

# Report on the Financial Feasibility of Creating the Greene, Ulster, Sullivan Solid Waste Authority



---

October 26, 2018

PREPARED BY



# Report on the Financial Feasibility of Creating the Greene, Ulster, Sullivan Solid Waste Authority



---

## TABLE OF CONTENTS

---

1. Introduction.....	1
2. The Systems.....	1
3. Sources of Information .....	2
4. GUS Legislation .....	2
5. Form and Cost of the Creation of GUS .....	3
6. Financial Results for the Solid Waste Systems .....	5
7. Financial Results for a Combined GUS System.....	17
8. Conclusion .....	28

## **1. Introduction**

---

The Counties of Greene, Sullivan and Ulster (together the “Counties” and each County) and the Ulster County Resource Recovery Agency (the “Agency” or “UCRRA”) have retained Environmental Capital LLC (“EC”) to prepare a report (the “Report on the Financial Feasibility of creating the Greene, Ulster, Sullivan Solid Waste Authority” or “Report”) on the financial feasibility of creating a new authority, the Greene, Ulster, Sullivan Solid Waste Authority, or “GUS”, that would provide solid waste disposal and related services within the three Counties.

For purposes of this Report we will define “financial feasibility” of GUS as the ability to amalgamate the three solid waste systems in the Counties under consolidated management, ownership and control without diminishing the level of solid waste disposal and related services provided within the Counties and without materially increasing the cost of providing those services. It is possible that certain costs over which GUS has no control may increase in the future after current contracts expire, such as the transportation and disposal (“T&D”) costs, but these are events the Counties and UCRRA would face if they continued to operate their systems independently. Moreover, one of the principal aims of GUS is to assist Greene County, Ulster County, and UCRRA, together, to achieve economies of scale in procuring services. Negotiating leverage in procuring T&D service and other outside services is expected to increase by virtue of the larger amounts of waste to be transported and disposed by GUS as a whole. It is also possible that recycling revenue will increase and recycling costs will decrease at higher volumes.

## **2. The Systems**

---

Greene County and Sullivan County each provide solid waste services through systems of assets (each, separately, a “System”) operated by departments within the respective two counties. Ulster County’s solid waste services are provided by UCRRA which operates a System within Ulster County comparable to those of Greene and Sullivan Counties.

Greene County and Sullivan County each provide solid waste service through a main transfer station and a number of smaller transfer stations and drop-off centers. In Greene County all waste received, including waste received at the smaller transfer stations and drop-off centers, is transported to the main transfer station in Catskill, NY, which is owned and operated by Greene County. Greene County contracts with Seneca Meadows, Inc. to transport and dispose of municipal solid waste (“MSW”) at the Seneca Meadows Landfill in Seneca Falls, NY and to transport and dispose of construction and demolition waste (“C&D”) at the Dunn Landfill in Rensselaer, NY. The contract with Seneca Meadows, Inc. (the “Greene County T&D Agreement”) expires on December 31, 2020 and includes two additional 1-year extensions at Greene County’s option.

Similarly, Sullivan County concentrates the delivery of solid waste to its main transfer station in Monticello, NY. Located at the Monticello site are residential drop-off facilities for MSW, C&D and recyclables and three closed landfills maintained by Sullivan County. The export building at Monticello, from which MSW and C&D are shipped, is operated under contract with County Waste, Inc., a subsidiary

of Waste Connections, Inc., which also owns Seneca Meadows, Inc. Waste is transported to and disposed of at the Seneca Meadows Landfill under a contract that expires on December 31, 2020.

UCRRA operates two main transfer stations in the towns of Kingston and New Paltz, which also service a variety of municipal drop-off centers. MSW and C&D are transported to Seneca Meadows, Inc. and biosolid waste is transported to the Chemung Landfill, located in Elmira, NY. UCRRA has contracts with Mr. Bult's, Inc., commonly known as MBI, and Seneca Meadows, Inc. to provide transportation and disposal which expire on December 31, 2019.

A full description of each System is contained in the "Feasibility Study for the Formation of GUS, a New Multi-County Solid Waste Authority", dated March 2018 and prepared by Cornerstone Environmental Group LLC, Middletown, NY (the "Cornerstone Report").

### **3. Sources of Information**

---

In developing this Report, we have interviewed individuals who are directly responsible for solid waste or are in supervisory positions at Greene County, Sullivan County and the Agency. We wish to thank Joshua Potosek, Donna Egan, Janet Young, Robert Van Valkenburg, Amy Block, Timothy Rose and Timothy DeGraff for their generosity with both their time and expertise.

In addition, we have reviewed the audited financial statements and cash operating statements and the audit of the Agency and the budget reports and audited financial statements of both Greene County and Sullivan County for the fiscal years ending December 31, 2014 through December 31, 2017. We have also reviewed a variety of other materials, including New York State Department of Environmental Conservation reports, capital improvement plans, transfer station reports, contracts, projections by Greene County and UCRRA, and other documents from Greene County, Sullivan County, and UCRRA.

In this Report we also rely on the Cornerstone Report that concludes that the "formation of GUS Solid Waste Authority is feasible." That report also recommends further investigation, including a more detailed financial review. In addition Cornerstone recommends further legal review, detail engineering review and an evaluation of heavy equipment and vehicles. This Report may serve to address the financial part of those recommendations. We concur that additional engineering and legal evaluation will be necessary to effect the creation of GUS.

### **4. GUS Legislation**

---

GUS would be created by an act by the State Legislature. The act would, among other things, specify the powers and activities contemplated for GUS and the area to be served - Greene County, Sullivan County, and Ulster County. It would permit GUS to acquire the three systems on terms agreed upon among the Counties and UCRRA. GUS would have the power to issue debt to refund existing solid waste bonds and to provide for future capital requirements of the GUS system.

## 5. Form and Cost of the Creation of GUS

---

An initial question in the creation of GUS is deciding whether or not GUS should pay for the assets of the Systems that it would acquire, and if so, how much GUS should pay. We believe that any payment would be counterproductive as we further discuss below.

There are several methodologies that might be used to determine the acquisition price that GUS would pay to acquire the three Systems.

### Book Value

One acquisition price alternative is the book value of assets acquired. It is the value at which assets are carried on the books of the owner. However, UCRRA, Greene County and Ulster County vary substantially in the way in which they account for their solid waste assets. The accounting values may not be related to the true “value” of the assets.

### Going Concern Market Value

A second acquisition price alternative would be to use the market value as a “going concern” of each System. Each solid waste system would be valued as a “going concern”, a concept common in corporate finance. This method would project the annual net cash flows or “profit” of the solid waste systems over time. These future cash flows would be discounted to determine a present value, which would be the acquisition price. (Present value (PV) is the current value of a future sum of money or stream of cash flows given a specified rate of return. Future cash flows are discounted at the discount rate, and the higher the discount rate, the lower the present value of the future cash flow. Discounting is the mathematical reverse of interest rate compounding). However, the Systems are not designed to make a profit. Only UCRRA has revenues that consistently exceed expenses, and that is in part due to its bond resolution that requires that it to do so. As a result, this method will not result in useful acquisition prices.

### Asset Market Value

A third alternative would be to ascertain the market value of each asset transferred to GUS by the Counties and UCRRA. This could be done by professional appraisers. This would require a long, expensive and substantial effort.

### Merger of the Solid Waste Systems

A fourth alternative would be to simply merge the three systems together into GUS. There would be no purchase price. This method would place no additional financial burden on users of the solid waste system in any of the three Counties.

## **Acquisition Price and the Purpose of GUS**

Each County has developed its own unique and expansive network of transfer/drop-off stations and a workable approach to aggregating waste for long distance transportation to landfill disposal. There is every reason, at least for the foreseeable future, to keep these organically developed, locally-oriented systems in place. These systems have been tailored to the unique local needs over a period of decades. Putting a value on those unique sets of assets and personnel would be very difficult.

One of the main benefits of forming GUS is to provide solid waste services to the three Counties at a lower cost and in more environmentally beneficial manner than is now the case. GUS could only obtain the funds for an acquisition price of any assets by issuing bonds. Incurring debt to pay a purchase price seems to contradict the purpose of the formation of GUS because it would add costs. GUS would have to recover the additional annual debt service costs on any bonds issued for acquisition costs through increases in the tipping fees it charges. Higher tipping fees could also drive waste out of the GUS system, ratcheting up the tipping fees required further. The customers of GUS would pay more, not less, for solid waste services.

The following analysis assumes a merger of the three Systems and does not include acquisition prices to be paid by GUS for the solid waste System assets to be acquired from the Sullivan, Greene County and UCRRA.

## 6. Financial Results for the Solid Waste Systems

Each of the three Systems had varying financial results for the period from 2014 through 2017 and different mechanisms for ensuring that revenues equal or exceed expenses, including debt service, as further described below.

### i. UCRRA

UCRRA's financial results for the period 2014 through 2017 are provided in Table 1. Since 2013, UCRRA has consistently generated solid waste revenues in excess of expenses and debt service requirements. Prior to 2013, UCRRA operated at a deficit that was funded by Ulster County pursuant to a Service Agreement between UCRRA and Ulster County. Since 2014, UCRRA has operated at an average annual surplus of \$1.02 million, as shown in the following table.

<b>Table 1</b>				
<b>UCRRA</b>				
<b>2014 -2017 Historical Financial Results</b>				
	2014	2015	2016	2017
<b>Operating Revenue:</b>				
Tipping fees	\$12,317,725	\$12,871,664	\$12,991,163	\$13,584,475
Compost tipping fees	27,292	42,502	61,741	102,854
Collection And Hauling Service Fees	1,038,774	686,259	497,528	710,301
Recycling service/tipping fees	36,076	42,059	49,916	208,680
Sales of Recyclables	600,215	282,568	371,672	604,843
Miscellaneous revenue	107,434	86,307	158,166	101,999
Grants	<u>128,939</u>	<u>38,889</u>	<u>286,066</u>	<u>40,813</u>
<b>Total Operating Revenue</b>	<b>\$14,256,455</b>	<b>\$14,050,248</b>	<b>\$14,416,252</b>	<b>\$15,353,965</b>
<b>Operating Expenses:</b>				
T&D	\$6,874,286	\$6,079,407	\$6,287,894	\$6,763,052
MRF Recycling Operations	82,712	71,571	70,273	86,930
Ulster Transfer Station	159,506	157,880	75,178	91,291
New Paltz Transfer Station	59,098	41,297	34,102	165,804
CLF Monitoring and Maintenance	219,770	184,739	171,027	191,650
Other Facilities O&M expense	687,655	568,044	664,425	614,946
Agency personnel expense	2,606,283	2,600,289	2,709,435	3,520,887
Administration Expense	579,965	539,544	563,844	631,980
Recycling education/Cocomposting Ops.	<u>23,525</u>	<u>26,413</u>	<u>40,409</u>	<u>41,247</u>
<b>Total Operating Expenses</b>	<b>\$11,292,800</b>	<b>\$10,269,184</b>	<b>\$10,616,587</b>	<b>\$12,107,787</b>
<b>Net Operating Revenue</b>	<b>\$2,963,655</b>	<b>\$3,781,064</b>	<b>\$3,799,665</b>	<b>\$3,246,178</b>
Debt Service	\$2,794,522	\$2,340,543	\$2,332,178	\$ 2,259,360
<b>Net Operating Revenue after Debt Service</b>	<b>\$169,133</b>	<b>\$1,440,521</b>	<b>\$ 1,467,487</b>	<b>\$ 986,818</b>

UCRRA derives most of its revenue from the tipping fees paid by users of its System, which have ranged from 86% to 92% of total revenues from 2014 through 2017. The tipping fee per ton has been \$103 since 2014. Ulster County has instituted legal flow control in the County, and has thereby stabilized the number of tons it receives each year. The number of tons of solid waste disposed and certain key ratios are:

<b>Table 2</b>				
<b>UCRRA</b>				
<b>Historical Volume and Financial Ratios</b>				
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Number of Tons	121,524	124,215	125,348	131,171
Tipping Fee	\$103	\$103	\$103	\$103
Tipping Fee Revenue to Total Revenue	0.86	0.92	0.90	0.88
Operating Costs per Ton of Waste	\$92.93	\$82.67	\$84.70	\$92.31
Debt Service Costs per Ton of Waste	23.00	18.84	18.61	17.22
Total Cost per Ton of Waste	115.92	101.52	103.30	109.53

The ratios and figures above show how UCRRA covers all of its operating costs and most of its total costs (operating costs plus debt service) with its tipping fee revenues. Its non-tipping fee revenues are also significant and as a result UCRRA has run a substantial surplus for the past four years.

The most significant cost for UCRRA, as well as for Greene County and Sullivan County, is its T&D cost, as shown in the table below.

<b>Table 3</b>				
<b>UCRRA</b>				
<b>Historical T&amp;D Costs</b>				
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Transportation	\$ 19.65	\$ 23.89	\$ 24.49	\$ 25.10
Disposal	27.50	21.25	21.67	22.11
Fuel	<u>10.00</u>	<u>5.00</u>	<u>4.00</u>	<u>5.00</u>
Total	\$ 57.15	\$ 50.14	\$ 50.16	\$ 52.21
T&D Costs to Total Operating Costs	0.61	0.59	0.59	0.56

UCRRA's current disposal contract with Seneca Meadows, Inc., dated October 30, 2014 expires on December 31, 2019, with no option of renewal. Sewage sludge is disposed of under a contract with Chemung Landfill, LLC, a subsidiary of Casella Waste Systems, Inc. that expires December 31, 2020. UCRRA has contracts with Mr. Bult's, Inc., commonly known as MBI, for transportation of both waste and sewage sludge that expire at the same time as the disposal contracts, December 31, 2019.

UCRRA's debt service is approximately \$1.8 million per year. Its debt will be fully repaid in 2025.



UCRRA maintains a five-year capital improvement program. The current capital improvement program for 2019 through 2023 is approximately \$2.5 million. UCRRA projects spending approximately \$425,000 on capital improvements in 2018 and has historically spent approximately \$450,000 annually over the last 4 years. The expenditures are funded by UCRRA from its operating revenues.

UCRRA is responsible for one landfill that was closed in 1996. The post closure costs are funded with UCRRA's operating revenues. The following table shows these costs over the last 4 years:

<b>Table 4</b>				
<b>UCRRA</b>				
<b>Historical Post-Closure Costs</b>				
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Post Closure Cost	\$201,839	\$187,136	\$173,421	\$186,908

## ii. Greene County

Greene County is the smallest of the three systems. Greene County revenues ranged from approximately \$4.5 million in 2014 to \$5.1 million in 2017. It has run a small deficit in each of the past four years, from (\$230,275) in 2014, or 5.1% of revenues, to a low of (\$57,792) in 2017 or 1.1% of revenues. All deficits are made up by Greene County's General Fund.

Greene County's principal revenue stream comes from tipping fees, representing between 96% and 98% of total revenues. The County's revenues have risen by approximately \$655,000 between 2015 and 2017 as it has received larger volumes of waste each year.

<b>Table 5</b>				
<b>Greene County</b>				
<b>2014-2017 Historical Financial Results</b>				
	2014	2015	2016	2017
<b>Operating Revenue:</b>				
Refuse and Garbage	\$ 4,300,515	\$ 4,333,594	\$ 4,789,201	\$ 5,006,860
Sales of Recyclables	148,988	112,914	88,617	120,753
Gifts and donations	10,163	7,511	6,995	8,631
Unclassified revenues	1,822	12,395	-	-
Grants	16,907	14,689	12,685	-
Solid Waste Vehicle Repair	<u>11</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Total Operating Revenue</b>	<b>\$ 4,478,405</b>	<b>\$ 4,481,103</b>	<b>\$ 4,897,498</b>	<b>\$ 5,136,244</b>
<b>Operating Expenses:</b>				
Personnel expense	\$ 1,380,704	\$ 1,350,055	\$ 1,371,654	\$ 1,458,413
Equipment	-	15,536	9,237	1,000
Equipment - Vehicles	-	-	113,582	42,500
Capital Improvement Program	-	-	22,490	54,155
Maintenance Agreements	5,495	5,820	5,973	5,985
Repairs	138,013	120,147	134,751	135,774
Automobile Expense	75,205	52,380	53,419	50,651
Administration Expense	10,820	11,692	11,193	10,787
Utilities	38,020	35,289	32,529	31,829
Insurance	22,715	21,310	10,005	18,677
Sub contractors	43,228	31,424	40,021	46,737
Miscellaneous	4,296	7,741	7,815	7,629
Coxsackie Transfer	20,000	20,000	20,000	-
Municipal Solid Waste	<u>2,970,185</u>	<u>3,040,572</u>	<u>3,179,232</u>	<u>3,329,900</u>
<b>Total Operating Expenses</b>	<b>\$ 4,708,680</b>	<b>\$ 4,711,965</b>	<b>\$ 5,011,901</b>	<b>\$ 5,194,035</b>
<b>Net Operating Revenue</b>	<b>\$ (230,275)</b>	<b>\$ (230,862)</b>	<b>\$ (114,404)</b>	<b>\$ (57,792)</b>

Greene County's tipping fee structure differs from UCRRRA and Sullivan County. The two latter systems charge one tip fee for all waste delivered, \$103 and \$95 respectively. Greene County reduces its posted

tipping fee based on the number of tons of waste delivered, providing a volume discount. The tipping fees and volume projections for 2018 are as follows:

<b>Type of Tipping Fee</b>	<b>2018 Tipping Fee</b>	<b>Number of Tons Projected for 2018</b>	<b>% of Total Volume</b>
Posted Tipping Fee	\$105/ton	12,000	25.6%
High Volume Tipping Fee	\$73.64	13,106	22.6%
Extra High Volume Tipping Fee	\$70.89	30,049	51.8%

All extra high volume waste is delivered by County Waste—Ulster LLC (“County Waste”), which is an affiliate of Seneca Meadows, Inc. County Waste delivers this waste pursuant to a contract with Greene County (the “County Waste Contract”), dated December 30, 2016, that specifies that County Waste will use “commercially reasonable efforts” to deliver roughly the same amount of waste each six months that it delivered the previous six months at a price equal to the T&D cost under the Greene County T&D Agreement with Seneca Meadows, Inc. plus \$11.50. The County Waste Contract permits County Waste to terminate its delivery obligations if the Greene County T&D Agreement is terminated. The termination date of the County Waste Contract is December 31, 2020.

The number of tons of solid waste delivered to the Greene County system has increased substantially between 2014 and 2017. Part of that may represent out of county waste entering the Greene County system, but the County could not quantify the amount. The table below provides the historical waste tonnage received, tipping fees, and certain other financial ratios.

	2014	2015	2016	2017
Number of Tons	51,407	54,822	58,038	59,771
Tipping Fee				
Regular	\$105.00	\$105.00	\$105.00	\$105.00
High Volume	N/A	N/A	N/A	\$69.50
Extra High Volume				
Tipping Fee Revenue to Total Revenue	0.96	0.97	0.98	0.97
T&D Costs to Operating Costs	0.63	0.65	0.63	0.64
Operating Cost per Ton of Waste*	\$91.60	\$85.95	\$86.36	\$86.90
Total Cost per Ton of Waste*	\$91.60	\$85.95	\$86.36	\$86.90

\*Greene County has no non-operating costs

Under the Greene County T&D Agreement, the costs per ton to transport and dispose of waste at the Seneca Meadows Landfill are as follows:

Table 8 Greene County T&D Costs						
	2017	2018	2019	2020	2021*	2022*
Transportation	\$35.00	\$35.70	\$36.41	\$37.14	\$37.89	\$38.64
Disposal	<u>\$23.00</u>	<u>\$23.69</u>	<u>\$24.40</u>	<u>\$25.13</u>	<u>\$25.89</u>	<u>\$26.66</u>
Total	\$58.00	\$59.39	\$60.81	\$62.28	\$63.77	\$65.31

\* 2021 and 2022 are at the option of 1-year renewals by Greene County  
The fuel cost to Greene County is \$270 per trip, pursuant to the Greene County T&D Agreement.

Greene County is also able under its T&D contract to send C&D to Dunn’s Landfill. The T&D cost at Dunn’s Landfill is about \$6.50/ton less for C&D than for waste at Seneca Meadows Landfill.

Greene County anticipates saving roughly \$1.70/ton going forward from instituting a fuel purchase program similar to that used by UCRRA.

Greene County has no debt outstanding for solid waste purposes. It has no landfill and no landfill closure or post closure costs.

Greene County has no formal capital improvement plan. Greene County is considering upgrades to the Hunter and Coxsackie transfer stations that would enable the direct haul of waste to Seneca Meadows Landfill. The annual savings are estimated to be around \$20 per ton on a total of 6,000 tons per year. The estimated cost is \$1,000,000, of which the County has set aside \$600,000 in a fund for solid waste projects. The County Legislature would need to vote to use any of these funds on this project. The potential savings from these upgrades is not included in this Report.

### **iii. Sullivan County**

Sullivan County has paid for a substantial amount of its solid waste costs through a special fee charged to real properties in the County. The solid waste/recycling fee (the "SWRF") is charged to all property owners in Sullivan County who own properties on which solid waste and recyclables are capable of being generated and that have access to the County's solid waste system. The SWRF was created by a local law. The amount of the SWRF is based on the residential or commercial status of each property and is billed as a part of the annual property tax bill. Since 2014 the revenue from this fee has been steady between \$5.46 million and \$5.55 million. Sullivan County has also paid certain costs through transfers from the General Fund.

In order to make the financial results of the three solid waste Systems comparable, we have reordered the presentation of the Sullivan County annual Final Budgets to net the operating revenues and costs of solid waste activities prior to the application of the debt service payments, SWRF payments and interfund transfers. We have not included the closure and post closure expenses.

Table 9 shows the summary results for Sullivan County for the period from 2014 through 2017. Between 2014 and 2017, Sullivan County had operating shortfalls prior to the application of the SWRF payments and interfund transfers ranging from approximately (\$620,000) to (\$1.4 million). In addition, Sullivan County had substantial debt service payments, ranging from approximately \$4 million to \$4.9 million annually. The resultant total solid waste System shortfall prior to the application of the SWRF payments and interfund transfers and before landfill closure costs and capital costs has ranged between (\$5 million) and (\$6.3 million) during this period.

The total solid waste System shortfall is made up for with the SWRF. As above, certain other costs, such as landfill closure and some capital expenditures, have been paid with transfers from the County General Fund.

**Table 9**  
**Sullivan County**  
**2014-2017 Historical Financial Results**

	2014	2015	2016	2017
<b>Operating Revenue:</b>				
Misc Fee / Reimbursement [Tip Fees]	\$4,568,648	\$4,606,367	\$5,460,531	\$5,520,777
Commercial Hauler License	3,550	2,400	3,525	4,950
Ferndale Transfer Station	198,861	206,064	220,922	192,262
Highland Transfer Station	141,765	138,442	147,666	140,138
Mamakating Transfer Station	58,358	59,494	66,918	58,870
Rockland Transfer Station	160,331	165,564	169,598	160,726
Western Sull Transfer Station	87,053	86,218	88,674	93,384
Sale Ref/Recycling Tires	272,953	221,419	237,739	295,580
State Aid	5,357	136,109	12,273	73,912
Earned Interest	<u>533</u>	<u>397</u>	<u>660</u>	<u>583</u>
<b>Total Operating Revenue</b>	<b>\$5,497,408</b>	<b>\$ 5,622,475</b>	<b>\$ 6,408,507</b>	<b>\$6,541,182</b>
<b>Operating Expenses:</b>				
Personnel service	\$1,545,120	\$ 1,512,731	\$1,584,777	\$1,696,758
Fixed Equipment	-	-	-	289,837
Engineer/Architect/Design Services	96,366	81,433	87,810	102,087
Contract Other [T&D]	4,004,748	4,151,522	4,434,963	4,595,652
Building Operations	185,557	191,227	180,550	199,068
Property Maintenance	57,376	43,550	-	35,858
Automobile/Travel	214,895	142,018	146,485	147,730
Administration Expense	11,320	13,773	13,730	17,503
Utilities	182,877	139,554	132,613	146,814
Special Department Supply	30,336	18,198	28,774	30,943
Department	341,271	220,660	270,593	488,639
Miscellaneous	<u>198,103</u>	<u>199,777</u>	<u>148,045</u>	<u>209,928</u>
<b>Total Operating Expenses</b>	<b>\$6,867,971</b>	<b>\$6,714,443</b>	<b>\$ 7,028,338</b>	<b>\$7,960,817</b>
<b>Net Operating Shortfall</b>	<b>\$(1,370,564)</b>	<b>\$(1,091,969)</b>	<b>\$ (619,831)</b>	<b>\$(1,419,635)</b>
<u>Debt Service on Bonds</u>	<u>(4,939,375)</u>	<u>(4,391,314)</u>	<u>(4,319,935)</u>	<u>(3,952,448)</u>
<b>Net after DS</b>	<b>(6,309,939)</b>	<b>(5,483,283)</b>	<b>(4,939,766)</b>	<b>(5,372,083)</b>
SWRF	<u>5,794,586</u>	<u>5,798,050</u>	<u>5,782,383</u>	<u>5,728,064</u>
<b>Net Operating Shortfall after SWRF</b>	<b>\$ (515,353)</b>	<b>314,767</b>	<b>842,617</b>	<b>355,981</b>

As may be seen from the table below, the Sullivan County tipping fee raises a substantially smaller amount of its total revenue from tipping fees than either UCRRA or Greene, necessitating the SWRF.

Table 10 Sullivan County Tipping Fees as a Percentage of Total Revenue				
	2014	2015	2016	2017
Sullivan	40%	40%	45%	45%
Greene	96%	97%	98%	97%
UCRRA	86%	92%	90%	88%

There are several main reasons for the shortfall. The first is that Sullivan’s T&D fees per ton have been significantly greater on a per ton basis than those in the other two Systems, while its tipping fees have been slightly less than UCRRA and Greene County’s posted tipping fees. Sullivan County’s T&D fees for the preceding four years are as follows:

Table 11 Sullivan County T&D Costs				
	2014	2015	2016	2017
T&D Combined per Ton	\$70.21	\$71.27	\$72.41	\$73.18
Fuel	<u>\$4.90</u>	<u>\$1.44</u>	<u>\$0.06</u>	<u>\$1.01</u>
Total	\$75.11	\$72.71	\$72.47	\$74.19

The comparison of total historical T&D costs per ton, excluding fuel costs, for all three systems is as follows:

Table 12 Comparison of System T&D Costs				
	2014	2015	2016	2017
UCRRA	\$57.15	\$50.14	\$50.16	\$52.21
Greene				\$58.00
Sullivan	\$70.21	\$71.27	\$72.41	\$73.18

Sullivan County entered into its T&D contract with Seneca Meadows, Inc. on December 30, 2009, while the UCRRA T&D contract dates from October 30, 2014 and the Greene County T&D contract dates from December 30, 2016. It may be noted that Sullivan’s T&D cost would be about \$1.2 million lower in 2017, if it paid \$20/ton less, or more in line with the terms of the more recent contracts of UCRRA and Greene County. The Sullivan County T&D agreement terminates on December 31, 2020.

The second main reason for Sullivan County’s solid waste operating shortfall is its large annual debt service. The County issued bonds for a variety of solid waste purposes, including landfill development and construction, landfill closure, transfer station construction, a materials recovery facility building, etc. Sullivan County has paid solid waste debt service as follows between 2014 and 2017:

<b>Table 13</b>				
<b>Sullivan County</b>				
<b>Historical Solid Waste Debt Service</b>				
	2014	2015	2016	2017
Solid Waste System Debt Service	\$4,939,375	\$4,391,314	\$4,319,935	\$3,952,448

The sum of the operating shortfall and the annual debt service has essentially been funded by the SWRF. The operating shortfall plus the annual debt service are in line with the amount of the SWRF, as may be seen in the following table.

<b>Table 14</b>				
<b>Sullivan County</b>				
<b>Effect of SWRF on Operating Shortfall</b>				
	2014	2015	2016	2017
Operating Shortfall	\$1,370,564	\$1,091,969	\$619,831	\$1,419,635
Solid Waste System Debt Service	<u>4,939,375</u>	<u>4,391,314</u>	<u>4,319,935</u>	<u>3,952,448</u>
Operating Shortfall plus Debt Service	\$6,309,939	5,483,283	4,939,766	5,372,083
SWRF	<u>5,794,586</u>	<u>5,798,050</u>	<u>5,782,383</u>	<u>5,728,064</u>
Difference	(515,353)	314,767	842,617	355,981

On December 31, 2018 Sullivan County will have \$10,775,000 of bonds for solid waste purposes outstanding but will see relief in the future as annual solid waste debt service decreases through 2026 when it is fully repaid. The debt service reduces in steps as different series of bonds mature:

<b>Table 15</b>	
<b>Sullivan County</b>	
<b>Future Debt Service on Solid Waste Bonds</b>	
	<b>Debt Service</b>
2018	\$3,487,690
2019	2,892,210
2020	2,090,867
2021	2,101,042
2022	2,112,653
2023	811,651
2024	808,872
2025	606,072
2026	606,122



## Sullivan County Capital Improvement Plan

Sullivan County currently maintains a 5-year capital improvement plan for the Refuse and Garbage Fund, including landfill closure costs, which it regularly updates. The current capital improvement program for the years 2018 through 2022 is approximately \$5 million. Sullivan County typically only projects exact capital needs for the upcoming fiscal year. The County has budgeted \$1,345,000 for 2018. Of this amount, \$1,155,000 is for landfill closure costs.

Capital expenditures are funded by debt, reserve funds, and some operating funds. Large capital expenditures for landfill closure have been paid out of a post closure fund the County maintains or through the issuance of debt. It transfers these monies into the Refuse and Garbage Fund as needed to pay for landfill closure costs. Smaller costs for landfill closure are paid out of the Refuse and Garbage Fund.

The following line items related to capital expenditures and landfill closure costs are not shown in Table 9 above, which shows ongoing solid waste operating revenues and expenses for Sullivan County:

### Cash Inflows

1. In 2014 and in 2015, the County transferred \$1,100,000 from the General Fund into the Refuse and Garbage Fund to pay for debt service on bond anticipation notes maturing in each of those years.
2. During 2016, the County transferred \$250,000 from the General Fund to cover capital items at the landfill. It includes a slope mower (\$75,000), maintenance on the perimeter security fence (\$75,000) and funds to be used toward the replacement of the leachate tanks (\$100,000).
3. In 2017, \$1,043,621 was transferred into the Refuse and Garbage Fund from the General Fund for landfill closure costs.

### Cash Outflows

1. In 2016 and 2017, \$500,000 was transferred each year from the Refuse and Garbage Fund to the General Fund. The money reimbursed the General Fund for payments made related to solid waste. There is one remaining transfer budgeted in the amount of \$500,000 in 2018.

Sullivan County has significant ongoing landfill closure and post closure costs. Sullivan County audited financial statements for 2017 show a long term liability for landfill post closure costs of \$15,303,388, offset by a committed fund balance in excess of \$6 million. Sullivan County has additional potential landfill closure costs, such as the potential construction of a leachate holding tank at a cost to be determined, but which may or may not be substantial. If the responsibility for landfill closure and post closure costs were transferred to GUS, a funding mechanism would need to be developed to pay for those costs. Alternatively, these costs could continue to be paid by Sullivan County, as they are currently paid from a variety of funds available to Sullivan County.

The following table shows annual tonnages, tipping fees per ton and a number of other financial ratios:

**Table 16**  
**Sullivan County**  
**Historical Tonnage, Tipping Fee, and Other Financial Ratios**

	2014	2015	2016	2017
Number of Tons	53,174	56,696	60,774	61,694
Tipping Fee	\$95.00	\$95.00	\$95.00	\$95.00
Tipping Fee Revenue to Total Revenue	0.40	0.40	0.45	0.45
T&D Costs to Operating Costs	0.58	0.62	0.63	0.58
Operating Costs per Ton of Waste	\$129	\$118	\$116	\$129
Debt Service per Ton of Waste	\$93	\$77	\$71	\$64
Total Cost per Ton of Waste	\$222	\$196	\$187	\$193
Debt Service/Total Cost	0.42	0.40	0.38	0.33
SWRF/Total Revenues	0.51	0.51	0.47	0.47
SWRF/Total Expenses plus Debt Service	0.44	0.48	0.48	0.43

## 7. Financial Results for a Combined GUS System

Table 17 shows the results of simply combining the financials of the three solid waste systems for the period from 2014 through 2017. We have included all revenues and expenses as shown on the UCRRA cash financial statements and the Greene County's and Sullivan County's Budget Performance Reports, with the exception of certain interfund transfers (discussed above) between the Sullivan County Refuse and Garbage Fund and General Fund which include capital expenditures and landfill closure costs.

<b>Table 17</b>				
<b>Sullivan County, Greene County, and UCRRA</b>				
<b>Combined 2014-2017 Historical Results</b>				
	2014	2015	2016	2017
<b>Greene County</b>				
Operating Revenue	\$4,478,405	\$4,481,103	\$4,897,498	\$5,136,244
Operating Expense	<u>4,708,680</u>	<u>4,711,965</u>	<u>5,011,901</u>	<u>5,194,035</u>
Net Operating Revenue	(230,275)	(230,862)	(114,404)	(57,792)
<b>UCRRA</b>				
Operating Revenue	\$14,256,455	\$14,050,248	\$14,416,252	\$15,353,965
Operating Expense	<u>11,292,800</u>	<u>10,269,184</u>	<u>10,616,587</u>	<u>12,107,787</u>
Net Operating Revenue	2,963,655	3,781,064	3,799,665	3,246,178
Debt Service – Bonds	\$2,794,522	\$2,340,543	\$2,332,178	\$2,259,360
<b>Sullivan County</b>				
Operating Revenue	\$5,497,408	\$5,622,475	\$6,408,507	\$6,541,182
Operating Expense	<u>6,867,971</u>	<u>6,714,443</u>	<u>7,028,338</u>	<u>7,960,817</u>
Net Operating Revenue	(1,370,564)	(1,091,969)	(619,831)	(1,419,635)
Debt Service – Bonds	\$4,939,375	\$ 4,391,314	\$4,319,935	\$3,952,448
<b>GUS SWMA</b>				
Operating Revenue	\$24,232,268	\$24,153,825	\$25,722,256	\$27,031,391
Operating Expense	<u>22,869,451</u>	<u>21,695,592</u>	<u>22,656,826</u>	<u>25,262,640</u>
<b>Net Operating Revenue</b>	1,362,817	2,458,233	3,065,430	1,768,751
Debt Service - UCRRA Bonds	\$2,794,522	\$2,340,543	\$2,332,178	\$2,259,360
Debt Service - Sullivan County Bonds	<u>4,939,375</u>	<u>4,391,314</u>	<u>4,319,935</u>	<u>3,952,448</u>
Total Debt Service	7,733,897	6,731,857	6,652,113	6,211,808
<b>Net Operating Revenue less DS</b>	\$(6,371,081)	\$(4,273,624)	\$(3,586,683)	\$(4,443,057)
<b>SWRF</b>	<u>5,794,586</u>	<u>5,798,050</u>	<u>5,782,383</u>	<u>5,728,064</u>
<b>Net Op. Revenue less DS plus SWRF</b>	\$ (576,495)	\$1,524,426	\$2,195,700	\$1,285,007

The combined statement of revenues and expenses are presented by year in summary form as follows:

1. The three systems' revenues and expenses are combined to produce Total Operating Revenues and Total Operating Expenses, respectively. Net Operating Revenues (Total Operating Revenues less Total Operating Expenses) is consistently positive from 2014 to 2017.
2. Total Debt Service equals UCRRA's debt service plus Sullivan County's debt service.
3. Total Debt Service is subtracted from Net Operating Revenues to produce Net Operating Revenue less Debt Service. Net Operating Revenues less Debt Service are negative for all four years and range from (\$6.4 million) to a (\$3.6 million) from 2014 to 2017, as the following table shows:

Table 18				
GUS				
Net Operating Revenue Less Debt Service				
	2014	2015	2016	2017
Net Operating Revenue less Debt Service	(\$6,371,081)	(\$4,273,624)	(\$3,586,683)	(\$4,443,057)

4. The Sullivan County SWRF is then added to produce Net Operating Revenues less Debt Service plus SWRF, which is positive in the years from 2015-2017, and slightly negative in 2014, as the following table shows:

Table 19				
GUS				
Net Operating Revenue Less Debt Service Plus SWRF				
	2014	2015	2016	2017
Net Operating Revenue less Debt Service plus SWRF	(\$576,495)	\$1,524,426	\$2,195,700	\$1,285,007

#### iv. Gus Formation

In order for GUS to be created, GUS will have to issue bonds (the "GUS Bonds"). As of March 2, 2019 UCRRA will have \$12,995,000 in total outstanding revenue bond debt service (principal and interest) payable from 2020 to 2025. Annual debt service on these bonds is approximately \$1,760,000. Offsetting these obligations, UCRRA has \$3,745,715.91 in its debt service reserve fund. The UCRRA Bond Indenture under which UCRRA has issued bonds requires that no action be taken that would materially affect the security of bondholders, such as merging UCRRA with another entity, unless the bondholders have been repaid or provision has been made for their repayment through the defeasance of their bonds. Defeasance means that US Treasury securities have been deposited in an escrow account with a Trustee, the proceeds of which will be sufficient to repay the UCRRA bondholders' principal and interest as they become due. Since the UCRRA bonds are not callable, they must be defeased to create GUS.

The funds needed to defease the UCRRA bonds may be obtained from a GUS bond issue and the debt service reserve funds UCRRA currently has on hand.

While the UCRRA bonds must be defeased, the same is not the case with the Sullivan County solid waste bonds. GUS may acquire the Sullivan County solid waste assets without paying off the Sullivan County bonds that financed them. In this analysis, we have assumed that Sullivan County's solid waste debt would not be refunded.

#### GUS Bond Issue

For purposes of this Report, we have performed a refunding analysis showing the GUS bond issue required to create GUS as of January 1, 2020. In that bond issue we have also included the financing of the UCRRA and Sullivan County capital improvement plans for 2020-2022, the years for which UCRRA and Sullivan County have provided us with capital improvement plans. We did not include the potential \$1,000,000 Greene County transfer station improvement project as they have not decided whether to proceed, and we have not included Sullivan County's landfill closure costs in the capital improvement plan.

There will also be a variety of organizational costs required to create GUS, which we have assumed to be \$1,000,000 and which are included in the GUS bond issue. Further work will be required to refine this number. We have set up the bond issue so that the amortization of the UCRRA refunding component of the bond issue is limited to the original final maturity of the original UCRRA refunded bonds. We have amortized the capital improvement plan requirements and the organizational costs in equal annual payments through 2040, as would be typical of a solid waste revenue bond.

#### Cases

We have prepared three different cases to assess the "feasibility" of GUS. In all three cases, we have carried forward the revenues and expenses of the three Systems as they existed in 2017 and added them to produce the totals to represent the results of GUS. We have replaced the debt service on the existing UCRRA Bonds from 2020 forward with that on the new GUS Bonds described above. We have changed the treatment of the Sullivan County bonds debt service and SWRF as described in the different cases. We have assumed that the Sullivan County landfill closure and post closure costs are paid by Sullivan County. These are the critical financial considerations in assessing the feasibility of GUS.

In Case 1, an amount equal to the Sullivan County debt service is shown as paid by GUS and an amount equal to the Sullivan County SWRF is shown as paid by Sullivan County to GUS.

In Case 2, Sullivan County solid waste debt service is not paid by GUS, nor is the Sullivan County SWRF amount paid to GUS. The Sullivan County T&D cost is reduced by \$1.2 million for reasons discussed below. No changes to any of the Systems' tipping fees are assumed.

Case 3 includes all of the same assumptions as Case 2, except for tipping fees. In Case 3, we have calculated the single tipping fee that would need to be charged across the GUS System to generate the revenues necessary to operate the GUS System, or the same total revenues as in Case 2.

***We did not attempt to produce an actual projection of revenues and expenses of the new GUS, as that was beyond the scope of this study. In all of the Cases, we assume that GUS starts functioning as GUS on 1/1/20.***

**Case 1 – Base Case (UCRRA Bonds Refunded by GUS Bonds, No Other Change)**

The combined statements of revenues and expenses carried forward from 2017 are presented for each year in summary form are as follows as shown on Table 20 on the following page:

1. The Total Operating Revenues from the three systems are combined, as are the Total Operating Expenses. This latter amount is subtracted from Total Operating Revenues to produce Net Operating Revenues, which is consistently positive from 2020 to 2026.
2. The projected debt service for the different components of the GUS bond issue are shown next and added to the debt service on the Sullivan County solid waste bonds to produce Total Debt Service.
3. Total Debt Service is subtracted from Net Operating Revenues to produce Net Operating Revenue less Debt Service. Net Operating Revenues less Debt Service are consistently negative until 2025 and 2026, when bonds of both UCRRA and Sullivan County are fully repaid. Specifically, Net Operating Revenues less Debt Service ranges from a negative (\$1.55 million) to a negative (\$462,000) in the years from 2020 to 2024. In 2025 and 2026, it is positive at \$617 thousand and \$1.4 million respectively.
4. The Sullivan County SWRF amount is then added to produce Net Operating Revenues less Debt Service plus SWRF, which are consistently and substantially positive in all projected years, ranging from \$1.2 million to \$7.2 million. As the Sullivan County bond debt service decreases from year to year and the UCRRA refunding component of the GUS Bonds fully amortizes, the Net Operating Revenues less Debt Service plus SWRF increase over time.

**Table 20  
GUS Case 1 -  
2018-2026 Pro Forma**

	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>Greene County</b>									
Operating Revenue	\$5,136,244	\$5,136,244	\$5,136,244	\$5,136,244	\$5,136,244	\$5,136,244	\$5,136,244	\$5,136,244	\$5,136,244
Operating Expense	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>
Net	(57,792)	(57,792)	(57,792)	(57,792)	(57,792)	(57,792)	(57,792)	(57,792)	(57,792)
<b>UCRRA</b>									
Operating Revenue	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965
Operating Expense	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>
Net	3,867,065	3,867,065	3,867,065	3,867,065	3,867,065	3,867,065	3,867,065	3,867,065	3,867,065
Debt Service - Bonds	\$1,896,550	\$1,790,000	\$1,790,000	\$1,790,000	\$1,790,000	\$1,790,000	\$1,790,000	\$299,284	\$-
<b>Sullivan County</b>									
Operating Revenue	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182
Operating Expense	<u>7,960,817</u>	<u>7,960,817</u>	<u>7,960,817</u>	<u>7,960,817</u>	<u>7,960,817</u>	<u>7,960,817</u>	<u>7,960,817</u>	<u>7,960,817</u>	<u>7,960,817</u>
Net	(1,419,635)	(1,419,635)	(1,419,635)	(1,419,635)	(1,419,635)	(1,419,635)	(1,419,635)	(1,419,635)	(1,419,635)
Debt Service - Bonds	\$3,487,690	\$2,892,210	\$2,090,867	\$2,101,042	\$2,112,653	\$811,651	\$808,872	\$606,072	\$606,122
<b>GUS SWMA</b>									
Operating Revenue	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391
Operating Expense	<u>24,641,753</u>	<u>24,641,753</u>	<u>24,641,753</u>	<u>24,641,753</u>	<u>24,641,753</u>	<u>24,641,753</u>	<u>24,641,753</u>	<u>24,641,753</u>	<u>24,641,753</u>
<b>Net Operating Revenue</b>	2,389,638	2,389,638	2,389,638	2,389,638	2,389,638	2,389,638	2,389,638	2,389,638	2,389,638
Debt Service									
GUS Bonds (UCRRA Debt)	\$-	\$-	\$1,484,472	\$1,469,105	\$1,464,005	\$1,466,905	\$1,462,705	\$798,053	\$-
GUS Bonds (New Money)	-	-	77,918	80,576	78,976	77,376	80,676	78,876	77,076
GUS Bonds (Capital Impr.)	-	-	151,551	289,026	288,326	287,426	291,226	289,726	288,026
UCRRA Bonds	1,896,550	1,790,000	-	-	-	-	-	-	-
Sullivan County Bonds	<u>3,487,690</u>	<u>2,892,210</u>	<u>2,090,867</u>	<u>2,101,042</u>	<u>2,112,653</u>	<u>811,651</u>	<u>808,872</u>	<u>606,072</u>	<u>606,122</u>
Total Debt Service	5,384,240	4,682,210	3,804,808	3,939,749	3,943,960	2,643,358	2,643,479	1,772,727	971,224
<b>Net Op. Revenue less DS</b>	\$(2,994,602)	\$(2,292,572)	\$(1,415,170)	\$(1,550,111)	\$(1,554,322)	\$(253,720)	\$(253,841)	\$616,911	\$1,418,414
SWRF	\$5,795,000	\$5,795,000	\$5,795,000	\$5,795,000	\$5,795,000	\$5,795,000	\$5,795,000	\$5,795,000	\$5,795,000
<b>Net Operating Revenue less DS plus SWRF</b>	\$2,800,398	\$3,502,428	\$4,379,830	\$4,244,889	\$4,240,678	\$5,541,280	\$5,541,159	\$6,411,911	\$7,213,414

*The conclusion that may be drawn from Case 1 is that there is nothing in the financial results of the three systems that would make their combination unfeasible, assuming that all of the existing payment mechanisms, including the Sullivan County SWRF, remain in place. GUS would provide the same level of service as is now provided.*

#### Alternate Cases and Further Discussion of Feasibility

The next two tables show the effects of several assumption changes that seek to harmonize the ways in which revenues are generated across the proposed GUS system. One major question is can GUS operate based on a model in which tipping fee revenues provide most of the revenues of the GUS system and in which the Sullivan County SWRF would not be necessary as a primary revenue source?

#### **Case 2 (UCRRA Bonds Refunded, No Sullivan County Debt, No SWRF, Lower T&D Costs)**

Case 2 looks at the effects of the elimination of the Sullivan County SWRF as a revenue source (See “Table 21”). It also assumed that Sullivan County would retain the responsibility of paying for its existing bonds and its landfill closure and post closure costs. Sullivan County could continue to use the SWRF as the funding source to pay those costs. Case 2 also assumes no changes in the current tipping fees or tipping fee revenues.

Also incorporated are the potential benefits of rebidding all the T&D contracts from 2020 and onwards. All of the disposal costs in the T&D costs of the three entities are incurred under contracts with Seneca Meadows, Inc. The UCRRA contract terminates on December 31, 2019 and the Greene County and Sullivan County contracts terminate on December 31, 2020. This presents an opportunity for GUS to procure all of the T&D services at one time with one coordinated bidding approach. The three contracts bid together will represent a sizeable amount of waste and an attractive opportunity for landfill operators. This may produce lower prices than if the three contracts for much smaller amounts were bid separately. At the same time, it gives GUS the opportunity to level the T&D cost playing field for all of the systems.

Case 2 includes the \$1.2 million savings effect that would be achieved, if the Sullivan County share of the GUS T&D expense were reduced to the approximate average of T&D per ton fees paid by Greene County and UCRRA. The average of the Greene County T&D (\$58.00/ton) and UCRRA T&D (\$47.21/ton) is equal to approximately \$53/ton. The Sullivan County T&D equals \$73.18/ton, approximately \$20.00/ton greater than the UCRRA-Greene County average. If Sullivan County were to achieve a \$20/ton reduction in its T&D cost, that would result in an approximately \$1.2 million savings in 2021.

It is possible that the rebid T&D fees will be different than those used in the analysis. An important part of the argument for GUS is the buying power that the combined number of tons of the three systems represents. GUS is likely to get a better deal than any of the systems acting alone. If, however, the newly bid T&D fee were not as low as those used in this analysis, the effect would be to harmonize the cost structures of all of the Systems, albeit at a higher level.

The results of these changes are shown in Table 21. Net Operating Revenues for the new GUS are \$2.4 million in all years from 2020 to 2026. Net Operating Revenues less Debt Service range from \$676,000



in 2020 to \$555,000 in 2024. In 2025 and 2026 they increase sharply to \$1.2 million and \$2.0 million respectively, as the UCRRA refunding bonds fully amortize.

**Table 21**  
**GUS Case 2 (Original Tipping Fees, Reduction in Sullivan County T&D, No Sullivan County Debt, No SWRF)**  
**Pro Forma**

	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>Greene County</b>									
Operating Revenue	\$ 5,136,244	\$ 5,136,244	\$ 5,136,244	\$ 5,136,244	\$ 5,136,244	\$ 5,136,244	\$ 5,136,244	\$ 5,136,244	\$ 5,136,244
Operating Expense	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>
Net	(57,792)	(57,792)	(57,792)	(57,792)	(57,792)	(57,792)	(57,792)	(57,792)	(57,792)
<b>UCRRA</b>									
Operating Revenue	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965	\$15,353,965
Operating Expense	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>
Net	3,867,065	3,867,065	3,867,065	3,867,065	3,867,065	3,867,065	3,867,065	3,867,065	3,867,065
Debt Service - Bonds	\$1,896,550	\$1,790,000	\$1,790,000	\$1,790,000	\$1,790,000	\$1,790,000	\$1,790,000	\$ 299,284	\$ -
<b>Sullivan County</b>									
Operating Revenue	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182	\$6,541,182
Operating Expense	7,960,817	7,960,817	7,960,817	7,960,817	7,960,817	7,960,817	7,960,817	7,960,817	7,960,817
Reduction in Sullivan T&D	-	-	-	<u>1,233,890</u>	<u>1,233,890</u>	<u>1,233,890</u>	<u>1,233,890</u>	<u>1,233,890</u>	<u>1,233,890</u>
Net	(1,419,635)	(1,419,635)	(1,419,635)	(185,746)	(185,746)	(185,746)	(185,746)	(185,746)	(185,746)
<b>GUS SWMA</b>									
Operating Revenue	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391	\$27,031,391
Operating Expense	<u>24,641,753</u>	<u>24,641,753</u>	<u>24,641,753</u>	<u>23,407,863</u>	<u>23,407,863</u>	<u>23,407,863</u>	<u>23,407,863</u>	<u>23,407,863</u>	<u>23,407,863</u>
<b>Net Operating Revenue</b>	2,389,638	2,389,638	2,389,638	3,623,528	3,623,528	3,623,528	3,623,528	3,623,528	3,623,528
<b>Debt Service</b>									
GUS Bonds (UCRRA Debt)	\$ -	\$ -	\$1,484,472	\$1,469,105	\$1,464,005	\$1,466,905	\$1,462,705	\$ 798,053	\$ -
GUS Bonds (New Money)	-	-	77,918	80,576	78,976	77,376	80,676	78,876	77,076
GUS Bonds (Capital Improve)	-	-	151,551	289,026	288,326	287,426	291,226	289,726	288,026
UCRRA Bonds	1,896,550	1,790,000	-	-	-	-	-	-	-
Sullivan County Bonds	<u>\$3,487,690</u>	<u>\$2,892,210</u>	-	-	-	-	-	-	-
Total Debt Service	5,384,240	4,682,210	1,713,941	1,838,707	1,831,307	1,831,707	1,834,607	1,166,655	365,102
<b>Net Operating Revenue less DS</b>	\$ (2,994,602)	\$ (2,292,572)	\$ 675,697	\$1,784,821	\$1,792,221	\$1,791,821	\$1,788,921	\$2,456,873	\$3,258,426
SWRF	\$5,795,000	\$5,795,000							
<b>Net Operating Revenue less DS plus SWRF</b>	\$2,800,398	\$3,502,428	\$ 675,697	\$1,784,821	\$1,792,221	\$1,791,821	\$1,788,921	\$2,456,873	\$3,258,426

*Case 2 demonstrates that GUS can be cash positive without the Sullivan County SWRF, assuming that it is not obligated to pay for the Sullivan County outstanding bonds or ongoing Sullivan County landfill closure and post closure costs. GUS would provide the same level of service as is now provided.*

**Case 3 (UCRRA Bonds Refunded, No Sullivan County Debt, No SWRF, Lower T&D Costs, One Tipping Fee GUS System Wide)**

The analyses in Cases 1 and 2 assume that GUS maintains the tipping fees in the individual systems at which they exist today. The current tipping fees charged range from a low of \$70.89/ton for Greene County's highest volume customer to a high of \$105/ton for Greene County's regular customers. The UCRRA tipping fee is \$103/ton and the Sullivan County tipping fee is \$95/ton.

Different tipping fees charged to similar customers based on their location may be perceived as unfair. It may also provide incentives for haulers to "game the system" by moving waste from one County to another to obtain a better price. It would be better to have a uniform tip fee that creates an even playing field for all waste haulers and in turn all residents, businesses and industries. A uniform tip fee will also provide for an easier and more readily transparent system administration. It would avoid "system gaming" which would become a chronic problem.

The following Table 22 shows the GUS-wide tipping fees for 2020 to 2026 that, if charged on all the 250,000 tons of waste delivered to the GUS system, in combination with other existing GUS revenues, would generate sufficient revenues to pay all the costs and expenses of the GUS system, including all GUS debt service. Those tipping fee revenues also achieve debt service coverage ratios<sup>1</sup> of 1.15 times in each year, as is necessary to achieve a high investment grade credit rating from the rating agencies. In 2020, the GUS-wide tipping fee that would be required is \$95.10. It would decline to \$90.78 in 2021 when we assume a \$1.2 million reduction in the T&D costs from a GUS wide bidding process (see previous section). The GUS-wide tipping fees would remain at about \$91.00 until 2025 and 2026, when it would decline to \$87.76 and \$84.11 due to debt service reductions on the GUS bonds.

---

<sup>1</sup> The debt service coverage ratio equals the Net Operating Revenues/Debt Service

**Table 22**  
**GUS Case 3 Pro Forma Results (One Tipping Fee to Achieve 1.15 DSCR, Reduction in Sullivan County T&D, No Sullivan County Debt, No SWRF)**

	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>Greene County</b>									
Operating Revenue	\$5,136,244	\$5,136,244	\$5,813,602	\$5,555,392	\$5,553,599	\$5,553,599	\$5,554,794	\$5,374,883	\$5,156,719
Operating Expense	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>	<u>5,194,035</u>
Net	(57,792)	(57,792)	619,567	361,356	359,563	359,563	360,759	180,848	(37,316)
<b>UCRRA</b>									
Operating Revenue	\$15,353,965	\$15,353,965	\$14,243,852	\$13,677,193	\$13,673,258	\$13,673,258	\$13,675,882	\$13,281,057	\$12,802,283
Operating Expense	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>	<u>11,486,900</u>
Net	3,867,065	3,867,065	2,756,952	2,190,293	2,186,358	2,186,358	2,188,982	1,794,157	1,315,383
<b>Sullivan County</b>									
Operating Revenue	\$6,541,182	\$6,541,182	\$6,547,351	\$6,280,831	\$6,278,980	\$6,278,980	\$6,280,214	\$6,094,514	\$5,869,329
Operating Expense	7,960,817	7,960,817	7,960,817	7,960,817	7,960,817	7,960,817	7,960,817	7,960,817	7,960,817
Reduction in Sullivan T&D	-	-	-	<u>1,233,890</u>	<u>1,233,890</u>	<u>1,233,890</u>	<u>1,233,890</u>	<u>1,233,890</u>	<u>1,233,890</u>
Net	(1,419,635)	(1,419,635)	(1,413,466)	(446,096)	(447,947)	(447,947)	(446,713)	(632,414)	(857,599)
<b>GUS SWMA</b>									
Operating Revenue	\$27,031,391	\$27,031,391	\$26,604,806	\$25,513,416	\$25,505,837	\$25,505,837	\$25,510,890	\$24,750,454	\$23,828,331
Operating Expense	<u>24,641,753</u>	<u>24,641,753</u>	<u>24,641,753</u>	<u>23,407,863</u>	<u>23,407,863</u>	<u>23,407,863</u>	<u>23,407,863</u>	<u>23,407,863</u>	<u>23,407,863</u>
<b>Net Operating Revenue</b>	2,389,638	2,389,638	1,963,053	2,105,553	2,097,974	2,097,974	2,103,027	1,342,591	420,468
<b>Debt Service</b>									
GUS Bonds (UCRRA Debt)	\$ -	\$ -	\$1,484,472	\$1,469,105	\$1,464,005	\$1,466,905	\$1,462,705	\$ 798,053	\$ -
GUS Bonds (New Money)	-	-	77,918	80,576	78,976	77,376	80,676	78,876	77,076
GUS Bonds (Capital Imp.)	-	-	151,551	289,026	288,326	287,426	291,226	289,726	288,026
UCRRA Bonds	1,896,550	1,790,000	-	-	-	-	-	-	-
Sullivan County Bonds	<u>\$3,487,690</u>	<u>\$2,892,210</u>	-	-	-	-	-	-	-
Total Debt Service	5,384,240	4,682,210	1,713,941	1,838,707	1,831,307	1,831,707	1,834,607	1,166,655	365,102
<b>Net Oper. Revenue less DS</b>	\$(2,994,602)	\$(2,292,572)	\$249,112	\$266,846	\$266,667	\$266,267	\$268,420	\$175,937	\$ 55,366
<b>SWRF</b>	\$5,795,000	\$5,795,000	-	-	-	-	-	-	-
<b>Net Operating Revenue less DS plus SWRF</b>	\$2,800,398	\$3,502,428	\$249,112	\$266,846	\$266,667	\$266,267	\$268,420	\$175,937	\$ 55,366
<b>Tipping Fee Achieving 1.15x Debt Service Coverage</b>			95.10	90.78	90.75	90.75	90.77	87.76	84.11

These uniform GUS-wide tipping fees represent a reduction for UCRRA customers, a slightly smaller reduction for Sullivan County and a mixed result for Greene County. While the regular tipping fee for Greene County is \$105, that fee is only paid by about 25% of Greene County customers with a projected tonnage for 2018 of 14,881 tons. About 75% of Greene County tonnage, or 43,155 tons, is delivered by high or extra high volume customers, mostly haulers. They pay tipping fees of \$73.64/ton and \$70.89/ton respectively. An increase to them ranging from a high of \$24/ton to a low of \$13/ton is likely to create problems. They could deliver their waste elsewhere, removing the waste and the revenues associated with it from GUS. In order to keep such waste within the GUS System, flow control could be implemented. Alternatively, tipping fee increases could be implemented over time to phase in the required increases, as might be negotiated with the affected customers.

*This analysis demonstrates that the GUS system could operate at a tipping fee in the \$84-95 range over time, assuming that GUS is not obligated to pay for the Sullivan County outstanding bonds or ongoing Sullivan County landfill closure and post closure costs. GUS would provide the same level of service as is now provided.*

## 8. Conclusion

---

GUS is financially “feasible” in each of the three cases that we have analyzed through the merger of the three solid waste Systems into GUS. GUS can maintain each System’s distinct characteristics and continue serving all of the existing customers as they have been served in the past with the same network of transfer stations, drop-off centers, recycling services, etc. The three cases show that GUS can be created to provide the same services as are now provided with little or no change in tipping fees or other revenue generating mechanisms. In all cases, we have included the debt service that results from refunding the existing UCRRA bonds, providing funds for the organizational costs of GUS and providing three years of capital improvements, as budgeted by UCRRA and Sullivan County. As has been discussed elsewhere, we have not included the Sullivan County landfill closure and post closure costs.

Case 1 shows that when all of the cash flows of the three Systems are combined, the resulting cash flows are positive, including the effect of the refunding of the UCRRA Bonds. As the new GUS Bond issue and the Sullivan County Bonds are paid off from 2020 to 2026 the sizes of the annual positive cash flows increase. This demonstrates that there are sufficient positive cash flows generated to make GUS feasible. Tipping fees would remain at the same levels as they are at present in each System.

Case 2 is similar to Case 1; however, it assumed that no payments would be made from Sullivan County to GUS or vice versa. Instead, Sullivan County would retain responsibility for paying the debt service on its outstanding solid waste bonds and the landfill closure and post closure costs at its landfill. Tipping fees would remain at the same levels as they are at present in each System. Case 2 also assumes that the procurement of T&D services results in a cost in Sullivan that is similar to that paid by UCRRA and Greene.

Case 3 is the same as Case 2 with one major change. We have calculated the tipping fees that, if implemented GUS system-wide, would provide sufficient revenues, together with other existing revenues, to pay all costs and expenses and generate a small surplus. The calculated tipping fees are \$95/ton in 2020 and decrease to \$84/ton in 2026. The challenge of Case 3 is the increased tipping fee that would be payable Greene County’s high volume and extra high volume customers.

If GUS is assembled using any of the three cases as the organizational framework, GUS will be financially stable and will have the ability to:

1. Realize the potential cost reductions that may be possible from economies of scale in procuring services, especially transportation and disposal, with approximately 250,000 tons per year of waste, as opposed to the much smaller amounts of each of the Systems individually.
2. Realize possible economies of scale in recycling operations and larger volume recyclables sales from the combined Systems.
3. Provide the basis to explore new and more environmentally beneficial forms of waste disposal. Many of the proposed and developing alternative methods of solid waste disposal are capital intensive and require large inputs of solid waste to be financially feasible. GUS will be in a

position to evaluate any new forms based on 250,000 tons per year, a far more attractive size than any of the existing Systems alone.

A great deal more work will be required to make GUS a reality, but our conclusion is that GUS is financially “feasible”.