

Brazos River Authority
City of Sugar Land Wastewater Operations
FY 2018 Budget Update - Final as of August 4, 2017

| | | | 2017 | 2018 | | |
|-----|---|---|--------------|--------------|--|--|
| 1 | Base Fee | | \$ 1,409,647 | \$ 1,409,647 | | |
| | Article V(a) states the base fee will be adjusted by an amount that is 100% of the increase or decrease, if any, up to 2.5%, in the most recently published Consumer Price Index as determined by the US Dept. of Labor-Houston Metro area. See attached 12 month rate change thru June 2017 of 1.6%. | | | \$ 22,554 | | |
| | Sub-Total Base Fee | | \$ 1,409,647 | \$ 1,432,201 | | |
| 2 | Disinfection Chemicals | | | | | |
| | | <table><tr><th>Qty</th><th>Unit Price</th></tr></table> | Qty | Unit Price | | |
| Qty | Unit Price | | | | | |
| | Sodium Hypochlorite | 225,974 \$ 0.65 | \$ 146,635 | | | |
| | Sodium Bisulfite | 34,771 \$ 1.52 | \$ 53,005 | | | |
| | Sodium Hypochlorite | 240,900 \$ 0.65 | | \$ 156,320 | | |
| | Sodium Bisulfite | 36,300 \$ 1.52 | | \$ 55,336 | | |
| 3 | Sludge Hauling - For FY 18, unit price decreased from \$32.00 to \$31.37 | | | | | |
| | | <table><tr><th>Qty</th><th>Unit Price</th></tr></table> | Qty | Unit Price | | |
| Qty | Unit Price | | | | | |
| | North Plant Sludge | 6,000 \$ 31.40 | \$ 188,400 | | | |
| | South Plant Sludge | 4,200 \$ 31.40 | \$ 131,880 | | | |
| | North Plant Sludge | 6,600 \$ 31.37 | | \$ 207,042 | | |
| | South Plant Sludge | 5,100 \$ 31.37 | | \$ 159,987 | | |
| 4 | Additional Sampling required by new permits | | | | | |
| | See detail in projected sampling section below | | \$ 19,040 | \$ 19,320 | | |
| 5 | Repair & Maintenance (SLNP/SLSP) | | \$ 122,000 | \$ 122,000 | | |
| 6 | Sugar Land South Plant Reclaimed Water Facility (Re-Use) | | \$ 46,000 | \$ 23,550 | | |
| | See detail below - adjusted out Sugar Land staff time | | | | | |
| | Sub-total before Additional Services | | \$ 2,116,606 | \$ 2,175,756 | | |
| 7 | Additional Services (The City did not include this in their approved budget for FY 2017) | | | | | |
| | Replace #1 clarifier drive-SP | | \$ 60,000 | | | |
| | Upgrade 35hp lift pump to 45hp-NP | | 50,000 | | | |
| | Upgrade wasting process & piping system-NP | | 50,000 | | | |
| | Valving repair at South Plant | | 20,000 | | | |
| | Replace all of the old gates in the aeration basin that do not work at the South Plant | | 15,000 | | | |
| | Install shade net cover over reuse filters--SP | | 15,000 | | | |
| | Upgrade NP lift pump VFD's | | 8,000 | | | |
| | Replace 35 HP Lift Pump with 45HP pump and VFD's for Pumps #3 and 4 | | \$ 120,000 | | | |
| | South Plant clarifier #1 and 2 upgrade (replace Drive Unit) | | 120,000 | | | |
| | Upgrade wasting process and piping system | | 50,000 | | | |
| | * Thickened sludge pump (Press supply) | | 36,000 | | | |
| | Replace grit pump #1 | | 20,000 | | | |
| | Install additional Grit washer | | 20,000 | | | |
| | Valving repair throughout South Plant | | 20,000 | | | |
| | Replace all non-functioning aeration gates | | 15,000 | | | |
| | Install shade cover over reuse filters | | 15,000 | | | |
| | Total Additional Services | | \$ 218,000 | \$ 416,000 | | |
| | Grand Total | | \$ 2,334,606 | \$ 2,591,756 | | |

FY 2018 PROJECTED SAMPLING - SUGAR LAND WASTEWATER

| Permit Changes | Sugar Land North | Vendor | # per year | Cost | Total |
|---|--------------------------------------|-------------------|------------|-----------|--------------|
| From \$180 per sample to \$495 per sample for 7 day chronic | Bio monitoring 7 day chronic (Inv) | BioAquatics | 4 | \$ 495.00 | \$ 1,980.00 |
| | Bio monitoring 7 day chronic (Vert) | BioAquatics | 4 | 495.00 | 1,980.00 |
| | Bio monitoring 24hr Acute (Inv) | BioAquatics | 2 | 45.00 | 90.00 |
| | Bio monitoring 24hr Acute (Vert) | BioAquatics | 2 | 45.00 | 90.00 |
| | Sludge | DHL | 1 | 709.00 | 709.00 |
| | Stormwater Metals | DHL | 9 | 106.00 | 954.00 |
| | IPP Short Quarter | DHL | 4 | 1,038.00 | 4,152.00 |
| | IPP Long Quarter | DHL | 2 | 1,519.00 | 3,038.00 |
| New test | Ecoli | Envirodyne | 156 | 40.00 | 6,240.00 |
| | DMRQA | | 1 | 150.00 | 150.00 |
| | TSS | Central Basin Lab | 700 | 24.57 | 17,201.00 |
| | Ammonia as N | Central Basin Lab | 388 | 33.89 | 13,150.99 |
| | CBOD (Carbonaceous Biological Oxygen | Central Basin Lab | 408 | 40.29 | 16,439.00 |
| | Total Solids | Central Basin Lab | 52 | 28.94 | 1,505.00 |
| | NO3 | Central Basin Lab | 12 | 21.17 | 254.00 |
| | NO2 | Central Basin Lab | 12 | 21.75 | 261.00 |
| | Alkalinity | Central Basin Lab | 104 | 23.40 | 2,434.00 |
| | TP | Central Basin Lab | 24 | 41.17 | 988.00 |
| New test | 1631E Mercury | DHL | 8 | 270.00 | 2,160.00 |
| TOTAL | | | 1,893 | | \$ 73,775.98 |

Sampling costs under old permit 62,855.98

Additional Sampling Services for NP \$ 10,920.00

| Permit Changes | Sugar Land South | Vendor | # per year | Cost | Total |
|----------------|--------------------------------------|-------------------|------------|-----------|--------------|
| | Bio monitoring 7day Chronic (Inv) | BioAquatics | 4 | \$ 495.00 | \$ 1,980.00 |
| | Bio monitoring 7day Chronic (Vert) | BioAquatics | 4 | 495.00 | 1,980.00 |
| | Bio monitoring 24hr Acute (Inv) | BioAquatics | 2 | 45.00 | 90.00 |
| | Bio monitoring 24hr Acute (Vert) | BioAquatics | 2 | 45.00 | 90.00 |
| | Sludge | DHL | 1 | 709.00 | 709.00 |
| | Selenium | DHL | 104 | 23.00 | 2,392.00 |
| | Stormwater Metals | DHL | 8 | 106.00 | 848.00 |
| | IPP Short Quarter | DHL | 4 | 1,038.00 | 4,152.00 |
| New test | IPP Long Quarter | DHL | 2 | 1,519.00 | 3,038.00 |
| | Ecoli | Envirodyne | 156 | 40.00 | 6,240.00 |
| | DMRQA | | 1 | 150.00 | 150.00 |
| | TSS | Central Basin Lab | 648 | 24.53 | 15,896.02 |
| | Ammonia as N | Central Basin Lab | 388 | 33.89 | 13,150.87 |
| | CBOD (Carbonaceous Biological Oxygen | Central Basin Lab | 508 | 40.59 | 20,619.97 |
| | Total Solids | Central Basin Lab | 156 | 28.95 | 4,516.00 |
| | NO3 | Central Basin Lab | 12 | 21.17 | 254.00 |
| | NO2 | Central Basin Lab | 12 | 21.75 | 261.00 |
| | Alkalinity | Central Basin Lab | 104 | 23.40 | 2,434.00 |
| New test | Turbidity | Central Basin Lab | 104 | 26.24 | 2,728.96 |
| | TP | Central Basin Lab | 24 | 41.17 | 988.00 |
| | 1631E Mercury | DHL | 8 | 270.00 | 2,160.00 |
| TOTAL | | | 2,252 | | \$ 84,677.83 |

Sampling costs under old permit 76,277.83

Additional Sampling Services for SP \$ 8,400.00

Databases, Tables & Calculators by Subject

Change Output Options:

From: 2016 ▼

To: 2017 ▼

☐ include graphs ☐ include annual averages

Data extracted on: August 4, 2017 (4:50:18 PM)

CPI-All Urban Consumers (Current Series)

Series Id: CUURA318SA0


Not Seasonally Adjusted

Series Title: All items in Houston-Galveston-Brazoria, TX, all urban consumers, not seasonally adjusted

Area: Houston-Galveston-Brazoria, TX

Item: All items

Base Period: 1982-84=100

Download:  .xlsx[illegible]

12-Month Percent Change

Series Id: CUURA318SA0


Not Seasonally Adjusted

Series Title: All items in Houston-Galveston-Brazoria, TX, all urban consumers, not seasonally adjusted

Area: Houston-Galveston-Brazoria, TX

Item: All items

Base Period: 1982-84=100

Download:  .xlsx[illegible]

Brazos River Authority
City of Sugar Land Reclaimed Water Treatment
FY 2018 Budget Update - April 1, 2017

Estimated Annual expenses:

| | |
|--|-------------------------|
| Labor cost - Sugar Land Staff (503 hours) | \$ 19,446 |
| Labor cost - Other BRA Staff (22 hours) | 1,746 |
| E-coli and Turbidity sampling for reuse project (detail below) | 7,421 |
| Grounds Maintenance | 3,500 |
| Repairs & Maint | 6,000 |
| Instrumentation R&M | 2,000 |
| Administrative | 2,883 |
| Annual Total | \$ 42,996 |
| Less - Sugar Land Staff Time | (19,446) |
| Estimated billings to the City | <u>\$ 23,550</u> |

Brazos River Authority will invoice the City for actual expenses each month as they are incurred.

FY 2018 PROJECTED SAMPLING - SUGAR LAND RECLAIMED WATER TREATMENT

| Sugar Land South RWTP | # per year | Cost | Total |
|------------------------------|-------------------|------------------------|--------------|
| Ecoli (Reuse/Permit) | 104 | \$ 40.00 | \$ 4,160 |
| Turbidity (Reuse) | 104 | \$ 31.36 | \$ 3,261 |
| Total | | <u>\$ 7,421</u> | |