

FILED

August 18, 2017

INDIANA UTILITY

REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

COMPLAINT OF SUGAR CREEK  
PACKING CO. FOR REVIEW OF  
WESTERN WAYNE REGIONAL  
SEWAGE DISTRICT'S OPERATIONS  
PURSUANT TO IC § 8-1-30(3)(b).

RESPONDENT: WESTERN WAYNE  
REGIONAL SEWAGE DISTRICT

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CAUSE NO. 44948

RESPONSIVE TESTIMONY  
of  
OTTO W. KROHN

IN SUPPORT OF  
Respondent  
WESTERN WAYNE REGIONAL SEWER DISTRICT

Respondent's Exhibit OWK  
and  
Supporting Exhibits OWK-1, OWK-2 & OWK-3

**TESTIMONY OF OTTO W. KROHN**

**1. INTRODUCTION**

**Q1: PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.**

**A1.** My name is Otto W. Krohn. My business address is 231 East Main Street, Westfield, Indiana 46074. I am an executive partner of O.W. Krohn & Associates, LLP, a firm of certified public accountants and consultants. Our practice focuses on the accounting, financial and managerial needs of local governmental units and utilities throughout the State of Indiana primarily, but we also have served clients in Illinois, Ohio, Kentucky and Georgia. Our firm and its partners are Registered Municipal Financial Advisors with the U.S. Securities & Exchange Commission (SEC) and hold individual and firm licenses with the Indiana State Board of Public Accountancy.

**Q2. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.**

**A2.** I am a 1978 graduate of Indiana University's Kelley School of Business and have been engaged in public accounting and financial consulting for more than thirty-nine years. I am a Certified Public Accountant (CPA) and Chartered Global Management Accountant (CGMA) in good standing with the American Institute of CPAs and the Indiana CPA Society. After spending eight and one-half years with a regional-sized firm of CPAs, I established my own accounting and consulting practice in 1986. The majority of my professional experience has been related to financial accounting and consulting for local government and utilities. I have worked extensively with the financial aspects of utility operations, including: accounting systems, computer applications, utility rate studies and

1 cost of service studies, expert witness services at regulatory and public hearings, financial  
2 feasibility, financial advisory services, financial reporting, assistance with long-term, strategic  
3 planning, and debt financing for capital improvement projects (including bonds and leases). I  
4 have practiced before the Indiana Utility Regulatory Commission (the "Commission") on a  
5 regular basis since 1978 and have presented exhibits and testimony in numerous regulatory  
6 hearings over the past thirty nine years involving utility rates, mergers, acquisitions, debt  
7 financings and territorial matters.

8 Throughout my career, I have actively participated in many professional organizations and trade  
9 associations that pertain to the practice of public accounting, utilities, local government, and  
10 consulting, including the following:

11 American Institute of Certified Public Accountants (AICPA)  
12 AICPA Tax Division  
13 AICPA Division for Management Advisory Services  
14 Education & Information Subcommittee (1988-90)  
15 Professional Practice Standards Subcommittee (1994-97)  
16 AICPA Joint Trial Board (2007-2012)  
17 Indiana CPA Society (INCPAS)  
18 Management Advisory Services Committee (1985-88, Committee Chair 88)  
19 Utilities Committee (1989-92, Committee Chair 92)  
20 Litigation Services Committee (1993-95, Committee Chair 95)  
21 Board of Directors (1996-00)  
22 Vice Chair- Executive Board of Directors (1998-00)  
23 Leadership Cabinet (2001-2008, 2011-2012)  
24 Institute of Management Consultants  
25 Indiana Association of Cities & Towns – Associate Member Advisory Board  
26 Association of Indiana Counties  
27 Indiana Association of County Commissioners  
28 Indiana Township Association  
29 United Township Association  
30 American Water Works Association  
31 Indiana Section of the Water Environmental Federation  
32 Finance Committee (1990-94)  
33 Audit Committee (Committee Chair 1995-present)  
34 Indiana Rural Water Association  
35 Alliance of Indiana Water & Wastewater  
36 Indiana Municipal Electric Association (President 1993-94)  
37 Indiana Municipal Power Agency

**Q3: DO YOU KNOW SUGAR CREEK PACKING COMPANY AND ARE YOU GENERALLY FAMILIAR WITH THE ISSUES RAISED IN THIS COMPLAINT?**

**A3:** Yes. Since I came on board with this project during the April / May, 2017 time-frame, I have attended Board meetings and participated in consultations with the various professionals serving WWRSD. I have also read newspaper articles, meeting minutes, previous accounting and engineering reports and data request exchanges related to this proceeding, the proposed project and the various options that WWRSD considered in arriving at their decision to move forward with the WWTP expansion project.

**Q4: CAN YOU PLEASE SHARE INFORMATION ABOUT WWRSD**

**A4:** Yes. As indicated in Mr. Wessler's testimony, WWRSD was formed in 1974 as a non-profit municipal corporation (Regional Sewer District) designed and created to provide effective and efficient sanitary sewer service to customers in western Wayne County, Indiana. WWRSD also serves customers in the Gateway Industrial Park. At present, WWRSD serves approximately 1,300 customers in Wayne County, including Sugar Creek. The WWTP has the capability of treating 0.8 mgd of wastewater. Current customer demands amount to 0.66 mgd. The District proposes to initially expand the existing WWTP by adding 0.4 mgd of additional capacity resulting in 1.2 mgd total capacity; and, a further expansion to 1.6 mgd in the future when demands warrant the additional expansion. The District also proposes to construct a larger lift station and force main in order to increase its ability to serve the Gateway Industrial Park.

**Q5: MR. KROHN, PLEASE DESCRIBE THE ANALYSIS THAT YOU AND YOUR FIRM HAVE CONDUCTED AND THE IMPLICATIONS ASSOCIATED WITH THE DISTRICT'S DECISION TO PROCEED WITH ITS PLANNED "WWTP EXPANSION" RATHER THAN ABANDONING THE EXISTING WWTP AND "CONNECTING TO**

**CONNERSVILLE'S WWTP".**

**A5:** Our analysis began by studying the previous financial impact calculations that were prepared initially by Pat Callahan on behalf of WWRSD and later adjusted by Umbaugh & Associates, a firm hired by Sugar Creek and Wayne County. Because both of those sets of financial impact calculations were based upon financial information that pre-dated Sugar Creek's 2016 expanded operations, we updated the financial statements and customer usage information through December 31, 2016, as well as the related pro forma adjustments. The updated "test year" included a revenue base of \$787,500 versus the 2014 revenues of \$576,783. 2014 had been used for the previous test year and revenue base.

**Figure 1. Operating Revenues for past 3 Calendar Years:**

	12/31/16	12/31/15	12/31/14
<b>OPERATING RECEIPTS:</b>			
<b>CAMBRIDGE CITY</b>	<b>\$ 638,417</b>	<b>\$ 453,424</b>	<b>\$ 433,375</b>
<b>DUBLIN</b>	<b>110,882</b>	<b>110,797</b>	<b>110,384</b>
<b>EAST GERMANTOWN</b>	<b>19,914</b>	<b>16,472</b>	<b>17,257</b>
<b>RENT</b>	<b>18,201</b>	<b>14,600</b>	<b>12,260</b>
<b>OTHER</b>	<b>176</b>	<b>5,282</b>	<b>3,507</b>
<b>TOTAL OPERATING RECEIPTS</b>	<b>787,590</b>	<b>600,575</b>	<b>576,783</b>

Another significant difference in our updated financial impact calculations is the use of actual construction bids for the WWTP expansion versus the previous use of engineering estimates. Construction bids came in about \$1 M less than the previously used construction cost estimates. The District has also made the decision to absorb approximately \$1 M of preliminary project-related expenditures for engineering design and other professional fees<sup>1</sup>. In an effort to minimize retail rates and charges to its customers, including Sugar Creek, the Board has chosen not to seek reimbursement of

<sup>1</sup> Some of these initial costs were the result of updating and redesigning the WWRSD system needs to accommodate both Sugar Creek coming on-line and the County's request for additional capacity to accommodate its goals and objectives for the Gateway Industrial Park.

this approximate \$1 M of preliminary project-related expenditures.

**Q6. YOU INDICATED THAT SUGAR CREEK HAD RAMPED UP ITS OPERATIONS (AND OPERATING REVENUES) DURING 2016. PLEASE EXPLAIN.**

**A6.** During 2016, monthly billings to Sugar Creek increased from a low in January / February of \$9,000 to \$10,000 per month to more than double that amount. Billings during the last 6 months of 2016 amounted to an average of approximately \$21,000 per month. Figure 2, below, summarizes Sugar Creek's monthly billings from WWRSD.

**Figure 2. Summary of Monthly Billings to Sugar Creek**

WESTERN WAYNE REGIONAL SEWER DISTRICT				
Sugar Creek Packaging Company				
	Total Monthly Consumption	Normal Charges	Penalties	Total Bill
January	3,293,000	\$ 10,160.55	\$ -	\$ 10,160.55
February	3,085,700	9,604.99	-	9,604.99
March	5,396,300	15,797.39	-	15,797.39
April	4,308,000	12,880.75	1,288.08	14,168.83
May	5,200,000	15,271.31	1,527.13	16,798.44
June	5,820,000	16,932.91	-	16,932.91
July	6,460,000	18,648.11	-	18,648.11
August	7,310,000	20,926.11	2,092.61	23,018.72
September	8,380,000	23,793.71	-	23,793.71
October	8,051,000	22,911.99	-	22,911.99
November	8,105,000	23,056.71	2,305.67	25,362.38
December	6,767,000	19,470.87	399.06	19,869.93
Total	72,176,000	\$209,455.40	\$ 7,612.55	\$217,067.95

**Q7. PLEASE REVIEW AND EXPLAIN YOUR UNDERSTANDING OF THE CONNERSVILLE TREATMENT OPTION.**

**A7.** The WWRSD "Build versus Buy" analysis included a detailed review of the Connersville Option outlined in the City of Connersville's proposal letter to WWRSD dated January 26, 2017 (See OWK-3).

1 The Connersville option involves the construction of more than 11 miles of new force main (18" PVC and  
2 22" HDPE size pipes) and installing a large lift station sufficient to pump wastewater all the way from the  
3 WWRSD WWTP to Connersville. The current WWTP would be replaced by a 3.5 MGD Lift Station. As  
4 can be seen in the comparison in Figure 3, assuming that the initial wholesale treatment rate proposed  
5 by Connersville stays the same for several years, the cost of expanding the District's WWTP still appears  
6 to be the economical alternative for the District and the District's ratepayers. If the District retains  
7 control of its own destiny by operating its own WWTP, the marginal cost of serving additional flows from  
8 future growth are anticipated to be quite a bit less than even the initial cost of treatment from  
9 Connersville.

10 The "marginal operating costs" of treating an additional 200,000 gpd, if WWRSD were to upgrade and  
11 expand its WWTP, is expected to amount to about \$35,000 per year (\$0.48 per 1,000 gallons). The  
12 initial wholesale treatment rate proposed by Connersville amounts to \$1.28 per 1,000 gallons – nearly  
13 three times as much. It is also quite likely that the initial treatment rate proposed by Connersville will  
14 likely escalate within 3 to 5 years (or sooner) after WWRSD invests \$10M to \$12M to connect to  
15 Connersville, thus becoming a captive customer. Further, changing plans at this late stage would cause  
16 additional and unknown delays with no compelling evidence that pumping the District's effluent to  
17 Connersville could or would result in any savings. The information I have looked at and summarize  
18 herein shows otherwise. As noted above, the Connersville proposed wholesale treatment rate (which is  
19 already far less than their stated ordinance rate and is deemed to be an extremely low treatment  
20 charge) is nearly 3 times greater than the marginal cost of treatment, assuming that WWRSD retains and  
21 maintains its own WWTP capabilities. At this point, based upon the best information available it is less  
22 expensive to build versus buy treatment capacity (See Figure 3).

1 **Figure 3. Comparison of Pro Forma Revenue Requirements & Monthly Cost per Home:**

Western Wayne Regional Sewer District		Build WWTP (with bid numbers) and include the \$1.9 million for the lift station/force main. District does not reimburse themselves for the professional fees spent to date. Include the \$3 million IFA BAN. Sugar Creek flow going from 200,000 gpd to 400,000 gpd with the net proceeds from the flow increase going to satisfy the \$3,000,000 IFA BAN.	Pump to Connersville and include the \$1.9 million for the lift station/force main. District does not reimburse themselves for the professional fees spent to date. Use cost numbers from County. Include \$3 million in grants from the County. No IFA BAN. Include Sugar Creek going from 200,000 gpd to 400,000 gpd with the District receiving the increased revenues.
<b>WWTP Costs vs. Connect to Connorsville Interceptor / Lift Station Upgrade SRF (Special Loan)</b>		<b>OPTION 1-A</b> \$10,400,000 1,900,000 -3,000,000 <b>Secured by Sugar Creek .2 MGD Incremental Sales (.2MGD to .4MGD)</b>	<b>OPTION 1-B</b> \$11,066,000 1,900,000  -3,000,000
<b>Assumed SRF Loan Amount</b>		<b>\$9,300,000</b>	<b>\$9,966,000</b>
<b>Rated Capacity - WWTP</b>		<b>MGD</b>	<b>MGD</b>
Current Flow - Sugar Creek		1.200	N/A
Add'l Flow - Sugar Creek		0.200	0.200
Current Flow - Other Users		0.200	0.200
Other New Customers		0.463	0.463
Other New Customers		0.000	0.000
<b>Total Flows</b>		<b>0.863</b>	<b>0.863</b>
<b>Revenue Subject to Rate Increase (net)</b>		<b>\$788,000</b>	<b>\$983,640</b>
O&M - Net of Incremental Costs SC Add'l Flow		\$450,000	\$755,000
Debt Service - SRF Bond Coverage (125%)		568,757	609,488
Total Net Revenue Requirements		142,189	152,372
<b>Add'l Revenue Required</b>		<b>\$1,160,947</b>	<b>\$1,516,860</b>
<b>Across-the-Board Rate Increase</b>		<b>47.3%</b>	<b>54.2%</b>
<b>Pro Forma Rate per 1,000 Gals.</b>			
<b>Base</b>		<b>Current</b>	
Base		\$18.09	\$27.89
Volume (per 1,000 gals)		\$2.68	\$3.95
<b>4,000 Avg Residential Bill</b>		<b>\$28.81</b>	<b>\$44.43</b>

2

3 The costs under Option 1-A could be further reduced if the County would make the same \$3 million

4 commitment to WWRSD as it seems to be making to promote the Connorsville option. Regardless,

5 Figure 3 compares the anticipated pro forma revenue requirements for WWRSD assuming that the

6 District moves forward with its construction bids for the WWTP Expansion project (Option 1a) versus the

7 *estimated* capital and operating costs identified by Wayne County's consulting engineers (Strand

8 Associates) if WWRSD were to abandon its WWTP and then design, bid out, construct more than 11

9 miles of force main, and install a large lift station to pump all of WWRSD's sewage to Connorsville

10 (Option 1b). While the initial retail user rate impact is certainly more favorable to expand WWRSD's



WWTP, it is believed that the longer-term impacts could become even more significant. This is because the above comparison assumes that Connersville would guarantee its initial \$1.28 per 1,000 gallon wholesale treatment rate for the same 20 year life of the SRF loan arrangement under Option 1-A. That is not very likely. (See Attached Exhibit OWK-3). However, I have gone ahead and quantified the cumulative savings based upon these very optimistic assumptions (See Figures 4 & 5).

**Figure 4. A Comparison of Marginal O&M Cost of 1.2 MGD WWTP vs. Connersville**

IMPACT OF INITIAL S.C. GROWTH & REMAINING CAPACITY FOR GROWTH			
SUGAR CREEK INCREMENTAL 200,000 GPD OF FLOW VOLUMES			
CONNERSVILLE OPTION		EXPAND WWTP OPTION	
MARGINAL COST OF TREATMENT		MARGINAL COST OF TREATMENT	
\$93,440.00 ANNUAL COST		\$35,000.00 ANNUAL COST	
\$1.28 RATE PER / 1,000		\$0.48 RATE PER / 1,000	
200 1,000 GAL / DAY		\$58,440.00 ANNUAL SAVINGS	
73,000 1,000 GAL / YR		\$0.80 RATE PER / 1,000	
REMAINING INCREMENTAL 300,000 GPD OF FLOW VOLUMES			
CONNERSVILLE OPTION		EXPAND WWTP OPTION	
MARGINAL COST OF TREATMENT		MARGINAL COST OF TREATMENT	
\$140,160.00 ANNUAL COST		\$52,500.00 ANNUAL COST	
\$1.28 RATE PER / 1,000		\$0.48 RATE PER / 1,000	
300 1,000 GAL / DAY		\$87,660.00 ANNUAL SAVINGS	
109,500 1,000 GAL / YR		\$0.80 RATE PER / 1,000	
TOTAL ANNUAL SAVINGS @ 1.2 MGD		\$146,100.00 1 YEAR SAVINGS	

Figure 4 (above) identifies the estimated annual marginal cost savings that could be realized due to economies of scale realized by “building” versus “buying”. Marginal operating costs are substantially less when WWRSD operates its own WWTP versus simply paying a variable treatment charge that is 2 to 3 times greater. The illustration presented in Figure 4 identifies the potential “economies of scale” that likely would result from growth and new development if the District maintains its own WWTP. These are economies of scale that would inure to the benefit of the WWRSD’s customers, including Sugar

Creek and the County's current and new industrial park businesses. Unfortunately, we do not have firm cost estimates of what it would really cost to acquire the necessary easements or access rights of way and then build the facilities necessary to pump sewage all the way to Connersville. So, we were forced to use the assumptions presented by Strand and Umbaugh in their 2016-dated cost estimates and pro formas. Regardless, there are no realized savings initially or in the future. Should WWRSD proceed with the Connersville option, it is important to note that any "upside" or actual benefit from future growth and new development would be realized by Connersville, not the customers and ratepayers in Cambridge City, Gateway Industrial Park, Dublin or East Germantown.

**Figure 5. "Build versus Buy" - Long-Term Benefits of Economies of Scale (Estimated)**

<b>TOTAL ANNUAL SAVINGS @ 1.2 MGD</b>	<b>\$146,100.00</b>	<b>1 YEAR SAVINGS</b>
<b>CUMULATIVE SAVINGS - 5 YRS</b>	<b>\$730,500.00</b>	<b>5 YEAR SAVINGS</b>
<b>CUMULATIVE SAVINGS - 10 YRS</b>	<b>\$1,461,000.00</b>	<b>10 YEAR SAVINGS</b>
<b>CUMULATIVE SAVINGS - 20 YRS</b>	<b>\$2,922,000.00</b>	<b>20 YEAR SAVINGS</b>

Based upon the estimated marginal cost of paying \$1.28 per 1,000 gallons versus increasing production at a cost of roughly \$.48 per 1,000 gallons, the annual and cumulative savings are displayed in Figure 5, above. Of course, if Connersville were to increase its wholesale rate, the incremental cost differences noted above would increase proportionately and potentially dramatically.

**Q8. IS THERE A CONCERN THAT CONNERSVILLE WOULD INCREASE ITS WHOLESALE TREATMENT RATE?**

**A8. Yes.** The proposed \$1.28 per 1,000 gallons wholesale treatment charge is only guaranteed for 3 years according to a letter from the City of Connersville dated January 26, 2017 (See Exhibit OWK-3). Based upon this letter, it is the District's grave concern that the \$1.28 per 1,000 gallons is a "teaser rate" offered to make Connersville seem like an attractive option. Once the District invests over \$11M to run pipes to Connersville and shuts down and decommissions its WWTP, WWRSD would be a captive customer of Connersville going forward. The economies of scale discussed above that result from future

1 growth and development would inure to Connersville, rather than WWRSD. Connersville is called upon  
2 to do very little other than accept and treat the WWRSD waste. Thus, Connersville would have very  
3 little, if any, "skin in the game". This is why I believe Connersville, and not WWRSD, would be the entity  
4 that has the most to gain from existing and future growth / development coming from Wayne County.  
5 Further, based upon the Connersville offer in the January 26, 2017 letter, the initial wholesale treatment  
6 rate guarantee for 3 years is not really guaranteed. There is a caveat that potential new debt  
7 requirements could nullify that guarantee. The other documents of concern regarding the City of  
8 Connersville option is their correspondence with IDEM during March, 2017 regarding the City's LTCP  
9 (See Exhibit OWK-4). It appears that in addition to the \$18M of remaining LTCP projects, the City needs  
10 approximately \$7M of additional funding for other WWTP projects. The \$25.5M of total capital costs to  
11 be funded from Connersville sewer ratepayers may very well explain the "teaser rate" limitation of 3  
12 years, or possibly less "due to the SRF loan requirements" indicated in the January 26<sup>th</sup> offer from  
13 Connersville.

14  
15 **Q9. HOW DOES THE CONNERSVILLE WHOLESALE TREATMENT PROPOSAL COMPARE TO OTHER**  
16 **WHOLESALE AND RETAIL RATES THAT CONNERSVILLE CURRENTLY HAS IN PLACE?**

17 **A9.** Pursuant to the City's Rate Ordinance (No. 5371) adopted by the Connersville City Council in June,  
18 2012, the City has a monthly fixed charge that is based upon water meter / connection sizes and a  
19 variable treatment charge per 100 cubic feet. In comparing the Connersville "teaser rate" proposal for  
20 the initial 3 years of service to WWRSD (which of course is subject to the caveat in the City's offer), the  
21 retail volume charge is more than double the teaser rate and, in addition, there is also a monthly base  
22 charge of nearly \$2,800 per month (\$33k to \$34k per year) for a customer with a connection size similar  
23 to the District. Connersville also assesses a 10% "outside city surcharge" for users served outside of

1 their corporate limits, including the City's existing wholesale treatment service to Everton Regional  
2 Sewer District. I looked to see how these rates have actually been applied and see that the community  
3 of Everton, outside the Connersville City limits, does not receive any wholesale discounted rate. In fact,  
4 Everton is subject to the City's 10% outside city surcharge, just like any retail users located outside of the  
5 City.

6  
7 **Q10. WHAT IS THE CONNERSVILLE OPTION LACKING TO MAKE IT A REALISTIC CONSIDERATION?**

8 **A10.** There would have to be a long-term rate guarantee and significant upfront savings, in my opinion,  
9 to make such a drastic change of course. And, quite simply, the best information we have right now  
10 shows that it is less expensive for WWRSD to maintain its own WWTP. There are no upfront savings  
11 with the Connersville option, and the potential for significant cost increases in the future make that  
12 option far too risky. As shown above in Figure 3, user fees would likely be a couple dollars a month  
13 higher from the outset. The longer-term benefits of the "build option" reviewed further below should  
14 also be an important consideration. If another large commercial or industrial operation were to locate  
15 in the Gateway Industrial Park, the District would be able fund any necessary expansions from the  
16 cumulative economies of scale savings, as well as incremental gross profits from the additional growth  
17 capacity provided by the proposed WWTP expansion – customer growth above and beyond the  
18 incremental 200,000 gpd requested by Sugar Creek. After the expansion to 1.2 MGD, and after Sugar  
19 Creek ramps up to 400,000 gpd, there still remains an additional 300,000 gpd of growth capacity. As this  
20 remaining capacity is utilized by additional new development, there would be additional revenues that  
21 would inure to the benefit of WWRSD and its customers rather than to further benefit Connersville.

22  
23 **Q11: WHAT OTHER FACTORS DO YOU BELIEVE ARE RELEVANT REGARDING SERVICE TO SUGAR CREEK,**

1 **AS WELL AS TO ALL CUSTOMERS OF WWRSD?**

2  
3 **Sustainability**

4 **A11:** Sustainability, including how to address any additional WWTP expansions. Assuming that growth  
5 and new development continues within WWRSD, including the industrial park, the WWTP may need to  
6 be expanded again from 1.2 MGD to 1.6 MGD or larger. The District has, and always should, consider  
7 how it will fund the next WWTP expansion so that there is a known plan in place to construct additional  
8 capacity in the future. The studies produced by Callahan CPA Group and later revised by Umbaugh &  
9 Associates unfortunately failed to take a larger view and take into account the potential longer-term  
10 benefits of the District maintaining ownership of its WWTP. While there are a number of variables,  
11 including a very limited time period in which the Connersville wholesale rate incentive would be  
12 guaranteed to remain unchanged (only 3 yrs), there are other potential negative impact considerations  
13 associated with Connersville's Long Term Control Plan ("LTCP"). The City's offer (Exhibit OWK-3)  
14 identifies that there could be the potential for future wholesale rate increases for WWRSD stemming  
15 from the LTCP. At a minimum, WWRSD would be required to pay at least the same percentage of rate  
16 increase as Connersville's retail customers. If Connersville has to construct additional LTCP projects as a  
17 result of taking on increased flows from WWRSD, there is the potential for WWRSD to have to pay for  
18 additional LTCP projects associated with the District's additional flows; and, the District would forego  
19 any positive impact that future growth might have on WWRSD's future bonding capacity. Bonding  
20 capacity stemming from economies of scale cost savings and the additional gross profits that a larger  
21 customer base might provide (over and above sugar Creek's proposed additional 200,000 gpd demands).  
22 These all create a number of unknown risks and potential costs for WWRSD and its customers that  
23 would be avoided under the "build option".

**Economies of Scale**

In addition to the initial \$55k - \$60k per year of annual cost savings from Sugar Creek's additional flows, growth associated with the 300,000 gpd of remaining capacity at the WWTP (after deducting Sugar Creek's commitment) is anticipated to save more than \$85k - \$90k per year when these additional flows are treated at WWRSD's own WWTP rather than pumping to Connersville. The potential \$140k - \$150k per year from pure "economies of scale" alone could support more than \$1.8M of additional bonds for any necessary future WWTP expansion (See Figure 6).

**Figure 6. Bonding Capacity from Economies of Scale**

PROJECTED ADDITIONAL GROSS PROFITS FROM ECONOMIES OF SCALE			
BONDING CAPACITY	ASSUMED INTEREST RATE	TERM (IN YRS)	ANNUAL DEBT SERVICE - P&I
\$1,800,000	2.5%	20	\$115,465
PROJECTED "COVERAGE" ON INCREMENTAL DEBT			126.5%

**Gross Profits from Additional User Base**

As WWRSD grows, so too will its net revenues from new customers. These additional cash flows would increase the District's ability to fund the next WWTP Expansion. Assuming that incremental operating revenues, above and beyond the additional 200,000 gpd from Sugar Creek, would generate approximately \$4 per 1,000 gallons; and, the gross margin above the \$1.28 per 1,000 gallons (already accounted for in the "economies of scale" noted above) amounts to \$0.80 per 1,000 gallons. These incremental gross profits could generate additional net cash flows of more than \$350k per year. These additional gross profits, from growth other than from Sugar Creek, could support another \$3.7M of additional bonds (See Figure 7, below).

**Figure 7. Potential Bonding Capacity from Future Growth in User Base**

PROJECTED ADDITIONAL GROSS PROFITS FROM FUTURE GROWTH			
CAPACITY AFTER SUGAR CREEK'S EXPANSION - GPD	INCREMENTAL ANNUAL REVENUE @ \$4 PER 1,000 GAL.	INCREMENTAL GROSS PROFITS ABOVE THE ECONOMIES OF SCALE (PER 1,000)	GROSS PROFIT ON INCREMENTAL GROWTH (.35 MGD)
300,000	\$438,000	\$2.72	\$297,840
BONDING CAPACITY	ASSUMED INTEREST RATE	TERM (IN YRS)	ANNUAL DEBT SERVICE - P&I
\$3,700,000	2.5%	20	\$237,344
PROJECTED "COVERAGE" ON INCREMENTAL DEBT			125.5%

### Summary of Potential Future WWTP Funding Resources

Economies of Scale from "Building instead of Buying"	\$ 1.8 M Bonding capacity
Additional Gross Profits from 300,000 gpd - new development	\$ 3.7 M Bonding capacity
Total Potential Resources to expand WWTP in Future	\$ 5.5 M Total

### **Q12. HOW MUCH ADDITIONAL CAPACITY COULD THE DISTRICT AFFORD TO CONSTRUCT WITHOUT HAVING TO RESORT TO ANOTHER RATE INCREASE?**

**A12.** That depends upon the future construction cost of adding incremental wastewater treatment capacity and what the needs actually are at that time. From a purely financial standpoint, if we were to compare these total potential additional resources with various assumed costs of constructing additional capacity in the future, we can quantify the amount of additional WWTP capacity that the District should be able to afford without having to increase its rates further.

Figure 8 identifies the potential additional capacity (expressed in MGD) that could be constructed from the resources noted above.

### **Figure 8. Resources & Capability of Funding Future WWTP Expansions**

TOTAL POTENTIAL RESOURCES FOR ADDITIONAL WWTP CAPACITY			
RESOURCES	ECONOMIES OF SCALE	GROSS PROFITS FROM GROWTH	TOTAL ALL RESOURCES
BONDS / CASH	\$1,800,000	\$3,700,000	\$5,500,000
FUNDING CAPACITY FOR FUTURE WWTP EXPANSION - MGD			
ASSUMED COST PER GPD	ECONOMIES OF SCALE	GROSS PROFITS FROM GROWTH	TOTAL MGD FROM ALL RESOURCES
\$5.00	0.36	0.74	1.10
\$6.00	0.30	0.62	0.92
\$7.00	0.26	0.53	0.79
\$8.00	0.23	0.46	0.69
\$9.00	0.20	0.41	0.61
\$10.00	0.18	0.37	0.55

Figure 8 identifies the potential for funding incremental WWTP expansions from the additional resources noted above in Figures 6 & 7, and assuming a range of WWTP construction costs of \$5 per gpd to \$10 per gpd. Pure economies of scale from "Building versus Buying" could be expected to fund an additional .18 MGD to .36 MGD without further rate increases. Gross profits from the 300,000 gpd of incremental sales volumes could pay for an additional .37 MGD to .74 MGD without further rate increases. And, combining just these two resources the WWRSD could be anticipated to fund future, additional incremental WWTP capacity of between .55 MGD to 1.1 MGD without further rate increases. Of course, there are a number of caveats that need to be considered in any projections of future results and this analysis is provided primarily as an illustration of other practical considerations and support for WWRSD's decision to move forward with the expansion efforts and to not waste any more precious time and money pursuing other less favorable and less flexible options.

#### IV. SUMMARY

**Q13: PLEASE SUMMARIZE YOUR TESTIMONY FOR THE COMMISSION.**

**A13:** WWRSD: (1) has capably served its customers for nearly forty years; (2) points out that the recent lift station situation is one that just recently came to light following the addition of Sugar Creek; (3)



1 supports and stands behind its ability to provide up to 200,000 gpd of wastewater treatment capacity to  
2 Sugar Creek; and, (4) is ready to move forward with its plans to expand its WWTP by 400,000 gpd and to  
3 construct a larger lift station and force main from the Gateway Industrial Park to the WWTP. It is also a  
4 relevant consideration to recognize that as Sugar Creek began significantly ramping up its operations in  
5 2016, daily flows have likely exceeded (often significantly) the 200,000 gpd level Sugar Creek indicated it  
6 needed and would be sending to WWRSD (see Respondent's Exhibit MW). This increased level of flow  
7 has brought to light the limitations in the design and capability of the lift stations serving the industrial  
8 park, as further discussed by Mr. Wessler, but WWRSD has in each case promptly stepped up to address  
9 the inherited facility limitations and problems. Despite the unsupported allegations by Sugar Creek  
10 regarding the ability and competency of the District to provide Sugar Creek adequate and reliable  
11 service, WWRSD has had a plan and funding mechanism in place and ready to immediately move  
12 forward with a WWTP Expansion and replacement of the existing problematic Lift Station and Force  
13 Main. Any capacity constraints are not because of the District's actions or its WWTP limitations, but  
14 rather appears to be due to the Lift Station and Force Main that the County EDC constructed to serve  
15 the Gateway Industrial Park back in the 1990's. As WWRSD's largest customer, Sugar Creek is an  
16 integral part of the District's customer base and has made certain requests of WWRSD over the last  
17 several years which the District has been working diligently to accommodate. The District values its  
18 relationship with Sugar Creek and is continuing to work to remedy any issues without any further delay.  
19 Unfortunately, the Connersville Option does not appear to offer any compelling advantages, but rather  
20 only additional costs, risks, and lost opportunities for WWRSD's customers. Finally, the District believes  
21 that constructing additional capacity is the best, most flexible alternative for its customers, including  
22 Sugar Creek, as well as the County, if a close review of the numbers is made. While the Connersville  
23 option would be a great deal for Connersville, this option does not appear to be good for WWRSD. Not

1 in the short run; and, not in the long run. In my opinion, WWRSD is in no way a troubled or incapable  
2 utility as Sugar Creek alleges in this IC 8-1-30 review.

3

4 **Q14: DOES THIS CONCLUDE YOUR TESTIMONY?**

5 **A14:** Yes.

**The following Exhibits are filed in a Separate  
Supporting Exhibit Filing:**

**Exhibit OWK – 1**

**Special Purpose Accounting Report & Rate Study  
Prepared by O. W. Krohn & Associates, LLP  
Proposed SRF Project – WWTP Expansion**

**Exhibit OWK – 2(a) – (c)**

**Reports & Calculations Prepared by  
Strand Engineering,  
Callahan CPA Group  
& Umbaugh**

**Exhibit OWK – 3(a) & (b)**

**January 26, 2017 Connersville Offer  
Connersville IDEM Correspondence -March, 2017  
Connersville Rate Ordinance No. 5371**