NOTICE

This scan only represents the application as filed. The information contained herein meets the requirements of K.A.R. 5-3-1 or K.A.R. 5-5-1, and has been found acceptable for filing in the office of the Chief Engineer. The application should not be considered to be a complete application as per K.A.R. 5-3-1b or K.A.R. 5-5-2a.

1320 Research Park Drive
Manhattan, KS 66502
785-564-6700
www. agriculture.ks.gov

Kansas
Department of Agriculture

900 SW Jackson, Room 456
Topeka, KS 66612
785-296-3556

Mike Beam, Secretary

Laura Kelly, Governor

WATER RESOURCES
RECEIVED
APR 14 2021
2:00PM
KS DEPT OF AGRICULTURE

File Number 50567
This item to be completed by the Division of Water Resources.

APPLICATION FOR PERMIT TO APPROPRIATE WATER FOR BENEFICIAL USE

Filing Fee Must Accompany the Application
(Please refer to Fee Schedule attached to this application form.)

To the Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture, 1320 Research Park Drive, Manhattan, Kansas 66502:

1. Name of Applicant (Please Print): City of Beloit

   Address: PO Box 567

   City: Beloit State KS. Zip Code 67420

   Telephone Number: (785) 738-2275

2. The source of water is: ☒ surface water in Solomon River (stream)

   OR ☐ groundwater in _____ (drainage basin)

   Certain streams in Kansas have minimum target flows established by law or may be subject to administration when water is released from storage for use by water assurance district members. If your application is subject to these regulations on the date we receive your application, you will be sent the appropriate form to complete and return to the Division of Water Resources.

3. The maximum quantity of water desired is 2,000 acre-feet OR _____ gallons per calendar year, to be diverted at a maximum rate of Natural flow gallons per minute OR _____ cubic feet per second.

   Once your application has been assigned a priority, the requested maximum rate of diversion and maximum requested quantity of water under that priority number can **NOT** be increased. Please be certain your requested maximum rate of diversion and maximum quantity of water are appropriate and reasonable for your proposed project and are in agreement with the Division of Water Resources' requirements.

4. The water is intended to be appropriated for **(Check use intended):**

(a) ☐ Artificial Recharge	(b) ☐ Irrigation	(c) ☐ Recreational	(d) ☐ Water Power
(e) ☐ Industrial	(f) ☒ Municipal	(g) ☐ Stockwatering	(h) ☐ Sediment Control
(i) ☐ Domestic	(j) ☐ Dewatering	(k) ☐ Hydraulic Dredging	(l) ☐ Fire Protection
(m) ☐ Thermal Exchange	(n) ☐ Contamination Remediation		

YOU **MUST** COMPLETE AND ATTACH ADDITIONAL DIVISION OF WATER RESOURCES FORM(S) PROVIDING INFORMATION TO SUBSTANTIATE YOUR REQUEST FOR THE AMOUNT OF WATER FOR THE INTENDED USE REFERENCED ABOVE.

For Office Use Only:
F.O. 3 *GMD* ____ *Meets K.A.R. 5-3-1* (YES / NO) *Use* MUN *Source* G / S *County* MC *By* BMM *Date* 4/15/21
Code RE3 *Fee $* 640 *TR #* _____ *Receipt Date* 4/14/21 *Check #* 82879

DWR 1-100 (Revised 05/17/2019)

4/19/2021
LMoody

File No. _____

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KS DEPT OF AGRICULTURE

5. The location of the proposed wells, pump sites or other works for diversion of water is:

Note: For the application to be accepted, the point of diversion location must be described to at least a 10 acre tract, unless you specifically request a 60 day period of time in which to locate the site within a specifically described, minimal legal quarter section of land.

(A) One in the NE quarter of the SW quarter of the SW quarter of Section 27, more particularly described as being near a point 850 feet North and 4000 feet West of the Southeast corner of said section, in Township 6 South, Range 9 West, Mitchell County, Kansas.

(B) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ , _____ County, Kansas.

(C) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ County, Kansas.

(D) One in the _____ quarter of the _____ quarter of the _____ quarter of Section _____, more particularly described as being near a point _____ feet North and _____ feet West of the Southeast corner of said section, in Township _____ South, Range _____ East/West (circle one), _____ County, Kansas.

If the source of supply is groundwater, a separate application shall be filed for each proposed well or battery of wells, except that a single application may include up to four wells within a circle with a quarter (¼) mile radius in the same local source of supply which do not exceed a maximum diversion rate of 20 gallons per minute per well.

A battery of wells is defined as two or more wells connected to a common pump by a manifold; or not more than four wells in the same local source of supply within a 300 foot radius circle which are being operated by pumps not to exceed a total maximum diversion rate of 800 gallons per minute and which supply water to a common distribution system.

6. The owner of the point of diversion, if other than the applicant is (please print):

United States Bureau of Reclamation
(name, address and telephone number)

_____
(name, address and telephone number)

You must provide evidence of legal access to, or control of, the point of diversion from the landowner or the landowner's authorized representative. Provide a copy of a recorded deed, lease, easement or other document with this application. In lieu thereof, you may sign the following sworn statement:

> I have legal access to, or control of, the point of diversion described in this application from the landowner or the landowner's authorized representative. I declare under penalty of perjury that the foregoing is true and correct.
>
> Executed on _____, 20____. _____
> Applicant's Signature

The applicant must provide the required information or signature irrespective of whether they are the landowner. Failure to complete this portion of the application will cause it to be unacceptable for filing and the application will be returned to the applicant.

7. The proposed project for diversion of water will consist of Storage and rediversion works
(number of wells, pumps or dams, etc.)
and will be completed (by) 2023.
(Month/Day/Year - each was or will be completed)

8. The first actual application of water for the proposed beneficial use was or is estimated to be 2023.
(Mo/Day/Year)

File No. _____

9. Will pesticide, fertilizer, or other foreign substance be injected into the water pumped from the diversion works?

☐ Yes ☒ No If "yes", a check valve shall be required.

All chemigation safety requirements must be met including a chemigation permit and reporting requirements.

10. If you are planning to impound water, please contact the Division of Water Resources for assistance, prior to submitting the application. Please attach a reservoir area capacity table and inform us of the total acres of surface drainage area above the reservoir.

Have you also made an application for a permit for construction of this dam and reservoir with the Division of Water Resources? ☐ Yes ☒ No

- If yes, show the Water Structures permit number here _____
- If no, explain here why a Water Structures permit is not required This is for an existing Federal Reservoir owned and operated by the USBR. DWR has no jurisdiction over the structure itself. Structures number is DMC-0063.

11. The application must be supplemented by a U.S.G.S. topographic map, aerial photograph or a detailed plat showing the following information. On the topographic map, aerial photograph, or plat, identify the center of the section, the section lines or the section corners and show the appropriate section, township and range numbers. Also, please show the following information:

(a) The location of the proposed point(s) of diversion (wells, stream-bank installations, dams, or other diversion works) should be plotted as described in Paragraph No. 5 of the application, showing the North-South distance and the East-West distance from a section line or southeast corner of section.

(b) If the application is for groundwater, please show the location of any existing water wells of any kind within ½ mile of the proposed well or wells. Identify each existing well as to its use and furnish the name and mailing address of the property owner or owners. If there are no wells within ½ mile, please advise us.

(c) If the application is for surface water, the names and addresses of the landowner(s) ½ mile downstream and ½ mile upstream from your property lines must be shown.

(d) The location of the proposed place of use should be shown by crosshatching on the topographic map, aerial photograph or plat.

(e) Show the location of the pipelines, canals, reservoirs or other facilities for conveying water from the point of diversion to the place of use.

A 7.5 minute U.S.G.S. topographic map may be obtained by providing the section, township and range numbers to: Kansas Geological Survey, 1930 Constant, Campus West, University of Kansas, Lawrence, Kansas 66047.

12. List any application, appropriation of water, water right, or vested right file number that covers the same diversion points or any of the same place of use described in this application. Also list any other recent modifications made to existing permits or water rights in conjunction with the filing of this application.

File No. 10,281 authorizes the same 2,000 acre-feet of storage and a rediversion of 171 acre-feet. This new permit should be limited to a total of 2,000 acre-feet of storage and redversion when combined with File No. 10,281. The proposed 2,000 acre-feet should be limited to 2,000 acre-feet when combined with Vested Water Right, MC002; and Water Rights, File Nos. 2,269; 10,281; and 47,776.

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KS DEPT OF AGRICULTURE

File No. _____

13. Furnish the following well information if the proposed appropriation is for the use of groundwater. If the well has not been completed, give information obtained from test holes, if available.

Information below is from: ☐ Test holes ☐ Well as completed ☐ Drillers log attached

Well location as shown in paragraph No.	(A)	(B)	(C)	(D)
Date Drilled	N/A			
Total depth of well				
Depth to water bearing formation				
Depth to static water level				
Depth to bottom of pump intake pipe				

14. The relationship of the applicant to the proposed place where the water will be used is that of Owner (owner, tenant, agent or otherwise).

15. The owner(s) of the property where the water is used, if other than the applicant, is (please print):

Same as applicant
(name, address and telephone number)

_____
(name, address and telephone number)

16. The undersigned states that the information set forth above is true to the best of his/her knowledge and that this application is submitted in good faith.

Dated at Beloit, Kansas, this 12th day of April (month), 2021 (year).

_____
(Applicant Signature)

By _____
(Agent or Officer Signature)

_____
(Agent or Officer - Please Print)

Assisted by Kelly Stewart, Water Commissioner KDA/DWR/Stockton Field Office Date: 11/04/2020
(office/title)

FEE SCHEDULE

1. The fee for an application for a permit to appropriate water for beneficial use, except for domestic use, shall be (see paragraph No. 2 below if requesting storage):

ACRE-FEET	FEE
0-100	$200.00
101-320	$300.00
More than 320	$300.00 plus $20.00 for each additional 100 acre-feet or any part thereof.

2. The fee for an application in which storage is requested, except for domestic use, shall be:

ACRE-FEET	FEE
0-250	$200.00
More than 250	$200.00 plus $20.00 for each additional 250 acre-feet of storage or any part thereof.

Note: If an application requests both direct use *and* storage, the fee charged shall be as determined under No. 1 or No. 2 above, whichever is greater, but not both fees.

3. The fee for an application for a permit to appropriate water for water power or dewatering purposes shall be $100.00 plus $200.00 for each 100 cubic feet per second, or part thereof, of the diversion rate requested.

Note: The applicant shall notify the Chief Engineer and pay the statutorily required field inspection fee of $400.00 when construction of the works for diversion has been completed, except that for applications filed on or after July 1, 2009, for works constructed for sediment control use and for evaporation from a groundwater pit for industrial use shall be accompanied by a field inspection fee of $200.00.

MAKE CHECKS PAYABLE TO THE KANSAS DEPARTMENT OF AGRICULTURE

ATTENTION

A Water Conservation Plan may be required per K.S.A. 82a-733. A statement that your application for permit to appropriate water may be subject to the minimum desirable streamflow requirements per K.S.A. 82a-703a, b, and c may also be required from you. After the Division of Water Resources has had the opportunity to review your application, you will be notified whether or not you will need to submit a Water Conservation Plan. You also may be required to install a water flow meter or water stage measuring device on your diversion works prior to diverting water. There may be other special conditions or Groundwater Management District regulations that you will need to comply with if this application is approved.

CONVERSION FACTORS

1 acre-foot equals 325,851 gallons

1 million gallons equal 3.07 acre-feet

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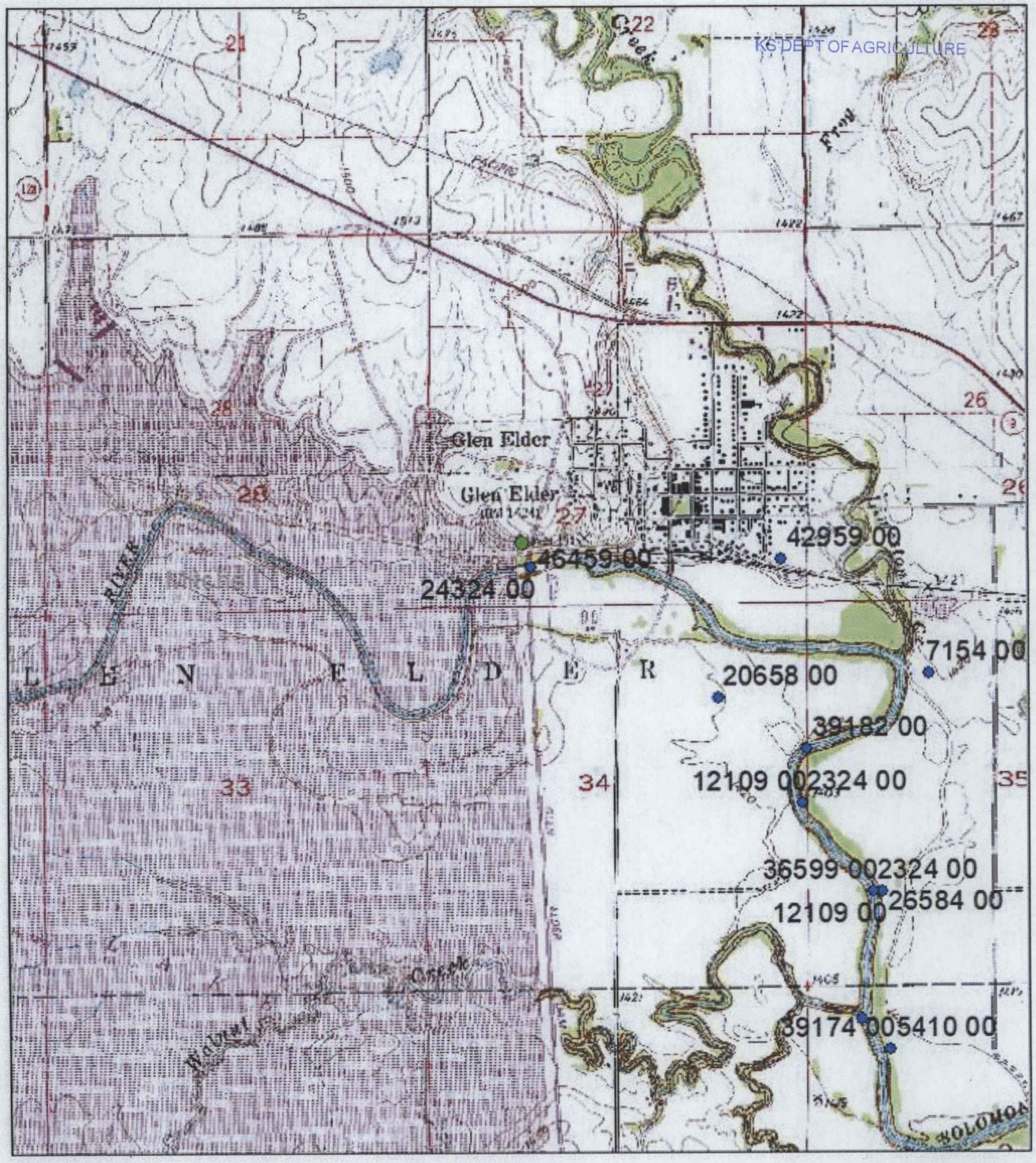
KS DEPT OF AGRICULTURE

Application, File No. _____



1:24,000

● Proposed Point of Diversion

The proposed point of diversion is proposing to utilize the same conduit through the dam that is used by File Nos. 18,212 and 45,679. Slightly different feet distances are being used to avoid the appearance of a complete overlap in point of diversion.

Applicant's Name City of Beloit
(Please Print)

MUNICIPAL (PUBLIC WATER SUPPLY) APPLICATION SUPPLEMENTAL INFORMATION SHEET

Application File Number
(assigned by DWR)

SECTION 1: PRESENT WATER USE SUMMARY (IF NO PREVIOUS MUNICIPAL WATER USE HAS BEEN UTILIZED, PROCEED TO SECTION 3)
NOTE: WORKSHEET FOR WATER PUMPED, PURCHASED, AND SOLD BY YOUR WATER DISTRIBUTION SYSTEM.

Column 1 Raw Water Diverted Under Your Rights	Column 2 Water Purchased From All Sources	Column 3 Water Sold to Other Public Water Suppliers	Column 4 Water Sold to Your Industrial, Stock, and Bulk Customers	Column 5 Water Sold to Your Residential and Commercial Customers	Column 6 Other Metered Water	Column 7 Remaining Water Used (See Below Explanation)
204,201	0	58,132	325	130,796	22,899	-7,951
TOTAL WATER = Columns 1 + 2		**ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6**				**UNACCOUNTED FOR WATER**

UNACCOUNTED FOR WATER = TOTAL WATER - ACCOUNTED FOR WATER

Column 1: The amount of raw water diverted from all of your points of diversion.

Column 2: The amount of water purchased wholesale from all other public water supply systems or the Kansas Water Office.

Column 3: The amount of water sold wholesale to all other public water supply systems.

Column 4: The amount of water sold retail to all industrial, pasture, stockwater, feedlot, and bulk water service connections. Include the amount of water sold to all farmsteads using at least 200,000 gallons of water per year.

Column 5: The amount of water sold retail to your residential and commercial customers and to industries and farmsteads using less than 200,000 gallons of water per year.

Column 6: The amount of water used that is metered at individual service connections and supplied free, such as for public service, treatment processes, and connections receiving free water.

Column 7: The amount of remaining water used. The gallons reported in this column are found by adding the numbers in Columns 1 and 2 and subtracting the numbers in Columns 3, 4, 5, and 6.

UNACCOUNTED FOR WATER

Use the following to calculate your distribution system's Unaccounted For Water:
Start with the amount in Column 1 and add the amount in Column 2, then subtract the amounts in Columns 3, 4, 5, and 6 leaving an amount of water representing your unaccounted for water to enter in Column 7.

Use the following to calculate the percent Unaccounted For Water versus the Total Water of your system:

$$\text{Percent Unaccounted For Water} = \frac{\text{Unaccounted For Water}}{\text{Total Water (Columns 1,2)}} \times 100$$

If this number exceeds 20%, please explain the large amount of unaccounted for water and describe any steps being taken to reduce it.

SECTION 2: PAST WATER USE
COMPLETE THE FOLLOWING TABLE FROM YOUR PAST WATER USE RECORDS.

	Column 1 Raw Water Diverted Under Your Rights	Column 2 Water Purchased From All Sources	Column 3 Water Sold to Other Public Water Suppliers	Column 4 Water Sold to Your Industrial, Stock, and Bulk Customers	Column 5 Water Sold to Your Residential and Commercial Customers	Column 6 Other Metered Water	Column 7 Remaining Water Used (See Above Explanation)
20 years ago	221,923	0	24,816	66,868	107,515	0.111	22,613
15 years ago	237,602	0	26,222	71,158	111,989	10,360	17,873
10 years ago	207,977	0	20,125	64,976	93,402	9,734	19,740
5 years ago	193,221	0	22,106	478	149,076	18,955	2,696
	TOTAL WATER = Columns 1 + 2		**ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6**				**UNACCOUNTED FOR WATER**

SECTION 3: PROJECTED FUTURE WATER NEEDS

PLEASE COMPLETE THE FOLLOWING TABLE SHOWING YOUR FUTURE WATER REQUIREMENTS FOR THE NEXT 20 YEARS:

	Column 1 Raw Water Diverted Under Your Rights	Column 2 Water Purchased From All Sources	Column 3 Water Sold to Other Public Water Suppliers	Column 4 Water Sold to Your Industrial, Stock, and Bulk Customers	Column 5 Water Sold to Your Residential and Commercial Customers	Column 6 Other Metered Water	Column 7 Remaining Water Used (See Explanation on other side)
Year 5	554,354	0	174,192	60,377	140,909	24,778	154,098
Year 10	584,352	0	183,017	60,406	151,799	26,692	162,437
Year 15	616,668	0	192,525	60,438	163,530	28,755	171,420
Year 20	651,482	0	202,767	60,471	176,169	30,978	181,098
	TOTAL WATER = Columns 1 + 2		ACCOUNTED FOR WATER = Columns 3 + 4 + 5 + 6				UNACCOUNTED FOR WATER

SECTION 4: POPULATION AND SERVICE CONNECTIONS

ESTIMATE THE NUMBER OF PERSONS DIRECTLY SERVED BY YOUR WATER DISTRIBUTION SYSTEM

PAST POPULATION - PROVIDE INFORMATION BELOW:
(CENSUS BUREAU INFORMATION)

LAST 20 YEARS	POPULATION
20 years ago	3,920
15 years ago	3,656
10 years ago	4,019
5 years ago	3,780
Last Year	3,793

PROJECTED FUTURE POPULATION

ESTIMATE FUTURE POPULATION AND SUBSTANTIATE NUMBERS ON SEPARATE ATTACHMENTS

NEXT 20 YEARS	POPULATION
Year 5	4,086
Year 10	4,402
Year 15	4,742
Year 20	5,109

Provide number of current active service connections:

1,518	Residential	4	Industrial	2	Other (specify) MCRWD #1 & #3
307	Commercial	0	Pasture/ Stockwater/ Feedlot	1,831	**Total**

SECTION 5: PRESENT GALLONS PER PERSON PER DAY

CALCULATE YOUR GALLONS PER PERSON PER DAY

Water in Columns 5, 6, and 7 ÷ Population ÷ 365 Days/Year = Gallons per Person per Day

145,744 (Amount of water in Columns 5, 6, and 7 of Section 1) ÷ 3,793 (Population from Last Year of Section 4) ÷ 365 Days/Year = 38.4 GALLONS PER PERSON PER DAY.

SECTION 6: AREA TO BE SERVED

Describe the area to be served or provide the legal description of the location where the water is to be used including any other city of water supply system (i.e. Rural Water District): The City of Beloit and immediate vicinity, within the boundary of Mitchell County Rural Water District No. 1 and immediate vicinity, and within the boundary of Mitchell County Rural Water District No. 3 and immediate vicinity.

You may attach additional information you believe will assist in informing the Division of the need for your request.

SUPPORTING DOCUMENTATION FOR WATER NEED AND POPULATION PROJECTIONS

REFERENCE - SECTION 3: PROJECTED FUTURE WATER NEEDS

The 20 year projections for water needs where developed by combining the current water needs for the City of Beloit and Mitchell County RWD No. 3 and applying a 1.5% annual growth rate. Additionally, a total of 120,000,000 gallons per year was reserved for potential future industry in the City of Beloit (60 Mgal) and feedlot expansions for Mitchell County RWD No. 3 (60 Mgal). Finally, a water loss of 38.5% was applied to all water needs. This high rate of lost water is primarily due to the membrane treatment process that will be a part of the new Water Treatment Plant. For more information regarding the details of how this water loss see Table 1 on the next page. This table was taken from the Waste Stream Summary Review and Consensus Document for this project which has been approved by KDHE. Most of this lost water will be pumped to evaporative ponds that will discharge back into the Solomon River. The rest of this lost water will go to the City's WWTP which ultimately discharges its effluent back into the Solomon River. The maximum diversion rate for the proposed WTP will be 2580 GPM.

REFERENCE - SECTION 4: PROJECTED FUTURE POPULATION

The 20 year projections for population were developed using an annual growth rate of 1.5%.

Table 1: Summary of Waste Streams

(from the Waste Stream Summary Review and Consensus Document)

Waste Stream Sources	Proposed Disposal Methods	Estimated Average Day Volumes*	Estimated Peak Day Volumes**
Process Waste			
Existing Presedimentation Basin sludge blowdown waste	Evaporative ponds (Q) - direct - piped - settled wastewater to Solomon River	26,250 GPD	63,000 GPD
Clarifier sludge blowdown waste	Evaporative ponds (Q) - direct - piped - settled wastewater to Solomon River	30,000 GPD	72,000 GPD
UF Membranes - Backwash Water	Evaporative ponds (Q) - direct - piped - settled wastewater to Solomon River	43,417 GPD	104,200 GPD
UF Membranes - Clean in Place (CIP) Wastewater	City Wastewater Treatment Plant	13,800 GPD	13,800 GPD
On-Line Individual UF Skid Turbidity Meters (IFE) (3 total)	Floor Drain – City Wastewater Treatment Plant	126 GPD	360 GPD
On-Line Combined UF Process Turbidity Meter (CFE)	Floor Drain – City Wastewater Treatment Plant	42 GPD	120 GPD
RO Membranes - Reject Water (Concentrate)	Evaporative ponds (Q) - direct - piped - settled wastewater to Solomon River	0.175 MGD	0.420 MGD
RO Membranes - Clean in Place (CIP) Wastewater	City Wastewater Treatment Plant	2,400 GPY (Yearly)	2,400 GPY (Yearly)
On-Line Individual RO Skid TDS Meters (ITE) (2 total)	Floor Drain – City Wastewater Treatment Plant	84 GPD	240 GPD
On-Line Combined RO Process TDS Meter (CTE)	Floor Drain – City Wastewater Treatment Plant	42 GPD	120 GPD
Free Chlorine residual analyzer effluent	Floor Drain – City Wastewater Treatment Plant	42 GPD	120 GPD
On-Line pH Meter	Floor Drain – City Wastewater Treatment Plant		
Total Chlorine residual analyzer effluent	Floor Drain – City Wastewater Treatment Plant	42 GPD	120 GPD
On-Line Turbidity Meter (non-compliance)	Floor Drain – City Wastewater Treatment Plant	42 GPD	120 GPD

*Waste Generation for Average Day Production is based on a Total Treatment Flow of 0.75 MGD.

**Waste Generation for Peak Day Production is based on a Total Treatment Flow of 1.8 MGD.

1320 Research Park Drive
Manhattan, KS 66502
785-564-6700
www. agriculture.ks.gov

Kansas
Department of Agriculture

900 SW Jackson, Room 456
Topeka, KS 66612
785-296-3556

Mike Beam, Secretary

Laura Kelly, Governor

April 16, 2021

CITY OF BELOIT
PO BOX 567
BELOIT KS 67420

RE: Application, File No(s). **50567**

Dear Sir or Madam:

The Division of Water Resources (Division) has received your application(s) for a permit to appropriate water for beneficial use. Your application(s) has been assigned the file number(s) referenced above. Please be aware that the Division may have a large number of pending applications on hand at times and makes every attempt to process them in the order in which they are received. You will be contacted if additional information is required.

Please note, this letter only acknowledges receipt of your application(s) and does not guarantee approval. In accordance with the provisions of the Kansas Water Appropriation Act, the use of water as proposed prior to approval of the application(s) is unlawful.

Additional information about the process may be found on our website at *agriculture.ks.gov/divisions-programs/dwr*. If you have any other questions, please contact our office at 785-564-6640 or your local Stockton Field Office at 785-425-6787.*Stockton Field Office at 785-425-6787.* If you call, please reference the file number so we can help you more efficiently.

Sincerely,

Kris Neuhauser
New Applications Lead
Water Appropriation Program

DATA ENTRY SYSTEM ID NUMBER SHEET

FILE NUMBER 50567

APPLICANT PERSON ID & SEQ #		PDIV ID		BATTERY ID
1100		88761		
		STRUCTURES #DMC-0063		

LANDOWNER PERSON ID & SEQ #		PUSE ID	
1100		4226	
33959		9224	
33397		64816	

WATER USE CORRESPONDENT PERSON ID & SEQ #	
1100	