

KANSAS PROJECTS, PROGRAMS & FUNDING

WESTERN WATER RESOURCES
INFRASTRUCTURE NEEDS & STRATEGIES

WGA/WSWC
PHOENIX, AZ
NOVEMBER 15, 2012

Tracy Streeter, Director
Kansas Water Office



Kansas Options for Water Infrastructure

- SRF's for Clean Water and Drinking Water
- Water Marketing and Water Assurance Programs
- State Water Plan Fund
- Gaming Revenue???



State Revolving Fund Programs in Kansas

- Over \$1.5B in loans have been executed to date
 - \$1B in Clean Water Loans
 - \$500M in Drinking Water loans
- Current new loan capacity is \$170M
 - \$70M for Drinking Water Projects
 - \$100M for Waste Water Projects
- 65% of funds used for loans have come from bond proceeds

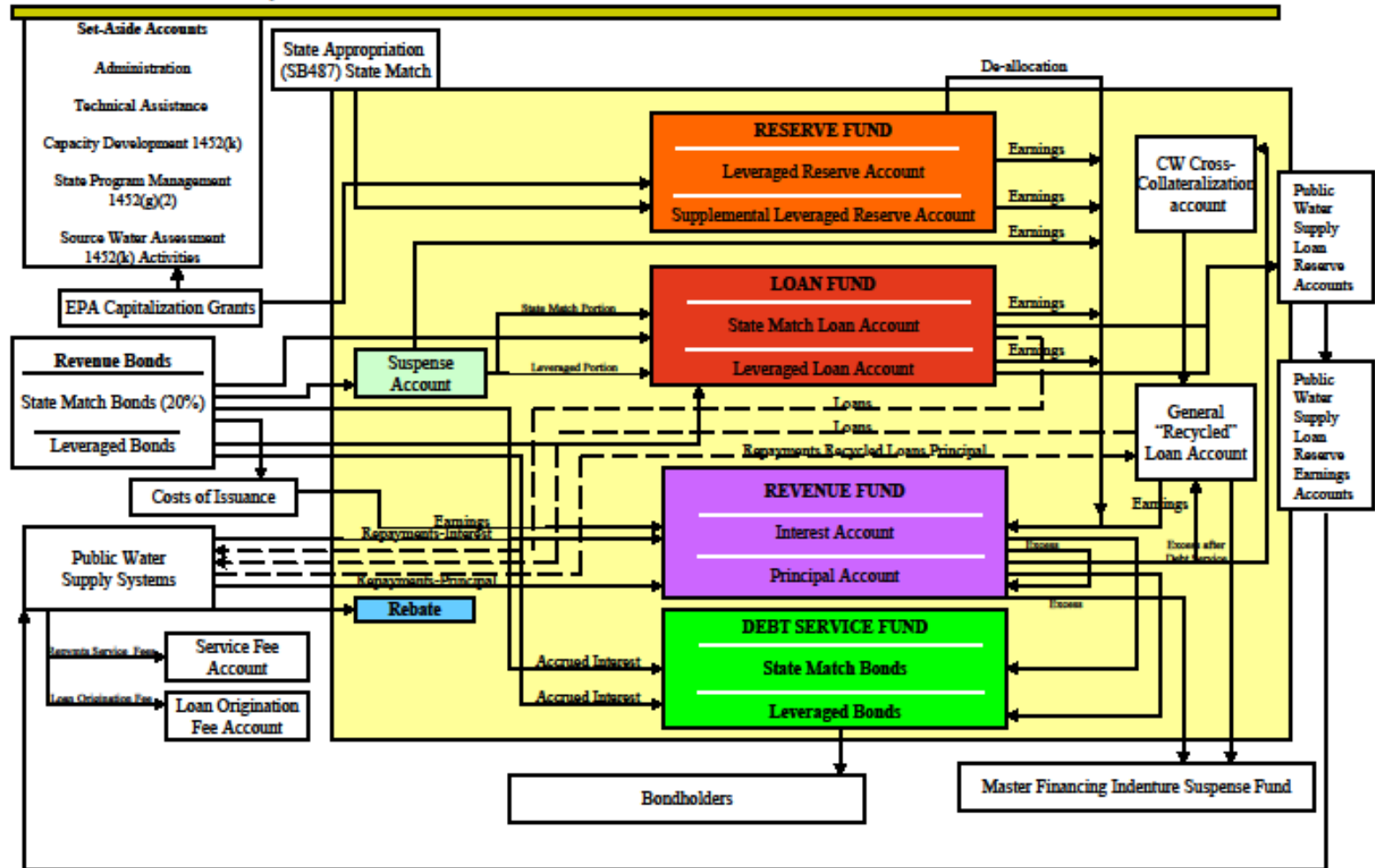
Borrowing Funds to Lend Funds (Leveraging)

- Drinking Water SRF
 - Until 2010 used a “Reserve Leveraging” structure
 - Could issue up to 4X the amount of funds kept in a reserve account (funded by Capitalization Grants).
 - The reserve account was invested in Guaranteed Investment Contracts (GICs) and interest earned help subsidize loan interest rates
 - GICs no longer an investment option (most have been forced to terminate early)
 - In 2010 new structure was built from scratch

Borrowing Funds to Lend Funds (Leveraging Continued)

- Clean Water SRF
 - Used “Cash flow” leveraging structure
 - Loaned out federal cap grants, recycled funds, and state match and used loan repayments to secure up to 4X the amount of federal grants awarded in bonds
 - Required to have revenue (cash flow) available to pay at least 125% of annual debt service on bonds
 - In 2010 new structure was built from scratch

KPWSLF Bond Resolution 106 Cash Flow Diagram as of December 1, 2010



Borrowing Funds to Lend Funds

The New Structure

- Master Financing Indenture created in 2010
 - Combined DW and CW SRF assets into a single pledge to access the bond market
 - Programs are 100% cross-collateralized
 - Still maintain separate accounts for each program
 - Flexibility to use a cash flow and/or reserve model for issuing leveraged bonds
 - Maintained AAA credit rating

SRF Administration – The Interagency Agreement

- KS Dept. of Health & Environment responsibilities
 - Develops regulatory reports
 - Develops and implements application process
 - Awards loans
 - Reviews design and construction
 - Reviews disbursement requests
 - Secures EPA Grants

SRF Administration – The Interagency Agreement (cont.)

- KS Dept. of Administration responsibilities
 - Prepares loan repayment schedules
 - Tracks and reports on all financial transactions
 - Coordinates financial audits
 - Serves as interface for financial transactions between the other two agencies
- KS Development Finance Authority
 - Issues bonds for program funding needs
 - Provides bond counsel
 - Provides financial advisor
 - Provides investments for program funds

Administration funding

- Service fee built into the interest rate of the loan (.35% for DW and .25% for CW)
- 4% of EPA Capitalization grants
- Fees can also support non SRF administration of DW and CW programs.

Customer Base

- Municipal drinking water systems are the only eligible borrowers for the Drinking Water SRF (includes rural water districts)
- Clean Water Loans can be made to municipalities or non point source implementation programs conforming with Section 319

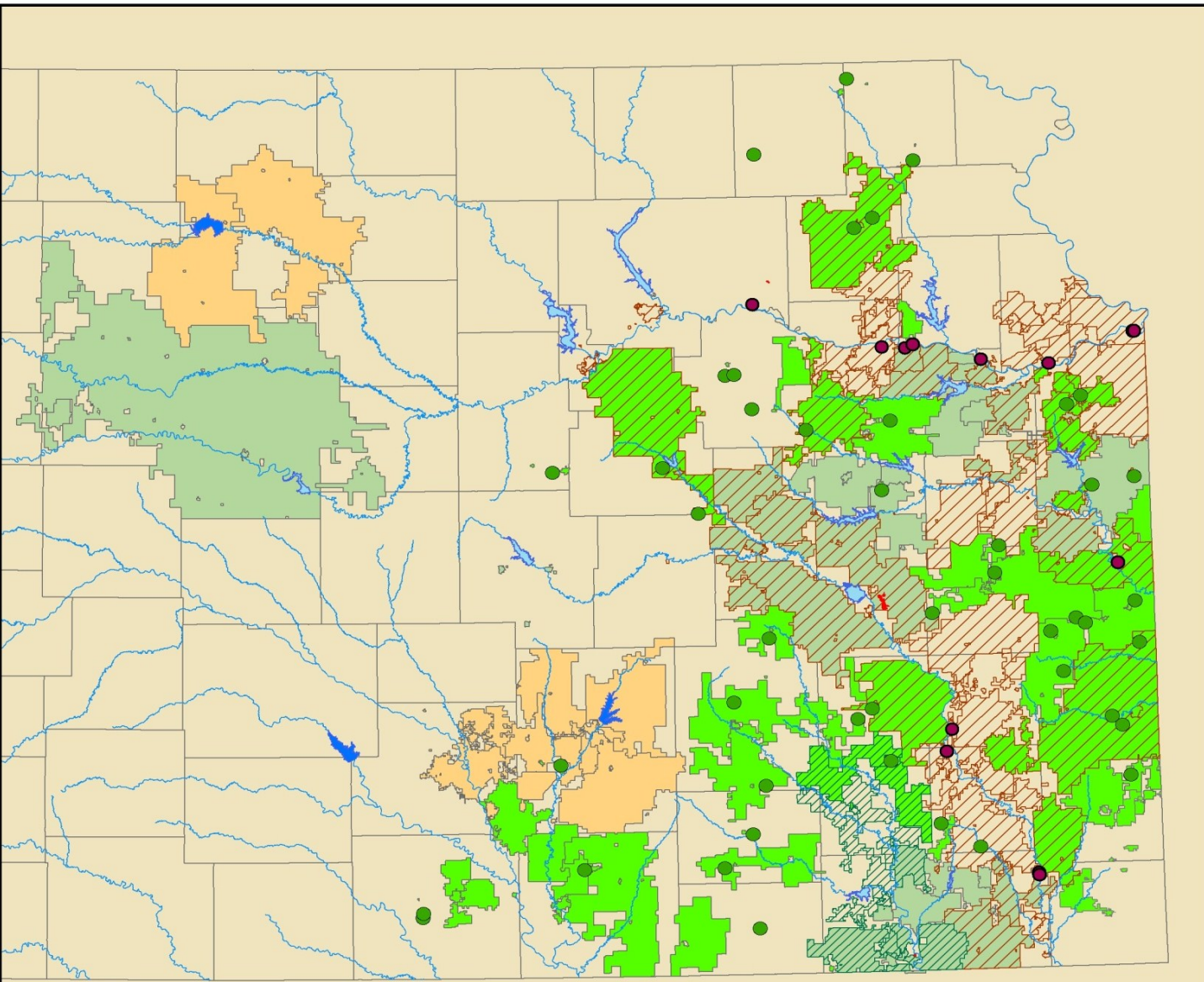
KS SRF Reasons for Success

- Uncomplicated application process – very easy for small borrowers to navigate
- Borrowers do not need a credit rating to obtain a loan
- No need for system to find interim financing during design and construction.
- Interest rates are set at 60% of a 3 month average of GO bond index (current rate 2.23%)

Barriers to Participation

- SRFs are loan programs with little to no funds for grants. Municipalities have recently been resistant to incurring more debt and 319 projects rarely have revenue streams to repay loans - at any interest rate
- Required construction provisions for SRF projects can increase costs and complicate recordkeeping
- Uncertainty of changing requirements being added by annual federal appropriation laws

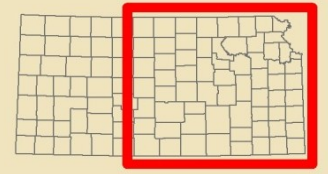
Federal Lake Water Supply Storage Customers and PWS Served by Multipurpose Small Lakes and Municipal Lakes



Legend

- MPSL or City Lake
- AD Industry
- Stream
- Market/AD Lake
- Other Contract Lake
- Water Marketing Industry*
- Verdigris MOA
- Water Assurance District
- MPSL / City Lake User
- Water Marketing
- Other Contracts
- County

*Elk City, John Redmond, and Milford Lakes



Reservoir Water Use and Energy Production

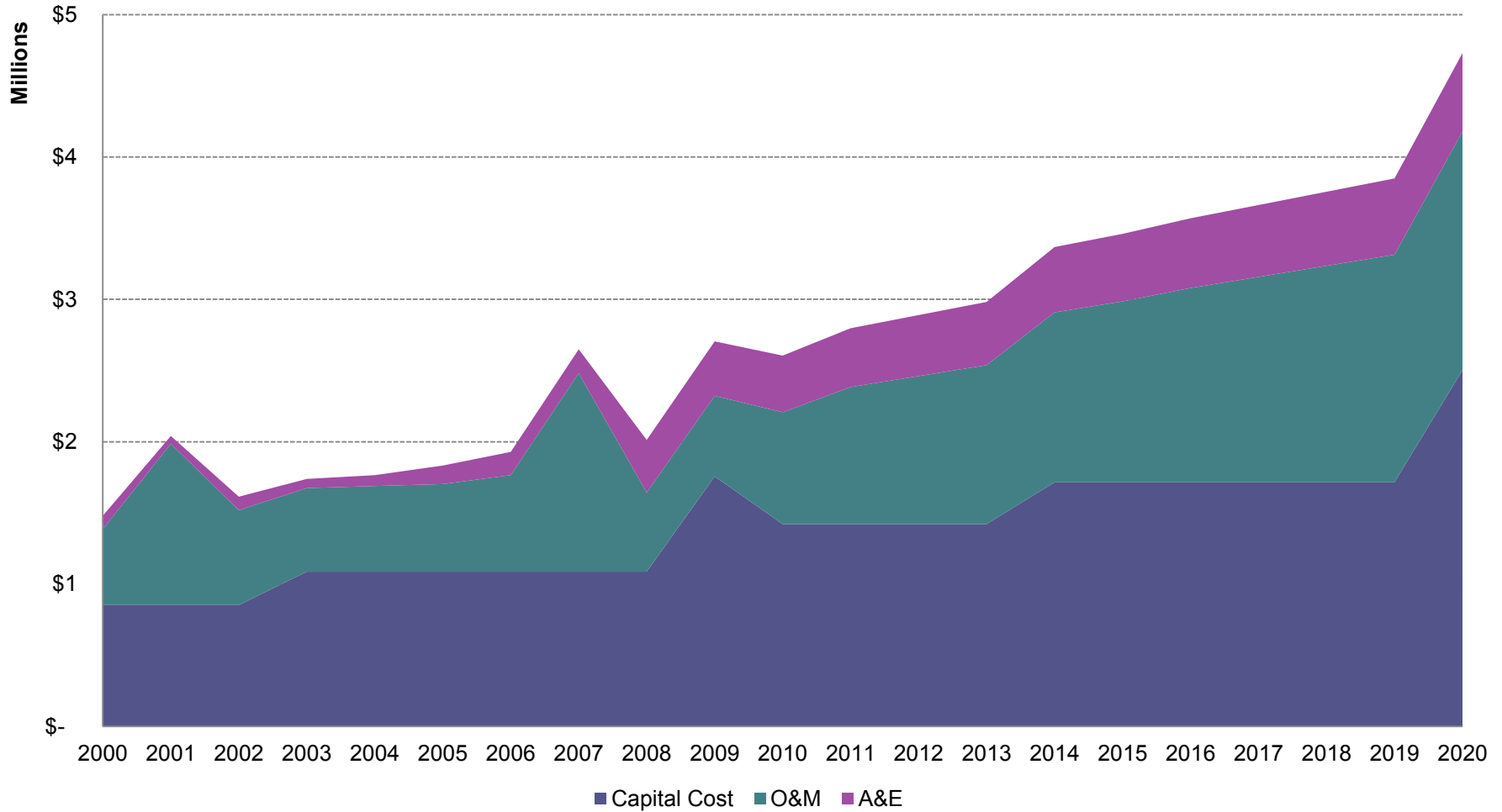
Kansas Power Plant Energy Production	11821.5 MW
Power Plant Energy production through Reservoir water use	6785.5 MW



What's the cost of water to the state?

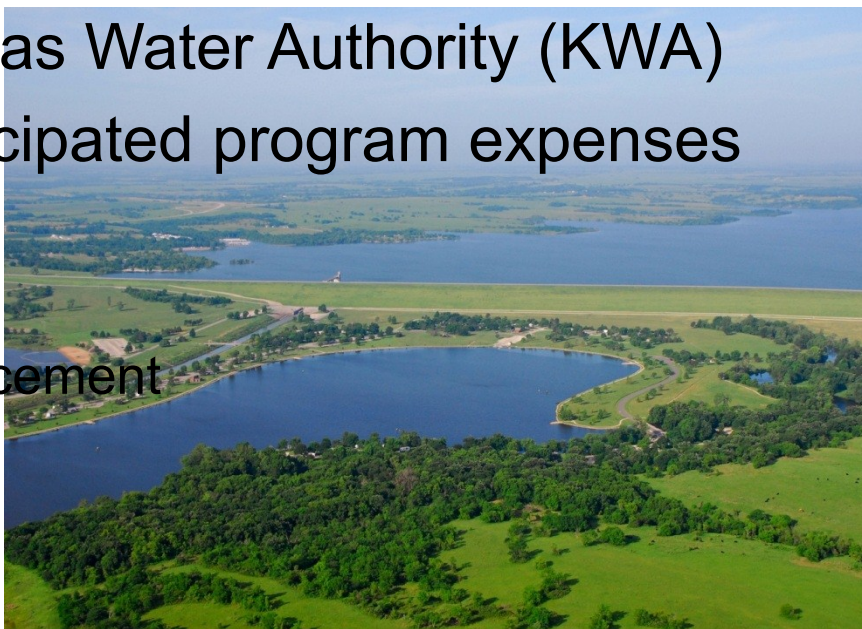
- Answer: It depends.....
- The range is \$41 - \$952 per acre-foot
- Factors influencing cost
 - Reservoir construction date
 - Older the lake, the cheaper the cost
 - Federal agreement under which purchase was made
 - Annual reservoir O & M charged from the Corps

Marketing Program Expenses

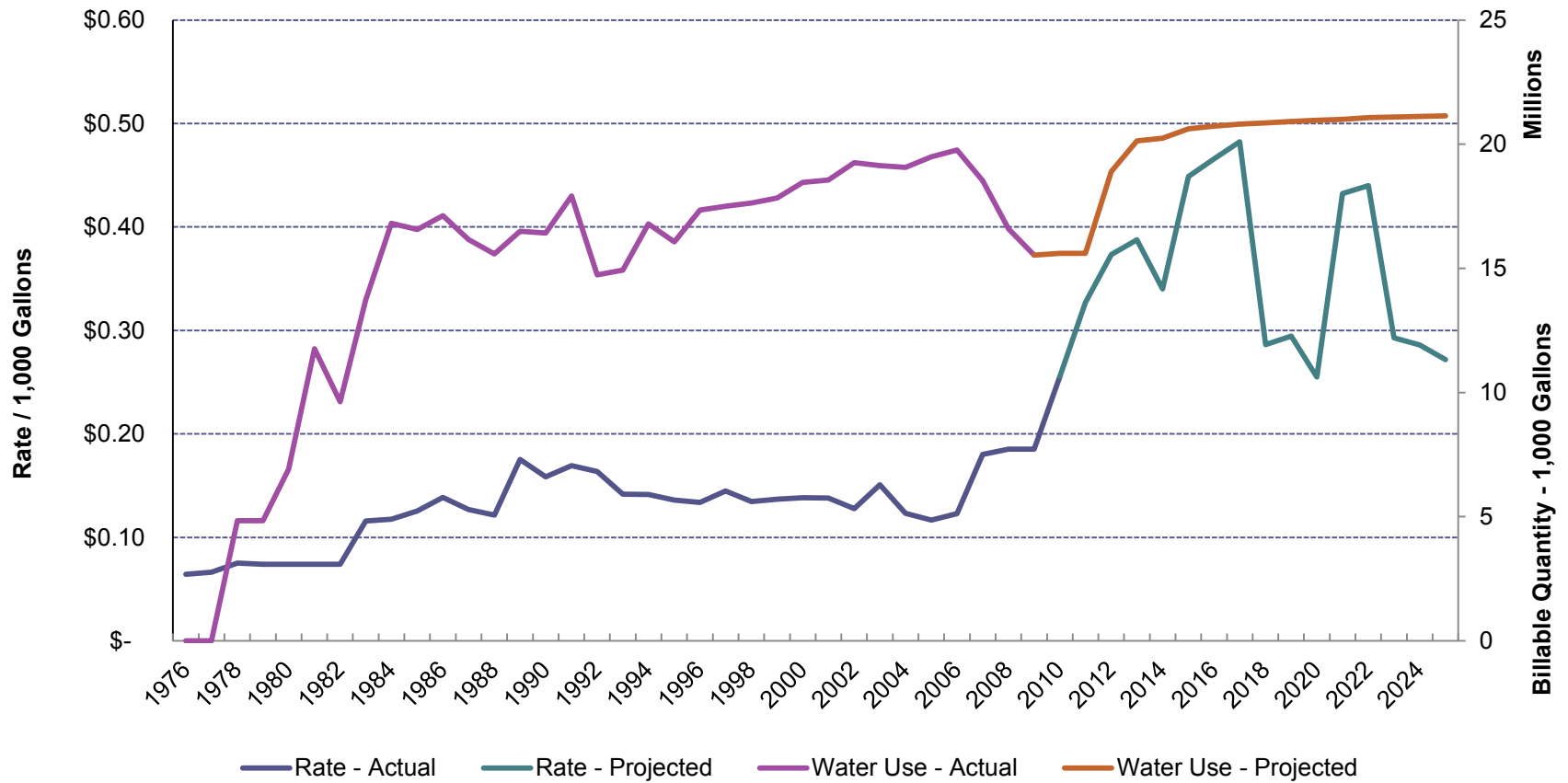


Marketing Rate

- Variable since 1983
 - Previous fixed rate contracts @ \$0.10/1000
 - 80% of water sold at \$0.10/1000
- Set annually by Kansas Water Authority (KWA)
- Rate set to meet anticipated program expenses
 - Capital Costs
 - O & M
 - Administration & Enforcement
 - Depreciation Reserve
- 2012 Rate –
 - \$0.37/1000 gallons
- Fixed contracts expire in 2017-2021



Water Marketing Rate



Water Assurance Program

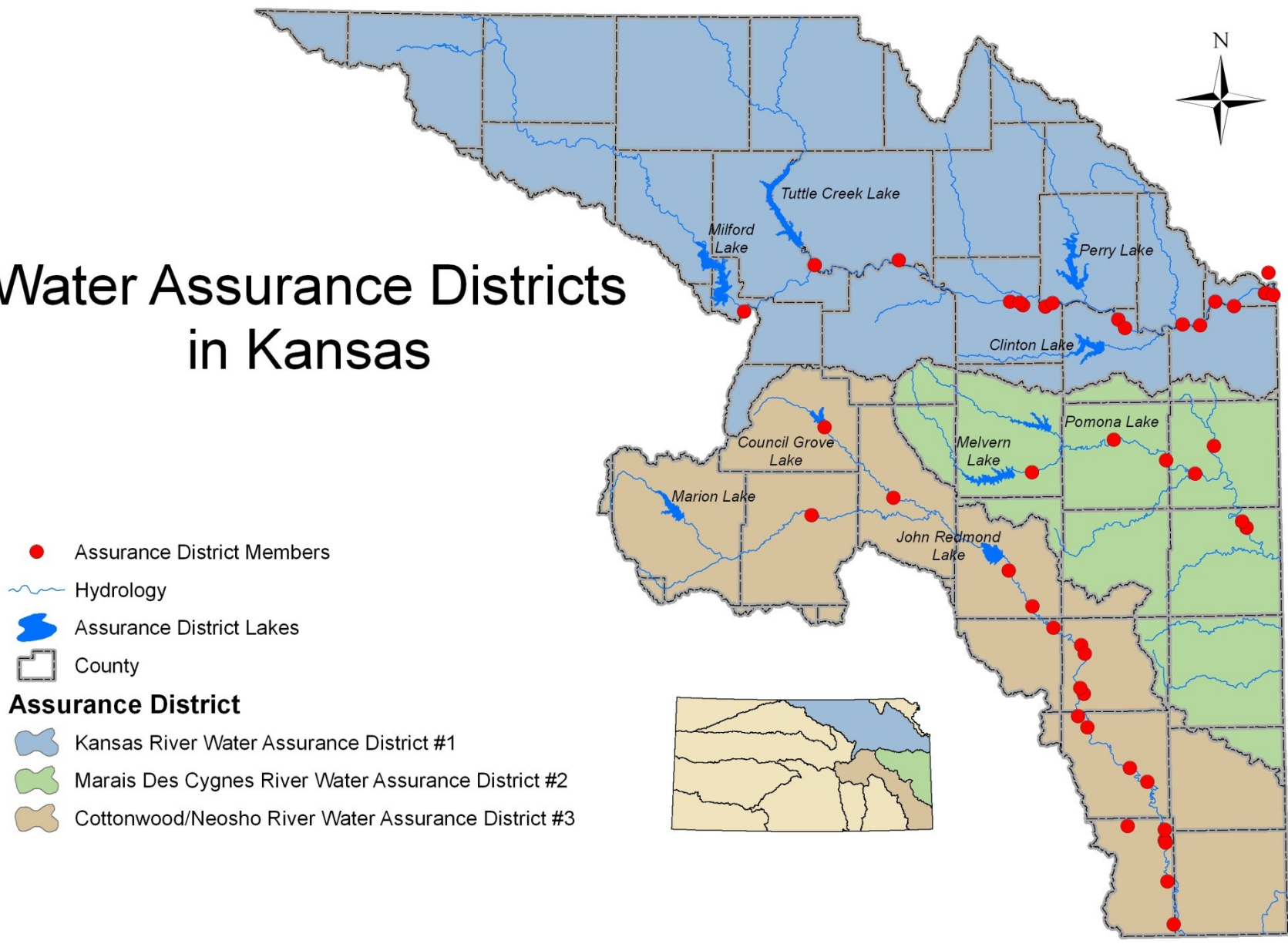
- Water Assurance Program Act (1986)
- Based on 1985 MOA with Corps of Engineers
- Allowed State to
acquire additional
storage at original
cost



Water Assurance Program

- Operate reservoirs as a system to meet downstream needs
- Targeted to municipal and industrial water rights
- 1985 MOA requires state to protect water quality releases

Water Assurance Districts in Kansas



● Assurance District Members

~ Hydrology

■ Assurance District Lakes

□ County

Assurance District

■ Kansas River Water Assurance District #1

■ Marais Des Cygnes River Water Assurance District #2

■ Cottonwood/Neosho River Water Assurance District #3

Capital Development and Storage Maintenance Plan

- 2005 Legislation Requiring the Capital Development Plan
 - KSA 82a-1308a . . .depreciation reserve cost . . . an amount necessary to meet the needs of the water marketing program capital development and storage maintenance plan, as approved by the Kansas water authority
- Includes major Marketing Program expenses and revenue
- Includes schedule to call storage in Hillsdale and Clinton reservoirs into service

Capital Development Plan

	2012	2013	2014	2020	2025	2027	2030	2031	2050
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Table 1. Projected Expenses

Principal and Interest to Corps	\$1,421,874	\$1,421,874	\$1,703,982	\$2,462,700	\$3,053,245	\$10,413,484	\$2,423,657	\$4,250,585	\$4,016,193
Operation & Maintenance to Corps	\$1,175,068	\$1,007,683	\$978,252	\$1,115,794	\$1,260,187	\$1,319,684	\$1,466,568	\$1,687,565	\$2,332,119
Administration & Enforcement	\$417,366	\$506,957	\$527,235	\$670,871	\$799,358	\$850,753	\$927,846	\$953,544	\$1,441,797
Total Projected Expenses	\$3,014,308	\$2,936,513	\$3,209,468	\$4,249,365	\$5,112,791	\$12,583,921	\$4,818,071	\$6,891,694	\$7,790,109

Table 2. Projected Water Use

Capped Contracts Billable Quantity (1000 GPY)	16,204,356	16,229,947	16,255,345	9,192,841	0	0	0	0	0
Variable Contracts Billable Quantity (1000 GPY)	3,460,282	3,564,131	3,945,333	11,614,997	21,069,077	21,171,936	21,269,976	21,310,116	21,762,498
Total Billable Quantity (1000 GPY)	19,664,638	19,794,078	20,200,679	20,807,839	21,069,077	21,171,936	21,269,976	21,310,116	21,762,498

Table 3. Revenue

Capped Contract Revenue	\$1,620,436	\$1,622,995	\$1,625,535	\$919,284	\$0	\$0	\$0	\$0	\$0
Assurance A&E Reimbursement	\$78,085	\$81,209	\$84,457	\$106,865	\$130,018	\$140,627	\$158,186	\$164,514	\$346,606
Sub-Total Revenue	\$1,698,521	\$1,704,203	\$1,709,992	\$1,026,149	\$130,018	\$140,627	\$158,186	\$164,514	\$346,606
Deficit in Program Funding Needs	\$1,315,787	\$1,232,310	\$1,499,477	\$3,223,216	\$4,982,773	\$12,443,294	\$4,659,885	\$6,727,180	\$7,443,503

Table 4. Specific Use Accounts

Conservation Storage Fund Deposits (Clinton)	\$0	\$0	\$40,277	\$40,277	\$1,059,963	\$1,059,963	\$0	\$0	\$0
Conservation Storage Fund Deposits (Hillsdale)	\$0	\$0	\$70,527	\$79,463	\$186,514	\$0	\$0	\$0	\$0
Total Conservation Storage Fund Deposits	\$0	\$0	\$110,804	\$119,740	\$1,246,477	\$1,059,963	\$0	\$0	\$0
Conservation Storage Fund Expenditures	\$0	\$0	\$282,107	\$758,719	\$932,570	\$7,419,743	\$0	\$0	\$0
Conservation Development Fund Balance	\$218,187	\$218,187	\$46,884	\$6,607	\$5,306,423	\$6,607	\$6,607	\$6,607	\$6,607
O&M Set-Aside Account Deposits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
O&M Set-Aside Account Expenditures	\$194,099	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
O&M Set-Aside Account Balance	\$53,931	\$53,931	\$53,931	\$53,931	\$53,931	\$53,931	\$53,931	\$53,931	\$53,931
Operational Deposits	\$150,000	\$92,500	\$138,500	\$0	\$0	\$0	\$0	\$0	\$0
Operational Reserve	\$310,000	\$402,500	\$541,000	\$541,000	\$541,000	\$541,000	\$541,000	\$541,000	\$541,000

Table 5. Variable Rate

Net Unfunded Program Expenses	\$1,271,688	\$1,324,810	\$1,466,673	\$2,584,237	\$5,296,680	\$6,083,514	\$4,659,885	\$6,727,180	\$7,443,503
Variable Rate	\$0.37169	\$0.372	\$0.372	\$0.223	\$0.252	\$0.288	\$0.220	\$0.316	\$0.343

Capital Development Plan

Reservoir	2012	2013	2014	2020	2025	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	\$450,694	\$450,694	\$7,870,437	\$0	\$0	2027
Council Grove	\$38,936	\$38,936	\$38,936	\$38,936	\$0	\$0	\$0	\$0	2024
Elk City	\$77,272	\$77,272	\$77,272	\$77,272	\$0	\$0	\$0	\$0	2029
Hillsdale	\$497,809	\$497,809	\$779,916	\$1,256,695	\$2,189,265	\$2,189,265	\$2,189,265	\$4,016,193	2030*
John Redmond	\$157,580	\$157,580	\$157,580	\$157,580	\$0	\$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
Melvern	\$68,237	\$68,237	\$68,237	\$68,237	\$0	\$0	\$0	\$0	2026
Total Annual Payment	\$1,421,874	\$1,421,874	\$1,703,982	\$2,462,656	\$3,053,245	\$10,423,701	\$51,492,920	\$234,392	

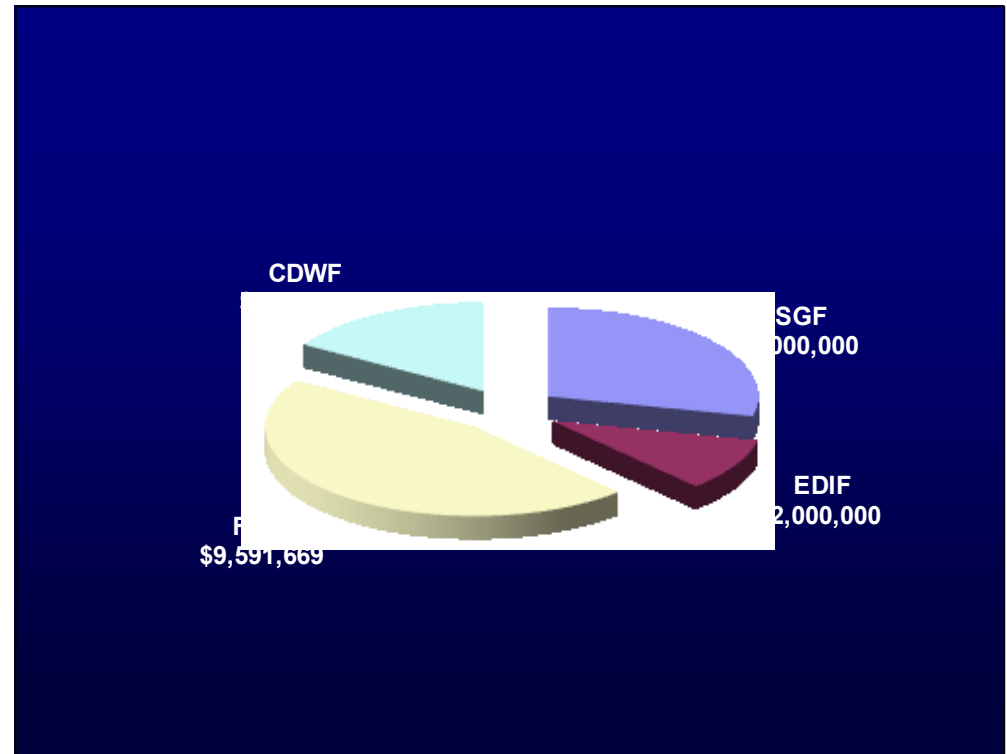
Reservoir	2012	2013	2014	2020	2025	2027	2030	2031	2050
Big Hill	\$86,250	\$123,495	\$83,497	\$93,162	\$101,216	\$104,438	\$109,271	\$309,745	\$395,244
Clinton	\$156,857	\$96,491	\$125,611	\$141,873	\$181,270	\$187,592	\$281,625	\$286,143	\$371,967
Council Grove	\$149,023	\$181,455	\$150,885	\$168,005	\$182,272	\$187,979	\$196,539	\$199,392	\$253,605
Elk City	\$13,739	\$30,238	\$16,724	\$17,926	\$18,929	\$19,329	\$19,931	\$20,131	\$23,939
Hillsdale	\$90,736	\$50,537	\$63,042	\$82,771	\$103,141	\$122,465	\$124,540	\$125,231	\$307,488
John Redmond	\$427,660	\$295,853	\$326,483	\$359,459	\$386,938	\$397,930	\$414,418	\$419,914	\$524,338
Kanopolis	\$71,536	\$40,069	\$46,712	\$64,792	\$79,859	\$85,886	\$94,926	\$97,940	\$155,195
Marion	\$77,831	\$93,221	\$76,939	\$88,280	\$97,731	\$101,512	\$107,182	\$109,072	\$144,986
Melvern	\$56,692	\$42,339	\$41,970	\$46,803	\$50,830	\$52,441	\$54,857	\$55,663	\$70,966
Milford	\$42,285	\$50,781	\$43,943	\$50,140	\$55,304	\$57,369	\$60,467	\$61,500	\$81,123
Pomona	\$2,458	\$3,203	\$2,446	\$2,583	\$2,697	\$2,743	\$2,812	\$2,834	\$3,268
Total Annual Payment	\$1,175,068	\$1,007,683	\$978,252	\$1,115,794	\$1,260,187	\$1,319,684	\$1,466,568	\$1,687,565	\$2,332,119

Principal and Interest	\$0.07381	\$0.073	\$0.081	\$0.107	\$0.139	\$0.143	\$0.143	\$0.143	\$0.000
Interest on SGF	\$0.00288	\$0.001	\$0.005	\$0.012	\$0.017	\$0.013	\$0.010	\$0.008	\$0.000
Operation and Maintenance	\$0.04658	\$0.046	\$0.055	\$0.054	\$0.061	\$0.063	\$0.070	\$0.071	\$0.089
Administration and Enforcement	\$0.02176	\$0.021	\$0.026	\$0.035	\$0.043	\$0.047	\$0.052	\$0.053	\$0.069
Depreciation Reserve	\$0.22665	\$0.231	\$0.205	\$0.014	\$0.000	\$0.021	\$0.000	\$0.040	\$0.185
Total Annual Rate	\$0.37169	\$0.372	\$0.372	\$0.223	\$0.252	\$0.288	\$0.220	\$0.316	\$0.343

State Water Plan Fund

- **Revenue**

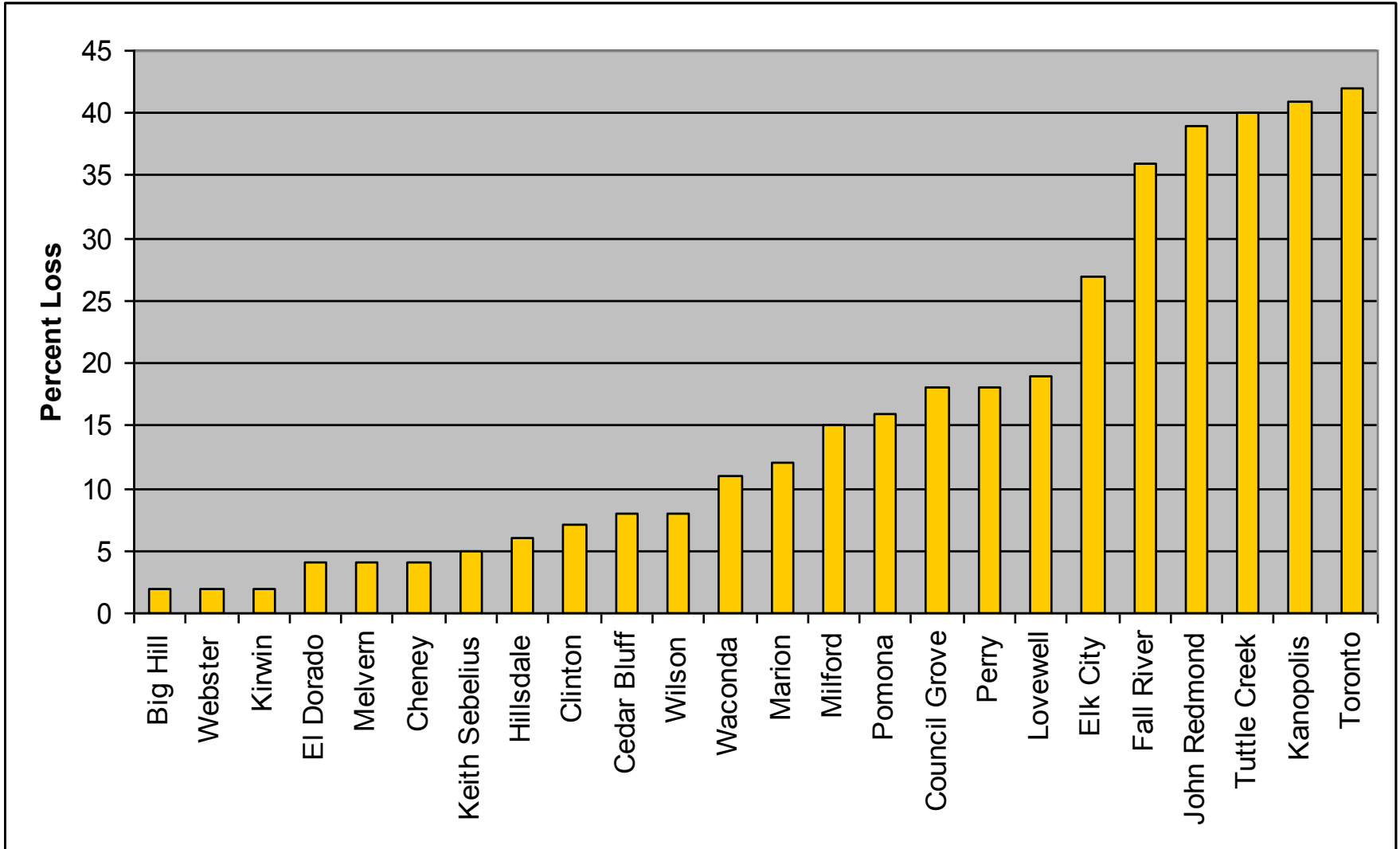
- **State General Fund**
- **EDIF (Lottery)**
- **Fees & Fines**
- **CDWF (Clean Drinking Water Fees)**



Revenue Source	FY 2006	FY 2007	FY 2008	FY 2009
SGF Transfer	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000
EDIF Transfer	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Municipal Water Fee (\$0.03/1,000)	\$3,454,401	\$3,532,987	\$3,384,068	\$3,748,687
Industrial Water Fee (\$0.03/1,000)	\$1,104,838	\$1,247,221	\$1,038,246	\$1,272,024
Stock water Fee (\$0.03/1,000)	\$359,112	\$361,565	\$386,364	\$368,708
Fertilizer Fee (\$1.40/ton)	\$3,034,328	\$3,054,967	\$3,345,545	\$2,940,000
Pesticide Reg. Fee (\$100/label)	\$989,800	\$1,027,200	\$1,086,990	\$1,000,000
Sand Royalty (\$0.15/ton)	\$225,460	\$206,824	\$150,500	\$182,250
Fines	\$140,395	\$262,070	\$213,622	\$80,000
TOTAL	\$17,308,334	\$17,692,834	\$17,605,335	\$17,591,669

Plus \$3.4 million from the Clean Drinking Water Fee Fund

Reservoir Storage Lost to Sedimentation



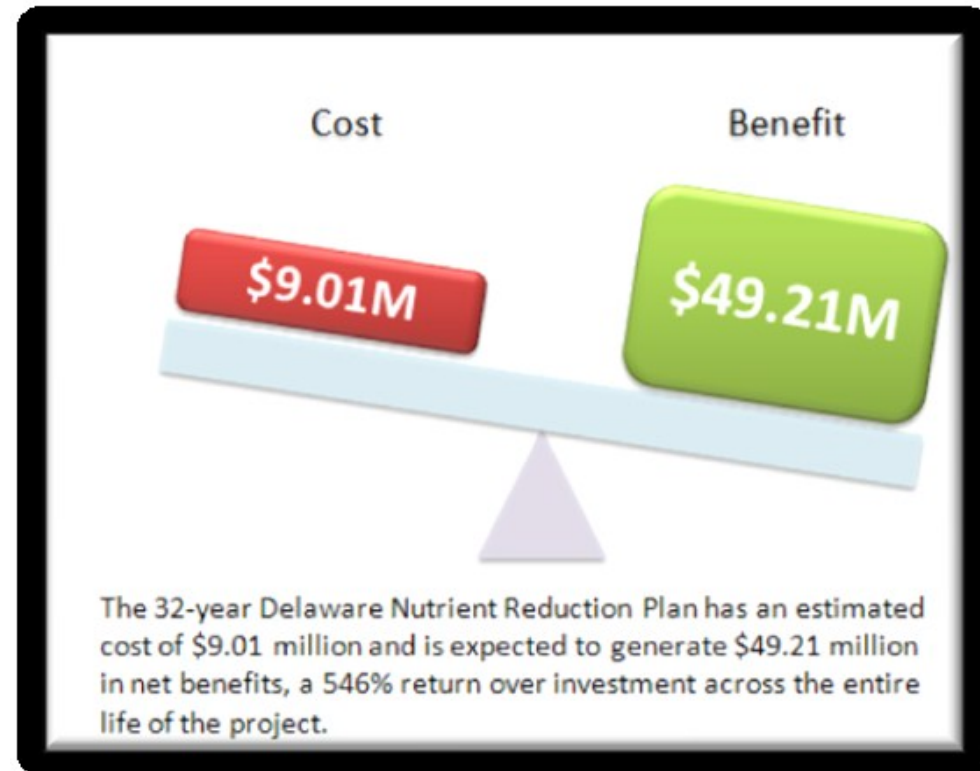
KWA Proposals for Nutrient & Sediment Reduction

FY 2014 Budget Recommendations

- **Restoration of the \$6 Million SGF Demand Transfer**
 - \$4.5 of \$6 million recommended for targeted Nutrient and Sediment Reduction Projects
 - Administered by KDA-DOC
- **Creation of Nutrient/Sediment Conservation Reserve Enhancement Program (CREP)**
 - Targeted cost-share assistance to high priority areas
 - Administered by KDA-DOC
 - \$500,000 recommended
- **Enhanced funding for WRAPS implementation**
 - Administered by KDHE-NPS Section
 - Increase of \$175,000 recommended

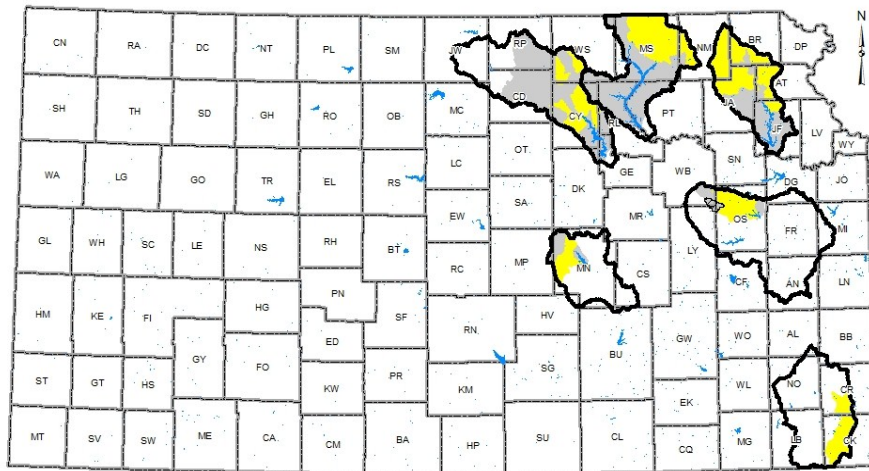
New Approach for Funding Nutrient & Sediment Projects

- Link WRAPS plans to conservation district implementation
 - WRAPS plans have identified over \$7 million in funding needs
- Funding model would allocate to targeted projects rather than targeted areas
 - Project funding based on greatest nutrient reduction per dollar expended



Nutrient & Sediment CREP

Proposed Target Areas

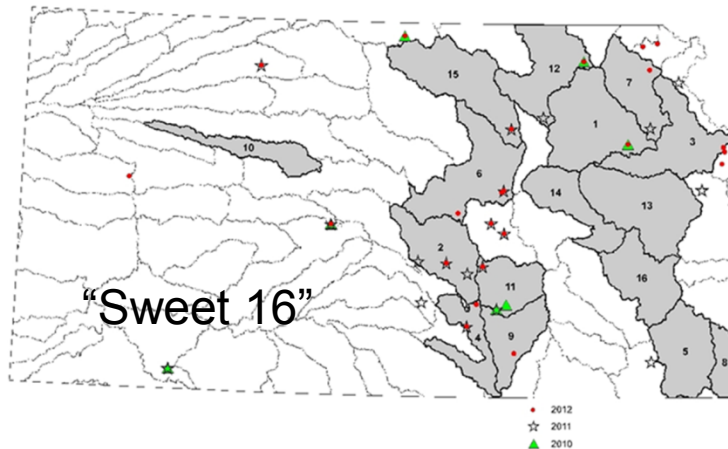
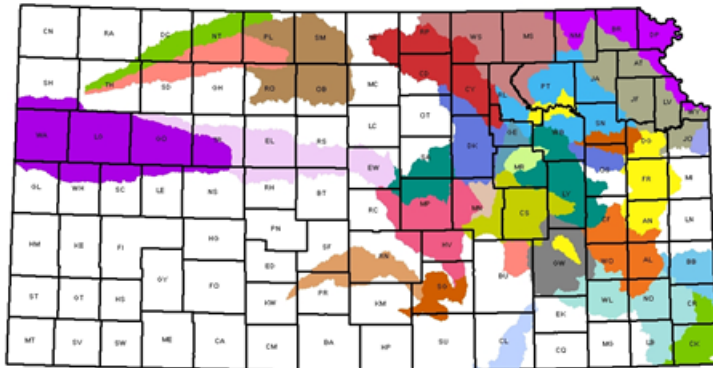


Watershed	Total Proposed CREP Acres	Tier 1 Acres	Tier 2 Acres
Lower Republican	911,655	209,695	701,960
Lower Big Blue	924,283	315,581	608,702
Delaware	717,696	397,317	320,379
Upper Cottonwood	136,039	85,873	50,166
Upper Marais des Cygnes	206,675	139,396	67,279
Middle Neosho	169,399	169,399	0
Total	3,065,747	1,317,261	1,748,486

- Establishment of buffer practices
 - Waterways, filter strips, riparian forest, wetlands (restored & constructed)
 - Streambank stabilization
- 10,000 Acre Enrollment
- \$21.6 million cost
 - \$17.3M USDA
 - \$4.3M non-fed (direct and in-kind)

WRAPS Funding Enhancement

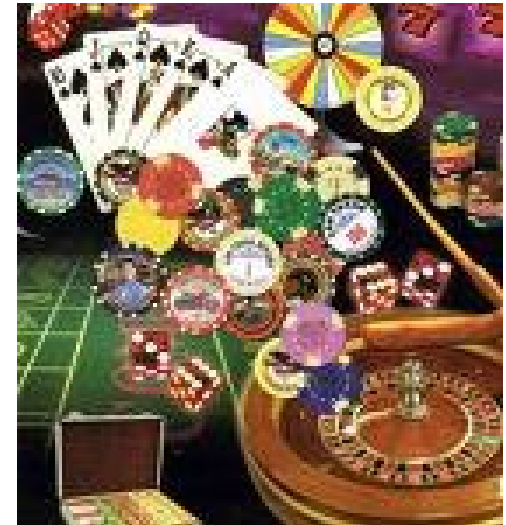
Over 50% of KS under WRAPS Plans



- \$175,000 in additional funding recommended by KWA
- \$625,000 current funding level
- Over \$7 million in expressed funding needs
- WRAPS plans exist in all priority nutrient watersheds

KWA proposes use of Expanded Lottery Act Revenue Fund

- ELARF uses
 - Debt reduction
 - Reservoir storage financing
 - Reservoir Beneficial Use Fund
 - Infrastructure improvement
 - Reservoir sedimentation
 - Other water supply infrastructure
 - Property tax relief



Recognizing water projects as infrastructure



Infrastructure - The fundamental facilities and systems serving a county, city, or area.

Infrastructure Improvement

- Watershed restoration and protection
- Streambank restoration and Riparian protection
- Dam safety and rehabilitation
- Water supply infrastructure
- Aquifer recharge
- Minimum pool agreements

Dredging / Removal



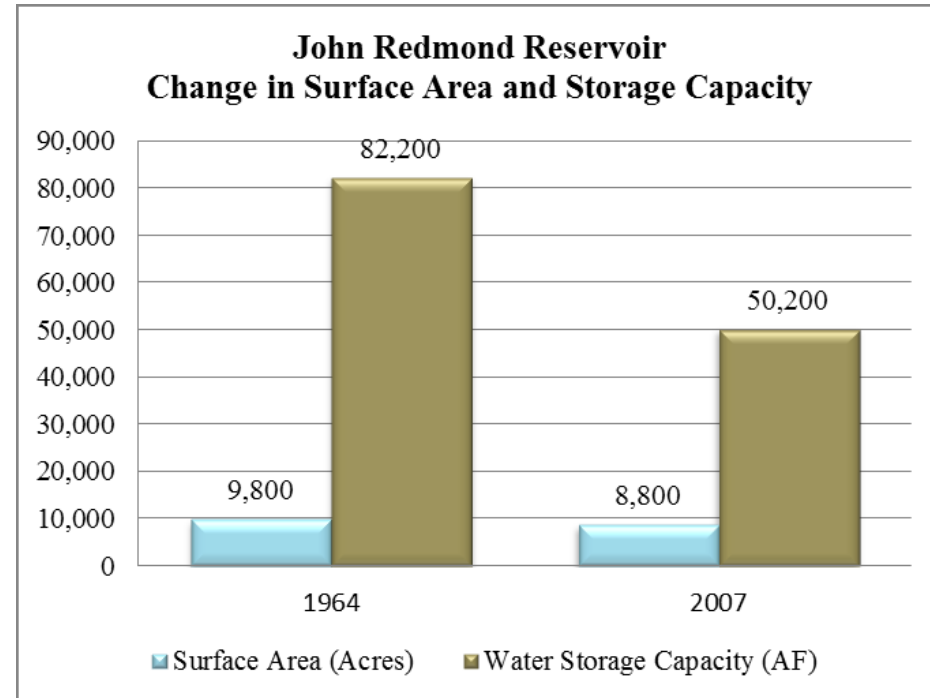


Complete pool level increase at John Redmond

- 2' Pool Raise to be implemented in 2013
 - Official approval in fall of '13
 - KWO has requested implementation begin ASAP if adequate inflows are received
 - Resulting in approximately 20,000 AF of additional storage

Develop plan to dredge John Redmond

- Meeting with Corps held in Sept
 - Corps is supportive!
- EIS being developed by KWO
- Application to modify federal project under development
- Meet with Coffey Co. Commission in December
- Public scoping meeting in January
- KWA recommends funding in FY 2014 to contract for detailed engineering work

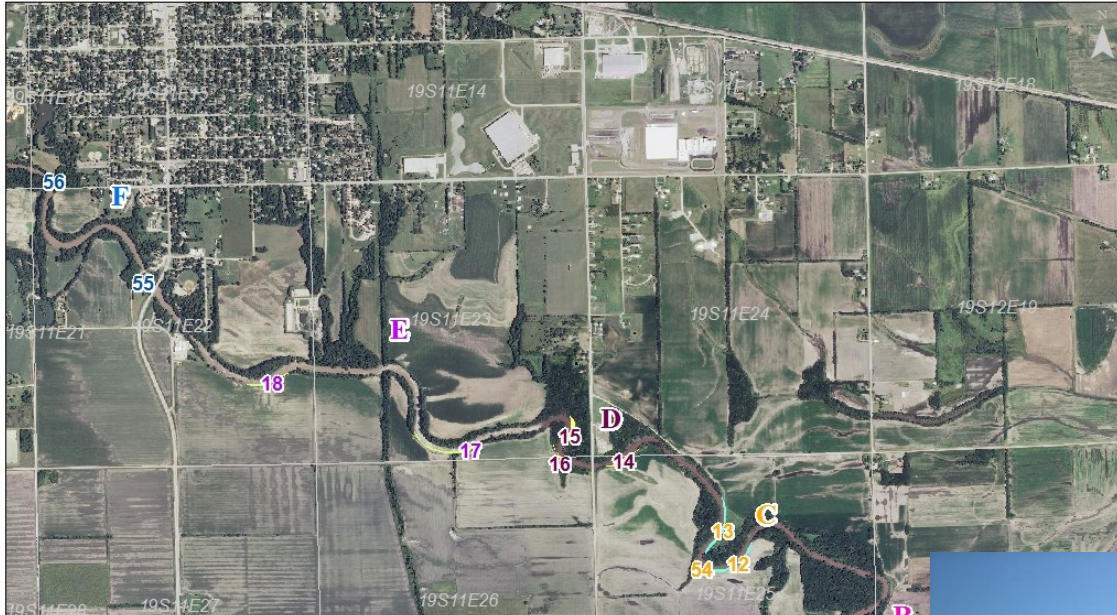


Some pictures of Eidman Site

- June 2008



Continue sediment reduction activities



Projects currently underway

- John Redmond
 - Streambank Restoration
 - 8.3 miles complete
 - Additional 11,000 ‘ ready for bid this fall
 - Estimated 21,550 tons of sediment reduced annually
- Perry
 - Similar projects completed and underway by Glacial Hills RC&D



Continue activities at Kanopolis

- Implementation of 2011 legislation
 - Lower Smoky Hill River Access District
 - Kanopolis storage sought for downstream district
 - Irrigators with Smoky Hill River surface rights
 - City of Salina
- KWO request Corps to evaluate reallocation of storage for additional water supply
 - 7,500 acre-feet available

Contact Information

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