	890,715	
	Not Under Contract	0	0	4,021,250	4,021,250	17,733,923
Tenkiller Ferry Lake, OK	East Central OK Water Auth.	17,700	0	0	17,700	
	Cherokee Co., RWD #13 [7]	2,020	0	0	2,020	
	Cherokee Co., RWD #2 [7]	2,020	0	0	2,020	
	Sequoyah Co. Water Assoc. [7]	44,400	0	0	44,400	
	Sequoyah Fules Corp. [7]	282,500	0	0	282,500	
	Summit Water Inc. [7]	4,330	0	0	4,330	
	Paradise Hills, Inc. [7]	6,039	0	0	6,039	
	Lake Tenkiller Associates [7]	8,722	0	0	8,722	
	Greenleaf Nursery Co. [8]	24,660	0	0	24,660	
	Greenleaf Nursery Co. [8]	6,290	0	0	6,290	
	L. Reg. Elec. Dev. Coop. Inc.	4,157	0	0	4,157	
	L. Reg. Elec. Dev. Coop. Inc.	2,166	0	0	2,166	
	L. Reg. Elec. Dev. Coop. Inc.	4,261	0	0	4,261	
	L. Reg. Elec. Dev. Coop. Inc.	4,350	0	0	4,350	
	Mongold Water System	1,167	0	0	1,167	
	Tenkiller Aqua Park	2,043	0	0	2,043	
	Gore Public Works Auth.	51,831	0	0	51,831	
	Pettit Bay Water Association	618	0	0	618	
	Fin and Feather Resort	1,630	0	0	1,630	
	Sixshooter Water System	256	0	0	256	
	Indian Hills Estates Company	402	0	0	402	
	Bill Richardson	132	0	0	132	
	Charles Willige	286	0	0	286	
	J.R. Mosteller	268	0	0	268	
	Burnt Cabin RWD Inc.	1,311	0	0	1,311	
	Sunny Heights Water System	1,372	0	0	1,372	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa		SWT WS Storage Cost				
Project	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
(Tenkiller continued)	Tenkiller Development Co.	417	0	0	417	
	RWD #13 Cherokee Co.	20,532	0	0	20,532	
	Stick Ross Mountain Water Co.	98,205	0	0	98,205	
	Tahlequah PWA	723,274	0	0	723,274	
	Billy Joe Stewart	775	0	0	775	
	RWD #2, Cherokee Co	19,123	0	0	19,123	1,337,257
Toronto Lake, KS	City of Toronto	21,410	0	0	21,410	
	Activate Future	14,965	0	0	14,965	36,375
Waurika Lake, OK	Waurika Project Master Conservation District	4,644,284	0	0	4,644,284	
	Waurika PMC Dist Eastern (Conveyance Facil)	488,882	0	0	488,882	
	Waurika PMC Dist Southern (ConveyanceFacil)	20,608,454	0	0	20,608,454	
	Waurika PMC Dist Western (Conveyance Facil)	8,910,058	0	0	8,910,058	
	Not Under Contract	0	0	11,790,671	11,790,671	46,442,349
Wister Lake, OK	Heavener Utility Auth. [9]	46,561	0	0	46,561	
	Poteau Valley Improvement Dist.	125,110	0	0	125,110	
	Poteau Valley Improvement Dist.	1,963,800	0	0	1,963,800	2,135,471
27 projects	27 projects / 131 agreements + 22 supplements	255,190,047	21,417,362	43,312,998	319,920,407	319,920,407
[1] SWT, Council Grove, Elk City, John Redmond, Marion, Water quality storage was reallocated and costs in this agreement developed under the MOU with the State of Kansas. Storage costs based on original construction or sunk costs of the reallocated water quality storage						
[2] SWT, Denison Dam, No cost computations included in the 1969 contract. The practice at that time, however, was to use original or sunk costs on a use-of-facilities cost allocation basis.						
[3] SWT, El Dorado. City traded lands for the project, they pay						
[4] SWT, Hugo, NUC. TMH assumed \$57.32/AF for price						
[5] SWT, Kaw Lake, NUC. TMH assumed \$229.74/AF for price						
[6] SWT, Sardis Lake. Agreement has been in litigation since						
[7] SWT, Tenkiller Lake, East Central OK Water Auth, Cherokee Co., RWD #13 & #2, Sequoyah County Water Assn, Sequoia Fules, Summit Water Inc., Paradise Hills and Lake Tenkiller Associates. Costs based on revision to the 1969 cost allocation; flood control costs were reduced and assigned to water supply since storage was reassigned from the flood control pool.						
[8] SWT, Tenkiller Lake, Greenleaf Nursery (both contracts). Assigned to WS under Sec 931, PL 99-662 (interim use of water supply for irrigation). Cost based on original cost of storage.						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa		SWT WS Storage Cost				
Project	User	WS Agreement Storage Cost (\$)				Project WS Storage Cost (\$)
		Present	Future	Not Under Contract	Total	
[9] SWT, Wister, Heavener Utility Auth. This 2007 agreement replaced the original 1963 agreement. Total amount of agreement, total repaid and amount remaining have been adjusted to show the sum of the two agreements.						
[10] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa		SWT Remaining Principal Owed [10]				
Project	User	Agreement Interest Rate (%)	Amount Owed (\$)			
			Present	Future	Total	District Percent
Arcadia Lake, OK	Edmond PWA	7.210	0	0	0	
Birch	Not Under Contract	NA	0	885,000	885,000	
Broken Bow Lake, OK	OK Tourism & Recreation		0	0	0	
	Broken Bow PWA (includes conduit)	2.742	75,572	0	75,572	
	Broken Bow PWA Future to Present		0	0	0	
	Not Under Contract	NA	0	388,154	388,154	
Canton Lake, OK	OK City Muni. Imp. Auth	2.500	0	0	0	
Copan Lake, OK	Copan PWA	3.502	0	0	0	
Council Grove, KA	KS Water Res. Board	2.699	736,520	0	736,520	
	State of KS - Reallocation [1]	2.699	0	0	0	
Denison Dam, L. Texoma, OK & TX	City of Denison, TX	2.500	0	0	0	
	TX Power & Light	2.500	28,132	0	28,132	
	Red River Auth. of TX [2]	2.500	0	0	0	
	Red River Auth. of TX	10.051	0	0	0	
	N. Texas MWD	10.693	0	0	0	
	Greater Texoma Utility Auth.	10.051	0	0	0	
	Greater Texoma Utility Auth.	10.051	0	0	0	
	Commissioner of the Land	5.125	0	0	0	
	Greater Texoma Utility Auth.	5.125	3,380,510	0	3,380,510	
	Buncombe Creek View Ad	8.125	0	0	0	
El Dorado Lake, KA	City of El Dorado (original) [3]		0	0	0	
	(Space 2)	3.502	2,433,506	0	2,433,506	
	(Space 3)		7,229,540	0	7,229,540	
Elk City, KA	KS Water Res. Board	2.742	1,038,821	0	1,038,821	
	State of KS [1]	2.742	0	0	0	
Eufaula Lake, OK	Haskell County Water Co.		11,748	0	11,748	
	Pittsburg Co. Water Co.		23,606	0	23,606	
	Haskell Co. RWD #1		3,706	0	3,706	
	Haskell Co., RWD #3		0	0	0	
	Pittsburg Co. RWD #4		1,503	0	1,503	
	Muskogee Co. MWD #3		3,020	0	3,020	
	Porum PWA		0	0	0	
	Lakeside Water Co., Inc		0	0	0	
	Sherwood Forrest Co.		0	0	0	
	Krebs Utility Auth.		16,343	0	16,343	
	RWD #8 McIntosh Co.#8		19,538	0	19,538	
	Activate Future		254,072	0	254,072	
	Porum PWA		18,062	0	18,062	
	Activate Future		24,010	0	24,010	
	Pittsburg Co. PWA	2.591	19,893	0	19,893	
	Activate Future		39,341	0	39,341	
	Longtown RWD & SD #1		38,547	0	38,547	
	Public Service Co. of OK		0	10,967	10,967	
	McAlester PWA		325,009	0	325,009	
	Bristow Point Property Owners Assoc.		0	0	0	
	Twin Rivers Estates, Inc.		0	0	0	
	Bridgeport Dunes Condo Assoc.		0	0	0	
	Pittsburg Co. RWD #14		0	0	0	
	Warner Utilities Auth.		0	0	0	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa		SWT Remaining Principal Owed [10]				
Project	User	Agreement Interest Rate (%)	Amount Owed (\$)			
			Present	Future	Total	District Percent
(Eufalula continued)	RWD No. 2, Onapa		0	0	0	
	Juniper Water Co.		0	0	0	
	Pittsburg Co. PWA		19,894	0	19,894	
	RWD #3 Muskogee Co.		0	0	0	
	City of Checotah		0	0	0	
	Not Under Contract	NA	0	4,009,866	4,009,866	
Heyburn, OK	Creek Co. RWD #1	2.500	0	0	0	
	Creek Co. RWD #1	2.500	0	0	0	
	Creek Co. RWD #1	2.500	0	0	0	
Hugo Lake, OK	Western Farmers Elect. Coop		214,023	0	214,023	
	Space #2		1,854,169	0	1,854,169	
	City of Checotah	3.225	0	0	0	
	City of Hugo (includes \$32,800 for conduit present use)	3.225	0	0	0	
	Pushmataha Co. RWD #3		0	0	0	
	Not Under Contract [4]	NA	0	125,990	125,990	
Hula, OK	City of Bartlesville	2.500	0	0	0	
	City of Bartlesville Mod.	2.500	0	0	0	
	Hula Water District	2.500	0	0	0	
	City of Bartlesville	2.500	0	0	0	
John Redmond, KA	KS Water Res. Board	2.670	0	0	0	
	State of KS [1]	2.670	0	0	0	
Kaw Lake, OK	OK Gas & Electric		0	0	0	
	Supplement Space #2		0	0	0	
	Kaw Reservoir Auth. (Conveyance Facilities)	3.222	0	0	0	
	Stillwater Utility Authority		0	0	0	
	Kaw Nation		0	0	0	
	Otoe-Missouria		0	0	0	
	Not Under Contract [5]	NA	0	18,373,933	18,373,933	
Keystone Lake, OK	Public Service Co. of OK	2.591	264,478		264,478	
	Supp Space #2		308,745		308,745	
	Not Under Contract	NA	0	203,500	203,500	
Marion, KA	KS Water Res. Board	3.046	855,574	0	855,574	
	Kansas Water Office [1]	3.046	0	0	0	
Oologah Lake, OK	City of Tulsa (conduit)	2.544	62,141	0	62,141	
	City of Tulsa	2.544	225,859	0	225,859	
	Supplement Space #2	3.225	136,111	0	136,111	
	Supplement Space #3	3.225	931,790	0	931,790	
	Supplement Space #4	3.225	4,113,447	0	4,113,447	
	City of Collinsville	2.544	2,648	0	2,648	
	Supplement Space #2	3.225	142,000	0	142,000	
	Public Service Co. of OK	2.544	21,484	0	21,484	
	Supplement Space #2	3.225	351,599	0	351,599	
	Rogers Co., RWD #4	2.544	1,584	0	1,584	
	Supplement Space #2	3.225	39,760	0	39,760	
	Rogers Co., RWD #3	2.544	3,931	0	3,931	
	Supplement Space #2	3.225	131,276	0	131,276	
	Supp. L. went to ultimate dev.	3.225	124,932	0	124,932	
	Washington Co., RWD #3	3.225	43,168	0	43,168	
	Town of Chelsea	3.225	0	0	0	
	Town of Chelsea from Nowata	2.500	421	0	421	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa		SWT Remaining Principal Owed [10]				
Project	User	Agreement Interest Rate (%)	Amount Owed (\$)			
			Present	Future	Total	District Percent
(Oologah continued)	Supplemental Space #2	3.225	614	0	614	
	Claremore Public Works Auth	3.225	11,424	0	11,424	
	Claremore Public Works	3.225	84,399	0	84,399	
	PSO	3.225	168,695	0	168,695	
Pat Mayse Lake, TX	City of Paris	3.137	190,439	0	190,439	
Pat Mayse (continued)	Supplement #1		0	0	0	
Pearson - Skubitz Big Hill Lake, KS	State of KS	4.012	0	0	0	
	Conduit Not Under Contract		0	21,244	21,244	
Pine Creek Lake, OK	Weyerhaeuser	2.936	674,623	0	674,623	
	Supplement #1	2.936	0	0	0	
Sardis Lake, OK	OK Water Res. Board (includes conduit under present use) [6]	4.012	15,667,460	19,760,089	35,427,549	
Skiatook Lake, OK	Osage Co., RWD #15 (Conveyance Facilities)	4.012	572,036	0	572,036	
	RWD #15, Osage Co		0	563,867	563,867	
	Sand Springs Municipal Auth.		1,477,400	0	1,477,400	
	Sand Springs Municipal Auth.		474,489	0	474,489	
	Sapulpa Municipal Auth.		1,493,004	0	1,493,004	
	Sapulpa Municipal Auth.		1,163,505	0	1,163,505	
	Skiatook PWA		447,618	0	447,618	
	Sands Springs		2,975,948	0	2,975,948	
	Skiatook PWA		327,354	0	327,354	
	Not Under Contract		NA	0	4,021,250	4,021,250
Tenkiller Ferry Lake, OK	East Central OK Water Auth.	2.500	3,860	0	3,860	
	Cherokee Co., RWD #13 [7]	2.500	625	0	625	
	Cherokee Co., RWD #2 [7]	2.500	602	0	602	
	Sequoyah Co. Water Assoc. [7]	6.750	0	0	0	
	Sequoyah Fules Corp. [7]	2.500	99,697	0	99,697	
	Summit Water Inc. [7]	2.500	0	0	0	
	Paradise Hills, Inc. [7]	2.500	0	0	0	
	Lake Tenkiller Associates [7]	6.595	0	0	0	
	Greenleaf Nursery Co. [8]	3.256	9,737	0	9,737	
	Greenleaf Nursery Co. [8]	3.256	1,108	0	1,108	
	L. Reg. Elec. Dev. Coop. Inc.	8.250	0	0	0	
	L. Reg. Elec. Dev. Coop. Inc.	6.125	0	0	0	
	L. Reg. Elec. Dev. Coop. Inc.	6.125	0	0	0	
	L. Reg. Elec. Dev. Coop. Inc.	6.125	0	0	0	
	Mongold Water System	8.250	0	0	0	
	Tenkiller Aqua Park	8.250	1,256	0	1,256	
	Gore Public Works Auth.	8.250	0	0	0	
	Pettit Bay Water Association	9.125	0	0	0	
	Fin and Feather Resort	8.125	0	0	0	
	Sixshooter Water System	8.125	0	0	0	
	Indian Hills Estates Company	7.500	0	0	0	
	Bill Richardson	8.125	0	0	0	
	Charles Willige	7.625	0	0	0	
	J.R. Mosteller	7.500	0	0	0	
	Burnt Cabin RWD Inc.	6.125	0	0	0	
	Sunny Heights Water System	7.750	0	0	0	

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa		SWT Remaining Principal Owed [10]				
Project	User	Agreement Interest Rate (%)	Amount Owed (\$)			
			Present	Future	Total	District Percent
(Tenkiller continued)	Tenkiller Development Co.	6.125	0	0	0	
	RWD #13 Cherokee Co.	5.500	0	0	0	
	Stick Ross Mountain Water Co.	5.125	0	0	0	
	Tahlequah PWA	5.125	0	0	0	
	Billy Joe Stewart	8.125	0	0	0	
	RWD #2, Cherokee Co	4.875	0	0	0	
Toronto Lake, KS	City of Toronto	2.584	0	0	0	
	Activate Future	9.352	0	0	0	
Waurika Lake, OK	Waurika Project Master Conservation District	3.463	0	0	0	
	Waurika PMC Dist Eastern (Conveyance Facil)	3.463	0	0	0	
	Waurika PMC Dist Southern (ConveyanceFacil)	3.463	0	0	0	
	Waurika PMC Dist Western (Conveyance Facil)	3.463	0	0	0	
	Not Under Contract	NA	0	11,790,671	11,790,671	
Wister Lake, OK	Heavener Utility Auth. [9]	2.500	11,668	0	11,668	
	Poteau Valley Improvement Dist.	2.500	40,915	0	40,915	
	Poteau Valley Improvement Dist.	9.920	634,192	0	634,192	
27 projects	27 projects / 131 agreements + 22 supplements		52,102,701	60,154,531	112,257,232	35%
[1] SWT, Council Grove, Elk City, John Redmond, Marion, Water quality storage was reallocated and costs in this agreement developed under the MOU with the State of Kansas. Storage costs based on original construction or sunk costs of the reallocated water quality storage						
[2] SWT, Denison Dam, No cost computations included in the 1969 contract. The practice at that time, however, was to use original or sunk costs on a use-of-facilities cost allocation basis.						
[3] SWT, El Dorado. City traded lands for the project, they pay						
[4] SWT, Hugo, NUC. TMH assumed \$57.32/AF for price						
[5] SWT, Kaw Lake, NUC. TMH assumed \$229.74/AF for price						
[6] SWT, Sardis Lake. Agreement has been in litigation since						
[7] SWT, Tenkiller Lake, East Central OK Water Auth, Cherokee Co., RWD #13 & #2, Sequoyah County Water Assn, Sequoia Fules, Summit Water Inc., Paradise Hills and Lake Tenkiller Associates. Costs based on revision to the 1969 cost allocation; flood control costs were reduced and assigned to water supply since storage was reassigned from the flood control pool.						
[8] SWT, Tenkiller Lake, Greenleaf Nursery (both contracts). Assigned to WS under Sec 931, PL 99-662 (interim use of water supply for irrigation). Cost based on original cost of storage.						

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Tulsa		SWT Remaining Principal Owed [10]				
Project	User	Agreement Interest Rate (%)	Amount Owed (\$)			District Percent
			Present	Future	Total	
[9] SWT, Wister, Heavener Utility Auth. This 2007 agreement replaced the original 1963 agreement. Total amount of agreement, total repaid and amount remaining have been adjusted to show the sum of the two agreements.						
[10] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.						

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Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa				
Project	User			
		(This page intentionally left blank)		
Arcadia Lake, OK	Edmond PWA			
Birch	Not Under Contract			
Broken Bow Lake, OK	OK Tourism & Recreation			
	Broken Bow PWA (includes conduit)			
	Broken Bow PWA Future to Present			
	Not Under Contract			
Canton Lake, OK	OK City Muni. Imp. Auth			
Copan Lake, OK	Copan PWA			
Council Grove, KA	KS Water Res. Board			
	State of KS - Reallocation [1]			
Denison Dam, L. Texoma, OK & TX	City of Denison, TX			
	TX Power & Light			
	Red River Auth. of TX [2]			
	Red River Auth. of TX			
	N. Texas MWD			
	Greater Texoma Utility Auth.			
	Greater Texoma Utility Auth.			
	Commissioner of the Land			
	Greater Texoma Utility Auth.			
	Buncombe Creek View Ad			
El Dorado Lake, KA	City of El Dorado (original) [3]			
	(Space 2)			
	(Space 3)			
Elk City, KA	KS Water Res. Board			
	State of KS [1]			
Eufaula Lake, OK	Haskell County Water Co.			
	Pittsburg Co. Water Co.			
	Haskell Co. RWD #1			
	Haskell Co., RWD #3			
	Pittsburg Co. RWD #4			
	Muskogee Co. MWD #3			
	Porum PWA			
	Lakeside Water Co., Inc			
	Sherwood Forrest Co.			
	Krebs Utility Auth.			
	RWD #8 McIntosh Co.#8			
	Activate Future			
	Porum PWA			
	Activate Future			
	Pittsburg Co. PWA			
	Activate Future			
	Longtown RWD & SD #1			
	Public Service Co. of OK			
	McAlester PWA			
	Bristow Point Property Owners Assoc.			
	Twin Rivers Estates, Inc.			
	Bridgeport Dunes Condo Assoc.			
	Pittsburg Co. RWD #14			
	Warner Utilities Auth.			

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa				
Project	User	(This page intentionally left blank)		
(Eufalula continued)	RWD No. 2, Onapa			
	Juniper Water Co.			
	Pittsburg Co. PWA			
	RWD #3 Muskogee Co.			
	City of Checotah			
	Not Under Contract			
Heyburn, OK	Creek Co. RWD #1			
	Creek Co. RWD #1			
	Creek Co. RWD #1			
Hugo Lake, OK	Western Farmers Elect. Coop			
	Space #2			
	City of Checotah			
	City of Hugo (includes \$32,800 for conduit present use)			
	Pushmataha Co. RWD #3			
	Not Under Contract [4]			
Hula, OK	City of Bartlesville			
	City of Bartlesville Mod.			
	Hula Water District			
	City of Bartlesville			
John Redmond, KA	KS Water Res. Board			
	State of KS [1]			
Kaw Lake, OK	OK Gas & Electric			
	Supplement Space #2			
	Kaw Reservoir Auth. (Conveyance Facilities)			
	Stillwater Utility Authority			
	Kaw Nation			
	Otoe-Missouria			
	Not Under Contract [5]			
Keystone Lake, OK	Public Service Co. of OK			
	Supp Space #2			
	Not Under Contract			
Marion, KA	KS Water Res. Board			
	Kansas Water Office [1]			
Oologah Lake, OK	City of Tulsa (conduit)			
	City of Tulsa			
	Supplement Space #2			
	Supplement Space #3			
	Supplement Space #4			
	City of Collinsville			
	Supplement Space #2			
	Public Service Co. of OK			
	Supplement Space #2			
	Rogers Co., RWD #4			
	Supplement Space #2			
	Rogers Co., RWD #3			
	Supplement Space #2			
	Supp. L. went to ultimate dev.			
	Washington Co., RWD #3			
	Town of Chelsea			
	Town of Chelsea from Nowata			

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa				
Project	User	(This page intentionally left blank)		
		(Oologah continued)	Supplemental Space #2	
	Claremore Public Works Auth			
	Claremore Public Works			
	PSO			
Pat Mayse Lake, TX	City of Paris			
Pat Mayse (continued)	Supplement #1			
Pearson - Skubitz Big Hill Lake, KS	State of KS			
	Conduit Not Under Contract			
Pine Creek Lake, OK	Weyerhaeuser			
	Supplement #1			
Sardis Lake, OK	OK Water Res. Board (includes conduit under present use) [6]			
Skiatook Lake, OK	Osage Co., RWD #15 (Conveyance Facilities)			
	RWD #15, Osage Co			
	Sand Springs Municipal Auth.			
	Sand Springs Municipal Auth.			
	Sapulpa Municipal Auth.			
	Sapulpa Municipal Auth.			
	Skiatook PWA			
	Sands Springs			
	Skiatook PWA			
	Not Under Contract			
Tenkiller Ferry Lake, OK	East Central OK Water Auth.			
	Cherokee Co., RWD #13 [7]			
	Cherokee Co., RWD #2 [7]			
	Sequoyah Co. Water Assoc. [7]			
	Sequoyah Fules Corp. [7]			
	Summit Water Inc. [7]			
	Paradise Hills, Inc. [7]			
	Lake Tenkiller Associates [7]			
	Greenleaf Nursery Co. [8]			
	Greenleaf Nursery Co. [8]			
	L. Reg. Elec. Dev. Coop. Inc.			
	L. Reg. Elec. Dev. Coop. Inc.			
	L. Reg. Elec. Dev. Coop. Inc.			
	L. Reg. Elec. Dev. Coop. Inc.			
	Mongold Water System			
	Tenkiller Aqua Park			
	Gore Public Works Auth.			
	Pettit Bay Water Association			
	Fin and Feather Resort			
	Sixshooter Water System			
	Indian Hills Estates Company			
	Bill Richardson			
	Charles Willige			
	J.R. Mosteller			
	Burnt Cabin RWD Inc.			
	Sunny Heights Water System			

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa				
Project	User	(This page intentionally left blank)		
(Tenkiller continued)	Tenkiller Development Co.			
	RWD #13 Cherokee Co.			
	Stick Ross Mountain Water Co.			
	Tahlequah PWA			
	Billy Joe Stewart			
	RWD #2, Cherokee Co			
Toronto Lake, KS	City of Toronto			
	Activate Future			
Waurika Lake, OK	Waurika Project Master Conservation District			
	Waurika PMC Dist Eastern (Conveyance Facil)			
	Waurika PMC Dist Southern (ConveyanceFacil)			
	Waurika PMC Dist Western (Conveyance Facil)			
	Not Under Contract			
Wister Lake, OK	Heavener Utility Auth. [9]			
	Poteau Valley Improvement Dist.			
	Poteau Valley Improvement Dist.			
27 projects	27 projects / 131 agreements + 22 supplements			
[1] SWT, Council Grove, Elk City, John Redmond, Marion, Water quality storage was reallocated and costs in this agreement developed under the MOU with the State of Kansas. Storage costs based on original construction or sunk costs of the reallocated water quality storage				
[2] SWT, Denison Dam, No cost computations included in the 1969 contract. The practice at that time, however, was to use original or sunk costs on a use-of-facilities cost allocation basis.				
[3] SWT, El Dorado. City traded lands for the project, they pay				
[4] SWT, Hugo, NUC. TMH assumed \$57.32/AF for price				
[5] SWT, Kaw Lake, NUC. TMH assumed \$229.74/AF for price				
[6] SWT, Sardis Lake. Agreement has been in litigation since				
[7] SWT, Tenkiller Lake, East Central OK Water Auth, Cherokee Co., RWD #13 & #2, Sequoyah County Water Assn, Sequoia Fules, Summit Water Inc., Paradise Hills and Lake Tenkiller Associates. Costs based on revision to the 1969 cost allocation; flood control costs were reduced and assigned to water supply since storage was reassigned from the flood control pool.				
[8] SWT, Tenkiller Lake, Greenleaf Nursery (both contracts). Assigned to WS under Sec 931, PL 99-662 (interim use of water supply for irrigation). Cost based on original cost of storage.				

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Tulsa				
Project	User	(This page intentionally left blank)		
[9] SWT, Wister, Heavener Utility Auth. This 2007 agreement replaced the original 1963 agreement. Total amount of agreement, total repaid and amount remaining have been adjusted to show the sum of the two agreements.				
[10] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.				

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Southwestern Division Summary							
Storage Space							
District	Number of Projects	Number of Agreements		WS Storage Space (acre-feet)			
		Basic	Supplemental	Present	Future	Not Under Contract	Total
Little Rock	11	26	8	347,585	9,910	17,275	374,770
Ft Worth	23	40	16	5,804,205	14,631	60,000	5,878,836
Tulsa	27	131	22	1,527,726	176,480	400,550	2,104,756
Division total	61	197	46	7,679,516	201,021	477,825	8,358,362
Storage Cost							
District	Number of Projects	Number of Agreements		WS Storage Cost (\$)			
		Basic	Supplemental	Present	Future	Not Under Contract	Total
Little Rock	11	26	8	42,547,923	4,462,747	11,900,000	58,910,670
Ft Worth	23	40	16	507,428,795	3,572,818	2,573,695	513,575,308
Tulsa	27	131	22	255,190,047	21,417,362	43,335,998	319,943,407
Division total	61	197	46	805,166,765	29,452,927	57,809,693	892,429,385
Remaining Principal							
District	Number of Projects	Number of Agreements		Remaining Principal Owed (\$) [1]			District / MSC %
		Basic	Supplemental	Present	Future	Total	
Little Rock	11	26	8	7,748,953	16,362,747	23,844,700	40
Ft Worth	23	40	16	200,647,651	5,283,328	205,930,979	40
Tulsa	27	131	22	52,102,701	60,154,531	112,257,232	35
Division total	61	197	46	260,232,305	81,800,606	342,032,911	38
[1] Remaining Principal owed (as applicable) includes, for the present use storage, interest on the unpaid balance after the end of the ten-year interest free period. Price level varies.							

2009 Water Supply Database

Appendix B: Storage Space, Costs and Remaining Principal by Agreement

Storage Space	
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District	
Little Rock	
Ft Worth	
Tulsa	
Division total	
Storage Cost	
District	
Little Rock	
Ft Worth	
Tulsa	
Division total	
Remaining Principal	
District	
Little Rock	
Ft Worth	
Tulsa	
Division total	
[1] Remaining Principal ow the end of the ten-year int	

MSC	District	Project	User	Date of Agreement	Total Storage Space (acre-feet)	Method used to determine cost of storage	Reallocation Source	Total Agreement Cost (\$)
NAD	NAB	Cowanessque Lake, PA	Susquehanna RBC	1986	25,600	Updated cost	Flood Pool	39,414,000
		Curwensville Lake, PA	Susquehanna RBC	1994	5,360	Updated cost	Conservation	11,339,000
	total	2 projects	2 agreements	(86 - 94)	30,960			50,753,000
TOTAL		2 projects	2 agreements		30,960			50,753,000
SAD	SAW	John H. Kerr, VA	Mecklenburg Cogeneration	1991	600	Updated cost	Hydro	150,421
			VA Dep of Corr.	1989	23	Updated cost	Hydro	5,075
			City of Henderson	2006	10,292	Updated cost	Hydro	2,375,336
			Virginian Beach	1984	10,200	Updated cost	Hydro	2,275,685
	total	1 project	4 agreements	(84 - 06)	21,115			4,806,517
	SAS	Hartwell, GA & SC	Anderson Co. Joint Municipal Water System (mod)	2002	24,620	Benefits Foregone	Hydro	3,477,000
			City of Lavonia	1990	127	Updated cost	Hydro	21,447
			Hart County	1998	1,827	Updated cost	Hydro	356,867
		J Strom Thurmond, GA & SC	City of Washington	1975	632	Benefits Foregone	Hydro	72,800
			City of Lincolnton	1990	83	Updated cost	Hydro	24,608
			City of Thompson	1990	1,056	Updated cost	Hydro	334,714
			Town of McCormick	2001	316	Benefits foregone (Section 322 of WRDA 86)	Hydro	66,499
			Savannah Valley Auth.	1989	92	Updated cost	Hydro	27,395
			Columbia County	1989	1,056	Updated cost	Hydro	313,048
			City of Lincolnton	1964	92	Original cost	Hydro	15,000
		Richard B Russell, GA & SC	SC Public Service Auth.	2001	491	Benefits Foregone	Hydro	1,615,243
			City of Elberton	1990	381	Updated cost	Hydro	419,658
	total	3 projects	12 agreements	(64-02)	30,773			6,744,279
SAM	Allatoona, GA	Cobb Co. - Marietta Water Auth.		1963	13,140	Original cost	Hydro	1,197,952
		City of Cartersville		1966	1,996	Original cost	Hydro	396,217
		City of Cartersville		1991	4,375	Updated cost	Hydro	1,518,094
		Carters, GA	City of Chatsworth	1991	818	Updated cost	Hydro	617,449
	total	2 projects	4 agreements	(63 - 91)	20,329			3,729,712
TOTAL		6 projects	20 agreements	(64-06)	72,217			15,280,508
LRD	LRH	Grayson Lake, KY	Rattlesnake Ridge	2000	2,508	Updated cost	Not Available	76,732
		John W. Flannagan Dam & Reservoir, VA	John Flannagan Water Auth	2004	3,360	Updated cost	Water Quality	162,983
		Summersville Lake, WV	City of Summersville	2001	468	Updated cost	Flood Pool	60,828
			3 agreements	(00-04)	6,336			300,543
	LRL	Carr Creek Lake, KY	Carr Creek Water Comm.	2006	2,052	Revenues Foregone	Not Available	305,563
		Cave Run Lake, KY	Cave Run Water Comm.	2003	538	Replacement Cost	Not Available	72,896
			City of West Liberty	1996	264	Replacement Cost	Not Available	30,360
		Green River Lake, KY	City of Campbellsville	1968	3,460	Revenues Foregone	Not Available	80,483
		Rough River Lake, KY	Hardinsburg	1978	150	Replacement Cost	Conservation	17,781
			Grayson County WD	2002	252	Replacement Cost	Conservation	34,934
	total	4 projects	6 agreements	(68-06)	6,716			542,017
	LRN	Center Hill Lake, TN	Cookeville	2003	6,680	Updated cost	Hydro	2,816,877
			Smithville	2003	401	Updated cost	Hydro	54,536
			Riverwatch Golf	2003	131	Benefits Foregone	Hydro	96,775
		Dale Hollow Lake, TN & KY	City of Byrdstown	2005	1,841	Benefits Foregone	Hydro	372,716
			Commonwealth of Kentucky	2005	368	Updated cost	Hydro	176,532
			Trooper Island	2004	2	Updated cost	Hydro	916
		J. Percy Priest Dam & Reservoir, TN	LaVergne	2003	2,733	Benefits Foregone	Hydro	1,818,550
			Murfreesboro	2003	5,084	Updated cost	Hydro	3,051,429
			Consolidated Utility	2003	3,007	Updated cost	Hydro	1,804,609
			Consolidated Utility	2003	1,367	Updated cost	Hydro	820,277
			YMCA of Middle TN	2003	22	Benefits Foregone	Hydro	16,638
			Cedar Crest Golf Ventures, LLD.	2004	96	Benefits Foregone	Hydro	75,951
			Town of Smyrna	2008	5,002	Updated cost	Hydro	2,350,000
		Laurel River Lake, KY	Laurel Co. Water Dist.	2005	519	Benefits Foregone	Hydro	166,847
	total	4 projects	14 agreements	(03-08)	27,253			13,622,653
	LRP	Mosquito Creek Lake, OH	City of Warren	1999	11,000	Updated cost	Not Available	224,500
	total	1 project	1 agreement	(99)	11,000			224,500
TOTAL		12 projects	24 agreements	(68 - 06)	51,305			14,689,713
MVD	MVK	Blakey Mt. Dam, Lake Ouachita	N. Garland County Reg. WD (1996)	1996	1,575	Benefits Foregone	Flood Pool	110,751
		Enid, MS	LSP Energy Limited	1998	4,500	Benefits Foregone	Conservation	1,111,898
	total	2 projects	2 agreements	(96 - 98)	6,075			1,222,649
TOTAL		2 projects	2 agreements	(96 - 98)	6,075			1,222,649
NWD	NWK	Harry S Truman Dam & Res., MO	Henry Co. PWSD #3	1994	172	Updated cost	Hydro	50,120
			HST PWSD #2	1997	111	Updated cost	Hydro	35,506
		Kanopolis, KS	Kansas Water Office	2002	12,500	Updated cost	Conservation	4,181,200
		Melvem Lake, KS	State of Kansas	1994	50,000	see footnote [1]	Water Quality	7,094,009
		Ponoma	State of Kansas	1995	14,324	see footnote [1]	Water Quality	1,555,242
			State of Kansas	1995	18,176	see footnote [1]	Water Quality	2,009,480
		Rathbun Lake, IA	Rathbun Regional Water Ass., Inc. (RRWA)	1986	3,340	Updated cost	Conservation	331,019
			RRWA	1989	3,340	Updated cost	Conservation	498,916
		Stockton, MO	City of Springfield	1993	50,000	Updated cost	Multipurpose	9,256,704
		Tuttle Creek Lake, KS	Kansas Water Office	1991	27,500	see footnote [1]	Water Quality	1,876,748
	total	7 projects	10 agreements	(86 - 02)	179,463			26,888,944
TOTAL		7 projects	10 agreements		179,463			26,888,944

MSC	District	Project	User	Date of Agreement	Total Storage Space (acre-feet)	Method used to determine cost of storage	Reallocation Source	Total Agreement Cost (\$)					
SWD	SWL	Beaver Lake, AR	Beaver Water District	2006	28,757	Special Auth at No C	Conservation	0					
			Carroll-Boone Water District	1977	9,000	Updated cost	Flood Pool	742,000					
			Carroll-Boone Water District	2006	2,396	Special Auth at No C	Conservation	0					
					Madison Co., Water District	1992	3,882	Updated cost	Flood Pool	482,991			
					Benton/Washington Co. WD	1996	8,113	Updated cost	Flood Pool	1,097,137			
					Blue Mountain Lake, AR	City of Danville	2005	1,550	Updated cost	Flood Pool	226,021		
					Bull Shoals Lake, AR	Marion Co. Water District	1988	880	Updated cost	Conservation	84,979		
					Greers Ferry Lake, AR	Tannebaum Golf Course	1998	90	Updated cost	Flood Pool	11,072		
						Clinton Water District	1970	900	Original cost	Flood Pool	81,000		
						Community Water System	1971	225	Original cost	Flood Pool	20,260		
						Community WS Phase 1	1995	3,776	Updated cost	Flood Pool	457,804		
						Community WS Phase 2	1998	4,283	Updated cost	Flood Pool	561,174		
						Thunderbird Golf Course	1998	55	Updated cost	Flood Pool	6,514		
						Red Apple Inn & Country Club	1996	66	Updated cost	Flood Pool	8,427		
						City of Clinton	2005	2,175	Updated cost	Flood Pool	277,423		
					Nimrod Lake, AR	City of Plainview	1973	33	Updated cost	Conservation	1,218		
						City of Plainview	1995	110	Updated cost	Conservation	21,967		
					Norfolk Lake, AR	City of Mountain Home	1969	800	Original cost	Conservation	65,467		
						Supplement	1971	1,600	Original cost	Conservation	130,933		
					total 6 projects	19 agreements	(70 - 06)	68,691			4,276,387		
			SWF		Waco, TX	Brazos River Auth.	1984	91,074	Updated cost	Not Available	5,793,449		
					total 1 projects	1 agreements	(84)	91,074			5,793,449		
			SWT		Council Grove Lake, KA	State of KS - Reallocation	1996	8,000	see footnote [1]	Water Quality	723,218		
						Denison Dam, L. Texoma, OK & TX	City of Denison, TX	1953	21,300	Original cost	Hydro	292,861	
								TX Power & Light	1961	16,400	Original cost	Hydro	286,353
								Red River Auth. of TX	1969	450	Original cost	Hydro	9,100
								Red River Auth. of TX	1983	2,054	Updated cost	Hydro	359,455
								N. Texas MWD	1985	84,099	Updated cost	Hydro	16,984,605
								Greater Texoma Utility Auth.	1992	5,500	Updated cost	Hydro	1,266,081
								Greater Texoma Utility Auth.	1979	5,500	Updated cost	Hydro	1,407,751
								Commissioner of the Land	2005	275	Updated cost	Hydro	87,696
		Greater Texoma Utility Auth.				2005	11,600	Updated cost	Hydro	3,727,060			
		Buncombe Creek View Ad				1992	1	Updated cost	Hydro	248			
		Elk City, KA				State of KS	1976	10,000	see footnote [1]	Water Quality	1,150,580		
		John Redmond, KA				State of KS	1996	10,000	see footnote [1]	Water Quality	832,485		
		Marion, KA				Kansas Water Office	1996	12,500	see footnote [1]	Water Quality	2,187,785		
		Tenkiller Ferry Lake, OK				East Central OK Water Auth.	1964	300	see footnote [2]	Flood Pool	17,700		
						Cherokee Co., RWD #13	2007	100	see footnote [2]	Flood Pool	2,020		
						Cherokee Co., RWD #2	1967	100	see footnote [2]	Flood Pool	2,020		
						Sequoyan Co. Water Association	1998	2,200	see footnote [2]	Flood Pool	44,400		
						Sequoyah Fules Corp.	1970	14,000	see footnote [2]	Flood Pool	282,500		
						Summit Water Inc.	1971	140	see footnote [2]	Flood Pool	4,330		
						Paradise Hills, Inc.	1974	220	see footnote [2]	Flood Pool	6,039		
						Lake Tenkiller Associates	1980	200	see footnote [2]	Flood Pool	8,722		
						L. Reg. Elec. Dev. Coop. Inc.	1989	38	Updated cost	Flood Pool	4,157		
						L. Reg. Elec. Dev. Coop. Inc.	1994	15	Updated cost	Flood Pool	2,166		
						L. Reg. Elec. Dev. Coop. Inc.	1991	34	Updated cost	Flood Pool	4,261		
						L. Reg. Elec. Dev. Coop. Inc.	1994	30	Updated cost	Flood Pool	4,350		
						Mongold Water System	1990	5	Updated cost	Flood Pool	1,167		
						Tenkiller Aqua Park	1990	17	Updated cost	Flood Pool	2,043		
						Gore Public Works Auth.	1990	480	Updated cost	Flood Pool	51,831		
						Pettit Bay Water Association	1991	5	Updated cost	Flood Pool	618		
						Fin and Feather Resort	1992	12	Updated cost	Flood Pool	1,630		
						Sixshooter Water System	1992	2	Updated cost	Flood Pool	256		
			Indian Hills Estates Company	1993	3	Updated cost	Flood Pool	402					
			Bill Richardson	1992	1	Updated cost	Flood Pool	132					
			Charles Willige	1996	2	Updated cost	Flood Pool	286					
			J.R. Mosteller	1993	2	Updated cost	Flood Pool	268					
			Burnt Cabin RWD Inc.	1994	12	Updated cost	Flood Pool	1,311					
			Sunny Heights Water System	1995	10	Updated cost	Flood Pool	1,372					
			Tenkiller Development Co.	1995	3	Updated cost	Flood Pool	417					
			RWD #13 Cherokee Co.	2004	132	Updated cost	Flood Pool	20,532					
			Stick Ross Mountain Water Co.	2005	584	Updated cost	Flood Pool	98,205					
			Tahlequah PWA	2005	4,300	Updated cost	Flood Pool	723,274					
			Billy Joe Stewart	1992	6	Updated cost	Flood Pool	775					
			RWD #2, Cherokee Co	2007	99	Updated cost	Flood Pool	19,123					
		Wister, OK	Poteau Valley Improvement Dist	1967	4,800	Original cost	Flood Pool	125,110					
			Poteau Valley Improvement Dist	1987	7,254	Updated cost	Flood Pool	1,963,800					
		total 6 projects	46 agreements	(53 - 07)	222,785			32,710,495					
TOTAL		14 projects	66 agreements	(53 - 07)	382,550			42,780,331					
NAT.		43 projects	124 agreements	(53 - 07)	722,570			151,615,145					
Footnotes	[1]	NWK & SWT, Costs developed under a MOU with the State of Kansas. Storage costs based on original construction or sunk costs of the reallocated water quality storage.											
	[2]	SWT, Costs based on revision to the 1969 cost allocation; flood control costs were reduced and assigned to water supply since storage was reassigned from the flood control pool.											

2009 Water Supply Database

Appendix D: Project Yield Potential

Project Yield Potential Based on Total WS Storage							
MSC	District	Project Name	Total Storage (AF)	Yield (MGD)	# Personal needs met	# Personal Household needs met	
NAD	NAE	Colebrook	50,200	116.30			
		East Brimfield	1,140	22.60			
		Littleville	9,400	17.50			
		total	60,740	156.40	130,333	2,317,037	
	NAP	Beltzville	27,880	42.00			
		Blue Marsh	8,000	15.40			
		total	35,880	57.40	47,833	850,370	
	NAB	Cowanesque Lake, PA	Curwensville Lake, PA	5,360	50.00		
			Jennings Randolph Lake, MD & WV	40,995	120.00		
			total	71,955	240.00	200,000	3,555,555
TOTAL			168,575	453.80	378,166	6,722,962	
SAD	SAW	B. Evertt Gordan	45,800	100.00			
		Falls Lake	45,000	66.70			
		John H. Kerr	21,115	8.33			
		W. Kerr Scott	33,000	44.98			
		total	144,915	220.01	183,342	3,259,407	
	SAS	Hartwell	26,574	37.80			
		J Strom Thurmond, GA & SC	3,833	12.15			
		Richard B Russell, GA & SC	872	15.86			
		total	31,279	65.81	54,842	974,963	
	SAM	Allatoona	19,511	51.25			
		Carters	818	2.00			
		Okatibee	13,100	25.00			
		total	33,429	78.25	65,208	1,159,259	
	TOTAL		209,623	364.07	303,392	5,393,629	
LRD	LRH	Alum Creek Lake, OH	79,200	106.67			
		Grayson Lake, KY	2,508	Not Avail.			
		John W. Flannagan Dam & Reservoir, VA	3,360	3.00			
		North Fork of Pound River Lake, VA	100	11.00			
		Paint Creek Lake, OH	1,040	1.50			
		Summersville Lake, WV	468	2.00			
		Tom Jenkins Dam, OH	5,690	Not Avail.			
		total	92,366	124.17	103,475	1,839,556	
		LRL	Barren River Lake, KY	1,050	18.00		
			Brookville Lake, IN	89,300	82.50		
	Caesar Creek Lake, OH		39,100	37.00			
	Carr Creek Lake,		2,052	2.00			
	Cave Run Lake, KY		802	3.00			
	Green River Lake, KY		4,315	7.50			
	Monroe Lake, IN		160,000	130.00			
	Nolin Lake, KY		98	1.00			
	Patoka Lake, IN		129,800	75.00			
	Rough River Lake, KY		522	4.10			
	William H. Harsha Lake, OH	35,534	37.00				
	total	462,573	397.10	330,917	5,882,963		
LRN	Center Hill Lake, TN	7,212	21.60				
	Dale Hollow Lake, TN & KY	2,211	2.10				
	J. Percy Priest Dam & Reservoir, TN	17,311	63.33				
	Laurel River Lake, KY	519	2.25				
	total	27,253	89.28	74,400	1,322,667		
LRP	Berlin, OH	19,400	34.00				

2009 Water Supply Database

Appendix D: Project Yield Potential

MSC	District	Project Name	Total Storage (AF)	Yield (MGD)	# Personal needs met	# Personal Household needs met
		Mosquito Creek Lake, OH	11,000	16.00		
		Stonewall Jackson Lake, WV	2,200	1.90		
		Tygart, WV	2,240	1.90		
		Youghiogheny Lake, PA	0	0.00		
	total		34,840	53.80	59,000	1,048,889
Total			617,032	664.35	567,792	10,094,075
MVD	MVS	Carlyle Lake, IL	32,692	24.50		
		Clarence Cannon Dam & Mark Twain Lake., MO	20,000	16.00		
		Lake Shelbyville, IL	24,714	17.00		
		Rend Lake, IL	109,000	70.00		
	total		186,406	127.50	107,917	1,918,519
	MVR	Saylorville	14,900	48.47		
	total		14,900	48.47	40,392	718,074
	MVK	DeGray	238,729	152.00		
		Enid	4,500	10.90		
		Blakey Mt, Dam, Lake Ouachita	1,575	1.00		
	total		244,804	163.90	136,583	2,428,148
Total			446,110	339.87	284,892	5,064,741
NWD	NWK	Clinton Lake, KS	89,200	17.30		
		Harry S Truman Dam & Res., MO	283	0.67		
		Hillsdale Lake, KS	53,000	15.20		
		Kanopolis Lake, KS	12,925	13.32		
		Long Branch Lake, MO	24,400	35.19		
		Melvern Lake, KS	50,000	7.20		
		Milford Lake, KS	300,000	111.00		
		Perry Lake, KS	151,100	74.60		
		Pomona Lake, KS	33,000	7.40		
		Rathbrn Lake, IA	6,680	2.04		
		Smithville Lake, MO	95,200	28.80		
		Stockton Lake, MO	50,000	30.00		
		Tuttle Creek Lake, KS	50,000	57.83		
	total		915,788	400.55	333,792	5,934,074
	Omaha	Browman Haley	15,500	1.90		
		Garrison	54,390	15.16		
	total		69,890	17.06	14,217	252,741
	NWP	Lost Creek, OR	10,000	8.93		
	total		10,000	8.93	7,442	132,296
	NWS	Howard Hanson, WA	22,400	Not Avail.		
	total		22,400	Not Avail.	Not Avail.	Not Avail.
Total			1,018,078	426.54	355,451	6,319,111
SPD	SPN	Dry Creek Warm Springs dam / Lake Sonoma, CA	212,000	189.30		
		Coyote Valley dam / Lake Mendocino, CA	111,000	99.11		
	total		323,000	288.41	240,342	4,272,741
Total			323,000	288.41	240,342	4,272,741

2009 Water Supply Database

Appendix D: Project Yield Potential

MSC	District	Project Name	Total Storage (AF)	Yield (MGD)	# Personal needs met	# Personal Household needs met
SWD	SWL	Beaver Lake, AR	160,148	132.50		
		Blue Mountain Lake, AR	1,550	2.00		
		Bull Shoals Lake, AR	880	1.00		
		DeQueen Lake, AR	17,885	22.00		
		Dierks Lake, AR	10,100	13.25		
		Gillham Lake, AR	20,600	42.00		
		Greers Ferry Lake, AR	12,578	3.00		
		Millwood Lake, AR	150,000	265.00		
		Nimrod Lake, AR	143	0.33		
		Norfolk Lake, AR	2,400	3.00		
	total		376,284	484.08	397,800	7,072,000
	SWF	Aquilla Lake, TX	33,600	9.67		
		Bardwell Lake, TX	42,800	11.2		
		Belton Lake, TX	360,700	104.7		
		Benbrook Lake, TX	86,884	7.79		
		Canyon Lake, TX	366,400	89.94		
		Cooper Dam & Jim Chapman Lake, TX	273,000	109		
		Ferrells Bridge Dam, Lake O'The Pines, TX	250,000	154.99		
		Granger Dam & Lake, TX	37,900	16.2		
		Grapevine Lake, TX	136,250	17.46		
		Joe Pool Lake, TX	142,900	14.2		
		Lavon Lake, TX	380,000	43.95		
		Lewisville Dam, TX	436,000	106.6		
		Navarro Mills Lake, TX	53,200	15.51		
		N. San Gabriel D&L (Georgetown), TX	29,200	10.34		
		O C Fisher Dam & Lake, TX	78,793	3.62		
		Proctor Lake, TX	31,400	13.9		
		Ray Roberts Lake, TX	799,600	112.46		
		Sam Rayburn Dam & Reservoir, TX	1,489,200	35.74		
		Somerville Lake, TX	143,900	36.19		
		Stillhouse Hollow Dam, TX	204,900	63.19		
Waco Lake, TX	151,626	94.9				
Whitney Lake, TX	50,000	17.64				
Wright Patman Dam & Lake, TX	300,583	13.00				
	total		5,878,836	1,102.19	933,402	16,587,407
	SWT	Arcadia Lake	23,090	11.00		
		Birch Lake	7,630	3.00		
		Broken Bow Lake	152,440	175.00		
		Canton Lake	90,000	4.60		
		Copan Lake	5,000	3.00		
		Council Grove Lake	32,400	6.70		
		Denison Dam - Lake Texoma	147,179	140.90		
		El Dorado Lake	142,800	22.20		
		Elk City Lake	34,300	12.20		
		Eufaula Lake	55,720	50.00		
		Heyburn Lake	2,000	1.70		
		Hugo Lake	47,600	58.10		
		Hulah Lake	19,800	12.40		
		John Redmond Dam and Reservoir	44,900	56.20		
		Kaw Lake	171,206	167.00		
		Keystone Lake	20,000	20.00		
		Marion Lake	50,800	9.70		
		Oologah Lake	342,600	154.00		

MSC	District	Project Name	Total Storage (AF)	Yield (MGD)	# Personal needs met	# Personal Household needs met
		Pat Mayse Lake	109,600	55.00		
		Pearson-Skubitz - Big Hill Lake	25,700	8.50		
		Pine Creek Lake	28,800	84.00		
		Sardis Lake	297,200	140.00		
		Skiatook Lake	62,900	14.00		
		Tenkiller Ferry Lake	25,472	26.63		
		Toronto Lake	400	0.10		
		Waurika Lake	151,400	36.20		
		Wister Lake	13,819	29.03		
	total		2,104,756	1,301.16	1,084,300	19,276,444
Total			8,359,876	2,887.43	2,415,142	42,935,851
Grand Total			11,142,294	5,424.47	4,545,177	80,803,110



Institute for Water Resources

The Institute for Water Resources (IWR) is a Corps of Engineers Field Operating Activity located within the Washington DC National Capital Region (NCR), in Alexandria, Virginia and with satellite centers in New Orleans, LA and Davis, CA. IWR was created in 1969 to analyze and anticipate changing water resources management conditions, and to develop planning methods and analytical tools to address economic, social, institutional, and environmental needs in water resources planning and policy. Since its inception, IWR has been a leader in the development of strategies and tools for planning and executing the Corps water resources planning and water management programs.

IWR strives to improve the performance of the Corps water resources program by examining water resources problems and offering practical solutions through a wide variety of technology transfer mechanisms. In addition to hosting and leading Corps participation in national forums, these include the production of white papers, reports, workshops, training courses, guidance and manuals of practice; the development of new planning, socio-economic, and risk-based decision-support methodologies, improved hydrologic engineering methods and software tools; and the management of national waterborne commerce statistics and other Civil Works information systems. IWR serves as the Corps expertise center for integrated water resources planning and management; hydrologic engineering; collaborative planning and environmental conflict resolution; and waterborne commerce data and marine transportation systems.

The Institute's Hydrologic Engineering Center (HEC), located in Davis, CA specializes in the development, documentation, training, and application of hydrologic engineering and hydrologic models. IWR's Navigation Data Center (NDC) and its Waterborne Commerce Statistical Center (WCSC) in New Orleans, LA, is the Corps data collection organization for waterborne commerce, vessel characteristics, port facilities, dredging information, and information on navigation locks.

Other enterprise centers at the Institute's NCR office include the International Center for Integrated Water Resources Management (ICIWaRM), which is a distributed, intergovernmental center, established in partnership with various Universities and non-Government organizations; and a Collaborative Planning Center which includes a focus on both the processes associated with conflict resolution, and the integration of public participation techniques with decision support and technical modeling – Computer Assisted Dispute Resolution (CADRe). The Institute plays a prominent role within a number of the Corps technical Communities of Practice (CoP), including the Economics CoP. The Corps Chief Economist is resident at the Institute, along with a critical mass of economists, sociologists and geographers specializing in water and natural resources investment decision support analysis and multi-criteria tradeoff techniques.

The U.S. Army Corps of Engineers Water Supply program has periodically produced the Water Supply Database. This document revises a 2006 report. Future reports are anticipated to be published yearly. For further information on the U.S. Army Corps of Engineers M&I Water Supply Database please contact Mr. Ted Hillyer at 703-428-6140 or via e-mail at: Theodore.M.Hillyer@usace.army.mil

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