

**Indian River County, Florida  
Solid Waste Disposal District  
Board Memorandum**

**Date:** March 22, 2023

**To:** Michael C. Zito, Interim County Administrator

**From:** Sean C. Lieske, Director of Utility Services

**Prepared By:** Himanshu H. Mehta, PE, Managing Director, Solid Waste Disposal District

**Subject:** Solid Waste Assessment and Tipping Fee Rate Study

**Descriptions and Conditions:**

The Solid Waste Disposal District (SWDD) is operated as an enterprise fund with the two primary sources of revenue being the Solid Waste Disposal Rates (tipping fees) charged at the Indian River County (IRC) Landfill and the fees collected through a non-ad valorem special assessment for improved residential and commercial properties throughout Indian River County. These fee structures were originally established through a rate resolution for the tipping fees and an ordinance for the assessment fees. These rates were established in 1995 through a waste composition study. There have been some minor clarifications and adjustments throughout the years; however, the overall structure remains the same.

Due to the continued need to increase the annual special assessment to keep up with the increased costs, staff began in early 2020 to look into the landfill tipping fees and the overall assessment program in an effort to reevaluate and modernize the financial strength of SWDD. As a first step, a purchase order in the amount of \$10,000 (not to exceed) was issued to Kessler Consulting, Inc. (KCI) on March 27, 2020 to initiate a Solid Waste Disposal Rate Survey to compare SWDD's disposal rates with up to ten other counties in the state. These counties were selected due to their geographical proximity or similar population. Additionally, only counties with publicly owned landfills and/or transfer stations, similar to the SWDD, were considered for this analysis.

On July 7, 2020, staff presented a summary of the tipping fee rate survey performed by KCI and the SWDD Board approved staff recommendation to bring back a proposal for a full solid waste rate analysis. On December 1, 2020, the SWDD Board approved the proposal from KCI to perform Phase I of the project to review and analyze existing data and to select field-based methodologies for measuring waste generation. Per recommendation from KCI, there was a strategic delay in starting the project to avoid the impacts of Covid-19 on the possible change in waste generation both on the residential and commercial sector. However, on August 17, 2021, the SWDD Board approved the proposal from KCI to perform Phase 2 project to provide on-site and analytical testing services to complete the rate study. The total cost approved to date for the project is \$221,250; however, the actual spent to date are expected to be approximately \$219,550. This work can be approximately broken down into the following categories: a) Tipping Fee Analysis - \$10,000; b) purchase and installation of truck scales on two Waste Management (WM) vehicles - \$28,000; c) Waste Generation Study - \$123,550; and d) Rate Study - \$58,000. This is about a \$1,700 savings; however, the actual amount will be determined after the final invoice in April 2023.

The field collection data began in October 2021 and the corresponding waste generation study was anticipated to be completed in early 2022 with the intention of completing the rate study for Fiscal Year 2022/23; however, there was a delay due to truck repairs on WM's two vehicles. Once the trucks were repaired, KCI was able to collect additional seasonal field data through July 2022 to maximize the information used in the waste generation study.

On January 31, 2023, KCI presented the findings of the waste generation study to the SWDD Board. Overall KCI identified that most properties, including residential, have a lower annual generation rate than what was determined in 1995. Meaning that less material is being processed by SWDD that is being generated by County properties, and a shift in the revenue generation for operations of the landfill and other facilities, should be considered. Some particular commercial entities though have shown an increase in their generation rates based upon the data collected.

The purpose of this agenda item is to have KCI present the findings of the Rate Study and to obtain SWDD Board direction and approval to begin the process for modifying both solid waste assessment and tipping fee changes that would take effect starting October 1, 2023.

### **Analysis:**

The following is a brief summary of how the implementation of the tipping fee analysis and the waste generation study factors into the various scenarios to provide solid waste rates and fund balance sufficiency for the next ten years.

#### **TIPPING FEE ANALYSIS AND RECOMMENDATION:**

Based on the initial survey of surrounding and similar size counties by KCI in 2020 as well as an updated survey in 2022, it was determined that the tipping rates in Indian River County are significantly less across the various categories. In staff's opinion, this creates an opportunity where "out of county" waste is brought in to IRC due to lower costs. KCI has provided a rate comparison table in Attachment A of their attached Rate Study report to show how IRC's rate compare to surrounding and similar size counties. The attached Table 1 summarizes the recommended SWDD tipping fee changes that would go in effect on October 1, 2023 and then 3% annually thereafter.

#### **RATE STUDY SUMMARY AND RECOMMENDATION:**

KCI developed a multi-year projected financial program that analyzed revenues versus planned expenditures over a five-year and a ten-year period. These also included capital expenditures ranging from \$17.3 million in the next five years and an additional \$22.3 million the following five years for a total ten-year projection of \$39.6 million. These projections were then further revised into five separate scenarios to gauge impacts of two primary factors: the implementation of proposed new Waste Generation Unit (WGU) rates from the generation analysis performed in 2022 and the increase of various tipping fees to be in line with market levels, especially of neighboring counties and solid waste districts. Please note, The County's current fund balance target for the SWDD fund is that a minimum of 30% total expenditures (including capital investment projects and transfers) be maintained as unrestricted funds. For the purposes of this study, a slightly more conservative 35% minimum was used.

This analysis was broken down into the following five options:

1. **Baseline (No Changes):** This scenario did not implement new recommended WGU rates and did not apply any changes to tipping fee rates for either a five- or ten-year period. Per KCI, the lowest the fund balance reached in the ten-year period is in FY 2032 at 26% this is predominantly due to large capital expenditures being planned for during that and the preceding years. This is below the recommended fund balance of 35%.
2. **Scenario 1:** This scenario only applied the new recommended WGU rates to the revenue projections for the five- and ten-year periods. As noted by KCI in the Generation Study technical memorandum, these rates are lower based upon new data representing lower generation of waste by most types of properties, and some that are higher. These lower overall generation rates then apply to the same assessment charges and show an impact of lower revenues throughout the ten-year period. KCI projections shows that if the new recommended WGU rates are applied, the fund will go below the recommended fund balance minimum percentage of 35% in FY 2031, and will be negative in the following years. This is again due to capital expenditures projected to impact the fund in that and previous years.
3. **Scenario 2:** This scenario only applied increases to tipping fees based upon review by SWDD to the five- and ten-year periods, and then increased them by an estimated CPI increase of 3% in outer years. In this scenario, revenues increase due to the tipping fee changes and the fund does not fall below the 35% fund balance target in the ten-year period.
4. **Scenario 3:** This scenario applied both recommended WGU rates and proposed tipping fee changes from Scenario 2 to the five- and ten-year periods. In this scenario the impacts of increasing the tipping fees positively impacts the reductions in revenue due to the WGU rate changes and the fund does not go below the minimum fund balance threshold of 35% in the ten-year period.
5. **Scenario 4:** This scenario applied a differential implementation of recommended WGU rates to be applied over a three-year period. This would include a revision to the WGU's of 50 percent of the proposed change in FY 2024 and the remaining 50% of the change in FY 2027. This scenario also implemented the new proposed tipping fees as presented in Scenarios 2 and 3 with a 3% increase per year in tipping fee rates through the ten-year period. In this scenario the impacts of increasing the tipping fees positively impacts the reductions in revenue due to the WGU rate changes and the fund does not go below the minimum fund balance threshold of 35% in the ten-year period.

All scenarios were identical in projected capital expenditures and associated projected revenues and expenditures in all other aspects.

Per KCI, the SWDD fund is in good shape for the coming five years no matter how SWDD chooses to implement potential revisions to their revenue structure. This provides SWDD some ease in determining the appropriate way to cover costs for the future and to plan for future capital investment needs. It also provides options for SWDD to consider that would not have immediate disparaging effect if implemented and could be reviewed for impacts for the coming years to verify projections.

As noted in the Generation Study technical memorandum, KCI has determined that the previous WGU rates that were in place are not accurate with current generation data based upon their age and changes in waste generation trends over the past two decades. Along with this information, an analysis occurred to determine if the proposed generation rates fell into line with actual tonnage data provided by the

Landfill. Since this data appeared more accurate than previous WGU information, it is recommended that these new rates be implemented.

As this rate study has shown, however, these new WGUs will reduce associated assessment revenue each year going forward, requiring SWDD to revise their revenue methodologies to cover similar expense requirements and new capital costs in the future. To do this, tipping fee rates have been evaluated for revision and increase for particular types to bring these more into line with neighboring counties and market levels. The results of which show positive revenue impacts and effective fund balance coverage for the future.

It should be noted that future projections get increasingly less accurate each year going forward due to the unpredictability of markets, the economy, growth, and many other factors that impact the projections included in this study. As such, the fact that all scenarios reviewed meet financial requirements in the next five-year period is a positive note, with the County or SWDD having the ability to impact the ten-year projections with multiple variables in the future.

Using the information gathered in this study, KCI (with SWDD leadership's input and guidance) recommends that Scenario 3 or Scenario 4 be strongly considered for implementation with regular review of the SWDD fund's financial standing to verify projection accuracy. This will implement more accurate, defensible generation rates for County residents and businesses while also implementing new tipping fees to meet market requirements and to further benefit flow control.

Finally, it is recommended that these funding scenarios be reviewed upon completion of the current franchise collection procurement process to integrate new collection costs into the model and to update rate changes or impacts accordingly.

### **Funding:**

This agenda provides the results of the final rate study and is not requesting any funding.

### **Recommendation:**

Solid Waste Disposal District staff recommends that the Board consider the following options as presented by Kessler Consulting, Inc. in the 2022 Rate Study:

1. No changes to current Waste Generation Units or the Tipping Fees.
2. Change only the Waste Generation Units.
3. Change only the Tipping Fees.
4. Starting October 1, 2023, change both the Waste Generation Units and the Tipping Fees.
5. Starting October 1, 2023, change the Tipping Fees 100% and the Waste Generation Units by only 50%; however, change the remaining Waste Generation Units by 50% starting October 1, 2027.

Staff recommends Option 5 and, if approved, request that the SWDD Board direct staff to begin the process for modifying both solid waste assessment and tipping fee changes, that would take effect starting October 1, 2023.

### **Attachments:**

1. KCI Technical Memorandum – Rate Study 2022

### Table 1 – New SWDD Tipping Fees

| Type of Disposal                      | Use Code            | Fee Basis | Current  | Proposed  | Rate Change | % Change |
|---------------------------------------|---------------------|-----------|----------|-----------|-------------|----------|
| Mixed Garbage and C&D                 | GCH                 | \$/ton    | \$32.50  | \$34.13   | \$1.63      | 5%       |
| C&D Debris                            | WCD                 | \$/ton    | \$31.80  | \$44.52   | \$12.72     | 40%      |
|                                       | C&D                 | \$/ton    | \$30.00  | \$42.00   | \$12.00     | 40%      |
|                                       | DIR                 | \$/ton    | \$3.00   | \$3.15    | \$0.15      | 5%       |
| Asphalt                               | ASP                 | \$/ton    | \$31.80  | \$44.52   | \$12.72     | 40%      |
| Pallets                               | PAL                 | \$/ton    | \$31.80  | \$44.52   | \$12.72     | 40%      |
| Clean Concrete                        | CCD, SCC            | \$/ton    | \$3.00   | \$15.00   | \$12.00     | 400%     |
| Land Clearing Debris                  | LCD                 | \$/ton    | \$22.00  | \$42.00   | \$20.00     | 91%      |
|                                       | CHP                 | \$/ton    | \$18.00  | \$38.00   | \$20.00     | 111%     |
| Yard Trash                            | YDT                 | \$/ton    | \$0.00   | No change | \$0.00      | \$0.00   |
| FDOT Yard Trash                       | FDOT                | \$/ton    | \$24.48  | \$42.00   | \$17.52     | 72%      |
| Garbage in Yard Trash                 | AGAR                | Each      | \$25.00  | No change | \$0.00      | \$0.00   |
| Contaminated Land Clearing Debris     | LCN                 | \$/ton    | \$55.00  | No change | \$0.00      | \$0.00   |
| Contaminated Yard Trash               | YDC                 | \$/ton    | \$55.00  | No change | \$0.00      | \$0.00   |
| Contaminated C&D                      | CDL                 | \$/ton    | \$55.00  | No change | \$0.00      | \$0.00   |
| Contaminated Soil                     | CCS                 | \$/ton    | \$55.00  | No change | \$0.00      | \$0.00   |
| Contaminated Soil – Alternative Cover | CCS-AC              | \$/ton    | \$5.00   | \$20.00   | \$15.00     | 300%     |
| Charity Projects – C&D                | CPC                 | \$/ton    | \$31.80  | \$44.52   | \$12.72     | 40%      |
| Charity Projects – Garbage            | CPG                 | \$/ton    | \$32.50  | \$34.13   | \$1.63      | 5%       |
| Dewatered Sludge                      | UTS                 | \$/ton    | \$15.00  | \$40.00   | \$25.00     | 167%     |
| Septage/Grease/Grit                   | SGG                 | \$/ton    | \$15.00  | \$40.00   | \$25.00     | 167%     |
| Dewatered Sludge                      | VB-UTS              | \$/ton    | \$24.23  | \$49.23   | \$25.00     | 103%     |
| Animal Disposal -Small                | ANS                 | each      | \$5.00   | No change | \$0.00      | \$0.00   |
| Animal Disposal – Large               | ANL                 | each      | \$50.00  | No change | \$0.00      | \$0.00   |
| Out of County MSW                     | OCG                 | \$/ton    | \$60.00  | \$70.00   | \$10.00     | 17%      |
| Asbestos                              | ASB                 | \$/ton    | \$140.00 | No change | \$0.00      | \$0.00   |
| Tires – Auto                          | TAS*, TAU*,<br>TDO* | \$/ton    | \$95.00  | \$150.00  | \$55.00     | 58%      |
|                                       |                     | each      | \$2.00   | Remove    | Remove      | Remove   |
| Tires – Truck                         | TTR, TTS,<br>TMS*   | \$/ton    | \$100.00 | \$300.00  | \$200.00    | 200%     |
|                                       |                     | each      | \$5.00   | Remove    | Remove      | Remove   |
| Tires – Heavy Equip.                  | THE, THS            | \$/ton    | \$130.00 | \$300.00  | \$170.00    | 131%     |
|                                       |                     | each      | \$20.00  | Remove    | Remove      | Remove   |
| Treated Ties/Poles                    | TTP                 | \$/ton    | \$32.53  | \$45.00   | \$12.47     | 38%      |
| Special Waste Handling                | SWH                 | each      | \$50.00  | \$70.00   | \$20.00     | 40%      |
| Vehicle Weight Tare/Gross             | VWS                 | each      | \$3.00   | \$10.00   | \$7.00      | 233%     |
| Uncovered Load                        | UL                  | each      | \$25.00  | \$100.00  | \$75.00     | 300%     |
| Scrap Metal / White Goods             | RSM                 | each      | \$0.00   | \$0.00    | \$0.00      | \$0.00   |
| Boats                                 | BOT                 | \$/ton    | \$32.50  | \$45.00   | \$12.50     | 38%      |
| Mobile Home Trailers                  | MHT                 | \$/ton    | \$31.80  | \$45.00   | \$13.20     | 42%      |
| Red Tide Debris                       | REDTIDE             | \$/ton    | \$32.50  | \$45.00   | \$12.50     | 38%      |
| Electronics - Residents               | REW                 | each      | \$0.00   | \$0.00    | \$0.00      | \$0.00   |
| Electronics - Businesses              | BEW                 | \$/ton    | \$0.00   | \$60.00   | \$60.00     | NEW      |
| Household Hazardous Waste             | HHW                 | each      | \$0.00   | \$0.00    | \$0.00      | \$0.00   |

\* The first six (6) Residential Tires will continue to be accepted at no charge at the IRC Landfill and at all five (5) Customer Convenience Centers (CCC's). No heavy tires will be accepted at the CCC's. No Tractor or Agricultural Tires will be accepted at the CCC's or the IRC Landfill as SWDD does not have a proper means of disposal.