

February 23, 2023

## MAXWELL SPECIAL UTILITY DISTRICT WATER RATE STUDY

NewGen<br>Strategies \& Solutions



IMPORTANCE OF LOCAL OFFICIALS IN UTILITY
MANAGEMENT

Utilities operate like a business, though the product being sold is a vital resource shared by all members of the community.

The Board of Directors must be able to address complex industry challenges including rising costs, aging infrastructure, and customer affordability.

The Board of Directors must ensure the viability of the business by ensuring revenues match or exceed expenses and financial metrics are met.

## KEY ISSUES

Financial
Performance

- Financial performance is projected to be insufficient through FY 2027.
- Additional funds needed to meet 1.1x Debt Service Coverage target in FY 2024 and FY 2025.
- 120-day Reserve target not being met in FY 2025 and beyond.
- Considerable growth anticipated over the term of the study.
- \$25.6 Million in Capital Improvements proposed over the next five years.
- Increase in Water Purchase costs due to new water supplies and rise in consumption.
- Growth in Units:
- Residential: Projected growth \% from engineer’s 2022 Impact Fee Report. Assumed 50\% of the anticipated growth in year 1.
- Whisper: 300 outstanding lots. Complete build-out by FY 2024.

| Growth (5/8" meter) | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Residential | 2,342 | 2,670 | 3,044 | 3,470 | 3,956 |
| Whisper | 307 | 507 | 507 | 507 | 507 |

- Impact Fees (per LUE):
- Residential: Assumed application of fee calculated in the engineer's 2022 Impact Fee Report beginning in FY 2025.
- Whisper: Maintain current fee per Settlement Agreement.

| Impact Fees | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Residential | $\$ 3,500$ | $\$ 3,500$ | $\$ 12,940$ | $\$ 12,940$ | $\$ 12,940$ |
| Whisper | $\$ 2,285$ | $\$ 2,285$ | $\$ 2,285$ | $\$ 2,285$ | $\$ 2,285$ |

- Capital Improvement Plan:
- Estimating \$25.6 million in projects over 5 years.
- Growth-related projects will be funded using impact fee revenues to the extent available.

|  | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CRWA |  |  |  |  |  |
| Hays Caldwell | \$1,273,630 | \$1,407,525 | \$1,555,495 | \$1,719,022 | \$1,899,739 |
| Wells Ranch Ph III - Project A \& Buy-in | - | 1,634,771 | 2,018,072 | 2,018,525 | 2,019,964 |
| Wells Ranch - Raw Water | 501,225 | 553,917 | 612,150 | 676,504 | 747,624 |
| Total CRWA | \$1,774,855 | \$3,596,213 | \$4,185,717 | \$4,414,051 | \$4,667,327 |
|  |  |  |  |  |  |
| Groundwater Leases |  |  |  |  |  |
| BK Edwards | \$93,141 | \$97,693.99 | \$102,469.08 | \$107,477.58 | \$112,730.87 |
| John Hohn | 19,516 | 19,516 | 19,516 | 19,516 | 23,436 |
| Total Groundwater Lease | \$112,658 | \$117,210 | \$121,985 | \$126,994 | \$136,167 |
|  |  |  |  |  |  |
| GBRA |  |  |  |  |  |
| Aggregated debt (2018-2021) | \$46,483 | \$192,777 | \$192,106 | \$191,328 | \$190,401 |
| 2022 Bond | - | - | - | 401,820 | 671,320 |
| Total GBRA | \$46,483 | \$192,777 | \$192,106 | \$593,148 | \$861,721 |
|  |  |  |  |  |  |
| 4-D Associates ${ }^{5}$ | \$20,144 | \$21,129 | \$22,161 | \$23,245 | \$24,381 |
| Total Water Purchases | \$1,954,139 | \$3,927,329 | \$4,521,969 | \$5,157,437 | \$5,689,595 |

Note: Water Purchase Costs does not include CRWA Admin Costs

COMBINED REGIONAL BILL COMPARISON MINIMUM BILL

Residential 5/8"
5,000 gallons


Residential Monthly Bill for 5,000 gal

## COMBINED REGIONAL BILL COMPARISON

Residential 5/8"
5,000 gallons


## ANTICIPATED FINANCIAL <br> PERFORMANCE UNDER CURRENT RATES

(\$ Millions)



## IMPACT FEE REVENUES

(\$ millions)

| 5/8" Meter | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Standard Service |  |  |  |  |  |  |
| Previous Year Connections | 2,189 | 2,342 | 2,670 | 3,044 | 3,470 |  |
| New Growth | 153 | 328 | 374 | 426 | 486 |  |
| Total Projected Connections | 2,342 | 2,670 | 3,044 | 3,470 | 3,956 |  |
| Impact Fee | $\$ 3,500$ | $\$ 3,500$ | $\$ 12,940$ | $\$ 12,940$ | $\$ 12,940$ |  |
| Projected Revenue | $\$ 536,305$ | $\$ 1,147,693$ | $\$ 4,837,230$ | $\$ 5,514,442$ | $\$ 6,286,464$ |  |
| Whisper |  |  |  |  |  |  |
| Previous Year Connections | 207 | 307 | 507 | 507 | 507 |  |
| New Growth | 100 | 200 | - | - | - |  |
| Total Projected Connections | 307 | 507 | 507 | 507 | 507 |  |
| Impact Fee | $\$ 2,285$ | $\$ 2,285$ | $\$ 2,285$ | $\$ 2,285$ | $\$ 2,285$ |  |
| Projected Revenue | $\$ 228,500$ | $\$ 457,000$ | $\$-$ | $\$-$ | $\$-$ |  |

## CAPITAL IMPROVEMENT PLAN FUNDING

(\$ millions)

|  | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capital Project Funding |  |  |  |  |  |  |
| Cash Funded | \$0.22 | \$- | \$- | \$2.53 | \$2.07 | \$4.83 |
| New Debt - Impact Fees | \$6.71 | \$7.25 | \$1.95 | \$3.65 | \$ - | \$19.57 |
| New Debt - Rates | - | - | - | - | 1.20 | 1.20 |
| Subtotal Debt Funded | \$6.71 | \$7.25 | \$1.95 | \$3.65 | \$1.20 | \$20.77 |
| Total Capital Projects | \$6.93 | \$7.25 | \$1.95 | \$6.19 | \$3.27 | \$25.59 |
| New Debt P\&I |  |  |  |  |  |  |
| Principal | \$6.71 | \$7.25 | \$1.95 | \$3.65 | \$1.20 | \$20.77 |
| Interest Rate \% | 4.50\% | 5.00\% | 5.00\% | 5.00\% | 5.00\% | 5.00\% |
| Term | 20 | 20 | 20 | 20 | 20 | 20 |
| Annual P\&I | \$0.52 | \$0.58 | \$0.16 | \$0.29 | \$0.10 | \$1.64 |
| Cumulative P\&I | \$0.52 | \$1.10 | \$1.25 | \$1.55 | \$1.64 |  |

[^0]
## CIP FUNDING SUMMARY

( $\$$ millions)

|  | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Principal and Interest |  |  |  |  |  |  |
| Impact Fee Funded | \$0.52 | \$1.10 | \$1.25 | \$1.55 | \$1.55 | \$5.96 |
| Rate Funded | - | - | - | - | 0.10 | 0.10 |
| Total P\&I | \$0.52 | \$1.10 | \$1.25 | \$1.55 | \$1.64 | \$6.06 |
| Rate-Funded Capital |  |  |  |  |  |  |
| Debt | \$ | \$ | \$ - | \$ | \$0.10 | \$0.10 |
| Cash | 0.22 | - | - | 2.53 | 2.07 | 4.83 |
| Total Rate-Funded Capital | \$0.22 | \$0.00 | \$0.00 | \$2.53 | \$2.17 | \$4.92 |

## WATER DESIGN ADJUSTMENTS

- Minimum Bill:
- Phase-in standardized Meter Equivalency for 3" meter over 5 years.
- Volumetric Charge:
- Phase-in standardized $15 \%$ increase between blocks over 5 years.
- Proposed rates effective July 1, 2023.

|  | Replacement Cost |
| :--- | ---: |
| Original Cost | $\$ 9,255,183$ |
| Land | $(463,573)$ |
| Original Cost Net of Land | $\$ 8,791,610$ |
| Target Replacement \% | $1.0 \%$ |
| Annual Replacement Cost | $\$ 87,916$ |
|  |  |
| Replacement Cost per Unit | $\mathbf{\$ 2 . 1 2}$ |
| Replacement Cost per k/gal | $\mathbf{\$ 0 . 3 2}$ |

Note: Replacement Cost analysis currently based on original investment cost. Further analysis of Fixed Assets records needed to assess future replacement cost and the impact of construction cost inflation.

| FY 2023 | Base Rate | R\&R | Total |
| :--- | ---: | ---: | ---: |
| Minimum Monthly Fee |  |  |  |
| 5/8" | $\$ 33.25$ | $\$-$ | $\$ 33.25$ |
| 1" | 33.25 | - | 33.25 |
| EAA Fee | 1.40 | - | 1.40 |
|  |  |  |  |
| Volumetric Rates (per kGal) |  |  |  |
| $0-5,000$ gal | $\$ 8.05$ | $\$ 0.32$ | $\$ 8.37$ |
| $5,000-10,000$ gal | 8.55 | 0.32 | 8.87 |
| $10,000-15,000$ gal | 9.05 | 0.32 | 9.37 |
| $15,000+$ gal | 9.60 | 0.32 | 9.92 |

MONTHLY CUSTOMER BILL PROJECTION

Residential 5/8" (5,000 gallons)


Note:
[1] Includes EAA Fee (\$1.40).

Residential Monthly Minimum Bill

COMBINED REGIONAL BILL COMPARISON MINIMUM BILL

Residential $5 / 8^{\prime \prime}$


Residential Monthly Bill for 5,000 gal

## COMBINED

 REGIONAL BILL COMPARISONResidential 5/8" 5,000 gallons

## MONTHLY CUSTOMER BILL PROJECTION

## Commercial 5/8"

 (50,000 gallons)

Notes:
[1] Includes EAA Fee. Excludes the TCEQ fee.

Commercial 5/8-inch Monthly Bill for 50,000 gal

COMBINED REGIONAL BILL COMPARISON

Commercial 5/8" 50,000 gallons



## FEE COMPARISON

| Fee Type | Current | Proposed | Variance |
| :--- | ---: | ---: | ---: |
| Engineering/Admin Fees (Meter Install) | $\$ 200$ | $\$ 200$ | $\$-$ |
| Service Call/Trip Charge | 30 | 50 | 20 |
| Customer Deposit (Residential) | 200 | 200 | - |
| Disconnect Service Fee | 100 | 100 | - |
| Transfer Fee | 25 | 50 | 25 |
| Re-Connect Service Fee | 30 | 50 | 20 |
| Damage to Meter/Tamper Fee | 100 | 250 | 150 |
| Customer Service Inspection Fee | 75 | 100 | 25 |
| Single Meter Application/Admin Fee | 50 | 75 | 25 |
| Installation Fee - 3/4" Meter (1.25"-8" Line Size) | 1,100 | 1,500 | 400 |
| NSF/Return Check Fee | 35 | 35 | - |
| Fire Hydrant Deposit | - | 2,500 | 2,500 |
| Meter Re-location Fee | - | 1,500 | 1,500 |

## Engineering/Admin Fees (Meter Install)



FEE
COMPARISON


Disconnect Service Fee


Transfer Fee


FEE
COMPARISON

## (Continued)

Damage to Meter / Tamper Fee


Re-connect Service Fee


Customer Service Inspection Fee


Single Meter Application / Admin Fee


Installation Fee - 3/4" meter (1.25" - 8" Line size)


## FEES NOT CURRENTLY CHARGED BY MAXWELL SUD

| Description | Cibolo | Marion | Crystal Clear SUD | $\begin{aligned} & \text { East Central } \\ & \text { SUD } \end{aligned}$ | $\begin{aligned} & \text { Green Valley } \\ & \text { SUD } \end{aligned}$ | Springs Hill WSC | Goforth SUD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Public Works Call-Out Fee | \$50-90/hr |  |  |  |  |  |  |
| Chipper Service | \$0.50 |  |  |  |  |  |  |
| Water Tap Short Service | \$625.00 |  |  |  |  |  |  |
| Water Tap Long Service | \$1,675.00 |  |  |  |  |  |  |
| Wastewater Impact Fee Additional Fee over 6 Feet | \$375.00 |  |  |  |  |  |  |
| CCMA Fee | \$1,800.00 |  |  |  |  |  |  |
| Fire Hydrant Fees (Rental) Deposit |  | \$1,700.00 |  |  |  | \$100.00 |  |
| Voluntary Disconnection for a Period of Time |  | \$15.00 |  |  |  |  |  |
| Backflow Preventer |  | \$300.00 |  |  |  |  | \$100.00 |
| $R$ \& R Depreciation Fee |  |  | \$6.95 |  |  |  |  |
| Debt Service Fee |  |  | \$13.00 |  |  |  |  |
| Service Investigation Fee |  |  |  | \$80.00 |  |  |  |
| Meter Relocation Fee |  |  |  |  | \$400.00 |  |  |
| Customer History Report Fee |  |  |  |  |  | \$5.00 | \$10.00 |
| Non-Disclosure Fee |  |  |  |  |  | \$5.00 |  |

## PATH FORWARD



- The Board of Directors must determine the appropriate path forward.
- Some level of rate action is needed in the near-term.
- Action must balance the needs of the utility with the affordability of service and the overall impact to customers.



## QUESTIONS AND DISCUSSION

NEWGEN STRATEGIES AND SOLUTIONS
275 W. CAMPBELL ROAD, SUITE 440
RICHARDSON, TEXAS 75080

CHRIS EKRUT, CFO AND DIRECTOR
(972) 232-2234

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|  | PROJECT DESCRIPTION | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maxwell Main Spine | \$1.57 | \$1.63 | \$ | \$ | \$ | \$3.20 |
|  | SH 142 Extension | 1.14 | 1.19 | - | - | - | 2.33 |
|  | Maxwell Bottle Neck | 0.07 | - | - | - | - | 0.07 |
|  | Sunset/Hymeadow Line | - | 0.13 | - | - | - | 0.13 |
|  | ARWA Delivery Line | - | - | - | - | 0.69 | 0.69 |
|  | Tower Road | - | - | - | 0.59 | - | 0.59 |
|  | Black Ankle Road | - | - | - | 2.24 | - | 2.24 |
|  | Harris Hill ET | 1.81 | 1.88 | - | - | - | 3.70 |
|  | FM 1966 West ET | - | - | 1.95 | 2.02 | - | 3.98 |
| CAPITAL PLAN | Ground Storage Tank | - | - | - | 0.93 | 0.96 | 1.88 |
|  | Pump Capacity | - | - | - | 0.23 | 0.24 | 0.47 |
| (\$ millions) | Electrical | - | - | - | 0.17 | 0.18 | 0.35 |
|  | Ground Storage Tank | 1.24 | 1.29 | - | - | - | 2.53 |
|  | Pump Capacity | 0.21 | 0.22 | - | - | - | 0.42 |
|  | Electrical | 0.16 | 0.16 | - | - | - | 0.32 |
|  | Ground Storage Tank | 0.41 | 0.43 | - | - | - | 0.84 |
|  | Pump Capacity | 0.16 | 0.16 | - | - | - | 0.32 |
|  | Electrical | 0.16 | 0.16 | - | - | - | 0.32 |
|  | Office Building | - | - | - | - | 1.20 | 1.20 |
|  | TOTAL | \$6.93 | \$7.25 | \$1.95 | \$6.18 | \$3.27 | \$25.58 |

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|  | Residential | Commercial | Saddlebrook | Whisper | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Units by Meter Size |  |  |  |  |  |
| 5/8" | 2,189 | 0 | 569 | 207 | 2965 |
| $1{ }^{\prime \prime}$ | 167 | 48 | 0 | 0 | 215 |
| 1.5 " | 0 | 4 | 0 | 0 | 4 |
| $2{ }^{\prime \prime}$ | 0 | 5 | 0 | 0 | 5 |
| 3" | 0 | 15 | 0 | 0 | 15 |
| 4" | 0 | 1 | 0 | 0 | 1 |
| Total Units | 2,356 | 73 | 569 | 207 | 3,205 |
| Consumption (1,000 gallons) |  |  |  |  |  |
| 0-5,000 gal | 79,287 | 3,508 | 0 | 4,452 | 87,247 |
| 5,000-10,000 gal | 29,063 | 2,713 | 0 | 2,247 | 34,023 |
| 10,000-15,000 gal | 12,641 | 2,044 | 0 | 987 | 15,672 |
| $15,000+\mathrm{gal}$ | 38,248 | 57,586 | 0 | 1,094 | 96,928 |
| All volumes | 0 | 0 | 31,182 | 0 | 31,182 |
| Total Consumption | 159,239 | 65,851 | 31,182 | 8,780 | 265,052 |

Notes:
[1] Unit count as of September 2022.
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## BASE RATE DESIGN

Residential and Whisper

|  | Current | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Minimum Monthly Fee |  |  |  |  |  |  |  |
| 5/8" | $\$ 30.00$ | $\$ 33.25$ | $\$ 36.50$ | $\$ 36.75$ | $\$ 36.75$ | $\$ 36.75$ |  |
| 1" | 30.00 | 33.25 | 36.50 | 36.75 | 36.75 | 36.75 |  |
| EAA Fee | 1.40 | 1.40 | 1.40 | 1.40 | 1.40 | 1.40 |  |
|  |  |  |  |  |  |  |  |
| Volumetric Rates (per kGal) |  |  |  |  |  |  |  |
| 0-5,000 gal | $\$ 7.25$ | $\$ 8.05$ | $\$ 8.80$ | $\$ 8.90$ | $\$ 8.90$ | $\$ 8.90$ |  |
| 5,000-10,000 gal | 7.50 | 8.55 | 9.55 | 9.90 | 10.15 | 10.25 |  |
| $10,000-15,000$ gal | 7.75 | 9.05 | 10.35 | 11.00 | 11.55 | 11.80 |  |
| $15,000+$ gal | 8.00 | 9.60 | 11.25 | 12.25 | 13.15 | 13.60 |  |

## BASE RATE DESIGN

Commercial

|  | Current | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Minimum Monthly Fee |  |  |  |  |  |  |  |
| 5/8" | $\$ 30.00$ | $\$ 33.25$ | $\$ 36.50$ | $\$ 36.75$ | $\$ 36.75$ | $\$ 36.75$ |  |
| 1" | 75.00 | 83.25 | 91.25 | 92.00 | 92.00 | 92.00 |  |
| 1.5" | 150.00 | 166.25 | 182.50 | 183.75 | 183.75 | 183.75 |  |
| 2" | 240.00 | 266.00 | 292.00 | 294.00 | 294.00 | 294.00 |  |
| 3" | 720.00 | 720.00 | 720.00 | 720.00 | 720.00 | 720.00 |  |
| 4" | 750.00 | 831.25 | 912.50 | 918.75 | 918.75 | 918.75 |  |
| EAA Fee | 1.40 | 1.40 | 1.40 | 1.40 | 1.40 | 1.40 |  |
|  |  |  |  |  |  |  |  |
| Volumetric Rates (per kGal) |  |  |  |  |  |  |  |
| 0-5,000 gal | $\$ 7.25$ | $\$ 8.05$ | $\$ 8.80$ | $\$ 8.90$ | $\$ 8.90$ | $\$ 8.90$ |  |
| 5,000-10,000 gal | 7.50 | 8.55 | 9.55 | 9.90 | 10.15 | 10.25 |  |
| 10,000-15,000 gal | 7.75 | 9.05 | 10.35 | 11.00 | 11.55 | 11.80 |  |
| 15,000+ gal | 8.00 | 9.60 | 11.25 | 12.25 | 13.15 | 13.60 |  |

## BASE RATE DESIGN

Saddlebrook

|  | Current | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Minimum Monthly Fee |  |  |  |  |  |  |
| 5/8" | $\$ 30.00$ | $\$ 33.25$ | $\$ 36.50$ | $\$ 36.75$ | $\$ 36.75$ | $\$ 36.75$ |
| EAA Fee | 1.40 | 1.40 | 1.40 | 1.40 | 1.40 | 1.40 |
|  |  |  |  |  |  |  |
| Volumetric Rates (per kGal) |  |  |  |  |  |  |
| All Volumes | $\$ 7.25$ | $\$ 8.05$ | $\$ 8.80$ | $\$ 8.90$ | $\$ 8.90$ | $\$ 8.90$ |


[^0]:    Note: The first debt payment is assumed to be in the year of the issuance

