

## ISSUES

### Bargersville Water Utility Rate Increase

Bargersville Water Utility has proposed and approved a water rate increase for the purpose of financing the constructing of a new well field, treatment plant, and several water mains of various sizes in southern White River Township. There are a multitude of issues that have been raised by this action, and it is the purpose of this document to list those issues, and to state the reasons why objections to that issue exist.

#### I. PUBLIC HEARINGS:

Two Public Hearing meetings were conducted by the Bargersville Water Utility Board (Bargersville Town Council). The first was on July 15, 2010 at 5:00pm in the Center Grove High School auditorium. The second was held on August 24, 2010 at 7:00 pm in the Bargersville Town Hall. The second meeting was necessary because the rate structure presented prior to the July meeting could not be supported by the tax rate structure expected from annexations by Bargersville. They were negated by a court action.

- A. Conduct of the meeting: The meetings were not controlled by the President of the Utility Board/Town Council (Mr. Combs). Consulting Attorney Nicholas Kile initiated the meeting by announcing that this was a public hearing and that comments from the public would be heard, but that there would be no questions answered by the Board members. This, of course, limited the interchange of ideas and most importantly, an interchange of information as to why the expansion was needed. A consulting engineer presented information on system peak demand (at the first meeting) and how cost reduction efforts had been made for the treatment plant (at the second meeting), there was no information presented to justify that an expansion of the magnitude being proposed was necessary to solve current water system problems, or how it would satisfy the expected future needs.

A resident of Highland Park subdivision (Mr. Dickey), who attended the July 15 meeting, commented at the meeting, and when I saw him several days later, that he found the procedure objectionable in that there was no interchange of information between utility representatives and the public. Several senior citizens approached me after the meeting and thanked me for my presentation, because someone had stood up to speak on their behalf.

August 24 Public Meeting attendee, Mr. Gary Tomey, (not a member of WRCU) wrote a letter to the editor that appeared in the September 22, 2010 edition of the Daily Journal. He expressed his disappointment at the way the meeting was conducted, pointing out that it was "orchestrated by the councils attorney", and reported specifics to which he objected.

State Representative Frizzell, co-author of legislation, (H.B. 1107-year 2010 bill and H.B. 1072-year 2011 bill), regarding excess rates by municipal utilities, attended the meeting. He also spoke, advising the Council of their obligation to be fair and reasonable.

- B. Opposition suppressed: Board/Council member Mr. Kehl was opposed to the expansion. He had expressed this position in previous Town Council meetings and was quoted in the Daily Journal as having boycotted a Council meeting because of his opposition. The format and conduct of the Public Hearings did not permit his views to be heard. After the council meeting on September 9, 2010, at which the rate ordinance was approved, Mr. Kehl spoke to me and said he had talked with the utility employees who operate the water treatment plant, and they had told him this expansion was not needed. It would appear that Mr. Kehl had utility operating knowledge that differed with what the consulting engineering representative reported, and that the conduct of the Public Hearings did not permit this to be heard.
- C. Presentation suppressed: White River Citizens United was permitted to deliver a presentation in opposition to the proposed rate increase at the first hearing. A planned presentation was not permitted at the second hearing. Prior to that meeting, when the Town Clerk was contacted relative to the availability of presentation facilities, WRCU was advised that the Council had ordered that presentation facilities be removed from the meeting room, and that no presentations would be permitted. However, the consulting engineering representative was recognized by the Council to deliver a presentation on the water treatment plant cost reduction history. In that presentation, no information was made available relative to the total scope of the project; nor to the total cost. Presentation projection equipment was present in the meeting room; being permanently attached to the ceiling.

## II. MASTER PLAN

A. New Water Plant: The Water Utility Master Planning Report (Executive Summary) dated November, 2002, and prepared by Commonwealth Engineers, Inc. presents a multiple phased development plan for the utility system. It, and several associated documents are contained in the Indiana Regulatory Commission Cause #42555, and filed dated February 10, 2004. The review of this document set generates the following issues.

1. "Phase IIC" is the designation given in the plan to the current proposal of constructing a new well field, a new treatment plant, a new clearwell, and a 30" transmission main. The estimated

cost of these items was given on page 4 of the summary as \$15,782,000. However in the testimony given by Mr. G.E.Tinkle II, on page GET-10, he estimates the same project would cost \$14,410,000. There is therefore some uncertainty on the part of the various consultants as to what was the cost of the project in 2004. Does that same uncertainty exists in the current plans?

2. The Phase IIC project was delayed to further study the cost. Now the cost is estimated at \$20,450,000. We were told in the August 24 hearing that considerable cost reduction had been achieved on the treatment plant, however current project cost estimates are at least \$5,000,000 above the 2004 numbers in paragraph (1) above.
3. The specifications of the water main size is quoted as 30" in these documents. The proposed project has the mains reduced to 24". This suggests that perhaps there are other system parameters that have been over stated in the master plan, but not as yet corrected.
4. The need for Phase IIC is supported by the phrase, "...to be completed by 2005 to keep up with *anticipated* growth."(Page 4 of the Executive Summary). There is neither in the Master Plan nor in materials made available to the utility customers to date, data that supports that anticipated growth has actually taken place, or can reasonable be expected in the future. On the contrary, evidence was presented at the August 24 Public Hearing by Mr. William Shakal that a considerable reduction in home building permits has taken place in the last several years. A critical question of justification for this project remains unanswered.
5. Following Phase IIC in the Master Plan are three additional phases; Phase IA South, IIA South, and IIIA South. These are reported to be necessary if water service is to be extended to the Town of Trafalgar, and to Brown County (Page 5, Executive Summary). Certainly this objective of utility expansion to these communities cannot be meet without the completion of Phase IIC, which would increase the water availability by over 50% from current capacity. The question is then generated as to the true need for the current proposal; is it a preparation to serve this far southern reach of the utility district, or is it to solve a current capacity problem in the far northern district where 87% of the current customers are located?

B. Master Plan Deviation: A Master Plan should be considered as a guide that requires updating. It needs to be adapted to the evolution that has taken place. A typical example of the process is a Comprehensive plan that guides a community's development. It requires updates to assure that it is compatible with current conditions. Given the significant

economic slow down the past several years, and the recovery forecast, it would be prudent to re-evaluate the 2002 Master Plan for the water utility before embarking on a \$20M expansion.

1. Data supplied by consulting engineering representatives at the public hearing defines the most pressing current problem to be a peak hour system demand. We have been told that peak hour demand has exceeded threshold values on several occasions this summer season. There has been no discussion offered on alternatives that would be appropriate for that problem, only that a new water plant is needed. There is therefore the question that we are being asked to pay for a new water plant when there could be other less costly solutions. Those solutions may even be appropriate for any supply problems that will exist in the southern district of the utility in the near future.
2. A deviation from the current Master Plan should now contain consideration of the “water commitments” that are reported in the Bargersville letter of September 1, 2010. This letter is a response to concerns expressed by the customers at the several hearings. A customer concern relative to the practice of conservation was countered with the response that Bargersville has committed future availability of water supply to potential future customers, and therefore conservation is not a solution to any current supply problem. If that is true, then it should become a part of the revised Master Plan and consideration be given as to how that future customer will pay for their fair share of the system expansion expense.
3. The existing water treatment plant has been equipped with a Fluidized Bed Reactor that is used only in the summer months to supplement peak capacity by 1.5MGD. Modifying the Master Plan to repeat such an expansion methodology would add to existing capacity during peak demand months in a similar cost effective manner.

### III. WATER RATE ELEMENTS

- A. Fire Protection fee: A fire protection fee of \$868 per fireplug per year is in the current rate structure. Those customers who are not residents of the Town of Bargersville are currently charged \$10.53 per month for this service. Residents of the Town of Bargersville do not receive this charge on their water bill. Instead, it is reported that they pay an “equivalent” fee through their town property tax rate. There are several problems with this practice;
  1. Communities surrounding the Bargersville Water Utility service area, which are served by Indiana American Water Company, are charged significantly less. The city of Franklin pays \$39.05

per month per fireplug (\$468.60 per year per fireplug).  
Customers not in a municipality pay \$2.64 per month.

2. A customer paying this fee through property tax can claim this expense on their federal income tax as a deduction, however a customer paying this fee as a monthly water bill charge can not.
3. Indiana has initiated a cap on property taxes. Including a partial payment of a property owners water bill as a portion of the tax bill subjects the utility to the tax cap credits that will be prevalent in the years to come. A large portion of Bargersville residents are already subject to those credits because of the large town and fire tax rates.
4. The proposed rate increase will increase the monthly fee for the non-town resident to \$20.00 making the difference from surrounding communities that much more. However, if one increases the existing fire protection fee of \$868 by 77%, and calculates the monthly "equivalent" rate a Bargersville town resident customer will be charged through property tax, one finds that a difference exists between it and the non-town resident rate. That difference exists because of the difference in the ratio of fireplugs to customers within the town and outside the town. It accentuates the difference in treatment between town residents and non residents regarding this fee.
5. We are told that the Town of Bargersville makes a quarterly transfer of funds from revenue received from property tax into the utility account. The expected transfer, on an annual basis, should be approximately \$219,000 (253 fire plugs in the Town X \$868). A review of the Annual City and Town Financial Report (CTAR-1) revised 2009, obtained from the State Board of Accounts, did not indicate clearly such a transfer of funds. A receipt of \$290,592.19 into the 6503 Water Utility Operating Fund is noted, but can not be traced to its origin. A note in capital letters on page 2 of Part 1 reads "TRANSFERS IN DO NOT MATCH TRANSFERS OUT! PLEASE CORRECT". It is assumed this is a note placed on the report by SBA, indicating poor accounting practices, so from this report one can not be sure the required tax revenue transfers actually took place.
6. When inquires were made relative to the origin of the cost basis of the fire protection fee, we were directed to an IURC cause #40187 dated April 20, 1995. Since then, any rate increase percentage has been applied to this fee without reverting to a repeat of the cost of services derivation. However, in a review of the referenced cause, we could find no basis for that derivation. A possible relevant document found in the IURC archives was a report by an engineering firm named SEICO. It was entitled "Report on Technical Phase of Cost of Service Study and Related Work for Bargersville Water Utility". The cost

of service derivation contained within this document is relative to the “Sprinkler vs No-Sprinkler” rate difference and the derivation of the “Base Extra Capacity” method of allocating operating costs.

- B. Sprinkler vs. No Sprinkler Rate Difference: Bargasville Water utility claims that summer season peak hour demand is the result of customers who have in ground sprinkler systems. They have therefore designed a water rate structure such as to charge customers with an in ground sprinkler system a higher monthly meter fee than a customer without. A number of issues are present with this rate structure;
1. Cost of Service; The document referenced in paragraph III-A-5 above is a cost of service study performed in 1995. While it should be considered out of date for today's rate structure, it never the less is the basis for this rate feature. On page 3, an analysis is performed on customers with sprinkler systems vs. without regarding their water consumption records in the 5 months in which sprinklers are most likely to be used. In considering a sample of 17 customers with sprinklers, and 22 without, it fails to note that 6 of the 17 customers with sprinklers have peak to average consumption less than the criteria utilized of greater than 2.5, and 2 of the 22 customers without sprinklers exceed the criteria. The data being analyzed indicates there is a sufficient number of customers in each category that fails the criteria test, that a conclusion of the effect of sprinklers is erroneous.
  2. A handout at the August 24 hearing presents a graph of average water consumption per month for each type of customers. Those that have sprinkler systems demonstrate a peak monthly average consumption of 23,200 gallons. Those that do not have sprinklers have a peak monthly consumption of 8,600 gallons per month. This data is intended to enforce the conclusion that system peak demand is caused by customers with sprinklers. A more careful analysis of the data, using customer quantities in each category that is obtained from the Umbaugh rate analysis of August 17, 2010 reveals just the opposite. The 1729 customers with sprinklers create a peak monthly demand of just over 40M gallons. The 8155 customers without sprinklers create a monthly demand of just over 70M gallons. The system peak demand is therefore more dependent on the usage of non sprinkler customers than it is on the sprinkler customers. The graph also indicates that during the non sprinkler usage months, the average monthly demand of the sprinkler customers is approximately 1000 gallons per month LESS than the non sprinkler customers. With the data supplied by Umbaugh, it is obvious that customers who own

sprinkler systems are unfairly being penalized because they are not the major consumers of the water. They individually may have a higher peak to average usage, but in total consumption that group is not the major consumers of water.

C. System Development Charge: The current System Development Charge of \$625 per new customer connection was developed in conjunction with a rate increase proposal presented to the IURC in 2004. That is documented in Cause #42555, and reports that the “Equity (Buy-in) Method” was employed. In that method, as stated on Page 7 of the testimony of J.F. Doninger of Umbaugh Associates, “the goal is to charge a fee for new customers sufficient to allow customer user rates to be revenue-neutral with respect to growth”. The current proposed rate increase fails to address several aspects of the SDC fee;

1. There is some uncertainty as to the correct calculation of the SDC fee in the 2004 Cause #42555. In Mr. Tinkles testimony (page GET-6, lines 8-11), the consulting engineer estimates future growth in terms of equivalent dwelling units to be 4,891 (This is the sum of 2755 units in the next five years, and 2136 units for the Intermediate-Term, with no Long-Term projection.) The EDU’s used by Umbaugh in calculating the current SDC fee is shown on page 23 of their report to the Town Council dated February 10, 2004 as 8,831. This larger EDU number has resulted in a smaller SDC fee than if the estimated EDU’s of the consulting engineer had been used. This condition needs to be reviewed and predictions updated.
2. There has been a failure to apply the Equity Buy-in Method to the Phase IIC expansion project. No recalculation of an SDC rate has been made. Requests that there be consideration of adjusting this fee have been rejected by the Director of Utility (Mr. Davis). It would seem reasonable that in a case such as this, where it is obvious that the project is for the benefit of future customers, that those customers need to be defined (as accurately as possible), and that they match the investment current customers have in the existing system.
3. The letter from the Town of Bartersville announcing the second Public Hearing, dated August 9, 2010, has as an attachment of the proposed rates. That schedule fails to include the SDC fee, so there is no evidence to assure the customers that there will even be an SDC fee, let alone any adjustment. Bartersville Ordinance 2010-15, which authorizes the new rate schedule, also does not contain any reference to an SDC fee.

C. Revenue from Future Growth: Rather than place the cost burden of a new facility on just the existing customers, past revenue review cases with the IURC by Bartersville Water Utility have contained alternatives

to such financing. The use of an SDC fee (mentioned above), as well as other techniques, have been put forth by the consultants advising the Town. They are worthy of further consideration;

1. Delayed Payment of Principle; In cause #42555, Umbaugh proposed that a delay of payment on the principle of the Bond issue be made. In this manner, any new customers added to the water system, who are major beneficiaries of these improvements, would pay a larger portion of the proposed debt. On page 8 of his testimony, Mr J.F.Doninger of Umbaugh declares; "In my opinion, this is a fair and reasonable approach of extending the burden of funding the proposed improvements to both the present and future ratepayers of the Bargersville Water Utility....". While this exact bonding method may not be applicable to the current system needs, it is paramount that considerations of this type be made so that a fair and reasonable cost allocation between existing and future customers is accomplished.
2. Cost Allocation to SDC; On page 96 of the 2002 Master Plan (not the Executive Summary), a proposal is made regarding a "Water Availability Fee" relative to Phase IIC funding. It was proposed that the project cost should be split in half. One half to be funded by the "Water Availability Fee" (currently referred to as SDC) from future customers, and the second half to be included in the rates paid by existing customers. The percent sharing should of course be performed based on the allocation of future benefits to be derived by both classes of customers, and not necessarily the 50/50 split cited. Here again we see that SDC fees are considered by the consultants advising Bargersville in the past to be a significant factor in arriving at a fair and reasonable rate structure.
3. Revenue from Future Customers; The proposed rate structure assures that bond debt obligations will be met by applying the whole debt to existing customers. There are no provisions for the revenue that will be realized from new customers. With existing customers paying the rates necessary to finance the debt and to pay the additional operating expenses, and new customer revenue will be free and clear "PROFIT". That is not fair and reasonable.

D. Base Maximum Method of cost allocation; In paragraph III-A-6 above, reference is made to a 1994 IURC cause number 40187 in which a document by SEICO, entitled "Report on Technical Phase of Cost of Service Study and Related Work for Bargersville Water Utility" is referenced. In that document, the cost sharing percentages are derived that are allocated to Base, Peak Day, and Peak Hour categories for classifying operating costs. The derivations on page 6 contain

computation errors relative to number rounding. They result in percentages that are used in the accompanying Umbagh Rate Analysis which are in error, thus propagating the round off error through out the rate structure derivation. Through out the years, any rate changes have been made as changes to these rates, thereby propagating the error to the proposed rate structure of Town ordinance 2010-15. In both public hearings, reference was made to the rate structure as “when you add a room to a crooked house....you end up with a crooked room”; this mathematical error is what was being referred to.

### III. EXPANSION PLAN

A. The Total Project; The total scope of the expansion project has never been revealed to the public. There were never any charts or diagrams to indicate the full extent or cost. Only in the June 23 and August 17 Rate Studies has there been any record of the project scope and its associated costs. Discussion has been limited to the cost of the new water treatment plant, which is only half of the total project cost.

B. System Requirements Document; A verbal request was made to the Town Clerk at the time she supplied a number of requested documents for a copy of a “Systems Requirement Document”. It was expected that the consulting engineering firms would have been given a document describing the needs of the Water Utility to meet current and expected system capacity needs, and which defined the scope of their design efforts. This document was described to her as quoted, but she was also advised of the purpose of such a document so that she could correlate the request with any document of that nature. She responded that no such document existed. If that is truly the case, one is left with the question as to what were the design objectives that defined the needs of the new facilities?

C. Is it Necessary?; The Town of Bargersville web site in July of 2009 was accessed for the purposes of obtaining the details of the water rate structure. Several items of “Key information” were noted at that time;

1. “Currently serving a customer base of approximately 9,000 people”
2. “The current design capacity is 7.5MGD, has an average daily production of 2.0MGD, and new customer availability of 3.2MGD”

This information indicated that there was adequate capacity for expansion. A year later a letter arrived from Bargersville advising of a 118% water rate increase in order to finance a new water plant. Although the increase of 118% was later retracted, a 77% increase is presently proposed. A credibility gap exists between the customers and the utility when a

reported 40% surplus capacity disappears within a year, and we are asked to pay for a 50% increase in capacity.

- D. An Alternative Proposal; A review of the Bargersville Water Utility facilities map suggest that alternative solutions may exist that will not only solve current capacity problems (if they exist), but strengthen the integrity of the system for serving future customers. They are;
1. A 12" line runs south on SR 37 and then east on Travis Road to the Orchard Tank. This should be capable of supporting an initial commercial development at SR 144 and SR 37 with a very short extension. Very limited residential customers exist in this area. A booster pump station on SR 37 may be needed if pressure drops are excessive.
  2. The system contained in the area defined by Smith Valley Road on the north, Stones Crossing Road on the south, Morgantown Road on the west, and SR 135 on the east contains the highest density residential and commercial area of the system. It experiences low water pressure at residences internal to the distribution mains network during peak summer demands. An additional water tower at Olive Branch Road and Morgantown Road may be a solution to this issue. Since this is a high population density area, a tank larger than 500K gallons may be needed to meet peak hour demands.
  3. Of the four system elements (well, treatment, pump, and transmission), the weakest link is transmission. With an additional 1.5MGD Fluidized Bed Reactor for peak season use only at the existing treatment plant, the existing well and treatment plant should serve average day (4.2MGD), and peak day (9.8MGD) through 2020. Peak hour capacity of 16.1MGD may require a separate solution, if additional and existing water tanks do not.
  4. System transmission problems are more likely to exist in the southern regions of the service area where current development is occurring. A solution would be to add a 12" line from the Orchard Tank down Morgantown Road to the Kinder Tank. This is open rural country and right of way would be easy to acquire. This would parallel the 8' line that runs from Stones Crossing Road to the Town of Bargersville along SR 135, and thereby improve the supply availability to the Town of Bargersville.
  5. These changes would more tightly couple the North and South Hydraulic Systems, and thereby strengthen the integrity of the entire system.

## V. UTILITY OPERATIONS

A. Operating Expenditures; The State Board of Accounts receives an annual financial report from the Town of Bargersville. That report is often referred to as the CTAR-1 report. Report ID 41-3-702 is available from the internet, and the following observations are made relative to all Bargersville utility operations;

1. Salaries and Wages vs. Benefits; The Water utility has a benefits expenditure that is 48.5% of the salary. That is excessive. The Wastewater utility has a benefits expenditure for its employees that is 31.8% of the salary. Why should these be different unless one utility has a better benefit package than the other. The Storm water utility has neither a salary nor a benefits expenditure. It would appear there are no employees assigned to that utility, although there is a Storm Water Utility secretary and a Board. The Electric utility has a salary expenditure that is 72% of the water utility, but it has no benefits expenditure. Some other fund must be paying the benefits for these employees. Is it the Water utility because of its high benefit expenditure?
2. Salaries and Benefits Rate of Rise; A survey of several IURC cause reports, the State Board of Accounts audit for 2005/6 of Bargersville Utilities, and the Umbaugh 2010 Rate Studies reveals that salaries and benefits since 1994 have risen at an elevated rate. The study indicates an average increase from 1994 to 2009 of 7.0% for wages and 7.7% for benefits. When viewed over a more limited space of time (2005 to 2009), the increases are 9.75% for wages and 11.0% for benefits. These rates of increase are excessive and result in a water rate structure that is unreasonable and unfair to the customers.
3. The Water utility SDC fund is reported in CTAR-1 to have a cash and investment balance of \$529,277.03 as of 12/31/2009. However, we are told that the Water utility had to borrow \$524,000 from the Wastewater utility in order to pay for the relocation of water mains in conjunction with the INDOT State Road 135 expansion project. That loan appears as a line item in the project cost sheet for the proposed new water plant. What happened to the Water Utility SDC funds?
4. The water utility is reported in the 2009 CTAR-1 report to have a \$282,128.27 CD in its operating account investments. Why were not these funds used to fund the expenses outlined in paragraph 3 above?
5. The disbursement from the Council of Governments Fund for Personal Services is recorded as \$96,378.20. Since there are five members on the Town Council, this would imply that each council member was paid \$19, 275.64 in 2009. That seems excessive. The utility funds do not reveal if these same council

members, who act as Board members to the utilities, are also paid for their services from the utility operating funds.

6. Mr. Welch, who is an employee of the Water Utility, benefits directly from the wage and benefits provided him from utility revenue. He has voted in favor of the proposed project, rather than abstain because of an obvious conflict of interest.

B. Debt to Asset ratio: The Water Utility is currently obligated to a debt of approximately \$12.5M. Umbaugh records the December 31, 2009 asset value of the water utility to be \$32.5M. Upon issuance of the project bonds for \$20M, the utility will be obligated to a debt of \$36M (includes interest), causing the total debt to rise to \$48.5M. Upon completion of the new water system, the asset value of the utility would increase by \$20M to be \$52.5M. The debt to asset ratio would then be  $\$48.5M / \$52.5M$ , or 92%.

C. Servicing City Streets; The Bargersville Fiscal Plan for the 135/Whiteland Road voluntary Annexation area, dated November 13, 2006, and the Fiscal Plan for North SR135 consensual Annexation, dated June 10, 2008 both contain references to the fact that the Town of Bargersville uses Utility employees and equipment to provide Street Department services to the Town streets and roads. In the second fiscal plan above, the following statement is contained; "Bargersville Utility employees are diverted to street department duties when circumstances dictate, such as for minor road repairs or snow removal". There is no indication in the Town financial reports reviewed to date that there is "job level" accounting being practiced so that water customers who do not live in the Town of Bargersville, and don't receive the benefits of these services, are not paying for them through their water bills. In the CTAR report for 2009, a receipt of \$131,600 into the towns "In lieu of taxes" account is recorded. Without full disclosure of what all is involved in this transfer, the assurance of fairness in allocating these expenses cannot be established.