

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

APPLICATION OF EASTERN RICHLAND)
SEWER CORPORATION FOR A NEW) CAUSE NO. 45776-U
SCHEDULE OF RATES AND CHARGES FOR)
WASTEWATER SERVICE)

PUBLIC'S EXHIBIT NO. 2

TESTIMONY OF JAMES T. PARKS

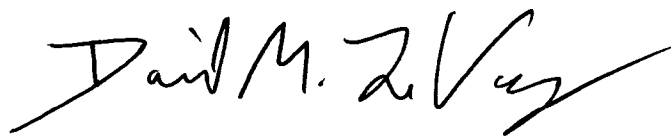
ON BEHALF OF

THE INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

February 16, 2023

Respectfully submitted

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**TESTIMONY OF OUCC WITNESS JAMES T. PARKS
CAUSE NO. 45776-U
EASTERN RICHLAND SEWER CORPORATION.**

I. INTRODUCTION

1 **Q: Please state your name and business address.**

2 A: My name is James T. Parks, P.E., and my business address is 115 W. Washington
3 Street, Suite 1500 South, Indianapolis, IN 46204

4 **Q: By whom are you employed and in what capacity?**

5 A: I am employed by the Office of Utility Consumer Counselor ("OUCC") as a Senior
6 Utility Analyst in the Water/Wastewater Division. My qualifications and experience
7 are described in Appendix A.

8 **Q: What is the purpose of your testimony?**

9 A: I describe the relief requested by Eastern Richland Sewer Corporation ("ERSC",
10 "Eastern Richland," "Applicant" or "Utility"). I provide background information by
11 briefly discussing the utility's history. I describe ERSC's wastewater collection
12 system and ERSC's two gravity sewer connections to the Town of Ellettsville's
13 collection system for conveying wastewater to Ellettsville's treatment plant. I
14 summarize ERSC infiltration and inflow ("I&I") challenges and steps ERSC has
15 taken over multiple years to locate and remove I&I. I also provide recommendations
16 on changes that Petitioner should make to plan for and undertake replacement of its
17 existing sewer assets as they reach the end of their useful life.

18 **Q: What relief does the ERSC seek in this Cause?**

19 A: ERSC seeks a 9.97% across the board rate increase in its metered and flat rate
20 monthly wastewater rates and approval of a new System Development Charge

1 (“SDC”) of \$2,500 per Equivalent Dwelling Unit (“EDU”).¹ The wastewater rate
2 increase reflects: 1) changes from ERSC’s Settlement Agreement and Mutual
3 Release with the Town of Ellettsville regarding its Sewage Treatment Purchase
4 Contract, 2) increased operating and maintenance costs, and 3) increased costs for
5 the contract operator.

6 **Q: Please describe the review and analysis you conducted to prepare your**
7 **testimony.**

8 A: I read Applicant’s Small Utility Rate Application in this Cause including the 2020
9 System Capacity Analysis and System Maps prepared by GRW Engineers. I
10 reviewed Applicant’s 2017 to 2021 annual reports filed with the IURC. I reviewed
11 eight reports that ERSC has submitted since 2011 as required by the Commission
12 identifying repairs and replacements of ERSC's sewer infrastructure, as well as its
13 efforts to televise the entire collection system over time.² I also reviewed
14 correspondence, monthly reports of operation (“MROs”), inspection reports, and
15 discharge permits with the Indiana Department of Environmental Management
16 (“IDEM”) for the Town of Ellettsville and Bypass / Overflow Incident Reports that
17 ERSC submitted to IDEM for sanitary sewer overflows (“SSOs”).

18 **Q: Are any Attachments submitted with your testimony?**

19 A: Yes. I provide the Attachments listed in Appendix B.

¹ Cause No. 45776-U Eastern Richland Sewer Corporation (ERSC) – Small Utility Rate Filing, Krohn & Associates, Inc. September 28, 2022.

² The annual reports detailing ERSC’s progress in sewer repairs to reduce infiltration and inflow (“I&I”) were required to be filed annually with the Commission. For the discussion of ERSC I&I reporting mandated by the Commission, see pages 7, 9, and 10 of the Cause No. 43921 Final Order, June 22, 2011.

II. CHARACTERISTICS OF EASTERN RICHLAND SEWER CORPORATION

1 **Q: Please describe Eastern Richland Sewer Corporation's characteristics.**

2 A: Eastern Richland Sewer Corporation is a public utility organized and existing as a
3 not-for-profit corporation that owns and operates a wastewater collection system in
4 Richland Township in Monroe County, Indiana.³ ERSC provides wastewater utility
5 service to 2,357 residential and commercial customers.⁴ ERSC does not have
6 employees or a wastewater treatment plant but only collects wastewater from its
7 customers for conveyance to the Town of Ellettsville for treatment. Reed & Sons
8 Construction, Inc. of Bloomington, Indiana have provided management, operation,
9 and maintenance activities under contract since late 2011.⁵

10 **Q: When did Eastern Richland Sewer Corporation begin operation?**

11 A: ERSC was formed to provide sewer service to the unincorporated rural area located
12 generally southeast of Ellettsville, Indiana on June 2, 1970.⁶ The IURC granted
13 ERSC its original Certificate of Territorial Authority ("CTA") in 1971.⁷

14 **Q: Has ERSC expanded its service territory?**

15 A: Yes. ERSC's CTA has expanded four times in Cause Nos. 32982, 43383, 43921,

³ IC 8-1-2-125 "Not-for-profit utilities"; services and facilities; reasonable and just charges; not-for-profit sewer utilities

⁴ See ERSC's 2021 IURC Annual Report, p. S-1. ERSC's customers included 2,256 residential customers and 101 commercial customers as of December 31, 2021.

⁵ Cause No. 43921, 1st Annual Report to the IURC regarding inspection, televising, maintenance, and replacement of ERSC infrastructure, December 21, 2011.

⁶ See ERSC's 2006 IURC Annual Report, p. E-6.

⁷ Cause No. 32783, December 1971.

1 and 44394.⁸ The third CTA expansion followed the 2011 merger with Northern
2 Richland Sewer Corporation (“NRSC”).⁹ NRSC, also formed in 1970, received its
3 CTA for a rural territory located generally north of Ellettsville in 1972.¹⁰ Like
4 ERSC, NRSC did not have its own treatment plant, providing only sewers to convey
5 wastewater to Ellettsville’s sanitary sewer system and wastewater treatment plant.

6 In 2014, ERSC exchanged 140 acres of service area with the South Central
7 Regional Sewer District (“SCRSD”) and added 4,805 acres of new service area
8 located south, west, and north of the Town of Ellettsville.¹¹ ERSC’s service territory
9 was shown in Applicant’s Cause No. 45776-U Small Utility Filing Letter, dated
10 September 28, 2022. For the Commission’s convenience I provide ERSC’s service
11 area map again in Attachment JTP-1.¹²

12 **Q: How has ERSC’s customer base grown over the last 10 years since merging?**

13 A: ERSC reported it had 2,074 customers after its merger with NRSC in 2011.¹³
14 Growth has been steady over the last ten years, reaching 2,375 by the end of 2021
15 with 1.3% per year average growth and 26 residential and 2 commercial customers
16 added annually. I summarize ERSC’s customer growth in Table 1.

⁸ Cause No. 32982 (unknown year - estimated to be 1972), Cause No. 43383, June 11, 2008. Cause No. 43921 (merger of ERSC and NRSC), June 22, 2011, Cause No. 44393 (exchange of territory with SCRSD and expansion to areas south, west, and north of Ellettsville, IN), August 27, 2014.

⁹ NRSC was merged into ERSC effective June 22,2011 in Cause No. 43921.

¹⁰ Cause No. 32784

¹¹ Cause No. 44394, August 27, 2014.

¹² The service territory map in Attachment JTP-1 was the best available map but does not show the entire acreage added on the north side of Ellettsville. *See* Cause No. 44394 for an overall service area map which is unfortunately of poor quality.

¹³ ERSC’s 2011 merger with NRSC added 240 customers.

Table 1
ERSC Customer Growth 2011 to 2021

Year (as of Dec. 31.)	Residential Customers	Commercial Customers	Total Customers
2011 (Merger Year)	1,994	80	2,074
2016	2,022	116	2,138
2017	2,063	120	2,183
2018	2,096	122	2,218
2019	2,157	117	2,274
2020	2,212	94	2,306
2021	2,256	101	2,357
Customer Growth 2011-2021	262	21	283
Avg. Annual Growth %	1.2%	2.4%	1.3%

1 **Q: What is ERSC's current tariff and average residential customer charge?**

2 A: The average residential bill in 2021 was \$35.06 based on average water usage of
3 4,085 gallons per month. Nearly all ERSC customers are charged based on
4 volumetric usage determined from metered water usage. Ellettsville's Water Utility
5 supplies drinking water to ERSC's customers and meters the water usage of all
6 commercial customers and nearly all of ERSC's residential customers. Based on the
7 Commission's 5,000 gallons per month comparison metric, the metered customer
8 charge for sewer service is \$42.46 per month.¹⁴ ERSC's few unmetered residential
9 customers (ranging between 10 and 11 in the last ten years) pay a flat rate of \$26.28

¹⁴ The sewer charge for 5,000 gallons per month is calculated as ERSC's minimum monthly charge for 3,000 gallons water usage at \$8.76 per 1,000 gallons equals \$26.28 (3 times \$8.76 = \$26.28) plus 2,000 additional gallons at \$8.09 per 1,000 gallons (2 times \$8.09 = \$16.18) equals \$42.46 per month.

1 per month.¹⁵ ERSC's monthly flat charge and volumetric rates were established in
2 Cause No. 44271-U on June 26, 2013.

3 **Q: How does ERSC conduct its operations?**

4 A: As I noted previously, ERSC does not have any employees. Operation and
5 maintenance, sewer repairs, construction, accounting, customer service, billing, and
6 management services are provided through contracted services. The Utility is
7 managed by volunteer members of the Board that oversee all utility operations.

8 **Q: Please describe the Eastern Richland Sewer Corporation collection system.**

9 A: ERSC reported its collection system is comprised of 198,768 lineal feet of 2-inch to
10 15-inch sewer main and 1,616 feet of 2-inch force main.¹⁶ ERSC reports the
11 majority of sewer pipe, 158,086 feet or 79.5 %, is 8-inch diameter. ERSC
12 functionally has two separated systems; the smaller "Northern" system, which was
13 formerly the Northern Richland Sewer Corporation, and the larger "Eastern"
14 System. These systems separately connect to Ellettsville's gravity sewer system at
15 two tie-in points. Both ERSC's and Ellettsville's collection systems are 100%
16 separate sanitary sewers by design with no permitted bypasses or overflow points.
17 Older sanitary sewers in both ERSC's and Ellettsville's collection systems are 50-
18 year-old vitrified clay pipe originally installed before the 1980s with PVC pipe
19 installed for newer sewers. However, I was unable to confirm the pipe materials
20 because ERSC lists total feet of sewers and force mains by pipe diameter but does

¹⁵ The monthly flat rate charge of \$26.28 is based on 3,000 gallons minimum usage times \$8.76 per 1,000 gallons or 3 times \$8.09 equals \$26.28 per month.

¹⁶ 2021 IURC Annual Report, page S-7.

1 not identify pipe materials in its Annual Reports.¹⁷ In 2013, the OUCC reported that
 2 approximately 60% of ERSC's mains at that time were vitrified clay and the remainder
 3 were PVC pipe.¹⁸ I summarized the sewer pipe diameters and length reported by
 4 Eastern Richland in its IURC Annual Reports in Table 2.

Table 2
ERSC Gravity Sewer Pipe and Force Mains (by Feet)

Sewer Dia. (inches)	2019	2020	2021	Percent of Total
2	407	407	407	0.2%
3	2,562	2,562	3,970	2.0%
4	2,981	2,981	2,981	1.5%
6	1,450	1,450	1,450	0.7%
8	156,514	157,749	158,086	79.5%
10	9,968	9,968	9,968	5.0%
12	16,354	16,354	16,354	8.2%
15	5,552	5,552	5,552	2.8%
Total Feet	195,788	197,023	198,768	100.0%
Total Miles	37.08	37.31	37.65	
Force Main				
Force Main Dia. (inches)	2019	2020	2021	
2	340	340	1,616	

5 Eastern Richland's smaller sewer sizes (2-inch to 6-inch) are below the minimum
 6 8-inch diameter for raw wastewater gravity sewers.¹⁹ ERSC's 2-inch diameter force

¹⁷ *Id.*

¹⁸ Report of the Indiana Office of Utility Consumer Counselor, Cause No. 44271-U, May 24, 2013, page 4.

¹⁹ Section 33.1 Minimum Size, Recommended Standards for Wastewater Facilities, Great Lakes - Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, 2014 Edition, also known as the Ten States Standards, p. 30-1.

1 mains are also below the minimum 4-inch diameter for force mains conveying raw
2 wastewater.²⁰ Eastern Richland's collection system also includes three lift stations,
3 Brewster LS, Shelburne LS, and Tanglewood LS with pumps that vary from 5 to 25
4 horsepower and from 75 to 280 gallons per minute capacity. The 2021 IURC Annual
5 Report indicates ERSC has four lift stations that were installed in the early 1970s.

6 **Q: Do problems exist with ERSC's gravity sewers?**

7 A: Yes. Clay pipe is subject to breakage as it ages and as the soil shifts, clear water,
8 also known as infiltration, can enter sewers through cracks and offset joints during
9 wet weather periods with high groundwater levels. Because of its shorter laying
10 (pipe) lengths of 4.5 to 6 feet versus PVC pipe's 20 ft. laying length, clay pipe has
11 more pipe joints that can leak. Clear water, known as inflow, can also enter sewers
12 through surface water entry at manhole lids, unsealed manhole frames and rings,
13 and illegal connections of private sump pumps, foundation drains, downspouts, and
14 area drains. Clear water entry, infiltration and inflow ("I&I"), can consume the
15 sewer's carrying capacity causing surcharging, basement back-ups, and downstream
16 sanitary sewer overflows ("SSOs") from manholes and lift stations during rain
17 events. SSOs are prohibited in sanitary sewer systems and must be reported to IDEM
18 when they occur. In its IURC Annual Reports, ERSC has reported 83 sanitary sewer
19 overflows over the last four years (2018 to 2021).²¹ Excessive I&I volumes can also
20 hydraulically overload Ellettsville's wastewater plant from peak flows imposed on
21 the plant. If not managed, I&I can lead to effluent violations and costly treatment

²⁰ *Id.*, Section 49.1 Velocity and Diameter (Force Mains), p. 40-14.

²¹ *See* the 2018 to 2021 IURC Annual Reports, Performance Measures (2nd page) which indicated ERSC had 30 Sanitary Sewer Overflows in 2018, 10 SSOs in 2019, 18 SSOs in 2020, and 25 SSOs in 2021.

1 plant expansion projects.

2 **Q: What is ERSC doing to address I&I?**

3 A: The I&I problem and deteriorated clay sewers have plagued ERSC for many years
4 to the extent that at the Commission's direction, it implemented a sewer televising,
5 inspection, repair, relining, and replacement program to locate and remove the I&I.
6 ERSC is required to annually report to the Commission its progress in sewer repairs to
7 reduce infiltration and inflow ("I&I") under Cause No. 43921.²² I reviewed eight
8 reports, which ERSC submitted beginning in 2011, that identify televising, inspections,
9 repairs and replacements of ERSC's sewer infrastructure. ERSC is supposed to submit
10 its sewer system reports annually with its IURC Annual Reports, but it has not always
11 done so. A total of three annual sewer reports were not submitted. ERSC filed the most
12 recent report, No. 8, on June 1, 2021 for calendar year 2020, but did not submit the 2021
13 report. The 2022 report is due April 1, 2023.

14 **Q: What information is ERSC required to include in its Annual Sewer Reports?**

15 A: The 2011 Order in Cause No. 43921 required ERSC to continue a televising and
16 replacement program required by the IURC's Order in Cause No. 47391-U for
17 Northern Richland Sewer Corporation, to extend reporting to also include the ERSC
18 sewer system, and further, to annually file with the IURC a report regarding the
19 status of its efforts to address I&I issues. Specifically, in the Cause No. 43921 Final
20 Order, the Commission agreed with OUCC witness Roger A. Pettijohn, who
21 recommended the report include: "(1) a description of any repair or replacement of

²² Cause No. 43921 Final Order, June 22, 2011. For the discussion of ERSC I&I reporting mandated by the Commission, see pages 7, 9, and 10. *See* also the sewer system repair reports filed under the same Cause for a good summary of the work completed.

1 either system's infrastructure, including costs incurred; (2) a description of ERSC's
2 maintenance program; (3) a description of ERSC's progress in televising the entire
3 system; and (4) a detail of the expenses incurred, including copies of invoices."²³ I
4 summarized sewer system metrics over the 2018 to 2021 period in Table 3.

Table 3
SSOs, Sewer Cleaning & Televising and Manhole Inspections

Parameter	2018	2019	2020	2021
Number of SSOs	30	10	18	25
Total Sewer Length (Ft.)	190,193	196,128	197,363	200,384
Cleaned & Televised (Ft.)	17,358	0	0	18,205
Cleaned & Televised (%)	9.13%	0%	0%	9.09%
Manholes Inspected	73	0	0	118

5 **Q: Does ERSC report how much I&I remains in its system or how much I&I it**
6 **has successfully located and removed?**

7 A: No. ERSC's reports describe the sewer system work performed each year and the
8 amount spent maintaining its sewers. However, ERSC does not discuss the I&I
9 removed, how much I&I remains in ERSC's system, and whether peak sewer flows
10 were lowered during wet weather conditions by ERSC's efforts.

11 **Q: What do you recommend for ERSC's Annual Sewer Reports?**

12 A: It is important to benchmark ERSC's I&I removal efforts and its successes. I
13 recommend ERSC keep documenting its I&I control work and sewer maintenance
14 and repairs by continuing its annual sewer reports using the same format with one
15 addition. ERSC should regularly estimate I&I volumes in its sewers and the I&I it
16 has located and eliminated through its sewer repairs, relining, and replacements.

²³ *Id.* p. 7.

1 ERSC should follow US EPA guidance on estimating its infiltration and inflow. *See*
2 Attachment JTP-2 for the EPA's Quick Guide for Estimating Infiltration and Inflow

3 **Q: Does ERSC know how much I&I is in its system?**

4 A: ERSC does not report and is not required to report its I&I volume in the annual
5 sewer reports to the Commission filed under Cause No. 43921. I&I volumes
6 fluctuate with greater I&I levels in years with more rain and higher groundwater
7 levels. The 2020 System Capacity Analysis for ERSC's East collection system by
8 GRW Engineers does report I&I flows and peaking factors for a 2018 to 2019 flow
9 monitoring program. I&I accounted for 46% of the average daily flow but jumped
10 five-fold for peak flows with a peaking factor of over 10 for several sewer segments.

11 **Q: Did you calculate Ellettsville's current I&I volume?**

12 A: Yes. I made approximations of I&I based on available data. I understand Ellettsville
13 supplies essentially all drinking water and treats all wastewater generated by
14 Ellettsville's and ERSC's customers. To estimate ERSC's I&I, I first calculated
15 Ellettsville's monthly I&I volumes by subtracting monthly water sold volumes
16 reported to the IURC from Ellettsville's wastewater effluent flows reported to
17 IDEM. I summarized the flow data and calculated I&I in Table 4. I also provide the
18 underlying data and my calculations in Attachment JTP-3.

19 Water sold is the highest volume that base sanitary sewage flows can reach.
20 For my calculations, I assumed all water sold becomes wastewater even though
21 some is lost to lawn sprinkling, garden watering, car washing, and other uses that
22 do not end up in the sewers. Based on *annual average flows*, my analysis indicates
23 I&I constitutes nearly half of Ellettsville's total wastewater flow (47%) in wetter
24 years (2019 and 2021) but dropped below 40% in 2020 when less rain fell. The

1 highest calculated *monthly I&I percentage* of total wastewater flow ranged from
 2 64% to 71%. On *peak flow days*, I&I constituted up to 90% of the total wastewater
 3 flow treated at Ellettsville's wastewater plant.

Table 4
OUCC Calculated I&I Volumes for the Ellettsville / ERSC Sewer Systems

Parameter	2019	2020	2021
Total Annual Precipitation (in.)	59.38	54.37	65.84
OUCC Estimated Population Equivalent Served	14,035	14,101	14,431
Total Wastewater Flow (MG/Yr.)	500.8	431.8	522.8
Total Water Sold (MG/Yr.)	266.3	263.6	274.6
Gallons per Population Equivalent (gallons/day)	52.0	51.1	52.1
OUCC Calculated I&I (MG/Yr.)	234.5	168.2	248.2
OUCC Calculated I&I Percent of WW Flow (%)	47%	39%	47%
Maximum I&I Percent of WW Flow (%)	66%	71%	67%
Annual Average Wastewater Flow (MGD)	1.37	1.18	1.43
Annual Average Water Sold (MGD)	0.73	0.72	0.75
OUCC Calculated Annual Average I&I (MGD)	0.64	0.46	0.68
Maximum Day Wastewater Flow (MGD)	6.22	7.54	7.70
Max. Day WW Flow per Population Equiv. (gpcd) ²⁴	443	535	534
Annual Average Wastewater Flow (MGD)	1.37	1.18	1.43
Avg. Day WW Flow per Population Equiv. (gpcd)	98	84	99
Peaking Factor (Max. Day/Annual Average)	4.5	6.4	5.4
Minimum Day Wastewater Flow (MGD)	0.57	0.41	0.51

4 **Q: Is Ellettsville's infiltration and inflow excessive?**

5 A: As shown in Table 3, Ellettsville's 2019 to 2021 average daily flows were up to 99

²⁴ gpcd stands for gallons per capita per day.

1 gallons per capita per day (“gpcd”), which is below the EPA’s excessive infiltration
2 criteria of 120 gpcd.²⁵ However, due to time constraints and data limitations, my
3 analysis had to substitute annual average flows (wet and dry weather flows) for
4 EPA’s more precise methodology of analyzing flows on days with high groundwater
5 levels. I also had to estimate the connected population, which I based on the US
6 Census Bureau’s data of 2.39 to 2.46 people per household multiplied by the number
7 of residential customers, and I accounted for commercial and multi-family
8 customers in addition to residential.²⁶ Actual population may be lower than my
9 estimates. If so, due to these two data issues (use of annual average flow data and
10 estimated population), my estimates of average daily flow per person understates
11 the levels of infiltration and inflow in Ellettsville’s and ERSC’s sewer systems.

12 Ellettsville’s 2019 to 2021 peak wastewater flows were up to 535 gallons per
13 capita per day (“gpcd”) and nearly twice the US EPA’s 275 gpcd criteria used to
14 determine whether inflow is excessive. These peak flows can overwhelm the
15 carrying capacities of downstream sewers causing sanitary sewer overflows and can
16 also impact the wastewater plant. Inflow appears to be a more serious problem for
17 Eastern Richland and Ellettsville than infiltration.

18 **Q: How much of the I&I reaching Ellettsville’s wastewater plant is from the**
19 **Eastern Richland sewer system?**

20 **A:** Eastern Richland does not report its share of the I&I in the overall sewer system

²⁵ See Attachment JTP-4 for the USEPA’s excessive I&I standards, 1984 Code of the Federal Register CFR-2008-Title 40-Volume 1-Section 35-2120.

²⁶ See Attachment JTP-5 for my estimate of connected population for the Ellettsville Water system, ERSC Sewer system, and the Ellettsville Wastewater system.

1 with Ellettsville. I would estimate that ERSC contributes at least half of the I&I.
2 ERSC's share could be estimated on the basis of total sewer pipe length within each
3 system (Ellettsville and ERSC). The best way to determine how much I&I ERSC's
4 system contributes is to install flow monitors at both of the ERSC's tie-ins to the
5 Ellettsville sewer system.

6 **Q: Is ERSC's wastewater collection system under any IDEM enforcement actions?**

7 A: No.

III. ELLETTSVILLE WASTEWATER TREATMENT

8 **Q: How is the wastewater collected in ERSC's sewer system treated?**

9 A: As noted previously in my testimony, ERSC does not own or operate a treatment
10 plant. Wastewater collected in ERSC's sewer system has always been conveyed for
11 treatment at the Ellettsville wastewater treatment plant ("WWTP").

12 **Q: Please describe Ellettsville's wastewater treatment plant.**

13 A: The Ellettsville WWTP is located outside Ellettsville's corporate boundaries but
14 within ERSC's service territory at 7568 North Red Hill Road, Ellettsville, IN. The
15 WWTP is a Class III, 2.3 MGD oxidation ditch-type wastewater treatment plant
16 consisting of a plant lift station, five flow meters, grit removal, a comminutor with
17 a bypass, bar screen, a three-channel oxidation ditch, two final clarifiers, UV
18 disinfection, post aeration, two aerobic digesters, a belt filter press with a polymer
19 feed system, and a concrete sludge storage pad. Digested solids are hauled off-site.
20 Treated effluent from Ellettsville's WWTP is discharged to Jack's Defeat Creek,
21 which flows north and empties into the West Fork of the White River near Gosport,
22 IN. Ellettsville's collection system is comprised of 100% separate sanitary sewers

1 by design with no overflow or bypass points.²⁷ Ellettsville 2.3 MGD wastewater
2 treatment plant replaced the original 0.46 MGD WWTP and the capacity increase
3 enabled Ellettsville to eliminate routing up to 1.0 MGD of its sewage to
4 Bloomington's Blucher Poole WWTP.²⁸

5 **Q: Has ERSC always relied on Ellettsville to provide treatment services to ERSC?**

6 A: Yes. When ERSC was organized, its Board executed a Sewage Treatment Purchase
7 Contract with the Town of Ellettsville on November 9, 1971 for wholesale treatment
8 of wastewater. The Treatment Purchase Contract has been subsequently amended
9 various times.²⁹ The contract term "extends for a term of sixty (60) years from the
10 date of the initial delivery of, any collected wastes as shown by the first bill
11 submitted by Ellettsville to Eastern Richland and thereafter may be renewed or
12 extended for such term, or terms, as may be agreed upon by the Seller and
13 Purchaser."³⁰ Since I do not know the date of ERSC's first wastewater treatment bill,
14 I do not know the contract's exact expiration date, but it should occur in 2032.

15 **Q: How is ERSC charged for wastewater treatment services by Ellettsville?**

16 A: It appears that for the contract's first fifteen years, charges were based on metered
17 wastewater volumes measured at the two discharge points into Ellettsville's sewer
18 system (for the original ERSC and NRSC collection systems). Ellettsville was
19 responsible for furnishing, installing, operating, and maintaining at the point of

²⁷ Ellettsville NPDES Permit No. IN 0021083, September 3, 2020.

²⁸ Construction Permit No. 8607, Ellettsville 2.3 MGD Wastewater Treatment Facility, July 12, 1995.

²⁹ The Sewage Treatment Purchase Contract was initially signed on November 9, 1971 and amended on June 16, 1986, August 12, 1996, February 9, 1998 and March 26, 2009. ERSC also entered into a Settlement Agreement and Mutual Release on September 20, 2021. *See* Attachment JTP-6.

³⁰ Sewage Treatment Purchase Contract, November 9, 1971, p. 4. *See* Attachment JTP-6.

1 discharge of ERSC's wastewater into Ellettsville's sewer system, the standard
2 metering equipment, including a meter house or pit, to properly measure the quantity
3 of ERSC's collected wastes.³¹

4 Metered wastewater volumes included I&I flow and base sanitary sewage
5 flows from ERSC's customers. In 1986, the Sewage Treatment Purchase Contract
6 was amended to change the basis for wastewater billing volumes to ERSC's
7 customers' *monthly metered water usage* plus an additional thirty percent (30%) to
8 allow for infiltration into ERSC's sewers.³² Subsequent contract amendments and
9 the 2021 Settlement Agreement and Mutual Release ("2021 Settlement
10 Agreement") do not include any changes that negate the 1986 billed wastewater
11 volume determination method.³³ However, my analysis of 2021 billed volumes and
12 charges indicates that ERSC is being billed based on metered water usage only. I
13 calculated average daily water usage per person in ERSC's system is approximately
14 52 gallons per person.

15 **Q: What is Ellettsville's current volumetric rate charged to treat ERSC's sewage?**
16 A: Based on its application, ERSC indicated it pays a volumetric charge of \$3.64 per
17 1,000 gallons for wastewater treatment based on metered water usage by customers.
18 However, I could not find reference to the \$3.64 in any of the amendments to the
19 Sewage Treatment Purchase Contract or in the Settlement Agreement and Mutual

³¹ Id., pp. 2-3.

³² Amended Sewage Treatment Purchase Contract, Item 2.b. June 16, 1986, p. 2. See Attachment JTP-6.

³³ Settlement Agreement and Mutual Release between Eastern Richland Sewer Corporation and the Town of Ellettsville, September 20, 2021. See Attachment JTP-6.

1 Release that resolved a dispute between ERSC and Ellettsville.³⁴

2 **Q: Does Ellettsville charge ERSC for capital needs in Ellettsville's wastewater**
3 **system?**

4 A: Yes. In lieu of previous contracted capacity payments, ERSC agreed to make a
5 \$660,000 one-time payment to settle Ellettsville's counter claim against ERSC
6 regarding the Sewage Treatment Purchase Contract and to begin making \$10,000
7 monthly payments as a capital contribution to Ellettsville Utilities in January 2022.³⁵
8 Ellettsville Utilities established a wastewater treatment facility Capital Reserve
9 Account ("CRA") to receive and hold ERSC's \$660,000 one-time payment and
10 ERSC's monthly capital contributions. The CRA is under the control of Ellettsville
11 Utilities, but restricted for use in the:

- 12 a. Expansion of the treatment plant and related facilities (not including
13 ordinary maintenance or repair).
- 14 b. Repair (excepting ordinary or routine maintenance and repair expenses),
15 replacement or construction of required treatment facilities in accordance
16 with good engineering practice.
- 17 c. CRA funds may be used for replacement of existing equipment necessary to
18 prolong the life of the Town's wastewater treatment plant, including but not
19 limited to, ultra-violet lights, motors, pumps, blowers, and including labor
20 costs associated with the installation of capital assets.
- 21 d. For other approved expenditures.

³⁴ *Id.*

³⁵ *Id.*, pp. 1-3.

1 **Q: Does ERSC have reserved capacity in Ellettsville's wastewater system?**

2 A: Yes. According to the 1996 Amendment to ERSC's Sewage Treatment Purchase
3 Contract, Eastern Richland was allocated 3,200 EDUs of capacity in Ellettsville's
4 new wastewater treatment plant.³⁶ Below is the pertinent language from the 1996
5 Contract Amendment.

6 It is anticipated that the plant will have a capacity of 2.3 MGD or 7,700
7 Equivalent Daily Usage (EDU). An EDU is equal to 298.7 gallons per day).
8 Provided that such capacity is available, Seller agrees to accept Purchaser'
9 sewage and waste delivered for treatment and disposal in an amount not to
10 exceed 3,200 EDUs per day.

11 I calculate that ERSC's equivalent flow allocation, based on 3,200 EDUs at 298.7
12 gallons per day per EDU, is 955,840 gallons per day. This equals 41.6% of the
13 Ellettsville WWTP's 2.3 MGD design average flow capacity.

14 **Q: Has ERSC's EDU allocation been increased?**

15 A: Apparently. The 2021 Settlement Agreement noted "ERSC retains the 3,900 EDUs
16 assigned to ERSC in the Treatment Purchase Contract, as amended" of the 7,700
17 total EDUs.³⁷ I calculate the 3,900 EDUs is equivalent to 1,164,935 gallons per day
18 or 51% of the 2.3 MGD design average flow capacity of the Ellettsville WWTP.
19 However, I could not find any amendment that increased ERSC's EDU allocation
20 to 3,900 from the 3,200 EDUs established in the 1986 Amendment. In response to
21 an informal discovery request, Eastern Richland indicated the Sewage Treatment
22 Purchase Contract was last amended in 2009 and the 2021 Settlement Agreement
23 "was not a specific amendment to the Contract. The settlement agreement with

³⁶ Amendment to the Sewage Treatment Purchase Contract, August 12, 1996, p. 2. *See* Attachment JTP-6.

³⁷ Settlement Agreement and Mutual Release between Eastern Richland Sewer Corporation and the Town of Ellettsville, September 20, 2021, p. 2. *See* Attachment JTP-6.

1 Town of Ellettsville established new treatment rate and capital contribution
2 commitments by ERSC. This settlement arose out of our dispute with the treatment
3 increase imposed by Town based on a 2016 COS study.”³⁸

4 **Q: Are ERSC’s allocated EDUs applied to another issue?**

5 A: Yes. ERSC included the 3,900 allocated EDUs, its 2,357 existing EDUs, and the
6 remaining 1,543 EDUs in its computed incremental cost calculation for its proposed
7 system development charge (“SDC”).³⁹

8 **Q: How did ERSC determine the proposed \$2,500 SDC amount?**

9 A: The SDC is based on \$13,545,000 in capital costs for three areas: 1) ERSC’s
10 \$2,795,000 portion (51% of the total) of future capital costs for projects to be
11 completed by Ellettsville to upgrade and replace wastewater assets; 2) \$2,750,000
12 for ERSC to construct a new one-mile-long parallel interceptor and 20 manholes;
13 and 3) \$8,000,000 for ERSC to rehabilitate old ERSC collection mains and
14 manholes. ERSC provided a copy of a 2020 System Capacity Analysis by GRW
15 Engineers for the parallel interceptor but did not provide other information in its
16 Small U filing describing or supporting the need for Ellettsville’s capital projects or
17 for the rehabilitation of ERSC’s old collection mains and manholes. OUCC witness
18 Carla Sullivan testifies about ERSC’s SDC calculations.

³⁸ Email communication between Carla Sullivan of the OUCC and Buzz Krohn and Michael L. Carmin representing ERSC, February 10, 2023. COS stands for Cost of Service.

³⁹ See the Incremental Cost Calculation of Proposed System Development Charge in the ERSC Small Utility Filing Letter to IURC, September 28, 2022, p. 7.

IV. EXTENSIONS AND REPLACEMENTS

1 **Q: Did ERSC request a revenue requirement for extensions and replacements?**

2 A: No. ERSC identified the \$2,795,000 for three capital projects for Ellettsville's
3 wastewater system on Schedule 7 E&R and in its calculations of the SDC but did
4 not request E&R as a revenue requirement on Schedule 1. OUCC witness Carla
5 Sullivan testifies about ERSC's E&R funding needs.

V. OUCC CONCLUSION

6 **Q: Please summarize your conclusions and recommendations.**

7 A: Since 2011, ERSC has investigated collection system needs pertaining to infiltration
8 and inflow and aging sewer assets but has continuing televising, repair, relining, and
9 replacement needs for its collection system. I recommend that ERSC keep
10 documenting its sewer televising, I&I control work and sewer maintenance and
11 repairs by continuing its annual sewer reports required under Cause No. 43921 using
12 the same format with one addition. ERSC should regularly estimate I&I volumes in
13 its sewers and the I&I it has located and eliminated through its sewer repairs,
14 relining, and replacements. ERSC should follow US EPA guidance on estimating
15 its infiltration and inflow.

16 **Q: Does this conclude your testimony?**

17 A: Yes.

Appendix A

1 **Q: Please describe your educational background and experience.**

2 A: In 1980 I graduated from Purdue University, where I received a Bachelor of Science
3 degree in Civil Engineering, specializing in Environmental Engineering. I then
4 worked two years with Peace Corps / Honduras as a municipal engineer on self-help
5 rural water supply and sanitation projects funded by the U.S. Agency for
6 International Development (U.S. AID). In 1984 I earned a Master of Science degree
7 in Civil Engineering (Environmental) from Purdue University. I have been a
8 Registered Professional Engineer in the State of Indiana since 1986. In 1984, I
9 accepted an engineering position with Purdue University, and was assigned to work
10 as a process engineer with the Indianapolis Department of Public Works ("DPW")
11 at the City's Advanced Wastewater Treatment Plants. I left Purdue and subsequently
12 worked for engineering consulting firms, first as a Project Engineer for Process
13 Engineering Group of Indianapolis and then as a Project Manager for the consulting
14 firm HNTB in Indianapolis. In 1999, I returned to DPW as a Project Engineer
15 working on planning projects, permitting, compliance monitoring, wastewater
16 treatment plant upgrades, and combined sewer overflow control projects.

17 **Q: Have you previously testified before the Indiana Utility Regulatory**
18 **Commission ("Commission")?**

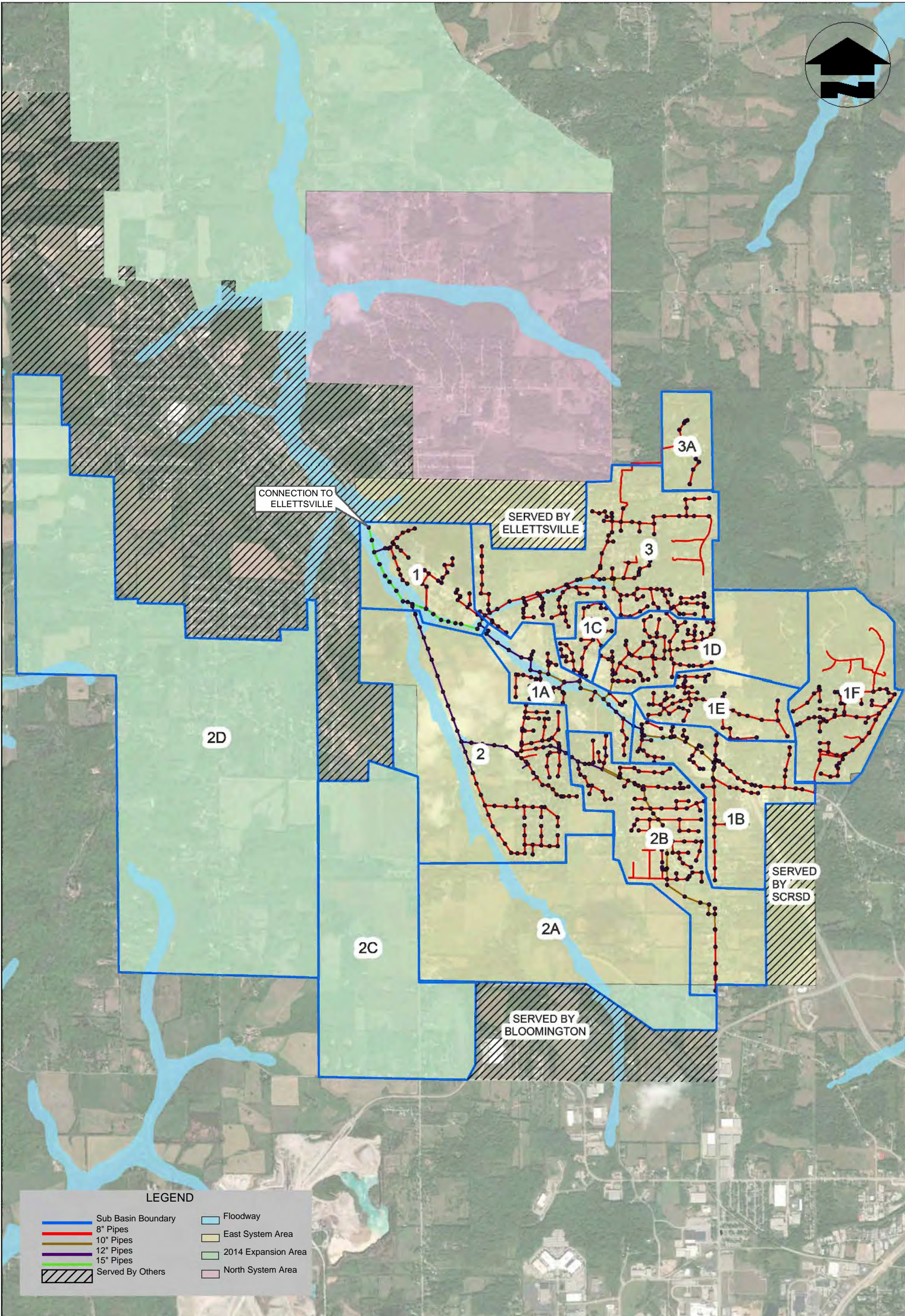
19 A: Yes.

Appendix B - List of Attachments

- | | |
|------------------|---|
| Attachment JTP-1 | Eastern Richland Sewer Corporation service area map |
| Attachment JTP-2 | EPA's Quick Guide for Estimating Infiltration and Inflow, 2014 |
| Attachment JTP-3 | OUCS Monthly I&I Calculations for the Ellettsville / ERSC Sewer Systems 2019 to 2021 |
| Attachment JTP-4 | USEPA's excessive I&I standards, 1984 Code of the Federal Register CFR-2008-Title40-Volume 1-Section 35-2120 |
| Attachment JTP-5 | OUCS estimate of the 2019 to 2021 connected population for the Ellettsville Water system, ERSC Sewer system, and the Ellettsville Wastewater system |
| Attachment JTP-6 | Sewage Treatment Purchase Contract, November 9, 1971, Amendments, and Settlement Agreement and Mutual Release between Eastern Richland Sewer Corporation and the Town of Ellettsville, September 20, 2021 |

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SCALE CHECK: THIS MARK SHOULD MEASURE EXACTLY 1/2" WHEN PLOTTED

EAST SYSTEM BASIN MAP
EASTERN RICHLAND SEWER CORP.
SEWER INTERCEPTOR PROJECT
RICHLAND TOWNSHIP, INDIANA

GRW PROJECT NO. 4828
CLIENT PROJECT NO.
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FIG 2



EPA New England Water Infrastructure Outreach provides tools, examples, and technical assistance for water infrastructure operators and managers, local officials, and other decision-makers for more effective and sustainable water infrastructure management. For more information see <http://www.epa.gov/region1/sso/toolbox.html>

Quick Guide for Estimating Infiltration and Inflow For Region 1 NPDES Annual Reporting

June 2014

Addressing Permit Requirements to:

Submit a calculation of the annual infiltration and inflow (I&I), maximum daily, weekly, and monthly infiltration and the maximum daily, weekly, and monthly inflow for the reporting year. For further details on Infiltration and Inflow, see '[Guide for Estimating Infiltration and Inflow](#)'.

Definitions

Infiltration

Groundwater that infiltrates a sewer system through defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from inflow. Infiltration is generally measured during seasonally high ground water conditions, during a dry period.

Inflow

Water other than sanitary flow that enters a sewer system from sources which include, but are not limited to, roof leaders, cellar drains, yard drains, area drains, drains from wet areas, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, stormwater, surface runoff (including leaking manhole covers), street wash-water, or drainage. Inflow does not include, and is distinguished from infiltration. Inflow is generally measured during wet weather.

Estimations for reporting:

Term	Definition or How to Calculate
Average Dry Weather (ADW) flow	Use highest 7 to 14 day average per day flow without precipitation and during high seasonal groundwater. Includes domestic wastewater and infiltration.
Groundwater Infiltration (GWI)	During ADW flow period, average the low nighttime flows (midnight to 6am) per day for the same time period, minus significant industrial or commercial flows.
Groundwater Infiltration (GWI)	Subtract GWI from ADW flow.
Maximum Daily Infiltration	Subtract BSF from highest daily flow after a dry period of three days or more during high seasonal groundwater.
Maximum Weekly Infiltration	Subtract BSF from highest 7 day average flow after a dry period of three days or more during high seasonal groundwater.
Maximum Monthly Infiltration	Subtract BSF from highest monthly flow during dry or minimal rain period during high seasonal groundwater.

Maximum Daily Inflow	Measured during wet weather. Determine infiltration rate for dry period preceding rain event. Subtract BSF plus infiltration rate from the highest daily flow during the event.
Maximum Weekly Inflow (includes delayed inflow)	Determine infiltration rate for dry period preceding rain event(s). Subtract BSF plus infiltration from the highest 7 day average wet weather flow.
Maximum Monthly Inflow	Determine infiltration rate for dry period preceding rain event(s). Subtract BSF plus infiltration rate from the highest monthly average flow.
Maximum Monthly Infiltration and Inflow	Subtract BSF from highest monthly average flow.
Average Annual Flow	The total annual volume divided by 365 days. The average annual flow can also be calculated by averaging the monthly average flows.
Average Annual Infiltration and Inflow	Subtract the BSF rate from the average annual flow.
Average Annual Infiltration	Average of the monthly minimum flows.
Average Annual Inflow	Subtract the BSF and average annual infiltration from the average annual flow.
Average Wet Weather Flow (Average WWF)	The average daily flow during a period of significant rainfall (excludes significant commercial and industrial flow).
Peak Hourly Wet Weather Flow (Peak WWF)	The highest one hour flow rate during a significant rain event.

Notes:

If your system experiences SSOs or backups, you may have excessive inflow, although infiltration also contributes to the problem. Even where a system is not suffering from SSOs, systems experiencing surcharging should be evaluating their I&I, as should systems where new growth is expected and existing collection system infrastructure may be inadequate or marginal for handling new customers.

Other calculations used by state agencies to determine whether infiltration and/or inflow are excessive include:

Is your Infiltration Rate Excessive?

Some states have an excessive infiltration criterion based on gallons per person per day (gppd) and other states use a criterion of gallons per day per inch of diameter per mile of pipe (gpd/idm).

To determine gppd, divide the ADW flow by the population served. If the ADW flow exceeds 120 gppd, your state agency may consider the infiltration excessive.

To determine gpd/idm, first determine your total inch diameter-miles of pipe (idm). As an example, for a sewer system that has 36 miles of 4 inch diameter laterals, 36 miles of 8 inch diameter, 6 miles of 10 inch diameter, and 6 miles of 12 inch diameter gravity sewers, the total number of inch – miles is:

$36 \times 4 + 36 \times 8 + 6 \times 10 + 6 \times 12 = 564$ inch diameter miles

To determine gpd/idm, divide the dry weather infiltration rate during seasonal high groundwater (GWI from B above) by the total inch miles. In this example, if the GWI is 2 mgd, with 564 inch diameter-miles of pipe, then the gpd/idm would be:

$2 \text{ mgd divide by } 564 \text{ idm} = 3546 \text{ gpd/idm}$

Metcalf & Eddy's text "*Wastewater Engineering: Collection and Pumping of Wastewater*", suggests that infiltration rates for whole collection systems (including service connections) that are lower than 1500 gpd/idm are not usually excessive. The Massachusetts Department of Environmental Protection document "*Guidelines for Performing I/I Analyses*" recommends (as a rule-of-thumb) sewer subsystems of about 20,000 linear feet that exhibit infiltration rates above 4000 gpd/idm be investigated for contributing potentially excessive infiltration. For more information on design standards consult the Technical Report, "*Guidelines for the Design of Wastewater Treatment Works, New England Interstate Water Pollution Control Commission TR-16*".

Is your inflow excessive?

Divide the Average WWF by the population served to determine the gallons per person per day (gppd). If the Average WWF exceeds 275 gppd your state agency may consider the inflow excessive. This calculation should exclude major industrial or commercial flows.

A calculation for gpd/idm can also be determined for wet weather.

Estimating your cost to treat Infiltration and Inflow

Wastewater collection and treatment cost can range from \$2 to \$5 per thousand gallons. An annual I&I volume of 150 million gallons would cost between \$300,000 and \$750,000 per year to transport and treat. For many older collection systems infiltration can be quite substantial, and has been calculated as high as fifty percent of the flow.

If your treatment facility is at or near capacity and an upgrade will be necessary, the cost of reducing I&I to free up capacity at the existing treatment facility should be measured against the cost of building additional treatment capacity.

OUCC Monthly I&I Calculations for the Ellettsville / ERSC Sewer Systems 2019 to 2021

Month-Year	Total Monthly Precip. (Inches)	Monthly Wastewater Effluent Flow (MGD)			Total Monthly WW Flow (MG)	Total Monthly Water Sold (MG)	OUCC Est. Total Monthly I&I Flow (MG)	I&I Percent of Effluent Flow (%)	Peak Day I&I Percent of Total Wastewater (%)	Peak Day Wastewater Effluent Flow gpcd
		Avg.	Max.	Min.						
	(a)	(b)	(c)	(d)	(e)	(f)	(e) - (f)	[(e)-(f)]/(e)	= ((c)-(f)/days)/(f)	(c)*1,000,000 /population
Jan-19	3.47	1.8647	4.744	0.968	57.806	19.779	38.027	66%	87%	338
Feb-19	6.90	2.0824	6.224	0.9	58.307	20.821	37.486	64%	88%	443
Mar-19	5.35	1.5814	3.389	0.774	49.023	20.593	28.430	58%	80%	241
Apr-19	6.87	2.0846	5.216	0.933	62.538	21.469	41.069	66%	86%	372
May-19	4.98	1.1342	2.017	0.799	35.160	21.502	13.658	39%	66%	144
Jun-19	7.70	1.5785	4.307	0.699	47.355	24.107	23.248	49%	81%	307
Jul-19	4.75	1.0794	3.739	0.652	33.461	22.600	10.861	32%	81%	266
Aug-19	4.86	0.8248	2.094	0.597	25.569	25.057	0.512	2%	61%	149
Sep-19	0.92	0.7217	1.194	0.605	21.651	24.783	-3.132	-14%	31%	85
Oct-19	5.52	0.854	1.924	0.574	26.474	23.485	2.989	11%	61%	137
Nov-19	4.51	1.1559	4.55	0.696	34.677	22.622	12.055	35%	83%	324
Dec-19	3.55	1.5747	4.755	0.958	48.816	19.489	29.327	60%	87%	339
Jan-20	6.12	2.1153	7.539	0.913	65.574	21.082	44.492	68%	91%	535
Feb-20	3.71	1.6172	5.601	0.948	46.899	21.016	25.883	55%	87%	397
Mar-20	7.53	2.1991	7.401	1.105	68.172	19.528	48.644	71%	91%	525
Apr-20	2.99	1.0644	2.157	0.693	31.932	20.981	10.951	34%	68%	153
May-20	7.43	1.3851	5.257	0.772	42.938	23.126	19.812	46%	86%	373
Jun-20	5.14	0.7993	1.383	0.405	23.979	25.663	-1.684	-7%	38%	98
Jul-20	9.21	1.0603	3.704	0.633	31.809	29.859	1.950	6%	74%	263
Aug-20	2.22	1.0142	2.291	0.693	31.440	25.622	5.818	19%	64%	162
Sep-20		0.8780			26.339	26.723	-0.384	-1%		
Oct-20	5.23	0.8416	2.31	0.503	26.090	26.000	0.090	0%	64%	164
Nov-20	4.79	1.2193	3.854	0.639	36.579	23.959	12.620	35%	79%	273

OUCC Monthly I&I Calculations for the Ellettsville / ERSC Sewer Systems 2019 to 2021

Month-Year	Total Monthly Precip. (Inches)	Monthly Wastewater Effluent Flow (MGD)			Total Monthly WW Flow (MG)	Total Monthly Water Sold (MG)	OUCC Est. Total Monthly I&I Flow (MG)	I&I Percent of Effluent Flow (%)	Peak Day I&I Percent of Total Wastewater (%)	Peak Day Wastewater Effluent Flow gpcd
		Avg.	Max.	Min.						
	(a)	(b)	(c)	(d)	(e)	(f)	(e) - (f)	[(e)-(f)]/(e)	= ((c)-(f)/days)/(f)	(c)*1,000,000 /population
Dec-20	1.98	1.0045	1.864	0.783	31.140	19.561	11.579	37%	66%	132
Jan-21	2.95	1.2436	3.024	0.778	38.552	22.927	15.625	41%	76%	210
Feb-21	3.62	1.6798	4.359	0.909	47.034	20.413	26.621	57%	83%	302
Mar-21	5.42	1.9694	4.098	0.931	61.051	19.948	41.103	67%	84%	284
Apr-21	4.77	1.1053	2.427	0.75	33.159	21.729	11.430	34%	70%	168
May-21	3.81	1.091	1.736	0.835	33.821	21.701	12.120	36%	60%	120
Jun-21	12.80	1.6885	7.7	0.82	50.655	25.869	24.786	49%	89%	534
Jul-21	8.25	2.0641	6.445	0.823	63.987	24.698	39.289	61%	88%	447
Aug-21	3.21	0.8303	1.023	0.586	25.739	25.688	0.051	0%	19%	71
Sep-21	5.26	1.0342	2.473	0.753	31.026	27.764	3.262	11%	63%	171
Oct-21	8.54	1.522	3.451	0.851	47.182	22.708	24.474	52%	79%	239
Nov-21	1.74	1.1051	1.676	0.507	33.153	20.617	12.536	38%	59%	116
Dec-21	5.47	1.8524	5.47	0.938	57.424	20.549	36.875	64%	88%	379
	Total In.	Avg.	Max.	Min.	Total WW	Total W	Total I&I	Percent I&I	Max Peak I&I	Peak gpcd
2019	59.38	1.372	6.224	0.574	500.837	266.307	234.530	47%	88%	443
2020	54.37	1.180	7.539	0.405	431.751	263.559	168.192	39%	91%	535
2021	65.84	1.432	7.7	0.507	522.784	274.611	248.173	47%	89%	534

Notes: OUCC calculated values are shown in red text.

- Green cells indicate excessive I&I > 275 gallons per capita per day ("gpcd").
- Yellow cells indicate exfiltration (loss of sewage from system).

	Est. Population
2019	14,035
2020	14,101
2021	14,431

This content is from the eCFR and is authoritative but unofficial.

Title 40 - Protection of Environment
Chapter I - Environmental Protection Agency
Subchapter B - Grants and Other Federal Assistance
Part 35 - State and Local Assistance
Subpart I - Grants for Construction of Treatment Works

Authority: Secs. 101(e), 109(b), 201 through 205, 207, 208(d), 210 through 212, 215 through 219, 304(d)(3), 313, 501, 502, 511 and 516(b) of the Clean Water Act, as amended, 33 U.S.C. 1251 *et seq.*

Source: 49 FR 6234, Feb. 17, 1984, unless otherwise noted.

Authority: 42 U.S.C. 7401 *et seq.*; 33 U.S.C. 1251 *et seq.*; 42 U.S.C. 300f *et seq.*; 42 U.S.C. 6901 *et seq.*; 7 U.S.C. 136 *et seq.*; 15 U.S.C. 2601 *et seq.*; 42 U.S.C. 13101 *et seq.*; Pub. L. 104-134, 110 Stat. 1321, 1321-299 (1996); Pub. L. 105-65, 111 Stat. 1344, 1373 (1997), 2 CFR 200.

§ 35.2120 Infiltration/Inflow.

- (a) **General.** The applicant shall demonstrate to the Regional Administrator's satisfaction that each sewer system discharging into the proposed treatment works project is not or will not be subject to excessive infiltration/inflow. For combined sewers, inflow is not considered excessive in any event.
- (b) **Inflow.** If the rainfall induced peak inflow rate results or will result in chronic operational problems during storm events, or the rainfall-induced total flow rate exceeds 275 gpcd during storm events, the applicant shall perform a study of the sewer system to determine the quantity of excessive inflow and to propose a rehabilitation program to eliminate the excessive inflow. All cases in which facilities are planned for the specific storage and/or treatment of inflow shall be subject to a cost-effectiveness analysis.
- (c) **Infiltration.**
 - (1) If the flow rate at the existing treatment facility is 120 gallons per capita per day or less during periods of high groundwater, the applicant shall build the project including sufficient capacity to transport and treat any existing infiltration. However, if the applicant believes any specific portion of its sewer system is subject to excessive infiltration, the applicant may confirm its belief in a cost-effectiveness analysis and propose a sewer rehabilitation program to eliminate that specific excessive infiltration.
 - (2) If the flow rate at the existing treatment facility is more than 120 gallons per capita per day during periods of high groundwater, the applicant shall either:
 - (i) Perform a study of the sewer system to determine the quantity of excessive infiltration and to propose a sewer rehabilitation program to eliminate the excessive infiltration; or
 - (ii) If the flow rate is not significantly more than 120 gallons per capita per day, request the Regional Administrator to determine that he may proceed without further study, in which case the allowable project cost will be limited to the cost of a project with a capacity of 120 gallons per capita per day under appendix A.G.2.a.

(Approved by the Office of Management and Budget under control number 2040-0027)

[49 FR 6234, Feb. 17, 1984, as amended at 50 FR 45895, Nov. 4, 1985]

**OUCC Population Served Estimates
Ellettsville Water & Wastewater and ERSC Wastewater**

Ellettsville Water EDUs - (includes Ellettsville Water Customers in ERSC's Service Territory) based on IURC Annual Reports			
	2019	2020	2021
Residential Customers	4,954	5,050	5,150
Commercial EDUs	563	504	569
Multi-Family EDUs	284	275	245
Total EDUs	5,802	5,829	5,964
People at 2.42/ EDU	14,035	14,101	14,431
Residential Sales	\$ 1,434,581	\$ 1,535,806	\$ 1,505,374
Commercial Sales	\$ 163,106	\$ 153,312	\$ 166,350
Multi-Family Sales	\$ 82,346	\$ 83,491	\$ 71,674

Eastern Richland Sewer Corp. Wastewater EDUs			
	2019	2020	2021
Residential Customers	2,157	2,212	2,256
Commercial EDUs	259	219	260
Multi-Family EDUs	0	0	0
Total EDUs	2,416	2,431	2,516
People at 2.46/ EDU	5,942	5,980	6,188
Residential Sales	\$ 927,567	\$ 972,186	\$ 948,615
Commercial Sales	\$ 111,197	\$ 96,245	\$ 109,145
Multi-Family Sales	\$ -	\$ -	\$ -

OUCC Calculated Ellettsville Wastewater EDUs			
	2019	2020	2021
Residential Customers	2,797	2,838	2,894
Commercial EDUs	305	285	310
Multi-Family EDUs	284	275	245
Total EDUs	3,386	3,398	3,449
People at 2.39/ EDU	8,093	8,120	8,242

Note: The OUCC's estimated values for EDUs shown in red text were calculated based on the ratio of water and wastewater sales for commercial and multi-family to residential sales.

SEWAGE TREATMENT PURCHASE CONTRACT

THIS CONTRACT, for the treatment of sewage and maintenance of sewage system is entered into as of the 9th day of November, 1971, between the TOWN OF ELLETTSVILLE, hereinafter referred to as the Seller and the EASTERN RICHLAND SEWER CORPORATION; hereinafter referred to as the Purchaser,
WITNESSETH:

WHEREAS, the Purchaser is organized and established under the provisions of Chapter 157 of the Acts of 1935, for the purposes of constructing and operating a sewage collection system serving sewer users within the area described in plans now on file in the office of the Purchaser and to accomplish this purpose, the Purchaser will require the treatment and disposal of collected wastes and the maintenance of the collection system.

WHEREAS, the Seller owns and operates a sewage treatment system and plant with a capacity currently capable of serving the present customers of the Seller's system and is constructing an additional system to serve the estimated number of sewer users to be served by the said Purchaser as shown in the plans of the system now on file in the office of the purchaser; and

WHEREAS, by Ordinance No. 164 enacted on the 15th day of November, 1971, by the Seller, the treatment and disposal of collected wastes and the maintenance of the collection system of Purchaser by Seller in accordance with the provisions of said Ordinance was approved, and the execution of this Contract carrying out the said treatment and disposal of collected wastes and the maintenance of the collection system by the Town Board and attested by the Clerk-Treasurer was duly authorized; and

-2-

WHEREAS, by Resolution of the Board of Directors of Eastern Richland Sewer Corporation, Purchaser, adopted a Resolution on the 7th day of June, 1971, authorizing the purchase of treatment and disposal of collected wastes and the maintenance of the collection system, from the Seller in accordance with the terms set forth in the said Resolution was approved, and the execution of this Contract by the Board of Directors, and attested by the Secretary, was duly authorized.

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements hereinafter set forth, THE SELLER AGREES:

1. QUALITY AND QUANTITY- To treat all sewage collected by the Purchaser during the term of this contract or any renewal or extension thereof, treatment or disposal of collected wastes meeting applicable quality standards of the State of Indiana, in such quantity as may be required by the Purchaser, not to exceed 6,000,000 gallons per month. The Seller shall accept the sewage and waste delivered for treatment and disposal as herein provided subject to such reasonable rules and regulations as may be adopted from time to time by the Seller. The Purchaser agrees that it will exercise due diligence and effort to prevent storm water, ground sewage and infiltration effluent from being introduced into Purchaser's collection system.

2. POINT OF DELIVERY - The sewage and collected waste will be delivered at a point located in accordance with the plan and specifications to the Town of Ellettsville sanitary system.

3. METERING EQUIPMENT - To furnish, install, operate, and maintain at its own expense at point of delivery, the necessary metering equipment, including a meter house or pit, and required devices of standard type for properly measuring the quantity of the collected wastes delivered to the Seller and to calibrate such metering equipment whenever requested by the Purchaser

-3-

but not more frequently than once every twelve (12) months. The previous readings of any meter disclosed by test to be inaccurate shall be corrected for the two (2) months previous as mutually agreed between the Seller and Purchaser. If any meter fails to register for any period, the amount of waste treated during such period shall be deemed to be the amount of wastes delivered in the corresponding period immediately prior to the failure, unless Seller and Purchaser shall agree upon a different amount. The metering equipment shall be read on the 1st day of the month. An appropriate official of the Purchaser at all reasonable times shall have access to the meter for the purpose of verifying its readings.

4. BILLING PROCEDURE - To furnish the Purchaser at the above address not later than the 10th day of each month, with an itemized statement of the amount of wastes delivered during the preceding month to the Seller for treatment.

5. BILLING OF PURCHASER'S USERS - The Seller shall bill the users of Purchaser according to the rates and amounts determined by Purchaser. The Seller will furnish to Purchaser each month such statements or records that the Purchaser may require and maintain all records and books available for Purchaser's inspection.

✓ 6. BILLING FOR MAINTENANCE - The Seller shall maintain, connect and disconnect Purchaser's lines and service Purchaser's collection system and inspect lines and systems connected and bill the Purchaser each month for actual cost of labor, materials and equipment plus fifteen per cent (15%) for overhead and mileage at twelve (12) cents per mile.

THE PURCHASER AGREES:

1. RATES AND PAYMENT DATE - To pay the Seller, not later than the 15th of each month for the volume of wastes treated in accordance with the schedule of rates set out in Schedule A. In

-4-

addition, Purchaser will pay the amounts billed by Seller for the actual cost of labor, material and equipment plus fifteen per cent (15%) for overhead and mileage at twelve (12) cents per mile for maintenance and service of Purchaser's collection system.

2. CONNECTION FEE - To pay as an agreed cost, a connection fee to connect the Seller's system with the system of the Purchaser the sum of One Hundred Twenty Thousand Three Hundred Dollars (\$120,300.00) which shall cover any and all costs of the Seller for installation of the metering equipment and the necessary enlargement of the sewage treatment plant by the Town of Ellettsville.

3. MAINTENANCE EASEMENTS - The Purchaser will acquire permanent easements for maintenance purposes eight (8) feet on either side of the Purchaser's sewer lines as finally installed so that the Seller can maintain, connect and disconnect Purchaser's lines and service Purchaser's collection system and inspect lines and systems connected.

IT IS FURTHER MUTUALLY AGREED BETWEEN THE SELLER AND THE PURCHASER AS FOLLOWS:

1. TERM OF CONTRACT - That this contract shall extend for a term of Sixty (60) years from the date of the initial delivery of any collected wastes as shown by the first bill submitted by the Seller to the Purchaser, and thereafter may be renewed or extended for such term, or terms, as may be agreed upon by the Seller and Purchaser.

2. DELIVERY OF COLLECTED SEWAGE - The Purchaser will notify the Seller at least thirty (30) days in advance in writing the date for the initial delivery of sewage wastes.

3. FAILURE TO RECEIVE - That the Seller will, at all times, operate and maintain its system in an efficient manner and will take such action as may be necessary to treat for the Purchase

-5-

such quantities of collected wastes and maintain the collection system required by the Purchaser. Temporary or partial failures to treat and dispose of collected wastes and the maintenance of the collection system shall be remedied with all possible dispatch:

4. MODIFICATION OF CONTRACT - That the provisions of this contract pertaining to the schedule of rates to be paid by the Purchaser for treatment and disposal of collected wastes and the maintenance of the collection system, delivered are subject to modification at the end of every two (2) year period. Any increase or decrease in rates shall be based on a demonstrable increase or decrease in the costs of performance hereunder, but such costs shall not include increased capitalization of the Seller's system, except that such increases in capitalization required to serve the Purchaser shall be included as hereinafter provided. Other provisions of this contract may be modified or altered by mutual agreement.

7/12/88 #5
5. EXPANSION OF SEWAGE WORKS - In the event the introduction of sewage into the sewage works of the Seller by the Purchaser, in excess of 6,000,000 gallons per month, is the basis for the expansion, remodeling or installation of new equipment in the sewage works of the Seller or as a result of rules, regulations or orders of agencies or bodies of the State of Indiana, the cost of said expansion, remodeling or new equipment shall be divided between the parties, based upon the agreement of the parties at that time.

6 EXPANSION OF SEWAGE COLLECTION - In the event of annexation by the Town of Ellettsville of areas served by Purchaser collection system, the Seller shall have the option of purchasing said lines and collection system in the area annexed by the Town of Ellettsville. It is recognized that the purchase of the

-6-

collection system would be conditioned on approval of the United States of America, acting through the Farmers Home Administration or their successor agencies since a loan made or insured by and/or a grant from the preceding financed the construction of the project. The purchase price shall be based on the original cost of installation of the lines to be purchased and shall be subject to the approval and upon terms acceptable to the Farmers Home Administration or its successor agency.

7. REGULATORY AGENCIES - That this contract is subject to such rules, regulations, or laws as may be applicable to similar agreements in this State and the Seller and Purchaser will collaborate in obtaining such permits, certificates, or the like, as may be required to comply therewith.

8. MISCELLANEOUS - That the construction of the collection system by the Purchaser is being financed by a loan made or insured by, and/or a grant from, the United States of America, acting through the Farmers Home Administration of the United States Department of Agriculture, and the provisions hereof pertaining to the undertaking of the Purchaser are conditioned upon the approval, in writing, of the State Director of the Farmers Home Administration.

9. SUCCESSOR TO THE PURCHASER - That in the event of any occurrence rendering the Purchaser incapable of performing under this contract, any successor of the Purchaser, whether the result of legal process, assignment, or otherwise, shall succeed to the rights of the purchaser hereunder.

IN WITNESS WHEREOF, the parties hereto, acting under authority of their respective governing bodies, have caused this contract to be duly executed in 7 counterparts, each of which shall constitute an original.

TOWN OF ELLETTSVILLE, Seller

By: *John H. Swanson*
President

Herbert E. Ray
Member

Jack L. Neal
Member

ATTEST:

Richard L. Justice
Clerk-Treasurer

EASTERN RICHLAND SEWER CORPORATION,
Purchaser

By: *Henry C. Hayes*
President

ATTEST:

James F. Anderson
Secretary

This contract is approved on behalf of the Farmers Home
Administration this ____ day of _____, 1971.

By: _____

This instrument prepared by: STEPHEN L. FERGUSON
Attorney at Law
121 1/2 West Kirkwood Avenue
Bloomington, Indiana 47401

TREATMENT COST

All sewage supplied to the Saller will be treated, up to the maximum allowable by this Contract, at a charge of Thirty-five cents (\$.35) per every One Thousand (1,000) gallons. This charge is expected to cover only the actual treatment of the sewage.

TOWN OF ELLETTSVILLE, Saller

Jack L. Neal
President

John W. [unclear]
Member

Rogert [unclear]
Member

ATTEST:

[Signature]
Clerk-Treasurer

EASTERN RICHLAND SEWER CORPORATION,
Purchaser

[Signature]
President

ATTEST:

[Signature]
Secretary

This schedule is approved on behalf of the Farmers Home Administration this _____ day of _____, 1972.

2-1

SEWAGE TREATMENT PURCHASE CONTRACT

This contract for the treatment of sewage and maintenance of a sewage system is entered into between the Town Trustees of Ellettsville, representing the Town of Ellettsville, Indiana, hereinafter referred to as the "Seller", and the Eastern Richland Sewer Corporation, hereinafter referred to as the "Purchaser".

WITNESSETH:

WHEREAS, pursuant to Ordinance No. 164 enacted on the first day of November, 1971, the parties entered into a sewage treatment purchase contract, dated the 9th day of November, 1971, and

WHEREAS, this sewage treatment purchase contract has been subsequently amended by agreement on various occasions, and

WHEREAS, Seller has recently expanded and improved the capacity of its sewage treatment plant thereby increasing the cost of operation, and

WHEREAS, the sewage treatment purchase contract dated the 9th day of November, 1971, provided for modification of the contract at the end of every two (2) years,

NOW, THEREFORE, IN CONSIDERATION OF THE FOREGOING AND THE MUTUAL AGREEMENTS hereinafter set forth, the Seller and the Purchaser agree to:

1. Reaffirm the contract between the parties heretofore entered into on the 9th day of November, 1971.

2. Amend the agreement between the parties as evidenced by the contract dated November 9th, 1971, and all subsequent amendments so that Seller shall bill the Purchaser as follows:

a. the sum of Sixty-two Thousand Two and Sixty-six Dollars (\$62,266.00) which represents 45.19% of the debt service and reserve requirements for the period of May 1st, 1985, to April 30th, 1986; the sum of Thirty-one Thousand Dollars (\$31,000.00) is payable upon execution of this contract and the balance within three (3) years. To the outstanding balance a Five Hundred Dollar (\$500.00) administration fee shall be added;

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b. At the rate of Sixty ~~Two~~ Cents (60¢) per one thousand gallons of sewage collected from the purchaser's system, the amount of sewage collected from the purchaser's system shall be determined by the water usage of the purchaser's customers for the month plus Thirty Percent (30%) of said amount to allow for infiltration of purchaser's lines. In addition, an amount shall be added for those customers who are not on the Town of Ellettsville Water System equal to their estimated billing plus Thirty Percent (30%);

c. 45.19% of the monthly debt service requirements, Bloomington treatment costs and additional pumping costs for the new lift stations starting May 1st, 1986. The portion of the bill representing the monthly debt service requirement will be Two Thousand Six Hundred and Thirty-six Dollars (\$2,636.00) per month and;

d. 45.19% of all bills previously issued to the Town by the City of Bloomington for sewage treatment costs for services rendered prior to May 1, 1986.

3. Both parties to this agreement agree that they shall take affirmative steps to examine and inspect their respective sewer systems in order to discover and eliminate infiltration. It is the intent of this provision that both parties will take all necessary, reasonable and prudent steps to eliminate infiltration in their systems.

4. Charge for billing Seventy-five (75¢) for each customer of Purchaser served by Seller and collection.

5. Apply the terms of this contract effective May 1, 1986, and all fees thereafter shall be calculated according to the provisions of this contract.

6. This proposal shall be in full force and effect until such time as a full cost on the service analysis can be conducted based upon twelve (12) months of accumulated data from the City of Bloomington. Once the cost of service analysis is performed, this billing process shall be re-evaluated and a more permanent billing arrangement will be established.

IT IS FURTHER UNDERSTOOD AND AGREED between Purchaser and insorar as they do not contradict the provisions of this agreement remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this agreement the 16 day of JUNE, 1986.

TOWN OF ELLETTSVILLE, INDIANA

BY: Dennis Fisher
Dennis Fisher, President of the
Town Board of Trustees

ATTEST:

Eugene Wolfe
EUGENE WOLFE, Clerk-Treasurer

EASTERN-RICHLAND SEWER CORPORATION

BY: John G. [Signature]
William F. Hardy, Pres. Charles H. May
Cleuda S. Raabe, Secretary David Willy
B. B. [Signature] Ed [Signature]

SEWAGE TREATMENT PURCHASE CONTRACT

THIS CONTRACT, for the treatment of sewage and maintenance of sewage system is entered into as of the 12th day of August, 1996, between the TOWN OF ELLETTSVILLE, hereinafter referred to as the Seller, and the EASTERN-RICHLAND SEWER CORPORATION, hereinafter referred to as the Purchaser, WITNESSETH:

WHEREAS, the Purchaser is organized and established under the provisions of Chapter 157 of the Acts of 1935 for the purposes of constructing and operating a sewage collection system serving sewer users within the area described in plans now on file in the office of the Purchaser and to accomplish this purpose, the Purchaser will require the treatment and disposal of collected wastes and the maintenance of the collection system.

WHEREAS, the Seller owns and operates a sewage treatment system and plant with a capacity currently capable of serving the present customers of the Seller's system and is constructing a new waste water treatment facility and trunk line to increase capacity.

WHEREAS, pursuant to Ordinance No. 164 enacted on the 1st day of November, 1971, the parties entered into a Sewage Treatment Purchase Contract dated the 9th day of November, 1971, and

WHEREAS, the seller is embarking on building a new sewage treatment plant thereby increasing the cost of operation, and

WHEREAS, the Sewage Treatment Contract dated the 9th day of November, 1971, provided for modification of the contract at the end of every two (2) years,

NOW, THEREFORE, in consideration of the foregoing mutual agreements hereinafter set forth, the Seller and the Purchaser agree to :

1. Reaffirm the contract between the parties heretofore entered into on the 9th day of November, 1971.
2. Amend the agreement between the parties as evidenced by the contract dated November 9, 1971, so that the Seller shall bill the Purchaser according to the following schedule:
 - a. Interim Rates beginning October 1, 1996, or upon approval by the I.U.R.C., whichever is later, to January 1, 1998:
 - (1) A monthly capacity payment of Seven Thousand Eight Hundred and Twenty-five Dollars (\$7,825.00);
 - (2) A flow rate of Two Dollars and Forty-seven Cents (\$2.47) per thousand gallons of water used by Purchaser's customers based on water meter readings. In addition, for those customers who are not on the town of Ellettsville water system, an estimated amount of water usage shall be assigned to those customers;
 - b. Monthly rates shall be further amended on January 1, 1998 after negotiation:
3. Charge for billing and collection One Dollar and Seventy Cents (\$1.70) for each customer of Purchaser served by Seller.
4. Because SRF proceeds are being used to fund the improvements, this contract shall be reviewed and be subject to modification annually.
5. It is anticipated that the plant will have a capacity of 2.3 MGD or 7,700 Equivalent Daily Usage (EDU). An EDU is equal to 298.7 gallons per day. Provided that such capacity is available, Seller agrees to accept Purchaser's sewage and waste delivered for treatment and disposal in an amount not to exceed 3,200 EDUs per

day.

6. Both parties to this agreement agree that they shall take affirmative steps to examine and inspect their respective sewer systems in order to discover and eliminate infiltration. It is the intent of this provision that both parties will take all necessary, reasonable and prudent steps to eliminate infiltration in their systems.

7. The June 16, 1986 Amendment of the Contract shall be of no further force or effect as the allocations of debt service and reserve requirements and Bloomington treatment costs and additional pumping costs are incorporated in the rate identified in paragraph 2 of this Contract. The remainder of the contract dated November 9, 1971, shall remain in full force and effect.

8. The rates to be paid are subject to approval of the Indiana Utility Regulatory Commission as to the Purchaser.

IN WITNESS WHEREOF, the parties have executed this agreement this 12th day of August, 1996.

TOWN OF ELLETTSVILLE

By: Michael D. Cornman
Michael D. Cornman, President
Ellettsville Town Council

DIANA EVANS, CLERK-TREASURER

EASTERN-RICHLAND SEWER CORPORATION

By: Robert Hayer, President

ATTEST:

David Walker
Secretary

Sheila D. Figgley

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SEWAGE TREATMENT PURCHASE CONTRACT

THIS CONTRACT, for the treatment of sewage is entered into as of the 1st day of January, 1998, between the TOWN OF ELLETTSVILLE, hereinafter referred to as the "Town", and the EASTERN RICHLAND SEWER CORPORATION, hereinafter referred to as the "Eastern".

In consideration of the mutual agreements hereinafter set forth, the Town and Eastern agree to further amend the contract between the parties dated November 9, 1971, as follows:

1. The Town shall charge Eastern according to final rates beginning after meter readings in January 1998, payable in February 1998, or upon approval by the Indiana Utility Regulatory Commission, hereinafter referred to as I.U.R.C., whichever is later, as follows:

(A) A monthly capacity payment of Twenty-seven Thousand, Five Hundred and Forty-five Dollars (\$27,545.00) beginning on February 15, 1998; and

(B) A flow rate of One Dollar and Ninety-eight Cents (\$1.98) per thousand gallons of water used by Eastern's customers based on retail water sales meter readings. In addition, for those customers who are not on a metered water system, an estimated amount of water usage shall be assigned to those customers.

2. The Town shall charge Eastern for billing and collection One Dollar and Seventy Cents (\$1.70) for each customer of Eastern served by the Town.

3. A portion of the monthly capacity payment identified in paragraph 1(A) shall be designated as an annual contribution to the

replacement account by the parties. The annual amount contributed by Eastern shall be Fifty-two Thousand, Six Hundred and Eighty Dollars (\$52,680.00). The annual amount contributed by the Town of Ellettsville shall be Sixty-nine Thousand, Nine Hundred and Fifty-three Dollars (\$69,953.00).

4. The Town shall provide to Eastern Richland an annual accounting of the receipts and disbursements of the replacement account.

5. Monies deposited in the replacement account shall be spent only on improvements that are jointly beneficial to Eastern and the Town.

6. The plant has capacity of Two Million, Three Hundred Thousand gallons per day (2.3 MGD) or Seven Thousand, Seven Hundred (7,700) Equivalent Dwelling Units (EDU). An EDU is equal to 298.7 gallons per day. Given that such capacity is available, the Town agrees to accept Eastern's sewage and waste delivered for treatment and disposal in an amount not to exceed Three Thousand, Two Hundred (3,200) EDUs per day.

Eastern shall allocate such capacity to its customers as it reasonably deems appropriate and shall receive from its customers and retain the membership and connection fee authorized by Eastern's rates and charges.

Because Eastern is paying a monthly capacity payment, the Town shall no longer charge Eastern's customers the One Thousand Dollar (\$1,000.00) sewer availability fee.

7. Both parties to this agreement agree that they shall take affirmative steps to examine and inspect their respective sewer systems in order to discover and reduce infiltration. It is the

intent of this provision that both parties will take all necessary, reasonable and prudent steps to reduce infiltration in their systems.

8. Because the State Revolving Fund loan program requires a five year funding of the debt reserve, the monthly capacity payment described in paragraph 1(A) shall be reduced on September 1, 2001, to Twenty-four Thousand, Three Hundred and Twenty-five Dollars (\$24,325.00).

9. Because State Revolving Fund loan proceeds have been used to fund the improvements, this contract shall be reviewed and be subject to modification annually.

10. The June 16, 1986 Amendment of the 1971 Contract shall be of no further force or effect as the allocations of debt service and reserve requirements and Bloomington treatment costs and additional pumping costs are incorporated in the rate identified in paragraph 1 of this Contract

11. The rates to be paid by Eastern are subject to approval of the Indiana Utility Regulatory Commission of Eastern's Application for Wholesale Sewage Treatment Cost Tracking Factor.

IN WITNESS WHEREOF, the TOWN OF ELLETTSVILLE has executed this agreement this 9th day of ~~January~~, 1998.

~~January~~
February
TOWN OF ELLETTSVILLE

By: Michael D. Corman
Michael D. Corman, President
Ellettsville Town Council

ATTEST:

Diana Evans
Diana Evans, Clerk-Treasurer

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EASTERN RICHLAND SEWER CORPORATION

By: Curt Hayes
Curt Hayes, President

ATTEST:

David Willibey
David Willibey, Secretary

Maureen Cassidy
Sharon Rogers
Tale Fugittley

Allen Jerome
David Willibey
Phil E. Bester

This instrument prepared by:

JAMES H. FERGUSON
FERGUSON & FERGUSON
Attorneys at Law
403 East Sixth Street
Bloomington, Indiana 47408-4098
(812) 330-2030

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AMENDMENT TO
SEWAGE TREATMENT PURCHASE CONTRACT

This Amendment to Sewage Treatment Purchase Contract, dated this 26th day of March, 2009, is entered into by and between the Town of Ellettsville ("Town") and Eastern Richland Sewer Corporation ("Eastern").

RECITALS

1. The Town and Eastern have entered into a Sewage Treatment Purchase Contract, dated November 9, 1971, and amendments executed June 16, 1986; August 12, 1996; and February 9, 1998.

2. Wastewater treatment costs and expenses have increased since 1998, necessitating an amendment to the flow rate that the Town charges Eastern.

NOW THEREFORE, in consideration of the mutual covenants expressed herein, the parties agree as follows:

1. Eastern shall proceed with due diligence to obtain the IURC's approval of the rate increases set forth below; however, if the IURC denies Eastern's application for rate increases, the following amendments shall be void.

the tracking factor application

EASTERN VERIFIES THAT UPON SIGNED THIS CONTRACT IT HAS OR WILL IN THE NEXT WEEK FILE THOSE DOCUMENTS NECESSARY TO

2. Paragraphs 1(B) and 1(C) of the amended Sewage Treatment Purchase Contract, dated February 9, 1998, shall be amended to read as follows:

(B) Effective for meter readings to be made in May of 2009 and billed in June of 2009, or upon approval by the Indiana Utility Regulatory Commission ("IURC"), whichever is later, a flow rate of Two Dollars and Twenty-Two Cents (\$2.22) per one thousand (1,000) gallons of water per month used by Eastern's customers based on retail water sales meter readings.

SEEK SUCH APPROVAL AND WILL DILIGENTLY PURSUE SUCH TRACKING FACTOR APPROVAL WITHOUT DELAY.

(C) Effective January 1, 2010, a flow rate of Two Dollars and Forty-Five Cents (\$2.45) per one thousand (1,000) gallons per month of water used by Eastern's customers based on retail water sales meter readings.

3. Except as amended herein, the Sewage Treatment Purchase Contract, executed February 9, 1998, remains in effect.

TOWN OF ELLETTSVILLE

EASTERN RICHLAND
SEWER CORPORATION

By: *Diana Bastin*

Diana Bastin, President
Ellettsville Town Council

By: *David Willibey*

David Willibey, President

Attest: *Sandy Hash*

Sandy Hash, Clerk/Treasurer

Attest: *Curt Hayes*

Curt Hayes, Secretary

AMENDMENT TO
SEWAGE TREATMENT PURCHASE CONTRACT

This Amendment to Sewage Treatment Purchase Contract, dated this 26th day of MARCH, 2009, is entered into by and between the Town of Ellettsville ("Town") and Eastern Richland Sewer Corporation ("Eastern").

RECITALS

1. The Town and Eastern have entered into a Sewage Treatment Purchase Contract, dated November 9, 1971, and amendments executed June 16, 1986; August 12, 1996; and February 9, 1998.

2. Billing and collections expenses have increased since 1998, necessitating an amendment to the amount that the Town charges Eastern for these services.

NOW THEREFORE, in consideration of the mutual covenants expressed herein, the parties agree as follows:

1. Paragraph 2 of the amended Sewage Treatment Purchase Contract, dated February 9, 1998, shall be amended to read as follows:

2. **BILLING AND COLLECTION CHARGES.** Monthly, Eastern shall pay the Town a base charge plus a postage charge for each of Eastern's customers for whom the Town provides wastewater treatment services. These monthly charges shall be calculated according to the following schedule:

In 2009 the base charge shall be \$1.86. The postage charge shall be \$0.242. The total charge for each customer billed shall be \$2.102.

In 2010 the base charge shall be \$2.26. The postage charge shall be the postage rate in effect at the time the bills are sent.

In 2011 the base charge shall be \$2.66. The postage charge shall be the postage rate in effect at the time the bills are sent.

As consideration for Eastern's agreeing to the above increases in billing and collection charges, the Town shall immediately dismiss with prejudice its Third-Party Complaint against Eastern, pending in Monroe Circuit Court, cause number 53C01 0804 PL 00811. Furthermore, the Town releases Eastern from any and all actions, claims, demands, causes of action, damages, punitive damages, costs, expenses, and any liability of any kind or nature whatsoever, known and unknown, including court costs, which the Town now has, claims or asserts, or might or could hereafter claim or assert against Eastern as a result of, growing out of, or in any manner connected with its billing of and collecting payments from Eastern's customers prior to implementation of the above increase in billing and collection charges.


As further consideration for Eastern's agreeing to the above increases in billing and collection charges, the Town shall strive to make its billing and collections more economical and shall adopt cost-saving technologies as soon as practicable.

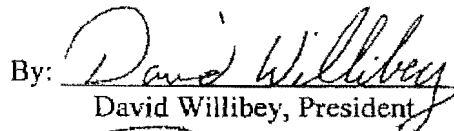
Beginning in ²⁰¹¹~~2012~~ and no more frequently thereafter than two (2) years since any prior increase or decrease in the base charge, either party may request that the parties review the Town's billing and collection services to determine whether to increase or decrease the base charge, or to change the billing methodology and to outsource some or all of the billing procedure.


2. Except as amended herein, the Sewage Treatment Purchase Contract, executed ^{MARCH 26, 2009}~~February 9, 1998~~, remains in effect.

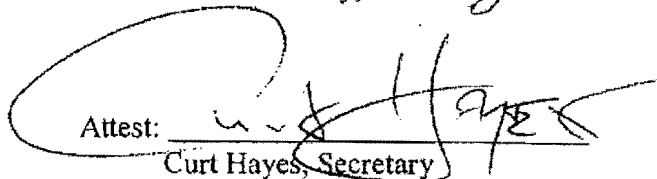
TOWN OF ELLETTSVILLE

EASTERN RICHLAND
SEWER CORPORATION

By: 
Diana Bastin, President
Ellettsville Town Council

By: 
David Willibey, President

Attest: 
Sandra Hash, Clerk/Treasurer

Attest: 
Curt Hayes, Secretary

**SETTLEMENT AGREEMENT AND MUTUAL
RELEASE**

This SETTLEMENT AGREEMENT AND MUTUAL RELEASE (hereafter "Agreement") is hereby made and entered into by and between Eastern Richland Sewer Corporation (hereinafter "ERSC") and Town of Ellettsville (hereafter "Town"), collectively the "Parties".

Recitals

WHEREAS, ERSC executed a Sewage Treatment Purchase Contract with Town on The 9th day of November, 1971, which has been subsequently amended various times ("Treatment Purchase Contract"); and

WHEREAS, disputes have arisen between ERSC and Town regarding the terms of the Treatment Purchase Contract; and

WHEREAS, ERSC initiated a lawsuit against Town in the Monroe Circuit Court under cause number 53C01-1707-PL-001491 ("Litigation"); and

WHEREAS, Town filed a counter-claim against ERSC in the Litigation; and

WHEREAS, the Parties desire to resolve all of the disputes between them without the expense, delay and uncertainty of continued litigation; and

WHEREAS, the Parties have reached an agreement whereby, in consideration of the performance of the covenants and agreements set forth herein, the Parties will mutually release each other from any claims, known or unknown, existing as of November 12, 2020 or arising out of the Treatment Purchase Contract and/or the Litigation.

NOW, THEREFORE, the Parties agree as follows:

A. Treatment Purchase Contract Amendment.

The Parties agree to amend the Treatment Purchase Contract as follows:

1. In lieu of the capacity payment, ERSC will make Ten Thousand Dollars (\$10,000.00) monthly payments as a capital contribution to Town of Ellettsville Utilities. Payment shall commence upon

receipt of the next regular invoice from the Town in January 2022.

2. The Town of Ellettsville Utilities will establish a wastewater treatment facility Capital Reserve Account ("CRA") to receive and hold the monthly capital contributions by ERSC.
3. Town of Ellettsville Utilities will pay \$10,000.00 per month to the CRA.
4. The capital account will be under the control of Town of Ellettsville Utilities, but designated for restricted use as follows:
 - a. Expansion of the treatment plant and related facilities (not including ordinary maintenance or repair).
 - b. Repair (excepting ordinary or routine maintenance and repair expenses), replacement or construction of required treatment facilities in accordance with good engineering practice.
 - c. CRA funds may be used for the replacement of existing equipment necessary to prolong the life of the Town's wastewater treatment plant, including but not limited to, ultra-violet lights, motors, pumps, blowers, and including labor costs associated with the installation of capital assets.
 - d. For other approved expenditures as listed on Exhibit A, a copy of which is attached hereto and incorporated herein.

The Town of Ellettsville shall retain, maintain and disburse funds from the CRA as appropriate in its reasonable discretion but consistent with paragraph 4, above. Town of Ellettsville shall provide to ERSC copies of activity report ledgers pertaining to the CRA not less frequently than every six (6) months and shall report any capital expenditure from the account not later than thirty (30) days after the expenditure.

B. Hook-on Fees.

Hook-on fees are subject to increase based on a cost of service or rate study. ERSC retains the 3900 EDUs assigned to ERSC in the Treatment Purchase Contract, as amended.

C. Settlement of Counter-Claim.

ERSC shall contribute a one-time payment in the amount of \$660,000.00 to Town of Ellettsville Utilities within fourteen (14) days of the date of final signature on this Agreement. Said funds shall be deposited in the CRA and

subject to the disbursement as set forth in paragraph 4 above.

D. Billing Services.

The Town of Ellettsville Utilities has provided billing services to ERSC. The computer records maintained by Town of Ellettsville Utilities has membership data and billing history for the properties connected to the ERSC sewer collection system, which ERSC would like to access. A computer software program can be prepared to capture the identification of ERSC's members, including names and addresses and billing history associated with each member's address. At ERSC's sole expense, estimated to be Three Thousand Dollars (\$3,000.00), the Town of Ellettsville will commission the preparation of the computer software program as described above for installation on the Utilities' computer system so long as the program does not conflict with other programs or software on the Utilities' computer system. The Town of Ellettsville Utilities will periodically prepare a membership report and billing history report and remit the same to ERSC but not less frequently than once every six months.

E. Future Treatment Rate Changes and Cost of a New Plant.

1. The parties acknowledge that the Treatment Purchase Contract provides for adjustment of the treatment rate charged by Town of Ellettsville Utilities to ERSC upon receipt of evidence supporting a treatment rate change. The Parties stipulate and covenant to exchange such evidence and to confer on the treatment rate change issue at reasonable times. Ellettsville Utilities agrees to provide opportunities for ERSC to review relevant treatment rate change evidence which may include, but not be limited to: a cost of service study, a rate study or other evidence or documentation prepared by Ellettsville and pertaining to a proposed change in the treatment rate charged by Town to ERSC. ERSC covenants to work in good faith with Town of Ellettsville Utilities, including Town's and ERSC's advisors and CPAs to evaluate the evidence and upon demonstration that the evidence supports a treatment rate change, Town and ERSC shall execute a further amendment of the Treatment Purchase Contract to reflect the then agreed upon treatment rate change. The treatment rate change shall become effective not later than 90 days after the Town Adopts a new rate ordinance.
2. In the event that the parties cannot agree upon a rate change, the parties agree that the Town may at its election institute a new treatment rate using wholesale agreement utility ratemaking practices. The treatment flow rate is and will be based on each party's pro rata share of the treatment plant and conveyance related operating, repair and maintenance expenses along with equipment replacement costs and capital improvements based on the percentage of treatment plant flow. Only appropriate administrative expenses allocated to the wastewater treatment division of the Utility will be allocated

to ERSC's treatment rate based on an allocation pro rata to all other expenses. ERSC's new rate will be based on ERSC's actual billed flows. ERSC covenants not to bring suit against the Town challenging the new rate if it is adopted based on a COS prepared in accordance with this Agreement.

3. In the event that the Town constructs a new sewer plant, ERSC agrees to share in those costs proportionate to its share of the new plant's capacity.

F. Mutual Release.

Each party does hereby release and forever discharge each other, their heirs, grantees, successors, servants, employees and assigns, including any affiliates of each party, as well as shareholders of any corporation, owners, directors, officers, employees and agents, and all other persons, firms or corporations liable or who might be claimed to be liable, none of whom admit any liability to the other, but who all expressly deny any liability from all actions, causes of action, claims, counterclaims and demands whatsoever, whether or not well founded in fact or law, that the parties may have against each other by reason of the Treatment Purchase Contract or arising out of the Litigation in the Monroe Circuit Court under Cause Number 53C01-1707-PL-001491, and any matter, cause or thing whatsoever which arises therefrom.

It is the Parties' express and specific intent and purpose that this instrument releases and forever discharges any and all claims, counterclaims and causes of action of any kind or nature whatsoever which each may assert against another arising out of the actions or damages by and between the Parties and/or the Litigation in the Monroe Circuit Court under Cause No. 53C01-1707-PL-001491, of any nature. To effect that purpose, this Settlement Agreement and Mutual Release is intended to release all parties from any claims, counterclaims or causes of action which the undersigned may assert and arising from known or unknown claims or counterclaims, as well as consequences of any injury or damages suffered, known or unknown; and whether any such claims, counterclaims and causes of action are specifically mentioned or not in this instrument, which may exist or might be claimed to exist at or prior to the date of this instrument.

The Parties intend that the agreement evidenced by the release be in full satisfaction of any claims, counterclaims or causes of action which the undersigned may raise and the undersigned specifically waive any claim or right to assert that any cause of action or alleged cause of action, claim, counterclaim or demand which has been, through oversight, error, intentionally or unintentionally, by the undersigned omitted from this release.

Notwithstanding the foregoing, nothing in this Settlement Agreement and Mutual Release shall be construed to preclude any party hereto from taking steps to enforce the terms hereof (if it becomes applicable).

The terms of this Settlement Agreement are not subject to ERSC's obtaining arate approval from the Indiana Utility Regulatory Commission.

G. Agreement Not to Slander or Defame Other Party.

The Parties covenant and agree that they will not engage in making any derogatory statements or disparaging remarks about any other Party, including the officers, agents and employees of the Party, in any manner to include electronic communications, credit references, social media and online "lists" and ratings.

H. Persons Bound.

This Settlement Agreement and Mutual Release shall bind and inure to the benefit of the Parties and their respective trustees, heirs, personal representatives, agents, assigns, attorneys, executors, administrators, insurers, officers and employees.

I. Governing Law and Jurisdiction.

This Settlement Agreement and Mutual Release shall be governed by and construed under the laws of the State of Indiana, and the Monroe Circuit Courts in Bloomington, Indiana shall have exclusive jurisdiction over disputes arising hereunder.

J. Attorney Fees.

If any legal action must be taken to enforce the terms of this Settlement Agreement and Mutual Release, the prevailing party in such action shall be entitled, in addition to any other relief that may be granted, to recover from the other(s) a reasonable sum for attorney fees.

K. Drafter.

This Settlement Agreement and Mutual Release is the result of negotiations between the Parties and no party shall be deemed to be the drafter of this document.

L. Voluntary Agreement.

In making this settlement, each party, being duly advised by its attorneys, has carefully read this Settlement Agreement and Mutual Release and understands the contents, and has relied entirely on its own judgment, belief, and knowledge.

M. Integration.

All negotiations, considerations, representations and understanding between the parties are incorporated in this Settlement Agreement and Mutual Release, and may be modified or altered only by agreement in writing between the parties.

N. Counterparts.

This Settlement Agreement and Mutual Release may be executed in multiple counterparts, each of which shall be an original, but all of which together shall constitute one and the same instrument.

O. Agreement Subject to Approval of Both Boards.

ERSC and the Town agree that this Agreement shall be presented to the ERSC and Ellettsville town Council for their approval.

The Parties have executed this Settlement Agreement and Mutual Release on the dates opposite their names.

EASTERN RICHLAND SEWER CORPORATION

By: Joe R Peden

Date: September 20, 2021

Printed: Joe R Peden

Title: President ERSC

TOWN OF ELLETTSVILLE

By: J Michael Farmer

Date: September 2, 2021

Printed: J MICHAEL FARMER

Title: Town Manager

Reviewed and approved as to Form:

Michael L. Carmin
Michael L. Carmin, CARMINPARKER, PC
CARMINPARKER, PC
Attorney for Eastern Richland Sewer Corp.

Darla S. Brown
Darla S. Brown,
STURGEON & BROWN, P.C.
Attorney for Town of Ellettsville

ELLETTSVILLE (INDIANA) MUNICIPAL SEWAGE WORKS

Waste water treatment plant items which have an annual replacement cost assigned to them for accounting purposes:

Headworks Pumps
Heavy Sludge Pump
Scum Pump
R.A.S. Pumps
Digested Sludge Pumps
Water Booster Pumps
Post Aeration blowers
Aerobic Digester Blowers
Sewage Grinder
Grit Collector
Grit Separator
Oxidation Ditch Equipment
Clarifier Drives
Belt Filter Press
Polymer Feed System
Samplers
Flow Meters
UV System
UV Bulbs
Conveyor
Electric Generator
Controls
Disc Membrane Diffusers
Supervisory Control and Data Acquisition Equipment
Treatment Plant Processing Equipment with a cost of over \$5,000



AFFIRMATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

/s/ James T. Parks

James T. Parks
Cause No.45776-U
Indiana Office of Utility Consumer
Counselor

02-16-2023

Date

CERTIFICATE OF SERVICE

This is to certify that a copy of the *Public's Exhibit No. 2 OUCC's Testimony of James T. Parks on behalf of the OUCC* has been served upon the following captioned proceeding by electronic service on February 16, 2023.

Otto W. "Buzz" Krohn
O W KROHN & ASSOCIATES, LLP
231 E Main St.
Westfield, IN 46074
Email: buzz@owkcpa.com

Dale Rightley, Treasurer
**EASTERN RICHLAND SEWER
CORPORATION**
4750 N. Marybelle Way
Bloomington, IN 47404
Email: rightley@bluemarble.net



Daniel M. Le Vay
Deputy Consumer Counselor

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