

LETTER REPORT

for

Transient Rental Unit Rates

for

Broad Creek Public Service District Hilton Head Island, SC

August 20, 2004

Revised November 30, 2005

LETTER REPORT

This Report addresses the cause and study for a new rate Category in Broad Creek Public Service District's (BCPSD) Schedule of Rates due to "Change in Use" of many of the District's S/F and M/F dwelling units to Transient Rental Units (TRU's) to include Time Sharing Units (TSU's); not different from hotel rooms. Within the District, there are numerous types of rental units; to wit, Permanent, Long and Short Term, Timeshares and Hotel Rooms. See Exhibit #1.

The District sewer collection system and Wastewater Treatment Plant (WWTP) were planned and designed based on PEAK FLOWS for every lot and facility being occupied at build out. The current build out flows excluding excess flows attributable to TRU's is 2.08 MGD. See Exhibit #2. There are now an estimated 1800 TRU's and 205 TSU's in the District which add additional peak flows for S/F and M/F units above those projected. See Exhibits #3 and #4. Based on random flow metering of TRU's throughout the District, the projected increased peak flow is estimated to be approximately 426,385 gpd or a 20.5% increase to the system as denoted in Exhibit #5. The WWTP and vacuum system cannot take these increases without modification. The District has already started enlargement and replacement of vacuum lines at a cost of \$992,000. The WWTP will have to be enlarged to 2.47 MGD at a cost of \$3,048,650. See Exhibit #6. The total impact will be \$4,040,650 plus increases in annual O & M costs and coverage. Thus, special funding/loans will be required. Assuming, the District can obtain a 20 year State Revolving Fund Loan (SRF) or Bonds at 5%, the annual debt service will be approximately \$324,232 plus coverage and O & M costs. This cost is directly related to change in use from the TRU's, and not the other users within the District. The projected revenue increase from the TRU's as denoted in Exhibit #3 is estimated to be \$601,200./year which will cover the debt service, coverage and operation costs of the District caused by TRU's. These costs are shown in Exhibits #6 and #7. The District's current reserves have been reduced due to enlargement and replacement of portions of the vacuum system.

The cost comparison of the proposed flat rate increase for sewer rates between TRU's and hotel rooms range from 20% to 80% lower for TRU's. See Exhibit #8. Also the financial effect to TRU consumers is estimated to average less than 1%; i.e. .006% for the average rental use of 20 weeks per year versus income received by said users. See Exhibit #9.

The proposed flat rate adjustment is from \$30/month to \$50/month for 2 and 3 bathroom units and from \$30/month to \$100/month for 4 and more bathroom units.

BCPSD's rate adjustment for TRU's is very consistent with other rental units such as hotels. The District user charges will remain in the lowest percentile within the South Carolina low country and region as shown on Exhibits 10a and 10b.

OCCUPANCY TYPES WITHIN BCPSD
(Furnished by H.H. Hospitality Assoc.)

PERMANENT YEAR ROUND	-	NO GUESTS
PERMANENT YEAR ROUND	-	WITH GUESTS
PERMANENT PARTIAL YEAR	-	VACANT NO GUESTS
PERMANENT PARTIAL YEAR	-	GUESTS
LONG TERM RENTALS BY OWNER	-	FULL YEAR
LONG TERM RENTALS BY OWNER	-	PARTIAL YEAR
LONG TERM RENTALS BY RENTAL CO.	-	FULL YEAR
LONG TERM RENTALS BY RENTAL CO.	-	PARTIAL YEAR
SHORT TERM RENTALS BY RENTAL CO.	-	PARTIAL YEAR
SHORT TERM RENTALS BY RENTAL CO.	-	PARTIAL YR/LONG TERM- REST OF YEAR
SHORT TERM RENTALS BY OWNER	-	PARTIAL YEAR
SHORT TERM RENTALS BY OWNER	-	PARTIAL YR/LONG TERM- REST OF YEAR
TIME SHARES	-	52 WEEKS A YEAR BY OWNERS
TIME SHARE	-	OWNERS & RENTALS
HOTELS	-	RENTALS
	-	FULL YEAR

**BUILD OUT SEWER FLOWS
FOR
BROAD CREEK PUBLIC SERVICE DISTRICT**

The following calculation represents the District's Build-out peak flows using South Carolina DHEC Unit Contributory Loading which are consistent with the Districts flow per ERU.

S/F - 1246 x 400 gpd	=	498,400
M/F – (2 BR Av.) 4311 x 300 gpd	=	1,293,300
Hotel Rooms 1323 x 100 gpd	=	132,300
Commercial (ERU) 1,033 x 100 gpd	=	<u>103,300</u>
		2,027,300 gpd

Used 2.08 MGD - 1990

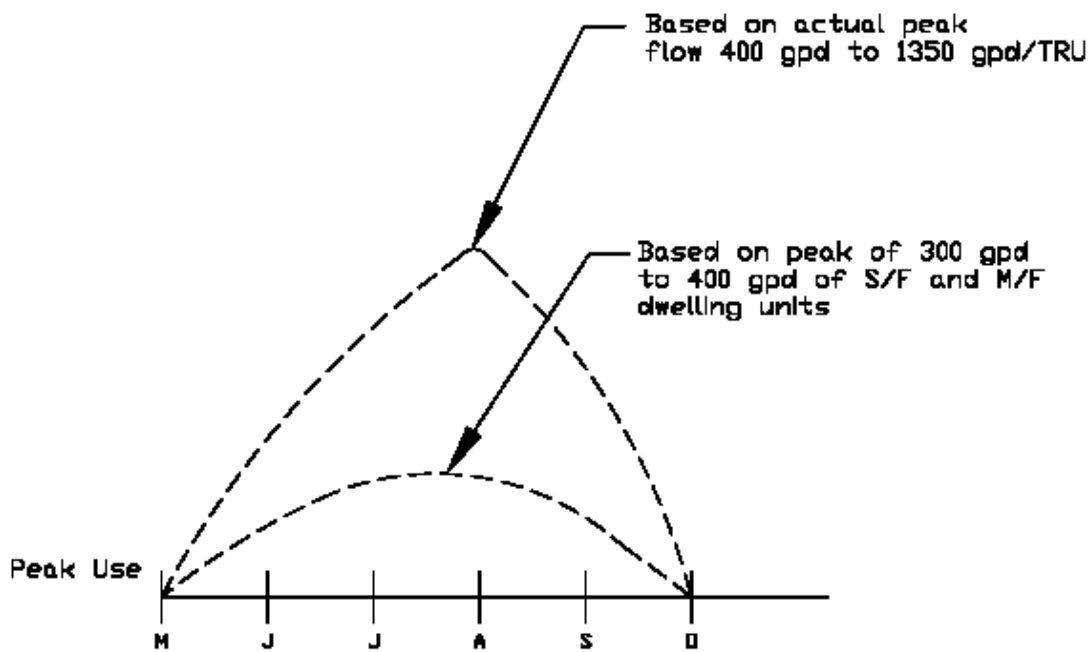
BR = Bathroom

ERU = Equivalent Residential Units

**INVENTORY OF TRANSIENT RENTAL UNITS (TRU'S)
AND
PROJECTED REVENUES FROM TRU'S**

Single Family Dwelling to TRU's	=	200 DU
Multi Family Dwelling to TRU's	=	1,600 DU
Multi Family Dwelling to TSU's	=	205 DU
 Estimated Additional Revenues Generated		
(TSU's) 205 M/F @ \$240.00	=	\$ 49,200.00
(TRU's) 200 S/F @ \$840.00/yr	=	\$168,000.00
(TRU's) 1600 M/F @ \$240.00/yr	=	<u>\$384,000.00</u>
		\$601,200.00/year

**PEAK FLOW CURVE
OF
FLOWS FROM TRU'S
VERSUS
PROJECTED PEAK FLOWS**



**METERING SUMMARY OF
 PEAK SEWER FLOW FROM TRU'S**

Vacuum Counters (Metering)

Rental (TRU's)	Test #1	349	Test #6	121
	Test #2	486	Test #7	65
	Test #3	117	Test #8	232
	Test #4	52	Test #9	290
	Test #5	145	Test #10	76
	Av = 193 cycles/day x 7 gal/cycle =			

Residential (Non-TRU's)	Test #1	29	Test #6	23
	Test #2	258	Test #7	21
	Test #3	28	Test #8	38
	Test #4	27	Test #9	11
	Test #5	77	Test #10	14
	52.6 x 7 gal = 368.2 gpd			

Note: Each Cycle = 7 gal per day
 (Average 5-10 gpd; use 7 gpd) ***

Therefore, the following Peak Flow Increase is:

S/F Units: $1,351 \text{ gpd} - 400 \text{ gpd} = 951 \text{ gpd} \times 200 \text{ TRU's} \times 60\%* = 114,120 \text{ gpd}$

M/F Units: $35\%** \times 1351 \text{ gpd} = 473 \text{ gpd} - 300 \text{ gpd} \times 1,805 = \frac{312,265 \text{ gpd(c)}}{426,385 \text{ gpd(c)}}$

- * Reduction given based on occupancy, size, and the metered S/F flows being lower than State unit contributory load factors.
- ** Reduction given based on number of M/F bathrooms being 30% to 40% of the S/F.
- *** Gallons/cycle based on original sensor settings and manufacturers recommendations. Day to day system operation may cause actual gallons/cycle to be in excess of the norm, but not less than norm.



**COST OF IMPROVEMENTS NEEDED TO
ACCOMMODATE EXCESS PEAK FLOWS**

A. Following are the Vacuum Line Replacement Projects Completed:

Full Sweep Vacuum Line	\$ 210,000
Midstream Vacuum Line	\$ 63,400
Rum Row Vacuum Line	\$ 103,500
Starboard Tack Vacuum Line	\$ 82,500
Mooring Bouy Vacuum Line	\$ 22,600
Mariners T-Roads Vacuum Lines	<u>\$ 235,000</u>
Total Completed	\$ 717,000

B. Pending Vacuum Line Replacement Projects:

Sea Lane Vacuum Line	\$ 110,000
Offshore Vacuum Line	<u>\$ 140,000</u>
Sub- Total	\$ 250,000
10% E & C	<u>\$ 25,000.</u>
Total	\$275,000.

Additional vacuum line replacement projects will be required in the future as single family homes continue to be replaced with larger TRU's.

C. Expected WWTP Expansion Cost as a Result of Change in Use/Peak Excess Flows and Vacuum System:

Project WWTP influent (due to change in use) – 2.47 MGD

Cost to expand WWTP by 426,385 gpd x \$6.50/gal = \$2,771,500.

10% E & C = \$ 277,150.

Total Cost (WWTP) = \$3,048,650.

Cost of A & B (Vacuum System) = \$ 992,000.

Total Cost (Due to Excess Flows) = \$4,040,650.

D. O & M Cost Increase [2.08 MGD to 2.51 MGD – 20.67% x .9] = \$197,745. (Annual)

E. Coverage Required by SRF Loans and/or Bond Validation

20% Annual Debt Service = \$ 64,846.40 (Annual)

Note: “Excess Peak Flows” are the amount of flow that exceeds SC DHEC Unit Contributory Load Factors used to size the existing facility (WWTP).

**DEBT SERVICE FOR CAPITOL IMPROVEMENTS, O&M, & COVERAGE
(Expansion of WWTP & Vacuum System)**

A. CIP – Annual Debt Service:

Cost: \$4,040,652

Bond/SRF Loan; Term - 20 years @ 5%

Therefore: 5% at 20 years (CIP)

.0802425872 x \$4,040,652. = \$324,232.00/year

B. Additional O&M Cost = \$197,745.00/year

C. Coverage Required = \$ 64,846.40/year

Total Additional Cost to BCPSD \$586,823.00/year

<u>Estimated Revenue</u>		<u>Expected Expenses</u>
\$601,200.	>	\$586,823.

**COST COMPARISON
PROPOSED TRU'S RATES TO CURRENT HOTEL RATES**

1 BR TRU's Exempted

Current Hotel Room – Flat Rates

(\$30/RM)

2 BR	=	\$60/mo
3 BR	=	\$90/mo
4 BR	=	\$120/mo
5 BR	=	\$150/mo

<u>TRU's</u>		<u>Flat Rates</u>	<u>Percent Lower</u>
2 BR	=	\$50/mo	20%
3 BR	=	\$50/mo	80%
4 BR	=	\$100/mo	20%
5 BR	=	\$100/mo	50%

BR = Bathroom

**FINANCIAL EFFECT TO CONSUMERS
DUE TO
CHANGE IN USE RATES FOR TRU'S**

Based on discussions and input from representatives of the Hilton Head Hospitality Association, The District does propose to exempt 1 Bathroom dwelling units and transient rental dwelling units (TRU) that are rented for two weeks or less per year. The cost impact to 2-3 BD TRU is 0.57% of 1%, and for more than 3 Bathrooms is 0.6% of 1% of revenue, or less than 1% on average. A non-factor on the customer's income stream.

$$1-3 \text{ BR } (\$525/\text{wk to } \$3,675/\text{wk}) = \$2,100 \text{ Av. } \times 20 = \frac{\$240}{\$42,000} = .57\% < 1\%$$

$$4 \text{ BR and up } (\$2,225/\text{wk to } \$11,525/\text{wk}) = \$6,815 \text{ Av. } \times 20 = \frac{\$840}{\$137,500} = .6\% < 1\%$$

**USER RATE
COMPARISON
For Water and Sewer Service
per 10,000 Gallons
per Month**

Location	Rate
Isle of Palms W&S Commission	\$91.00
Kiawah Island Utility	\$74.14
Beaufort Jasper W&S Authority	\$73.50
Fripp Island PSD	\$52.46
Hilton Head #1 PSD	\$48.25
Broad Creek PSD	\$40.80
South Island PSD	\$34.80

TYPICAL MONTHLY WATER & WASTEWATER BILLS
Residential Costumers = 10,000 Gallons Usage
Large & Small Cities and Towns

Community	Average Monthly Rate
Alpharetta	93.72
Rockdale County	89.33
Forsyth County	85.64
Oconee County	81.98
Newton County	80.36
Fayette County	76.86
Peachtree City	76.86
Atlanta	75.06
Henry County	74.94
Carroll County	74.13
Cherokee County	73.66
Gwinnett County	73.44
Douglasville	72.36
Woodstock	71.84
Butts County	71.66
Coweta County	69.10
Covington	67.08
Cobb County	64.70
Marietta	64.12
Gainesville	61.05
Fayetteville	59.04
Griffin	58.60
Average	58.18
McDonough	56.80
LaGrange	56.42
Athens-Clarke County	55.82
Clayton County	55.00
Monroe	53.25
Hartwell	52.84
Columbia County	50.29
Rome	47.06
Jackson	46.40
Augusta-Richmond County	45.32
BCPSD	40.80
East Point	40.66
Adel	39.73
Toccoa	39.45
Macon	38.66
Milledgeville	38.61
Albany	37.78
Stockbridge	37.39
Calhoun	37.37
Carrollton	36.61
Savannah	35.64
Warner Robbins	35.12
Columbus	34.78