



City of Flagstaff, Arizona

Sustainable Solid Waste Fund

Cost of Service Analysis and Recommendation Report

Public Works and Solid Waste Divisions

The City of Flagstaff Public Works Division has prepared a financial plan and rate analysis for the Solid Waste fund. The reason for preparing this plan is a result of future capital expenditure requirements exceeding current revenue capacity. The proposed rate increase is to ensure the section has sufficient revenue to meet their operational, capital, and debt service obligations.

Staff has identified future capital projects with costs of approximately \$23 million and \$8.3 million in fleet capital. These projects are a combination of regulatory compliance issues as well as Landfill and Collection fleet replacement costs needed to remain operational. The most critical items are listed below.

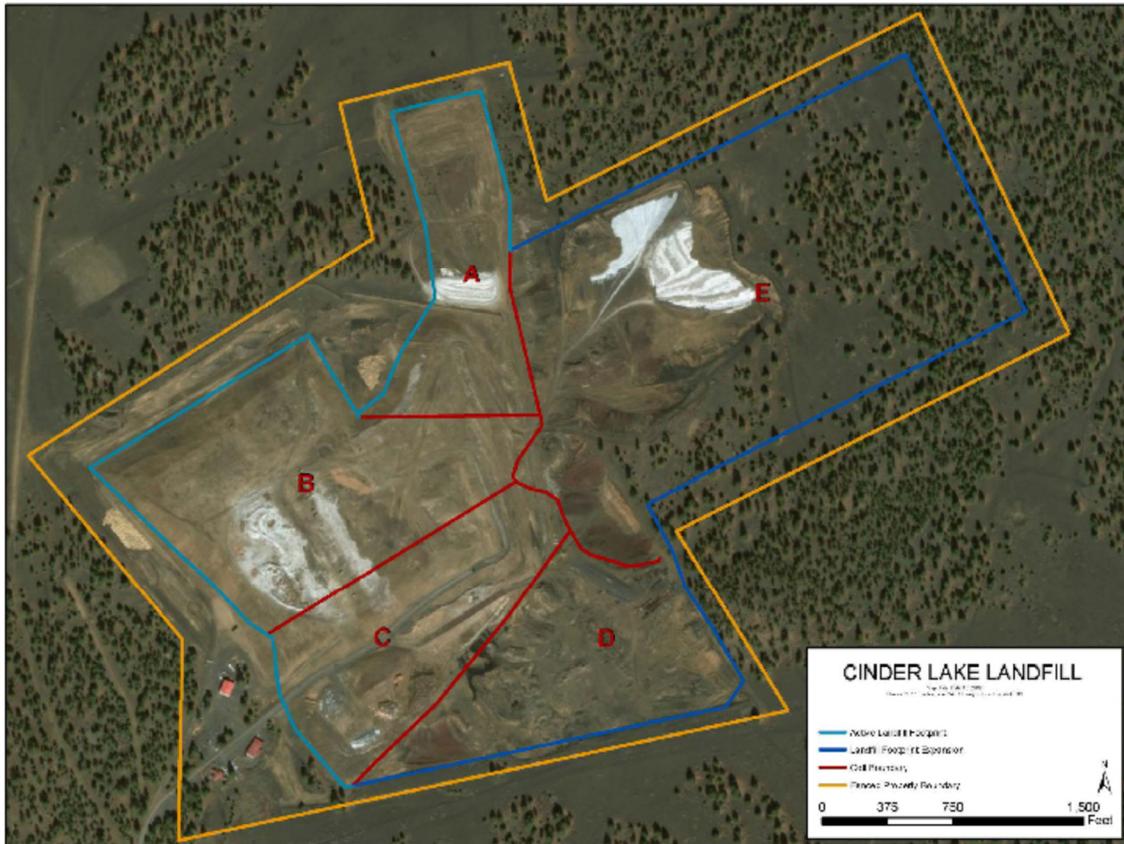
- With approximately 40 years of available airspace remaining at Cinder Lake Landfill (CLL), the facility assumes the role as the only regional landfill within the County. Although CLL is a favorable asset to the City, the facility will be required to absorb considerable costs for the future landfill gas collection infrastructure. Ultimately the new Environmental Protection Agency (EPA) rules could impact the program by as much as \$19 (\$11m is currently set aside).
- Recent passage of new air quality rules by the United States Environmental Protection Agency (EPA) may require installation of landfill gas controls at CLL in the near future otherwise daily fines could be enforced. CLL currently does not have an adequate three-phase power source to power and operate a landfill gas control system. Design and construction for the installation of this system may be required as soon as 2023.
- The Landfill Road is currently unrepairable from a structural standpoint and many of the curves are unsafe for heavy vehicles. The width and geometry of the Road do not allow certain heavy equipment to pass safely at the same time. In addition, the road section is warped from years of

heavy vehicle traffic. The Road was recently ranked by the City’s Streets Division in the “failure” category, with an Overall Condition Index of 51 and an annual degradation rate of approximately 8% per year. The cost to replace, ideally realign and bring in infrastructure to accommodate on-going operations is approximately \$7 million. Construction of the redesigned road is anticipated to begin in 2023.

- Implementation of a volumetric pricing structure for residential solid waste collection to achieve the City of Flagstaff’s goal of 90% by 2050. In communities with pay-as-you-throw programs (also known as unit pricing or variable-rate pricing), residents are charged for the collection of municipal solid waste—ordinary household trash—based on the amount they throw away. This creates a direct economic incentive to recycle more and to generate less waste.
- The current operating cells A thru C will last another 5-7 years (depending on growth rates and solid waste diversion success). Expanding the operation to Sequences D and E (136 acres) will require the facility to follow guidelines for design and construction of landfills with an approved liner at a cost of approximately \$5.5 million.

The framework of the Solid Waste Section demonstrates a multitude of services that are offered within the community and the region. The financial outlook for the program remains optimistic, and staff will continue to make necessary adjustments as the local and regional economy will allow. Environmental compliance is also essential to assuring the program remains a viable disposal option in the region for years to come. Management remains committed to balancing fiscal responsibility and environmental stewardship for the City and the region.

Figure 5-Map of CLL



City of Flagstaff Solid Waste Section Cost of Service Study

In 2017 the Solid Waste Section engaged R3 Consulting Group, Inc. (R3), to conduct a Rate Study for the City's Solid Waste Section with the following major deliverables:

- An Excel Rate Model that Solid Waste can use to project revenues and expenses, and evaluate current and future rate adjustment options, including cost of service rate options by line of business over an extended period;
- Calculation of the cost of service of various Solid Waste collection and Landfill services, to allow the City to establish cost of service rates for individual services, should it wish to do so now, or at some point in the future; and
- Rate adjustment options over a 10-year planning period, and recommended rate adjustments.

The Rate Model is designed to provide a format for projecting the City of Flagstaff's Solid Waste Division's Landfill and Collection operations revenues and expenses over a 10 year planning period, and determine necessary rate adjustments to meet the projected revenue requirements.

Using revenue and expense adjustments input by staff, the Rate Model provides for projecting revenue and expense line item amounts by Line of Business (Landfill, Residential Collection, Commercial Collection, and Hoist & Haul), and by individual Collection Service within each (e.g., residential refuse and residential recycling), over the planning period.

Conclusion and Recommendations

As CLL nears capacity in its existing operating cells, landfill expansion into other areas of the landfill will be the operational topic for the next several years. The excavation of cells will present a particular challenge to the success of the operation. If we can begin to realize the cost of expansion on a more immediate basis, then the future expenditures will be less impactful to the overall budget.

Staff will continue planning for eventual implementation of landfill gas collection and controls.

The recycle industry is currently undergoing a crisis on a global level as a result of China's mandates for clean plastic and paper products and tariffs on acceptable material. We anticipate that the hardship will be felt down to a local level as well. In the meantime, it will be important to maintain communications with our partners at Norton Environmental. Volumetric pricing will help reducing our shortfall with minimum guarantees as long as we are able to keep the material we deliver to them as free from contaminants as possible through an extensive public outreach campaign.

Staff will make every effort to continue offering the level of service that the Citizens of Flagstaff and Coconino County have come to expect and we will continue to monitor and adjust to the disposal trends in Flagstaff and the surrounding community.

Staff recommends the following rate increase to maintain a sustainable Solid Waste Fund.

- Residential Trash and Recycling Service: 7.5% increase each year for 5 years
- Landfill Fees one-time 3% increase
- Commercial Trash and Recycling Service one-time 3% increase
- Hoist and Haul Service one-time 3% increase

The current and proposed fees schedules are available on the city website under the Notice for Proposed Taxes and Fees along with this report.

Summary of Solid Waste Revenue and Cash Flow

Solid Waste Fund		2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Sources of Funds						
Beginning	Unrestricted Fund Balance	\$ 6,987,698	5,674,902	6,128,934	6,253,291	6,286,959
Revenues						
	Solid Waste Fee (before as fee increases)	11,146,070	11,341,516	11,540,840	11,744,120	11,951,437
	Residential Rate Increase 7.5%	143,317	444,885	762,591	1,085,862	1,413,993
	Commercial Rate Increase 3%	41,923	85,523	87,234	88,978	90,758
	Landfill Rate Increase 3%	55,956	114,151	116,434	118,763	121,138
	Total Rate Increase	241,196	644,559	966,259	1,293,603	1,625,889
	Investment Earnings	223,666	106,235	98,036	79,646	57,565
	Total Revenues	11,610,932	12,092,310	12,605,135	13,117,369	13,634,891
Transfers In						
	BBB- Tourism	63,570	-	-	-	-
	Total Transfers In	63,570	-	-	-	-
Total Sources of Funds		18,662,200	17,767,212	18,734,069	19,370,660	19,921,850
Uses of Funds						
Expenditures						
	Operating & Transfer	8,877,616	8,999,681	9,224,556	9,455,053	9,691,313
	Indirect Costs	1,119,682	1,147,674	1,176,366	1,205,775	1,235,919
	Capital	1,815,000	963,923	1,552,856	1,895,873	1,634,940
	Set Aside for Postclosure Costs	675,000	527,000	527,000	527,000	527,000
	Contingency	500,000	-	-	-	-
	Total Expenditures	12,987,298	11,638,278	12,480,778	13,083,701	13,089,172
Total Uses of Funds		12,987,298	11,638,278	12,480,778	13,083,701	13,089,172
	Ending Fund Balance	\$ 5,674,902	6,128,934	6,253,291	6,286,959	6,832,678
	Unrestricted Fund Balance	\$ 4,513,902	4,919,934	4,992,291	4,974,959	5,469,678
	Minimum Fund Balance	\$ 1,161,000	\$ 1,209,000	\$ 1,261,000	\$ 1,312,000	\$ 1,363,000
Minimum Fund Balance - City policy to maintain at least 10% of ongoing operating revenue in fund balance.						
*** As of 6/30/18, the Solid Waste has \$11M in restricted fund balance balance for the postclosure cost of the Landfill.						

The operation of the Landfill, HPC, and Collections within the Solid Waste Section demonstrates a multitude of services that are offered within the community and the region. With these staff recommendations the financial outlook for the program remains optimistic, and staff will continue to make necessary adjustments as the local and regional economy will allow. Environmental compliance is also essential to assuring the program remains a viable disposal option in the region for years to come. Leadership remains committed to balancing fiscal responsibility and environmental stewardship for the City and the region.

City Council Meetings Schedule

On November 20, 2018 the City will hold a public hearing and staff will present an ordinance along with the rate analysis information to the Council. Council could accept staff recommendation or adjust, such as increasing or decreasing the proposed new rate. Or the Council could choose not to read the

ordinance the first time and direct staff to bring the item back with amendments. If Council completes the first read of the ordinance, a second read will be required at the December 4, 2018 meeting prior to adopting the rate changes. To meet the funding outlined in this analysis, the new rates would need to be effective January 3, 2019.