

**Ratermann, Tom**

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**From:** Ratermann, Tom  
**Sent:** Wednesday, August 3, 2022 8:45 PM  
**To:** 'Kneemueller, Ashley'  
**Cc:** Rizo, Jaime; Abbott, Michael; Hoke, John; Lara Florea (lflorea@bcrsd.com)  
**Subject:** RE: Privately owned WWTFs in Boone county  
**Attachments:** Excerpt - Fees - BCRSD pages 14 to 17.pdf; Table 3-1 revised 2-23-2022.pdf; Map - Cornell's Friendly Acres 11-4-08.pdf; Report to Board 7-27-22.pdf

Ashley – I have attached a file with an excerpt from the BCRSD’s regulations regarding current connection fees. The Board of Trustees is raising the connection fees effective January 1, 2023. For 5/8” and ¾” water meters, the 2023 fee will be \$2,300. I will get you the fee structure for the other water meter sizes.

I have also attached a file named “Table 3-1 revised 2-23-2022.” It indicates that the BCRSD’s South Route K facility has remaining capacity for 20 residential units or 6,080 gpd. I have also attached a file with a map of Friendly Acres indicating 16 lots. Currently, the BCRSD has treatment capacity to serve Friendly Acres at the BCRSD’s South Route K facility.

I have also attached a file with a report to the Board of Trustees of the BCRSD regarding treatment capacity at the BCRSD’s Midway Crossing facility. The flow allocation is shown below:

	Number of lots	Design GPD per lot	Actual GPD per lot	
Midway Crossing	73	370		27,010
Rollingwood	47	370		17,390
			SUBTOTAL	44,400
Midway Crossing	73		129	-9,417
Rollingwood	47		129	-6,063
Fred Overton	36		129	-4,644
			SUBTOTAL	-20,124
			TOTAL	24,276

The actual flow on the Midway Auto / Truck Plaza permit is 22,500 GPD. Therefore, the BCRSD currently has treatment capacity to serve Midway Auto / Truck Plaza at the BCRSD’s Midway Crossing facility. Please call or e-mail if you have questions. Thanks. TR

Tom Ratermann  
Boone County Regional Sewer District  
1314 N. 7<sup>th</sup> Street  
Columbia, MO 65201  
573-443-2765

**From:** Kneemueller, Ashley <Ashley.Kneemueller@dnr.mo.gov>  
**Sent:** Tuesday, July 12, 2022 10:37 AM

**To:** Ratermann, Tom <TRatermann@bcrsd.com>

**Cc:** Rizo, Jaime <Jaime.Rizo@dnr.mo.gov>; Abbott, Michael <michael.abbott@dnr.mo.gov>; Hoke, John <john.hoke@dnr.mo.gov>

**Subject:** Privately owned WWTFs in Boone county

**\*\*EXTERNAL E-MAIL\*\*** Verify before clicking links or attachments.

Hello Tom,

I spoke with the Department's legal counsel and they confirmed 10 CSR 20-6.010(2)(C)4 refers only to the connection charge proposed by BCRSD to demonstrate a connection is 120% or more the applicant's cost of installing or operating a private facility. This means the Department will not include the private facility's cost of physical connection in making the 120% determination.

I have a copy of a correspondence from BCRSD to Brant Farris dated July 2021 showing connection fees for several water meter sizes, but can you provide me the current connection fees required by the District? I want to ensure the most up to date information is used.

Additionally, you mentioned that both Midway Crossing and South Route K are at capacity, however DMR data submitted to the Department shows actual flows below the design flow for Midway Crossing and South Route K's Outfall #1. South Route K's Outfall #2 appears near capacity. Can you confirm the receiving capacity of these two facilities? Does the District base capacity on something other than flows, such as number of connections or population served compared to design population equivalent?

If either or both of the mentioned District facilities are at capacity at this time, the Department would like to move forward with issuing permits to Midway Auto/Truck Stop and Cornell's Friendly Acres based on temporary unavailability of the BCRSD facilities. The permits can contain language that if capacity/connection becomes available during the permit cycle, the private facilities must demonstrate a use of lower continuing authority per 10 CSR 20-6.010(2)(C) OR connect to the BCRSD system within the timeframe provided in the BCRSD notice of service availability per 10 CSR 20-6.010(2)(F)3. Language in these permits will clarify demonstration to use a lower continuing authority is temporary, and good only for the length of the permit cycle, until modification, or until BCRSD service is truly available. Connection or a new demonstration will be required if any of these occur.

Please let me know about the above and if you had the chance to look over the drafted language to go in permits, sent June 29 after our meeting.

Thank you,

*Ashley Kneemueller*

Ms. - she/her/hers

Environmental Program Assistant

Operating Permits Section – Domestic Wastewater Unit

573-526-1503

Missouri Department of Natural Resources

Water Protection Program

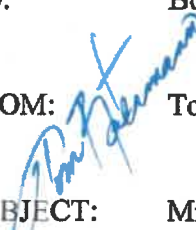
PO Box 176

Jefferson City, MO 65102-0176

*We'd like your feedback on the service you received from the Missouri Department of Natural Resources. Please consider taking a few minutes to complete the department's Customer Satisfaction Survey at <https://www.surveymonkey.com/r/MoDNRsurvey>. Thank you.*

DATE: July 27, 2022

TO: Board of Trustees

FROM:  Tom Ratermann

SUBJECT: Midway Crossing Wastewater Treatment Plant (WWTP)

#### **EXISTING CONDITION**

The Midway Crossing WWTP is operated under a Missouri State Operating Permit with a design flow of 150,000 gallons per day (gpd), which at 370 gpd per residential unit would serve 405 residential units. Currently, the WWTP serves 78 residential units in Midway Crossing, 47 residential units in Rollingwood Plat 2, Midway Elementary School and a cat boarding facility. Based on the past five years of Discharge Monitoring Reports (DMR) data, the WWTP treats an average flow of 23,923 gpd (see Midway Area Facility Plan by McClure Engineering dated June 27, 2022).

I have reviewed the water usage records for 73 residential units in Midway Crossing subdivision for the calendar year 2020. My conclusion is that for calendar year 2020, 73 residential units in Midway Crossing subdivision used an average of 129 gpd per unit and that this is representative for residential units in the Midway Crossing WWTP service area.

Further I have reviewed the water usage records for Midway Heights Elementary School for the period from February 2019 through December 2021. My conclusion is that the school used an average of 556 gpd for the period.

I have also reviewed the water usage records for the cat boarding facility for the period from May 2021 to December 2021. My conclusion is that the cat boarding facility used an average of 132 gpd for the period.

The Sewer District has an agreement, dated May 23<sup>rd</sup>, 2018, for service with Fred Overton Development, Inc. (Developer) for 170 single family lots and 2 commercial lots. The agreement states that "...the 2 commercial lots shall not produce more wastewater than a single-family lot, that is 370 gpd."

## **PROPOSED CONDITION**

The Developer proposes making the necessary revisions with the Boone County Resource Management Department to build 36 residential units with 3 bedrooms per unit on the 2 commercial lots instead of commercial development.

## **RECOMMENDATIONS**

Based upon the conclusions reached regarding water usage in the Midway Crossing WWTP service area I recommend revising the agreement for service with the Developer to allow for the development of the 2 commercial lots with 36 residential units with 3 bedrooms per unit with the following conditions:

1. That the plans and specifications for the pump station and force main will be reviewed by a third-party consulting engineering company and that the Developer will reimburse the Sewer District for the actual cost of the review;
2. That the Developer will install a water meter for each residential unit on the 2 lots and that the property owner will be responsible for the sewer bill for each unit; and
3. That the agreement will run with the land and be recorded in the land records.

Further, I recommend that the Sewer District consider a flow monitoring study in 2023 for the Midway Crossing WWTP service area and the Trails West Lagoon service area.

C:     File  
          Chris Pieper  
          Angela Burke