Kansas Water Authority Meeting
Salina, Kansas
10:00 a.m. – December 19, 2019

Time	*Agenda Item*	*Presenter*	*KWA Advice*	*KWA Decision*	*Page No.*
10:00 am	**Call to Order/Introductions**	Connie Owen			
10:05 am	**Welcome**				
10:10 am	**Approval of Meeting Minutes**	Connie Owen			1
	September 3-4, 2019 Meeting			X	
10:15 am	**KWA PWS Committee**	Dennis Schwartz			7
	2020 Surplus Water Report	Nate Westrup		X	9
	City of Lawrence Water Marketing Contract	Nate Westrup		X	
	Access District Contract Authorization	Nate Westrup		X	
10:35 am	**Federal Updates**				
	EPA Wetland Grants	Kirk Tjelmeland		X	66
	Kansas River Reservoir & Flood Sediment Study	Laura Totten USACE-KC District	X		67
11:00 am	**KWA RAC Operations Committee**	Jeremiah Hobbs			71
	RAC Messages to the KWA	Bobbi Luttjohann		X	
	RAC Membership	Bobbi Luttjohann		X	
11:20 am	**Performance-Based Budget Task Force Update**	Mike Armstrong	X		--
11:50 am	**Research Coordination Work Group**	Dan Devlin	X		75
12:00 pm	***Working Lunch Break***				
12:30 pm	**Equus Beds Chloride Plume Project Update**	Daniel Clement Burns & McDonnell	X		76
1:00 pm	**2019 Special Committee on Natural Resources Report**	Earl Lewis	X		--
1:30 pm	**Arbuckle Study Update**	Earl Lewis	X		78
1:45 pm	**WCA/LEMA Update for 2019**	David Barfield	X		--
2:00 pm	**KWA Annual Report to the Governor and Legislature**	Matt Unruh/ Cara Hendricks		X	
3:00 pm	**Director's Report**	Earl Lewis	X		
3:15 pm	**New Business**				
3:30 pm	**Adjourn**				

*Upcoming Kansas Water Authority Meetings: January 29, 2020, Topeka, KS

Minutes

KANSAS WATER AUTHORITY

September 3, 2019 **Abilene, Kansas** **Regular Meeting**

CALL TO ORDER: Chair Connie Owen called the **September 3rd, 2019** Kansas Water Authority meeting to order at **1:10** p.m. at the Northwest Kansas Technical College, Goodland, KS.

VOTING MEMBERS PRESENT: Connie Owen – Chair, Mike Armstrong, John Bailey, Mark Fischer, Greg Graff, Randy Hayzlett, Jeremiah Hobbs, Chris Ladwig, Carolyn McGinn, Ted Nighswonger, Dennis Schwartz, David Stroberg

EX-OFFICIO MEMBERS PRESENT: Patty Clark; Earl Lewis; David Barfield; Rolfe Mandel; Dan Devlin; Brad Loveless; Rob Reschke; Leo Henning; Jude Kastens, Mike Beam

VOTING MEMBERS ABSENT: Alan King

EX-OFFICIO MEMBERS ABSENT: Dwight Keen

RESEARCH COORDINATION WORKGROUP:

Cara Hendricks presented

RESEARCH COORDINATION WORKGROUP:

Rolfe Mandel from KGS presented. More information found in attached presentation.

RAC MEMBERSHIP DISCUSSION:

Bobbi Luttjohann presented

KWA BUDGET COMMITTEE:

Leo Henning presented KDHE budget. **Chris Beightel, Mike Beam and Rob Reschke** presented KDA budget. **Cara Hendricks** presented the KWO budget.

ADJOURNMENT The KWA adjourned at **4:00** p.m**.**

Minutes

KANSAS WATER AUTHORITY

September 4, 2019 **Abilene, Kansas** **Regular Meeting**

CALL TO ORDER: Chair Connie Owen called the **September 4th, 2019** Kansas Water Authority meeting to order at **8:02** a.m. at the Northwest Kansas Technical College, Goodland, KS.

VOTING MEMBERS PRESENT: Connie Owen – Chair, Mike Armstrong, John Bailey, Mark Fischer, Greg Graff, Randy Hayzlett, Jeremiah Hobbs, Alan King, Chris Ladwig, Carolyn McGinn, Ted Nighswonger, Dennis Schwartz, David Stroberg

EX-OFFICIO MEMBERS PRESENT: Patty Clark; Earl Lewis; David Barfield; Rolfe Mandel; Dan Devlin; Rob Reschke; Leo Henning; Jude Kastens, Mike Beam

VOTING MEMBERS ABSENT: All present

EX-OFFICIO MEMBERS ABSENT: Dwight Keen, Brad Loveless

APPROVAL OF MINUTES:

Motion No. 09-19-01 It was moved by **Mark Fischer** and seconded by **Ted Nighswonger** the **April 18, 2019** Minutes for the Regular Meeting of the Kansas Water Authority be approved as amended to show attendance of April meeting by Dennis Schwartz. **Motion carried with no dissenting votes.** Information found on page 98 of meeting materials.

KWA/PWS Committee:
Comprehensive Capital Development Plan

Dennis Schwartz provided an update

KWA/PWS Committee:
City of Lawrence Water Marketing Contract

Dennis Schwartz asked to table this discussion until the December Meeting to have better understanding of wording in the contract.

KWA/PWS Committee:
Access District Request to Negotiate Rate

Motion No. 09-19-02 It was moved by **Dennis Schwartz** and seconded **by Greg Graff** to approve authorization to proceed with negotiations for the purchase of additional irrigation storage space in Kanopolis. Information found on page 102 of meeting materials.

WATER VISION & WATER PLAN REPORTS\UPDATES
Bobbi Luttjohann provided an update

KWO/KWA OPERATIONS:
KS River Reservoirs Flood & Sediment Study
Cara Hendricks presented

KWO/KWA OPERATIONS:
Equus Beds Chloride Plume Project
Cara Hendricks presented

KWO/KWA OPERATIONS:
Lower Missouri Flooding Corps PAS Agreement

Motion No. 09-19-03 It was moved by **Mike Armstrong** and seconded by **Dennis Schwartz** to approve entering into a cooperative multi-state Public Assistance to States agreement with the U.S. Army Corps of Engineers for the Flood Risk Management Study for the Lower Missouri River Basin, KS, MO, IA, NE.

KWO/KWA OPERATIONS:
FEMA HHPD Rehabilitation Grant

Motion No. 09-19-04 It was moved by **Dennis Schwartz** and seconded by **Carolyn McGinn** to give approval to the Director to enter into an agreement with the FEMA to receive and utilize High Hazard Potential Dams Rehabilitation Grant Funds.

RAC MEMBERSHIP DISCUSSION/ACTION:
New RAC Appointments

Motion No. 09-19-05 It was moved by **Mike Armstrong** and seconded by **Dennis Schwartz** to accept and appoint the **Cimarron RAC** Applicants as recommended

Motion No. 09-19-06 It was moved by **Jeremiah Hobbs** and seconded by **Carolyn McGinn** to accept and appoint the **Equus-Walnut RAC** Applicants as recommended

Motion No. 09-19-07 It was moved by **Greg Graff** and seconded by **Ted Nighswonger** to accept and appoint the **Great Bend Prairie RAC** Applicants as recommended

Motion No. 09-19-08 It was moved by **Mike Armstrong** and seconded by **Mark Fischer** to accept and appoint the **Kansas RAC** Applicants as recommended

Motion No. 09-19-09 It was moved by **Jeremiah Hobbs** and seconded by **Dennis Schwartz** to accept and appoint the **Marias des Cygnes RAC** Applicants as recommended

Motion No. 09-19-10 It was moved by **Mike Armstrong** and seconded by **Greg Graff** to accept and appoint the **Missouri RAC** Applicants as recommended

Motion No. 09-19-11 It was moved by **Dennis Schwartz** and seconded by **Mark Fischer** to accept and appoint the **Neosho RAC** Applicants as recommended

Motion No. 09-19-12 It was moved by **Mike Armstrong** and seconded by **Dennis Schwartz** to accept and appoint the **Red Hills RAC** Applicants as recommended

Motion No. 09-19-13 It was moved by **Greg Graff** and seconded by **Alan King** to accept and appoint the **Smoky Hill Saline RAC** Applicants as recommended

Motion No. 09-19-14 It was moved by **Randy Hayzlett** and seconded by **Alan King** to accept and appoint the **Solomon-Republican RAC** Applicants as recommended

Motion No. 09-19-15 It was moved by **Mark Fischer** and seconded by **David Stroberg** to accept and appoint the **Upper Arkansas RAC** Applicants as recommended

Motion No. 09-19-16 It was moved by **Dennis Schwartz** and seconded by **Mike Armstrong** to accept and appoint the **Upper Republican RAC** Applicants as recommended

Motion No. 09-19-17 It was moved by **Greg Graff** and seconded by **Jeremiah Hobbs** to accept and appoint the **Upper Smoky-Hill RAC** Applicants as recommended

Motion No. 09-19-18 It was moved by **Dennis Schwartz** and seconded by **Mike Armstrong** to accept and appoint the **Verdigris RAC** Applicants as recommended

KWA BUDGET COMMITTEE:

Motion No. 09-19-19 It was moved by **Mike Armstrong** and seconded by **Connie Owen** to accept the final FY21 SWPF budget recommendations made by the KWA as a whole at the September KWA meeting for submittal as part of the administration budget process in September 2019

Director's Report: Presented by **Earl Lewis;** gave an update on staff changes and discussed the mineralization letters that have gone out from our office.

David Barfield – gave an update on the ongoing LEMA's and WCA's, discussed the executive orders that are going out, and discussed the upcoming Public Meeting for September 18th in St. John, KS.

ADJOURNMENT The KWA adjourned at **12:13** p.m**.**

MEMO

Kansas Water Office
900 SW Jackson Suite 404
Topeka, KS 66612
Phone: (785) 296-3185
Fax: (785) 296-0878
www.kwo.org

DATE: December 9, 2019
TO: Kansas Water Authority
FROM: Dennis Schwartz, Chair, Public Water Supply Committee
Nathan Westrup
RE: Public Water Supply Committee Update

Items Proposed for Action:

- Consider approval of the 2020 Surplus Water Report
- Consider approval of City of Lawrence water marketing contract and cancelation of associated contracts
- Consider approval of the Access District's contract for additional storage purchase from Kanopolis Lake

Surplus Water Available in Water Marketing Program Lakes, Calendar Year 2020 (Surplus Water Report)

Approval of this report by the KWA gives the Director the permission to enter into contracts for water considered to be surplus during the calendar year. The Calendar Year (CY) 2020 Surplus Report includes the changes made annually to the report, with a few additional updates as noted below. Kansas Water Office staff provided the draft 2020 Surplus Water Report to the Committee at the Dec. 2nd meeting for review. The draft report is included in the mailing materials.

The other changes include:

- Clinton contracts table reflects the approval of the City of Lawrence contract (19-1) and cancelation of variable rate contracts held by Douglas Co. RWD's 1, 2, 4, and the City of Lawrence.
- Removal of pending applications at Kanopolis that expired in 2019 after 13 years on file.
- Storage and yield estimates recalculated based on new sediment surveys for three reservoirs with the most notable change to yield, a 7.1% increase at Kanopolis due to lower than projected sedimentation rate.

The Public Water Supply Committee recommends the Kansas Water Authority approve the Surplus Water Available in Water Marketing Program Lakes, Calendar Year 2020 report and authorize the Director to enter into surplus water supply contracts for water defined to be surplus by the report.

City of Lawrence, Water Marketing Contract No. 19-1

- Contract terms:
  - Single, 40-year contract (through 2059)
  - 4,988 MGY
    - Quantity based on revised request to include City of Baldwin and Douglas Co. RWDs No. 1, 2, and 4 (entities currently holding individual Water Marketing Program contracts)
    - Quantity fully commits the available yield of Clinton in 2059, with presumed contract renewals for Douglas Co. RWD No. 3, 6, and 5
- Standard contract, with additions to Article 6
  - Similar language to that provided in HAWC contract at Hillsdale
  - Identifies entities opting to go under Lawrence to account for quantity in contract
  - Subject entities with existing Water Marketing Contracts will need to terminate their contracts prior to December 30, 2019 utilizing the "Mutual Rescission and Cancellation" form as attached.
    - Written requests to terminate Water Purchase Contract Nos. 90-1, 90-3, and 95-2 were received from Douglas Co. RWD Nos. 1, 2, and 4, respectively.

The Public Water Supply Committee recommends the KWA approve Water Marketing Contract No. 19-1 and approve cancellation of Water Marketing Contract Nos. 90-1, 90-3, and 95-2.

Lower Smoky Hill Water Supply Access District

"82a-2311. Same; negotiations of contracts. If any member of the district requests an opportunity to renegotiate any existing contracts for the purchase of water supply, as described in K.S.A. 82a-1301 *et seq*., and amendments thereto, the Kansas water authority and the Kansas water office shall conduct such negotiations on a timely basis and on the provisions for which negotiations are requested."

- Pursuant to Contract Between the Kansas Water Office and the Lower Smoky Hill Water Supply Access District – For Water Supply Access, the District has submitted a written request (July 1, 2019) to (re)negotiate for purchase of additional storage in Kanopolis Lake
  - The request to negotiate was approved by the KWA on September 4, 2019
  - The Access District wishes to purchase up to an additional 700 acre-feet of irrigation storage space, approximately 1.5% of conservation pool
  - Contract negotiations are anticipated to be completed late 2019 or early 2020, in preparation for the 2020 irrigation season
    - The Director requests approval to enter into a contract with the Access District upon completion of negotiations

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The Public Water Supply Committee recommends the Director be authorized to enter into a contract with the Access District for purchase of additional irrigation storage space in Kanopolis Lake.

Surplus Water Available in Water Marketing Program Lakes Calendar Year 2020

December 2019

Kansas Water Office

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Introduction

Surplus water is defined as waters within the conservation water supply capacity committed to the State, but not required to meet contractual requirements. Water in this storage may be sold under short term contracts if it is found to be surplus, is determined to be in the public interest, and if the contract will advance the purposes of the State Water Resource Planning Act.

This report for Calendar Year 2020, as approved by the Kansas Water Authority, constitutes the finding that the waters so indicated in the report are surplus (IPM-12).

The report will be used as guidance to the Director of the Kansas Water Office in contracting for surplus waters for calendar year 2020. The surplus yield identified in this report is a starting point in determining whether the Office should enter into a surplus water marketing contract. At the time an application for a surplus contract is submitted, the Director will also consider:

- Pending applications that are actively being pursued by an applicant which may result in water being committed to a user in the near future
- The impact of the adopted lake level management plan
- The existence of drought conditions and the effect of the drought on water in storage
- Any other information that could be used in the determination of the public interest.

Surplus Water Available in 2020

Statute limits the amount of water that can be provided as surplus water in any one calendar year to 10% of the water supply yield capability, unless the Governor has declared an emergency which affects the public, health, safety or welfare. Surplus Yield is the yield associated with water supply storage that is in service and is not committed to another user for that year. The Surplus Yield Available is equal to either the surplus yield or 10% of the water supply yield, whichever value is smaller.

Summary Table

	Water Supply Yield		**Surplus Yield Available in 2020**	
Lake	mgd	Af/yr	mgd	Af/yr
Big Hill (Pearson-Skubitz)	8.0	8,947	0.80	895
Clinton	18.3	20,485	0.00	0
Council Grove	8.3	9,339	0.83	934
Elk City	13.8	15,476	1.38	1,548
Hillsdale	15.5	17,364	0.00	0
John Redmond	31.7	35,499	3.1	3,432
Kanopolis	8.6	9,691	0.86	969
Marion	5.1	5,716	0.51	572
Melvern	8.6	9,642	0.86	964
Milford	108.0	121,028	0.00	0
Perry	67.4	75,585	0.00	0
Pomona	7.8	8,792	0.78	879
Toronto	4.7	5,249	0.11	126
Tuttle Creek	173.0	193,918	17.3	19,392

Explanation of Yield Changes from CY 2019 Surplus Report

The primary difference between the water supply yields of this report and the previous year's report is due to the application of an additional year of sediment accumulation in each reservoir. The annual sedimentation rate at each reservoir is published online by the Kansas Water Office and establishes the annual volumetric reduction to the reservoirs listed in this surplus report. In addition to the impact of annual sediment accumulation on yield, operational changes can impact yield. A real-world operational change to Milford's Lake Level Management Plan was incorporated into the model, resulting in a greater reduction in yield. Toronto Lake has been added to the report, with surplus yield being available from its marketing storage. The changes from 2019 to 2020 are summarized in the table below.

Yield Changes From 2019 Surplus Report

Lake	2019 Yield (MGD)	2020 Yield (MGD)	% Change from 2019	Comment
Big Hill (Pearson-Skubitz)	8.0	8.0	-0.2%	
Clinton	18.3	18.3	-0.2%	
Council Grove	8.4	8.3	-0.3%	
Elk City	13.9	13.8	-0.9%	
Hillsdale	15.5	15.5	-0.1%	
John Redmond	32.0	31.7	-1.0%	Updated Survey
Kanopolis	8.1	8.6	7.1%	Updated Survey
Marion	5.1	5.1	-0.7%	
Melvern	8.7	8.6	-1.0%	Updated Survey
Milford	108.1	108.0	-0.1%	
Perry	68.0	67.4	-0.8%	
Pomona	7.9	7.8	-0.6%	
Toronto	4.7	4.7	-1.0%	
Tuttle Creek	174.6	173.0	-0.9%	

Yields units are million gallons/day (MGD)

Drought Condition Contingency

The Kansas Water Office has the statutory responsibility to advise the Governor on drought conditions and coordinates the Governor's drought response team. The Drought Monitoring Program collects climate data from a variety of sources, monitors drought activities and publishes a drought report during periods of drought. **The impact of drought conditions on reservoir storage will be evaluated at the time a surplus contract is being considered. Prior to entering into a surplus contract, the Kansas Water Office will review current drought conditions, declarations and forecasts. Conditions that may warrant declining a new surplus contract include: extended below normal precipitation; below normal streamflow in the river basin; concern about percent of storage remaining in the conservation pool and low probability of refill based on historic record**.

Explanation of Reservoir Tables

Table 1 - Conservation Storage Break Out

Table 1 for each reservoir separates the conservation storage into various components. The conservation storage is used for multiple purposes, which are identified in Table 1 and the pie charts as Water Quality, Other/Local and Water Supply.

The Water Quality pool is utilized to make established minimum releases which are intended to maintain flow in the stream below the lake. The Corps retains ownership of this storage.

The Other/Local pool includes storage that has been contracted by the Corps of Engineers to a local water supplier and storage that has been retained by the Corps of Engineers.

The Water Supply pool includes the amount of storage the State has under contract to serve the needs of municipal or industrial users' long term needs. The Water Supply pool is further divided into an In Service portion and a Future Use portion. Some of the water supply contracts between the Corps of Engineers and the Kansas Water Office allow the State to defer payment on storage until the storage is needed. When the storage is being paid for it is considered In Service. The Corps of Engineers retains ownership of the Future Use storage until the State calls that storage into service.

The In Service water supply is then further divided by how that storage has been and is being paid for. Water Marketing is the amount of committed storage to serve the customers of that program. Water Assurance is the amount of storage owned by the municipal and industrial users below lakes that have formed an assurance district. The Reserve Capacity is storage the State purchased in the mid 1990's under the 1985 Memorandum of Understanding (MOU) between Kansas and the U.S. Army Corps of Engineers. This portion of storage has not yet been needed for either the Water Marketing or Water Assurance programs. Annual operation and maintenance costs of the Reserve Capacity are paid by the State Water Plan Fund.

Table 1 provides the break out of the conservation storage in percentage of the current total conservation pool and in current estimated acre-feet, which is based on a projection using the most recent sediment survey adopted by the Corps of Engineers. The amount of water the water supply storage can yield during a 2% drought is also provided. The drought from 1952 through 1957 is defined in regulations as a 2% drought.

Table 2 - Contracted Quantities

Table 2 lists data associated with existing water marketing contracts for each lake. Table 2 provides the annual maximum quantity of water for each contract as well as the amount of water committed to each customer in 2019. Statute allows for a contract holder to negotiate a contract for an amount of water which gradually increases over time. The difference between the 2020 maximum quantity and the annual maximum quantity is a portion of the water available for surplus.

Table 3 - Pending Applications

Table 3 lists pending applications for water marketing contracts for each lake. The Water Marketing Program allows applications to remain on file for up to 13 years without beginning negotiations for a contract. Thus, some applications will not result in long term contracts in 2020. This information will be reviewed by the Director at the time a surplus application is submitted.

Table 4 - Past Surplus Contracts

Table 4 lists the surplus water marketing contracts for the past two years for each lake.

Table 5 - Surplus Yield

This table lists the yield that is determined to be surplus in 2020. Storage owned by a water assurance district and water committed to a water marketing customer in 2020 is not available for surplus contracts. Thus, the yield committed through marketing contracts and the yield associated with the portion of the Water Supply pool owned by a water assurance district is subtracted from the estimated 2020 yield. Additionally, the portion of the Water Supply pool considered Future Use Storage is controlled by the Corps of Engineers and is not available for a surplus water marketing contract. When there is Surplus Yield, the amount of Surplus Yield Available for use during the calendar year is limited to 10% of the Current Yield or the calculated Surplus Yield, whichever is less.

Calculation of Surplus Yield Available (*example*):

	mgd	AF/yr	
	10	11,201	Current Yield
-	2	2,240	Marketing Contracts
-	3	3,360	WAD Storage Yield
-	3	3,360	Future Use Yield
	2	2,240	Surplus Yield
	1	**1,120**	**Surplus Yield Available**

Lake Level Management Considerations

The Kansas Water Office is charged by the State Water Planning Act with negotiating and entering into agreements with the Corps of Engineers and the Bureau of Reclamation regarding operation or releases of water from federal projects. Seasonal lake levels are developed annually and are known as Lake Level Management Plans. Development of these plans includes public and stakeholder input. They are intended to increase the benefits to recreational users and improve wildlife and aquatic habitat while protecting the flood control, water supply and water quality purposes of the lake. It is important to note that the plans are developed for average climate conditions.

Most plans include additional flood storage for high springtime flows but flood operation procedures are followed as specified in the regulation manual. Drought conditions may also warrant deviation from the plan. Large volumes of water are stored or evacuated as the seasonal pool elevation changes. Protection of water supply storage is essential and statutory limitations are in place for this purpose. Water from the water quality and water supply pools may be evacuated during a lake level operation; however, the amount of water evacuated from the water supply pool under a lake level management operation is limited to the surplus yield available.

Internal Policy Memorandum #12

KANSAS WATER AUTHORITY
901 South Kansas Avenue, Topeka, KS 66612-1249 (785) 296-3185

Steve Irsik, Chairman
5405 Six Road, Ingalls, KS 67853
(620) 335-5363 - steve@ucom.net

IPM-12
Adopted April 7, 2006

MEMORANDUM OF INTERNAL POLICY

Disposal of Surplus Water in the State's Conservation Water Supply Capacity

Background

The Kansas Water Authority shall authorize the director of the Kansas Water Office to dispose of water when the Authority finds

1. the water is determined to be surplus,
2. it is in the public interest to dispose of the water, and
3. such disposal will advance the purposes of the State water resource planning act.

Surplus water is defined as waters within the conservation water supply capacity committed to the State, but not required to meet contractual requirements. K.S.A. 82a-1305(b) addresses disposal of surplus water.

82a-1305. (b) Whenever the authority finds that it is in the public's interest and will advance the purposes set forth in this act and in article 9 of chapter 82a of Kansas Statutes Annotated, and amendments thereto, the authority shall authorize the director to dispose of waters found by the authority to be surplus waters. Any arrangement for the disposition of any such surplus waters shall not be subject to the provisions of K.S.A. 82a-1306, 82a-1307 and 82a-1308a, and amendments thereto, relating to long-term contracts. No such arrangement shall be made for a period of time in excess of one year nor shall any such arrangement dispose of water from the conservation water supply capacity in excess of 10% of the yield capability as computed pursuant to subsection (a) unless the governor has declared that an emergency exists which affects the public health, safety or welfare. No charges shall be levied on the disposition of surplus waters when the purpose for such disposition is streamflow maintenance or reservoir pool management. A charge at a rate not to exceed the rate established pursuant to K.S.A. 82a-1306, and amendments thereto, shall be levied on the disposition of surplus waters when the purpose of such disposition is the maintenance of public health. A charge at a rate that may exceed the rate established pursuant to K.S.A. 82a-1306, and amendments thereto, shall be levied on the disposition of surplus waters when the purpose for such disposition is other than streamflow maintenance, reservoir pool management or maintenance of public health. History: L. 1974, ch. 452, § 5; L. 1976, ch. 441, § 2; L. 1977, ch. 358, § 1; L. 1983, ch. 343, § 4; L. 1984, ch. 382, § 2; L. 1986, ch. 396, § 4; July 1.

Process and Criteria

At the last Kansas Water Authority meeting of each calendar year, the Kansas Water Office will report to the Authority the following:

1. available surplus water within the State's water conservation storage capacity by reservoir for the following calendar year,
2. pending applications and on-going negotiations of water marketing contracts,
3. anticipated uses of the surplus water, including anticipated water marketing surplus contracts, streamflow maintenance needs and lake level management plans, and
4. assessment of any drought that may be occurring in the State and potential impacts of the drought on storage.

Approval of the report by the Authority will constitute a finding that the waters so indicated in the report are surplus, that it is in the public interest to dispose of the surplus waters, and disposal will advance the purposes of the State water resource planning act. The report will guide the director of the Kansas Water Office in disposing of surplus waters for the following calendar year, including entering into surplus water marketing contracts.

Because the yield capability of each reservoir's water conservation storage, referred to in K.S.A. 82a-1305(a), is projected into the future forty years per K.A.R. 98-5-8(a)(4) and the annual report of disposal of surplus water will utilize yield data associated with the following calendar year, the disposal of surplus water will be limited to the amount of storage that allows 90% of the "yield capability as computed pursuant to subsection (a)" to remain in storage for the following calendar year.

Date: June 2, 2006

Steve Irsik, Chairman
Kansas Water Authority

Reservoir Specific Tables

Big Hill Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	814 - 858	Flood Pool Elevation (ft msl)	858 - 867.5

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	0.00%	0	0
Other/Local	0.00%	0	0
Water Supply	100.00%	8.0	22,148
Future Use	64.20%	5.1	14,219
In Service	35.80%	2.9	7,929
Water Marketing	35.80%	2.9	7,929
Assurance District	0.00%	0	0
Reserve Capacity	0.00%	0	0

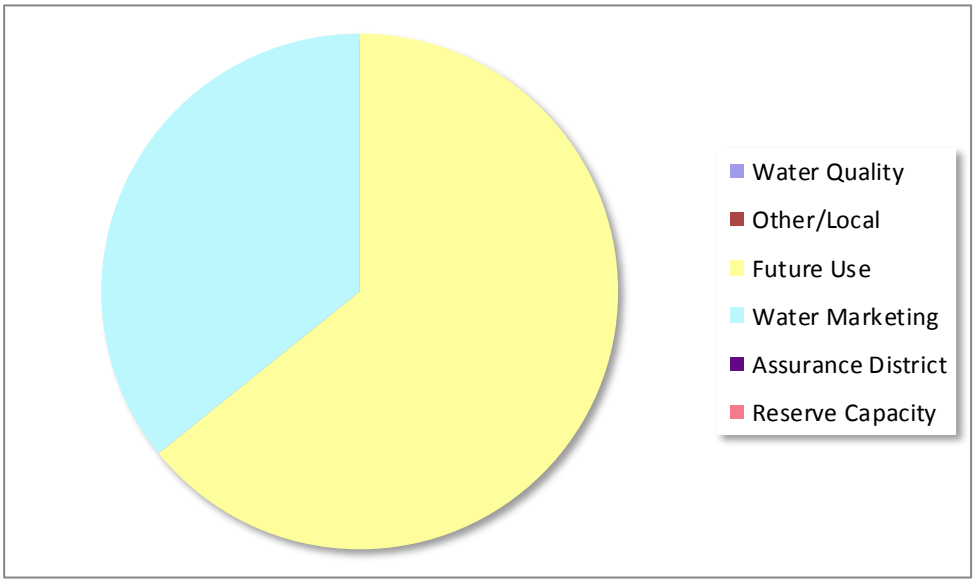


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
98-1	Public Wholesale Water Supply Dist. No. 4	4/17/2038	454,700,000	1,395	454,700,000	1,395
			454,700,000	1,395	454,700,000	1,395

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
8.0	8,947	Current Yield
1.2	1,395	Marketing Contracts
0	0	WAD Storage Yield
5.1	5,744	Future Use Yield
1.6	1,807	Surplus Yield
0.80	**895**	**Surplus Yield Available**

Lake Level Management Consideration

No Lake Level Management Plan was prepared for Big Hill for Water Year 2020.

Clinton Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	840 - 875.5	Flood Pool Elevation (ft msl)	875.5 - 903.4

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	19.20%	0	22,117
Other/Local	0.00%	0	0
Water Supply	80.80%	18.3	93,077
Future Use	32.30%	7.3	37,208
In Service	48.50%	11.0	55,869
Water Marketing	48.50%	11.0	55,869
Assurance District	0.00%	0	0
Reserve Capacity	0.00%	0	0

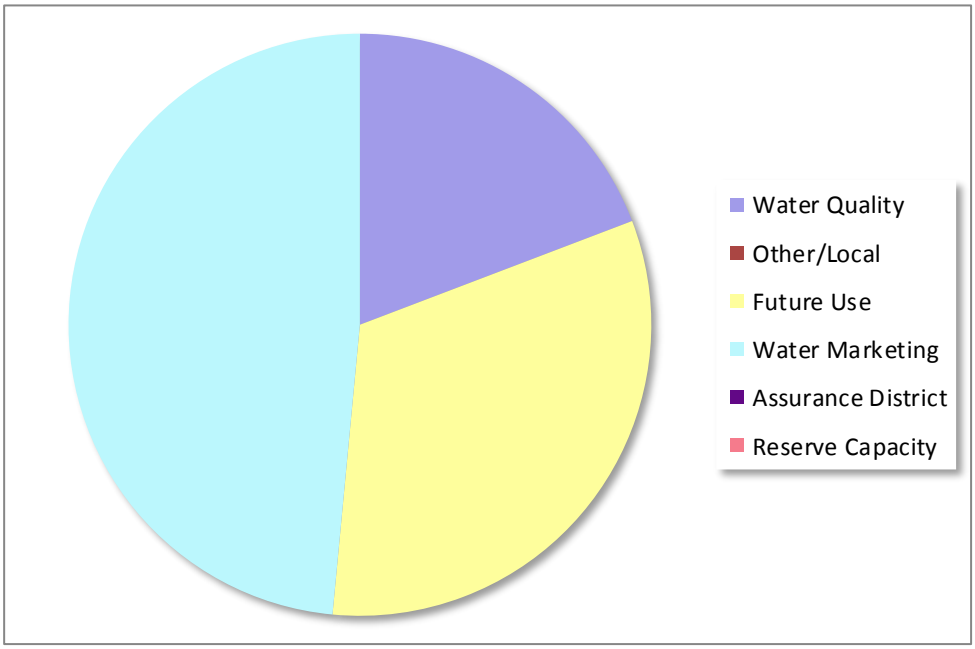


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
79-1	Douglas County Rural Water District No. 3	12/13/2021	684,273,174	2,100	684,273,174	2,100
79-2	Douglas County Rural Water District No. 6	12/13/2021	23,759,981	73	23,759,981	73
90-2	Douglas County Rural Water District No. 6	1/1/2031	9,503,298	29	9,503,298	29
95-3	Douglas County Rural Water District No. 5	10/26/2035	128,298,541	394	128,298,541	394
19-1	City of Lawrence	12/29/2059	4,988,000,000	15,308	4,988,000,000	15,308
			5,833,834,994	17,903	5,833,834,994	17,903

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

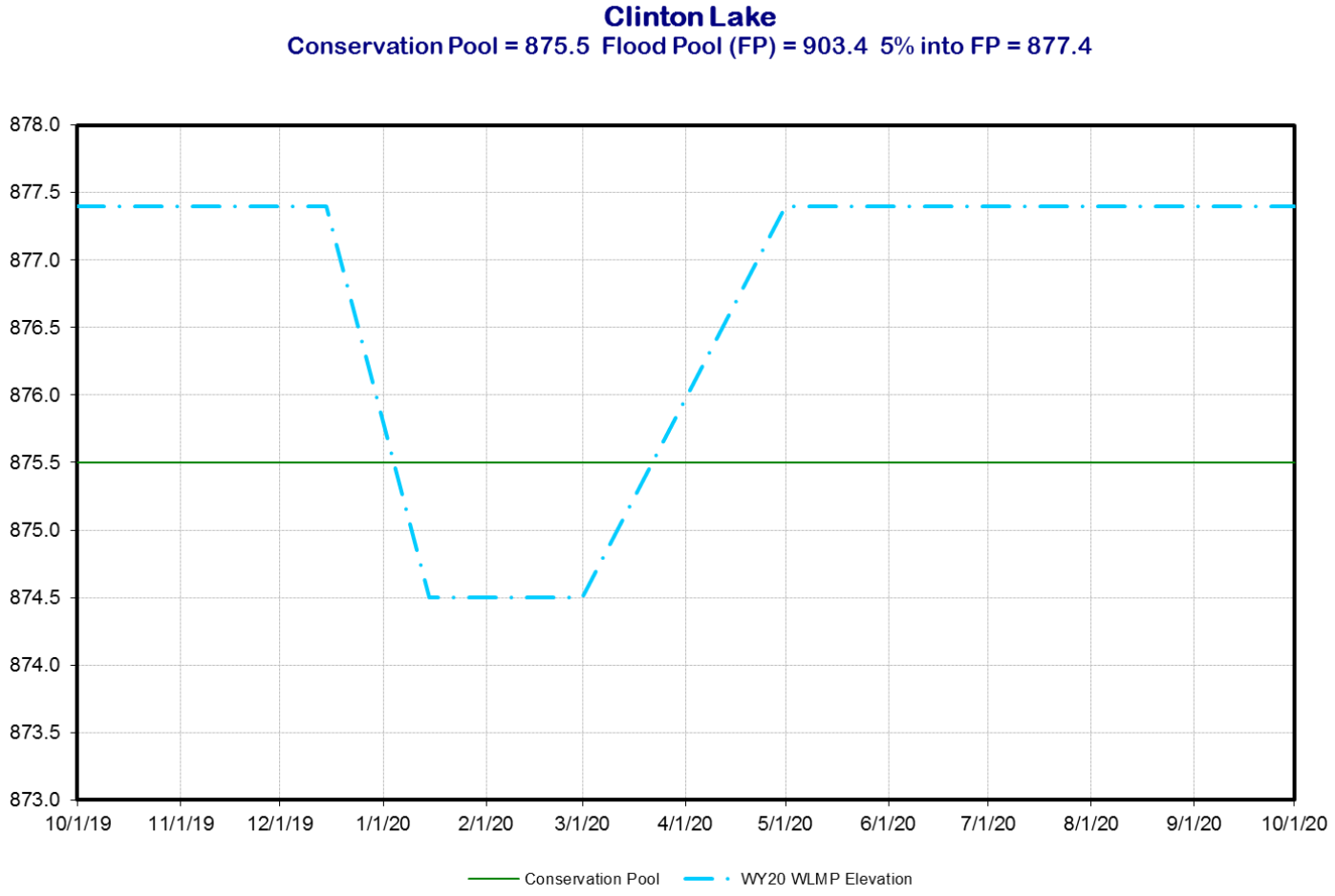
Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
18.3	20,485	Current Yield
16.0	17,903	Marketing Contracts
0	0	WAD Storage Yield
7.3	8,189	Future Use Yield
0.0	0	Surplus Yield
0.0	**0**	**Surplus Yield Available**

Lake Level Management Consideration

According to the Lake Level Management Plan, pool level may be lowered in January (or prior to freezing). The minimum lake level in this plan does not require disposition of surplus water.



Council Grove Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	1240 - 1274	Flood Pool Elevation (ft msl)	1274 - 1289

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	22.67%	0	9,350
Other/Local	0.00%	0	0
Water Supply	77.33%	8.3	31,892
Future Use	0.00%	0.0	0
In Service	77.33%	8.3	31,892
Water Marketing	43.43%	4.7	17,911
Assurance District	14.80%	1.6	6,104
Reserve Capacity	19.10%	2.1	7,877

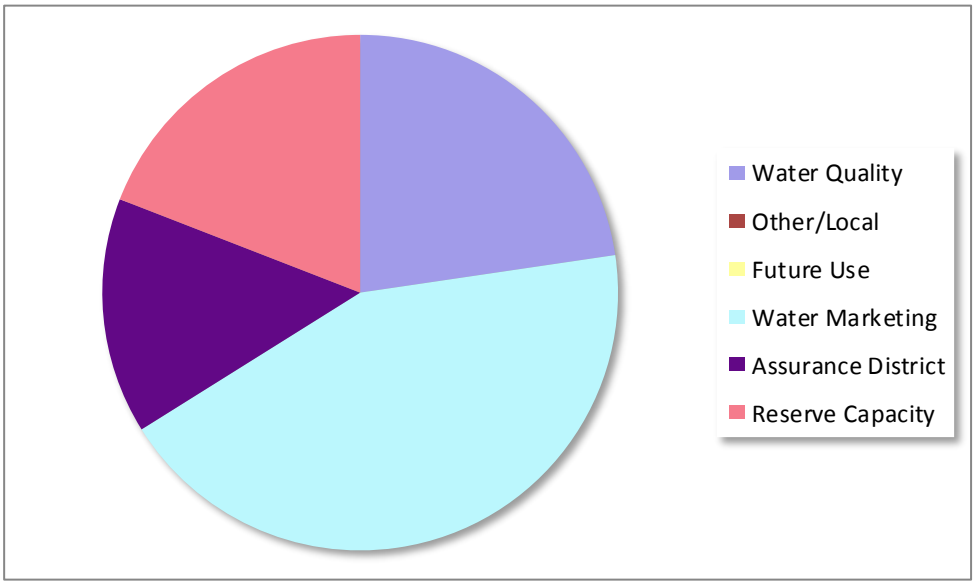


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
81-2	City of Emporia	10/21/2023	1,095,000,000	3,360	1,095,000,000	3,360
93-4	City of Council Grove	9/13/2033	30,000,000	92	150,000,000	460
			1,125,000,000	3,452	1,245,000,000	3,820

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
City of Council Grove	12/6/2028	175,000,000	537

Table 4: Past Surplus Contracts

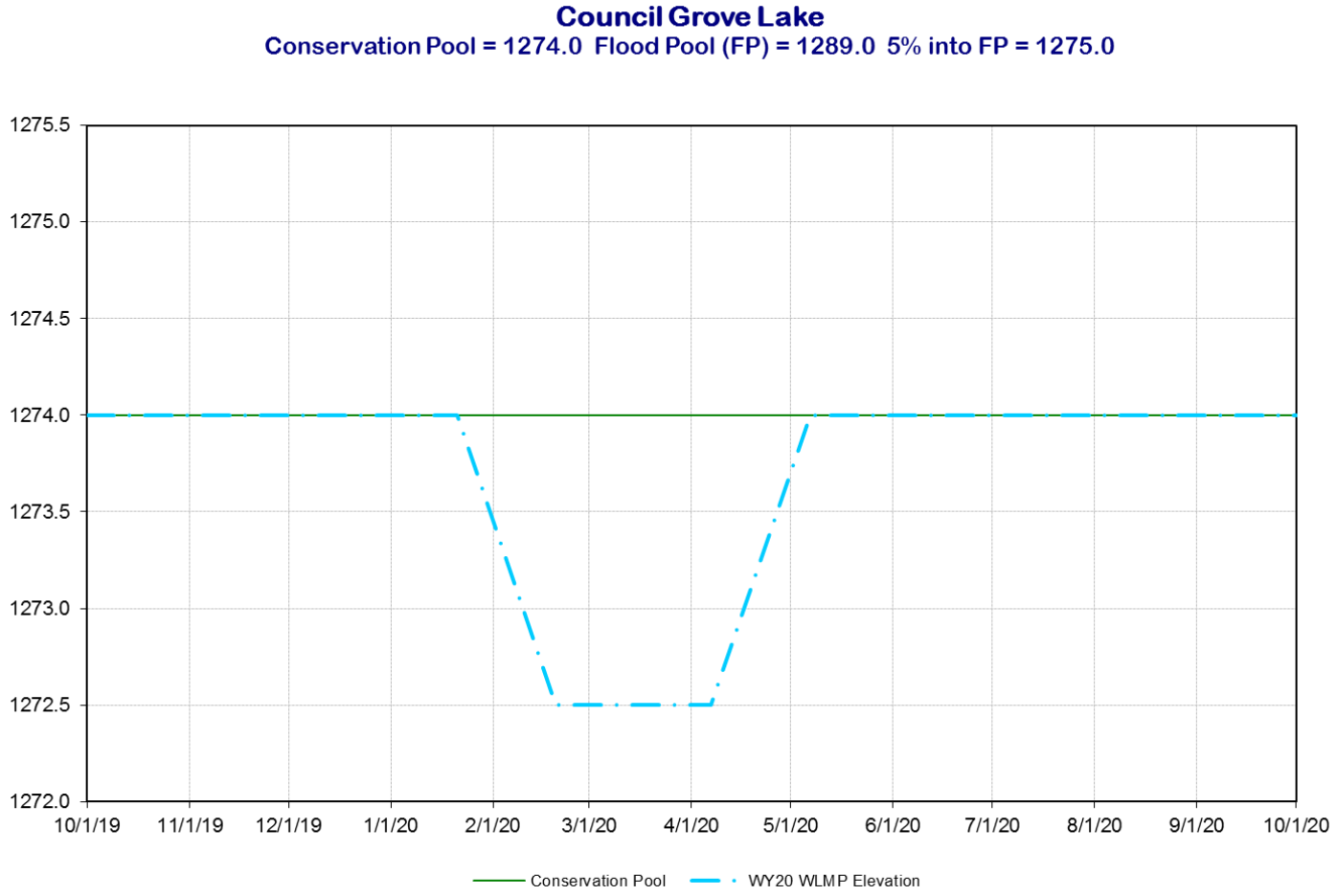
Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
18-01	Tom J. Moxley	12/31/2018	25,000,000	77
18-02	D. Randall Heilman	12/31/2018	14,112,000	43

Table 5: Surplus Yield

mgd	AF/yr	
8.3	9,339	Current Yield
3.1	3,452	Marketing Contracts
1.6	1,787	WAD Storage Yield
0.0	0	Future Use Yield
3.7	4,099	Surplus Yield
0.83	**934**	**Surplus Yield Available**

Lake Level Management Consideration

According to the Lake Level Management Plan, pool level may be lowered in January (or prior to freezing). The minimum lake level in this plan does not require disposition of surplus water.



Elk City Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	764 - 796	Flood Pool Elevation (ft msl)	796 - 825

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	14.08%	0	4,822
Other/Local	0.00%	0	0
Water Supply	85.92%	13.8	29,427
Future Use	0.00%	0.0	0
In Service	85.92%	13.8	29,427
Water Marketing	57.45%	9.2	19,676
Assurance District	0.00%	0.0	0
Reserve Capacity	28.47%	4.6	9,751

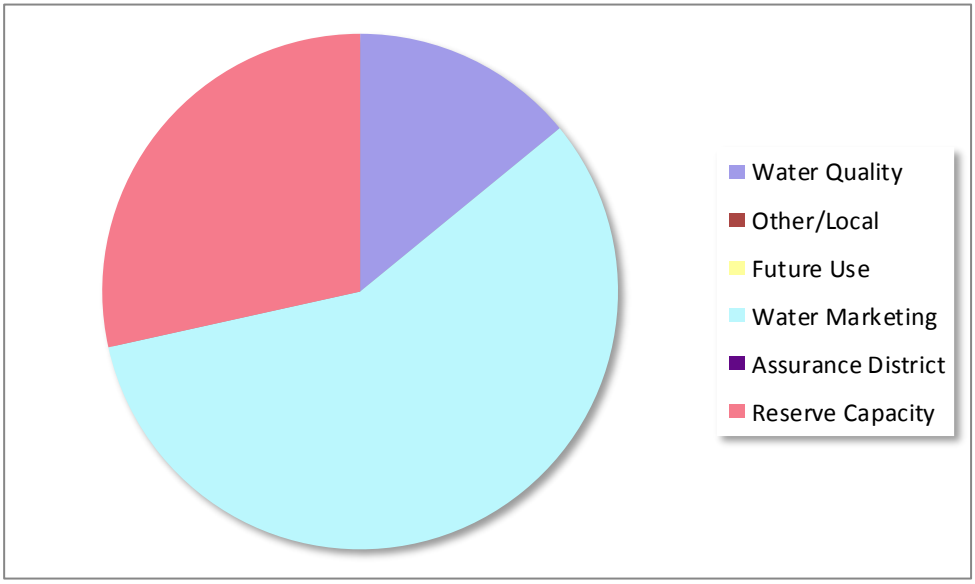


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
81-5	City of Coffeyville	12/16/2023	300,000,000	921	300,000,000	921
99-5	Coffeyville Resources	12/3/2039	608,000,000	1,866	608,000,000	1,866
12-7	Coffeyville Resources	8/9/2051	400,000,000	1,228	400,000,000	1,228
			1,308,000,000	4,015	1,308,000,000	4,015

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
13.8	15,476	Current Yield
3.6	4,015	Marketing Contracts
0.0	0	WAD Storage Yield
0.0	0	Future Use Yield
10.2	11,461	Surplus Yield
1.38	**1,548**	**Surplus Yield Available**

Lake Level Management Consideration

No Lake Level Management Plan was prepared for Elk City for Water Year 2020.

Hillsdale Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	850 - 917	Flood Pool Elevation (ft msl)	917 - 931

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	22.06%	0	16,680
Other/Local	0.00%	0	0
Water Supply	77.94%	15.5	58,931
Future Use	53.26%	10.6	40,268
In Service	24.68%	4.9	18,663
Water Marketing	24.68%	4.9	18,663
Assurance District	0.00%	0.0	0
Reserve Capacity	0.00%	0.0	0

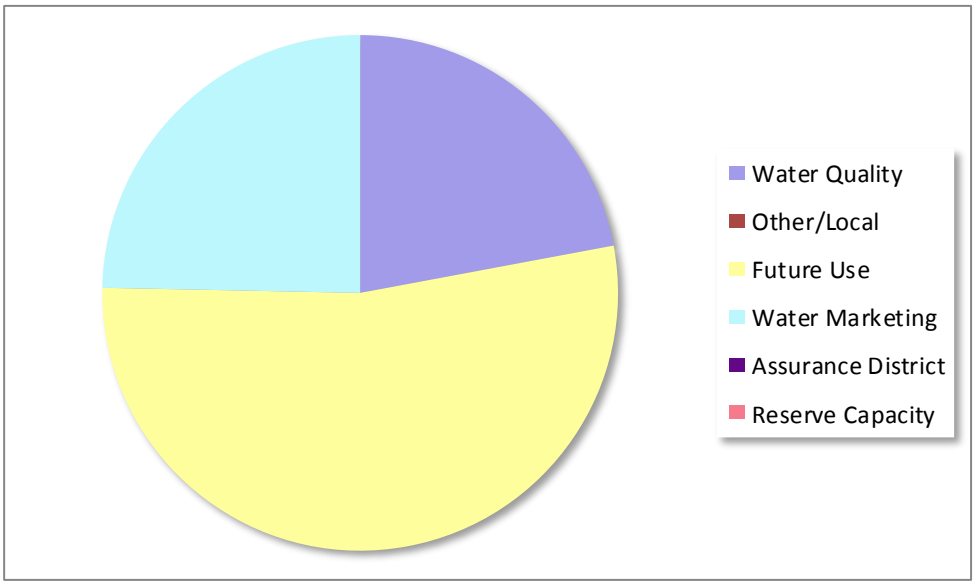


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
81-1	Miami County Rural Water District No. 2	10/21/2023	239,440,000	735	239,440,000	735
13-1	Hillsdale Area Water Cooperative	12/31/2052	4,564,323,000	14,007	5,308,560,000	16,291
			4,803,763,000	14,742	5,548,000,000	17,026

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

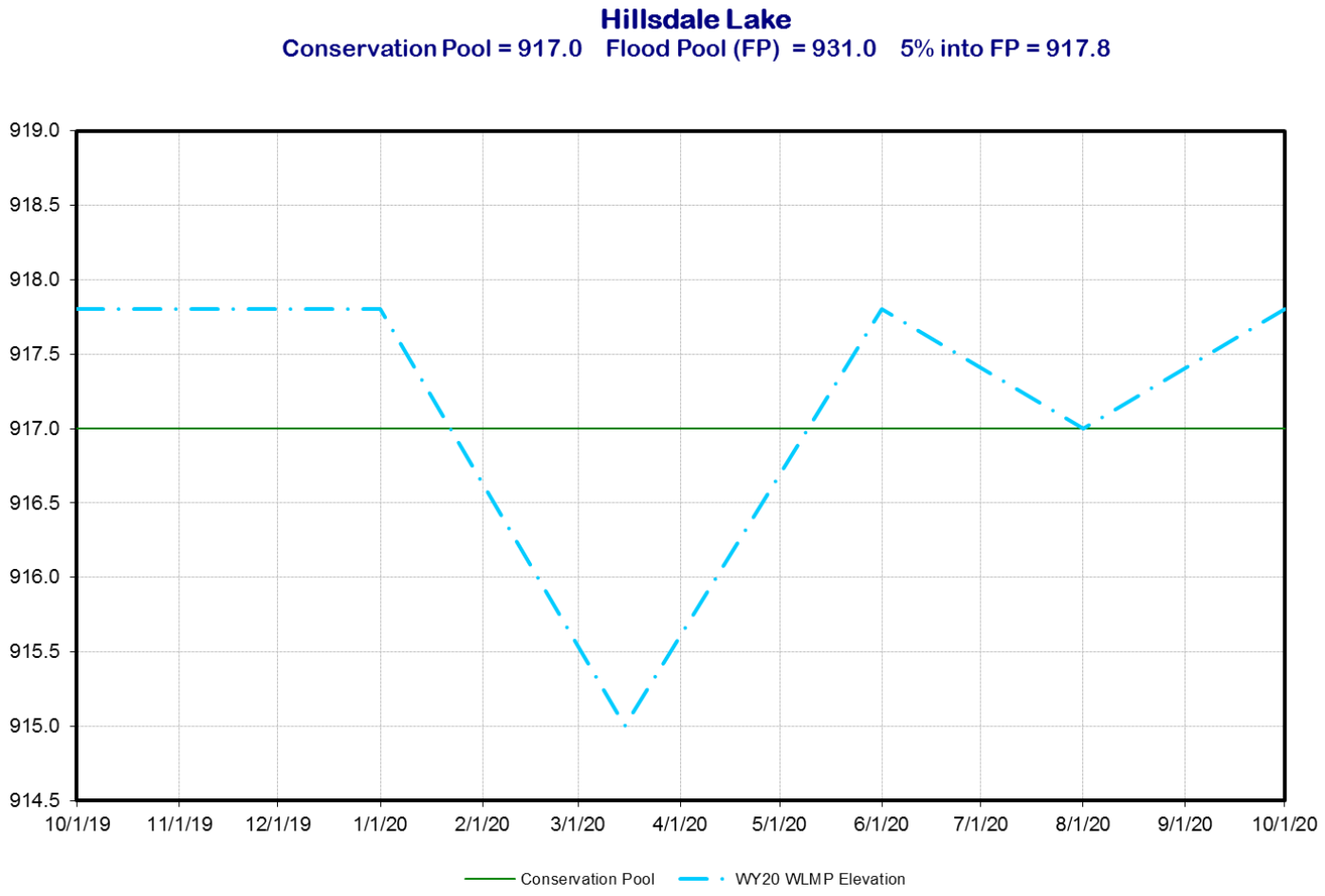
Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
15.5	17,364	Current Yield
13.2	14,742	Marketing Contracts
0.0	0	WAD Storage Yield
10.6	11,865	Future Use Yield
0.0	0	Surplus Yield
0.00	**0**	**Surplus Yield Available**

Lake Level Management Consideration

According to the Lake Level Management Plan, pool level may be lowered in January (or prior to freezing). The minimum lake level in this plan does not require disposition of surplus water.



John Redmond Reservoir

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	1020 - 1041	Flood Pool Elevation (ft msl)	1041 - 1068

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	23.82%	0	14,766
Other/Local	0.00%	0	0
Water Supply	76.18%	31.7	47,223
Future Use	0.00%	0.0	0
In Service	76.18%	31.7	47,223
Water Marketing	69.06%	28.7	42,810
Assurance District	7.12%	3.0	4,414
Reserve Capacity	0.00%	0.0	0

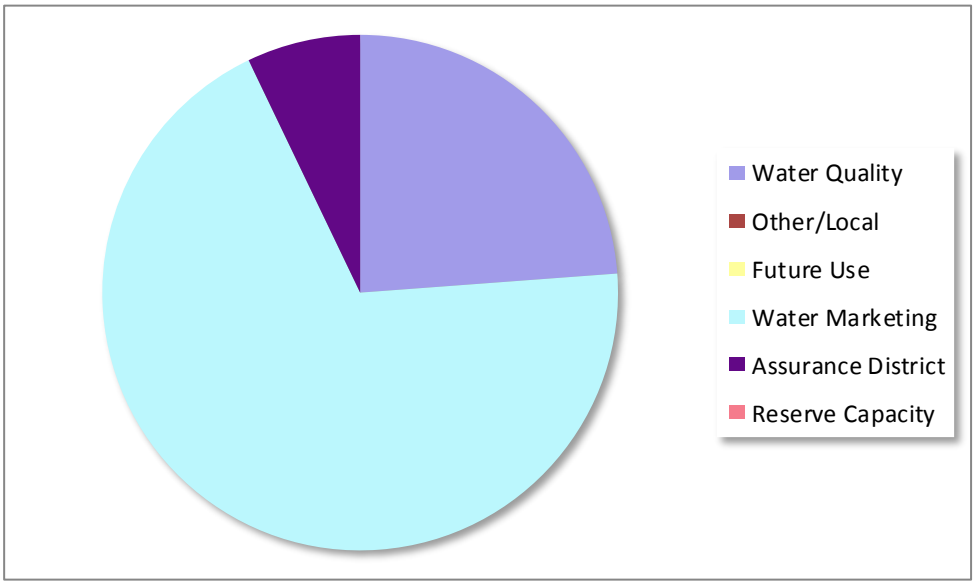


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
17-2	Wolf Creek Nuclear Generating Station	12/31/2022	9,368,000,000	28,749	9,368,000,000	28,749
	(KG&E, KCP&L, KEPC)		9,368,000,000	28,749	9,368,000,000	28,749

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
31.7	35,499	Current Yield
25.6	28,749	Marketing Contracts
3.0	3,318	WAD Storage Yield
0.0	0	Future Use Yield
3.1	3,432	Surplus Yield
3.06	**3,432**	**Surplus Yield Available**

Lake Level Management Consideration

No Lake Level Management Plan was prepared for John Redmond for Water Year 2020.

Kanopolis Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	1431 - 1463	Flood Pool Elevation (ft msl)	1463 - 1508

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	53.40%	0	24,814
Other/Local	0.00%	0	0
Water Supply	46.60%	8.6	21,655
Future Use	0.00%	0.0	0
In Service	46.60%	8.6	21,655
Water Marketing	23.46%	4.4	10,902
Access District	23.14%	4.3	10,753
Reserve Capacity	0.00%	0.0	0

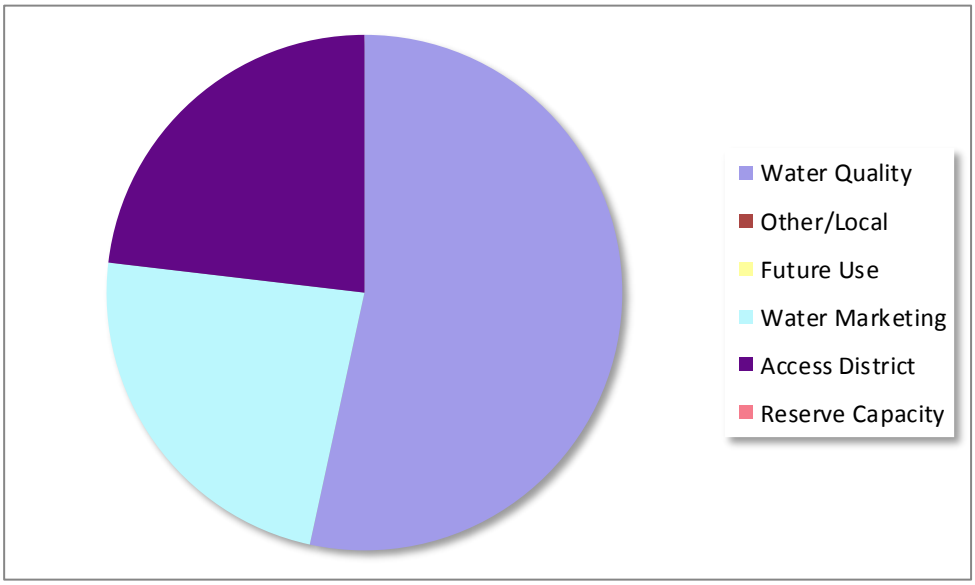


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
01-2	Post Rock Rural Water District	7/12/2041	400,000,000	1,228	400,000,000	1,228
			400,000,000	1,228	400,000,000	1,228

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

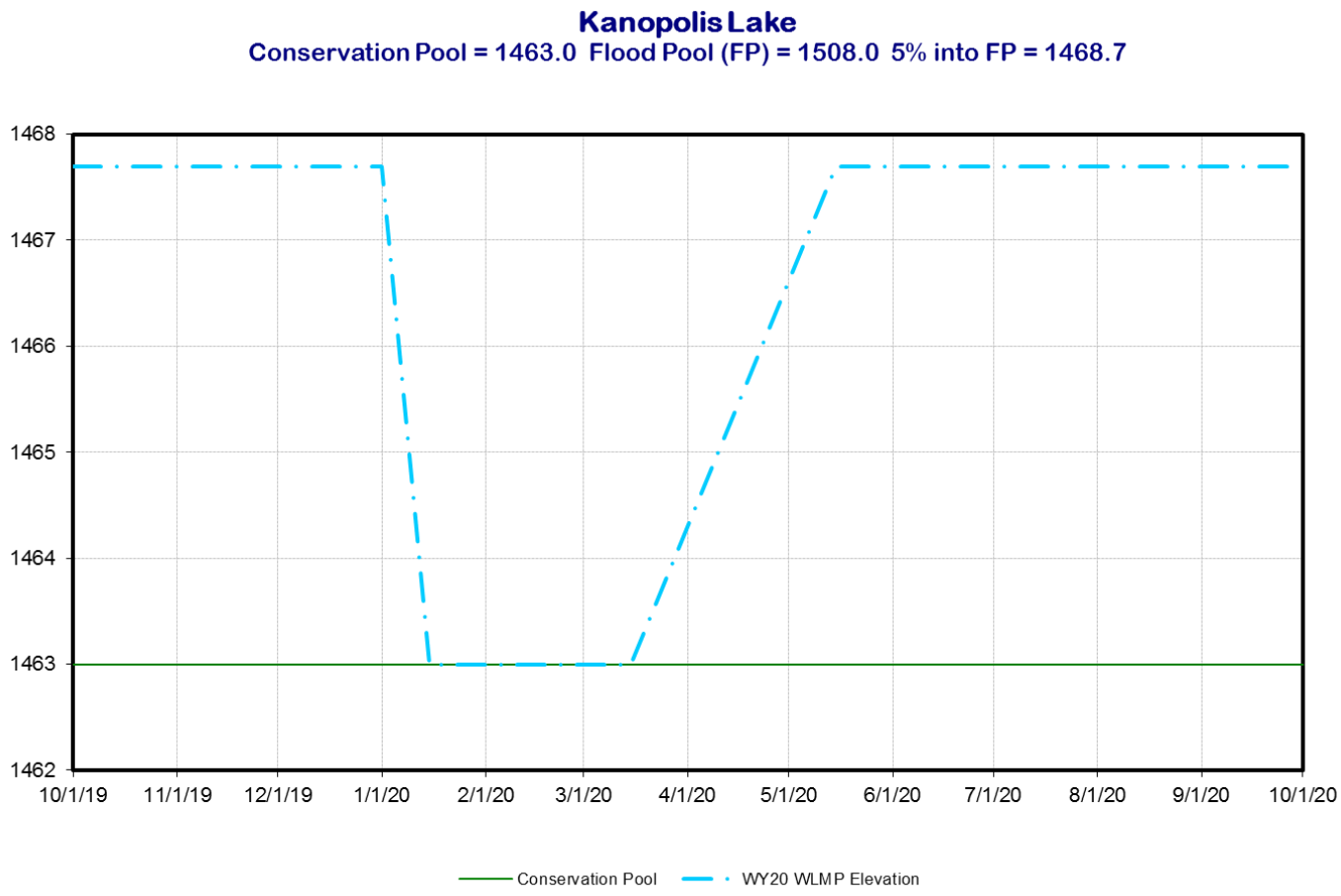
Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
8.6	9,691	Current Yield
1.1	1,228	Marketing Contracts
4.3	4,812	AD Storage Yield
0.0	0	Future Use Yield
3.3	3,651	Surplus Yield
0.86	**969**	**Surplus Yield Available**

Lake Level Management Consideration

In accordance with the Lake Level Management Plan for Kanopolis, no conservation storage will be evacuated during the 2020 Water Year.



Marion Reservoir

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	1320 - 1350.5	Flood Pool Elevation (ft msl)	1350.5 - 1358.5

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	35.88%	0	27,898
Other/Local	0.00%	0	0
Water Supply	64.12%	5.1	49,856
Future Use	0.00%	0.0	0
In Service	64.12%	5.1	49,856
Water Marketing	45.77%	3.64	35,588
Assurance District	0.43%	0.03	334
Reserve Capacity	17.92%	1.43	13,934

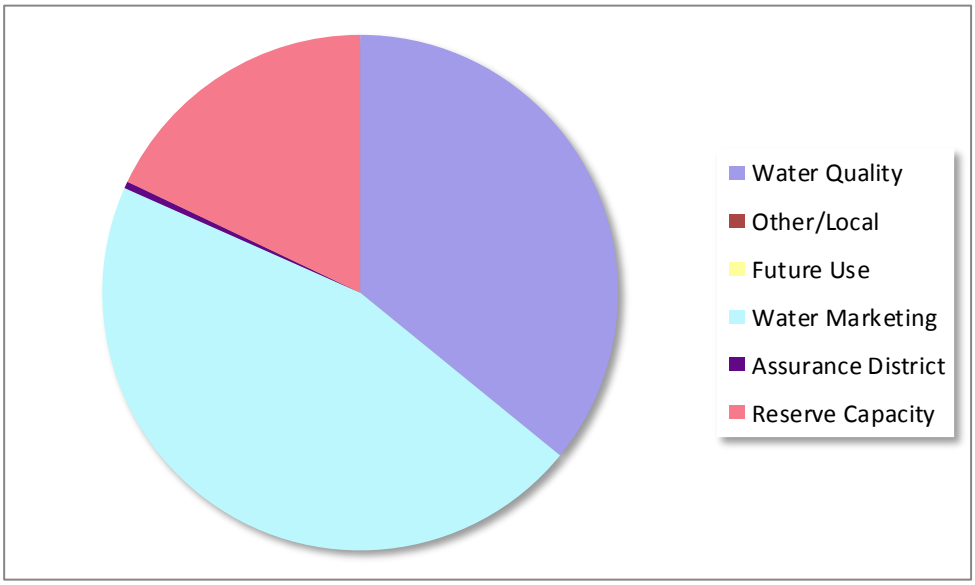


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
80-1	City of Hillsboro	12/22/2021	300,000,000	921	300,000,000	921
81-4	City of Marion	10/3/2023	237,500,000	729	237,500,000	729
99-1	City of Peabody	4/9/2039	60,000,000	184	60,000,000	184
			597,500,000	1,834	597,500,000	1,834

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

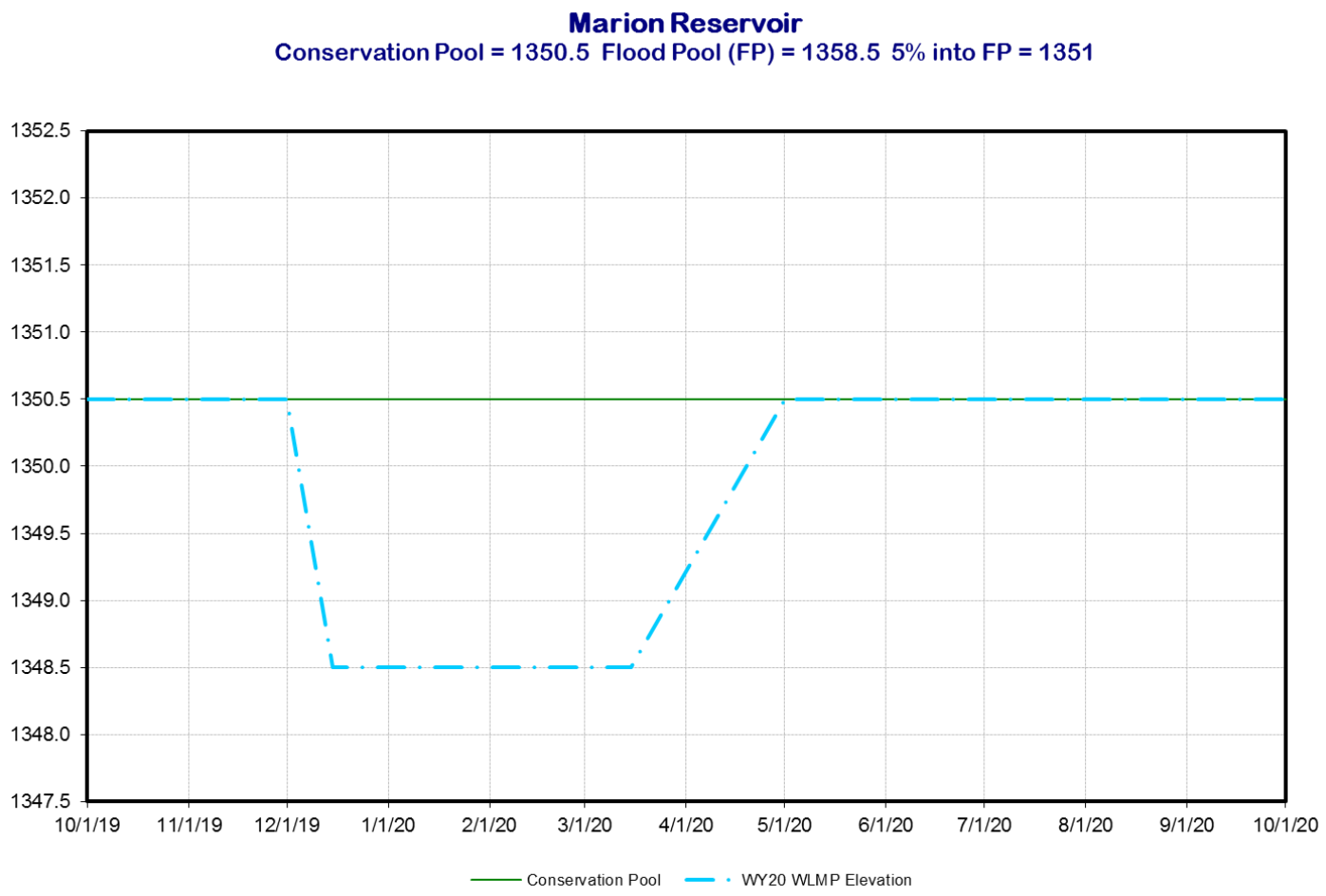
Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
5.1	5,716	Current Yield
1.64	1,834	Marketing Contracts
0.03	38	WAD Storage Yield
0.0	0	Future Use Yield
3.43	3,844	Surplus Yield
0.51	**572**	**Surplus Yield Available**

Lake Level Management Consideration

According to the Lake Level Management Plan, pool level may be lowered in December (or prior to freezing). The minimum lake level in this plan does not require disposition of surplus water.



Melvern Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	975 - 1036	Flood Pool Elevation (ft msl)	1036 - 1057

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	27.59%	0	40,728
Other/Local	37.93%	0	55,992
Water Supply	34.48%	8.6	50,899
Future Use	0.00%	0.0	0
In Service	34.48%	8.6	50,899
Water Marketing	9.90%	2.5	14,614
Assurance District	7.17%	1.8	10,584
Reserve Capacity	17.41%	4.3	25,701

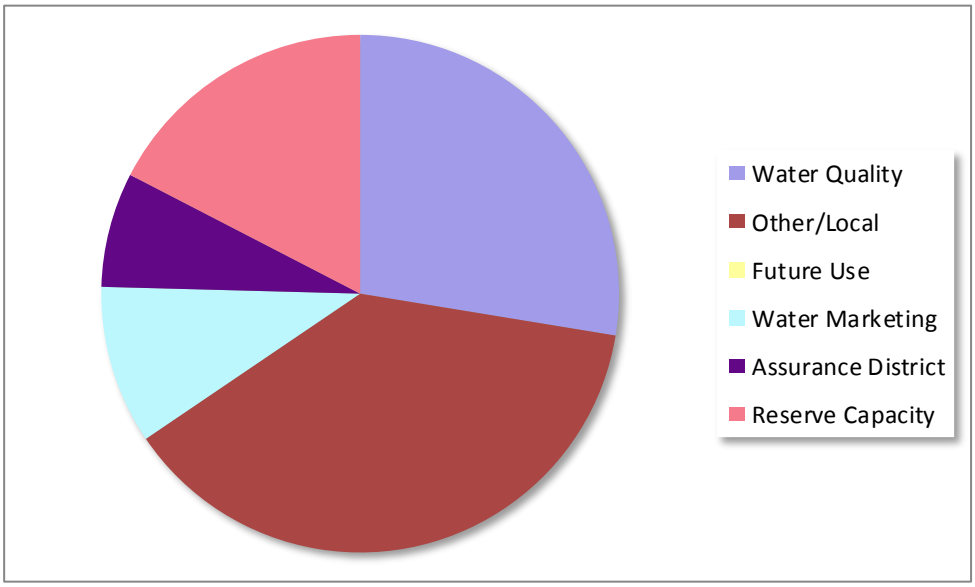


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
93-3	City of Osage City	4/22/2033	100,000,000	307	100,000,000	307
93-2	City of Burlingame	7/15/2033	65,000,000	199	65,000,000	199
93-1	Public Wholesale Water Supply District No. 12	1/1/2035	450,000,000	1,381	547,430,000	1,680
05-6	City of Harveyville	8/11/2045	25,000,000	77	25,000,000	77
			640,000,000	1,964	737,430,000	2,263

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

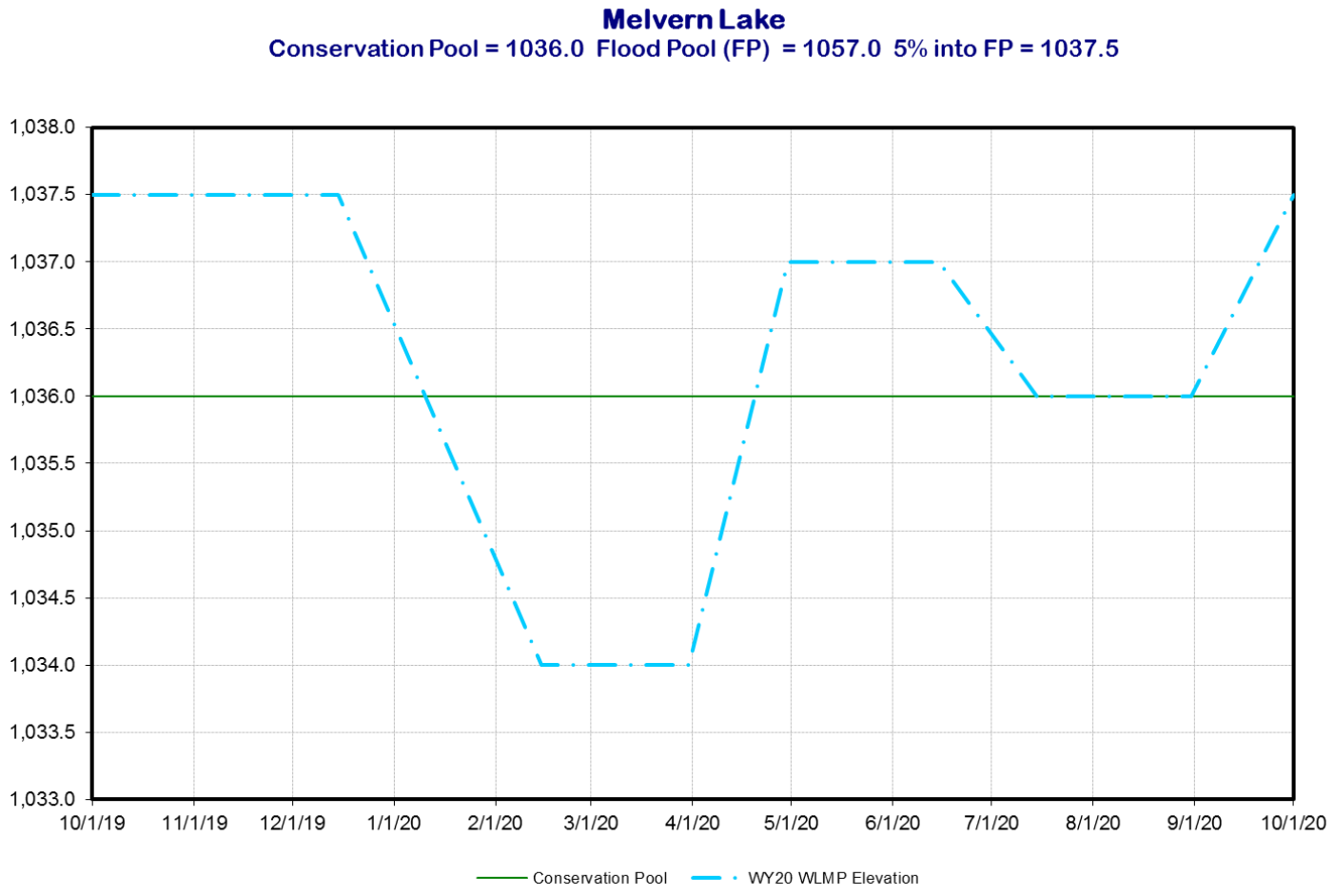
Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
8.6	9,642	Current Yield
1.8	1,964	Marketing Contracts
1.8	2,005	WAD Storage Yield
0.0	0	Future Use Yield
5.1	5,673	Surplus Yield
0.86	**964**	**Surplus Yield Available**

Lake Level Management Consideration

According to the Lake Level Management Plan, pool level may be lowered in December (or prior to freezing). The minimum lake level in this plan does not require disposition of surplus water.



Milford Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	1080 - 1144.4	Flood Pool Elevation (ft msl)	1144.4 - 1176.2

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	0.00%	0	0
Other/Local	0.00%	0	0
Water Supply	100.00%	108	357,240
Future Use	66.12%	71	236,207
In Service	33.88%	37	121,033
Water Marketing	15.55%	17	55,551
Assurance District	18.33%	20	65,482
Reserve Capacity	0.00%	0	0

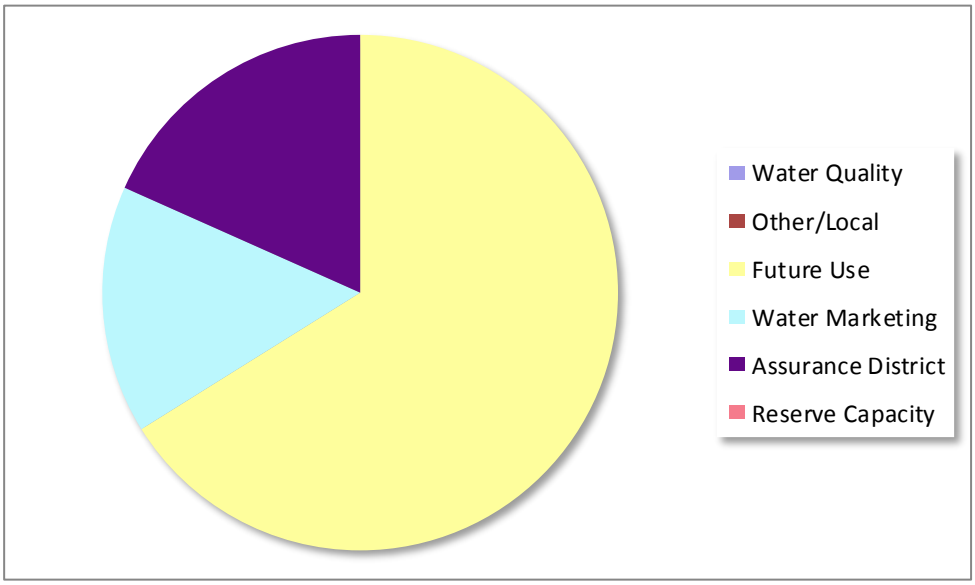


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
80-2	Westar Energy - Jeffrey Energy Center	12/5/2022	7,300,000,000	22,403	7,300,000,000	22,403
			7,300,000,000	22,403	7,300,000,000	22,403

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

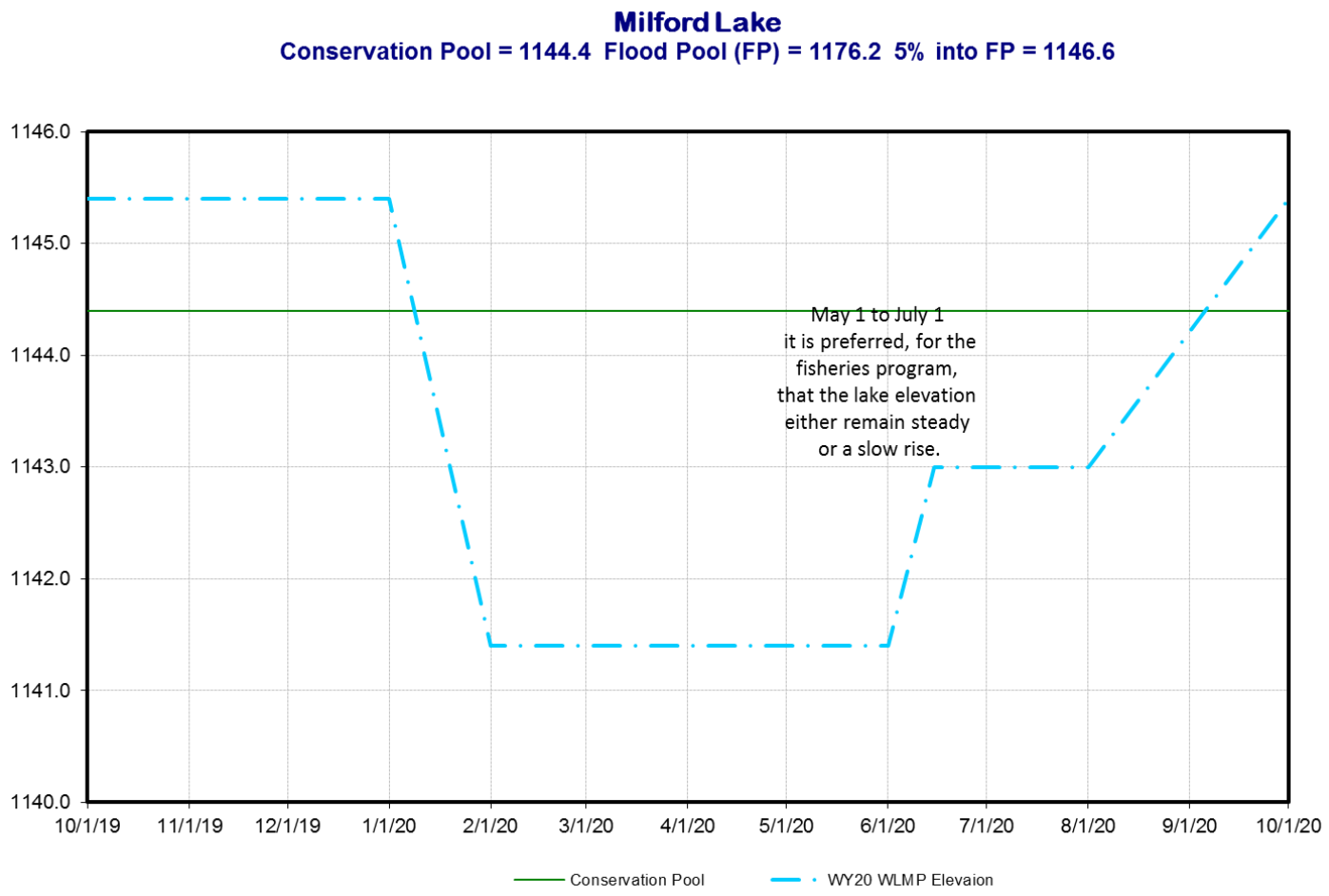
Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
108	121,028	Current Yield
20	22,403	Marketing Contracts
20	22,184	WAD Storage Yield
71	80,024	Future Use Yield
0.0	0	Surplus Yield
0.00	**0**	**Surplus Yield Available**

Lake Level Management Consideration

In accordance with the Lake Level Management Plan for Milford, pool level will be lowered in January. The drawdown will be made in an attempt to mitigate the impact of the harmful algal blooms in the lake. The quantity of water in the future use pool is sufficient for the evacuation of storage associated with the change in elevation.



Perry Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	850 - 891.5	Flood Pool Elevation (ft msl)	891.5 - 920.6

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	0.00%	0	0
Other/Local	0.00%	0	0
Water Supply	100.00%	67.4	188,309
Future Use	83.33%	56.2	156,918
In Service	16.67%	11.2	31,391
Water Marketing	0.00%	0.0	0
Assurance District	16.67%	11.2	31,391
Reserve Capacity	0.00%	0.0	0

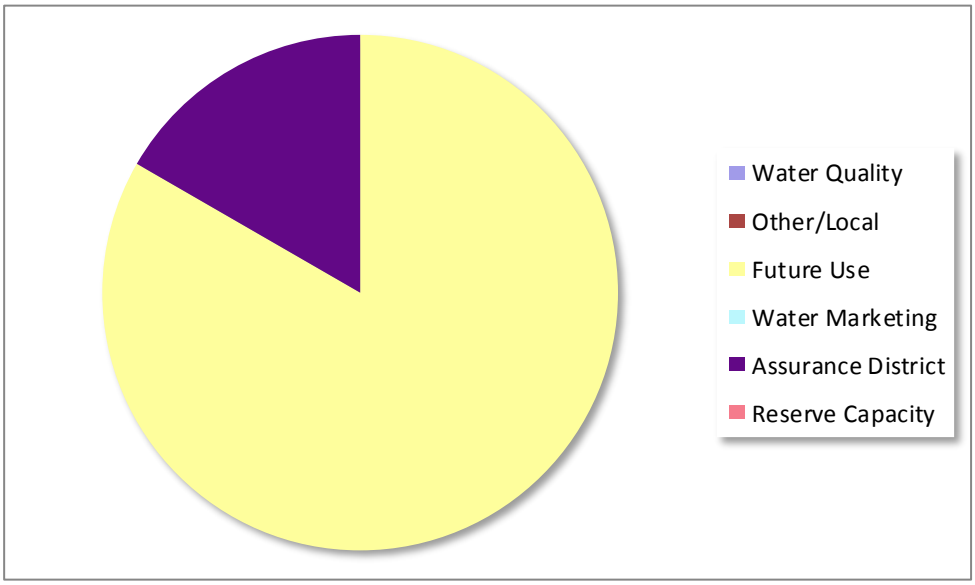


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There are no contracted quantities						

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

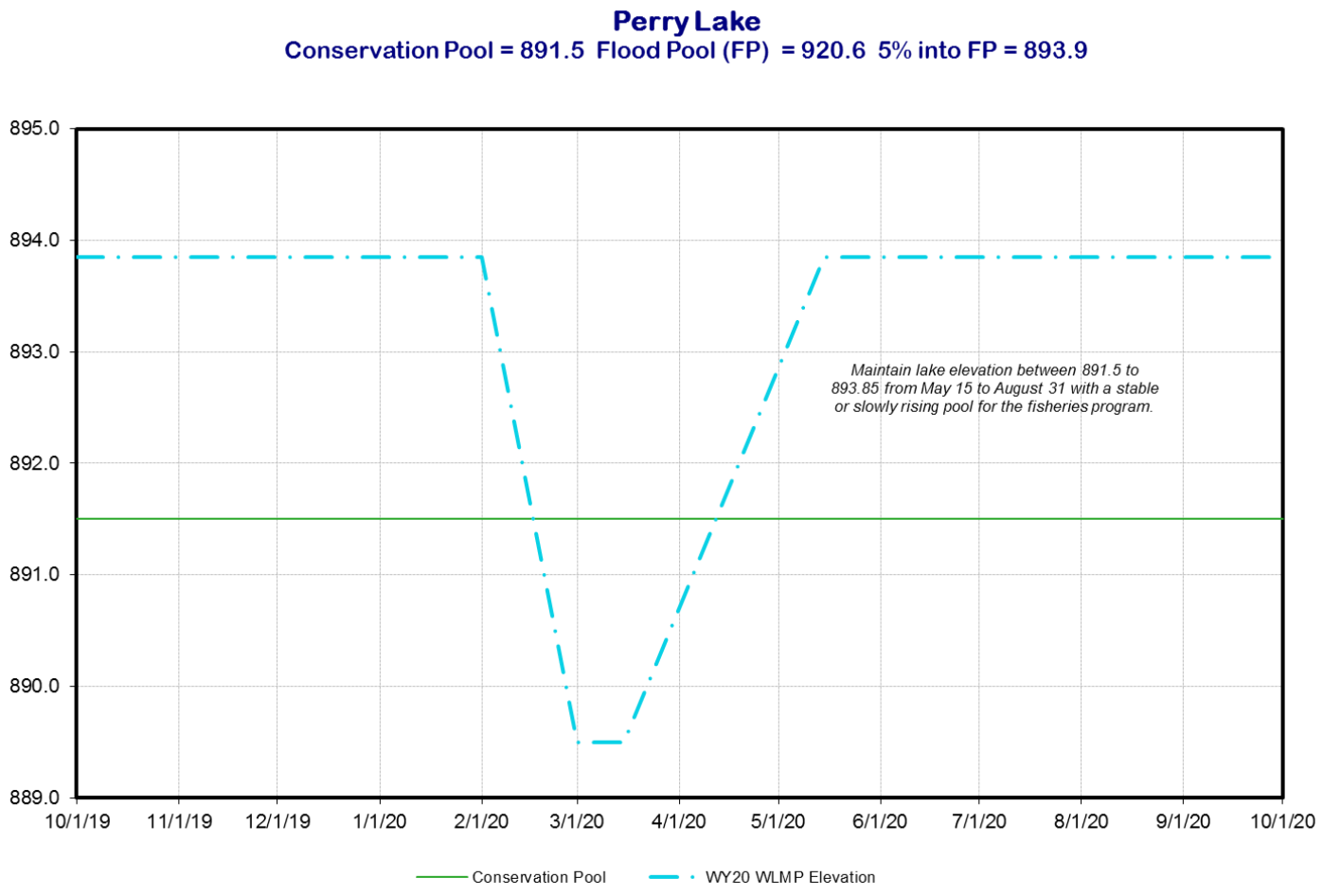
Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
67.4	75,585	Current Yield
0.0	0	Marketing Contracts
11.2	12,600	WAD Storage Yield
56.2	62,985	Future Use Yield
0.0	0	Surplus Yield
0.00	**0**	**Surplus Yield Available**

Lake Level Management Consideration

In accordance with the Lake Level Management Plan for Perry, pool level will be lowered in February. The quantity of water in the future use pool is sufficient for the evacuation of storage associated with the change in elevation.



Pomona Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	945 - 974	Flood Pool Elevation (ft msl)	974 - 1003

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	25.24%	0	13,140
Other/Local	0.89%	0	465
Water Supply	73.86%	7.8	38,446
Future Use	0.00%	0.0	0
In Service	73.86%	7.8	38,446
Water Marketing	1.52%	0.2	791
Assurance District	23.63%	2.5	12,300
Reserve Capacity	48.71%	5.2	25,355

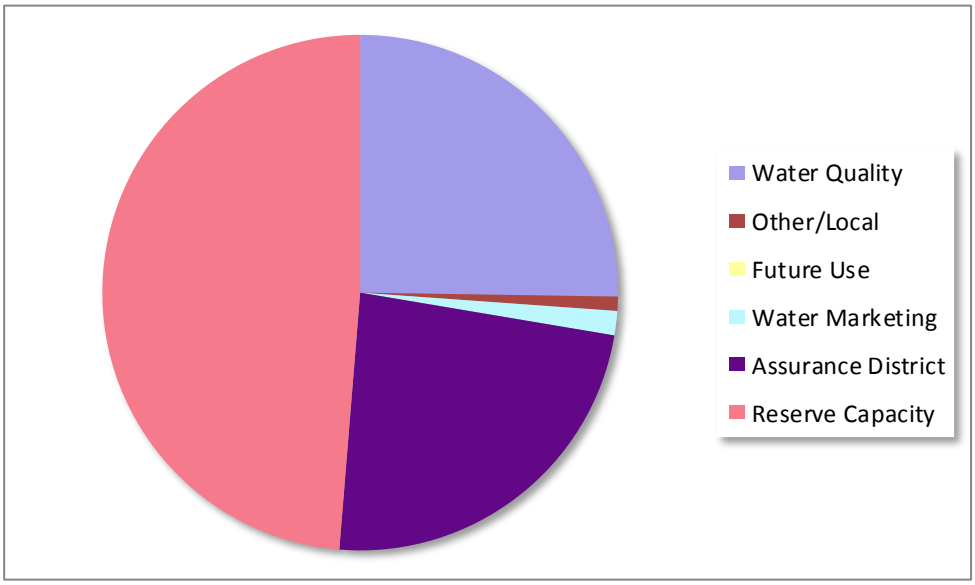


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
05-5	Osage County Rural Water District No. 3	7/10/2048	55,600,000	171	55,600,000	171
			55,600,000	171	55,600,000	171

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

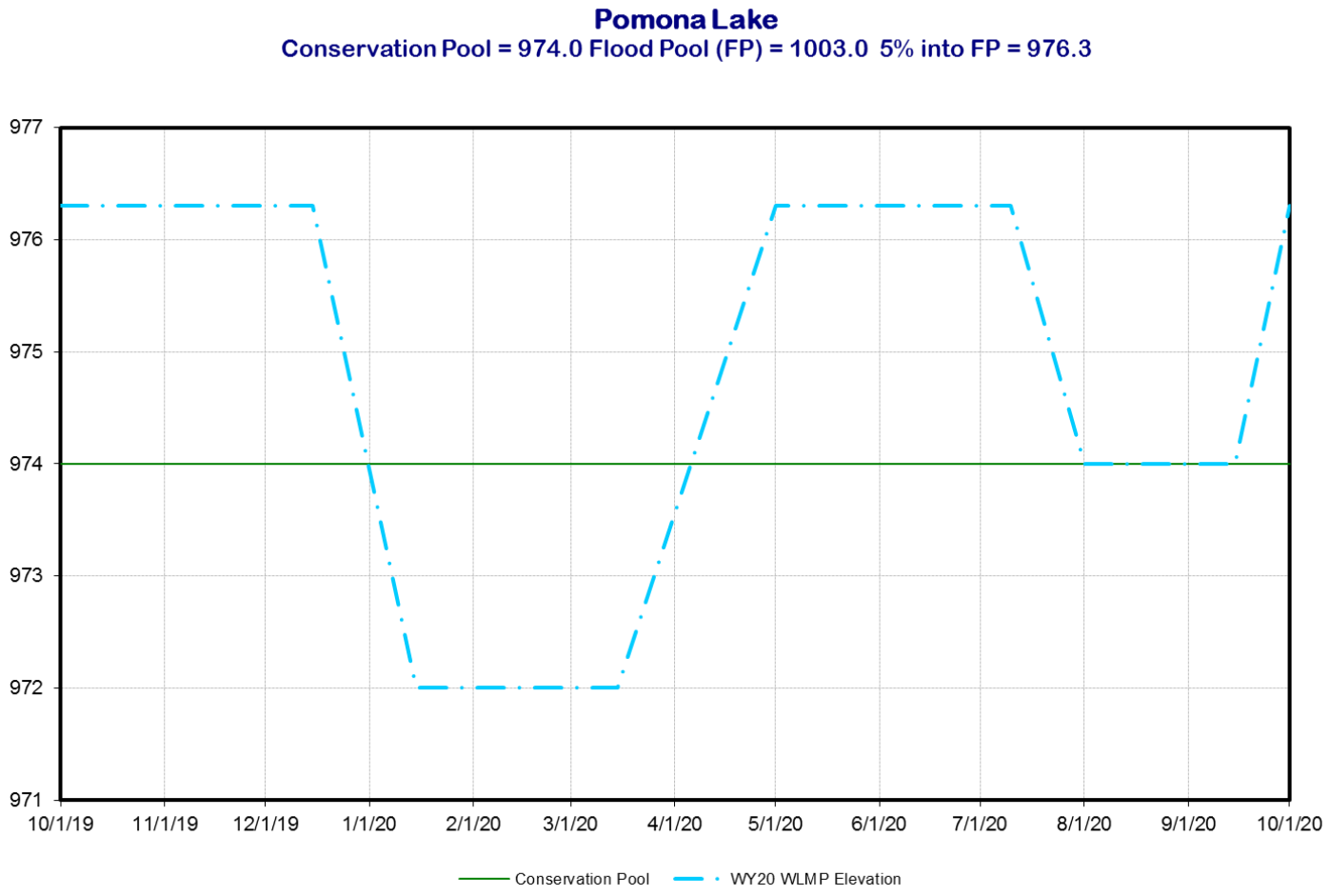
Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
7.8	8,792	Current Yield
0.2	171	Marketing Contracts
2.5	2,813	WAD Storage Yield
0.0	0	Future Use Yield
5.2	5,808	Surplus Yield
0.78	**879**	**Surplus Yield Available**

Lake Level Management Consideration

In accordance with the Lake Level Management Plan for Pomona, pool level will be lowered in December. The minimum lake level in this plan does not require disposition of surplus water.



Toronto Lake

Table 1: Conservation Storage Break Out

Conservation/Inactive Pool Elev. (ft msl)	856 - 901.5	Flood Pool Elevation (ft msl)	901.5 - 931

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality/Supply	61.76%	2.9	8,833
Inactive (Below 896.0)	35.85%	1.7	5,127
Water Supply	2.40%	0.1	343
Future Use	0.00%	0.0	0
In Service	2.40%	0.1	343
Water Marketing	2.40%	0.1	343
Assurance District	0.00%	0.0	0
Reserve Capacity	0.00%	0.0	0

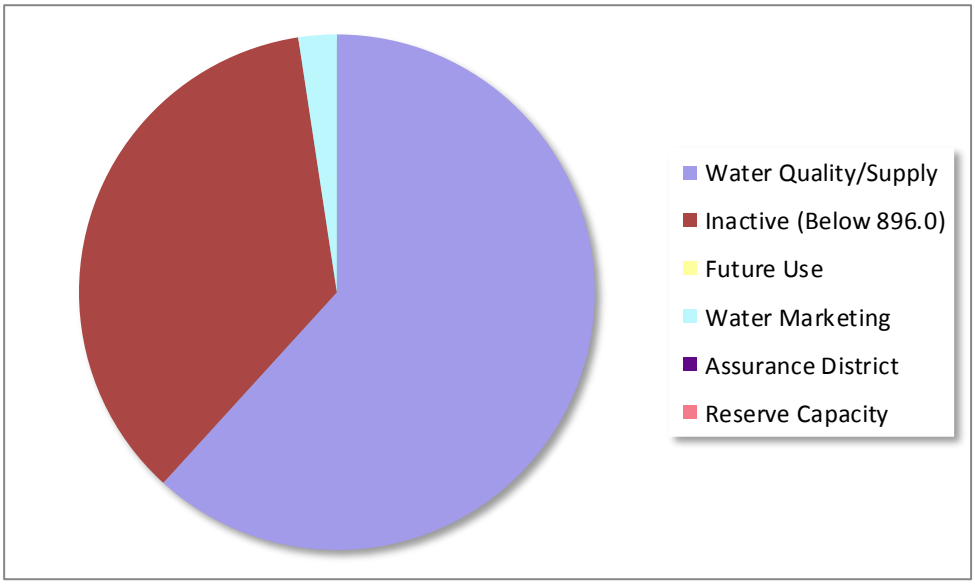


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There are no contracted quantities						

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
4.7	5,249	Current Yield
0.0	0	Marketing Contracts
0.0	0	WAD Storage Yield
0.0	0	Future Use Yield
0.1	126	Surplus Yield
0.11	**126**	**Surplus Yield Available**

Lake Level Management Consideration

No Lake Level Management Plan was prepared for Toronto for Water Year 2020.

Tuttle Creek Lake

Table 1: Conservation Storage Break Out

Conservation Pool Elevation (ft msl)	1020 - 1075	Flood Pool Elevation (ft msl)	1075 - 1136

	Break Out of Conservation Storage	Current Yield (mgd)	Current Storage (acre feet)
Water Quality	59.02%	0	128,543
Other/Local	0.00%	0	0
Water Supply	40.98%	173.0	89,252
Future Use	0.00%	0.0	0
In Service	40.98%	173.0	89,252
Water Marketing	0.00%	0.0	0
Assurance District	33.89%	143.1	73,811
Reserve Capacity	7.09%	29.9	15,442

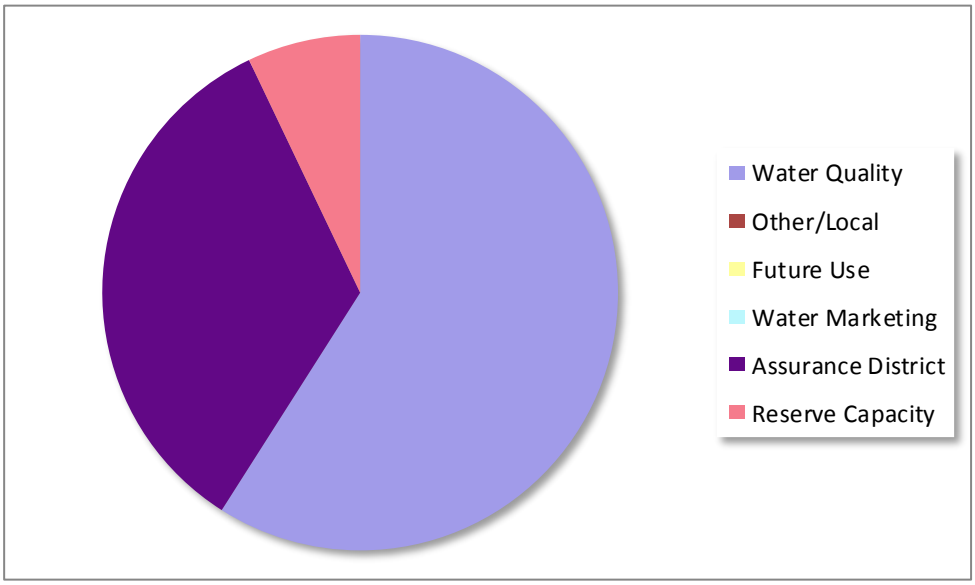


Table 2: Contracted Quantities

Contract Number	Customer Name	Contract End Date	2020 Maximum Gallons	2020 Maximum AF	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There are no contracted quantities						

Table 3: Pending Applications

Applicant Name	Application Expiration Date	Requested Quantity Gallons	Requested Quantity AF
There are no pending applications on file			

Table 4: Past Surplus Contracts

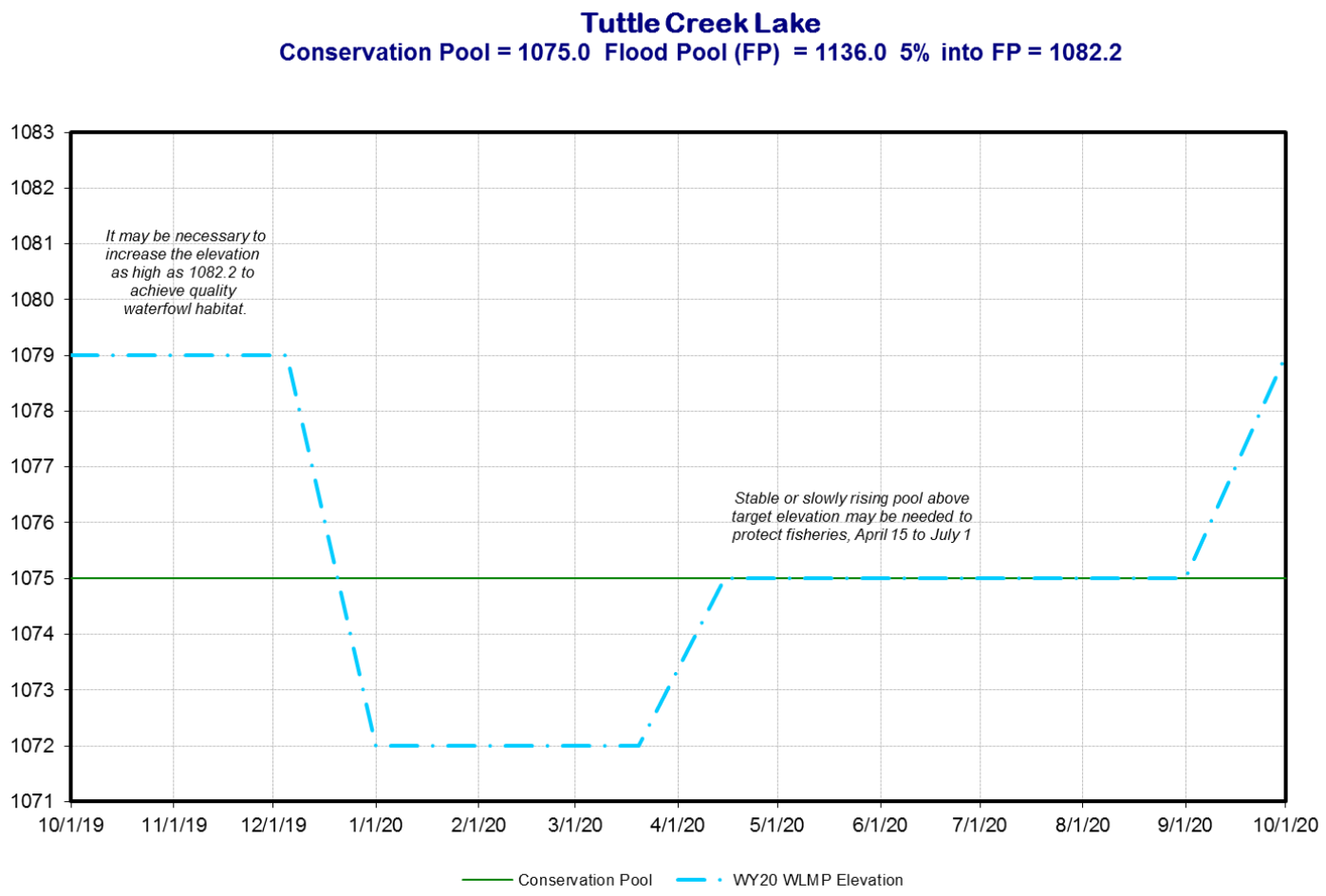
Contract Number	Customer Name	Contract End Date	Annual Contract Maximum Gallons	Annual Contract Maximum AF
There were no surplus contracts in the past two years				

Table 5: Surplus Yield

mgd	AF/yr	
173	193,918	Current Yield
0	0	Marketing Contracts
143	160,368	WAD Storage Yield
0	0	Future Use Yield
30	33,550	Surplus Yield
17.3	**19,392**	**Surplus Yield Available**

Lake Level Management Consideration

In accordance with the Lake Level Management Plan for Tuttle Creek, pool level will be lowered in December. The minimum lake level in this plan does not require disposition of surplus water.



KANSAS WATER OFFICE

WATER PURCHASE CONTRACT NO. 19-1

This contract is executed and entered into this _____ day of _____, 2019, by and between the State of Kansas as represented by the Kansas Water Office (hereinafter referred to as the "State"), an authorized agency to enter such contracts for the State of Kansas, and the City of Lawrence (hereinafter referred to as the "Purchaser").

WHEREAS, the Purchaser desires to purchase a supply of water for a municipal and industrial water supply; and

WHEREAS, the State has signed an Agreement (Contract No. DACW41-77-C-0149) with the United States of America under the provisions of the Water Supply Act of 1958 (Title III, P.L. 85-500), as amended, for water supply storage space in the Reservoir; and

WHEREAS, the State has filed an appropriate water reservation right on May 13, 1974, to divert and store water in the Reservoir; and

WHEREAS, the State and Purchaser entered into a contract on December 29, 1977, to provide water for municipal and industrial water supply from the Reservoir, which expires on December 29, 2019; and

WHEREAS, the State and Purchaser entered into contract on August 9, 1990 (Water Purchase Contract No. 90-5), to provide additional water for municipal and industrial water supply from the Reservoir, which the parties intend to rescind and replace with this contract; and

WHEREAS, the Director of the Kansas Water Office is authorized by K.S.A. 74-2615, as amended, and by K.S.A. 82a-1305, as amended, to negotiate contracts for the sale of water; and

WHEREAS, the Purchaser filed an appropriate application with the State to negotiate the purchase of raw water from the Reservoir, in compliance with the State Water Plan Storage Act, K.S.A. 82a-1301 *et seq.*, as amended; and

WHEREAS, some of the Purchaser's immediate and projected water supply needs can be provided from the Reservoir; and

WHEREAS, the withdrawal and use of up to 4,988 million gallons of water annually from the Reservoir by the Purchaser is in the interest of the people of the State of Kansas and will advance the purposes set forth in Article 9 of Chapter 82a of Kansas Statutes Annotated and amendments thereto; and

WHEREAS, the Purchaser's application to purchase raw water from the Reservoir is approved for a maximum total amount of 4,988 million gallons per year in accordance with Articles 9 and 13 of Chapter 82a of Kansas Statutes Annotated.

NOW, THEREFORE, in consideration of the foregoing, the parties mutually agree as follows:

ARTICLE 1. DEFINITIONS

As used in this contract, unless the context otherwise requires:

(a) "Authority" means the Kansas Water Authority, or its successor.

(b) "Director" means the Director of the Kansas Water Office, his or her successor, or designated representative.

(c) "Point of withdrawal from the reservoir" means the point at which water is taken from the reservoir by pump, siphon, canal, or any other device; or released through the dam by gates, conduits, or any other means.

(e) "Raw water" refers to untreated water at the point of withdrawal from the reservoir.

(f) "Reservoir" means Clinton Lake.

ARTICLE 2. TERM OF THE CONTRACT

The term of this contract shall be for a period of forty (40) years beginning on December 30, 2019. The Purchaser may commence using water under this contract on December 30, 2019.

ARTICLE 3. LEGISLATIVE DISAPPROVAL AND REVOCATION

This contract, any amendment hereto, or renewal thereof is subject to disapproval and revocation by the Kansas Legislature as provided in K.S.A. 82a-1307, and amendments thereto.

ARTICLE 4. UNITED STATES APPROVAL

The Purchaser shall secure the right from the federal government to construct, modify, alter, or maintain installations and facilities at the point of withdrawal from the reservoir as the Purchaser shall deem necessary to effectuate the terms of this contract when such installations and facilities are on federal lands. The Purchaser shall bear any and all costs of construction, modification, operation, and maintenance of Purchaser-owned, leased, or constructed installations and facilities.

The Purchaser shall provide the Director, upon written request, with proof of any easement granted by the federal government for rights-of-way across, in, and upon federal government land required for intake, transmission of water, and necessary appurtenances by and for the benefit of the Purchaser for the purposes of this contract.

ARTICLE 5. COMPLIANCE WITH KANSAS STATUTES

This contract is subject to such federal and state statutes as may be applicable, including specifically, but not by way of limitation, the State Water Resource Planning Act, K.S.A. 82a-901 *et seq.*, and amendments thereto; the State Water Plan, K.S.A. 82a-927 *et seq.*, and amendments thereto; and the State Water Plan Storage Act, K.S.A. 82a-1301 *et seq.*, and amendments thereto; and the Purchaser agrees to comply with such applicable statutes and any amendments to said statutes which may be enacted subsequent to the execution of this contract.

ARTICLE 6. QUANTITY OF WATER

a. Quantity. During the term of this contract, defined in Article 2, subject to the conditions herein stated, the State will permit the Purchaser to withdraw not more than 4,988 million gallons of raw water from the water supply storage in the Reservoir in any one (1) calendar year. If the Purchaser in any

calendar year does not withdraw the entire annual raw water amount obligated under terms of this contract, the unused amount of water shall not add to the Purchaser's entitlement in any subsequent year.

b. Review and Adjustment. The Director shall review the quantity and purposes for which water is used on the sixth anniversary of the execution of this contract and on each annual anniversary for the remaining portion of the term of this contract. The Director may adjust the total amount of water contracted for on the sixth anniversary of the execution of the contract and on each annual anniversary thereafter, if the Purchaser does not begin full payment for the water under contract and another water user is ready, willing, and able to contract for such water.

c. Water Appropriation Rights. Any rights under the Kansas Water Appropriation Act, K.S.A. 82a-701 et seq., and amendments thereto, acquired by the Purchaser and having priority dates later than the date of execution of this contract, shall not be used by the Purchaser to offset the minimum cost or volume of any quantity of raw water obligated under the terms of this contract. Any water received under authority of such water appropriation rights shall not be counted against the Purchaser's annual water entitlement under this contract even though the Purchaser may have to pay the State as if the water had been received under this contract as provided in Article 9. However, the State recognizes Purchaser has a second water treatment plant on the Kansas River. If it is necessary for the Purchaser to change the point of diversion to a collector well and in the process the Kansas Department of Agriculture, Division of Water Resources or its successor requires the Purchaser to acquire a new groundwater right, this provision shall not apply up to the amount of water authorized by Kansas River surface water vested rights or appropriation rights active on the effective date of this agreement. For appropriation rights, the quantity covered shall be the quantity certified by the Kansas Department of Agriculture, Division of Water Resources or its successor, whether the certification occurs before or after the effective date of the agreement.

The Purchaser may use water withdrawn in accordance with the terms of this contract without obtaining a permit or water right under the Kansas Water Appropriation Act. Rights of the Purchaser under this contract shall be entitled to the same protection as any other vested property interest including vested water rights, water appropriation rights, and approved applications for permit to appropriate water.

d. Existing Contracts for Purchase of Water from Reservoir. As of the date of execution of this contract, the purchasing entities in the following table:

(1) have existing water purchase contracts with the State of Kansas from the Reservoir;

(2) are wholesale customers of the Purchaser; and

(3) intend to allow expiration of their water purchase contracts effective December 30, 2019 or seek that the Authority approve rescission and cancellation of their existing water purchase contracts effective December 30, 2019.

PURCHASING ENTITY	CONTRACT NUMBER	CONTRACT END DATE	TOTAL QUANTITY (Gal/Yr)
City of Baldwin	77-3	12/29/2019	323,128,999
Douglas County Rural Water District No. 1	77-4	12/29/2019	47,516,490
	90-1	1/1/2031	14,258,172
Douglas County Rural Water District No. 2	90-3	1/1/2031	80,728,250
Douglas County Rural Water District No. 4	77-5	12/29/2019	68,431,337
	95-2	10/26/2035	105,488,095

The parties acknowledge that a portion of the total contract quantity established in paragraph (a) of Article 6 contains the quantities of the above-listed water purchase contracts. It is further understood that if any of the entities listed in the table apply to renew or fail to seek rescission and cancellation of their water purchase contract(s) prior to December 30, 2019, the total contract quantity in paragraph (a) of Article 6 shall be reduced by the quantity attributed to such entity through its water purchase contract, and the parties agree to execute an addendum reflecting the reduced quantity in paragraph (a) of Article 6.

ARTICLE 7. PRICE OF WATER

a. Price. The Purchaser agrees to pay the State at the rate set in accordance with K.S.A. 82a-1306, and amendments thereto, for each one thousand (1,000) gallons of raw water used or raw water which must be paid for under terms of this contract; provided, however, that the Purchaser is obligated and agrees to pay the minimum charges in accordance with this Article regardless of the quantity of raw water actually used, except as provided in Article 13. The rate for raw water which must be paid for under terms of this contract shall be $0.418 for each one thousand (1,000) gallons during calendar year 2020.

b. Minimum Charge. The Purchaser agrees to pay to the State a minimum charge whether or not water is withdrawn during the calendar year. The minimum charge for each calendar year shall be determined as provided in K.S.A. 82a-1306, and amendments thereto. The minimum charge for calendar year 2020 and each succeeding calendar year, unless changed by amendment of State statutes, shall be the sum of the following two components:

(1) fifty (50) percent of the total amount of water contracted for annually during the term of this contract multiplied by the rate established in accordance with paragraph (a) of this Article or as adjusted in accordance with paragraph (c) of this Article; and

(2) a charge on the remaining fifty (50) percent of water contracted for during the year computed by multiplying the net amount of moneys advanced from state funds for costs incurred and associated with that portion of the conservation storage water supply under the State Water Marketing Program by the average rate of interest earned during the past calendar year by the Pooled Money Investment Board on thirty (30) day repurchase agreements and by the portion of the remaining fifty (50) percent under contract to the total conservation water supply capacity available under the State Water Marketing Program.

c. Review and Adjustment of Rates. The Director shall review the rate stated in this Article by July 15 of each year during the term of this contract and may adjust the rate effective January 1 of the following year. Such adjusted rate shall be charged for all water used or water which must be paid for under terms of this contract as provided in Article 9. The Director shall notify in writing the Purchaser by July 31 of each year of the adjusted rate which will become effective on January 1 of the ensuing year. Failure to furnish such notification by July 31 shall not relieve the Purchaser of the obligation to pay such adjusted rate.

ARTICLE 8. PURPOSE AND PLACE OF USE

a. Purpose. Water purchased under this contract shall be used for purposes which are stated in the preamble of this contract.

b. Place of Use. The place of use for water purchased under this contract shall be generally within the corporate limits of the City of Lawrence, but may be outside the corporate limits of the City of Lawrence for those water users who are contracting with the City for water supply.

c. Approval of Change in Place of Use. The Purchaser shall inform the Director of any intention to sell any water under this contract in excess of 12,000,000 gallons per year to any person or entity located outside the place of use defined in (b) of this Article. Whenever the Purchaser shall propose to enter into a contract to sell water purchased under this contract to any such person or entity outside the defined place of use, the Purchaser shall, before execution thereof, submit a copy of such contract to the Authority for review. The Purchaser agrees not to execute and enter into any such contracts unless approved by the Authority.

ARTICLE 9. BILLING AND PAYMENT SCHEDULE

a. Payments. The Purchaser shall transmit all payments due hereunder to the Director. Remittance for minimum payments as provided in paragraph (d) of Article 9 and paragraph (e) of Article 9 shall be paid to the Director in either one annual payment on or before the due date established in

Article 9, or in equal monthly installments during the calendar year in which the minimum payment is due, whether or not water is withdrawn during the calendar year. Remittance for payments due for raw water used in excess of the quantity obligated by the minimum payment as provided in paragraph (f) of Article 9 shall be paid to the Director in full within thirty (30) days after date of billing by the State.

b. Determination of Charges. Charges for water for which payment is required shall be determined by the State in accordance with K.S.A. 82a-1308a and subsequent amendments thereto. The Purchaser acknowledges and agrees that rate computations are subject to change, based on subsequent amendments to State statutes that may affect the terms of this contract.

c. Water Subject to Payment. The Purchaser shall pay as specified in this contract for all water received under terms of this contract up to the maximum quantity obligated by this contract (4,988 million gallons per year). In no event shall the Purchaser be permitted to withdraw in any one year more than the maximum of 4,988 million gallons per year.

d. Initial Minimum Payment. The initial minimum payment shall become due on January 31, 2020. Remittance for the initial minimum payment shall be in accordance with paragraph (a) of Article 9. Payment of the initial minimum charge shall entitle the Purchaser to receive up to one-half (1/2) of the maximum annual quantity of water in 2020 as set forth in Article 6, without additional charge.

e. Subsequent Minimum Payments. On each subsequent January 31st following the due date of the initial minimum payment, subsequent minimum payments shall become due. Remittance for minimum payments shall be in accordance with paragraph (a) of Article 9. Payment of the minimum payment shall entitle the Purchaser to receive during the calendar year, without additional charge, one-half (1/2) of the maximum annual quantity obligated under terms of this contract.

f. Water in Excess of Minimum. At the end of each calendar year throughout the term of this contract or within thirty (30) days after the end of each calendar year, the State shall bill the Purchaser for any water used during the calendar year in excess of the amount of water used to compute the minimum

payment. The Purchaser shall be given credit for the proportionate share of the payment which was made as an interest charge on the net amount of monies advanced from the State General Fund for the costs incurred and associated with providing fifty (50) percent of the total annual amount of water contracted for purchase during that calendar year.

g. Overpayment or Underpayment. If for reason of error in computation, measuring device malfunction, or other causes, there is an overpayment or underpayment to the State by the Purchaser of the charges provided herein, such overpayment shall be reimbursed or underpayment shall be billed, as the case may be. The State shall notify the Purchaser thereof in writing. However, all charges made in any year shall be conclusively presumed to be correct six (6) months after the end of such year.

h. Adjustment for Apportionment. In the event the Purchaser is unable in any year due to an apportionment under paragraph (c) of Article 13 to withdraw the amount that the Purchaser is entitled to receive after payment of the minimum payment, the amount of such minimum payment in excess of the amount of water actually received by Purchaser shall be credited to reduce the minimum payment obligation of the Purchaser for the subsequent calendar year.

i. Overdue Payments. If the Purchaser shall fail to make any of the payments when due, then the overdue payments shall bear interest, compounded annually at the rate prescribed in K.S.A. 82a-1317, and amendments thereto, during the term of this contract. This shall not be construed as giving the Purchaser the option of either making payments when due or paying interest, nor shall it be construed as waiving any of the rights of the State that might result from such default by the Purchaser.

j. Payments. Any payments due and payable to the Kansas Water Office under the terms of this contract shall be transferred electronically under such arrangements as the Purchaser and the State determine or shall be sent to:

Kansas Water Office
Attention: Accounts Payable/Water Marketing
900 SW Jackson Street, Suite 404
Topeka, KS 66612

ARTICLE 10. POINT OF WITHDRAWAL

The point of withdrawal from the reservoir shall be in SW ¼ of the NE ¼ of the SW ¼ of Section 8, Township 13 South, Range 19 East, Douglas County, Kansas.

ARTICLE 11. METERING OF WATER

The Purchaser shall, at its own expense, furnish, install, operate, and maintain at the place of diversion, a commercial measuring device as ordered by the Director.

The Purchaser shall test and calibrate as accurately as possible such measuring device or devices upon installation and thereafter as necessary or whenever requested by the Director, but not more frequently than once every twelve (12) months. A measuring device that meets the standards as set forth in the current regulations regarding water meter specifications (K.A.R. 5-1-4) shall be deemed to be accurate. Certification of measuring devices shall be obtained from a commercial testing company approved by the Director.

The previous readings of any measuring device disclosed by test to be inaccurate shall be corrected for the three (3) months previous to such test or one-half (1/2) the period since the last test, whichever is shorter, in accordance with the percentage of inaccuracy found by such tests.

If any measuring device fails to register for any period, the amount of water furnished during such period shall be determined by the Director, after consultation with the Purchaser.

The Purchaser shall read the measuring device on or before the last calendar day of each month, and shall send such reading to the Director within ten (10) days after it has been taken.

The Purchaser shall provide to the State monthly reports of all water withdrawn from any sources under authority of Purchaser-held water use permits or water appropriation rights if additional rights are acquired and subject to Article 6c. Representatives of the State shall, at all reasonable times, have access to the measuring device for the purpose of verifying all readings.

The State may measure withdrawals by other suitable means to verify the accuracy of the Purchaser's measuring device or to measure the amount of water furnished when the Purchaser's measuring device fails to register.

ARTICLE 12. WATER WITHDRAWAL

Initial withdrawal of water under this contract will be on the 30th day of December 2019. Upon request by the Director, the Purchaser shall provide notification, in writing, of the estimated amounts, dates, and rates of withdrawal for the time period identified by the Director. In no event, during the term of this contract, shall the Purchaser withdraw water in excess of the maximum daily rate of 30 million gallons.

ARTICLE 13. CONTINUITY OF WATER SERVICE

a. The Director shall make all reasonable efforts to perfect and protect the water reservation rights necessary for the satisfaction of the water supply commitment. In the event it becomes necessary for any reason to apportion the water among the persons having contracts, therefor, or to temporarily discontinue the furnishing of water to such persons, the Director will give each person oral notice, followed by a written notice, of such action as far in advance as is reasonably practicable.

b. Neither the Director nor the Authority shall be responsible or have any legal liability for any insufficiency of water or the apportionment thereof, and the duty of the Director and the Authority to furnish water is specifically subject to the following conditions:

(1) If the total amount of water contracted for withdrawal by all purchasers from the Reservoir in the year is greater than the supply available from the conservation water supply storage in the Reservoir, the Director, with the approval of the Authority, will apportion the available water among all the purchasers having contracts therefor, as may best provide for the health, safety, and general welfare of the people of this State as determined by the Authority.

(2) The Director shall evaluate the effect of sediment deposits in the Reservoir and, if such evaluation indicates that the sediment deposits have reduced the yield from the State's conservation water supply storage space, the Director will apportion available water among the persons having contracts in relation to the annual volume of water contracted. If a reduction has been made and future calculations and/or experience proves an increased yield from the Reservoir, the Purchaser's contract quantity shall be increased proportionally up to the contract quantity described under Article 6 of this contract.

(3) If the United States temporarily discontinues or reduces water storage available to the State in the Reservoir under the State's agreement with the United States of America for the purpose of inspection, investigation, maintenance, repair, or rehabilitation of the Reservoir or for other reasons deemed necessary by the United States of America, the Director will apportion the available water among the persons having contracts in the Reservoir as determined by the State.

(4) If, because of an emergency, the Director deems it necessary for the health, safety, and general welfare of the people of Kansas to reduce or terminate the withdrawal of water from the Reservoir, the Director, with the approval of the Authority, will apportion any available water among the persons having contracts in the Reservoir therefore as may best provide for the health, safety, and general welfare of the people of Kansas.

c. In the event the Director finds it necessary to apportion the available water from the Reservoir among the persons having contracts therefore, and such apportionment results in the Purchaser being unable during the year to receive the amount of water that has been purchased by payment of the minimum charge, the Purchaser shall pay the State only for the amount of water actually made available to the Purchaser during the year.

ARTICLE 14. LIABILITY

a. The parties herein acknowledge that this contract is for raw water from the conservation water supply storage at the Reservoir. The Kansas Water Office, the Director, the Authority, or any employee, agent, or agency of the State of Kansas, makes no guarantee for nor assumes any liability for any claim arising out of the control, carriage, handling, use, disposal, or distribution of water furnished to the Purchaser beyond the point of withdrawal as described in this contract except as provided in the Kansas Tort Claims Act, K.S.A. 1982 Supplement 75-6101 et seq., and amendments thereto; and the Purchaser shall hold the State harmless on account of damage or claim of damage of any nature whatsoever arising out of or connected with the control, carriage, handling, use, disposal, or distribution of water beyond the point of withdrawal. Nothing in this Article shall be construed to impair any protection of the rights of the Purchaser as set forth in Article 6.

b. In addition, neither the Director of the Kansas Water Office nor the Kansas Water Authority shall be liable for any claim by Purchaser arising out of the quality of water in the Reservoir to the point of withdrawal. The Purchaser shall hold the State, its agencies, employees, and agents harmless from or on account of any and all damage to Purchaser of any nature whatsoever arising out of or connected with the quality of the water in the Reservoir up to the point of withdrawal or rediversion.

ARTICLE 15. AMENDMENT

The contract may be amended or nullified by written agreement of the parties, as provided in K.S.A. 82a-1316, and amendments thereto.

ARTICLE 16. ASSIGNMENT OF CONTRACT

a. The Purchaser may not assign, sell, convey, or transfer all or any part of this contract, or any interest therein unless and until same is approved by the Authority under such reasonable terms and conditions as the Authority may impose.

b. Whenever the assignment, sale, conveyance, or transfer of all or any part of this water purchase contract involves a change in either the place of use or the purpose of use, the Authority shall have the option to cancel the water purchase contract or portion thereof and make the water available for purchase by persons who have filed applications in accordance with rules and regulations for administration of the State Water Plan Storage Act, K.S.A. 82a-1301 et seq., and amendments thereto.

ARTICLE 17. RIGHT OF FIRST REFUSAL

As required by the provisions of K.S.A. 82a-1305(a), and amendments thereto, upon expiration of this contract, the Director shall give the Purchaser the first right of refusal to purchase any offering of the water previously purchased before offering the same to any other applicant under the provisions of K.S.A. 82a-1310a, et seq., and amendments thereto.

ARTICLE 18. TERMINATION

In the event the Purchaser is unable to obtain, construct, maintain, operate the necessary water diversion and distribution facilities, the Purchaser may terminate this contract upon giving the State thirty (30) days written notice of its intent to do so, and all rights and liabilities of the Purchaser hereunder shall cease. Provided, however, that nothing in this Article shall be construed to affect the duty of the Purchaser to pay the prorated share of the minimum charge for the year in which the contract is terminated or the actual charge for the quantity of water withdrawn, whichever is greater, before notice of termination is given.

ARTICLE 19. WATER CONSERVATION PLAN

The Purchaser shall adopt and implement a water conservation plan, prepared in accordance with the guidelines developed and maintained by the Kansas Water Office.

ARTICLE 20. RESCISSION OF PRIOR AGREEMENTS

The contract dated August 9, 1990 (Water Purchase Contract No. 90-5), by and between the State and Purchaser to provide additional water for municipal and industrial water supply from the Reservoir,

any amendments thereto, and any other written or oral agreements between the State and Purchaser are hereby rescinded and shall have no further force or effect whatsoever as of the effective date of this contract.

ARTICLE 21. MISCELLANEOUS PROVISIONS

a. Severability. In the event any provisions of this agreement, or any part of any provision of this agreement, are held invalid by a court of competent jurisdiction, such invalidity shall not affect other terms hereof which can be given effect without the invalid provision or portion of such provision, and to that end the terms of this agreement are intended to be severable.

b. Choice of Law, Jurisdiction, and Venue. Disputes arising out of this contract shall be determined under the laws of the State of Kansas, in the district courts of that state, sitting in Shawnee County, Kansas.

c. Kansas Contract Provisions Attachment. The provisions found in contractual provisions attachment (Form DA-146a – Attachment A), which is attached hereto, are hereby incorporated in this contract and made a part thereof by reference herein.

d. Cash Basis. The parties understand and recognize that Purchaser is a municipality and subject to the provisions of the Kansas Cash Basis Law, codified as amended at K.S.A. 10-1101, *et seq.*

e. Headings. Headings used in this agreement are informational and not to be considered persuasive or determinative of any clause or matter in dispute.

f. Merger. This contract contains the full understanding of the parties with respect to the matters hereto and supersedes all prior agreements and understandings, whether written or oral, pertaining thereto, and may not be amended or modified except by a writing signed by both parties.

IN WITNESS WHEREOF, the parties affirm and acknowledge the terms and conditions agreed to above, and further affirm that they have the authority to bind the parties by their signatures to the same, and hereto have executed this agreement as of the day and year first above written.

THE STATE OF KANSAS, BY:

_____

Director, Kansas Water Office

WITH THE EXPRESS APPROVAL OF THE KANSAS WATER AUTHORITY, BY:

_____

Chair, Kansas Water Authority

PURCHASER, BY:

_____

City of Lawrence

ATTEST:

_____

State of Kansas
Department of Administration
DA-146a (Rev. 06-12)

CONTRACTUAL PROVISIONS ATTACHMENT A

Important: This form contains mandatory contract provisions and must be attached to or incorporated in all copies of any contractual agreement. If it is attached to the vendor/contractor's standard contract form, then that form must be altered to contain the following provision:

"The Provisions found in Contractual Provisions Attachment (Form DA-146a, Rev. 06-12), which is attached hereto, are hereby incorporated in this contract and made a part thereof."

The parties agree that the following provisions are hereby incorporated into the contract to which it is attached and made a part thereof, said contract being the _____ day of _____, 20_____.

1. **Terms Herein Controlling Provisions**: It is expressly agreed that the terms of each and every provision in this attachment shall prevail and control over the terms of any other conflicting provision in any other document relating to and a part of the contract in which this attachment is incorporated. Any terms that conflict or could be interpreted to conflict with this attachment are nullified.

2. **Kansas Law and Venue**: This contract shall be subject to, governed by, and construed according to the laws of the State of Kansas, and jurisdiction and venue of any suit in connection with this contract shall reside only in courts located in the State of Kansas.

3. **Termination Due To Lack Of Funding Appropriation**: If, in the judgment of the Director of Accounts and Reports, Department of Administration, sufficient funds are not appropriated to continue the function performed in this agreement and for the payment of the charges-hereunder, State may terminate this agreement at the end of its current fiscal year. State agrees to give written notice of termination to contractor at least 30 days prior to the end of its current fiscal year, and shall give such notice for a greater period prior to the end of such fiscal year as may be provided in this contract, except that such notice shall not be required prior to 90 days before the end of such fiscal year. Contractor shall have the right, at the end of such fiscal year, to take possession of any equipment provided State under the contract. State will pay to the contractor all regular contractual payments incurred through the end of such fiscal year, plus contractual charges incidental to the return of any such equipment. Upon termination of the agreement by State, title to any such equipment shall revert to contractor at the end of the State's current fiscal year. The termination of the contract pursuant to this paragraph shall not cause any penalty to be charged to the agency or the contractor.

4. **Disclaimer Of Liability**: No provision of this contract will be given effect that attempts to require the State of Kansas or its agencies to defend, hold harmless, or indemnify any contractor or third party for any acts or omissions. The liability of the State of Kansas is defined under the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.).

5. **Anti-Discrimination Clause**: The contractor agrees: (a) to comply with the Kansas Act Against Discrimination (K.S.A. 44-1001 et seq.) and the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111 et seq.) and the applicable provisions of the Americans With Disabilities Act (42 U.S.C. 12101 et seq.) (ADA) and to not discriminate against any person because of race, religion, color, sex, disability, national origin or ancestry, or age in the admission or access to, or treatment or employment in, its programs or activities; (b) to include in all solicitations or advertisements for employees, the phrase "equal opportunity employer"; (c) to comply with the reporting requirements set out at K.S.A. 44-1031 and K.S.A. 44-1116; (d) to include those provisions in every subcontract or purchase order so that they are binding upon such subcontractor or vendor; (e) that a failure to comply with the reporting requirements of (c) above or if the contractor is found guilty of any violation of such acts by the Kansas Human Rights Commission, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration; (f) if it is determined that the contractor has violated applicable provisions of ADA, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration.

Contractor agrees to comply with all applicable state and federal anti-discrimination laws.

The provisions of this paragraph number 5 (with the exception of those provisions relating to the ADA) are not applicable to a contractor who employs fewer than four employees during the term of such contract or whose contracts with the contracting State agency cumulatively total $5,000 or less during the fiscal year of such agency.

6. **Acceptance Of Contract**: This contract shall not be considered accepted, approved or otherwise effective until the statutorily required approvals and certifications have been given.

7. **Arbitration, Damages, Warranties**: Notwithstanding any language to the contrary, no interpretation of this contract shall find that the State or its agencies have agreed to binding arbitration, or the payment of damages or penalties. Further, the State of Kansas and its agencies do not agree to pay attorney fees, costs, or late payment charges beyond those available under the Kansas Prompt Payment Act (K.S.A. 75-6403), and no provision will be given effect that attempts to exclude, modify, disclaim or otherwise attempt to limit any damages available to the State of Kansas or its agencies at law, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.

8. **Representative's Authority To Contract**: By signing this contract, the representative of the contractor thereby represents that such person is duly authorized by the contractor to execute this contract on behalf of the contractor and that the contractor agrees to be bound by the provisions thereof.

9. **Responsibility For Taxes**: The State of Kansas and its agencies shall not be responsible for, nor indemnify a contractor for, any federal, state or local taxes which may be imposed or levied upon the subject matter of this contract.

10. **Insurance**: The State of Kansas and its agencies shall not be required to purchase any insurance against loss or damage to property or any other subject matter relating to this contract, nor shall this contract require them to establish a "self-insurance" fund to protect against any such loss or damage. Subject to the provisions of the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.), the contractor shall bear the risk of any loss or damage to any property in which the contractor holds title.

11. **Information**: **No provision of this contract shall be construed as limiting the Legislative Division of Post Audit from having access to information pursuant to K.S.A. 46-1101 et seq.**

12. **The Eleventh Amendment**: "The Eleventh Amendment is an inherent and incumbent protection with the State of Kansas and need not be reserved, but prudence requires the State to reiterate that nothing related to this contract shall be deemed a waiver of the Eleventh Amendment."

13. **Campaign Contributions / Lobbying:** Funds provided through a grant award or contract shall not be given or received in exchange for the making of a campaign contribution. No part of the funds provided through this contract shall be used to influence or attempt to influence an officer or employee of any State of Kansas agency or a member of the Legislature regarding any pending legislation or the awarding, extension, continuation, renewal, amendment or modification of any government contract, grant, loan, or cooperative agreement.

MUTUAL RESCISSION AND CANCELLATION OF
WATER PURCHASE CONTRACT NO. [XX-X]

This contract to rescind and cancel is executed and entered into this __ day of ___ 2019, by and between the State of Kansas ("State") as represented by the Kansas Water Office ("KWO"), and [Entity Name] ("Purchaser"). The parties mutually intend to rescind and cancel Water Purchase Contract No. **XX-X**, which was approved by the Kansas Water Authority ("KWA") on [Insert Date].

The parties agree:

1. That the Director of the KWO is authorized by K.S.A. 74-2615, as amended, and by K.S.A. 82a-1305, as amended, to negotiate contracts for the sale of water;
2. That Purchaser is a wholesale customer of the State;
3. That the parties entered into Contract No. XX-X;
4. That Contract No. 19-1, which was entered between State and City of Lawrence, contains the following language in Article 16 providing that Purchaser/[Entity Name] intends “to allow expiration of their water purchase contracts effective December 30, 2019 or seek that the Authority approve rescission and cancellation of their existing water purchase contracts effective December 30, 2019”; and
5. That the KWA approved the cancellation of Contract No. XX-X on [Insert Date];
6. That K.S.A. 82a-1316, as amended, authorizes the rescission and cancellation of the Water Purchase Contract.

Therefore, the parties mutually agree that Contract No. XX-X is hereinafter rescinded and cancelled effective December 30, 2019, and all foregoing responsibilities and obligations of the parties under said contract shall be discharged as of said date, and the parties owe no further duties to one another under Contract No. XX-X.

By execution of this contract, each of the undersigned agree to be bound by the agreement, this ___ day of _____, 2019.

Kansas Water Office	**[Entity Name]**
By: _____	By: _____
Printed Name: _____	Printed Name: _____
Title: _____	Title: _____

MEMO

Kansas Water Office
900 SW Jackson Street, Suite 404
Topeka, KS 66612
Phone: (785) 296-3185
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www.kwo.ks.gov

DATE: December 13, 2019
TO: Kansas Water Authority
FROM: Kirk Tjelmeland
RE: EPA Wetland Grants

Approval by the Kansas Water Authority, under KSA 74-2622, is required before the Kansas Water Office enters into agreements with the federal government. The KWO applied to receive funding through the 2019 Wetland Program Development Grant (WPDG) by Region 7 Environmental Protection Agency (EPA). The total amount of the grant is $372,913.00, federal funds are $277,615.00 and the non-federal matching fund obligation is $95,298.00. All non-federal matches will be provided by in-kind service contributions. KWO has received notification from EPA of successful award of the grant and the workplan approval is nearly complete. The second grant is a Multi-Purpose Wetland grant that has been awarded in the amount of $51,596 and requires no match.

The first grant is entitled *Evaluating Playas in Western Kansas-Recharge to the High Plains aquifer and Economics of Cropping* and is phase II of a 2014 WPDG which looked at recharge rates to the Ogallala aquifer through a single Playa lake. The 2019 WPDG will be looking at 16 Playas and determining the recharge rates as well as looking at the economic value of farming Playas, return on investment.

The second grant is a Multi-purpose grant entitled *Impact of Wind on Sediment Resuspension and Vegetation Growth in Aging Reservoirs* which is phase II of a 2015 WPDG which looked at wetlands in aging reservoirs. The proposed grant is looking at resuspension of nutrients in Webster and Clinton Reservoirs related to Harmful Algal Blooms (HABs).

Both of these grant ideas were developed early in 2019 by a group of state agencies, interest groups and Kansas citizens with wetland knowledge. These grants will address tasks in the Wetland Program Plan.

KWO staff continue to work with the EPA and other wetland entities to accomplish tasks in the Wetland Program Plan to further the knowledge and understanding the wetlands provide to the state of Kansas. The Multi-purpose grant is new and provides additional funding for wetland projects.

The KWO recommends the KWA authorize the Director to enter into an agreement with the U.S. EPA for both the Wetland Program Development Grant and the Multi-Purpose Wetland Grant.

MEMO

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DATE: December 12, 2019
TO: Kansas Water Authority
FROM: Cara Hendricks
RE: Kansas River Reservoirs Flood and Sediment Study

This is an update to the ongoing Kansas River Reservoirs Flood and Sediment Study. The Federal Cost Share Agreement for the study was executed on March 25, 2019. Since that time, the Kansas Water Office and the Kansas Department of Wildlife, Parks and Tourism, the non-federal co-sponsors of the study, have worked with the U.S. Army Corps of Engineers (USACE) to develop a Project Management Plan (PMP), currently in the final stages of USACE internal review, and a Shared Vision Statement (below).

The study is presently focused on efforts to identify problems and opportunities and establish the current baseline of existing conditions within the Kansas River Basin through targeted outreach of diverse stakeholders. Laura Totten, the USACE project manager for the study, will be presenting an overview of the study to the KWA that is similar to what has been presented at recent public scoping sessions. A timeline of the study is attached with further details about major milestones and project progression on subsequent pages.

Shared Vision Statement:

> "Identify actions within the Kansas River Basin necessary to extend the useful life of our reservoirs, to increase their resiliency and maintain capacity. Develop sustainable measures to reduce flood risk, improve sediment management, and mitigate drought, while seeking opportunities related to critical infrastructure investment, water supply availability, ecosystem restoration, water quality, and enhancing recreation."

No action is needed at this time. Information is provided for discussion purposes only.

Kansas River Reservoirs Flood and Sediment Study Timeline

A Project Management Plan has been developed for the Kansas River Reservoirs Flood and Sediment Study which sets out the work plan for the next 5 years of the study.

The work breakdown structure and timeline is as follows:

Project Management Plan (PMP) Development

- Over the past eight months, the Project Development Team (PDT) has been working on the Draft PMP, which includes the Public Involvement Plan for outreach and stakeholder engagement.
- It is anticipated the PMP will be finalized shortly. This important step will provide the guidance going forward as the PDT moves through the study.

Initial Stakeholder Involvement

- The Kansas River Reservoirs Flood and Sediment Study concluded the first round of public stakeholder input during the scoping phase of the study. Four public meetings were held across the basin, and a focused, more technical smaller group workshop was conducted in conjunction with the Governor's Conference on the Future of Water in Kansas.
- Additional stakeholder input will be scheduled for early 2020, which will involve smaller focus groups and one-on-one meetings with interested parties.

Shared Vision Milestone

The purpose of the Shared Vision Milestone is to define the overall Shared Vision for the watershed, water and related resources vision as developed by the USACE, KWO and KDWPT, and to present the study framework and associated activities that clearly support the partnership shared vision. It includes:

- Partner/stakeholder outreach and public involvement
- Shared vision statement
- Identify broad problems, needs, and opportunities
- Develop broad goals, objectives, and constraints
- Study framework
- Assessment of prior and existing data, reports, studies, and models
- Interviews with experts and agencies
- Develop existing conditions and future without project (FWOP)
- Data gap analysis
- Alternative strategies development
- Shared vision milestone report summary and presentation to include:
    - Draft summary report
    - Final draft summary report
    - Shared vision milestone presentation
    - Division planning review
    - Shared vision memo for the record

It is anticipated the Shared Vision Milestone meeting will take place in November 2020.

Recommendations Milestone Report and Presentation

Recommendations will provide a strategic roadmap that identifies the sequencing of priorities, where federal authorities and appropriations are available, and where new ones are needed. Recommendations will include actions that provide solutions to solving identified problems within the Kansas River Basin.

During this phase, another round of partner and stakeholder outreach and public involvement will occur. Additional activities include:

- Refine and prioritize problems, needs, and opportunities
- Refine and prioritize goals, objectives, and constraints
- Refine existing conditions and future without project (FWOP)
- Develop cumulative effects and perform a qualitative assessment
- Assessment of alternative strategies
    - Costs, benefits, potential environmental effects
- Recommendations
    - Development of recommendations
    - Decision framework
    - Risks and uncertainty
    - Strategic roadmap
- Draft watershed study report
- Reviews by District Quality Control and Agency Technical Review
- Recommendations milestone report summary and presentation to include:
    - Draft summary report
    - Final draft summary report
    - Recommendations milestone presentation
    - Division planning review
    - Shared vision memo for the record

It is anticipated the Recommendations Milestone will be reached in May 2023.

Watershed Study Milestone Report and Presentation

- Draft watershed study
- District quality control/agency technical review/planning center of expertise reviews
- Public/technical/legal/policy/major subordinate command review
- Final watershed study
- USACE Major Subordinate Command review
- Transmittal memo from USACE - Headquarters to Assistant Secretary of the Army for Civil Works

It is anticipated the Watershed Study Report Milestone meeting will be held in Fall 2023.

MEMO

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DATE: December 12, 2019
TO: Kansas Water Authority
FROM: Jeremiah Hobbs
RE: RAC Messages

The Kansas Water Authority (KWA) Regional Advisory Committee (RAC) Operations Committee met on December 12, 2019, via conference call. Discussion from the meeting included a message from the Missouri RAC.

The KWA RAC Operations Committee reviewed and discussed the following messages, background, and staff input and offer the following recommendations to the KWA.

<u>Message 1</u>: As education is a goal of multiple Regional Advisory Committees, the Missouri RAC encourages further development/funding of the Kansas Runs on Water website to be the "one stop shop" for water education material.

Background: Water education is such an integral part of multiple agencies and multiple RACs that significant effort and resources has been put towards generating the necessary tools to further education. One of the tools that was recently unveiled was the Kansas Runs on Water website. This was the location where persons interested in water education could find the materials or a point of contact person for programs.

Staff Input: Agency staff continue to work with Walz Tetrick on website development and refinement however this takes manpower and funding. To remain a top-notch website, constant attention through revisions and updates will be required which takes dedicated funding.

Proposed Resolution: The KWA should direct the KWO to work in collaboration with agency partners to secure dedicated funding for the Kansas Runs on Water website as the associated education and outreach campaign.

<u>Message 2:</u> The Missouri RAC encourages the KWA and KWO to endorse one cover crop NRCS practice change and the testing for one NRCS practice change in Doniphan County:

1. **Setting a specific planting date for cover crops and not using the "30 days of growing time before a killing freeze."**
2. **Testing for the use of broad-based slope terraces on land with 12% slope that are using: contour farming, no-till farming, crop rotation and in some instances cover crops.**

Background:

The committee believes that if there were a specific planting date set for cover crops there would be even more participation in this practice, holding more soil and improving water quality. The current criteria are ambiguous and unclear causing a reluctance by producers to commit to this NRCS program. Currently the technical note states, 30 days of growing time for cover crops before the first killing freeze, a very arbitrary date. This concept has been brought up at the local work group by producers in the area who want to know a specific planting date.

Doniphan County sets in the very northeast corner of Kansas, bordered on three sides by the Missouri River and covered with sloping, very fertile loess soils. Currently the NRCS Field Office Technical Guide (FOTG) requires construction of grass back terraces for land with a slope of more than 10%. However farming practices to hold the soil in place have improved over the years with producers using: contour farming, no-till and crop rotation including cover crops. The Doniphan County Conservation District Board of Supervisors believes there are producers who are not participating in NRCS due to the 10% restriction. This concept has proven successful by producers not participating in NRCS programs and has been brought up at the local work group.

Increasing the number of producers applying both of these NRCS practices on more acres will benefit water quality.

Staff Input: At the November 21, 2019 Missouri RAC meeting a NRCS District Conservationist reported that this is a good time to provide input to the NRCS on practices. Clearly these two practice variances are specific to this region however they might have application state-wide especially the cover crop planting date.

Proposed Resolution: The KWA should direct the KWO to provide further follow-up with the Missouri RAC to allow for additional discussion and clarification on the process of the Kansas Technical Committee (KTC) and to work with the local work group before approaching additional state agencies and the NRCS.

The KWA RAC Operations Committee recommends KWA approval of the proposed resolutions for the messages to the KWA from the Missouri RAC.

MEMO

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DATE: December 12, 2019
TO: Kansas Water Authority
FROM: Jeremiah Hobbs
RE: RAC Membership

The Kansas Water Authority (KWA) Regional Advisory Committee (RAC) Operations Committee met on December 12, 2019, via conference call. Discussion from the meeting included RAC membership applications for the following RACs:

- Great Bend Prairie
- Missouri
- Upper Arkansas
- Verdigris

The KWA RAC Operations Committee reviewed and discussed the following applications and offer the following recommendations to the KWA.

Great Bend Prairie RAC:

Two applications have been received to fill the current vacancy on the Great Bend Prairie RAC:

The applicant, Craig Crossette has applied for the following category:

- Public Water Supply

The applicant, Bruce Pinkall has applied for the following category:

- Public Water Supply

Currently the Great Bend Prairie RAC has one vacancy open:

- Public Water Supply 3 (expiration date – 2023)

Recommendation: Both applicants would qualify to fill a Public Water Supply 3 category. Based on geographic distribution of applicants and current members, it is recommended to appoint Craig Crossette (from Sterling, KS) to fill the category of Public Water Supply 3 (expiration date – 2023).

Missouri RAC:

One application has been received to fill current vacancies on the Missouri RAC.

The applicant, Michael Stec has applied for the following categories:

- Public Water Supply

Currently the Missouri RAC has two vacancies open:

- Agriculture Industry (expiration date – 2021)
- Public Water Supply 2 (expiration date – 2023)

Recommendation: The applicant is qualified to fill the Public Water Supply 2 category as he is the Utilities Manager for the City of Atchison and has previously attended RAC meetings. It is recommended to appoint Michael Stec to fill the category of Public Water Supply 2 (expiration date – 2023).

Upper Arkansas RAC:

One application has been received to fill current vacancies on the Upper Arkansas RAC.

The applicant, Brant Peterson has applied for the following categories:

- Agriculture
- Conservation/Environment
- Industry/Commerce
- Other (At Large Public)

Currently the Upper Arkansas RAC has two vacancies open:

- Groundwater Management (expiration date – 2023)
- At Large Public 2 (expiration date – 2023)

Recommendation: The applicant is qualified to fill either position, but due to his agriculture, irrigation, and GMD experience he is best suited to fill the Groundwater Management category. It is recommended to appoint Brant Peterson to fill the category of Groundwater Management (expiration date – 2023).

Verdigris RAC:

One application has been received to fill the current vacancy on the Verdigris RAC.

The applicant, Bob Culbertson has applied for the following categories:

- Conservation/Environment

Currently the Verdigris RAC has one vacancy open:

- Conservation/Environment 2 (expiration date – 2021)

Recommendation: The applicant is qualified to fill the Conservation /Environment 2 category as he currently works for the Kansas Alliance of Wetlands and Streams (KAWS), is a Watershed Restoration and Protection Strategy (WRAPS) coordinator for the Toronto and Fall River WRAPS, and has previously attended RAC meetings. It is recommended to appoint Bob Culbertson to fill the category of Conservation/Environment 2 (expiration date – 2021).

The KWA RAC Operations Committee recommends KWA approval of the applications for membership as follows:

Great Bend Prairie: Craig Crossette - Public Water Supply 3 (expiration date – 2023)

Missouri RAC: Micheal Stec - Public Water Supply 2 (expiration date – 2023)

Upper Arkansas RAC: Brant Peterson - Groundwater Management (expiration date – 2023)

Verdigris RAC: Bob Culbertson - Conservation/Environment 2 (expiration date – 2021)

MEMO

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DATE: December 12, 2019
TO: Kansas Water Authority
FROM: Cara Hendricks
RE: Research Coordination

As previously presented and discussed by the Kansas Water Authority (KWA), a research coordination workgroup has continued to meet to identify priorities for research needed to support implementation of the Vision. No action is being sought at this time.

Efforts focused on the specific areas of research previously identified by the group have continued, which include streambank stabilization effectiveness, irrigation technologies and crop genetic research, and harmful algal blooms. Dan Devlin will update the KWA on the recent addition of a cotton research plan to be encompassed within the Crop & Livestock Research, as well as update the KWA on the recent Kansas Water Resources Institute (KWRI) research grant proposals.

Another recent addition includes a partnership with the Kansas Water Office, Kansas Biological Survey and the Kansas Department of Emergency Management to enhance real-time flood mapping and create a flood inundation mapping tool, encompassed within the Reservoir Surveys & Water Quality Research.

No action is needed at this time. Information is provided for discussion purposes only.

MEMO

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www.kwo.org

DATE: December 12, 2019
TO: Kansas Water Authority
FROM: Gary Koons
RE: Equus Beds Chloride Plume Project

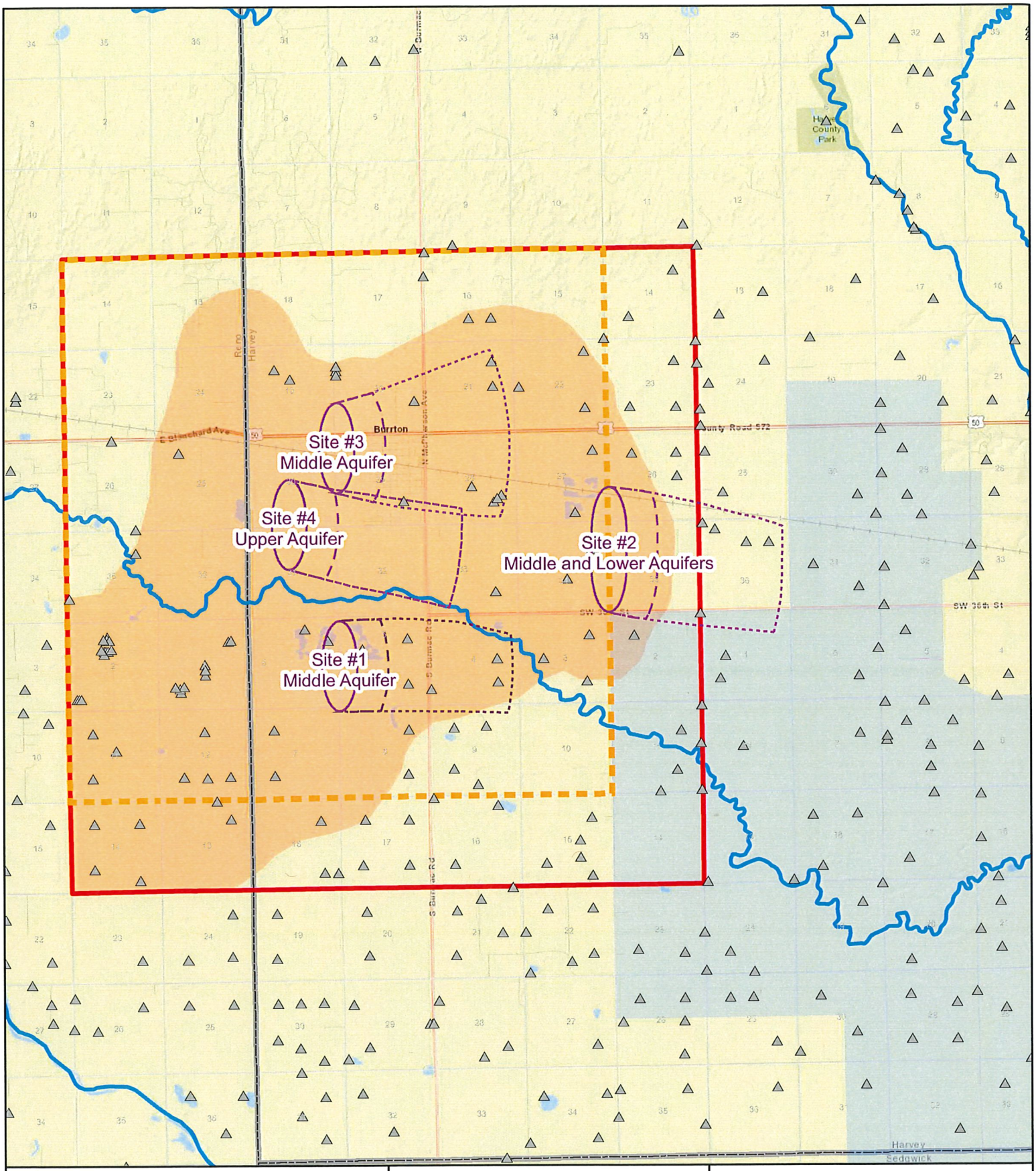
Groundwater in the vicinity of Burrton, Kansas continues to be impacted by elevated chloride concentrations, primarily caused by historic oil field operations in the region dating back to the 1930's. The plume of high chloride groundwater is expanding and migrating southeast in the Equus Beds Aquifer, threatening to impact a larger area of the aquifer which is used for municipal, industrial, and agricultural water supplies.

In FY2018 and FY2019, SWPF funds in the amount of $50,000 annually were appropriated to the Kansas Water Office (KWO) to investigate the options for remediating the groundwater plume and for the development of a remediation plan. The KWO, with the assistance of the Kansas Department of Health and Environment (KDHE) Groundwater Remediation team, is currently working with Burns & McDonnell to evaluate remediation options within the Burrton chloride plume.

On November 14, 2019, a draft report was presented to KWO and KDHE to demonstrate site selection methodology and remediation options for one of the four contamination sites. The final report includes this information for all four sites, and will demonstrate the most cost-effective way to utilize contaminated groundwater in the region, while protecting existing freshwater resources.

The project is now in a partner engagement phase and will be reviewed by the Equus-Walnut Regional Advisory Committee, Groundwater Management District No. 2, and the City of Wichita. The final report will be publicly available following a one-month review period.

This is being provided for informational purposes only. No Kansas Water Authority action is necessary at this time.



Legend

- 5-Year Potential Impact Areas
- 25-Year Potential Impact Areas
- Remediation Sites
- Wichita Wellfield Area (USGS)
- Active Water Rights DWR WIMAS 10/15/2019
- Burrton IGUCA Boundary
- Project Area Boundary
- Potential Groundwater >250ppm Chloride (Within Project Area)
- PLSS Sections
- County Boundaries

N

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Miles

BURNS McDONNELL

Figure 1-1

Potential Remediation Site Locations

MEMO

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DATE: December 12, 2019
TO: Kansas Water Authority
FROM: Earl Lewis
RE: Arbuckle Study Update

At the September 2019 KWA meeting in Goodland, the Kansas Geological Survey (KGS) presented information regarding the risks associated with the use of injection and storage wells in south and south-central Kansas within the Arbuckle formation, and requested funding for a study to collect data necessary to address those risks. The KWA recommended $100,000 in State Water Plan Funds (SWPF) for FY 2021 to initiate discussions and scoping of the Arbuckle study.

Pursuant to KWA decision, on Oct. 1, 2019, the KWA sent a letter (as attached) to Governor Kelly requesting that she convene a group of relevant agencies and key stakeholders to determine the best course of action for scoping the study, identifying potential funding sources, and addressing both short and long term issues. On Nov. 19, 2019, the Governor responded with a letter (as attached) directing the KWA to convene a group to address the Arbuckle Study, and to appoint the Kansas Water Office to lead the study group.

The Governor indicated that the following agencies shall be members of the group: Kansas Department of Health and Environment, Kansas Corporation Commission, Kansas Geological Survey, Kansas Department of Commerce, Kansas Department of Agriculture, and Kansas Department of Wildlife, Parks & Tourism.

A progress report is requested to be provided to the Governor on the study by Sept. 1, 2020.

No action is needed at this time. Information is provided for discussion purposes only.

October 1, 2019

The Honorable Laura Kelly
Capitol
300 SW 10th Ave., Ste. 241S
Topeka, KS 66612

Re: Request to Convene Group to Address Arbuckle Study

Dear Governor Kelly:

At the September 4, 2019, meeting of the Kansas Water Authority (KWA), the Kansas Geological Survey (KGS) provided information on the Arbuckle formation, which is a geological formation that has long been relied on for fluid waste disposal, oil production and as a fresh water source by numerous industries and municipalities. Two different State agencies oversee disposal allotments and practices for a diverse group of industries relying on the Arbuckle: the Kansas Department of Health and Environment (KDHE) and the Kansas Corporation Commission (KCC).

The KGS explained that this resource, which had previously been considered infinite, is facing some concerning issues. Due to a significant increase in the rate at which fluids have been deposited into the formation during the last decade, increased pressures in the formation, according to the KGS, have likely had a role in the increased seismicity in south-central Kansas since 2013. Additionally, the volume of fluid waste disposal into the formation over many years has depleted its storage capacity in some key localized areas. In some areas of Kansas, industry users may have as little as three years of space remaining. There is additional concern that continued disposal in these areas could result in contamination of fresh groundwater sources which lie above the Arbuckle formation.

At the KWA meeting, the KGS proposed a 5-year study of the Arbuckle to collect additional data and to ultimately provide the state with tools and insight necessary to appropriately manage the resource. Initial concerns regarding the study were discussed by the KWA, primarily that the time horizon of the study is not conducive to the needs of the industries that may be affected within the next few years, as well as the overall cost of the study, which, as proposed by the KGS, totals approximately $2.9 million over the 5-year period.

After some discussion, the KWA acted to recommend $100,000 in State Water Plan Funds for FY 2021 to initiate discussions and scoping of the Arbuckle study. The KWA also took action to request that the Governor convene a group of relevant agencies and key stakeholders to determine the best course of action for scoping the study, finding potential funding sources, and addressing both short and long term issues. The Kansas Water Authority formally submits this request and is willing to assist in whatever capacity necessary.

We appreciate the opportunity to submit this request and would be available to address any questions.

Sincerely,

Earl Lewis
Secretary, Kansas Water Authority

Capitol Building
Room 241 South
Topeka, KS 66612

Kansas
Office of the Governor

Phone: (785) 296-3232
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Laura Kelly, Governor

November 19, 2019

Earl Lewis
Secretary, Kansas Water Authority
Kansas Water Office
900 SW Jackson Street, Suite 404
Topeka, KS 66612

Re: Request to Convene Group to Address Arbuckle Study

Mr. Lewis:

Thank you for your October 1, 2019, letter requesting the convening of a group of relevant agencies and key stakeholders to determine the best course of action for studying the Arbuckle. As you express in your letter, the increase in the rate at which fluids have been deposited into the Arbuckle formation during the last decade is concerning. The depletion of storage capacity in key localized areas and the potential for contamination of fresh groundwater sources above the Arbuckle formation requires forward movement on the proposed study.

As the Kansas Water Authority (KWA) is responsible for advising the Governor, Legislature and Director of the Kansas Water Office on water policy issues, I am directing the KWA to form the requested working group. The KWA shall appoint the Kansas Water Office to lead the study group. The following agencies shall be members: The Kansas Department of Health and Environment (KDHE), Kansas Corporation Commission (KCC), Kansas Geological Survey (KGS), Kansas Department of Commerce (KDC), Kansas Department of Agriculture (KDA), and Kansas Department of Wildlife, Parks & Tourism (KDWPT). Additionally, the KWA should appoint key stakeholders and industry partners to this workgroup.

The Arbuckle Study Work Group should focus its efforts on determining the scope of the study, finding potential funding sources and defining both short and long-term issues for the Arbuckle. It is imperative that we gain a better understanding of how to manage use of the Arbuckle. Additionally, this group should work together to break down silos between their respective agencies and develop strategies for timely sharing of information. I am requesting that the KWA report back progress to me on this study by September 1, 2020.

Sincerely,

Laura Kelly

Laura Kelly
Governor of Kansas

Cc: Secretary Lee Norman
Kansas Department of Health & Environment
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Topeka, KS 66612

Secretary Mike Beam
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