

**Revised Draft Analysis
of
Assessments for
Valley County Solid Waste District**

July 20, 2021

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Table 1
Valley County
Solid Waste Quantities
(Year 2020)

<u>Source</u>	<u>Tons per Year</u>
Total Waste to Landfill	14,036
Less Out of County and Non-Typical Waste:	
Contaminated Soil	2,126
Sewage Sludge	60
T&R Res. Wolf Point	64
T&R Res. Ft. Kipp	326
Tires From out of County	25
Phillips County	1,856
Town of Jordan	367
Subtotal	4,824
Valley County	9,212
<u>Source (In County)</u>	<u>Tons per Year</u>
T&R Collection	3,945
T&R Containers	2,752
Direct to Landfill (Contractors)	795
Direct to Landfill (Others)	1,430
Other Miscellaneous	290
Total	9,212

Table 2
Summary of Waste Generation
(Tons per Year)

<u>Item</u>	<u>Residential</u>	<u>Commercial</u>	<u>Total</u>
T & R Collection	1,855 ⁽¹⁾	2,090 ⁽¹⁾	3,945
T & R Containers	2,013 ⁽¹⁾	739 ⁽¹⁾	2,752
Direct to Landfill	860 ⁽²⁾	860 ⁽²⁾	1,720
Subtotal	4,728	3,689	8,417
Direct to Landfill (by Contractors)	0	795	795 ⁽³⁾
Total	4,728	4,749	9,212

(1)Based on input from T& R Trucking (estimated).

(2)Based on conversations with Brain A. and estimated by Barry D.

There is not very detailed information on this breakdown.

(3)Information provided by Darcia.

Table 3
Summary of Revenues
(2019-2020 Budget)

<u>Source</u>	<u>Annual Revenue</u>
Assessments	\$721,000
Landfill Fees (Contractor)	\$25,000
Landfill Fees (Other)	\$100,000 ⁽¹⁾
Phillips County	\$70,000
Town of Jordan	\$15,000
Tribe	\$15,000
Miscellaneous	\$27,000
TOTAL	\$973,000

(1) Estimated.

Table 4
Summary of Assessments

<u>Source</u>	<u>No. Establish.</u>	<u>Total Assess. Units</u>	<u>Annual Revenue</u>	<u>Annual Tons</u>	<u>Revenue Per Ton</u>
<u>Residential</u>					
Single Fam.	3,346	3,346	\$485,000	-	-
Multi Fam.	103 ⁽¹⁾	231	\$33,000	-	-
Subtotal	3,449	3,577	\$518,000	4,728	\$110
<u>Commercial</u>					
	301	1,397	\$203,000	3,689	\$55
TOTAL	750	4,974	\$721,000	8,417⁽²⁾	\$86 (Avg.)

(1) Includes subsidized housing in Glasgow.

(2) Assumes 795 tons are delivered directly to the landfill by contractor and not included in this table.

TONS PER HOUSEHOLD:

4,728 tons ÷ 3,577 H.H. Units = 1.32 Tons/HH

(Original estimate when District was created assumed 1.0 tons per household.

Table 5
Summary of Expenses
(2019-2020 Budget)

<u>Item</u>	<u>Annual Cost</u>	<u>Cost Per Ton</u>
I. <u>Landfill</u>		
Labor	\$286,000	
Fuel & Tires	\$75,000	
Supplies	\$23,000	
Parts & Repairs	\$78,000	
Equipment	\$25,000	
Road Repairs	\$30,000	
Miscellaneous	\$41,000	
Subtotal	\$558,000	\$39.75
		(14,036 Tons)
II. <u>Container System Costs</u>		
Subtotal	\$266,000	\$31.60
		(8,417 Tons)
TOTAL	\$824,000	\$71.35

COST PER HOUSEHOLD (IN COUNTY):

\$71.35 x 1.32 Tons/HH = \$94.18

ATTACHED WORK SHEET

PROPOSED UNIT ASSESSMENT CALCULATION

- 1) Assume 1 Household = 90 gallon container emptied once/week which is equivalent to 0.5 cubic yards/week.
- 2) Assume 1 Household generates 1.32 tons/year.
- 3) Based on this:

$$26 \text{ cubic yards/year} = 1.32 \text{ tons (2,640 lbs)}$$

$$2,640 \text{ lbs} \div 26 \text{ CY} = 100 \text{ lbs/CY}$$

(Not 175 lbs/CY which was originally assumed)

- 4) Therefore, the recommended assessment would be:

$$1 \text{ unit} = 1.32 \text{ Tons} = 100 \text{ lbs/cy} = 20 \text{ CY/Ton}$$

(Not 11.41 CY/Ton which was originally assumed)

SUMMARY OF ANALYSIS TO DATE (July 20, 2021)

- The annual quantity of waste entering the landfill in 2020 was 14,036 tons of which 9,212 tons was typical solid waste generated in Valley County, which is 66% of the total. This total tonnage is approximately 20% higher than the average of the last six years which was approximately 11,200 tons. Prior to the last six years the average was approximately 14,000 tons.
- The revenue brought in was \$973,000 in 2019-2020 whereas the costs to operate the District was \$824,000 (17% more revenue than costs).
- The revenue attributed to the assessments on the taxes indicates that the revenue for residential assessments is \$110/ton whereas the revenue for the commercial establishments is \$55/ton or 50% of the residential assessments per ton. The average of all assessments is \$86 per ton.
- The average tonnage per household is estimated to be 1.32 tons. This compares to an estimate of 1.0 tons when the District was established. There was not very much data available back then, so the 1.0 was a general rule of thumb back in the 1980's. The 1.32 tons is close to other Cities across the State.
- The cost per household, based on the 2019-2020 expense budget and using the 1.32 tons per household, is \$94.18. This would be the break-even fee per equivalent unit.

RECOMMENDATIONS TO CONSIDER FOR AMENDING THE ASSESSMENT SCHEDULE

1. Revise the equivalent unit from 1.0 tons to 1.32 tons. (This would be 1 equivalent residential unit).
2. Revise the commercial assessment schedule from 11.41 CY/Ton to 20 CY/Ton. This should be based on the capacity of the commercial establishments' containers and frequency of collection, not the actual volume collected since the containers are not weighed each time they are emptied.
3. Abandon or significantly modify the commercial schedule. The range within each tonnage category on the schedule is way too wide and also does not equate to the residential unit's volume. I recommend abandoning it and calculating each commercial establishment's fee using the criteria in item 1&2 above where at all possible. This would be the most equitable method.
4. If collection data is not available for some commercial establishments, develop a standard rate for like businesses (Example: for RV Parks; 1 unit per 5 spaces).
5. For very small businesses assign 1 unit (Example: 1 unit for small offices, beauty shops, etc.)
6. Once the new equivalent number of units for each commercial establishment are determined, add up the total number of equivalent units (households and commercials) and calculate the new base rate per equivalent unit (which will be the rate per household = 1 unit) by dividing the total annual revenue that is desired by the total number of equivalent units.

7. It is also recommended to assess all the government facilities (fishing access, campgrounds, government buildings, etc.) on the same cost/ton basis.