



**Water Marketing Program
2011
Capital Development
&
Storage Maintenance Plan**



**Approved by the Kansas Water Authority
May 19, 2011**

EXECUTIVE SUMMARY

The purpose of this *Capital Development and Storage Maintenance Plan* is to provide for long-term planning of future program needs related to acquisition of all the water supply storage under federal contracts, potential new storage development and protection and restoration of the storage owned by the State.

The 2011 *Water Marketing Program Capital Development and Storage Maintenance Plan* continues the basic schedule of calling future use storage into service in Clinton and Hillsdale reservoirs approved by the Kansas Water Authority in June 2006 as follows:

- Clinton Reservoir in one increment of 8,900 AF in 2020 and one of 26,780 AF in 2027.
- Hillsdale Reservoir in one increment of 3,533 AF in 2014, one of 3,533 AF in 2020, one of 3,534 AF in 2025 and a final increment of 29,150 AF in 2030.

This schedule and the financial modifications of the Program discussed in this Plan result in a Depreciation Reserve component of the variable rate for Water Marketing for calendar year 2012 of \$0.22665.

This Plan does not make recommendations for addressing remaining future use storage in Big Hill, Milford and Perry reservoirs, nor does it include recommendations for funding of storage maintenance and restoration.

INTRODUCTION

The Water Marketing Program provides water supply to industrial and municipal customers through long-term contracts. These contracts are for water delivered from storage space owned by the state in the federal reservoirs developed by the Corps of Engineers. Kansas has contracts with the U.S. Army Corps of Engineers for purchase of water supply storage in thirteen (13) reservoirs; eleven of those have storage currently committed to, and being paid for by, the customers of the Water Marketing Program.

The purpose of the Water Marketing rate as established in 1983, and continuing today, is to insure that the revenue into the program is adequate to meet the expected expenses of the program. Those expenses include annual payments for principal and interest on storage under federal contract, operation and maintenance cost for that storage and the state's administration and enforcement cost associated with operating the program.

The *Capital Development and Storage Maintenance Plan* was established as a way to determine the appropriate level of the Depreciation Reserve component of the variable rate under the Water Marketing Program. This rate component was redefined in legislation passed in 2005. This change was made to ensure the program would have an adequate cash flow in the face of increased expenses and the expectation of the need to call additional storage into service, particularly at Clinton and Hillsdale reservoirs.

WATER MARKETING PROGRAM EXPENSES

Projected Water Marketing Program Expenses (Table 1)

Table 1 summarizes the expenses of the Water Marketing Program which include principal and interest payments and operation and maintenance costs which are paid to the Corps of Engineers annually. The administration and enforcement costs to the Program are those incurred by the Kansas Water Office (KWO) and the Division of Water Resources, Department of Agriculture.

Principal and Interest to Corps

The Water Marketing Program is operated to fully pay the capital costs of the water supply storage assigned to the Program. The contracts with the federal government typically give the state 50 years to pay the cost associated with the purchase of all of the contracted storage. In five reservoirs, (Big Hill, Clinton, Hillsdale, Milford and Perry) the state is able to delay payment until storage space is needed. When storage is needed, it is called into service, and the state begins payment on principal and interest and operation and maintenance.

This *Water Marketing Program Capital Development and Storage Maintenance Plan* contains the schedule adopted by the Kansas Water Authority in 2006 to call additional storage into service in Hillsdale and Clinton reservoirs. This schedule is based on the projected needs of contract holders, as well as cost considerations.

Schedule of Calls into Service Based in Clinton and Hillsdale

Calendar Year	CLINTON RESERVOIR			HILLSDALE RESERVOIR		
	AF Increment	Total AF in Service	% in Service	AF Increment	Total AF in Service	% in Service
2010		53,520	60.00		13,250	25.00
2014				3,533	16,783	31.67
2020	8,900	62,420	70.00	3,533	20,316	38.33
2025				3,534	23,850	45.00
2027	26,780	89,200	100.00			
2030				29,150	53,000	100.00

The rate is set using the total principal and interest costs due to the COE in 2012 from the amortization schedules for the storage that is currently in service. Increases appear in 2014, 2020 and 2025 due to calling increments of storage space into service in Clinton and Hillsdale reservoirs. This schedule leaves significant calls until the end of the contract period for both reservoirs, leaving a significant balloon payment in 2027 for Clinton and 2030 for Hillsdale.

Principle and interest costs by reservoir are shown in the table at the end of this document.

Operation and Maintenance

The Water Marketing Program pays the annual operation, maintenance and repair costs incurred by the Corps of Engineers for that portion of the storage space assigned to the Program. These costs vary from year to year and from reservoir to reservoir.

The rate for 2012 is based on work the Corps completed in 2010. The Corps provides the estimate prior to the rate determination; actual billings have been very close to the estimates.

Actual costs in Table 1 for 2011 and 2012 for operation and maintenance include projects funded with money from the American Recovery and Reinvestment Act (ARRA) that the Kansas City District of the U.S. Army Corps of Engineers completed during Federal Fiscal Year 2009 and 2010. The table includes an estimate of the remaining ARRA projects anticipated to be completed during 2011 and 2012 and are reflected in the projected rate for 2013 and 2014. Table 1 also includes an estimated increase in the operation and maintenance costs for the proposed quantities of storage to be called into service in Clinton and Hillsdale reservoirs.

Operation and maintenance costs by reservoir are shown in the table at the end of this document.

Administration and Enforcement

The Water Marketing Program pays for administration and enforcement costs which are the actual costs to the state to operate and administer the Program. Administration and enforcement costs increased in 2009 due to salaries and wages for three additional employees being shifted from the State General Fund to the Water Marketing Fund. The 2012 cost includes an increase in KWO operating expenses from fifteen to thirty percent beginning in state fiscal year 2012 (beginning July, 2011).

WATER MARKETING PROGRAM REVENUE

Revenue for the Program comes from water sales, reimbursement for administration expenses from the water assurance program and occasional use of funds from specific use accounts.

Projected Annual Water Marketing Program Water Use (Table 2)

Projected annual revenue is dependent upon the quantity of water projected to be billed to water marketing customers into the future. The estimated billable quantities are based on water paid for historically by each customer projected into the future using a linear equation. The increase in the variable rate quantities and the decrease in capped rate quantities in 2018 are based on the assumption that when the term of the capped rate contracts end, the contracts will be renewed as variable rate contracts with the same quantity as the capped contracts.

Revenue from Capped Contract Water Sales (Table 3)

Initial Water Marketing Program legislation (1974) established a maximum rate for a contract at \$0.10 per 1,000 gallons. All contracts prior to March 17, 1983 are capped at the \$0.10 per 1,000 gallon rate. Projected (2011 - 2023) annual revenue from the capped contracts is based on the estimated billable quantity in Table 2 multiplied by the \$0.10/1,000 gallon rate.

Revenue from Administration and Enforcement (Table 3)

The Water Marketing Program directly pays the expenses associated with salary and operation of the Marketing and Assurance programs. The Water Marketing Program is reimbursed for administration and enforcement costs by the Water Assurance Program, which is included as “Assurance A&E Reimbursement” in Table 3.

DEFICIT IN PROGRAM FUNDING NEEDS: MODIFICATIONS OF BASIC EXPENSES AND REVENUE

The difference between the projected program expenses and the capped revenue is the unmet revenue need of the program shown as “Deficit in Program Funding Needs” in Table 3. Modifications of that deficit are discussed and shown in Table 4.

Specific Use Accounts (Table 4)

Conservation Storage Fund Deposits

The State Conservation Storage Water Supply Fund was established as a savings fund for acquisition, development or maintenance of state owned public water supply storage. This Fund is utilized to collect for the calls into service in Hillsdale and Clinton. Expenditure from the Fund was used in setting the 2011 rate, with \$150,000 of the State Conservation Storage Water Supply Fund being used to pay a portion of the costs associated with the 2009 increment service call for Hillsdale in 2011.

Because there is a current balance in the Conservation Storage Water Supply Fund that is sufficient to make the 2014 incremental payment for Hillsdale, the 2012 rate has been set with no collection for the Fund. Collections will need to resume in 2014 for the next increments of Clinton and Hillsdale to be called into service in 2020.

Operation and Maintenance Set-Aside Account

In 1991, an Operation and Maintenance (O & M) Set-Aside Account within the Water Marketing Fund was established. It enables the Program to pay for any unusually high O & M expenses without causing abnormally high spikes in the rate. Up to 1 cent per 1,000 gallons of revenue from purchasers may be credited to this account if there is any remaining revenue after expenses are met. No deposits to or expenditures from this account are used in the 2012 rate setting.

Operational Reserve

The Capital Development Plan starting in 2011 shows an operational reserve. The Water Marketing Program operates on a cash basis. Each calendar year, major revenues are received in January and February and major expenditures occur in September and October. The monthly cash flow is an important operational consideration. An operational reserve accommodates the uncertainty of projecting water sale revenue. Table 4 shows a current balance of \$160,000. The 2012 rate is set anticipating a \$150,000 “deposit” to increase the operating reserve. It is the desire of the program to operate with a reserve of ~\$500,000, an approximate 25% operating reserve.

Variable Rate (Table 5)

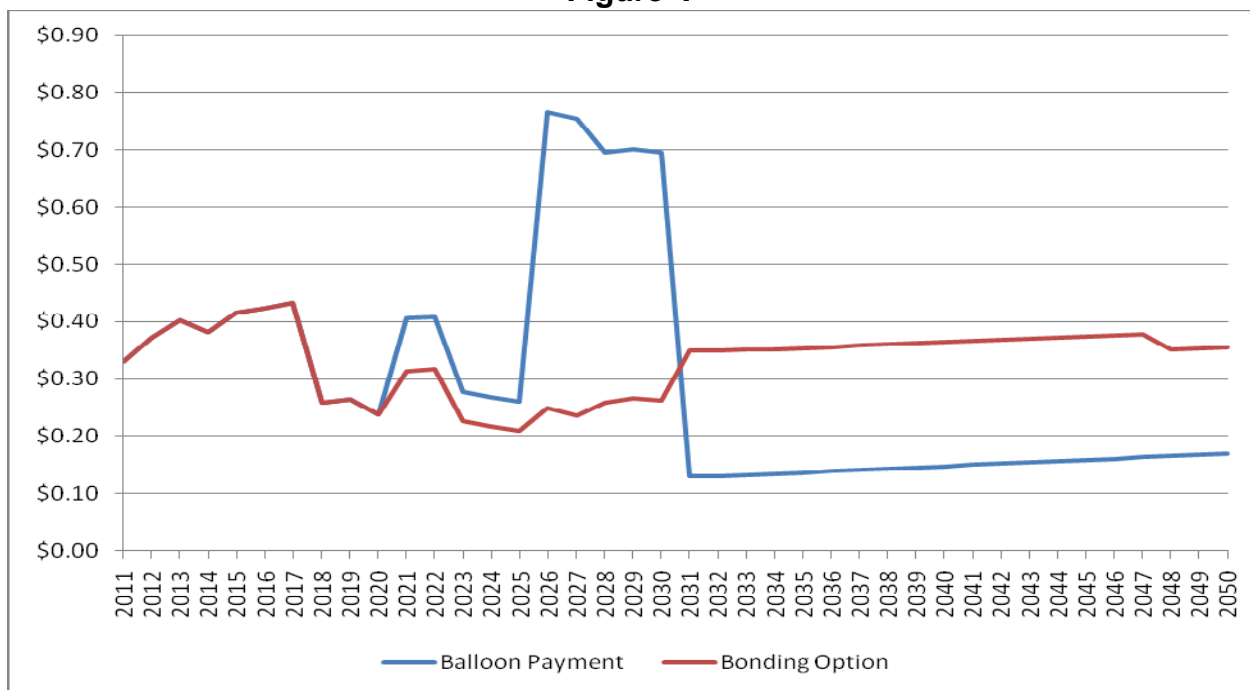
This table shows the net unfunded program expenses after adjustments shown in Table 4. This is the amount of revenue that has to be collected from the variable rate customers to meet Program expenses. Dividing the unfunded expenses by the billable quantity of water for variable rate customers shown in Table 2, results in the variable rate shown in Table 5. The table includes the actual rate for 2011, the proposed rate for 2012 and the estimated rates for 2013 – 2050. Specific components of the variable rate are shown in the table at the end of this document; the calculation of those components as required under K.S.A. 82a-1308a and K.A.R 98-5-5 are included in the Appendix.

FUTURE PROGRAM ISSUES

Issuance of Revenue Bonds

This Plan establishes a schedule of calls into service at Clinton and Hillsdale reservoirs. The principal and interest payments associated with those calls are included in Table 1. The schedule leaves significant increments, hence significant ending payments, of \$7,679,985.91 for Clinton Reservoir and \$51,037,921.44 for Hillsdale Reservoir. Collection of revenue for these final calls causes a significant temporary spike in the rate. Issuing revenue bonds at that time and collecting on them over the next 20 years lessens the impact of those final increment calls and provides a more stable rate for variable rate contract customers. (See Figure 1).

Figure 1



K.S.A. 82a-1361 authorizes the KWO to issue and sell revenue bonds to finance the cost of acquiring a reservoir site or sites, constructing, reconstructing, improving and expanding large reservoir projects, or to purchase water supply storage in existing reservoirs. The Kansas Development Finance Authority has recommended that the KWO update this statute. This will need to be pursued prior to the issuing of bonds in the future.

Alternate Schedules for Calling Storage into Service

The *Water Marketing Program Capital Development & Storage Maintenance Plan* approved by the KWA in 2006 established the basic schedule for calling the remaining storage in Clinton and Hillsdale reservoirs into service. There are other ways to call this storage into service with different financial implications on the water marketing customers. For example, if more future use storage in Hillsdale Reservoir is called into service earlier, the rate will not fluctuate as much as the current schedule (See Figure 2). These options will continue to be evaluated.

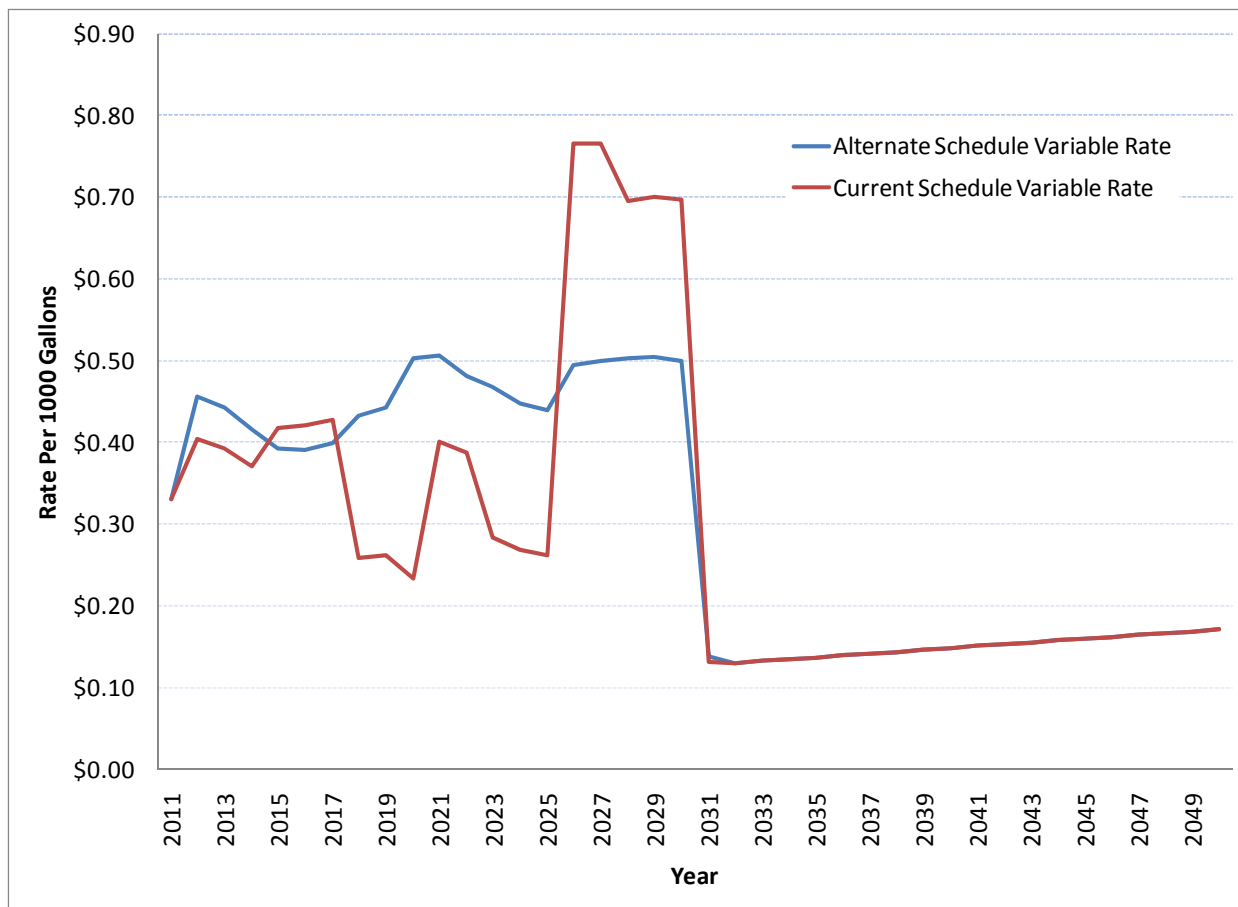


Figure 2. Water Marketing Program Variable Rate Comparison for Current and Alternate Schedules for Calling Storage into Service

Big Hill, Perry and Milford Reservoirs Future Use Storage - Unfunded Liability

As discussed above, the *Water Marketing Program Capital Development & Storage Maintenance Plan* includes a schedule to call all of the remaining future use storage in Clinton and Hillsdale reservoirs into service by the end of the contract term. This Plan makes no recommendation related to the future use storage in Big Hill, Milford and Perry reservoirs, since no marketing customers have been identified.

A portion of the unfunded liability for the Program will potentially be reduced by purchase of storage by the Kansas River Water Assurance District No. 1. The District has identified an interest in 60,400 acre-feet or 30.45% of Milford Reservoir and 15,000 acre-feet or 12% of Perry Reservoir. These amounts are referred to as set-aside storage and the state has agreed to not make any other commitments for that storage until 2020. At that time, the District will purchase the needed quantities in each reservoir and assume the operation and maintenance costs.

The Reservoir Sustainability Initiative adopted by the Kansas Water Authority (KWA) recommends that the state secure all available storage for the use of the citizens of the state. Bonding and other alternatives to secure all remaining future use storage are being evaluated to secure this storage in the future.

Kanopolis Reservoir

In 2002, the state of Kansas purchased 46 percent of the conservation pool in Kanopolis Reservoir for water supply purposes. The associated cost of this storage is currently contained in Table 1. The reallocation report that authorized that purchase indicated that the permanent pool could feasibly be raised by two feet, allowing another 7,500 acre-feet of storage to be made available to the state for water supply. No action on this additional pool raise was taken at that time. In 2010, the KWA approved moving forward with an effort to determine the remaining steps needed to reallocate 7,500 acre-feet of storage space from the flood pool to water supply. Future versions of this Plan may need to include the expected costs associated with this potential purchase.

Reservoir Restoration and Protection

Sediment deposition reduces the water supply yield from a reservoir. Efforts are underway to better understand the sources, transport and deposition of sediment in reservoirs through monitoring, research and assessment activities and consideration of enhanced management strategies. Activities are also underway to better operate the reservoirs to meet anticipated water supply needs. These efforts are part of a Reservoir Sustainability Initiative adopted by the KWA. A Reservoir Roadmap to implement securing, restoring and protecting reservoir storage was presented to the 2010 Legislature. The report identifies a projected financial need of almost \$4 billion over the next 40 years. Additional funding needs from the Water Marketing Program may be identified in future years to help finance these efforts.

APPENDIX
Variable Rate Component Calculations

Pursuant to K.S.A. 82a-1308a and K.A.R 98-5-5, the following calculations were used to determine each water marketing program variable rate component for 2012.

Amount for Repayment of Capital Costs

This component is computed by determining the total cost of in-service storage over the life of the contracts, minus the amount paid on that debt, and dividing by the projected amount of water to be paid for over the remainder of the state repayment period. The rate component went down from 2011 to 2012 primarily in response to an increase in the estimate of water paid for due to Jeffrey Energy Center’s increased water use in 2010.

<u>Formula</u>	<u>Calculation</u>
$A = \frac{P1-R}{T1}$	$\$0.07381 = \frac{\$62,841,789.48 - \$30,885,628.89}{432,933,387}$

A – The amount necessary to repay the amortized capital cost per 1,000 gallons for calendar year 2012 = \$0.07381.

P1 – Total anticipated cumulative principal and interest payments to the Corps of Engineers for the entire repayment period, calendar year 1974 through 2031 (the year when the last payment to the Corps of Engineers is due on storage currently in-service) = \$62,841,789.48. This includes the principal and interest associated with an additional 5,750 acre-feet of storage in Hillsdale Lake which was called into service in 2009.

R – Total cumulative revenues designated for deposit in the State General Fund for repayment of amortized capital costs through calendar year 2010 = \$30,885,628.89. This includes \$709,498.07 in Conservation Storage Development Fund receipts used to pay capital costs in 1990 and 1991; \$1,751,164.60 in capital costs repaid by the Kansas River Water Assurance District No. 1 for Milford and Perry storage over a ten-year period from 1991 to 2000; \$311,226.90 from the Cottonwood/Neosho River Basins Water Assurance District No. 3 for Marion and Council Grove storage; and \$830,779.06 in 2009 and \$72,299.81 in 2010 from the Marais des Cygnes River Water Assurance District No. 2 for the purchase of additional storage in Melvern and Pomona reservoirs.

T1 – Total projected water to be paid for (50% minimum or actual use under contract, whichever is greater) during the remainder of the state’s repayment period (calendar year 2010 through 2031) = 432,933,387 thousand gallons.

NOTE: Water to be sold over the remainder of the state repayment period is estimated by taking water paid for in the previous calendar year, 2010, for each customer and using a linear equation to project the use out to the end of the state’s repayment period for all reservoirs. The annual projected quantity from 2011 to 2031, the end of the repayment period, for each customer is then summed to determine a total quantity.

Amount of Interest on Advances from the State General Fund

This component is collected as interest on the net amount of money advanced from the State General Fund to pay the principal and interest payments associated with in-service storage in the early days of the Water Marketing Program. It is computed by totaling the cumulative principle and interest payments made to the Corps of Engineers through 2010 and subtracting the total revenue that has been paid back to the State General Fund.

<u>Formula</u>	<u>Calculation</u>
$B = \frac{(P2 - R) \times I}{T2}$	$\$0.00288 = \frac{(\$37,074,632.85 - \$30,885,628.89) \times 0.907\%}{19,471,206}$

B – The amount per 1,000 gallons for interest on the net monies advanced from the State General Fund for payment of principal and interest to the federal government = \$0.00228.

P2 – Cumulative principal and interest payments to the Corps of Engineers through calendar year 2010 = \$37,074,632.85.

R – Total cumulative revenue credited for principal and interest repayment through calendar year 2010 = \$30,885,628.89 (calculated as for “R” in capital cost rate component above).

I – Calendar year 2010 average Pooled Money Investment Board interest rate = 0.907%, down from 1.803% last year.

T2 – Total 1,000 gallons paid for by purchasers in calendar year 2010 (50% minimum or actual use by each purchaser, whichever is greater) = 19,471,206 thousand gallons.

NOTE: This component is computed making the assumption that the difference between what we have paid the Corps of Engineers for principle and interest and what we collected as revenue for principle and interest is what the program borrowed from the SGF.

Amount for Administration and Enforcement

This component is computed by dividing the total actual cost for Kansas Water Office and Division of Water Resources during 2010 by the total 1,000 gallons paid for by purchasers in 2010.

<u>Formula</u>	<u>Calculation</u>
$C = \frac{E}{T2}$	$\$0.02176 = \frac{\$423,633.59}{19,471,206}$

C – Costs per 1,000 gallons for calendar year 2010 for administration and enforcement charges of the Water Marketing and Appropriation Acts = \$0.02176.

E – Total actual costs of the Kansas Water Office and Division of Water Resources during the previous calendar year for administration and enforcement = \$423,633.59.

T2 – Total 1,000 gallons paid for by purchasers in calendar year 2010 (50% minimum or actual used by each purchaser, whichever is greater) = 19,471,206.

Amount for Repayment of Operation and Maintenance Costs

This component is computed by dividing the billed cost of operation and maintenance for 2012 (based on bills from the Corps of Engineers) divided by the 1,000 gallons of water paid for in 2010.

FormulaCalculation

$$D = \frac{O}{T2}$$

$$\$04658 = \frac{\$907,063.11}{19,471,206}$$

D – Amount necessary per 1,000 gallons to repay operation, maintenance, and repair costs associated with the conservation water supply capacity under the Water Marketing Program = \$0.04658.

O – Actual amount to be paid for operation, maintenance, and repair which is billed by the Corps in the upcoming calendar year for water marketing storage = \$907,063.11.

T2 – Total 1,000 gallons paid for by purchasers in calendar year 2010 (50% minimum or actual used by each purchaser, whichever is greater) = 19,471,206.

Amount for Depreciation Reserve

K.S.A. 82a-1308a(5) amended reads, “an amount as a depreciation reserve cost to be dedicated for the purposes provided for in K.S.A. 82a-1315b, as follows: (b) for calendar years 2007 and subsequent years, an amount which is equal to the amount necessary to meet the needs of the Water Marketing Program Capital Development and Storage Maintenance Plan as approved by the Kansas Water Authority.” As seen in the 2011 Plan, this component is \$0.22665 per 1,000 gallons to ensure that the program is able to meet expenses and have an adequate cash flow in 2012.

Component costs for the 2011 and 2012 Kansas Water Marketing Program are reported below.

	2011	2012
Amount of repayment of capital costs	\$0.07424	\$0.07381
Amount of interest on advances from the general fund	0.00757	0.00288
Amount for administration and enforcement	0.02461	0.02176
Amount for operation and maintenance	0.06194	0.04658
Amount for depreciation reserve	0.16212	0.22665
RATE	\$0.33048	\$0.37169

	2011	2012	2013	2014	2020	2025	2027	2030	2031	2050
--	------	------	------	------	------	------	------	------	------	------

Table 1. Projected Water Marketing Program Expenses

Principal and Interest to Corps	\$1,421,874	\$1,421,874	\$1,421,874	\$1,703,982	\$2,462,656	\$3,053,201	\$10,423,701	\$51,492,920	\$234,392	\$0
Operation & Maintenance to Corps	\$962,514	\$907,063	\$1,046,248	\$1,078,236	\$1,117,116	\$1,265,725	\$1,327,351	\$1,479,614	\$1,502,332	\$2,120,082
Administration & Enforcement	\$413,027	\$520,797	\$538,468	\$575,138	\$795,160	\$978,512	\$1,051,852	\$1,161,864	\$1,198,534	\$1,895,271
Total Projected Expenses	\$2,797,415	\$2,849,734	\$3,006,589	\$3,357,355	\$4,374,932	\$5,297,437	\$12,802,905	\$54,134,397	\$2,935,258	\$4,015,352

Table 2. Projected Annual Water Marketing Program Water Use

Capped Contracts Billable Quantity (1000 GPY)	15,351,194	16,171,751	16,197,507	16,223,263	9,259,193	-	-	-	-	-
Variable Contracts Billable Quantity (1000 GPY)	3,396,384	3,509,595	3,614,033	3,995,053	11,310,819	20,926,607	21,032,659	21,136,905	21,178,915	21,648,456
Total Billable Quantity (1000 GPY)	18,747,578	19,681,346	19,811,540	20,218,316	20,570,012	20,926,607	21,032,659	21,136,905	21,178,915	21,648,456

Table 3. Revenue

Capped Contract Revenue	\$1,535,119	\$1,617,175	\$1,619,751	\$1,622,326	\$925,919	\$-	\$-	\$-	\$-	\$-
Assurance A&E Reimbursement	\$75,082	\$78,085	\$81,209	\$84,457	\$106,865	\$130,018	\$140,627	\$158,186	\$164,514	\$346,606
Sub-Total Revenue	\$1,610,201	\$1,695,260	\$1,700,959	\$1,706,783	\$1,032,784	\$130,018	\$140,627	\$158,186	\$164,514	\$346,606
Deficit in Program Funding Needs	\$1,187,213	\$1,154,474	\$1,305,630	1,650,572	\$3,342,148	\$5,167,419	\$12,662,278	\$53,976,211	\$2,770,744	\$3,668,746

Table 4. Specific Use Accounts

Conservation Storage Fund Deposits (Clinton)	\$30,844	\$0	\$0	\$35,864	\$35,864	\$1,060,019	\$1,060,019	\$0	\$0	\$0
Conservation Storage Fund Deposits (Hillsdale)	\$54,365	\$0	\$0	\$69,571	\$69,571	\$186,514	\$9,813,853	\$9,813,853		
Total Conservation Storage Fund Deposits	\$85,209	\$0	\$0	\$105,435	\$105,435	\$1,246,533	\$10,873,871	\$9,813,853	\$0	\$0
Conservation Storage Fund Expenditures	\$150,000			\$282,107	\$758,674	\$969,985	\$7,679,986	\$49,069,263		
Conservation Development Fund Balance	\$303,086	\$303,086	\$303,086	\$126,414	\$353	\$5,263,033	\$19,330,790	\$(296,915)	\$(296,915)	\$(296,915)
O&M Set-Aside Account Deposits	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
O&M Set-Aside Account Expenditures	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
O&M Set-Aside Account Balance	\$73,030	\$73,030	\$73,030	\$73,030	\$73,030	\$73,030	\$73,030	\$73,030	\$73,030	\$73,030
Operational Deposits		\$150,000	\$150,000	\$50,000						
Operational Reserve	\$160,000	\$310,000	\$460,000	\$510,000	\$510,000	\$510,000	\$510,000	\$510,000	\$510,000	\$510,000

Table 5. Variable Rate

Net Unfunded Program Expenses	\$1,122,422	\$1,304,474	\$1,455,630	\$1,523,900	\$2,688,909	\$5,443,967	\$15,856,163	\$14,720,801	\$2,770,744	\$3,668,746
Variable Rate	\$0.33048	\$0.37169	\$0.40277	\$0.38145	\$0.23773	\$0.26015	\$0.75388	\$0.69645	\$0.13083	\$0.16947

Projected Annual Principal and Interest Payments Made from Water Marketing Program

Reservoir	2011	2012	2013	2014	2020	2027	2030	2031	Payoff Year (CY)
Big Hill	\$119,390	\$119,390	\$119,390	\$119,390	\$119,390	\$119,390	\$0	\$0	2029
Clinton	\$168,754	\$168,754	\$168,754	\$168,754	\$450,649	\$7,880,654	\$0	\$0	2027
Council Grove	\$38,936	\$38,936	\$38,936	\$38,936	\$38,936	\$0	\$0	\$0	2024
Elk City	\$77,272	\$77,272	\$77,272	\$77,272	\$77,272	\$0	\$0	\$0	2029
Hillsdale	\$497,809	\$497,809	\$497,809	\$779,916	\$1,256,695	\$2,189,265	\$51,258,528	\$0	2030
John Redmond	\$157,580	\$157,580	\$157,580	\$157,580	\$157,580	\$0	\$0	\$0	2023
Kanopolis	\$234,392	\$234,392	\$234,392	\$234,392	\$234,392	\$234,392	\$234,392	\$234,392	2031
Marion	\$59,504	\$59,504	\$59,504	\$59,504	\$59,504	\$0	\$0	\$0	2026
Melvorn	\$68,237	\$68,237	\$68,237	\$68,237	\$68,237	\$0	\$0	\$0	2026
Total Annual Payment	\$1,421,874	\$1,421,874	\$1,421,874	\$1,703,982	\$2,462,656	\$10,423,701	\$51,492,920	\$234,392	

Projected Annual Operation and Maintenance by Reservoir

Reservoir	2011	2012	2013	2014	2020	2027	2030	2031	2041
Big Hill	\$ 57,827.34	\$ 80,749.54	\$ 76,537.93	\$ 77,899.51	\$ 86,069.00	\$ 95,600.06	\$ 99,684.81	\$ 101,046.39	\$ 114,662.20
Clinton	\$ 136,057.43	\$ 156,857.00	\$ 139,007.27	\$ 130,318.68	\$ 147,757.11	\$ 196,062.91	\$ 294,701.95	\$ 299,545.96	\$ 347,986.06
Council Grove	\$ 148,080.17	\$ 109,080.42	\$ 176,591.13	\$ 145,781.18	\$ 161,419.38	\$ 179,663.95	\$ 187,483.05	\$ 190,089.41	\$ 216,153.08
Elk City	\$ 43,911.91	\$ 13,739.16	\$ 42,704.90	\$ 15,074.18	\$ 15,812.67	\$ 16,674.24	\$ 17,043.49	\$ 17,166.57	\$ 18,397.39
Hillsdale	\$ 45,752.31	\$ 90,736.12	\$ 69,367.14	\$ 65,856.49	\$ 87,382.13	\$ 130,747.07	\$ 133,557.61	\$ 134,494.46	\$ 319,656.38
John Redmond	\$ 427,802.49	\$ 233,861.33	\$ 323,739.75	\$ 431,052.66	\$ 362,962.30	\$ 402,184.85	\$ 418,994.52	\$ 424,597.74	\$ 480,629.95
Kanopolis	\$ 26,585.93	\$ 71,536.00	\$ 53,130.34	\$ 52,364.71	\$ 75,532.92	\$ 102,562.50	\$ 114,146.61	\$ 118,007.97	\$ 156,621.66
Marion	\$ 45,219.28	\$ 49,368.17	\$ 72,667.22	\$ 74,447.52	\$ 85,129.28	\$ 97,591.33	\$ 102,932.21	\$ 104,712.50	\$ 122,515.43
Melvorn	\$ 38,821.36	\$ 56,691.97	\$ 46,003.49	\$ 42,441.77	\$ 47,476.62	\$ 53,350.62	\$ 55,868.05	\$ 56,707.19	\$ 65,098.62
Milford	\$ 31,251.97	\$ 42,285.00	\$ 44,074.94	\$ 40,552.65	\$ 44,991.62	\$ 50,170.42	\$ 52,389.91	\$ 53,129.74	\$ 60,528.03
Pomona	\$ -	\$ 2,458.40	\$ 2,423.47	\$ 2,446.29	\$ 2,583.26	\$ 2,743.06	\$ 2,811.55	\$ 2,834.38	\$ 3,062.66
Total Annual Payment	\$1,001,310.19	\$907,063.11	\$1,046,247.57	\$1,078,235.64	\$1,117,116.29	\$ 1,327,351.02	\$ 1,479,613.74	\$ 1,502,332.31	\$ 1,905,311.46

Rate Components (Capital Development Plan)

Principal and Interest	\$0.07424	\$0.07381	\$0.06969	\$0.08106	\$0.10726	\$0.14307	\$0.14318	\$0.14318	\$0.00000
Interest on SGF	\$0.00757	\$0.00288	\$0.00304	\$0.00451	\$0.01194	\$0.01336	\$0.01000	\$0.00844	\$0.00000
Operation and Maintenance	\$0.06194	\$0.04658	\$0.05351	\$0.05478	\$0.05427	\$0.06343	\$0.07023	\$0.07119	\$0.08870
Administration and Enforcement	\$0.02461	\$0.02176	\$0.02282	\$0.02646	\$0.03506	\$0.04676	\$0.05167	\$0.05332	\$0.06945
Depreciation Reserve	\$0.16212	\$0.22665	\$0.25371	\$0.21463	\$0.02919	\$0.48726	\$0.42136	\$0.00000	\$0.00000
Total Annual Rate	\$0.33048	\$0.37169	\$0.40277	\$0.38145	\$0.23773	\$0.75388	\$0.69645	\$0.27613	\$0.15816