

**BEFORE THE PUBLIC SERVICE COMMISSION  
STATE OF MISSOURI**

In the Matter of the Application of the )  
Branson Cedars Resort Utility )  
Company LLC, for Certificates of )  
Convenience and Necessity )  
Related to Water and Sewer Systems. )

**Case No. WA-2015-0049**

**STAFF'S REVISED RECOMMENDATION**

**COMES NOW** the Staff of the Missouri Public Service Commission, by and through counsel, and hereby files its *Revised Recommendation*. The revisions affect revenue and water rate design.

Respectfully submitted,

/s/ Kevin A. Thompson  
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Attorney for Staff of the  
Missouri Public Service Commission

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a true and correct copy of the foregoing has been served, by hand delivery, electronic mail, or First Class United States Mail, postage prepaid, to all counsel of record this **3<sup>rd</sup> day of August, 2015**.

/s/ Kevin A. Thompson  
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## MEMORANDUM

TO: Missouri Public Service Commission Official Case File  
Case No. WA-2015-0049  
Branson Cedars Resort Utility Company LLC

FROM: Jim Merciel – Water and Sewer Unit; Case Coordinator  
Curt Gateley – Water and Sewer Unit  
Keith Foster – Auditing Unit

<u>/s/ Jim Merciel</u>	<u>August 3, 2015</u>
Case Coordinator	Date

<u>/s/ Cydney Mayfield</u>	<u>August 3, 2015</u>
Staff Counsel	Date

SUBJECT: Staff's Supplemental Recommendation  
DATE: August 3, 2015

### PROCEDURAL BACKGROUND

On March 31, 2015, Staff submitted its *Staff Recommendation* (referred to herein as “Staff’s Recommendation”) in this case (EFIS item No. 19) in which it recommended that the Commission issue a Certificate of Convenience and Necessity (CCN) to Branson Cedars Resort Utility Company LLC (BCRU or Company) to provide water and sewer service, with certain conditions.

On April 1, 2015 the Commission issued an order directing the other parties to submit responses to the Staff’s recommendation. The Office of the Public Counsel (OPC) submitted a response objecting to Staff’s recommendation, and BCRU submitted a response supporting Staff’s recommendation and disagreeing with OPC’s objections. Both of these responses were filed on April 13, 2015. The intervenor, Branson Cedars, Inc., which is a property owners group whose members are within BCRU’s requested service area, has not submitted a position with regard to Staff’s recommendation.

A prehearing conference was held on April 30, 2015 for the purpose of discussing disagreements among the parties to this case. Staff submitted a Status Report on June 5, 2015, as was ordered by the Commission, to inform the Commission of the status of disposition of this case. The Commission has also directed Staff to submit another status report by August 4, 2015.

## **REVISIONS TO STAFF'S RECOMMENDATION**

Staff is making some modifications to Staff's Recommendation that is based on updated information. The modifications affect revenue and water rate design.

Attachment A, included with this memorandum and incorporated herein by reference, shows Staff's revised rate base and revenue requirement, and highlights modifications of specific expenses. The modifications involve expenses for laboratory fees, legal fees, and PSC annual assessment amounts, resulting in a different revenue level.

Attachment B, included with this memorandum and incorporated herein by reference, shows Staff's modified rate design for the residential class and commercial classes that use multiplier factors for flat water rates. The modified rate design incorporates the modified revenue requirement, and some changes resulting in revised assumptions and updates regarding water use of commercial irrigation customers. A separate page of this document includes detail with regard to assumptions and data on which the rate design is based.

The specific modifications to Staff's Recommendation are as follows:

1. A modification of laboratory fees to reflect quarterly wastewater sampling instead of monthly sampling, and modification of legal fees to include case-related legal expenses that were incurred by BCRU since the test year. Additionally, the estimated PSC annual assessment amount was revised to use the current 2016 Fiscal Year assessment factor.
2. The Branson Cedars landscape commercial customer is changed to a flat rate commercial class factor of 1, from 1.5, based on estimated usage as stated by BCRU.
3. Staff now recommends a metered rate that will only apply to Big Cedar's landscape area. Staff previously proposed applying the 1.5 commercial class factor flat rate for this customer, however after an analysis of actual water use based on meter readings (the only water meter presently on BCRU's system), the metered rate is designed to result in water bills for this customer that, when annualized, are approximately equal to the Class 1 commercial rate. The metered rate consists of a "customer charge" that is largely fixed costs, and a "commodity charge" that largely represents variable costs, as is typical for water rates. However, unlike rates developed using cost of service information, this custom metered rate is calculated as a proportion based on a 35-65 percent ratio of customer charge to commodity charge for 5,000 gallon use customers; and then calculated for Big Cedar based on that specific customer's actual four-year use of approximately 1,400 gallons annualized monthly use. The metered rate is calculated in this manner in order that Big Cedar's water bill will resemble the class 1 flat rate, which applies to other similar but unmetered customers.
4. Staff is no longer recommending the installation of a 3" meter for fire flow, because that meter would be for public fire protection, which is not a specific customer. With the exception of a high service pump that is used for fire flows, the facilities that are used for

public fire protection are also used for landscape irrigation, specifically ponds that are aesthetic grounds features as well as available as a source for fire protection water. As grounds features, this use does involve a commercial water utility customer. Refilling of the ponds may be done by gravity flow, or may be pumped for quick re-filling for fire protection. Staff believes, and continues to recommend, that the Company should install a meter, but one that is sized only for gravity flow pond-filling. This activity involves a relatively large amount of water usage and ultimately this customer could be considered to be a class of its own, as a large irrigation customer. A smaller meter than the previously recommended 3” fire-flow sized meter is needed, but there are variations on what size meter to use for lower flows by gravity, and how the plumbing should be arranged, all of which depends upon how non-fire flow re-filling will be accomplished by this customer. One option would be to use a device called a “detector check assembly” which is a device that utilizes a small meter that is sized based on desired flow to measure normal usage, but automatically allows for unmetered full-pipe fire flow when that is needed. Because of the variables involved, Staff makes no specific recommendation regarding how to meter this customer at this time, but will hold itself out to work with BCRU, if it is desirable, regarding metering configuration.

5. Besides the irrigation customers as noted above, Staff previously recommended that meters be installed for certain commercial customers. Regardless of any potential debate about whether or not any particular customer should be considered to be a commercial customer, Staff now recommends that within six (6) months of an order from the Commission granting a CCN, meters be installed for all commercial (non-residential) customers, except Staff believes it is not necessary to meter the two cabins that are constructed as model homes, because there is likely very little water use associated with those buildings. This recommendation does include the metering of laundry facilities that are owned by two property owners who have multiple residential cabins. It is unknown at this time whether the private laundry facilities might utilize dedicated meters, or if it would be more practical, depending upon building plumbing, to meter each one of the laundry facilities by utilizing meters that are placed on one of the associated residential cabins. The important point is that water usage should be measured for the customers with laundry facilities. Staff recognizes that existing plumbing and service line connection arrangements throughout the service area are largely unknown, since BCRU did not construct the buildings or water system, nor make the connections, and plans and maps are not available. For that reason, it will be necessary for BCRU to determine meter locations, and deal with unusual metering arrangements (two commercial customers with one common connection as an example) as meters are being installed, and water main and service pipe locations are discovered. One water meter is in fact already in place for one of the landscape customers, Big Cedar, as noted. It would be acceptable to Staff for BCRU to install additional meters to measure water use on residential cabins or the model homes, either within the recommended six-month period, or after that period. Staff will hold itself out to assist BCRU, if it is desired, to resolve difficult situations in order to attain the goal of metering the commercial water customers.

6. Staff has re-visited a late charge that was included in Staff's Recommendation, in the amount of \$25. After further study and discussion with BCRU, Staff wishes to modify its recommendation to reflect this to be an optional charge of \$5. BCRU states that it has never actually assessed a late charge, and further if such a charge were to be assessed BCRU would have to bill the customer separately from the regular utility bills that are issued by the contract billing agent, White River Valley Environmental Services, LLC, because the billing agent does not undertake collection action nor add extra special fees such as this.

Other points of Staff's Recommendation that were originally stated remain, including recommending the approval of service area, depreciation schedules, and tariffs to be filed by BCRU at a later time.

After making the above-noted changes, Staff's recommended flat monthly water rate for residential customers, revised from the Staff's Recommendation, is \$56.29, increased from \$53.91. The revised recommended flat monthly rate for residential sewer customers is \$48.26, decreased from \$48.82. The revised recommended water and sewer rates combined would result in a residential monthly utility bill of \$104.55, increased from \$102.73. The larger commercial flat rates change proportionally as well. A metered rate of \$37.14 monthly customer charge and \$13.79 per 1,000 gallons commodity charge is proposed to apply only to Big Cedar as an existing customer for its landscape area, and which is intended to result in water bills that on an annual basis are approximately equal to the recommended commercial class 1 flat water rate. Staff notes that in the unlikely event that this customer's water use significantly changes, then this rate may not be appropriate, and the customer may need to be converted to another rate class.

Any water meters installed by BCRU between now and the completion of its next rate case would be used to collect water use information, and in turn those meter readings would be used to develop metered rates applicable to metered customers.

### **FUTURE RATE REVIEWS AND RATE CASES**

As is typical with CCN cases, many factors that are necessary to be considered when setting rates for customers are estimated. Among the estimates that apply to BCRU are water usage for various types of customers, future expected operating expenses that have not been incurred in the past, and future capital expenditures. Estimates for other items apply in other cases.

Due to the uncertainty of relying on estimates, generally, in CCN cases, Staff often advocates conducting a rate review within some time frame, such as within eighteen (18) months, in order to check for overearnings after the utility has experienced a full year of operational history. Overearnings could result if expense estimates are overstated, or if customer growth is much greater than expected from a forecast, or because of other unexpected changes in expenses. However, a time frame for a rate review that may be contemplated in a recommendation is sometimes postponed at a later time, because of unexpected changed circumstances that could include a lack of customer growth. Staff believes, at this time, that a rate review of BCRU will

be appropriate within an eighteen month time frame from the effective date of an order from the Commission granting a CCN. Staff has some freedom to choose when the best time may be to conduct a rate review.

While Staff is interested, generally, in reviewing new utilities' financial records to check for overearnings, the utilities on the other hand will at some point decide to file a rate case, seeking to increase rates, because they believe they are under earning. Under earnings situations could result if estimates are understated, or customer growth does not happen as predicted, or capital expenditures are greater than expected. Utilities choose to file rate cases based on circumstances that could include timing of capital projects, their ability to meet day-to-day operating expenses, customer growth or perhaps a lack of growth, significant capital expenditures, and the utilities' abilities to spend the amount of time and money necessary to handle a rate case as well, as well as deal with the impact upon their customers.

Staff observes that BCRU, in particular, will be expending capital funds to install meters, to actually charge customers based on actual water use, and to replace its sewage treatment facility with a lift station that will pump sewage to a nearby municipality for wholesale treatment, as discussed on page 3 of the Staff Recommendation filed on March 31, 2015. As such, it is likely that BCRU will seek a rate increase at some time in the foreseeable future, but the date that would be the most advantageous to do so is unknown at this time and should be left to the business decision of BCRU.

In its response to the Staff Recommendation filed on April 13, OPC expressed its belief that Staff's Recommendation should contain a requirement for a rate case in the near future and a refund/credit provision pending the outcome of that future rate case. For the reasons stated above, Staff does not agree that including any such requirements with indeterminate dates, whether as a recommendation to the Commission or to BCRU, is appropriate. Rather, Staff recommends the Commission set rates as it sees appropriate, as is normally done in CCN cases; and then Staff, BCRU, and OPC may exercise any available actions to study rates in the future, and take action as necessary based on what is found at that time.

### **STAFF'S CONCLUSIONS AND MODIFIED RECOMMENDATIONS**

To summarize, Staff retains its position that BCRU's proposal seeking a CCN to provide water and sewer service, with conditions as described in Staff's Recommendation and modified within this memorandum, is reasonable, feasible and is not detrimental to the public interest.

Staff's specific recommendation points for this case, as originally stated or as modified herein, is that the Commission issue an order that does the following:

- a. Approves a CCN for BCRU to provide water and sewer service in the proposed Branson Cedars service area as modified by Staff and BCRU, and as shown in Staff's recommendation of March 31, 2015;

- b. Approves monthly residential flat rates of \$56.29 for water service and \$48.26 for sewer service, with factored flat rates for various commercial customers and a metered rate of \$37.14 monthly customer charge and \$13.79 per 1,000 gallons commodity charge for one specific existing customer with established historical water usage, all as shown on Attachment A;
- c. Service charges to include a \$5 optional late charge applicable to either a water bill or combined water and sewer bill, a \$25 trip charge for turn-on, turn-off, or service/investigative work undertaken by BCRU, and actual cost of emergency or requested repair work to a customer-owned sewer STEP unit undertaken by BCRU or a contractor hired by BCRU;
- d. Requires BCRU to install a master meter on each of its two wells, and water meters for all of the commercial customers, within six (6) months after the effective date of an order approving a CCN, read the meters monthly, retain meter plant records, and maintain meter read records for each metered customer;
- e. Requires BCRU to submit new complete tariffs for water service and sewer service, as 30-day filings, within 20 days after the effective date of an order approving a CCN;
- f. Authorizes BCRU to utilize and apply water and sewer depreciation rates as included with Staff's recommendation of March 31, 2015;
- g. Requires BCRU to keep its financial books and records for plant-in-service and operating expenses in accordance with the NARUC Uniform System of Accounts;
- h. Requires BCRU to keep operations records including those for customer complaints/inquiries, vehicle, equipment and telephone use records, maintenance activity, service calls and customer account records;
- i. Makes no finding that would preclude the Commission from considering the ratemaking treatment to be afforded any matters pertaining to the granting of the subject Certificate, including expenditures related to the certificated service area, in any later proceeding.

Staff will file a further recommendation regarding approval of water and sewer tariffs that BCRU will be submitting in accordance with the Commission's order granting the CCN.

List of Attachments:

Attachment A - Revised Staff Rate Base and Revenue Requirement

Attachment B – Revised Rate Design for Water and Sewer Monthly Rates

**Branson Cedars Resort**  
**WA-2015-0049**  
**Staff Rate Base and Revenue Requirement (Revised)**

RATE BASE - WATER		
USOA Account Number	Description	Total Plant 12/31/2014
<b>Plant-in-Service</b>		
<b>Source of Supply Plant</b>		
311.000	Structures and Improvements	\$ 2,979
314.000	Wells and Springs	\$ 19,614
<b>Pumping Plant</b>		
325.100	Electric Pumping Equipment	\$ 42,920
<b>Transmission and Distribution Plant</b>		
342.000	Distribution Reservoirs and Standpipes	\$ 13,737
343.000	Transmission and Distribution Mains	\$ 34,516
345.000	Services	\$ 256
346.000	Meters	\$ 99
<b>Total Gross Plant</b>		<b>\$ 114,120</b>
<b>Depreciation Reserve</b>		
<b>Source of Supply Plant</b>		
311.000	Structures and Improvements	\$ 1,507
314.000	Wells and Springs	\$ 11,179
<b>Pumping Plant</b>		
325.100	Electric Pumping Equipment	\$ 21,213
<b>Transmission and Distribution Plant</b>		
342.000	Distribution Reservoirs and Standpipes	\$ 8,912
343.000	Transmission and Distribution Mains	\$ 11,389
345.000	Services	\$ 25
346.000	Meters	\$ 12
<b>Total Accumulated Reserve</b>		<b>\$ 54,237</b>
<b>Net Plant in Service</b>		<b>\$ 59,883</b>
<b>Subtract from Net Plant</b>		
Contributions in Aid of Construction (CIAC)		\$ 27,247
Customer Deposits		\$ -
<b>Total Subtract from Net Plant</b>		<b>\$ 27,247</b>
<b>TOTAL RATE BASE - WATER</b>		<b>\$ 32,637</b>

RATE BASE - SEWER		
USOA Account Number	Description	Total Plant 12/31/2014
<b>Plant-in-Service</b>		
<b>Collection Plant</b>		
352.100	Collection Sewer - Force	\$ 48,591
352.200	Collection Sewer - Gravity	\$ 7,708
<b>Treatment &amp; Disposal</b>		
373.000	Treatment & Disposal Equipment	\$ 129,381
<b>Total Gross Plant</b>		<b>\$ 185,680</b>
<b>Depreciation Reserve</b>		
<b>Collection Plant</b>		
352.100	Collection Sewer - Force	\$ 5,638
352.200	Collection Sewer - Gravity	\$ 924
<b>Treatment &amp; Disposal</b>		
373.000	Treatment & Disposal Equipment	\$ 38,721
<b>Total Accumulated Reserve</b>		<b>\$ 45,283</b>
<b>Net Plant in Service</b>		<b>\$ 140,397</b>
<b>Subtract from Net Plant</b>		
Contributions in Aid of Construction (CIAC)		\$ 37,456
Customer Deposits		\$ -
<b>Total Subtract from Net Plant</b>		<b>\$ 37,456</b>
<b>TOTAL RATE BASE - SEWER</b>		<b>\$ 102,941</b>

COST OF SERVICE - WATER		
Expense	Amount	
Operations & Maintenance - Outside Services Employed	\$5,426	
Operations & Maintenance - General Expense	\$976	
Maintenance Salaries	\$3,328	
Billing & Collections	\$1,029	
Accounting/Office Staff Salaries	\$731	
Supplies Expense	\$521	
Chemical Expense (Chlorine)	\$1,791	
Chemical Expense (Aluminum Sulfate)	\$0	
Lab Fees (Wastewater Sampling)	\$0	
Lab Fees (E Coli Testing)	\$623	
Electricity Expense (Pumping)	\$18,912	
DNR Lab and Operating Permit Fees	\$100	
Property & General Liability Insurance Expense	\$139	
Real Estate Taxes	\$80	
Legal Fees (Amortization of cost of certificate case)	\$2,272	
PSC Assessment (0.72667650% of revenue)	\$156	
Employer FICA Taxes	\$215	
Missouri Unemployment Taxes	\$99	
Depreciation Expense	\$5,800	
Amortization of CIAC	(\$2,145)	
Weighted Return on Rate Base (7.66%)	\$2,500	
<b>Total Annual Cost of Service - Water</b>		<b>\$42,553</b>

COST OF SERVICE - SEWER		
Expense	Amount	
Operations & Maintenance - Outside Services Employed	\$7,077	
Operations & Maintenance - General Expense	\$0	
Maintenance Salaries	\$1,664	
Billing & Collections	\$1,029	
Accounting/Office Staff Salaries	\$731	
Supplies Expense	\$490	
Chemical Expense (Chlorine)	\$0	
Chemical Expense (Aluminum Sulfate)	\$936	
Lab Fees (Wastewater Sampling)	\$800	
Lab Fees (E Coli Testing)	\$0	
Electricity Expense (Pumping)	\$3,652	
DNR Lab and Operating Permit Fees	\$250	
Property & General Liability Insurance Expense	\$65	
Real Estate Taxes	\$0	
Legal Fees (Amortization of cost of certificate case)	\$2,066	
PSC Assessment (0.93783445% of revenue)	\$139	
Employer FICA Taxes	\$136	
Missouri Unemployment Taxes	\$62	
Depreciation Expense	\$7,595	
Amortization of CIAC	(\$2,149)	
Weighted Return on Rate Base (7.66%)	\$7,885	
<b>Total Annual Cost of Service - Sewer</b>		<b>\$32,428</b>

<b>Total Operating Revenues at Current Rates - Water</b>	<b>\$21,480</b>
<b>Overall Revenue Increase Needed - Water</b>	<b>\$21,073</b>

<b>Total Operating Revenues at Current Rates - Sewer</b>	<b>\$19,080</b>
<b>Overall Revenue Increase Needed - Sewer</b>	<b>\$13,348</b>



Branson Cedars

**Updated for design revenue July 29, 2015**

rate design WA-2015-0049

Previously was Attachment H in Staff's recommendation of March 31, 2015

High Service pumping for public fire protection, including 1 fire hydrant and extraordinary pond re-fill for fire water. Fire flow use not included in rate design.

customers	water		sewer		
		flat rate factor		flat rate factor	
residential	47	1.00	47	1.00	model homes not included in residential count
commercial					
private laundry facility a	1	1.00	1	1.00	separate building to be metered, arrangement TBD
private laundry facility b	1	1.00	1	1.00	basement of a cabin to be metered, arrangement TBD
model homes	2	1.00	2	1.00	expected low usage, metering not necessary initially
Big Cedar landscape	1	1.00			5/8 inch meter in place
Branson Cedars landscape	1	1.00			5/8 inch meter recommended
Store	1	1.00	1	1.00	to be metered, probaly 5/8"
BC shop	1	1.00			to be metered, probaly 5/8"
Outpost	1	1.00	1	1.00	to be metered, probaly 5/8"
BC sales office	1	1.50	1	1.50	to be metered, size TBD
Pool/bath	1	1.50	1	1.50	5/8 inch meter recommended
Pond fill by gravity	1	4.00			to be non-fire flow metered, size and arrangement TBD
customer equivalants		63.00		56.00	
design revenue		\$42,553		\$ 32,428	

monthly rates - residential	\$ 56.29	\$ 48.26
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commercial class 1.0	\$ 56.29	\$ 48.26
commercial class 1.5	\$ 84.44	\$ 72.39
commercial class 4.0	\$ 225.16	

metered class 1.0 commercial	\$ 37.14	customer charge, per month
(Big Cedar only)	\$ 13.79	commodity charge, per 1,000 gallon

\$ 104.55 combined (was 53.91 and 48.82 in original staff rec)

(water was 53.91)  
(water was 80.87)  
(water was 215.64)

meter readings for installations other than Big Cedar landscape are for study and data collection until further rate design work in a rate review or a rate case

Numbers and assumptions for rate design  
 merciel  
 assumptions were updated 6/25/15

July 29, 2015

-- seasonal monthly usage is usage per month when water is used  
 -- annual monthly usage is total seasonal use divided by 12 months

use 5,000 for residential and class 1 factor water use  
 use 65% desired ratio of commodity charge expense to customer charge expense

**private laundry facility a - Chodrick** assume 3 day per week use 156 days per year, 624 cabin-days  
 ---per data request 4 cabins 0.5 washerload per cabin-day 312 washerloads  
 25 gallons per wash 7,800 annual use  
 650 annual monthly use

USE CLASS 1 FLAT RATE

**private laundry facility b - Budd** assume 3 day per week use 156 days per year, 2,652 cabin-days  
 ---per data request 17 cabins 0.5 washerload per cabin-day 1,326 washerloads  
 25 gallons per wash 33,150 annual use  
 2,763 annual monthly use

USE CLASS 1 FLAT RATE

**model homes** minimal use

USE CLASS 1 FLAT RATE FOR EACH

**Big Cedar landscape** 47 months metered use 65,253 gallons  
 ---per data request 19 summer months water actually used  
 3,434 seasonal monthly usage  
 16,656 average annual usage 1,388 annual monthly use

USE A CUSTOM METERED RATE EQUAL TO CLASS 1 FLAT RATE

\$ 56.29 class 1 monthly flat rate				original staff rec was 1.5 class flat rate
Big Cedar metered rate is proportional to		apply Big Cedar usage		
35% of class 1 flat monthly rate, customer chg	\$ 19.70	\$ 19.70	<b>customer charge \$ 37.14</b>	
65% of class 1 flat rate monthly rate	\$ 7.32	\$ 10.16	<b>commodity charge \$ 13.79 per 1,000 gal</b>	
divided by assumed class 1 monthly use, commodity chg				
total to be proportional to:	\$ 29.86	check bill calculation	\$ 37.14	
proportion factor	1.885		\$ 19.31	1.4 average month use
			<b>\$ 56.45</b>	has rounding error

**Branson Cedars landscape** 135 days per year 1 hr per day 7 gpm assumpt 10 rain days per month 45 rain days 90 actual days used  
 ---per data request May 15 - Sept 30 420 gallons per day when used  
 8400 seasonal monthly usage 20 days per month used  
 37,800 average annual usage 3,150 annual monthly use

USE CLASS 1 FLAT RATE

**Store** minimal commercial use

USE CLASS 1 FLAT RATE

**BC shop** minimal commercial use

USE CLASS 1 FLAT RATE

**Outpost** minimal commercial use

USE CLASS 1 FLAT RATE

**BC sales office** daily commercial use with kitchen facility, assume somewhat greater than residential and class 1 use

USE CLASS 1.5 FLAT RATE

**Pool/bath** 1,000 gallons per day domestic use; hose use; 2-hour refill 135 days per year  
 ---per data request 10 gpm est May 15 - Sept 30  
 30,000 seasonal monthly usage 30 days per month used  
 135,000 average annual usage 11,250 annual monthly use  
 2.3 customer equivalent usage  
 1.5 customer charge equivalent, applying commodity/customer ratio

USE CLASS 1.5 FLAT RATE

**Pond fill by gravity** 3,600 gallons per day March through November 9 months 270 days 972,000 total annual usage  
 ---per data request 108,000 seasonal monthly usage  
 972,000 average annual usage 81,000 annual monthly use  
 16.2 customer equivalent usage  
 10.5 customer charge equivalent, applying commodity/customer ratio

apply as large irrigation rate =>

USE CLASS 4 FLAT RATE

The 3 inch meter previously recommended by staff is no longer being recommended, because that is only for public fire flow use.  
 A 2 inch meter is likely adequate for full pipe gravity pond irrigation flow, 140 gpm, however the meter must be bypassed for pumped fire flow.  
 A smaller meter may be used if flow is throttled to meter flow capacity, must be by-passed for pumped fire flow.  
 The 15 hp high service pump, if used for the 3 inch pond pipelines, could produce flow of 220 gpm, within the capacity of a 3 inch meter.