



Assessment of Long-Term Solid Waste Management Alternatives

Updated Final Model Report

Sonoma County

Draft Report | March 2009

Long-Term Solid Waste Management Alternatives Revisions

Table of Contents

Introduction.....	1
1. Revisions to the Assessment of Long-Term Solid Waste Management Alternatives Model (Report).....	1

Appendices:

- Revisions to the Assessment of Long-Term Solid Waste Management Alternatives Model
 - A. 100% Tonnage Case - Detailed Analysis Spreadsheets
 - B. 80% Tonnage Case - Detailed Analysis Spreadsheets
 - C. 50% Tonnage Case - Detailed Analysis Spreadsheets
 - D. 50% Tonnage Central Transfer Station Alone Operating Case – Detailed Analysis Spreadsheet

Update of Assessment of Long-Term Solid Waste Management Alternatives, Economic Forecast Model Revisions for Sonoma County

Introduction

In January 2006 HDR completed the Sonoma County Assessment of Long-Term Solid Waste Management Alternatives (Report), dated January 2006 (2006 Report). The 2006 Report included a forecast of economic conditions for four selected long-term disposal system scenarios. The County is in the process of implementing one of the recommendations from the 2006 Report, which is exploring a possible divestiture of the County's solid waste assets. As the divestiture project is brought forward to the County Board of Supervisors for consideration, it is important for the Board of Supervisors to compare the benefits of a divestiture against the other selected alternatives in the 2006 Report. In an effort to make this comparison relevant, County staff requested that HDR update the economic forecast for the four selected long-term disposal system scenarios to reflect current conditions and trends.

This Update to the Economic Model for the Assessment of Long-Term Solid Waste Management Alternatives for Sonoma County provides a description of the changes which were made to the previously prepared economic forecast model, as well as copies of the new model runs for each long-term disposal scenario are included as attachments.

1. Revisions to the Assessment of Long-Term Solid Waste Management Alternatives Model (2006 Report)

All four economic forecast models were re-run reflecting four scenarios; two scenarios which model the reopening of the landfill by the County, and two scenarios which model the closure and long-term out-haul of wastes, as follows:

- Scenario 1: Out-haul for five years then reopen the Central landfill using a normal containment system
- Scenario 2: Outhaul for five years, then reopen the Central landfill using a robust containment system
- Scenario 3: Close the Central landfill and export using trucks
- Scenario 4: Close the Central landfill and export using rail

Each of the scenarios was modeled at tonnage assumptions as follows:

- 100% which excludes the City of Petaluma;
- 80%;

- 50% assuming all of the transfer stations remain open; and
- 50% assuming only the Central Transfer station remains open.

The original base year for the analysis, in the 2006 Report, (Fiscal Year 2005/06) was revised to reflect actual data from Fiscal Year (“FY”) 2007/08. In particular, the new base year reflects actual tonnage, costs, and revenues experienced in FY 2007/08. These changes include:

- Out-haul costs were revised to reflect the actual out-haul costs using transfer trailer trucks (\$13.8M per year) to transport solid waste delivered to County facilities to permitted disposal sites located outside Sonoma County.
- The cost of operations for all of the transfer stations were revised to reflect FY 2007/08 actual expenses.
- Tonnages were lowered to reflect the current FY 2008/09 trend of approximately 270,000 tons per year at the 100% scenario and correspondingly less tonnage with the 80% and 50% scenarios. The waste escalation rate remains at 0.95% per year in this update, this escalation rate is applied to 270,000 annual tons going forward from 2007/2008 FY.

Additional changes made to the 2006 Report include:

- Power Plant revenues for Scenarios 3 and 4 (landfill closure) were reduced to reflect projected landfill gas generation decline. A straight line decline was used for this analysis.
- The diversion rate was adjusted to the 2006 reported rate of 64%. The diversion rate of 70% by 2015 was included in the assumptions.
- The Sonoma County Waste Management Agency surcharge for management of household hazardous waste, education, and planning programs was removed from the modeling.
- Zero waste infrastructure costs were also removed from the model.
- The duration of the model was extended to 2027/28 to reflect a future 20-year analysis.

In addition, changes were made to the 2006 Report reflecting new and/or revised information on costs estimates for the closure of the Central Landfill and the post-closure maintenance of the closed landfills including:

- The Central Landfill post-closure estimates were lowered from \$71M to \$19.8M.

- The post-closure cost estimate for the Central Landfill under the closed landfill scenarios 3 and 4 was revised to reflect revised post-closure funding estimates.
- The other County sites post-closure maintenance costs have been reduced from approximately \$38M to approximately \$36.5M.

The model includes Central closure cost deposits, funded through tipping fees, over a three-year period of \$3,793,979 each fiscal year to the Enterprise Fund (FY 20010/11 through FY 20013/14) to fully fund the estimated cost of closing the Central Landfill.

A more detailed summary of the changes and the reason for the change is illustrated on the following table:

**Comparison of Assumptions of the
Assessment of Long-Term Solid Waste Management Alternatives
(BVA, January 2006) to the Update to the Assessment (HDR, December 2008)**

	Assessment of Long-Term Solid Waste Management Alternatives (January 2006) -- General Assumptions	Update of Assessment of Long-Term Solid Waste Management Alternatives (December 2008) -- General Assumptions	Reason(s) for change
1	Funding of SCWMA programs at the FY 2005-06 levels escalated at the assumed inflation rate.	SCWMA programs removed from models.	Both expenditures and revenues for SCWMA diversion and waste reduction programs were removed from the models. SCWMA is looking at alternate funding method(s) other than disposal tipping fees.
2	Funding of zero waste programs.	No funding of zero waste programs.	Zero waste programs have not been pursued by SCWMA due to lack of available funding.
3	Continued operations of 4 transfer stations and use of Central Tipping Building as an out-haul transfer station.	Continued operations of 4 transfer stations and use of Central Tipping Building as an out-haul transfer station. Additionally, a new financial model for the 50% scenario assuming all transfer stations are closed except for Central, was added to this 2009 Update	Updated to most current budget data reflecting an increase of \$417,762 from the original document.
4	Continued funding of administration activities at the FY 2005-06 levels escalated at the assumed inflation rate.	Continued funding of administration activities at the FY 2007-08 levels escalated at the assumed inflation rate.	Updated to most current budget data reflecting an increase of \$110,699 from the 2006 Report.
5	Continued funding of "Other Expenses" including litter control, capital expenditures at the transfer stations and engineering for capital projects at the FY 2005-06 levels escalated at the assumed inflation rate.	Continued funding of "Other Expenses" including litter control and capital expenditures and associated engineering at the transfer stations necessary for regulatory compliance at the FY 2007-08 levels escalated at the assumed inflation rate.	Updated to most current budget data. All discretionary capital projects have been postponed reducing total capital expenditures. As, a result "Other Expenses" reflect a decrease from the 2006 Report.

	Assessment of Long-Term Solid Waste Management Alternatives (January 2006) -- General Assumptions	Update of Assessment of Long-Term Solid Waste Management Alternatives (December 2008) -- General Assumptions	Reason(s) for change
6	Revenues based on incoming fees to cover the SCWMA programs and monies from landfill gas-to-energy plant power sales.	Revenues based on incoming fees to cover expenses and monies from landfill gas-to-energy plant power sales. SCWMA expenditures and revenues have been removed.	Updated to most current budget data. FY 08-09 budgeted revenue for power sales is \$3,184,000, a decrease of \$58,000 from the revenue in the original document. Revenues from landfill gas-to-energy plant power sales were adjusted to reflect declining gas volumes over time. SCWMA is looking at alternate funding method(s) other than disposal tipping fees.
7	General inflation rate of 4% per year. This rate is not applied to expenses with specific adjustment rates fixed by contractual provisions (i.e. #9 below).	General inflation rate of 4% per year.	Unchanged.
8	FY 2005-06 disposal tonnage estimates of 372,200 tons inflated by 0.95% per year and diversion rate of about 65% in 2015.	FY 2008/09 disposal tonnage estimates of 270,000 tons inflated by 0.95% per year and diversion rate adjusted to 64% in base year with 70% in 2015.	Updated to most current tonnage estimates for a decrease of 102,000 tons. The actual 2007-08 data is lower than the original projection for 2007-08 and subsequent years. 2006 diversion rate is 64%. Diversion rate in model has been increased to 70% for 2015 per the ColWMP.
9	Out-haul based on average contractual amounts inflated at 2% per year for the first 5 years.	Out-haul based on current actual contractual amounts inflated at 2% per year.	Per ton out-haul expenses higher given fuel cost inflation included in terms of the agreement. The average per ton cost for out-haul has increased from \$41/ton to \$49/ton due to fuel cost inflation adjustments.
10	\$5 million operating reserve funded from FY 2005-06 through FY 2009-10, then escalated at an interest rate of 5% per year.	\$5 million operating reserve funded from FY 2009-10 to FY 2013-14, then escalated at an interest rate of 5% per year.	The models have been changed to reflect collection of the reserve from FY 2009-10 to FY 2013-14. No deposit to this reserve was made between FY 2005-06 and FY 2009-10. Current and proposed tipping fees do not include the deposit for this \$5 million operating reserve.

	Assessment of Long-Term Solid Waste Management Alternatives (January 2006) -- General Assumptions	Update of Assessment of Long-Term Solid Waste Management Alternatives (December 2008) -- General Assumptions	Reason(s) for change
11	Environmental compliance and associated administration and engineering expenses for the Central Landfill funded at FY 2005-06 levels escalated at the assumed inflation rate.	Environmental compliance and associated administration, and engineering expenses for the Central Landfill funded at FY 2007-08 levels escalated at the assumed inflation rate.	Updated to most current budget data. In Scenarios 3 and 4, expenses for environmental compliance increase in FY 09-10 through FY 14-15 to reflect the phased construction of the Central Landfill closure and the corresponding increase of post-closure maintenance costs for the closed landfill.
12	For Scenarios 1 and 2: Central closure cost assumed at \$44.3 million less contributions to date of approximately \$8.3 million.	For Scenarios 1 and 2: Central closure cost assumed at \$44.3 million less contributions to date of approximately \$9.7 million.	Since Scenarios 1 and 2 assume that the Central Landfill will be reopened and filled to the permitted capacity, the original closure cost estimates remain unchanged. If Central were to reopen, deposits to the closure fund would resume.
13	For Scenarios 3 and 4: Central closure cost assumed at \$27.0 million less contributions to date of approximately \$8.3 million.	Central closure cost assumed at \$21.8 million less contributions to date of approximately \$9.7 million. Deposits to the Central Closure Fund will be budgeted starting in FY 10/11 at \$3.8M per year for 3 years to fully fund closure expenses.	In 2008, the County retained GeoSyntec to reevaluate closure cost estimates. Liabilities for closure and post-closure maintenance of the Central Landfill, which had been estimated at up to \$100M, are now estimated to be approximately \$50M. The \$100M estimates were based on full build-out of the Central Landfill. The revised estimates, as requested by regulatory agencies, are based on the existing configuration of the Central Landfill including the installation of a leachate pipeline to the Santa Rosa Regional Wastewater Treatment Plant (SRRWTP). These estimates are subject to change based on final approval by the regulatory agencies, as well as the fact that they only cover a 30-year horizon.
14	Total post-closure costs of existing closed landfills, not including Central, of approximately \$38 million funded equally over a 30-year period.	Total post-closure costs, not including Central, of approximately \$36.5 million funded equally over a 30-year period.	Minor modifications were made to existing estimates.

	Assessment of Long-Term Solid Waste Management Alternatives (January 2006) -- General Assumptions	Update of Assessment of Long-Term Solid Waste Management Alternatives (December 2008) -- General Assumptions	Reason(s) for change
15	Central post-closure costs are not included in 2006 Report, for Scenarios 1 and 2 only which included reopening the Central Landfill. The remaining permitted capacity of the Central Landfill extended beyond the projected years of the original document, so post-closure costs estimates were not needed. Central post-closure costs of \$65.7M were included in Scenarios 3 and 4 because these scenarios did not include reopening the landfill by the County.	In Scenarios 3 and 4 included a gradual step-down to the final post-closure cost estimate. The step down reflects the fact that the closure construction is proposed to be phased over a 5-year period. . The completion of each phase of the Central closure will gradually reduce the total funding needed for post-closure maintenance for the Central Landfill. Central closure activities will be completed in FY 15-16, at which time the post-closure budget estimate for Central to \$934,798 for that fiscal year.	In 2008, GeoSyntec reevaluated closure cost estimates for the Central Landfill. Liabilities for closure and post-closure maintenance of the Central Landfill, which had been estimated at up to \$100M, are now estimated to be approximately \$50M. The \$100M estimates were based on full build-out of the Central Landfill. The revised estimates, as requested by regulatory agencies, are based on the existing configuration of the Central Landfill including the installation of a leachate pipeline to the SRRWTP. These estimates are subject to change based on covering a 30-year horizon.

The following tables illustrate the five-year average tip fee beginning in year 2008/09 through 2012/13 for each Scenario. The tables summarize the five-year average tip fee for this period for each of the tonnage assumptions (100%, 80% and 50%). The 2006 Report values reflect adjustments to the Model for comparison purposes. The 2006 Report values reflect the removal of Zero waste and Agency programs. The most prominent reason for the increase of the average tip fee is the reduction in the waste tonnage quantity.

**Summary of Economic Scenarios
Assuming Full System Tonnage**

Scenarios	2006 Report Model 5-year Average Projected Tipping Fee \$/ton	Revised 2009 Model 5-year Average Projected Tipping Fee \$/ton
Scenario 1 - Outhaul for 5 Years then Re-open Central with Normal Containment System	\$ 95	\$ 113
Scenario 2 - Outhaul for 5 Years then Re-open Central with a Robust Containment System	\$ 99	\$ 118
Scenario 3 - Close Central Landfill and Outhaul by Truck	\$ 88	\$ 107
Scenario 4 - Close Central Landfill and Outhaul by Rail	\$ 90	\$ 109

**Summary of Economic Scenarios
Assuming 80% of System Tonnage**

Scenarios	2006 Model 5-year average tipping fee	Updated 2009 Model 5-year average
Scenario 1 - Outhaul for 5 Years then Re-open Central with Normal Containment System	\$ 103	\$ 131
Scenario 2 - Outhaul for 5 Years then Re-open Central with a Robust Containment System	\$ 107	\$ 137
Scenario 3 - Close Central Landfill and Outhaul by Truck	\$ 95	\$ 113
Scenario 4 - Close Central Landfill and Outhaul by Rail	\$ 97	\$ 115

**Summary of Economic Scenarios
Assuming 50% System Tonnage**

Scenarios	2006 Model 5-year average tipping fee	Updated 2009 Model, 5-year average	Updated 2009 Model with Central TS only, 5-year average
Scenario 1 - Outhaul for 5 Years then Re-open Central with Normal Containment System	\$ 130	\$ 195	\$ 180
Scenario 2 - Outhaul for 5 Years then Re-open Central with a Robust Containment System	\$ 135	\$ 204	\$ 189
Scenario 3 - Close Central Landfill and Outhaul by Truck	\$ 115	\$ 153	\$ 141
Scenario 4 - Close Central Landfill and Outhaul by Rail	\$ 118	\$ 154	\$ 143

Appendices

Revisions to the Assessment of Long-Term Solid Waste Management Alternatives Model

- A. 100% Tonnage Case - Detailed Analysis Spreadsheets
- B. 80% Tonnage Case - Detailed Analysis Spreadsheets
- C. 50% Tonnage Case - Detailed Analysis Spreadsheets
- D. 50% Tonnage Central Transfer Station Alone Operating Case – Detailed Analysis Spreadsheet

A. Revisions to the Assessment of Long-Term Solid Waste Management Alternatives Model

100% Tonnage Case – Detailed Analysis Spreadsheets

Sonoma County

Economic Analysis - Full System Tonnage

Scenario 1: Outhaul for 5 Years then Re-open Central with Normal Containment System

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>	
EXPENSES																						
Transfer Stations & Out of County Disposal																						
Operations & Environmental Compliance																						
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159		
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Annapolis	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225		
Guerneville	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055		
Healdsburg	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507		
Sonoma	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466		
Transport to Central																						
Central Tipping Building	\$ -	\$ -	\$ -	\$ 154,942	\$ 161,139	\$ 167,585	\$ 174,288	\$ 181,260	\$ 188,510	\$ 196,051	\$ 203,893	\$ 212,048	\$ 220,530	\$ 229,351	\$ 238,526	\$ 248,067	\$ 257,989	\$ 268,309	\$ -	\$ -	\$ -	
Annapolis	\$ -	\$ -	\$ -	\$ 31,038	\$ 32,280	\$ 33,571	\$ 34,914	\$ 36,310	\$ 37,763	\$ 39,273	\$ 40,844	\$ 42,478	\$ 44,177	\$ 45,944	\$ 47,782	\$ 49,693	\$ 51,681	\$ 53,748	\$ -	\$ -	\$ -	
Guerneville	\$ -	\$ -	\$ -	\$ 187,608	\$ 195,113	\$ 202,917	\$ 211,034	\$ 219,475	\$ 228,254	\$ 237,384	\$ 246,880	\$ 256,755	\$ 267,025	\$ 277,706	\$ 288,814	\$ 300,367	\$ 312,382	\$ 324,877	\$ -	\$ -	\$ -	
Healdsburg	\$ -	\$ -	\$ -	\$ 656,759	\$ 683,030	\$ 710,351	\$ 738,765	\$ 768,315	\$ 799,048	\$ 831,010	\$ 864,250	\$ 898,820	\$ 934,773	\$ 972,164	\$ 1,011,051	\$ 1,051,493	\$ 1,093,552	\$ 1,137,294	\$ -	\$ -	\$ -	
Sonoma	\$ -	\$ -	\$ -	\$ 474,409	\$ 493,385	\$ 513,121	\$ 533,645	\$ 554,991	\$ 577,191	\$ 600,278	\$ 624,290	\$ 649,261	\$ 675,232	\$ 702,241	\$ 730,331	\$ 759,544	\$ 789,926	\$ 821,523	\$ -	\$ -	\$ -	
Out of County Haul and Disposal																						
Total Transfer Station & Out of County Disposal Expenses	\$ 14,005,622	\$ 14,421,449	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Capital Improvements																						
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556		
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266		
Total Transfer Station & Out of County Disposal Expenses	\$ 19,719,887	\$ 20,364,284	\$ 5,526,128	\$ 5,747,174	\$ 5,977,061	\$ 6,216,143	\$ 6,464,789	\$ 6,723,380	\$ 6,992,315	\$ 7,272,008	\$ 7,562,888	\$ 7,865,404	\$ 8,180,020	\$ 8,507,221	\$ 8,847,510	\$ 9,201,410	\$ 9,569,466	\$ 7,242,265	\$ 7,531,955	\$ 7,833,233		
Disposal																						
Central Landfill																						
Operations	\$ -	\$ -	\$ 8,517,830	\$ 8,942,700	\$ 9,388,762	\$ 9,857,073	\$ 10,348,744	\$ 10,864,939	\$ 11,406,882	\$ 11,975,858	\$ 12,573,214	\$ 13,200,365	\$ 13,858,800	\$ 14,550,077	\$ 15,275,834	\$ 16,037,793	\$ 16,837,758	\$ 17,677,626	\$ 18,559,386	\$ 19,485,128		
Environmental Compliance	\$ 4,272,145	\$ 4,443,031	\$ 4,620,752	\$ 4,805,582	\$ 4,997,806	\$ 5,197,718	\$ 5,405,627	\$ 5,621,852	\$ 5,846,726	\$ 6,080,595	\$ 6,323,819	\$ 6,576,771	\$ 6,839,842	\$ 7,113,436	\$ 7,397,973	\$ 7,693,892	\$ 8,001,648	\$ 8,321,714	\$ 8,654,582	\$ 9,000,766		
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311																

Sonoma County

Economic Analysis - Full System Tonnage

Scenario 2: Outhaul for 5 Years then Re-open Central with Robust Containment System

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
EXPENSES																					
Transfer Stations & Out of County Disposal																					
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Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159	
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annapolis	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225	
Guerneville	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,349	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055	
Healdsburg	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507	
Sonoma	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466	
Transport to Central																					
Central Tipping Building	\$ -	\$ -	\$ -	\$ 154,942	\$ 161,139	\$ 167,585	\$ 174,288	\$ 181,260	\$ 188,510	\$ 196,051	\$ 203,893	\$ 212,048	\$ 220,530	\$ 229,351	\$ 238,526	\$ 248,067	\$ 257,989	\$ 268,309	\$ 279,041	\$ 290,203	\$ 301,811
Annapolis	\$ -	\$ -	\$ -	\$ 31,038	\$ 32,280	\$ 33,571	\$ 34,914	\$ 36,310	\$ 37,763	\$ 39,273	\$ 40,844	\$ 42,478	\$ 44,177	\$ 45,944	\$ 47,782	\$ 49,693	\$ 51,681	\$ 53,748	\$ 55,898	\$ 58,134	\$ 60,459
Guerneville	\$ -	\$ -	\$ -	\$ 187,608	\$ 195,113	\$ 202,917	\$ 211,034	\$ 219,475	\$ 228,254	\$ 237,384	\$ 246,880	\$ 256,755	\$ 267,025	\$ 277,706	\$ 288,814	\$ 300,367	\$ 312,382	\$ 324,877	\$ 337,872	\$ 351,387	\$ 365,442
Healdsburg	\$ -	\$ -	\$ -	\$ 656,759	\$ 683,030	\$ 710,351	\$ 738,765	\$ 768,315	\$ 799,048	\$ 831,010	\$ 864,250	\$ 898,820	\$ 934,773	\$ 972,164	\$ 1,011,051	\$ 1,051,493	\$ 1,093,552	\$ 1,137,294	\$ 1,182,786	\$ 1,230,098	\$ 1,279,302
Sonoma	\$ -	\$ -	\$ -	\$ 474,409	\$ 493,385	\$ 513,121	\$ 533,645	\$ 554,991	\$ 577,191	\$ 600,278	\$ 624,290	\$ 649,261	\$ 675,232	\$ 702,241	\$ 730,331	\$ 759,544	\$ 789,926	\$ 821,523	\$ 854,383	\$ 888,559	\$ 924,101
Out of County Haul and Disposal																					
Capital Improvements	\$ 14,005,622	\$ 14,421,449	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556	
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266	
Total Transfer Station & Out of County Disposal Expenses	\$ 19,719,887	\$ 20,364,284	\$ 5,526,128	\$ 5,747,174	\$ 5,977,061	\$ 6,216,143	\$ 6,464,789	\$ 6,723,380	\$ 6,992,315	\$ 7,272,008	\$ 7,562,888	\$ 7,865,404	\$ 8,180,020	\$ 8,507,221	\$ 8,847,510	\$ 9,201,410	\$ 9,569,466	\$ 9,952,245	\$ 10,350,335	\$ 10,764,348	
Disposal																					
Central Landfill																					
Operations	\$ -	\$ -	\$ 8,517,830	\$ 8,942,700	\$ 9,388,762	\$ 9,857,073	\$ 10,348,744	\$ 10,864,939	\$ 11,406,882	\$ 11,975,858	\$ 12,573,214	\$ 13,200,365	\$ 13,858,800	\$ 14,550,077	\$ 15,275,834	\$ 16,037,793	\$ 16,837,758	\$ 17,677,626	\$ 18,559,386	\$ 19,485,128	
Environmental Compliance	\$ 4,272,145	\$ 4,443,031	\$ 4,620,752	\$ 4,805,582	\$ 4,997,806	\$ 5,197,718	\$ 5,405,627	\$ 5,621,852	\$ 5,846,726	\$ 6,080,595	\$ 6,323,819	\$ 6,576,771	\$ 6,839,842	\$ 7,113,436	\$ 7,397,973	\$ 7,693,892	\$ 8,001,648	\$ 8,321,714	\$ 8,654,582	\$ 9,000,766	
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$		

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
REVENUES																					
Power Plant Revenues		\$ 3,202,522	\$ 3,250,560	\$ 3,299,318	\$ 3,348,808	\$ 3,399,040	\$ 3,450,026	\$ 3,501,776	\$ 3,554,303	\$ 3,607,617	\$ 3,661,731	\$ 3,716,657	\$ 3,772,407	\$ 3,828,993	\$ 3,886,428	\$ 3,944,725	\$ 4,003,896	\$ 4,063,954	\$ 4,124,913	\$ 4,186,787	\$ 4,249,589
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358
First Year Use of Fund Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Haul Revenues		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Expansion - Rock Quarry Royalties		\$ 622,365	\$ 647,259	\$ 673,150	\$ 700,076	\$ 728,079	\$ 757,202	\$ 787,490	\$ 818,990	\$ 851,749	\$ 885,819	\$ 912,397	\$ 942,103	\$ 972,407	\$ 1,002,710	\$ 1,033,014	\$ 1,063,317	\$ 1,093,620	\$ 1,123,923	\$ 1,153,626	\$ 1,183,329
TOTAL REVENUES		\$ 4,055,122	\$ 4,115,949	\$ 4,177,688	\$ 4,862,718	\$ 4,951,218	\$ 5,041,668	\$ 5,134,121	\$ 5,228,635	\$ 5,325,267	\$ 5,424,076	\$ 5,525,124	\$ 5,628,476	\$ 5,734,197	\$ 4,921,103	\$ 4,994,920	\$ 5,069,843	\$ 5,145,891	\$ 5,223,079	\$ 5,301,426	\$ 5,380,947
NET EXPENSES		\$ 25,996,273	\$ 27,893,459	\$ 31,319,507	\$ 28,884,496	\$ 29,976,661	\$ 31,527,396	\$ 30,948,925	\$ 30,308,780	\$ 31,428,057	\$ 32,599,147	\$ 33,824,415	\$ 35,106,334	\$ 36,447,491	\$ 38,771,843	\$ 40,276,565	\$ 41,850,492	\$ 43,496,777	\$ 45,218,718	\$ 47,019,765	\$ 58,763,578
Calculated Tipping Fee		\$ 96.28	\$ 102.34	\$ 113.83	\$ 103.99	\$ 106.90	\$ 111.38	\$ 108.30	\$ 105.07	\$ 107.92	\$ 110.89	\$ 113.97	\$ 117.18	\$ 120.51	\$ 126.99	\$ 130.68	\$ 134.51	\$ 138.48	\$ 142.61	\$ 146.89	\$ 181.85
Closure/Post-Closure Expenses																					
Central Closure		\$ 2,785,681	\$ 2,897,108	\$ 3,012,992	\$ 3,133,512	\$ 3,258,853	\$ 3,389,207	\$ 3,524,775	\$ 3,665,766	\$ 3,812,397	\$ 3,964,892	\$ 4,123,488	\$ 4,288,428	\$ 4,459,965	\$ 4,638,363	\$ 4,823,898	\$ 5,016,854	\$ 5,217,528	\$ 5,426,229		
Central Post Closure		\$ 743,463	\$ 773,202	\$ 804,130	\$ 836,295	\$ 869,747	\$ 904,537	\$ 940,718	\$ 978,347	\$ 1,017,481	\$ 1,058,180	\$ 1,100,507	\$ 1,144,527	\$ 1,190,308	\$ 1,237,921	\$ 1,287,438	\$ 1,338,935	\$ 1,392,492	\$ 1,448,192		
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 4,897,850	\$ 5,093,765	\$ 5,297,515	\$ 5,509,416	\$ 5,729,792	\$ 5,958,984	\$ 6,197,343	\$ 6,445,237	\$ 6,703,047	\$ 6,971,168	\$ 7,250,015	\$ 7,540,016	\$ 7,841,616	\$ 8,155,281	\$ 8,481,492	\$ 8,820,752	\$ 9,173,582	\$ 9,540,525
Calculated Tipping Fee		\$ 100.97	\$ 107.17	\$ 131.63	\$ 122.33	\$ 125.80	\$ 130.84	\$ 128.35	\$ 125.72	\$ 129.20	\$ 132.81	\$ 136.56	\$ 140.45	\$ 144.48	\$ 151.69	\$ 156.12	\$ 160.72	\$ 165.48	\$ 170.43	\$ 175.55	\$ 211.38
Total Expenses Less Revenues w/ Zero Waste		\$ 27,261,719	\$ 29,209,523	\$ 36,217,358	\$ 33,978,261	\$ 35,274,177	\$ 37,036,811	\$ 36,678,717	\$ 36,267,764	\$ 37,625,400	\$ 39,044,384	\$ 40,527,461	\$ 42,077,502	\$ 43,697,506	\$ 46,311,859	\$ 48,118,181	\$ 50,005,773	\$ 51,978,269	\$ 54,039,470	\$ 56,193,347	\$ 68,304,103
Net Present Value (NPV) of Total Expenses Less Revenues																					
Total Expenses Less Revenues w/o Zero Waste		\$ 27,261,719	\$ 29,209,523	\$ 36,217,358	\$ 33,978,261	\$ 35,274,177	\$ 37,036,811	\$ 36,678,717	\$ 36,267,764	\$ 37,625,400	\$ 39,044,384	\$ 40,527,461	\$ 42,077,502	\$ 43,697,506	\$ 46,311,859	\$ 48,118,181	\$ 50,005,773	\$ 51,978,269	\$ 54,039,470	\$ 56,193,347	\$ 68,304,103
Net Present Value (NPV) of Total Expenses Less Revenues																					
Operating Reserves/Fund Balance																					
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543
Operating Reserve Deposit		\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Reserve Interest		\$ 74,529	\$ 100,701	\$ 109,468	\$ 133,955	\$ 162,929	\$ 207,002	\$ 212,177	\$ 217,482	\$ 222,919	\$ 228,492	\$ 234,204	\$ 240,059	\$ 246,060	\$ 252,212	\$ 258,517	\$ 264,980	\$ 271,605	\$ 278,395	\$ 285,355	\$ 292,489
Operating Reserve		\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543	\$ 11,992,032
Year End - Fund Balance		\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543	\$ 11,992,032
TONNAGE FLOW																					
Amount of Waste Received at County Facilities		270,000	272,565	275,154	277,768	280,407	283,071	285,760	288,475	291,215	293,982	296,775	299,594	302,440	305,314	308,214	311,142	314,098	317,082	320,094	323,135
Amount to Central		-	-	275,154	277,768	280,407	283,071	285,760													

Sonoma County
Economic Analysis - Full System Tonnage
Scenario 3: Close Central Landfill and Outhaul

Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
EXPENSES																				
Transfer Stations & Out of County Disposal																				
Operations & Environmental Compliance																				
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ 2,159,176	\$ 2,245,544	\$ 2,335,365	\$ 2,428,780	\$ 2,525,931	\$ 2,626,968	\$ 2,732,047	\$ 2,841,329	\$ 2,954,982	\$ 3,073,181	\$ 3,196,109	\$ 3,323,953	\$ 3,456,911	\$ 3,595,188	\$ 3,738,995	\$ 3,888,555	\$ 4,044,097	\$ 4,205,861
Annapolis	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225
Guerneville	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055
Healdsburg	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507
Sonoma	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466
Out of County Haul and Disposal	\$ 14,005,622	\$ 14,421,449	\$ 14,849,622	\$ 15,290,507	\$ 15,744,482	\$ 16,211,936	\$ 16,693,268	\$ 17,188,891	\$ 17,699,230	\$ 18,224,720	\$ 18,765,812	\$ 19,322,969	\$ 19,896,667	\$ 20,487,400	\$ 21,095,670	\$ 21,722,001	\$ 22,366,927	\$ 23,031,001	\$ 23,714,792	\$ 24,418,884
Capital Improvements																				
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266
Total Transfer Station & Out of County Disposal Expenses	\$ 19,719,887	\$ 20,364,284	\$ 21,030,171	\$ 21,718,278	\$ 22,429,364	\$ 23,164,213	\$ 23,923,636	\$ 24,708,474	\$ 25,519,596	\$ 26,357,900	\$ 27,224,320	\$ 28,119,817	\$ 29,045,390	\$ 30,002,071	\$ 30,990,928	\$ 32,013,069	\$ 33,069,638	\$ 34,161,821	\$ 35,290,844	\$ 36,457,978
Disposal																				
Central Landfill																				
Operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Compliance	\$ 3,152,824	\$ 3,247,409	\$ 2,726,858	\$ 2,245,945	\$ 1,772,246	\$ 1,310,188	\$ 907,571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899
Containment System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Canyon Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Disposal Expenses	\$ 5,678,094	\$ 5,801,702	\$ 5,318,032	\$ 4,870,004	\$ 4,436,424	\$ 4,011,175	\$ 3,647,365	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 		

	Year	1 Fiscal Year	2 2008-09	3 2009-10	4 2010-11	5 2011-12	6 2012-13	7 2013-14	8 2014-15	9 2015-16	10 2016-17	11 2017-18	12 2018-19	13 2019-20	14 2020-21	15 2021-22	16 2022-23	17 2023-24	18 2024-25	19 2025-26	20 2026-27	20 2027-28
REVENUES																						
Power Plant Revenues		\$ 3,155,194	\$ 3,085,780	\$ 3,051,073	\$ 3,016,365	\$ 2,981,658	\$ 2,946,951	\$ 2,912,244	\$ 2,877,537	\$ 2,842,830	\$ 2,808,123	\$ 2,773,416	\$ 2,738,708	\$ 2,704,001	\$ 2,669,294	\$ 2,634,587	\$ 2,599,880	\$ 2,565,173	\$ 2,530,466	\$ 2,495,758	\$ 2,461,051	
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358	
First Year Use of Fund Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Haul Revenues		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Expansion - Rock Quarry Royalties		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL REVENUES		\$ 4,007,794	\$ 3,951,169	\$ 3,929,442	\$ 3,907,911	\$ 3,886,577	\$ 3,865,444	\$ 3,844,514	\$ 3,823,791	\$ 3,803,277	\$ 3,782,977	\$ 3,762,893	\$ 3,743,028	\$ 3,723,385	\$ 3,703,969	\$ 3,684,782	\$ 3,665,828	\$ 3,647,110	\$ 3,628,632	\$ 3,610,397	\$ 3,592,410	
NET EXPENSES		\$ 23,998,812	\$ 25,900,130	\$ 25,490,249	\$ 26,484,720	\$ 27,055,934	\$ 28,083,736	\$ 27,027,230	\$ 25,388,577	\$ 26,400,367	\$ 27,446,334	\$ 28,527,694	\$ 29,645,707	\$ 30,801,679	\$ 31,996,963	\$ 33,232,963	\$ 34,511,130	\$ 35,832,973	\$ 37,200,051	\$ 38,613,983	\$ 40,076,447	
Calculated Tipping Fee		\$ 88.88	\$ 95.02	\$ 92.64	\$ 95.35	\$ 96.49	\$ 99.21	\$ 94.58	\$ 88.01	\$ 90.66	\$ 93.36	\$ 96.13	\$ 98.95	\$ 101.84	\$ 104.80	\$ 107.82	\$ 110.92	\$ 114.08	\$ 117.32	\$ 120.63	\$ 124.02	
Closure/Post-Closure Expenses																						
Central Closure		\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979
Central Post Closure		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104	
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104	
Calculated Tipping Fee		\$ 93.57	\$ 99.85	\$ 111.40	\$ 114.13	\$ 115.30	\$ 104.65	\$ 100.18	\$ 97.02	\$ 99.83	\$ 102.82	\$ 105.87	\$ 108.99	\$ 112.18	\$ 115.45	\$ 118.80	\$ 122.22	\$ 125.73	\$ 129.32	\$ 132.99	\$ 136.76	
Total Expenses Less Revenues w/ Zero Waste		\$ 25,264,258	\$ 27,216,194	\$ 30,652,935	\$ 31,702,154	\$ 32,330,306	\$ 29,623,344	\$ 28,628,423	\$ 27,988,615	\$ 29,072,935	\$ 30,225,805	\$ 31,418,344	\$ 32,651,983	\$ 33,928,206	\$ 35,248,551	\$ 36,614,614	\$ 38,028,048	\$ 39,490,567	\$ 41,003,949	\$ 42,570,037	\$ 44,190,743	
Net Present Value (NPV) of Total Expenses Less Revenues																						
Total Expenses Less Revenues w/o Zero Waste		\$ 25,264,258	\$ 27,216,194	\$ 30,652,935	\$ 31,702,154	\$ 32,330,306	\$ 29,623,344	\$ 28,628,423	\$ 27,988,615	\$ 29,072,935	\$ 30,225,805	\$ 31,418,344	\$ 32,651,983	\$ 33,928,206	\$ 35,248,551	\$ 36,614,614	\$ 38,028,048	\$ 39,490,567	\$ 41,003,949	\$ 42,570,037	\$ 44,190,743	
Net Present Value (NPV) of Total Expenses Less Revenues																						
Operating Reserves/Fund Balance																						
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	
Operating Reserve Deposit		\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Reserve Interest		\$ 38,755	\$ 51,899	\$ 55,824	\$ 67,860	\$ 82,067	\$ 103,934	\$ 105,285	\$ 106,654	\$ 108,040	\$ 109,445	\$ 110,867	\$ 112,309	\$ 113,769	\$ 115,248	\$ 116,746	\$ 118,264	\$ 119,801	\$ 121,358	\$ 122,936	\$ 124,534	
Operating Reserve		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098	
Year End - Fund Balance		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098	
TONNAGE FLOW																						
Amount of Waste Received at County Facilities		270,000	272,565	275,154	277,768	280,407	283,071	2														

Sonoma County
Economic Analysis - Full System Tonnage
Scenario 4: Close Central Landfill and Outhaul via Rail

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
EXPENSES																					
Transfer Stations & Out of County Disposal																					
Operations & Environmental Compliance																					
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159	
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ 2,159,176	\$ 2,245,544	\$ 2,335,365	\$ 2,428,780	\$ 2,525,931	\$ 2,626,968	\$ 2,732,047	\$ 2,841,329	\$ 2,954,982	\$ 3,073,181	\$ 3,196,109	\$ 3,323,953	\$ 3,456,911	\$ 3,595,188	\$ 3,738,995	\$ 3,888,555	\$ 4,044,097	\$ 4,205,861	
Annapolis	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225	
Guerneville	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055	
Healdsburg	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507	
Sonoma	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466	
Out of County Rail Haul and Disposal	\$ 14,005,622	\$ 14,421,449	\$ 15,691,594	\$ 16,157,478	\$ 16,637,193	\$ 17,131,152	\$ 17,639,775	\$ 18,163,500	\$ 18,702,775	\$ 19,258,060	\$ 19,829,832	\$ 20,418,580	\$ 21,024,807	\$ 21,649,034	\$ 22,291,794	\$ 22,953,637	\$ 23,635,130	\$ 24,336,857	\$ 25,059,419	\$ 25,803,433	
Capital Improvements																					
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556	
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266	
Total Transfer Station & Out of County Disposal Expenses	\$ 19,719,887	\$ 20,364,284	\$ 21,872,143	\$ 22,585,249	\$ 23,322,075	\$ 24,083,429	\$ 24,870,144	\$ 25,683,083	\$ 26,523,141	\$ 27,391,241	\$ 28,288,340	\$ 29,215,428	\$ 30,173,529	\$ 31,163,705	\$ 32,187,052	\$ 33,244,705	\$ 34,337,841	\$ 35,467,677	\$ 36,635,471	\$ 37,842,527	
Disposal																					
Central Landfill																					
Operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Environmental Compliance	\$ 3,152,824	\$ 3,247,409	\$ 2,726,858	\$ 2,245,945	\$ 1,772,246	\$ 1,310,188	\$ 907,571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899	
Containment System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
West Canyon Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Disposal Expenses	\$ 5,678,094	\$ 5,801,702	\$ 5,318,032	\$ 4,870,004	\$ 4,436,424	\$ 4,011,175	\$ 3,647,365	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899	
Other																					
Administration (50% of total)	\$ 1,356,606	\$ 1,410,870	\$ 1,467,305	\$ 1,525,997	\$ 1,587,037	\$ 1,650,519	\$ 1,716,540	\$ 1,785,201	\$ 1,856,609	\$ 1,930,874	\$ 2,008,109	\$ 2,088,433	\$ 2,171,970	\$ 2,258,849	\$ 2,349,203	\$ 2,443,171	\$ 2,540,898	\$ 2,642,534	\$ 2,748,235	\$ 2,858,165	
Litter Control	\$ 290,480	\$ 302,100	\$ 314,184	\$ 326,751	\$ 339,821	\$ 353,414	\$ 367,550	\$ 382,252	\$ 397,542	\$ 413,444	\$ 429,982	\$ 447,181	\$ 465,068	\$ 483,671	\$ 503,018	\$ 523,139	\$ 544,064	\$ 565,827	\$ 588,460	\$ 611,998	
Capital Expenditures at Disposal Sites	\$ 961,538	\$ 1,000,000	\$ 1,040,000	\$ 1,081,600	\$ 1,124,864	\$ 1,169,859	\$ 1,216,653	\$ 1,265,319	\$ 1,315,932	\$ 1,368,569	\$ 1,423,312	\$ 1,480,244	\$ 1,539,454	\$ 1,601,032	\$ 1,665,074	\$ 1,731,676	\$ 1,800,944	\$ 1,872,981	\$ 1,947,900	\$ 2,025,817	

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
REVENUES																					
Power Plant Revenues		\$ 3,155,194	\$ 3,085,780	\$ 3,051,073	\$ 3,016,365	\$ 2,981,658	\$ 2,946,951	\$ 2,912,244	\$ 2,877,537	\$ 2,842,830	\$ 2,808,123	\$ 2,773,416	\$ 2,738,708	\$ 2,704,001	\$ 2,669,294	\$ 2,634,587	\$ 2,599,880	\$ 2,565,173	\$ 2,530,466	\$ 2,495,758	\$ 2,461,051
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358
First Year Use of Fund Balance		\$ -	\$ -																		
Direct Haul Revenues		\$ -	\$ -																		
West Expansion - Rock Quarry Royalties		\$ 4,007,794	\$ 3,951,169	\$ 3,929,442	\$ 3,907,911	\$ 3,886,577	\$ 3,865,444	\$ 3,844,514	\$ 3,823,791	\$ 3,803,277	\$ 3,782,977	\$ 3,762,893	\$ 3,743,028	\$ 3,723,385	\$ 3,703,969	\$ 3,684,782	\$ 3,665,828	\$ 3,647,110	\$ 3,628,632	\$ 3,610,397	\$ 3,592,410
TOTAL REVENUES		\$ 23,998,812	\$ 25,900,130	\$ 26,332,222	\$ 27,351,691	\$ 27,948,645	\$ 29,002,951	\$ 27,973,737	\$ 26,363,186	\$ 27,403,912	\$ 28,479,675	\$ 29,591,714	\$ 30,741,318	\$ 31,929,819	\$ 33,158,598	\$ 34,429,086	\$ 35,742,766	\$ 37,101,176	\$ 38,505,907	\$ 39,958,610	\$ 41,460,996
NET EXPENSES																					
Calculated Tipping Fee		\$ 88.88	\$ 95.02	\$ 95.70	\$ 98.47	\$ 99.67	\$ 102.46	\$ 97.89	\$ 91.39	\$ 94.10	\$ 96.88	\$ 99.71	\$ 102.61	\$ 105.57	\$ 108.61	\$ 111.71	\$ 114.88	\$ 118.12	\$ 121.44	\$ 124.83	\$ 128.31
Closure/Post-Closure Expenses																					
Central Closure		\$ 3,793,979	\$ 3,793,979	\$ 3,793,979																	
Central Post Closure		\$ 934,798	\$ 940,718	\$ 978,347	\$ 1,017,481	\$ 1,058,180	\$ 1,100,507	\$ 1,144,527	\$ 1,190,308	\$ 1,237,921	\$ 1,287,438	\$ 1,338,935	\$ 1,392,492	\$ 1,448,192							
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 5,162,686	\$ 5,217,434	\$ 5,274,372	\$ 1,539,609	\$ 1,601,193	\$ 2,600,039	\$ 2,672,568	\$ 2,779,471	\$ 2,890,650	\$ 3,006,276	\$ 3,126,527	\$ 3,251,588	\$ 3,381,652	\$ 3,516,918	\$ 3,657,594	\$ 3,803,898	\$ 3,956,054	\$ 4,114,296
Calculated Tipping Fee		\$ 93.57	\$ 99.85	\$ 114.46	\$ 117.25	\$ 118.48	\$ 107.90	\$ 103.50	\$ 100.40	\$ 103.28	\$ 106.33	\$ 109.45	\$ 112.64	\$ 115.91	\$ 119.26	\$ 122.68	\$ 126.18	\$ 129.76	\$ 133.43	\$ 137.19	\$ 141.04
Total Expenses Less Revenues w/ Zero Waste		\$ 25,264,258	\$ 27,216,194	\$ 31,494,908	\$ 32,569,125	\$ 33,223,017	\$ 30,542,560	\$ 29,574,930	\$ 28,963,224	\$ 30,076,481	\$ 31,259,146	\$ 32,482,364	\$ 33,747,594	\$ 35,056,346	\$ 36,410,186	\$ 37,810,737	\$ 39,259,684	\$ 40,758,770	\$ 42,309,805	\$ 43,914,665	\$ 45,575,292
Net Present Value (NPV) of Total Expenses Less Revenues																					
Total Expenses Less Revenues w/o Zero Waste		\$ 25,264,258	\$ 27,216,194	\$ 31,494,908	\$ 32,569,125	\$ 33,223,017	\$ 30,542,560	\$ 29,574,930	\$ 28,963,224	\$ 30,076,481	\$ 31,259,146	\$ 32,482,364	\$ 33,747,594	\$ 35,056,346	\$ 36,410,186	\$ 37,810,737	\$ 39,259,684	\$ 40,758,770	\$ 42,309,805	\$ 43,914,665	\$ 45,575,292
Net Present Value (NPV) of Total Expenses Less Revenues																					
Operating Reserves/Fund Balance																					
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563
Operating Reserve Deposit		\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ 1,025,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000	\$ 1,600,000
Operating Reserve Interest		\$ 38,755	\$ 51,899	\$ 55,824	\$ 67,860	\$ 82,067	\$ 103,934	\$ 105,285	\$ 106,654	\$ 108,040	\$ 109,445	\$ 110,867	\$ 112,309	\$ 113,769	\$ 115,248	\$ 116,746	\$ 118,264	\$ 119,801	\$ 121,358	\$ 122,936	\$ 124,534
Operating Reserve		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098
Year End - Fund Balance		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098
TONNAGE FLOW																					
Amount of Waste Received at County Facilities		270,000	272,565	275,154	277,768	280,407	283,071	285,760	288,475	291,215	293,982	296,775	299,594	302,440	305,314	308,214	311,142	314,098	317,082	320,094	323,135
Amount to Central																					
Total System Waste		270,000	272,565	275,154	277,768	280,407	283,071	285,760	288,475	291,215	293,982	296,775	299,594	302,440	305,314	308,214	311,				

B. Revisions to the Assessment of Long-Term Solid Waste Management Alternatives Model 80% Tonnage Case - Detailed Analysis Spreadsheets

Sonoma County

Economic Analysis - 80% System Tonnage

Scenario 1: Outhaul for 5 Years then Re-open Central with Normal Containment System

	Year Fiscal Year	1 2008-09	2009-10	3 2010-11	4 2011-12	5 2012-13	6 2013-14	7 2014-15	8 2015-16	9 2016-17	10 2017-18	11 2018-19	12 2019-20	13 2020-21	14 2021-22	15 2022-23	16 2023-24	17 2024-25	18 2025-26	19 2026-27	20 2027-28
EXPENSES																					
Transfer Stations & Out of County Disposal																					
Operations & Environmental Compliance																					
Central Tipping Building		\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159
Central Tipping Building - Additional Operations		\$ 1,996,280	\$ 2,076,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annapolis		\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225
Guerneville		\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055
Healdsburg		\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507
Sonoma		\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466
Transport to Central																					
Central Tipping Building		\$ -	\$ -	\$ 123,953	\$ 128,911	\$ 134,068	\$ 139,431	\$ 145,008	\$ 150,808	\$ 156,840	\$ 163,114	\$ 169,639	\$ 176,424	\$ 183,481	\$ 190,820	\$ 198,453	\$ 206,391	\$ 214,647	\$ -	\$ -	\$ -
Annapolis		\$ -	\$ -	\$ 24,831	\$ 25,824	\$ 26,857	\$ 27,931	\$ 29,048	\$ 30,210	\$ 31,419	\$ 32,675	\$ 33,982	\$ 35,342	\$ 36,755	\$ 38,225	\$ 39,754	\$ 41,345	\$ 42,998	\$ -	\$ -	\$ -
Guerneville		\$ -	\$ -	\$ 150,087	\$ 156,090	\$ 162,334	\$ 168,827	\$ 175,580	\$ 182,603	\$ 189,907	\$ 197,504	\$ 205,404	\$ 213,620	\$ 222,165	\$ 231,051	\$ 240,293	\$ 249,905	\$ 259,901	\$ -	\$ -	\$ -
Healdsburg		\$ -	\$ -	\$ 525,407	\$ 546,424	\$ 568,281	\$ 591,012	\$ 614,652	\$ 639,238	\$ 664,808	\$ 691,400	\$ 719,056	\$ 747,818	\$ 777,731	\$ 808,840	\$ 841,194	\$ 874,842	\$ 909,836	\$ -	\$ -	\$ -
Sonoma		\$ -	\$ -	\$ 379,527	\$ 394,708	\$ 410,496	\$ 426,916	\$ 443,993	\$ 461,753	\$ 480,223	\$ 499,432	\$ 519,409	\$ 540,185	\$ 561,793	\$ 584,264	\$ 607,635	\$ 631,940	\$ 657,218	\$ -	\$ -	\$ -
Out of County Haul and Disposal																					
		\$ 9,704,981	\$ 9,993,122	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Improvements																					
Capital Repairs		\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556
Administration (20% of total)		\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266
Total Transfer Station & Out of County Disposal Expenses		\$ 15,419,246	\$ 15,935,957	\$ 5,225,177	\$ 5,434,184	\$ 5,651,552	\$ 5,877,614	\$ 6,112,718	\$ 6,357,227	\$ 6,611,516	\$ 6,875,977	\$ 7,151,016	\$ 7,437,057	\$ 7,734,539	\$ 8,043,920	\$ 8,365,677	\$ 8,700,304	\$ 9,048,316	\$ 7,242,265	\$ 7,531,955	\$ 7,833,233
Disposal																					
Central Landfill																					
Operations		\$ -	\$ -	\$ 8,163,315	\$ 8,570,502	\$ 8,997,998	\$ 9,446,818	\$ 9,918,026	\$ 10,412,737	\$ 10,932,124	\$ 11,477,419	\$ 12,049,912	\$ 12,650,962	\$ 13,281,992	\$ 13,944,498	\$ 14,640,049	\$ 15,370,295	\$ 16,136,965	\$ 16,941,877	\$ 17,786,938	\$ 18,674,150
Environmental Compliance		\$ 4,272,145	\$ 4,443,031	\$ 4,620,752	\$ 4,805,582	\$ 4,997,806	\$ 5,197,718	\$ 5,405,627	\$ 5,621,852	\$ 5,846,726	\$ 6,080,595	\$ 6,323,819	\$ 6,576,771	\$ 6,839,842	\$ 7,113,436	\$ 7,397,973	\$ 7,693,892	\$ 8,001,648	\$ 8,321,714	\$ 8,654,582	\$ 9,000,766
Debt Service		\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration & Engineering (30% of total)		\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899
Containment System		\$ -	\$ -	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	
West Canyon Development		\$ 520,000	\$ 540,800	\$ 3,346,470																	\$ 9,860,054
Total Disposal Expenses		\$ 7,317,415	\$ 7,538,124	\$ 24,462,939	\$ 21,741,370	\$ 22,401,209	\$ 23,086,750	\$ 23,804,673	\$ 22,846,936	\$ 23,634,042	\$ 24,457,764	\$ 25,319,822	\$ 26,222,019	\$ 27,166,243	\$ 28,154,469	\$ 29,188,771	\$ 30,271,316	\$ 31,404,378	\$ 32,590,338	\$ 33,831,688	\$ 44,991,095
Other																					
Administration (50% of total)		\$ 1,356,606	\$ 1,410,870	\$ 1,467,305	\$ 1,525,997	\$ 1,587,037	\$ 1,650,519	\$ 1,716,540	\$ 1,785,201	\$ 1,856,609	\$ 1,930,874	\$ 2,008,109	\$ 2,088,433	\$ 2,171,970	\$ 2,258,849	\$ 2,349,203	\$ 2,443,171	\$ 2,540,898	\$ 2,642,534	\$ 2,748,235	\$ 2,858,165
Litter Control		\$ 290,480	\$ 302,100	\$ 314,184	\$ 326,751	\$ 339,821	\$ 353,414	\$ 367,550	\$ 382,252	\$ 397,542	\$ 413,444	\$ 429,982	\$ 447,181	\$ 465,068	\$ 483,671	\$ 503,018	\$ 523,139	\$ 544,064	\$ 565,827	\$ 588,460	\$ 611,998
Capital Expenditures at Disposal Sites		\$ 961,538	\$ 1,000,000	\$ 1,040,000	\$ 1,081,600	\$ 1,124,864	\$ 1,169,859	\$ 1,216,653	\$ 1,265,319	\$ 1,315,932	\$ 1,368,569	\$ 1,423,312	\$ 1,480,244	\$ 1,539,454	\$ 1,601,032	\$ 1,665,074	\$ 1,731,676	\$ 1,800,944	\$ 1,872,981	\$ 1,947,900	\$ 2,025,817
Deposit to Operating Reserve		\$ -	\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000													
Engineering for Other Capital Projects		\$ 405,468	\$ 421,687	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other Expenses		\$ 3,014,093	\$ 4,106,999	\$ 3,071,489	\$ 3,804,348	\$ 4,076,722	\$ 4,773,791	\$ 3,300,743	\$ 3,432,772	\$ 3,570,083	\$ 3,712,887	\$ 3,861,402	\$ 4,015,858	\$ 4,176,493	\$ 4,343,552	\$ 4,517,294	\$ 4,697,986	\$ 4,885,906	\$ 5,081,342	\$ 5,284,595	\$ 5,495,979
TOTAL EXPENSES		\$ 25,750,754	\$ 27,581,080	\$ 32,759,605	\$ 30,979,903	\$ 32,129,483	\$ 33,738,155	\$ 33,218,134	\$ 32,636,935	\$ 33,815,642	\$ 35,046,628	\$ 36,332,241	\$ 37,674,934	\$ 39,077,274	\$ 40,541,942	\$ 42,071,742	\$ 43,669,607	\$ 45,338,600	\$ 44,913,944	\$ 46,648,238	\$ 58,320,308

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
REVENUES																					
Power Plant Revenues		\$ 3,202,522	\$ 3,250,560	\$ 3,299,318	\$ 3,348,808	\$ 3,399,040	\$ 3,450,026	\$ 3,501,776	\$ 3,554,303	\$ 3,607,617	\$ 3,661,731	\$ 3,716,657	\$ 3,772,407	\$ 3,828,993	\$ 3,886,428	\$ 3,944,725	\$ 4,003,896	\$ 4,063,954	\$ 4,124,913	\$ 4,186,787	\$ 4,249,589
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358
First Year Use of Fund Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Haul Revenues		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Expansion - Rock Quarry Royalties		\$ 622,365	\$ 647,259	\$ 673,150	\$ 700,076	\$ 728,079	\$ 757,202	\$ 787,490	\$ 818,990	\$ 851,749	\$ 885,819	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL REVENUES		\$ 4,055,122	\$ 4,115,949	\$ 4,177,688	\$ 4,862,718	\$ 4,951,218	\$ 5,041,668	\$ 5,134,121	\$ 5,228,635	\$ 5,325,267	\$ 5,424,076	\$ 5,525,124	\$ 5,628,476	\$ 5,734,197	\$ 4,921,103	\$ 4,994,920	\$ 5,069,843	\$ 5,145,891	\$ 5,223,079	\$ 5,301,426	\$ 5,380,947
NET EXPENSES		\$ 21,695,632	\$ 23,465,131	\$ 28,581,917	\$ 26,117,185	\$ 27,178,265	\$ 28,696,487	\$ 28,084,012	\$ 27,408,300	\$ 28,490,375	\$ 29,622,552	\$ 30,807,116	\$ 32,046,459	\$ 33,343,077	\$ 35,620,839	\$ 37,076,823	\$ 38,599,763	\$ 40,192,709	\$ 39,690,864	\$ 41,346,813	\$ 52,939,361
Calculated Tipping Fee		\$ 100.44	\$ 107.61	\$ 129.84	\$ 117.53	\$ 121.16	\$ 126.72	\$ 122.85	\$ 118.76	\$ 122.29	\$ 125.95	\$ 129.76	\$ 133.71	\$ 137.81	\$ 145.84	\$ 150.37	\$ 155.07	\$ 159.95	\$ 156.47	\$ 161.46	\$ 204.79
Closure/Post-Closure Expenses																					
Central Closure		\$ 2,785,681	\$ 2,897,108	\$ 3,012,992	\$ 3,133,512	\$ 3,258,853	\$ 3,389,207	\$ 3,524,775	\$ 3,665,766	\$ 3,812,397	\$ 3,964,892	\$ 4,123,488	\$ 4,288,428	\$ 4,459,965	\$ 4,638,363	\$ 4,823,898	\$ 5,016,854	\$ 5,217,528	\$ 5,426,229		
Central Post Closure		\$ 743,463	\$ 773,202	\$ 804,130	\$ 836,295	\$ 869,747	\$ 904,537	\$ 940,718	\$ 978,347	\$ 1,017,481	\$ 1,058,180	\$ 1,100,507	\$ 1,144,527	\$ 1,190,308	\$ 1,237,921	\$ 1,287,438	\$ 1,338,935	\$ 1,392,492	\$ 1,448,192		
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 4,897,850	\$ 5,093,765	\$ 5,297,515	\$ 5,509,416	\$ 5,729,792	\$ 5,958,984	\$ 6,197,343	\$ 6,445,237	\$ 6,703,047	\$ 6,971,168	\$ 7,250,015	\$ 7,540,016	\$ 7,841,616	\$ 8,155,281	\$ 8,481,492	\$ 8,820,752	\$ 9,173,582	\$ 9,540,525
Calculated Tipping Fee		\$ 106.30	\$ 113.65	\$ 152.10	\$ 140.45	\$ 144.77	\$ 151.05	\$ 147.91	\$ 144.58	\$ 148.89	\$ 153.36	\$ 157.99	\$ 162.79	\$ 167.77	\$ 176.71	\$ 182.17	\$ 187.84	\$ 193.71	\$ 191.24	\$ 197.29	\$ 241.69
Total Expenses Less Revenues w/ Zero Waste		\$ 22,961,078	\$ 24,781,195	\$ 33,479,767	\$ 31,210,949	\$ 32,475,780	\$ 34,205,903	\$ 33,813,805	\$ 33,367,284	\$ 34,687,718	\$ 36,067,789	\$ 37,510,163	\$ 39,017,627	\$ 40,593,093	\$ 43,160,855	\$ 44,918,439	\$ 46,755,044	\$ 48,674,201	\$ 48,511,617	\$ 50,520,395	\$ 62,479,886
Net Present Value (NPV) of Total Expenses Less Revenues																					
Total Expenses Less Revenues w/o Zero Waste		\$ 22,961,078	\$ 24,781,195	\$ 33,479,767	\$ 31,210,949	\$ 32,475,780	\$ 34,205,903	\$ 33,813,805	\$ 33,367,284	\$ 34,687,718	\$ 36,067,789	\$ 37,510,163	\$ 39,017,627	\$ 40,593,093	\$ 43,160,855	\$ 44,918,439	\$ 46,755,044	\$ 48,674,201	\$ 48,511,617	\$ 50,520,395	\$ 62,479,886
Net Present Value (NPV) of Total Expenses Less Revenues																					
Operating Reserves/Fund Balance																					
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543
Operating Reserve Deposit		\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Reserve Interest		\$ 74,529	\$ 100,701	\$ 109,468	\$ 133,955	\$ 162,929	\$ 207,002	\$ 212,177	\$ 217,482	\$ 222,919	\$ 228,492	\$ 234,204	\$ 240,059	\$ 246,060	\$ 252,212	\$ 258,517	\$ 264,980	\$ 271,605	\$ 278,395	\$ 285,355	\$ 292,489
Operating Reserve		\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543	\$ 11,992,032
Year End - Fund Balance		\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,											

Sonoma County

Economic Analysis - 80% System Tonnage

Scenario 2: Outhaul for 5 Years then Re-open Central with Robust Containment System

Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>	
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	
EXPENSES																					
Transfer Stations & Out of County Disposal																					
Operations & Environmental Compliance																					
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159	
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Annapolis	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225	
Guerneville	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055	
Healdsburg	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507	
Sonoma	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466	
Transport to Central																					
Central Tipping Building	\$ -	\$ -	\$ -	\$ 123,953	\$ 128,911	\$ 134,068	\$ 139,431	\$ 145,008	\$ 150,808	\$ 156,840	\$ 163,114	\$ 169,639	\$ 176,424	\$ 183,481	\$ 190,820	\$ 198,453	\$ 206,391	\$ 214,647	\$ 223,233	\$ 232,162	\$ 241,449
Annapolis	\$ -	\$ -	\$ -	\$ 24,831	\$ 25,824	\$ 26,857	\$ 27,931	\$ 29,048	\$ 30,210	\$ 31,419	\$ 32,675	\$ 33,982	\$ 35,342	\$ 36,755	\$ 38,225	\$ 39,754	\$ 41,345	\$ 42,998	\$ 44,718	\$ 46,507	\$ 48,367
Guerneville	\$ -	\$ -	\$ -	\$ 150,087	\$ 156,090	\$ 162,334	\$ 168,827	\$ 175,580	\$ 182,603	\$ 189,907	\$ 197,504	\$ 205,404	\$ 213,620	\$ 222,165	\$ 231,051	\$ 240,293	\$ 249,905	\$ 259,901	\$ 270,297	\$ 281,109	\$ 292,354
Healdsburg	\$ -	\$ -	\$ -	\$ 525,407	\$ 546,424	\$ 568,281	\$ 591,012	\$ 614,652	\$ 639,238	\$ 664,808	\$ 691,400	\$ 719,056	\$ 747,818	\$ 777,731	\$ 808,840	\$ 841,194	\$ 874,842	\$ 909,836	\$ 946,229	\$ 984,078	\$ 1,023,441
Sonoma	\$ -	\$ -	\$ -	\$ 379,527	\$ 394,708	\$ 410,496	\$ 426,916	\$ 443,993	\$ 480,223	\$ 499,432	\$ 519,409	\$ 540,185	\$ 561,793	\$ 584,264	\$ 607,635	\$ 631,940	\$ 657,218	\$ 683,507	\$ 710,847	\$ 739,281	
Out of County Haul and Disposal																					
	\$ 9,704,981	\$ 9,993,122	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Capital Improvements																					
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556	
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266	
Total Transfer Station & Out of County Disposal Expenses	\$ 15,419,246	\$ 15,935,957	\$ 5,225,177	\$ 5,434,184	\$ 5,651,552	\$ 5,877,614	\$ 6,112,718	\$ 6,357,227	\$ 6,611,516	\$ 6,875,977	\$ 7,151,016	\$ 7,437,057	\$ 7,734,539	\$ 8,043,920	\$ 8,365,677	\$ 8,700,304	\$ 9,048,316	\$ 9,410,249	\$ 9,786,659	\$ 10,178,125	
Disposal																					
Central Landfill																					
Operations	\$ -	\$ -	\$ 8,163,315	\$ 8,570,502	\$ 8,997,998	\$ 9,446,818	\$ 9,918,026	\$ 10,412,737	\$ 10,932,124	\$ 11,477,419	\$ 12,049,912	\$ 12,650,962	\$ 13,281,992	\$ 13,944,498	\$ 14,640,049	\$ 15,370,295	\$ 16,136,965	\$ 16,941,877	\$ 17,786,938	\$ 18,674,150	
Environmental Compliance	\$ 4,272,145	\$ 4,443,031	\$ 4,620,752	\$ 4,805,582	\$ 4,997,806	\$ 5,197,718	\$ 5,405,627	\$ 5,621,852	\$ 5,846,726	\$ 6,080,595	\$ 6,323,819	\$ 6,576,771	\$ 6,839,842	\$ 7,113,436							

Update of Assessment of Long-Term Solid Waste Management Alternatives, Economic Forecast Model Revisions for Sonoma County

Sonoma County
Economic Analysis - 80% System Tonnage
Scenario 3: Close Central Landfill and Outhaul

Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
EXPENSES																				
Transfer Stations & Out of County Disposal																				
Operations & Environmental Compliance																				
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ 2,159,176	\$ 2,245,544	\$ 2,335,365	\$ 2,428,780	\$ 2,525,931	\$ 2,626,968	\$ 2,732,047	\$ 2,841,329	\$ 2,954,982	\$ 3,073,181	\$ 3,196,109	\$ 3,323,953	\$ 3,456,911	\$ 3,595,188	\$ 3,738,995	\$ 3,888,555	\$ 4,044,097	\$ 4,205,861
Annapolis	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225
Guerneville	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055
Healdsburg	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507
Sonoma	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466
Out of County Haul and Disposal	\$ 9,704,981	\$ 9,993,122	\$ 10,289,818	\$ 10,595,322	\$ 10,909,897	\$ 11,233,812	\$ 11,567,344	\$ 11,910,778	\$ 12,264,410	\$ 12,628,540	\$ 13,003,481	\$ 13,389,555	\$ 13,787,090	\$ 14,196,429	\$ 14,617,921	\$ 15,051,927	\$ 15,498,819	\$ 15,958,979	\$ 16,432,801	\$ 16,920,691
Capital Improvements																				
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266
Total Transfer Station & Out of County Disposal Expenses	\$ 15,419,246	\$ 15,935,957	\$ 16,470,366	\$ 17,023,093	\$ 17,594,779	\$ 18,186,089	\$ 18,797,712	\$ 19,430,361												
Disposal																				
Central Landfill																				
Operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Compliance	\$ 3,152,824	\$ 3,247,409	\$ 2,726,858	\$ 2,245,945	\$ 1,772,246	\$ 1,310,188	\$ 907,571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ 20,084,776	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899
Containment System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Canyon Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Disposal Expenses	\$ 5,678,094	\$ 5,801,702	\$ 5,318,032	\$ 4,870,004	\$ 4,436,424	\$ 4,011,175	\$ 3,647,365	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899
Other																				
Administration (50% of total)	\$ 1,356,606	\$ 1,410,870	\$ 1,467,305	\$ 1,525,997	\$ 1,587,037	\$ 1,650,519	\$ 1,716,540	\$ 1,785,201	\$ 1,856,609	\$ 1,930,874	\$ 2,008,109	\$ 2,088,433	\$ 2,171,970	\$ 2,258,849	\$ 2,349,203	\$ 2,443,171	\$ 2,540,898	\$ 2,642,534	\$ 2,748,235	\$ 2,858,165
Litter Control	\$ 290,480	\$ 302,100	\$ 314,184	\$ 326,751	\$ 339,821	\$ 353,414	\$ 367,550	\$ 382,252	\$ 397,542	\$ 413,444	\$ 429,982	\$ 447,181	\$ 465,068	\$ 483,671	\$ 503,018	\$ 523,139	\$ 544,064	\$ 565,827	\$ 588,460	\$ 611,998
Capital Expenditures at Disposal Sites	\$ 961,538	\$ 1,000,000	\$ 1,040,000	\$ 1,081,600	\$ 1,124,864	\$ 1,169,859	\$ 1,216,653	\$ 1,265,319	\$ 1,315,932	\$ 1,368,569	\$ 1,423,312	\$ 1,480,244	\$ 1,539,454	\$ 1,601,032	\$ 1,665,074	\$ 1,731,676	\$ 1,800,944	\$ 1,872,981	\$ 1,947,900	\$ 2,025,817
Deposit to Operating Reserve	\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000														
Engineering for Other Capital Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other Expenses	\$ 2,608,625	\$ 3,685,312	\$ 3,071,489	\$ 3,804,348	<b															

	Year	1 Fiscal Year <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>	
REVENUES																						
Power Plant Revenues		\$ 3,155,194	\$ 3,085,780	\$ 3,051,073	\$ 3,016,365	\$ 2,981,658	\$ 2,946,951	\$ 2,912,244	\$ 2,877,537	\$ 2,842,830	\$ 2,808,123	\$ 2,773,416	\$ 2,738,708	\$ 2,704,001	\$ 2,669,294	\$ 2,634,587	\$ 2,599,880	\$ 2,565,173	\$ 2,530,466	\$ 2,495,758	\$ 2,461,051	
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358	
First Year Use of Fund Balance		\$ -	\$ -																			
Direct Haul Revenues		\$ -	\$ -																			
West Expansion - Rock Quarry Royalties		\$ 4,007,794	\$ 3,951,169	\$ 3,929,442	\$ 3,907,911	\$ 3,886,577	\$ 3,865,444	\$ 3,844,514	\$ 3,823,791	\$ 3,803,277	\$ 3,782,977	\$ 3,762,893	\$ 3,743,028	\$ 3,723,385	\$ 3,703,969	\$ 3,684,782	\$ 3,665,828	\$ 3,647,110	\$ 3,628,632	\$ 3,610,397	\$ 3,592,410	
TOTAL REVENUES		\$ 19,698,170	\$ 21,471,803	\$ 20,930,445	\$ 21,789,535	\$ 22,221,349	\$ 23,105,612	\$ 21,901,306	\$ 20,110,464	\$ 20,965,547		\$ 22,765,364		\$ 24,692,102	\$ 25,705,993	\$ 26,755,213	\$ 27,841,056	\$ 28,964,864	\$ 30,128,029	\$ 31,331,993	\$ 32,578,254	
NET EXPENSES																						
Calculated Tipping Fee		\$ 91.20	\$ 98.47	\$ 95.08	\$ 98.06	\$ 99.06	\$ 102.03	\$ 95.80	\$ 87.14	\$ 89.99	\$ 92.91	\$ 95.89	\$ 98.94	\$ 102.05	\$ 105.24	\$ 108.51	\$ 111.85	\$ 115.27	\$ 118.77	\$ 122.35	\$ 126.02	
Closure/Post-Closure Expenses																						
Central Closure		\$ 3,793,979	\$ 3,793,979	\$ 3,793,979																		
Central Post Closure		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -										
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104	
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 5,162,686	\$ 5,217,434	\$ 5,274,372	\$ 1,539,609	\$ 1,601,193	\$ 2,600,039	\$ 2,672,568	\$ 2,779,471	\$ 2,890,650	\$ 3,006,276	\$ 3,126,527	\$ 3,251,588	\$ 3,381,652	\$ 3,516,918	\$ 3,657,594	\$ 3,803,898	\$ 3,956,054	\$ 4,114,296	
Calculated Tipping Fee		\$ 97.05	\$ 104.51	\$ 118.54	\$ 121.54	\$ 122.57	\$ 108.83	\$ 102.81	\$ 98.41	\$ 101.46	\$ 104.72	\$ 108.06	\$ 111.48	\$ 114.98	\$ 118.56	\$ 122.22	\$ 125.98	\$ 129.83	\$ 133.77	\$ 137.80	\$ 141.94	
Total Expenses Less Revenues w/ Zero Waste		\$ 20,963,616	\$ 22,787,867	\$ 26,093,131	\$ 27,006,969	\$ 27,495,721	\$ 24,645,221	\$ 23,502,499	\$ 22,710,502	\$ 23,638,115		\$ 25,656,014		\$ 27,818,629	\$ 28,957,581	\$ 30,136,865	\$ 31,357,974	\$ 32,622,459	\$ 33,931,927	\$ 35,288,047	\$ 36,692,550	
Net Present Value (NPV) of Total Expenses Less Revenues																						
Total Expenses Less Revenues w/o Zero Waste		\$ 20,963,616	\$ 22,787,867	\$ 26,093,131	\$ 27,006,969	\$ 27,495,721	\$ 24,645,221	\$ 23,502,499	\$ 22,710,502	\$ 23,638,115		\$ 25,656,014		\$ 27,818,629	\$ 28,957,581	\$ 30,136,865	\$ 31,357,974	\$ 32,622,459	\$ 33,931,927	\$ 35,288,047	\$ 36,692,550	
Net Present Value (NPV) of Total Expenses Less Revenues																						
Operating Reserves/Fund Balance																						
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	
Operating Reserve Deposit		\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ 24,629,626	\$ -	\$ 26,718,569	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Operating Reserve Interest		\$ 38,755	\$ 51,899	\$ 55,824	\$ 67,860	\$ 82,067	\$ 103,934	\$ 105,285	\$ 106,654	\$ 108,040	\$ 109,445	\$ 110,867	\$ 112,309	\$ 113,769	\$ 115,248	\$ 116,746	\$ 118,264	\$ 119,801	\$ 121,358	\$ 122,936	\$ 124,534	
Operating Reserve		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098	
Year End - Fund Balance		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098	
TONNAGE FLOW																						
Amount of Waste Received at County Facilities		216,000	218,052	220,124	222,215	224,326	226,457	228,608	230,780	232,972	235,186	237,420	239,675	241,952	244,251	246,571	248,914	251,278	253,665	256,075	258,508	
Amount to Central		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total System Waste		216,000	218,052	220,124	222,215	224,326	226,457	228,608	230,780	232,972	235,186	237,420	239,675	241,952	244,251	246,571	248,914	251,278	253,665	256,075	258,508	
Amount Hauled Out of County		216,000	218,052	220,124	222,215	224,326	226,457	228,608	230,780	232,972	235,186	237,420	239,675	241,952	244,251	246,571	248,914	251,278	253,665	256,075	258,508	
Amount Direct Haul		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Original tonnage assumptions		440,333	444,516	448,739	453,002	457,305	461,650	466,035	470,463	474,932	479,444	483,999	488,597	493,238	497,924	502,654	507,430	512,250	517,117	522,029	526,988	
Assumptions																						
Annual General Escalation Rate		4.0%																				
Annual Out of County Haul Fee Escalation Rate		2.0%																				
Annual Waste Escalation Rate		0.95%																				
Annual Revenue Increase		1.5%																				
LFG Generation (and Revenue) Decrease Rate		2.6%																				
Net Revenue Increase-Revenue Decrease Rate		-1.1%																				
PCM per ton per year		\$ 5.86	\$ 6.04	\$ 23.45	\$ 23.48	\$ 23.51	\$ 6.80	\$ 7.00	\$ 11.27	\$ 11.47	\$ 11.82	\$ 12.18	\$ 12.54	\$ 12.92	\$ 13.31	\$ 13.71	\$ 14.13	\$ 14.56	\$ 15.00	\$ 15.45	\$ 15.92	

Sonoma County Economic Analysis - 80% System Tonnage Scenario 4: Close Central Landfill and Outhaul via Rail

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>	
EXPENSES																						
Transfer Stations & Out of County Disposal																						
Operations & Environmental Compliance																						
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159		
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ 2,159,176	\$ 2,245,544	\$ 2,335,365	\$ 2,428,780	\$ 2,525,931	\$ 2,626,968	\$ 2,732,047	\$ 2,841,329	\$ 2,954,982	\$ 3,073,181	\$ 3,196,109	\$ 3,323,953	\$ 3,456,911	\$ 3,595,188	\$ 3,738,995	\$ 3,888,555	\$ 4,044,097	\$ 4,205,861		
Annapolis	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225		
Guerneville	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055		
Healdsburg	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507		
Sonoma	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466		
Transport to Central																						
Central Tipping Building	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annapolis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Guerneville	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Healdsburg	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sonoma	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Out of County Rail Haul and Disposal																						
	\$ 9,704,981	\$ 9,993,122	\$ 10,963,396	\$ 11,288,899	\$ 11,624,066	\$ 11,969,185	\$ 12,324,550	\$ 12,690,466	\$ 13,067,246	\$ 13,455,212	\$ 13,854,697	\$ 14,266,043	\$ 14,689,602	\$ 15,125,737	\$ 15,574,820	\$ 16,037,236	\$ 16,513,382	\$ 17,003,664	\$ 17,508,503	\$ 18,028,330		
Capital Improvements																						
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556		
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266		
Total Transfer Station & Out of County Disposal Expenses	\$ 15,419,246	\$ 15,935,957	\$ 17,143,944	\$ 17,716,670	\$ 18,308,948	\$ 18,921,462	\$ 19,554,918	\$ 20,210,048	\$ 20,887,612	\$ 21,588,393	\$ 22,313,205	\$ 23,062,892	\$ 23,838,324	\$ 24,640,408	\$ 25,470,078	\$ 26,328,304	\$ 27,216,092	\$ 28,134,483	\$ 29,084,555	\$ 30,067,424		
Disposal																						
Central Landfill																						
Operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Compliance	\$ 3,152,824	\$ 3,247,409	\$ 2,726,858	\$ 2,245,945	\$ 1,772,246	\$ 1,310,188	\$ 907,571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899		
Containment System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Canyon Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Disposal Expenses	\$ 5,678,094	\$ 5,801,702	\$ 5,318,032	\$ 4,870,004	\$ 4,436,424	\$ 4,011,175	\$ 3,647,365	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899		
Other																						
Administration (50% of total)	\$ 1,356,606	\$ 1,410,870	\$ 1,467,305	\$ 1,525,997	\$ 1,587,037	\$ 1,650,519	\$ 1,716,540	\$ 1,785,201	\$ 1,856,609	\$ 1,930,874	\$ 2,008,109	\$ 2,088,433	\$ 2,171,970	\$ 2,258,849	\$ 2,349,203	\$ 2,443,171	\$ 2,540,898	\$ 2,642,534	\$ 2,748,235	\$ 2,858,165		
Litter Control	\$ 290,480	\$ 302,100	\$ 314,184	\$ 326,751	\$ 339,821	\$ 353,414	\$ 367,550	\$ 382,252	\$ 397,542	\$ 413,444	\$ 429,982	\$ 447,181	\$ 465,068	\$ 483,671	\$ 503,018	\$ 523,139	\$ 544,064	\$ 565,827	\$ 588,460	\$ 611,998		
Capital Expenditures at Disposal Sites	\$ 961,538	\$ 1,000,000	\$ 1,040,000	\$ 1,081,600	\$ 1,124,864	\$ 1,169,859	\$ 1,216,653	\$ 1,265,319	\$ 1,315,932	\$ 1,368,569	\$ 1,423,312	\$ 1,480,244	\$ 1,539,454	\$ 1,601,032	\$ 1,665,074	\$ 1,731,676	\$ 1,800,944	\$ 1,872,981	\$ 1,947,900	\$ 2,025,817		
Deposit to Operating Reserve	\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000																
Engineering for Other Capital Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other Expenses	\$ 2,608,625	\$ 3,685,312	\$ 3,071,489	\$ 3,804,348	\$ 4,076,722	\$ 4,773,791	\$ 3,300,743	\$ 3,432,772	\$ 3,570,083	\$ 3,712,887	\$ 3,861,402	\$ 4,015,858	\$ 4,176,493	\$ 4,343,552	\$ 4,517,294	\$ 4,697,986	\$ 4,885,906	\$ 5,081,342	\$ 5,284,595	\$ 5,495,979		
TOTAL EXPENSES	\$ 23,705,964	\$ 25,422,971	\$ 25,533,465	\$ 26,391,022	\$ 26,822,095	\$ 27,706,428	\$ 26,503,025	\$ 24,713,942	\$ 25,571,661	\$ 26,459,804	\$ 27,379,473	\$ 28,331,810	\$ 29,317,999	\$ 30,339,269	\$ 31,396,894	\$ 32,492,193	\$ 33,626,537	\$ 34,801,345	\$ 36,018,091	\$ 37,278,302		

	Year Fiscal Year	1 2008-09	2 2009-10	3 2010-11	4 2011-12	5 2012-13	6 2013-14	7 2014-15	8 2015-16	9 2016-17	10 2017-18	11 2018-19	12 2019-20	13 2020-21	14 2021-22	15 2022-23	16 2023-24	17 2024-25	18 2025-26	19 2026-27	20 2027-28
REVENUES																					
Power Plant Revenues		\$ 3,155,194	\$ 3,085,780	\$ 3,051,073	\$ 3,016,365	\$ 2,981,658	\$ 2,946,951	\$ 2,912,244	\$ 2,877,537	\$ 2,842,830	\$ 2,808,123	\$ 2,773,416	\$ 2,738,708	\$ 2,704,001	\$ 2,669,294	\$ 2,634,587	\$ 2,599,880	\$ 2,565,173	\$ 2,530,466	\$ 2,495,758	\$ 2,461,051
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358
First Year Use of Fund Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Haul Revenues		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Expansion - Rock Quarry Royalties		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL REVENUES		\$ 4,007,794	\$ 3,951,169	\$ 3,929,442	\$ 3,907,911	\$ 3,886,577	\$ 3,865,444	\$ 3,844,514	\$ 3,823,791	\$ 3,803,277	\$ 3,782,977	\$ 3,762,893	\$ 3,743,028	\$ 3,723,385	\$ 3,703,969	\$ 3,684,782	\$ 3,665,828	\$ 3,647,110	\$ 3,628,632	\$ 3,610,397	\$ 3,592,410
NET EXPENSES		\$ 19,698,170	\$ 21,471,803	\$ 21,604,023	\$ 22,483,112	\$ 22,935,518	\$ 23,840,985	\$ 22,658,512	\$ 20,890,151	\$ 21,768,383	\$ 22,676,827	\$ 23,616,580	\$ 24,588,782	\$ 25,594,614	\$ 26,635,300	\$ 27,712,112	\$ 28,826,365	\$ 29,979,427	\$ 31,172,714	\$ 32,407,694	\$ 33,685,893
Calculated Tipping Fee		\$ 91.20	\$ 98.47	\$ 98.14	\$ 101.18	\$ 102.24	\$ 105.28	\$ 99.12	\$ 90.52	\$ 93.44	\$ 96.42	\$ 99.47	\$ 102.59	\$ 105.78	\$ 109.05	\$ 112.39	\$ 115.81	\$ 119.31	\$ 122.89	\$ 126.56	\$ 130.31
Closure/Post-Closure Expenses																					
Central Closure		\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979
Central Post Closure		\$ 934,798	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	\$ 940,718	
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104
Calculated Tipping Fee		\$ 97.05	\$ 104.51	\$ 121.60	\$ 124.66	\$ 125.75	\$ 112.08	\$ 106.12	\$ 101.79	\$ 104.91	\$ 108.24	\$ 111.65	\$ 115.14	\$ 118.71	\$ 122.36	\$ 126.10	\$ 129.94	\$ 133.86	\$ 137.88	\$ 142.00	\$ 146.22
Total Expenses Less Revenues w/ Zero Waste		\$ 20,963,616	\$ 22,787,867	\$ 26,766,709	\$ 27,700,546	\$ 28,209,890	\$ 25,380,593	\$ 24,259,705	\$ 23,490,190	\$ 24,440,952	\$ 25,456,298	\$ 26,507,230	\$ 27,595,058	\$ 28,721,141	\$ 29,886,888	\$ 31,093,763	\$ 32,343,283	\$ 33,637,021	\$ 34,976,612	\$ 36,363,748	\$ 37,800,189
Net Present Value (NPV) of Total Expenses Less Revenues																					
Total Expenses Less Revenues w/o Zero Waste		\$ 20,963,616	\$ 22,787,867	\$ 26,766,709	\$ 27,700,546	\$ 28,209,890	\$ 25,380,593	\$ 24,259,705	\$ 23,490,190	\$ 24,440,952	\$ 25,456,298	\$ 26,507,230	\$ 27,595,058	\$ 28,721,141	\$ 29,886,888	\$ 31,093,763	\$ 32,343,283	\$ 33,637,021	\$ 34,976,612	\$ 36,363,748	\$ 37,800,189
Net Present Value (NPV) of Total Expenses Less Revenues																					
Operating Reserves/Fund Balance																					
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563
Operating Reserve Deposit		\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Reserve Interest		\$ 38,755	\$ 51,899	\$ 55,824	\$ 67,860	\$ 82,067	\$ 103,934	\$ 105,285	\$ 106,654	\$ 108,040	\$ 109,445	\$ 110,867	\$ 112,309	\$ 113,769	\$ 115,248	\$ 116,746	\$ 118,264	\$ 119,801	\$ 121,358	\$ 122,936	\$ 124,534
Operating Reserve		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098
Year End - Fund Balance		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098
TONNAGE FLOW																					
Amount of Waste Received at County Facilities		216,000	218,052	220,124	2																

C. Revisions to the Assessment of Long-Term Solid Waste Management Alternatives Model

50% Tonnage Case - Detailed Analysis Spreadsheets

Sonoma County

Economic Analysis - 50% System Tonnage

Scenario 1: Outhaul for 5 Years then Re-open Central with Normal Containment System

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>	
EXPENSES																						
Transfer Stations & Out of County Disposal																						
Operations & Environmental Compliance																						
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159		
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annapolis	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225		
Guerneville	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055		
Healdsburg	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507		
Sonoma	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466		
Transport to Central																						
Central Tipping Building	\$ -	\$ -	\$ -	\$ 77,471	\$ 80,570	\$ 83,792	\$ 87,144	\$ 90,630	\$ 94,255	\$ 98,025	\$ 101,946	\$ 106,024	\$ 110,265	\$ 114,676	\$ 119,263	\$ 124,033	\$ 128,995	\$ 134,154	\$ -	\$ -	\$ -	
Annapolis	\$ -	\$ -	\$ -	\$ 15,519	\$ 16,140	\$ 16,785	\$ 17,457	\$ 18,155	\$ 18,881	\$ 19,637	\$ 20,422	\$ 21,239	\$ 22,088	\$ 22,972	\$ 23,891	\$ 24,847	\$ 25,840	\$ 26,874	\$ -	\$ -	\$ -	
Guerneville	\$ -	\$ -	\$ -	\$ 93,804	\$ 97,556	\$ 101,459	\$ 105,517	\$ 109,738	\$ 114,127	\$ 118,692	\$ 123,440	\$ 128,377	\$ 133,513	\$ 138,853	\$ 144,407	\$ 150,183	\$ 156,191	\$ 162,438	\$ -	\$ -	\$ -	
Healdsburg	\$ -	\$ -	\$ -	\$ 328,380	\$ 341,515	\$ 355,175	\$ 369,382	\$ 384,158	\$ 399,524	\$ 415,505	\$ 432,125	\$ 449,410	\$ 467,387	\$ 486,082	\$ 505,525	\$ 525,746	\$ 546,776	\$ 568,647	\$ -	\$ -	\$ -	
Sonoma	\$ -	\$ -	\$ -	\$ 237,204	\$ 246,693	\$ 256,560	\$ 266,823	\$ 277,496	\$ 288,595	\$ 300,139	\$ 312,145	\$ 324,631	\$ 337,616	\$ 351,120	\$ 379,772	\$ 394,963	\$ 410,761	\$ -	\$ -	\$ -	\$ -	
Out of County Haul and Disposal																						
	\$ 6,065,613	\$ 6,245,701	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Improvements																						
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556		
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266		
Total Transfer Station & Out of County Disposal Expenses	\$ 11,779,878	\$ 12,188,537	\$ 4,773,750	\$ 4,964,700	\$ 5,163,288	\$ 5,369,820	\$ 5,584,613	\$ 5,807,997	\$ 6,040,317	\$ 6,281,930	\$ 6,533,207	\$ 6,794,535	\$ 7,066,317	\$ 7,348,969	\$ 7,642,928	\$ 7,948,645	\$ 8,266,591	\$ 7,242,265	\$ 7,531,955	\$ 7,833,233		
Disposal																						
Central Landfill																						
Operations	\$ -	\$ -	\$ 7,631,543	\$ 8,012,204	\$ 8,411,853	\$ 8,831,436	\$ 9,271,948	\$ 9,734,433	\$ 10,219,987	\$ 10,729,760	\$ 11,264,960	\$ 11,826,856	\$ 12,416,780	\$ 13,036,129	\$ 13,686,371	\$ 14,369,047	\$ 15,085,775	\$ 15,838,254	\$ 16,628,266	\$ 17,457,684		
Environmental Compliance	\$ 4,272,145	\$ 4,443,031	\$ 4,620,752	\$ 4,805,582	\$ 4,997,806	\$ 5,197,718	\$ 5,405,627	\$ 5,621,852	\$ 5,846,726	\$ 6,080,595	\$ 6,323,819	\$ 6,576,771	\$ 6,839,842	\$ 7,113,436	\$ 7,397,973	\$ 7,693,892	\$ 8,001,648	\$ 8,321,714	\$ 8,654,582	\$ 9,000,766		
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522																				

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>													
REVENUES																																		
Power Plant Revenues		\$ 3,202,522	\$ 3,250,560	\$ 3,299,318	\$ 3,348,808	\$ 3,399,040	\$ 3,450,026	\$ 3,501,776	\$ 3,554,303	\$ 3,607,617	\$ 3,661,731	\$ 3,716,657	\$ 3,772,407	\$ 3,828,993	\$ 3,886,428	\$ 3,944,725	\$ 4,003,896	\$ 4,063,954	\$ 4,124,913	\$ 4,186,787	\$ 4,249,589													
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358													
First Year Use of Fund Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -													
Direct Haul Revenues		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -													
West Expansion - Rock Quarry Royalties		\$ 622,365	\$ 647,259	\$ 673,150	\$ 700,076	\$ 728,079	\$ 757,202	\$ 787,490	\$ 818,990	\$ 851,749	\$ 885,819	\$ 921,103	\$ 994,920	\$ 5,069,843	\$ 5,145,891	\$ 5,223,079	\$ 5,301,426	\$ 5,380,947	\$ 4,055,122	\$ 4,115,949	\$ 4,177,688	\$ 4,862,718	\$ 4,951,218	\$ 5,041,668	\$ 5,134,121	\$ 5,228,635	\$ 5,325,267	\$ 5,424,076	\$ 5,525,124	\$ 5,628,476	\$ 5,734,197			
TOTAL REVENUES		\$ 18,056,264	\$ 19,717,711	\$ 27,598,718	\$ 25,089,404	\$ 26,103,857	\$ 27,573,312	\$ 26,909,830	\$ 26,180,767	\$ 27,207,039	\$ 28,280,846	\$ 29,404,356	\$ 30,579,832	\$ 31,809,644	\$ 34,017,519	\$ 35,400,396	\$ 36,846,857	\$ 38,359,794	\$ 38,587,241	\$ 40,188,141	\$ 51,722,894	\$ 4,055,122	\$ 4,115,949	\$ 4,177,688	\$ 4,862,718	\$ 4,951,218	\$ 5,041,668	\$ 5,134,121	\$ 5,228,635	\$ 5,325,267	\$ 5,424,076	\$ 5,525,124	\$ 5,628,476	\$ 5,734,197
NET EXPENSES		\$ 18,056,264	\$ 19,717,711	\$ 27,598,718	\$ 25,089,404	\$ 26,103,857	\$ 27,573,312	\$ 26,909,830	\$ 26,180,767	\$ 27,207,039	\$ 28,280,846	\$ 29,404,356	\$ 30,579,832	\$ 31,809,644	\$ 34,017,519	\$ 35,400,396	\$ 36,846,857	\$ 38,359,794	\$ 38,587,241	\$ 40,188,141	\$ 51,722,894	\$ 4,055,122	\$ 4,115,949	\$ 4,177,688	\$ 4,862,718	\$ 4,951,218	\$ 5,041,668	\$ 5,134,121	\$ 5,228,635	\$ 5,325,267	\$ 5,424,076	\$ 5,525,124	\$ 5,628,476	\$ 5,734,197
Calculated Tipping Fee		\$ 133.75	\$ 144.68	\$ 200.61	\$ 180.65	\$ 186.19	\$ 194.82	\$ 188.34	\$ 181.51	\$ 186.85	\$ 192.40	\$ 198.16	\$ 204.14	\$ 210.35	\$ 222.84	\$ 229.71	\$ 236.85	\$ 244.25	\$ 243.39	\$ 251.10	\$ 320.13													
Closure/Post-Closure Expenses																																		
Central Closure		\$ 2,785,681	\$ 2,897,108	\$ 3,012,992	\$ 3,133,512	\$ 3,258,853	\$ 3,389,207	\$ 3,524,775	\$ 3,665,766	\$ 3,812,397	\$ 3,964,892	\$ 4,123,488	\$ 4,288,428	\$ 4,459,965	\$ 4,638,363	\$ 4,823,898	\$ 5,016,854	\$ 5,217,528	\$ 5,426,229															
Central Post Closure		\$ 743,463	\$ 773,202	\$ 804,130	\$ 836,295	\$ 869,747	\$ 904,537	\$ 940,718	\$ 978,347	\$ 1,017,481	\$ 1,058,180	\$ 1,100,507	\$ 1,144,527	\$ 1,190,308	\$ 1,237,921	\$ 1,287,438	\$ 1,338,935	\$ 1,392,492	\$ 1,448,192															
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104													
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 4,897,850	\$ 5,093,765	\$ 5,297,515	\$ 5,509,416	\$ 5,729,792	\$ 5,958,984	\$ 6,197,343	\$ 6,445,237	\$ 6,703,047	\$ 6,971,168	\$ 7,250,015	\$ 7,540,016	\$ 7,841,616	\$ 8,155,281	\$ 8,481,492	\$ 8,820,752	\$ 9,173,582	\$ 9,540,525													
Calculated Tipping Fee		\$ 143.12	\$ 154.34	\$ 236.21	\$ 217.33	\$ 223.97	\$ 233.74	\$ 228.44	\$ 222.83	\$ 229.41	\$ 236.25	\$ 243.33	\$ 250.68	\$ 258.30	\$ 272.23	\$ 280.60	\$ 289.27	\$ 298.26	\$ 299.03	\$ 308.42	\$ 379.18													
Total Expenses Less Revenues w/ Zero Waste		\$ 19,321,710	\$ 21,033,775	\$ 32,496,568	\$ 30,183,168	\$ 31,401,372	\$ 33,082,727	\$ 32,639,622	\$ 32,139,751	\$ 33,404,382	\$ 34,726,083	\$ 36,107,402	\$ 37,551,000	\$ 39,059,659	\$ 41,557,535	\$ 43,242,012	\$ 45,002,138	\$ 46,841,287	\$ 47,407,993	\$ 49,361,723	\$ 61,263,420													
Net Present Value (NPV) of Total Expenses Less Revenues																																		
Total Expenses Less Revenues w/o Zero Waste		\$ 19,321,710	\$ 21,033,775	\$ 32,496,568	\$ 30,183,168	\$ 31,401,372	\$ 33,082,727	\$ 32,639,622	\$ 32,139,751	\$ 33,404,382	\$ 34,726,083	\$ 36,107,402	\$ 37,551,000	\$ 39,059,659	\$ 41,557,535	\$ 43,242,012	\$ 45,002,138	\$ 46,841,287	\$ 47,407,993	\$ 49,361,723	\$ 61,263,420													
Net Present Value (NPV) of Total Expenses Less Revenues																																		
Operating Reserves/Fund Balance																																		
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543													
Operating Reserve Deposit		\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -													
Operating Reserve Interest		\$ 74,529	\$ 100,701	\$ 109,468	\$ 133,955	\$ 162,929	\$ 207,002	\$ 212,177	\$ 217,482	\$ 222,919	\$ 228,492	\$ 234,204	\$ 240,059	\$ 246,060	\$ 2																			

Sonoma County

Economic Analysis - 50% System Tonnage

Scenario 2: Outhaul for 5 Years then Re-open Central with Robust Containment System

Year	1 <u>Fiscal Year</u>	2 <u>2008-09</u>	3 <u>2009-10</u>	4 <u>2010-11</u>	5 <u>2011-12</u>	6 <u>2012-13</u>	7 <u>2013-14</u>	8 <u>2014-15</u>	9 <u>2015-16</u>	10 <u>2016-17</u>	11 <u>2017-18</u>	12 <u>2018-19</u>	13 <u>2019-20</u>	14 <u>2020-21</u>	15 <u>2021-22</u>	16 <u>2022-23</u>	17 <u>2023-24</u>	18 <u>2024-25</u>	19 <u>2025-26</u>	20 <u>2026-27</u>	21 <u>2027-28</u>	
EXPENSES																						
Transfer Stations & Out of County Disposal																						
Operations & Environmental Compliance																						
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159	\$ -	\$ -
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annapolis	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225	\$ -	
Guerneville	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055	\$ -	
Healdsburg	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507	\$ -	
Sonoma	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466	\$ -	
Transport to Central																						
Central Tipping Building	\$ -	\$ -	\$ 77,471	\$ 80,570	\$ 83,792	\$ 87,144	\$ 90,630	\$ 94,255	\$ 98,025	\$ 101,946	\$ 106,024	\$ 110,265	\$ 114,676	\$ 119,263	\$ 124,033	\$ 128,995	\$ 134,154	\$ 139,521	\$ 145,101	\$ 150,905	\$ -	
Annapolis	\$ -	\$ -	\$ 15,519	\$ 16,140	\$ 16,785	\$ 17,457	\$ 18,155	\$ 18,881	\$ 19,637	\$ 20,422	\$ 21,239	\$ 22,088	\$ 22,972	\$ 23,891	\$ 24,847	\$ 25,840	\$ 26,874	\$ 27,949	\$ 29,067	\$ 30,230	\$ -	
Guerneville	\$ -	\$ -	\$ 93,804	\$ 97,556	\$ 101,459	\$ 105,517	\$ 109,738	\$ 114,127	\$ 118,692	\$ 123,440	\$ 128,377	\$ 133,513	\$ 138,853	\$ 144,407	\$ 150,183	\$ 156,191	\$ 162,438	\$ 168,936	\$ 175,693	\$ 182,721	\$ -	
Healdsburg	\$ -	\$ -	\$ 328,380	\$ 341,515	\$ 355,175	\$ 369,382	\$ 384,158	\$ 399,524	\$ 415,505	\$ 432,125	\$ 449,410	\$ 467,387	\$ 486,082	\$ 505,525	\$ 525,746	\$ 546,776	\$ 568,647	\$ 591,393	\$ 615,049	\$ 639,651	\$ -	
Sonoma	\$ -	\$ -	\$ 237,204	\$ 246,693	\$ 256,560	\$ 266,823	\$ 277,496	\$ 288,595	\$ 300,139	\$ 312,145	\$ 324,631	\$ 337,616	\$ 351,120	\$ 365,165	\$ 379,772	\$ 394,963	\$ 410,761	\$ 427,192	\$ 444,279	\$ 462,051	\$ -	
Out of County Haul and Disposal																						
	\$ 6,065,613	\$ 6,245,701	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Improvements																						
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556	\$ -	
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266	\$ -	
Total Transfer Station & Out of County Disposal Expenses	\$ 11,779,878	\$ 12,188,537	\$ 4,773,750	\$ 4,964,700	\$ 5,163,288	\$ 5,369,820	\$ 5,584,613	\$ 5,807,997	\$ 6,040,317	\$ 6,281,930	\$ 6,533,207	\$ 6,794,535	\$ 7,066,317	\$ 7,348,969	\$ 7,642,928	\$ 7,948,645	\$ 8,266,591	\$ 8,597,255	\$ 8,941,145	\$ 9,298,791	\$ -	
Disposal																						
Central Landfill																						
Operations	\$ -	\$ -	\$ 7,631,543	\$ 8,012,204	\$ 8,411,853	\$ 8,831,436	\$ 9,271,948	\$ 9,734,433	\$ 10,219,987	\$ 10,729,760	\$ 11,264,960	\$ 11,826,856	\$ 12,416,780	\$ 13,036,129	\$ 13,686,371	\$ 14,369,047	\$ 15,085,775	\$ 15,838,254	\$ 16,628,266	\$ 17,457,684	\$ -	
Environmental Compliance	\$ 4,272,145	\$ 4,443,031	\$ 4,620,752	\$ 4,805,582	\$ 4,997,806	\$ 5,197,718	\$ 5,405,627	\$ 5,621,852	\$ 5,846,726	\$ 6,080,595	\$ 6,323,819	\$ 6,576,771	\$ 6,839,842	\$ 7,113,436	\$ 7,397,973	\$ 7,693,892	\$ 8,001,648	\$ 8,321,714	\$ 8,654,582	\$ 9,000,766	\$ -	
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,																		

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
REVENUES																					
Power Plant Revenues		\$ 3,202,522	\$ 3,250,560	\$ 3,299,318	\$ 3,348,808	\$ 3,399,040	\$ 3,450,026	\$ 3,501,776	\$ 3,554,303	\$ 3,607,617	\$ 3,661,731	\$ 3,716,657	\$ 3,772,407	\$ 3,828,993	\$ 3,886,428	\$ 3,944,725	\$ 4,003,896	\$ 4,063,954	\$ 4,124,913	\$ 4,186,787	\$ 4,249,589
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358
First Year Use of Fund Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Haul Revenues		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Expansion - Rock Quarry Royalties		\$ 622,365	\$ 647,259	\$ 673,150	\$ 700,076	\$ 728,079	\$ 757,202	\$ 787,490	\$ 818,990	\$ 851,749	\$ 885,819	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL REVENUES		\$ 4,055,122	\$ 4,115,949	\$ 4,177,688	\$ 4,862,718	\$ 4,951,218	\$ 5,041,668	\$ 5,134,121	\$ 5,228,635	\$ 5,325,267	\$ 5,424,076	\$ 5,525,124	\$ 5,628,476	\$ 5,734,197	\$ 4,921,103	\$ 4,994,920	\$ 5,069,843	\$ 5,145,891	\$ 5,223,079	\$ 5,301,426	\$ 5,380,947
NET EXPENSES		\$ 18,056,264	\$ 19,717,711	\$ 29,680,842	\$ 27,171,528	\$ 28,185,981	\$ 29,655,436	\$ 28,991,954	\$ 28,262,891	\$ 29,289,163	\$ 30,362,970	\$ 31,486,480	\$ 32,661,956	\$ 33,891,768	\$ 36,099,644	\$ 37,482,520	\$ 38,928,981	\$ 40,441,918	\$ 42,024,356	\$ 43,679,455	\$ 55,270,576
Calculated Tipping Fee		\$ 133.75	\$ 144.68	\$ 215.74	\$ 195.64	\$ 201.04	\$ 209.53	\$ 202.91	\$ 195.95	\$ 201.15	\$ 206.56	\$ 212.19	\$ 218.04	\$ 224.12	\$ 236.48	\$ 243.22	\$ 250.23	\$ 257.51	\$ 265.07	\$ 272.92	\$ 342.09
Closure/Post-Closure Expenses																					
Central Closure		\$ 2,785,681	\$ 2,897,108	\$ 3,012,992	\$ 3,133,512	\$ 3,258,853	\$ 3,389,207	\$ 3,524,775	\$ 3,665,766	\$ 3,812,397	\$ 3,964,892	\$ 4,123,488	\$ 4,288,428	\$ 4,459,965	\$ 4,638,363	\$ 4,823,898	\$ 5,016,854	\$ 5,217,528	\$ 5,426,229		
Central Post Closure		\$ 743,463	\$ 773,202	\$ 804,130	\$ 836,295	\$ 869,747	\$ 904,537	\$ 940,718	\$ 978,347	\$ 1,017,481	\$ 1,058,180	\$ 1,100,507	\$ 1,144,527	\$ 1,190,308	\$ 1,237,921	\$ 1,287,438	\$ 1,338,935	\$ 1,392,492	\$ 1,448,192		
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 4,897,850	\$ 5,093,765	\$ 5,297,515	\$ 5,509,416	\$ 5,729,792	\$ 5,958,984	\$ 6,197,343	\$ 6,445,237	\$ 6,703,047	\$ 6,971,168	\$ 7,250,015	\$ 7,540,016	\$ 7,841,616	\$ 8,155,281	\$ 8,481,492	\$ 8,820,752	\$ 9,173,582	\$ 9,540,525
Calculated Tipping Fee		\$ 143.12	\$ 154.34	\$ 251.34	\$ 232.32	\$ 238.82	\$ 248.45	\$ 243.01	\$ 237.26	\$ 243.71	\$ 250.41	\$ 257.36	\$ 264.58	\$ 272.07	\$ 285.87	\$ 294.11	\$ 302.65	\$ 311.52	\$ 320.71	\$ 330.23	\$ 401.14
Total Expenses Less Revenues w/ Zero Waste		\$ 19,321,710	\$ 21,033,775	\$ 34,578,692	\$ 32,265,292	\$ 33,483,496	\$ 35,164,851	\$ 34,721,746	\$ 34,221,875	\$ 35,486,506	\$ 36,808,207	\$ 38,189,526	\$ 39,633,125	\$ 41,141,783	\$ 43,639,659	\$ 45,324,136	\$ 47,084,262	\$ 48,923,411	\$ 50,845,108	\$ 52,853,037	\$ 64,811,102
Net Present Value (NPV) of Total Expenses Less Revenues																					
Total Expenses Less Revenues w/o Zero Waste		\$ 19,321,710	\$ 21,033,775	\$ 34,578,692	\$ 32,265,292	\$ 33,483,496	\$ 35,164,851	\$ 34,721,746	\$ 34,221,875	\$ 35,486,506	\$ 36,808,207	\$ 38,189,526	\$ 39,633,125	\$ 41,141,783	\$ 43,639,659	\$ 45,324,136	\$ 47,084,262	\$ 48,923,411	\$ 50,845,108	\$ 52,853,037	\$ 64,811,102
Net Present Value (NPV) of Total Expenses Less Revenues																					
Operating Reserves/Fund Balance																					
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543
Operating Reserve Deposit		\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Reserve Interest		\$ 74,529	\$ 100,701	\$ 109,468	\$ 133,955	\$ 162,929	\$ 207,002	\$ 212,177	\$ 217,482	\$ 222,919	\$ 228,492	\$ 234,204	\$ 240,059	\$ 246,060	\$ 252,212	\$ 258,517	\$ 264,980	\$ 271,605	\$ 278,395	\$ 285,355	\$ 292,489
Operating Reserve		\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543	\$ 11,992,032
Year End - Fund Balance		\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543	\$ 11,992,032

Sonoma County
Economic Analysis - 50% System Tonnage
Scenario 3: Close Central Landfill and Outhaul

Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
EXPENSES																				
Transfer Stations & Out of County Disposal																				
Operations & Environmental Compliance																				
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ 2,159,176	\$ 2,245,544	\$ 2,335,365	\$ 2,428,780	\$ 2,525,931	\$ 2,626,968	\$ 2,732,047	\$ 2,841,329	\$ 2,954,982	\$ 3,073,181	\$ 3,196,109	\$ 3,323,953	\$ 3,456,911	\$ 3,595,188	\$ 3,738,995	\$ 3,888,555	\$ 4,044,097	\$ 4,205,861
Annapolis	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225
Guerneville	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055
Healdsburg	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507
Sonoma	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466
Out of County Haul and Disposal	\$ 6,065,613	\$ 6,245,701	\$ 6,431,136	\$ 6,622,076	\$ 6,818,686	\$ 7,021,133	\$ 7,229,590	\$ 7,444,237	\$ 7,665,256	\$ 7,892,837	\$ 8,127,176	\$ 8,368,472	\$ 8,616,931	\$ 8,872,768	\$ 9,136,201	\$ 9,407,454	\$ 9,686,762	\$ 9,974,362	\$ 10,270,501	\$ 10,575,432
Capital Improvements																				
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266
Total Transfer Station & Out of County Disposal Expenses	\$ 11,779,878	\$ 12,188,537	\$ 12,611,685	\$ 13,049,847	\$ 13,503,567	\$ 13,973,410	\$ 14,459,958	\$ 14,963,819	\$ 15,485,622	\$ 16,026,018	\$ 16,585,684	\$ 17,165,320	\$ 17,765,654	\$ 18,387,439	\$ 19,031,459	\$ 19,698,523	\$ 20,389,473	\$ 21,105,181	\$ 21,846,553	\$ 22,614,526
Disposal																				
Central Landfill																				
Operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Compliance	\$ 3,152,824	\$ 3,247,409	\$ 2,726,858	\$ 2,245,945	\$ 1,772,246	\$ 1,310,188	\$ 907,571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899
Containment System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Canyon Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Disposal Expenses	\$ 5,678,094	\$ 5,801,702	\$ 5,318,032	\$ 4,870,004	\$ 4,436,424	\$ 4,011,175	\$ 3,647,365	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899
Other																				
Administration (50% of total)	\$ 1,356,606	\$ 1,410,870	\$ 1,467,305	\$ 1,525,997	\$															

	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Fiscal Year	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
REVENUES																					
Power Plant Revenues		\$ 3,155,194	\$ 3,085,780	\$ 3,051,073	\$ 3,016,365	\$ 2,981,658	\$ 2,946,951	\$ 2,912,244	\$ 2,877,537	\$ 2,842,830	\$ 2,808,123	\$ 2,773,416	\$ 2,738,708	\$ 2,704,001	\$ 2,669,294	\$ 2,634,587	\$ 2,599,880	\$ 2,565,173	\$ 2,530,466	\$ 2,495,758	\$ 2,461,051
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358
First Year Use of Fund Balance		\$ -	\$ -																		
Direct Haul Revenues																					
West Expansion - Rock Quarry Royalties																					
TOTAL REVENUES		\$ 4,007,794	\$ 3,951,169	\$ 3,929,442	\$ 3,907,911	\$ 3,886,577	\$ 3,865,444	\$ 3,844,514	\$ 3,823,791	\$ 3,803,277	\$ 3,782,977	\$ 3,762,893	\$ 3,743,028	\$ 3,723,385	\$ 3,703,969	\$ 3,684,782	\$ 3,665,828	\$ 3,647,110	\$ 3,628,632	\$ 3,610,397	\$ 3,592,410
NET EXPENSES		\$ 16,058,803	\$ 17,724,382	\$ 17,071,763	\$ 17,816,289	\$ 18,130,137	\$ 18,892,932	\$ 17,563,552	\$ 15,643,922	\$ 16,366,393	\$ 17,114,452	\$ 17,889,058	\$ 18,691,210	\$ 19,521,943	\$ 20,382,332	\$ 21,273,493	\$ 22,196,584	\$ 23,152,807	\$ 24,143,412	\$ 25,169,692	\$ 26,232,994
Calculated Tipping Fee		\$ 118.95	\$ 130.06	\$ 124.09	\$ 128.28	\$ 129.31	\$ 133.49	\$ 122.93	\$ 108.46	\$ 112.40	\$ 116.43	\$ 120.56	\$ 124.78	\$ 129.10	\$ 133.52	\$ 138.04	\$ 142.68	\$ 147.42	\$ 152.29	\$ 157.26	\$ 162.37
Closure/Post-Closure Expenses																					
Central Closure																					
Central Post Closure																					
All Other Landfills Post Closure																					
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 5,162,686	\$ 5,217,434	\$ 5,274,372	\$ 1,539,609	\$ 1,601,193	\$ 2,600,039	\$ 2,672,568	\$ 2,779,471	\$ 2,890,650	\$ 3,006,276	\$ 3,126,527	\$ 3,251,588	\$ 3,381,652	\$ 3,516,918	\$ 3,657,594	\$ 3,803,898	\$ 3,956,054	\$ 4,114,296
Calculated Tipping Fee		\$ 128.33	\$ 139.71	\$ 161.61	\$ 165.85	\$ 166.93	\$ 144.36	\$ 134.13	\$ 126.49	\$ 130.76	\$ 135.34	\$ 140.04	\$ 144.85	\$ 149.77	\$ 154.82	\$ 159.99	\$ 165.28	\$ 170.71	\$ 176.28	\$ 181.98	\$ 187.83
Total Expenses Less Revenues w/ Zero Waste		\$ 17,324,249	\$ 19,040,446	\$ 22,234,449	\$ 23,033,723	\$ 23,404,509	\$ 20,432,541	\$ 19,164,745	\$ 18,243,960	\$ 19,038,962	\$ 19,893,923	\$ 20,779,708	\$ 21,697,486	\$ 22,648,470	\$ 23,633,920	\$ 24,655,144	\$ 25,713,501	\$ 26,810,402	\$ 27,947,310	\$ 29,125,746	\$ 30,347,291
Net Present Value (NPV) of Total Expenses Less Revenues																					
Total Expenses Less Revenues w/o Zero Waste		\$ 17,324,249	\$ 19,040,446	\$ 22,234,449	\$ 23,033,723	\$ 23,404,509	\$ 20,432,541	\$ 19,164,745	\$ 18,243,960	\$ 19,038,962	\$ 19,893,923	\$ 20,779,708	\$ 21,697,486	\$ 22,648,470	\$ 23,633,920	\$ 24,655,144	\$ 25,713,501	\$ 26,810,402	\$ 27,947,310	\$ 29,125,746	\$ 30,347,291
Net Present Value (NPV) of Total Expenses Less Revenues																					
Operating Reserves/Fund Balance																					
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563
Operating Reserve Deposit		\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Reserve Interest		\$ 38,755	\$ 51,899	\$ 55,824	\$ 67,860	\$ 82,067	\$ 103,934	\$ 105,285	\$ 106,654	\$ 108,040	\$ 109,445	\$ 110,867	\$ 112,309	\$ 113,769	\$ 115,248	\$ 116,746	\$ 118,264	\$ 119,801	\$ 121,358	\$ 122,936	\$ 124,534
Operating Reserve		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098
Year End - Fund Balance		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098
TONNAGE FLOW																					
Amount of Waste Received at County Facilities		135,000	136,283	137,577	138,884	140,204	141,536	142,880	144,237	145,608	146,991	148,387	149,797	151,220	152,657	154,107	155,571	157,049	158,541	160,047	161,568
Amount to Central		-	-	-																	

Sonoma County
Economic Analysis - 50% System Tonnage
Scenario 4: Close Central Landfill and Outhaul via Rail

	Year Fiscal Year	1 2008-09	2 2009-10	3 2010-11	4 2011-12	5 2012-13	6 2013-14	7 2014-15	8 2015-16	9 2016-17	10 2017-18	11 2018-19	12 2019-20	13 2020-21	14 2021-22	15 2022-23	16 2023-24	17 2024-25	18 2025-26	19 2026-27	20 2027-28	
		2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	
EXPENSES																						
Transfer Stations & Out of County Disposal																						
Operations & Environmental Compliance	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159		
Central Tipping Building	\$ 1,996,280	\$ 2,076,131	\$ 2,159,176	\$ 2,245,544	\$ 2,335,365	\$ 2,428,780	\$ 2,525,931	\$ 2,626,968	\$ 2,732,047	\$ 2,841,329	\$ 2,954,982	\$ 3,073,181	\$ 3,196,109	\$ 3,323,953	\$ 3,456,911	\$ 3,595,188	\$ 3,738,995	\$ 3,888,555	\$ 4,044,097	\$ 4,205,861		
Central Tipping Building - Additional Operations	\$ 219,391	\$ 228,167	\$ 237,294	\$ 246,785	\$ 256,657	\$ 266,923	\$ 277,600	\$ 288,704	\$ 300,252	\$ 312,262	\$ 324,753	\$ 337,743	\$ 351,253	\$ 365,303	\$ 379,915	\$ 395,111	\$ 410,916	\$ 427,353	\$ 444,447	\$ 462,225		
Annapolis	\$ 426,255	\$ 443,305	\$ 461,038	\$ 479,479	\$ 498,658	\$ 518,605	\$ 539,349	\$ 560,923	\$ 583,360	\$ 606,694	\$ 630,962	\$ 656,200	\$ 682,448	\$ 709,746	\$ 738,136	\$ 767,662	\$ 798,368	\$ 830,303	\$ 863,515	\$ 898,055		
Guerneville	\$ 582,152	\$ 605,438	\$ 629,656	\$ 654,842	\$ 681,036	\$ 708,277	\$ 736,608	\$ 766,072	\$ 796,715	\$ 828,584	\$ 861,727	\$ 896,196	\$ 932,044	\$ 969,326	\$ 1,008,099	\$ 1,048,423	\$ 1,090,360	\$ 1,133,974	\$ 1,179,333	\$ 1,226,507		
Healdsburg	\$ 262,224	\$ 272,713	\$ 283,621	\$ 294,966	\$ 306,765	\$ 319,035	\$ 331,797	\$ 345,069	\$ 358,871	\$ 373,226	\$ 388,155	\$ 403,681	\$ 419,829	\$ 436,622	\$ 454,087	\$ 472,250	\$ 491,140	\$ 510,786	\$ 531,217	\$ 552,466		
Out of County Rail Haul and Disposal	\$ 6,065,613	\$ 6,245,701	\$ 6,852,122	\$ 7,055,562	\$ 7,265,041	\$ 7,480,740	\$ 7,702,844	\$ 7,931,541	\$ 8,167,029	\$ 8,409,508	\$ 8,659,186	\$ 8,916,277	\$ 9,181,001	\$ 9,453,585	\$ 9,734,262	\$ 10,023,273	\$ 10,320,863	\$ 10,627,290	\$ 10,942,814	\$ 11,267,706		
Capital Improvements	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556		
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266		
Total Transfer Station & Out of County Disposal Expenses	\$ 11,779,878	\$ 12,188,537	\$ 13,032,671	\$ 13,483,333	\$ 13,949,923	\$ 14,433,017	\$ 14,933,212	\$ 15,451,124	\$ 15,987,395	\$ 16,542,688	\$ 17,117,694	\$ 17,713,125	\$ 18,329,724	\$ 18,968,256	\$ 19,629,520	\$ 20,314,341	\$ 21,023,574	\$ 21,758,109	\$ 22,518,866	\$ 23,306,801		
Disposal																						
Central Landfill																						
Operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Environmental Compliance	\$ 3,152,824	\$ 3,247,409	\$ 2,726,858	\$ 2,245,945	\$ 1,772,246	\$ 1,310,188	\$ 907,571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899		
Containment System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
West Canyon Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Disposal Expenses	\$ 5,678,094	\$ 5,801,702	\$ 5,318,032	\$ 4,870,004	\$ 4,436,424	\$ 4,011,175	\$ 3,647,365	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899		
Other																						
Administration (50% of total)	\$ 1,356,606	\$ 1,410,870	\$ 1,467,305	\$ 1,525,997	\$ 1,587,037	\$ 1,650,519	\$ 1,716,540	\$ 1,785,201	\$ 1,856,609	\$ 1,930,874	\$ 2,008,109	\$ 2,088,433	\$ 2,171,970	\$ 2,258,849	\$ 2,349,203	\$ 2,443,171	\$ 2,540,898	\$ 2,642,534	\$ 2,748,235	\$ 2,858,165		
Litter Control	\$ 290,480	\$ 302,100	\$ 314,184	\$ 326,751	\$ 339,821	\$ 353,414	\$ 367,550	\$ 382,252	\$ 397,542	\$ 413,444	\$ 429,982	\$ 447,181	\$ 465,068	\$ 483,671	\$ 503,018	\$ 523,139	\$ 544,064	\$ 565,827	\$ 588,460	\$ 611,998		
Capital Expenditures at Disposal Sites	\$ 961,538	\$ 1,000,000	\$ 1,040,000	\$ 1,081,600	\$ 1,124,864	\$ 1,169,859																

	Year	1 Fiscal Year 2008-09	2 2009-10	3 2010-11	4 2011-12	5 2012-13	6 2013-14	7 2014-15	8 2015-16	9 2016-17	10 2017-18	11 2018-19	12 2019-20	13 2020-21	14 2021-22	15 2022-23	16 2023-24	17 2024-25	18 2025-26	19 2026-27	20 2027-28	
REVENUES																						
Power Plant Revenues		\$ 3,155,194	\$ 3,085,780	\$ 3,051,073	\$ 3,016,365	\$ 2,981,658	\$ 2,946,951	\$ 2,912,244	\$ 2,877,537	\$ 2,842,830	\$ 2,808,123	\$ 2,773,416	\$ 2,738,708	\$ 2,704,001	\$ 2,669,294	\$ 2,634,587	\$ 2,599,880	\$ 2,565,173	\$ 2,530,466	\$ 2,495,758	\$ 2,461,05	
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,35	
First Year Use of Fund Balance		\$ -	\$ -																			
Direct Haul Revenues																						
West Expansion - Rock Quarry Royalties																						
TOTAL REVENUES		\$ 4,007,794	\$ 3,951,169	\$ 3,929,442	\$ 3,907,911	\$ 3,886,577	\$ 3,865,444	\$ 3,844,514	\$ 3,823,791	\$ 3,803,277	\$ 3,782,977	\$ 3,762,893	\$ 3,743,028	\$ 3,723,385	\$ 3,703,969	\$ 3,684,782	\$ 3,665,828	\$ 3,647,110	\$ 3,628,632	\$ 3,610,397	\$ 3,592,41	
NET EXPENSES		\$ 16,058,803	\$ 17,724,382	\$ 17,492,750	\$ 18,249,774	\$ 18,576,493	\$ 19,352,540	\$ 18,036,805	\$ 16,131,226	\$ 16,868,166	\$ 17,631,122	\$ 18,421,068	\$ 19,239,016	\$ 20,086,013	\$ 20,963,149	\$ 21,871,554	\$ 22,812,402	\$ 23,786,909	\$ 24,796,340	\$ 25,842,006	\$ 26,925,26	
Calculated Tipping Fee		\$ 118.95	\$ 130.06	\$ 127.15	\$ 131.40	\$ 132.50	\$ 136.73	\$ 126.24	\$ 111.84	\$ 115.85	\$ 119.95	\$ 124.14	\$ 128.43	\$ 132.83	\$ 137.32	\$ 141.92	\$ 146.64	\$ 151.46	\$ 156.40	\$ 161.47	\$ 166.6	
Closure/Post-Closure Expenses																						
Central Closure		\$ 3,793,979	\$ 3,793,979	\$ 3,793,979																		
Central Post Closure																						
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,10	
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 5,162,686	\$ 5,217,434	\$ 5,274,372	\$ 1,539,609	\$ 1,601,193	\$ 2,600,039	\$ 2,672,568	\$ 2,779,471	\$ 2,890,650	\$ 3,006,276	\$ 3,126,527	\$ 3,251,588	\$ 3,381,652	\$ 3,516,918	\$ 3,657,594	\$ 3,803,898	\$ 3,956,054	\$ 4,114,29	
Calculated Tipping Fee		\$ 128.33	\$ 139.71	\$ 164.67	\$ 168.97	\$ 170.12	\$ 147.61	\$ 137.44	\$ 129.86	\$ 134.20	\$ 138.86	\$ 143.62	\$ 148.50	\$ 153.50	\$ 158.62	\$ 163.87	\$ 169.24	\$ 174.75	\$ 180.40	\$ 186.18	\$ 192.1	
Total Expenses Less Revenues w/ Zero Waste		\$ 17,324,249	\$ 19,040,446	\$ 22,655,435	\$ 23,467,209	\$ 23,850,865	\$ 20,892,149	\$ 19,637,998	\$ 18,731,265	\$ 19,540,734	\$ 20,410,593	\$ 21,311,718	\$ 22,245,292	\$ 23,212,540	\$ 24,214,737	\$ 25,253,206	\$ 26,329,319	\$ 27,444,503	\$ 28,600,238	\$ 29,798,060	\$ 31,039,56	
Net Present Value (NPV) of Total Expenses Less Revenues																						
Total Expenses Less Revenues w/o Zero Waste		\$ 17,324,249	\$ 19,040,446	\$ 22,655,435	\$ 23,467,209	\$ 23,850,865	\$ 20,892,149	\$ 19,637,998	\$ 18,731,265	\$ 19,540,734	\$ 20,410,593	\$ 21,311,718	\$ 22,245,292	\$ 23,212,540	\$ 24,214,737	\$ 25,253,206	\$ 26,329,319	\$ 27,444,503	\$ 28,600,238	\$ 29,798,060	\$ 31,039,56	
Net Present Value (NPV) of Total Expenses Less Revenues																						
Operating Reserves/Fund Balance																						
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,56	
Operating Reserve Deposit		\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Operating Reserve Interest		\$ 38,755	\$ 51,899	\$ 55,824	\$ 67,860	\$ 82,067	\$ 103,934	\$ 105,285	\$ 106,654	\$ 108,040	\$ 109,445	\$ 110,867	\$ 112,309	\$ 113,769	\$ 115,248	\$ 116,746	\$ 118,264	\$ 119,801	\$ 121,358	\$ 122,936	\$ 124,53	
Operating Reserve		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,09	
Year End - Fund Balance		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,09	
TONNAGE FLOW																						
Amount of Waste Received at County Facilities		135,000	136,283	137,577	138,884	140,204	141,536	142,880	144,237	145,608	146,991	148,387	149,797	151,220	152,657	154,107	155,571	157,049	158,541	160,047	161,568	
Amount to Central		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total System Waste		135,000	136,283	137,577	138,884	140,204	141,536	142,880	144,237	145,608	146,991	148,387	149,797	151,220	152,657	154,107	155,571	157,049	158,541	160,047	161,568	
Amount Hauled Out of County		135,000	136,283	137,577	138,884	140,204	141,536	142,880	144,237	145,608	146,991	148,387	149,797	151,220	152,657	154,107	155,571	157,049	158,541	160,047	161,568	
Amount Direct Haul		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Original tonnage assumptions		440,333	444,516	448,739	453,002	457,305	461,650	466,035	470,463	474,932	479,444	483,999	488,597	493,238	497,924	502,654	507,430	512,250	517,117	522,029	526,98	
Assumptions																						
Annual General Escalation Rate		4.0%																				
Annual Out of County Haul Fee Escalation Rate		2.0%																				
Annual Waste Escalation Rate		0.95%																				
Annual Revenue Increase		1.5%																				
LFG Generation (and Revenue) Decrease Rate		2.6%																				
Net Revenue Increase-Revenue Decrease Rate		-1.1%																				
PCM per ton per year		\$ 9.37	\$ 9.66	\$ 37.53	\$ 37.57	\$ 37.62	\$ 10.88	\$ 11.21	\$ 18.03	\$ 18.35	\$ 18.91	\$ 19.48	\$ 20.07	\$ 20.68	\$ 21.30	\$ 21.94	\$ 22.61	\$ 23.29	\$ 24.72	\$ 25.40		

D. Revisions to the Assessment of Long-Term Solid Waste Management Alternatives Model
50% Tonnage with Central Transfer Station Alone Operating Case - Detailed Analysis Spreadsheets

Sonoma County

Economic Analysis - 50% System Tonnage and Central Transfer Station Alone

Scenario 1: Outhaul for 5 Years then Re-open Central with Normal Containment System

EXPENSES	Year	1 Fiscal Year 2008-09	2 2009-10	3 2010-11	4 2011-12	5 2012-13	6 2013-14	7 2014-15	8 2015-16	9 2016-17	10 2017-18	11 2018-19	12 2019-20	13 2020-21	14 2021-22	15 2022-23	16 2023-24	17 2024-25	18 2025-26	19 2026-27	20 2027-28
Transfer Stations & Out of County Disposal																					
Operations & Environmental Compliance																					
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159	
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Transport to Central																					
Central Tipping Building	\$ -	\$ -	\$ 77,471	\$ 80,570	\$ 83,792	\$ 87,144	\$ 90,630	\$ 94,255	\$ 98,025	\$ 101,946	\$ 106,024	\$ 110,265	\$ 114,676	\$ 119,263	\$ 124,033	\$ 128,995	\$ 134,154	\$ -	\$ -	\$ -	
Out of County Haul and Disposal																					
	\$ 6,065,613	\$ 6,245,701	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Capital Improvements																					
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556	
Administration (20% of total)																					
	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266	
Total Transfer Station & Out of County Disposal Expenses																					
	\$ 10,289,855	\$ 10,638,913	\$ 2,487,235	\$ 2,586,724	\$ 2,690,193	\$ 2,797,801	\$ 2,909,713	\$ 3,026,102	\$ 3,147,146	\$ 3,273,032	\$ 3,403,953	\$ 3,540,111	\$ 3,681,715	\$ 3,828,984	\$ 3,982,143	\$ 4,141,429	\$ 4,307,086	\$ 4,339,849	\$ 4,513,443	\$ 4,693,981	
Disposal																					
Central Landfill																					
Operations	\$ -	\$ -	\$ 7,631,543	\$ 8,012,204	\$ 8,411,853	\$ 8,831,436	\$ 9,271,948	\$ 9,734,433	\$ 10,219,987	\$ 10,729,760	\$ 11,264,960	\$ 11,826,856	\$ 12,416,780	\$ 13,036,129	\$ 13,686,371	\$ 14,369,047	\$ 15,085,775	\$ 15,838,254	\$ 16,628,266	\$ 17,457,684	
Environmental Compliance	\$ 4,272,145	\$ 4,443,031	\$ 4,620,752	\$ 4,805,582	\$ 4,997,806	\$ 5,197,718	\$ 5,405,627	\$ 5,621,852	\$ 5,846,726	\$ 6,080,595	\$ 6,323,819	\$ 6,576,771	\$ 6,839,842	\$ 7,113,436	\$ 7,397,973	\$ 7,693,892	\$ 8,001,648	\$ 8,321,714	\$ 8,654,582	\$ 9,000,766	
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899	
Containment System	\$ -	\$ -	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227	\$ 5,741,227		
West Canyon Development	\$ 520,000	\$ 540,800	\$ 3,346,470																		
Total Disposal Expenses																					
	\$ 7,317,415	\$ 7,538,124	\$ 23,931,166	\$ 21,183,073	\$ 21,815,064	\$ 22,471,368	\$ 23,158,595	\$ 22,168,632	\$ 22,921,905	\$ 23,710,105	\$ 24,534,870	\$ 25,397,914	\$ 26,301,031	\$ 27,246,101	\$ 28,235,093	\$ 29,270,069	\$ 30,353,188	\$ 31,486,714	\$ 32,673,016	\$ 43,774,629	
Other																					
Administration (50% of total)	\$ 1,356,606	\$ 1,410,870	\$ 1,467,305	\$ 1,525,997	\$ 1,587,037	\$ 1,650,519	\$ 1,716,540	\$ 1,785,201	\$ 1,856,609	\$ 1,930,874	\$ 2,008,109	\$ 2,088,433	\$ 2,171,970	\$ 2,258,849	\$ 2,349,203	\$ 2,443,171	\$ 2,540,898	\$ 2,642,534	\$ 2,748,235	\$ 2,858,165	
Litter Control	\$ 290,480	\$ 302,100	\$ 314,184	\$ 326,751	\$ 339,821	\$ 353,414	\$ 367,550	\$ 382,252	\$ 397,542	\$ 413,444	\$ 429,982	\$ 447,181	\$ 465,068	\$ 483,671	\$ 503,018	\$ 523,139	\$ 544,064	\$ 565,827	\$ 588,460	\$ 611,998	
Capital Expenditures at Disposal Sites	\$ 961,538	\$ 1,000,000	\$ 1,040,000	\$ 1,08																	

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-265</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
REVENUES																					
Power Plant Revenues		\$ 3,202,522	\$ 3,250,560	\$ 3,299,318	\$ 3,348,808	\$ 3,399,040	\$ 3,450,026	\$ 3,501,776	\$ 3,554,303	\$ 3,607,617	\$ 3,661,731	\$ 3,716,657	\$ 3,772,407	\$ 3,828,993	\$ 3,886,428	\$ 3,944,725	\$ 4,003,896	\$ 4,063,954	\$ 4,124,913	\$ 4,186,787	\$ 4,249,589
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358
First Year Use of Fund Balance		\$ -	\$ -																		
Direct Haul Revenues		\$ -	\$ -																		
West Expansion - Rock Quarry Royalties				\$ 622,365	\$ 647,259	\$ 673,150	\$ 700,076	\$ 728,079	\$ 757,202	\$ 787,490	\$ 818,990	\$ 851,749	\$ 885,819								
TOTAL REVENUES		\$ 4,055,122	\$ 4,115,949	\$ 4,177,688	\$ 4,862,718	\$ 4,951,218	\$ 5,041,668	\$ 5,134,121	\$ 5,228,635	\$ 5,325,267	\$ 5,424,076	\$ 5,525,124	\$ 5,628,476	\$ 5,734,197	\$ 4,921,103	\$ 4,994,920	\$ 5,069,843	\$ 5,145,891	\$ 5,223,079	\$ 5,301,426	\$ 5,380,947
NET EXPENSES		\$ 16,566,241	\$ 18,168,087	\$ 25,312,202	\$ 22,711,427	\$ 23,630,762	\$ 25,001,293	\$ 24,234,930	\$ 23,398,871	\$ 24,313,867	\$ 25,271,948	\$ 26,275,101	\$ -	\$ 28,425,042	\$ 30,497,534	\$ 31,739,611	\$ 33,039,640	\$ 34,400,289	\$ 35,684,826	\$ 37,169,629	\$ 48,583,642
Calculated Tipping Fee		\$ 122.71	\$ 133.31	\$ 183.99	\$ 163.53	\$ 168.55	\$ 176.64	\$ 169.62	\$ 162.22	\$ 166.98	\$ 171.93	\$ 177.07	\$ 182.42	\$ 187.97	\$ 199.78	\$ 205.96	\$ 212.38	\$ 219.04	\$ 225.08	\$ 232.24	\$ 300.70
Closure/Post-Closure Expenses																					
Central Closure				\$ 2,785,681	\$ 2,897,108	\$ 3,012,992	\$ 3,133,512	\$ 3,258,853	\$ 3,389,207	\$ 3,524,775	\$ 3,665,766	\$ 3,812,397	\$ 3,964,892	\$ 4,123,488	\$ 4,288,428	\$ 4,459,965	\$ 4,638,363	\$ 4,823,898	\$ 5,016,854	\$ 5,217,528	\$ 5,426,229
Central Post Closure				\$ 743,463	\$ 773,202	\$ 804,130	\$ 836,295	\$ 869,747	\$ 904,537	\$ 940,718	\$ 978,347	\$ 27132574081	\$ 1,058,180	\$ 1,100,507	\$ 1,144,527	\$ 1,190,308	\$ 1,237,921	\$ 1,287,438	\$ 1,338,935	\$ 1,392,492	\$ 1,448,192
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 4,897,850	\$ 5,093,765	\$ 5,297,515	\$ 5,509,416	\$ 5,729,792	\$ 5,958,984	\$ 6,197,343	\$ 6,445,237	\$ 6,703,047	\$ 6,971,168	\$ 7,250,015	\$ 7,540,016	\$ 7,841,616	\$ 8,155,281	\$ 8,481,492	\$ 8,820,752	\$ 9,173,582	\$ 9,540,525
Calculated Tipping Fee		\$ 132.09	\$ 142.97	\$ 219.59	\$ 200.20	\$ 206.33	\$ 215.57	\$ 209.72	\$ 203.54	\$ 209.54	\$ 215.78	\$ 222.24	\$ 228.95	\$ 235.91	\$ 249.17	\$ 256.84	\$ 264.80	\$ 273.05	\$ 280.72	\$ 289.56	\$ 359.75
Total Expenses Less Revenues w/ Zero Waste		\$ 17,831,688	\$ 19,484,151	\$ 30,210,053	\$ 27,805,192	\$ 28,928,277	\$ 30,510,708	\$ 29,964,722	\$ 29,357,855	\$ 30,511,210	\$ 31,717,185	\$ 32,978,148	\$ -	\$ 35,675,057	\$ 38,037,550	\$ 39,581,227	\$ 41,194,922	\$ 42,881,782	\$ 44,505,578	\$ 46,343,211	\$ 58,124,167
Net Present Value (NPV) of Total Expenses Less Revenues																					
Total Expenses Less Revenues w/o Zero Waste		\$ 17,831,688	\$ 19,484,151	\$ 30,210,053	\$ 27,805,192	\$ 28,928,277	\$ 30,510,708	\$ 29,964,722	\$ 29,357,855	\$ 30,511,210	\$ 31,717,185	\$ 32,978,148	\$ -	\$ 35,675,057	\$ 38,037,550	\$ 39,581,227	\$ 41,194,922	\$ 42,881,782	\$ 44,505,578	\$ 46,343,211	\$ 58,124,167
Net Present Value (NPV) of Total Expenses Less Revenues																					
Operating Reserves/Fund Balance																					
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543
Operating Reserve Deposit		\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ 34,296,576	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Reserve Interest		\$ 74,529	\$ 100,701	\$ 109,468	\$ 133,955	\$ 162,929	\$ 207,002	\$ 212,177	\$ 217,482	\$ 222,919	\$ 228,492	\$ 234,204	\$ 240,059	\$ 246,060	\$ 252,212	\$ 258,517	\$ 264,980	\$ 271,605	\$ 278,395	\$ 285,355	\$ 292,489
Operating Reserve		\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543	\$ 11,992,032
Year End - Fund Balance		\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543	\$ 11,992,032
TONNAGE FLOW																					
Amount of Waste Received at County Facilities		135,000	136,283	137,577	138,884	140,204	141,536	142,880	144,237	145,608	146,991	148,387	149,797	151,220	152,657	154,107	155,571	157,049	158,541	160,047	161,568
Amount to Central		-	-	137,577	138,884	140,204	141,536	142,880	144,237	145,608	146,991	148,387	149,797	151,220	152,657	154,107	155,571	157,049	158,541	160,047	161,568
Total System Waste		135,000</td																			

Sonoma County

Economic Analysis - 50% System Tonnage and Central Transfer Station Alone

Scenario 2: Outhaul for 5 Years then Re-open Central with Robust Containment System

	Year Fiscal Year	1 2008-09	2 2009-10	3 2010-11	4 2011-12	5 2012-13	6 2013-14	7 2014-15	8 2015-16	9 2016-17	10 2017-18	11 2018-19	12 2019-20	13 2020-21	14 2021-22	15 2022-23	16 2023-24	17 2024-25	18 2025-26	19 2026-27	20 2027-28
EXPENSES																					
Transfer Stations & Out of County Disposal																					
Operations & Environmental Compliance																					
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159	
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transport to Central																					
Central Tipping Building	\$ -	\$ -	\$ 77,471	\$ 80,570	\$ 83,792	\$ 87,144	\$ 90,630	\$ 94,255	\$ 98,025	\$ 101,946	\$ 106,024	\$ 110,265	\$ 114,676	\$ 119,263	\$ 124,033	\$ 128,995	\$ 134,154	\$ 139,521	\$ 145,101	\$ 150,905	
Out of County Haul and Disposal	\$ 6,065,613	\$ 6,245,701	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Improvements																					
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556	
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266	
Total Transfer Station & Out of County Disposal Expenses	\$ 10,289,855	\$ 10,638,913	\$ 2,487,235	\$ 2,586,724	\$ 2,690,193	\$ 2,797,801	\$ 2,909,713	\$ 3,026,102	\$ 3,147,146	\$ 3,273,032	\$ 3,403,953	\$ 3,540,111	\$ 3,681,715	\$ 3,828,984	\$ 3,982,143	\$ 4,141,429	\$ 4,307,086	\$ 4,479,370	\$ 4,658,545	\$ 4,844,886	
Disposal																					
Central Landfill																					
Operations	\$ -	\$ 7,631,543	\$ 8,012,204	\$ 8,411,853	\$ 8,831,436	\$ 9,271,948	\$ 9,734,433	\$ 10,219,987	\$ 10,729,760	\$ 11,264,960	\$ 11,826,856	\$ 12,416,780	\$ 13,036,129	\$ 13,686,371	\$ 14,369,047	\$ 15,085,775	\$ 15,838,254	\$ 16,628,266	\$ 17,457,684		
Environmental Compliance	\$ 4,272,145	\$ 4,443,031	\$ 4,620,752	\$ 4,805,582	\$ 4,997,806	\$ 5,197,718	\$ 5,405,627	\$ 5,621,852	\$ 5,846,726	\$ 6,080,595	\$ 6,323,819	\$ 6,576,771	\$ 6,839,842	\$ 7,113,436	\$ 7,397,973	\$ 7,693,892	\$ 8,001,648	\$ 8,321,714	\$ 8,654,582	\$ 9,000,766	
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899	
Containment System	\$ -	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351	\$ 7,823,351		
West Canyon Development	\$ 520,000	\$ 540,800	\$ 3,346,470																		
Total Disposal Expenses	\$ 7,317,415	\$ 7,538,124	\$ 26,013,291	\$ 23,265,197	\$ 23,897,188	\$ 24,553,492	\$ 25,240,720	\$ 24,250,756	\$ 25,004,029	\$ 25,792,229	\$ 26,616,995	\$ 27,480,038	\$ 28,383,155	\$ 29,328,225	\$ 30,317,217	\$ 31,352,193	\$ 32,435,313	\$ 33,568,839	\$ 34,755,140	\$ 45,856,753	
Other																					
Administration (50% of total)	\$ 1,356,606	\$ 1,410,870	\$ 1,467,305	\$ 1,525,997	\$ 1,587,037	\$ 1,650,519	\$ 1,716,540	\$ 1,785,201	\$ 1,856,609	\$ 1,930,874	\$ 2,008,109	\$ 2,088,433	\$ 2,171,970	\$ 2,258,849	\$ 2,349,203	\$ 2,443,171	\$ 2,540,898	\$ 2,642,534	\$ 2,748,235	\$ 2,858,165	
Litter Control	\$ 290,480	\$ 302,100	\$ 314,184	\$ 326,751	\$ 339,821	\$ 353,414	\$ 367,550	\$ 382,252	\$ 397,542	\$ 413,444	\$ 429,982	\$ 447,181	\$ 465,068	\$ 483,671	\$ 503,018	\$ 523,139	\$ 544,064	\$ 565,827	\$ 588,460	\$ 611,998	
Capital Expenditures at Disposal Sites	\$ 961,538	\$ 1,000,000	\$ 1,040,000	\$ 1,081,600	\$ 1,124,864	\$ 1,169,859	\$ 1,216,653	\$ 1,265,319	\$ 1,315,932	\$ 1,368,569	\$ 1,423,312	\$ 1,480,244	\$ 1,539,454	\$ 1,601,032	\$ 1,665,074	\$ 1,731,676	\$ 1,800,944	\$ 1,872,981	\$ 1,947,900	\$ 2,025,817	
Deposit to Operating Reserve	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000																
Engineering for Other Capital Projects	\$ 405,468	\$ 421,687	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Other Expenses	\$ 3,014,093	\$ 4,106,999	\$ 3,071,489	\$ 3,804,348	\$ 4,076,722	\$ 4,7															

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>		
REVENUES																							
Power Plant Revenues		\$ 3,202,522	\$ 3,250,560	\$ 3,299,318	\$ 3,348,808	\$ 3,399,040	\$ 3,450,026	\$ 3,501,776	\$ 3,554,303	\$ 3,607,617	\$ 3,661,731	\$ 3,716,657	\$ 3,772,407	\$ 3,828,993	\$ 3,886,428	\$ 3,944,725	\$ 4,003,896	\$ 4,063,954	\$ 4,124,913	\$ 4,186,787	\$ 4,249,589		
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358		
First Year Use of Fund Balance																							
Direct Haul Revenues		\$ -	\$ -																				
West Expansion - Rock Quarry Royalties				\$ 622,365	\$ 647,259	\$ 673,150	\$ 700,076	\$ 728,079	\$ 757,202	\$ 787,490	\$ 818,990	\$ 851,749	\$ 885,819										
TOTAL REVENUES		\$ 4,055,122	\$ 4,115,949	\$ 4,177,688	\$ 4,862,718	\$ 4,951,218	\$ 5,041,668	\$ 5,134,121	\$ 5,228,635	\$ 5,325,267	\$ 5,424,076	\$ 5,525,124	\$ 5,628,476	\$ 5,734,197	\$ 4,921,103	\$ 4,994,920	\$ 5,069,843	\$ 5,145,891	\$ 5,223,079	\$ 5,301,426	\$ 5,380,947		
NET EXPENSES		\$ 16,566,241	\$ 18,168,087	\$ 27,394,326	\$ 24,793,552	\$ 25,712,886	\$ 27,083,417	\$ 26,317,054	\$ 25,480,995	\$ 26,395,991	\$ 27,354,072	\$ 28,357,226	\$ 29,407,532	\$ 30,507,166	\$ 32,579,658	\$ 33,821,735	\$ 35,121,765	\$ 36,482,413	\$ 37,906,471	\$ 39,396,854	\$ 50,816,672		
Calculated Tipping Fee		\$ 122.71	\$ 133.31	\$ 199.12	\$ 178.52	\$ 183.40	\$ 191.35	\$ 184.19	\$ 176.66	\$ 181.28	\$ 186.09	\$ 191.10	\$ 196.32	\$ 201.74	\$ 213.42	\$ 219.47	\$ 225.76	\$ 232.30	\$ 239.10	\$ 246.16	\$ 314.52		
Closure/Post-Closure Expenses																							
Central Closure				\$ 2,785,681	\$ 2,897,108	\$ 3,012,992	\$ 3,133,512	\$ 3,258,853	\$ 3,389,207	\$ 3,524,775	\$ 3,665,766	\$ 3,812,397	\$ 3,964,892	\$ 4,123,488	\$ 4,288,428	\$ 4,459,965	\$ 4,638,363	\$ 4,823,898	\$ 5,016,854	\$ 5,217,528	\$ 5,426,229		
Central Post Closure				\$ 743,463	\$ 773,202	\$ 804,130	\$ 836,295	\$ 869,747	\$ 904,537	\$ 940,718	\$ 978,347	\$ 1,017,481	\$ 1,058,180	\$ 1,100,507	\$ 1,144,527	\$ 1,190,308	\$ 1,237,921	\$ 1,287,438	\$ 1,338,935	\$ 1,392,492	\$ 1,448,192		
All Other Landfills Post Closure				\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 4,897,850	\$ 5,093,765	\$ 5,297,515	\$ 5,509,416	\$ 5,729,792	\$ 5,958,984	\$ 6,197,343	\$ 6,445,237	\$ 6,703,047	\$ 6,971,168	\$ 7,250,015	\$ 7,540,016	\$ 7,841,616	\$ 8,155,281	\$ 8,481,492	\$ 8,820,752	\$ 9,173,582	\$ 9,540,525		
Calculated Tipping Fee		\$ 132.09	\$ 142.97	\$ 234.72	\$ 215.20	\$ 221.18	\$ 230.28	\$ 224.29	\$ 217.97	\$ 223.84	\$ 229.94	\$ 236.28	\$ 242.85	\$ 249.68	\$ 262.81	\$ 270.35	\$ 278.18	\$ 286.31	\$ 294.73	\$ 303.48	\$ 373.57		
Total Expenses Less Revenues w/ Zero Waste		\$ 17,831,688	\$ 19,484,151	\$ 32,292,177	\$ 29,887,316	\$ 31,010,401	\$ 32,592,833	\$ 32,046,846	\$ 31,439,979	\$ 32,593,335	\$ 33,799,309	\$ 35,060,272	\$ 36,378,700	\$ 37,757,182	\$ 40,119,674	\$ 41,663,351	\$ 43,277,046	\$ 44,963,906	\$ 46,727,223	\$ 48,570,437	\$ 60,357,197		
Net Present Value (NPV) of Total Expenses Less Revenues																							
Total Expenses Less Revenues w/o Zero Waste		\$ 17,831,688	\$ 19,484,151	\$ 32,292,177	\$ 29,887,316	\$ 31,010,401	\$ 32,592,833	\$ 32,046,846	\$ 31,439,979	\$ 32,593,335	\$ 33,799,309	\$ 35,060,272	\$ 36,378,700	\$ 37,757,182	\$ 40,119,674	\$ 41,663,351	\$ 43,277,046	\$ 44,963,906	\$ 46,727,223	\$ 48,570,437	\$ 60,357,197		
Net Present Value (NPV) of Total Expenses Less Revenues																							
Operating Reserves/Fund Balance																							
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,189	\$ 11,135,794	\$ 11,414,189	\$ 11,699,543		
Operating Reserve Deposit		\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Operating Reserve Interest			\$ 74,529	\$ 100,701	\$ 109,468	\$ 133,955	\$ 162,929	\$ 207,002	\$ 212,177	\$ 217,482	\$ 222,919	\$ 228,492	\$ 234,204	\$ 240,059	\$ 246,060	\$ 252,212	\$ 258,517	\$ 264,980	\$ 271,605	\$ 278,395	\$ 285,355	\$ 292,489	
Operating Reserve				\$ 3,055,690	\$ 4,128,733	\$ 4,488,201	\$ 5,492,156	\$ 6,680,085	\$ 8,487,087	\$ 8,699,264	\$ 8,916,746	\$ 9,139,665	\$ 9,368,156	\$ 9,602,360	\$ 9,842,419	\$ 10,088,480	\$ 10,340,692	\$ 10,599,209	\$ 10,864,				

Sonoma County
Economic Analysis - 50% System Tonnage and Central Transfer Station Alone
Scenario 3: Close Central Landfill and Outhaul

Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
EXPENSES																				
Transfer Stations & Out of County Disposal																				
Operations & Environmental Compliance	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159
Central Tipping Building	\$ 1,996,280	\$ 2,076,131	\$ 2,159,176	\$ 2,245,544	\$ 2,335,365	\$ 2,428,780	\$ 2,525,931	\$ 2,626,968	\$ 2,732,047	\$ 2,841,329	\$ 2,954,982	\$ 3,073,181	\$ 3,196,109	\$ 3,323,953	\$ 3,456,911	\$ 3,595,188	\$ 3,738,995	\$ 3,888,555	\$ 4,044,097	\$ 4,205,861
Central Tipping Building - Additional Operations																				
Out of County Haul and Disposal	\$ 6,065,613	\$ 6,245,701	\$ 6,431,136	\$ 6,622,076	\$ 6,818,686	\$ 7,021,133	\$ 7,229,590	\$ 7,444,237	\$ 7,665,256	\$ 7,892,837	\$ 8,127,176	\$ 8,368,472	\$ 8,616,931	\$ 8,872,768	\$ 9,136,201	\$ 9,407,454	\$ 9,686,762	\$ 9,974,362	\$ 10,270,501	\$ 10,575,432
Capital Improvements																				
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266
Total Transfer Station & Out of County Disposal Expenses	\$ 10,289,855	\$ 10,638,913	\$ 11,000,077	\$ 11,373,775	\$ 11,760,452	\$ 12,160,569	\$ 12,574,604	\$ 13,003,051	\$ 13,446,423	\$ 13,905,252	\$ 14,380,086	\$ 14,871,499	\$ 15,380,080	\$ 15,906,442	\$ 16,451,222	\$ 17,015,077	\$ 17,598,689	\$ 18,202,766	\$ 18,828,041	\$ 19,475,273
Disposal																				
Central Landfill																				
Operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Compliance	\$ 3,152,824	\$ 3,247,409	\$ 2,726,858	\$ 2,245,945	\$ 1,772,246	\$ 1,310,188	\$ 907,571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899
Containment System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Canyon Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Disposal Expenses	\$ 5,678,094	\$ 5,801,702	\$ 5,318,032	\$ 4,870,004	\$ 4,436,424	\$ 4,011,175	\$ 3,647,365	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899
Other																				
Administration (50% of total)	\$ 1,356,606	\$ 1,410,870	\$ 1,467,305	\$ 1,525,997	\$ 1,587,037	\$ 1,650,519	\$ 1,716,540	\$ 1,785,201	\$ 1,856,609	\$ 1,930,874	\$ 2,008,109	\$ 2,088,433	\$ 2,171,970	\$ 2,258,849	\$ 2,349,203	\$ 2,443,171	\$ 2,540,898	\$ 2,642,534	\$ 2,748,235	\$ 2,858,165
Litter Control	\$ 290,480	\$ 302,100	\$ 314,184	\$ 326,751	\$ 339,821	\$ 353,414	\$ 367,550	\$ 382,252	\$ 397,542	\$ 413,444	\$ 429,982	\$ 447,181	\$ 465,068	\$ 483,671	\$ 503,018	\$ 523,139	\$ 544,064	\$ 565,827	\$ 588,460	\$ 611,998
Capital Expenditures at Disposal Sites	\$ 961,538	\$ 1,000,000	\$ 1,040,000	\$ 1,081,600	\$ 1,124,864	\$ 1,169,859	\$ 1,216,653	\$ 1,265,319	\$ 1,315,932	\$ 1,368,569	\$ 1,423,312	\$ 1,480,244	\$ 1,539,454	\$ 1,601,032	\$ 1,665,074	\$ 1,731,676	\$ 1,800,944	\$ 1,872,981	\$ 1,947,900	\$ 2,025,817
Deposit to Operating Reserve	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000															
Engineering for Other Capital Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Other Expenses	\$ 2,608,625	\$ 3,685,312	\$ 3,071,489	\$ 3,804,348	\$ 4,076,722	\$ 4,773,791	\$ 3,300,743	\$ 3,432,772	\$ 3,570,083	\$ 3,712,887	\$ 3,861,402	\$ 4,015,858	\$ 4,176,493	\$ 4,343,552	\$ 4,517,294	\$ 4,697,986	\$ 4,885,906	\$ 5,081,342	\$ 5,284,595	\$ 5,495,979
TOTAL EXPENSES	\$ 18,576,574	\$ 20,125,927	\$ 19,389,597	\$ 20,048,127	\$ 20,273,599	\$ 20,945,536	\$ 19,522,712	\$ 17,506,945	\$ 18,130,472	\$ 18,7										

	Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Fiscal Year	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
REVENUES																					
Power Plant Revenues		\$ 3,155,194	\$ 3,085,780	\$ 3,051,073	\$ 3,016,365	\$ 2,981,658	\$ 2,946,951	\$ 2,912,244	\$ 2,877,537	\$ 2,842,830	\$ 2,808,123	\$ 2,773,416	\$ 2,738,708	\$ 2,704,001	\$ 2,669,294	\$ 2,634,587	\$ 2,599,880	\$ 2,565,173	\$ 2,530,466	\$ 2,495,758	\$ 2,461,051
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358
First Year Use of Fund Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Direct Haul Revenues		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Expansion - Rock Quarry Royalties		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL REVENUES		\$ 4,007,794	\$ 3,951,169	\$ 3,929,442	\$ 3,907,911	\$ 3,886,577	\$ 3,865,444	\$ 3,844,514	\$ 3,823,791	\$ 3,803,277	\$ 3,782,977	\$ 3,762,893	\$ 3,743,028	\$ 3,723,385	\$ 3,703,969	\$ 3,684,782	\$ 3,665,828	\$ 3,647,110	\$ 3,628,632	\$ 3,610,397	\$ 3,592,410
NET EXPENSES																					
		\$ 14,568,780	\$ 16,174,759	\$ 15,460,155	\$ 16,140,217	\$ 16,387,022	\$ 17,080,092	\$ 15,678,198	\$ 13,683,154	\$ 14,327,195	\$ 14,993,685	\$ 15,683,461	\$ 16,397,389	\$ 17,136,369	\$ 17,901,335	\$ 18,693,256	\$ 19,513,138	\$ 20,362,023	\$ 21,240,996	\$ 22,151,180	\$ 23,093,742
Calculated Tipping Fee		\$ 107.92	\$ 118.69	\$ 112.37	\$ 116.21	\$ 116.88	\$ 120.68	\$ 109.73	\$ 94.87	\$ 98.40	\$ 102.00	\$ 105.69	\$ 109.46	\$ 113.32	\$ 117.27	\$ 121.30	\$ 125.43	\$ 129.65	\$ 133.98	\$ 138.40	\$ 142.94
Closure/Post-Closure Expenses																					
Central Closure		\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979	\$ 3,793,979
Central Post Closure		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 1,362,686	\$ 1,521,743	\$ 1,527,437	\$ 1,539,609	\$ 1,601,193	\$ 2,600,039	\$ 2,672,568	\$ 2,779,471	\$ 2,890,650	\$ 3,006,276	\$ 3,126,527	\$ 3,251,588	\$ 3,381,652	\$ 3,516,918	\$ 3,657,594	\$ 3,803,898	\$ 3,956,054	\$ 4,114,296
Calculated Tipping Fee		\$ 117.29	\$ 128.34	\$ 149.90	\$ 153.78	\$ 154.50	\$ 131.55	\$ 120.94	\$ 112.89	\$ 116.75	\$ 120.91	\$ 125.17	\$ 129.53	\$ 134.00	\$ 138.57	\$ 143.24	\$ 148.04	\$ 152.94	\$ 157.97	\$ 163.12	\$ 168.40
Total Expenses Less Revenues w/ Zero Waste		\$ 15,834,226	\$ 17,490,823	\$ 20,622,841	\$ 21,357,651	\$ 21,661,394	\$ 18,619,701	\$ 17,279,391	\$ 16,283,193	\$ 16,999,763	\$ 17,773,157	\$ 18,574,111	\$ 19,403,665	\$ 20,262,896	\$ 21,152,923	\$ 22,074,908	\$ 23,030,055	\$ 24,019,618	\$ 25,044,894	\$ 26,107,234	\$ 27,208,038
Net Present Value (NPV) of Total Expenses Less Revenues																					
Total Expenses Less Revenues w/o Zero Waste		\$ 15,834,226	\$ 17,490,823	\$ 20,622,841	\$ 21,357,651	\$ 21,661,394	\$ 18,619,701	\$ 17,279,391	\$ 16,283,193	\$ 16,999,763	\$ 17,773,157	\$ 18,574,111	\$ 19,403,665	\$ 20,262,896	\$ 21,152,923	\$ 22,074,908	\$ 23,030,055	\$ 24,019,618	\$ 25,044,894	\$ 26,107,234	\$ 27,208,038
Net Present Value (NPV) of Total Expenses Less Revenues																					
Operating Reserves/Fund Balance																					
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563
Operating Reserve Deposit		\$ -	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Reserve Interest		\$ 38,755	\$ 51,899	\$ 55,824	\$ 67,860	\$ 82,067	\$ 103,934	\$ 105,285	\$ 106,654	\$ 108,040	\$ 109,445	\$ 110,867	\$ 112,309	\$ 113,769	\$ 115,248	\$ 116,746	\$ 118,264	\$ 119,801	\$ 121,358	\$ 122,936	\$ 124,534
Operating Reserve		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098
Year End - Fund Balance		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098
TONNAGE FLOW																					

Sonoma County

Economic Analysis - 50% System Tonnage and Central Transfer Station Alone

Scenario 4: Close Central Landfill and Outhaul via Rail

	Year Fiscal Year	1 2008-09	2 2009-10	3 2010-11	4 2011-12	5 2012-13	6 2013-14	7 2014-15	8 2015-16	9 2016-17	10 2017-18	11 2018-19	12 2019-20	13 2020-21	14 2021-22	15 2022-23	16 2023-24	17 2024-25	18 2025-26	19 2026-27	20 2027-28
EXPENSES																					
Transfer Stations & Out of County Disposal																					
Operations & Environmental Compliance																					
Central Tipping Building	\$ 1,633,320	\$ 1,698,653	\$ 1,766,599	\$ 1,837,263	\$ 1,910,753	\$ 1,987,184	\$ 2,066,671	\$ 2,149,338	\$ 2,235,311	\$ 2,324,724	\$ 2,417,713	\$ 2,514,421	\$ 2,614,998	\$ 2,719,598	\$ 2,828,382	\$ 2,941,517	\$ 3,059,178	\$ 3,181,545	\$ 3,308,807	\$ 3,441,159	
Central Tipping Building - Additional Operations	\$ 1,996,280	\$ 2,076,131	\$ 2,159,176	\$ 2,245,544	\$ 2,335,365	\$ 2,428,780	\$ 2,525,931	\$ 2,626,968	\$ 2,732,047	\$ 2,841,329	\$ 2,954,982	\$ 3,073,181	\$ 3,196,109	\$ 3,323,953	\$ 3,456,911	\$ 3,595,188	\$ 3,738,995	\$ 3,888,555	\$ 4,044,097	\$ 4,205,861	
Out of County Rail Haul and Disposal	\$ 6,065,613	\$ 6,245,701	\$ 6,852,122	\$ 7,055,562	\$ 7,265,041	\$ 7,480,740	\$ 7,702,844	\$ 7,931,541	\$ 8,167,029	\$ 8,409,508	\$ 8,659,186	\$ 8,916,277	\$ 9,181,001	\$ 9,453,585	\$ 9,734,262	\$ 10,023,273	\$ 10,320,863	\$ 10,627,290	\$ 10,942,814	\$ 11,267,706	
Capital Improvements																					
Capital Repairs	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 74,012	\$ 76,973	\$ 80,052	\$ 83,254	\$ 86,584	\$ 90,047	\$ 93,649	\$ 97,395	\$ 101,291	\$ 105,342	\$ 109,556	
Administration (20% of total)	\$ 542,642	\$ 564,348	\$ 586,922	\$ 610,399	\$ 634,815	\$ 660,208	\$ 686,616	\$ 714,080	\$ 742,644	\$ 772,349	\$ 803,243	\$ 835,373	\$ 868,788	\$ 903,540	\$ 939,681	\$ 977,268	\$ 1,016,359	\$ 1,057,014	\$ 1,099,294	\$ 1,143,266	
Total Transfer Station & Out of County Disposal Expenses	\$ 10,289,855	\$ 10,638,913	\$ 11,421,063	\$ 11,807,260	\$ 12,206,808	\$ 12,620,177	\$ 13,047,858	\$ 13,490,356	\$ 13,948,196	\$ 14,421,922	\$ 14,912,097	\$ 15,419,304	\$ 15,944,150	\$ 16,487,260	\$ 17,049,283	\$ 17,630,895	\$ 18,232,790	\$ 18,855,694	\$ 19,500,354	\$ 20,167,548	
Disposal																					
Central Landfill																					
Operations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Environmental Compliance	\$ 3,152,824	\$ 3,247,409	\$ 2,726,858	\$ 2,245,945	\$ 1,772,246	\$ 1,310,188	\$ 907,571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service	\$ 1,711,306	\$ 1,707,771	\$ 1,710,791	\$ 1,708,461	\$ 1,711,956	\$ 1,710,676	\$ 1,709,870	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Administration & Engineering (30% of total)	\$ 813,964	\$ 846,522	\$ 880,383	\$ 915,598	\$ 952,222	\$ 990,311	\$ 1,029,924	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899	
Containment System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Canyon Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Disposal Expenses	\$ 5,678,094	\$ 5,801,702	\$ 5,318,032	\$ 4,870,004	\$ 4,436,424	\$ 4,011,175	\$ 3,647,365	\$ 1,071,121	\$ 1,113,966	\$ 1,158,524	\$ 1,204,865	\$ 1,253,060	\$ 1,303,182	\$ 1,355,309	\$ 1,409,522	\$ 1,465,903	\$ 1,524,539	\$ 1,585,520	\$ 1,648,941	\$ 1,714,899	
Other																					
Administration (50% of total)	\$ 1,356,606	\$ 1,410,870	\$ 1,467,305	\$ 1,525,997	\$ 1,587,037	\$ 1,650,519	\$ 1,716,540	\$ 1,785,201	\$ 1,856,609	\$ 1,930,874	\$ 2,008,109	\$ 2,088,433	\$ 2,171,970	\$ 2,258,849	\$ 2,349,203	\$ 2,443,171	\$ 2,540,898	\$ 2,642,534	\$ 2,748,235	\$ 2,858,165	
Litter Control	\$ 290,480	\$ 302,100	\$ 314,184	\$ 326,751	\$ 339,821	\$ 353,414	\$ 367,550	\$ 382,252	\$ 397,542	\$ 413,444	\$ 429,982	\$ 447,181	\$ 465,068	\$ 483,671	\$ 503,018	\$ 523,139	\$ 544,064	\$ 565,827	\$ 588,460	\$ 611,998	
Capital Expenditures at Disposal Sites	\$ 961,538	\$ 1,000,000	\$ 1,040,000	\$ 1,081,600	\$ 1,124,864	\$ 1,169,859	\$ 1,216,653	\$ 1,265,319	\$ 1,315,932	\$ 1,368,569	\$ 1,423,312	\$ 1,480,244	\$ 1,539,454	\$ 1,601,032	\$ 1,665,074	\$ 1,731,676	\$ 1,800,944	\$ 1,872,981	\$ 1,947,900	\$ 2,025,817	
Deposit to Operating Reserve	\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000																
Engineering for Other Capital Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Other Expenses	\$ 2,608,625	\$ 3,685,312	\$ 3,071,489	\$ 3,804,348	\$ 4,076,722	\$ 4,773,791	\$ 3,300,743	\$ 3,432,772	\$ 3,570,083	\$ 3,712,887	\$ 3,861,402	\$ 4,015,858	\$ 4,176,493	\$ 4,343,552	\$ 4,517,294	\$ 4,697,986	\$ 4,885,906	\$ 5,081,342	\$ 5,284,595	\$ 5,495,979	
TOTAL EXPENSES	\$ 18,576,574	\$ 20,125,927	\$ 19,810,584	\$ 20,481,																	

	Year Fiscal Year	1 <u>2008-09</u>	2 <u>2009-10</u>	3 <u>2010-11</u>	4 <u>2011-12</u>	5 <u>2012-13</u>	6 <u>2013-14</u>	7 <u>2014-15</u>	8 <u>2015-16</u>	9 <u>2016-17</u>	10 <u>2017-18</u>	11 <u>2018-19</u>	12 <u>2019-20</u>	13 <u>2020-21</u>	14 <u>2021-22</u>	15 <u>2022-23</u>	16 <u>2023-24</u>	17 <u>2024-25</u>	18 <u>2025-26</u>	19 <u>2026-27</u>	20 <u>2027-28</u>	
REVENUES																						
Power Plant Revenues		\$ 3,155,194	\$ 3,085,780	\$ 3,051,073	\$ 3,016,365	\$ 2,981,658	\$ 2,946,951	\$ 2,912,244	\$ 2,877,537	\$ 2,842,830	\$ 2,808,123	\$ 2,773,416	\$ 2,738,708	\$ 2,704,001	\$ 2,669,294	\$ 2,634,587	\$ 2,599,880	\$ 2,565,173	\$ 2,530,466	\$ 2,495,758	\$ 2,461,051	
Other Misc Revenues		\$ 852,600	\$ 865,389	\$ 878,370	\$ 891,545	\$ 904,919	\$ 918,492	\$ 932,270	\$ 946,254	\$ 960,448	\$ 974,854	\$ 989,477	\$ 1,004,319	\$ 1,019,384	\$ 1,034,675	\$ 1,050,195	\$ 1,065,948	\$ 1,081,937	\$ 1,098,166	\$ 1,114,639	\$ 1,131,358	
First Year Use of Fund Balance		\$ -	\$ -																			
Direct Haul Revenues		\$ -	\$ -																			
West Expansion - Rock Quarry Royalties		\$ -	\$ -																			
TOTAL REVENUES		\$ 4,007,794	\$ 3,951,169	\$ 3,929,442	\$ 3,907,911	\$ 3,886,577	\$ 3,865,444	\$ 3,844,514	\$ 3,823,791	\$ 3,803,277	\$ 3,782,977	\$ 3,762,893	\$ 3,743,028	\$ 3,723,385	\$ 3,703,969	\$ 3,684,782	\$ 3,665,828	\$ 3,647,110	\$ 3,628,632	\$ 3,610,397	\$ 3,592,410	
NET EXPENSES		\$ 14,568,780	\$ 16,174,759	\$ 15,881,141	\$ 16,573,702	\$ 16,833,377	\$ 17,539,700	\$ 16,151,452	\$ 14,170,458	\$ 14,828,968	\$ 15,510,356	\$ 16,215,471	\$ 16,945,195	\$ 17,700,439	\$ 18,482,152	\$ 19,291,318	\$ 20,128,956	\$ 20,996,125	\$ 21,893,924	\$ 22,823,494	\$ 23,786,017	
Calculated Tipping Fee		\$ 107.92	\$ 118.69	\$ 115.43	\$ 119.33	\$ 120.06	\$ 123.92	\$ 113.04	\$ 98.24	\$ 101.84	\$ 105.52	\$ 109.28	\$ 113.12	\$ 117.05	\$ 121.07	\$ 125.18	\$ 129.39	\$ 133.69	\$ 138.10	\$ 142.60	\$ 147.22	
Closure/Post-Closure Expenses																						
Central Closure		\$ 3,793,979	\$ 3,793,979	\$ 3,793,979																		
Central Post Closure		\$ 934,798	\$ 940,718	\$ 978,347	\$ 1,017,481	\$ 1,058,180	\$ 1,100,507	\$ 1,144,527	\$ 1,190,308	\$ 1,237,921	\$ 1,287,438	\$ 1,338,935	\$ 1,392,492	\$ 1,448,192								
All Other Landfills Post Closure		\$ 1,265,446	\$ 1,316,064	\$ 1,368,707	\$ 1,423,455	\$ 1,480,393	\$ 1,539,609	\$ 1,601,193	\$ 1,665,241	\$ 1,731,850	\$ 1,801,124	\$ 1,873,169	\$ 1,948,096	\$ 2,026,020	\$ 2,107,061	\$ 2,191,343	\$ 2,278,997	\$ 2,370,157	\$ 2,464,963	\$ 2,563,562	\$ 2,666,104	
Subtotal Closure/Post-Closure Expenses		\$ 1,265,446	\$ 1,316,064	\$ 1,512,686	\$ 2,174,434	\$ 2,724,372	\$ 1,539,609	\$ 1,601,193	\$ 2,600,039	\$ 2,672,568	\$ 2,779,471	\$ 2,890,650	\$ 3,006,276	\$ 3,126,527	\$ 3,251,588	\$ 3,381,652	\$ 3,516,918	\$ 3,657,594	\$ 3,803,898	\$ 3,956,054	\$ 4,114,296	
Calculated Tipping Fee		\$ 117.29	\$ 128.34	\$ 152.96	\$ 156.90	\$ 157.68	\$ 134.80	\$ 124.25	\$ 116.27	\$ 120.20	\$ 124.43	\$ 128.76	\$ 133.19	\$ 137.73	\$ 142.37	\$ 147.12	\$ 151.99	\$ 156.98	\$ 162.09	\$ 167.32	\$ 172.69	
Total Expenses Less Revenues w/ Zero Waste		\$ 15,834,226	\$ 17,490,823	\$ 21,043,827	\$ 21,791,136	\$ 22,107,750	\$ 19,079,309	\$ 17,752,645	\$ 16,770,497	\$ 17,501,536	\$ 18,289,827	\$ 19,106,121	\$ 19,951,471	\$ 20,826,966	\$ 21,733,740	\$ 22,672,969	\$ 23,645,873	\$ 24,653,719	\$ 25,697,822	\$ 26,779,548	\$ 27,900,313	
Net Present Value (NPV) of Total Expenses Less Revenues																						
Total Expenses Less Revenues w/o Zero Waste		\$ 15,834,226	\$ 17,490,823	\$ 21,043,827	\$ 21,791,136	\$ 22,107,750	\$ 19,079,309	\$ 17,752,645	\$ 16,770,497	\$ 17,501,536	\$ 18,289,827	\$ 19,106,121	\$ 19,951,471	\$ 20,826,966	\$ 21,733,740	\$ 22,672,969	\$ 23,645,873	\$ 24,653,719	\$ 25,697,822	\$ 26,779,548	\$ 27,900,313	
Net Present Value (NPV) of Total Expenses Less Revenues																						
Operating Reserves/Fund Balance																						
Year Beginning - Fund Balance		\$ 2,981,161	\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	
Operating Reserve Deposit		\$ 972,342	\$ 250,000	\$ 870,000	\$ 1,025,000	\$ 1,600,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Operating Reserve Interest		\$ 38,755	\$ 51,899	\$ 55,824	\$ 67,860	\$ 82,067	\$ 103,934	\$ 105,285	\$ 106,654	\$ 108,040	\$ 109,445	\$ 110,867	\$ 112,309	\$ 113,769	\$ 115,248	\$ 116,746	\$ 118,264	\$ 119,801	\$ 121,358	\$ 122,936	\$ 124,534	
Operating Reserve		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098	
Year End - Fund Balance		\$ 3,019,916	\$ 4,044,157	\$ 4,349,981	\$ 5,287,841	\$ 6,394,908	\$ 8,098,842	\$ 8,204,127	\$ 8,310,781	\$ 8,418,821	\$ 8,528,265	\$ 8,639,133	\$ 8,751,442	\$ 8,865,210	\$ 8,980,458	\$ 9,097,204	\$ 9,215,468	\$ 9,335,269	\$ 9,456,627	\$ 9,579,563	\$ 9,704,098	
TONNAGE FLOW																						
Amount of Waste Received at County Facilities		135,000	136,283	137,577	138,884	140,204	141,536	142,880	144,237	145,608	146,991	148,387	149,797	151,220	152,657	154,107	155,571					