



March 15, 2018

Board of Directors  
Ventura Regional Sanitation District  
Ventura, California

**DISCUSS AND PROVIDE DIRECTION TO STAFF ON VRSD CENTRAL ADMINISTRATION COST OVERHEAD ALLOCATION METHODOLOGY**

**RECOMMENDATIONS**

- A. Consider nine different scenarios developed by VRSD staff for the allocation of Central Administration overhead costs to VRSD’s core operations departments, and direct staff to prepare FY2018-2019 Budgets for VRSD, Saticoy Sanitary District (SSD), and Triunfo Sanitation District (TSD) in accordance with one of the scenarios.
- B. Direct staff to prepare FY2018-2019 Budgets for VRSD, SSD, and TSD such that overhead charges to the Solid Waste Department, SSD, and TSD for the year will be charged or recovered in twelve monthly amounts.

**FISCAL IMPACT**

Any fiscal impact is contingent upon direction from the Board. However, this discussion is about how overhead costs should be allocated, not about additional costs. Further, the Board direction received is expected to be applied by staff first in the preparation of budgets for FY 2018-2019. As such, there would be no net fiscal impact to VRSD in the current fiscal year.

**BACKGROUND/ANALYSIS**

On June 15, 2017, the VRSD Board established Goal 3-6, *Examine the Overhead Allocation Methodology* as one of the FY 2017-2018 Goals. This board letter is to provide information to the Board for discussion and possible action in order for staff to accomplish Goal 3-6. The Board may choose to direct staff to follow the staff recommendations or to pursue some other course of action. This letter, and all calculations made for this letter to demonstrate the various scenarios examined, use values from FY 2017-2018 budgets.

Staff suggested Goal 3-6 to the Board for consideration for the FY 2017-2018 Goals because there was some notion that VRSD’s Solid Waste Department may have historically contributed more than its proportionate share to fund the costs of the Central Administration Department. With all of the new Board members and all of the new staff

members at VRSD over the past two years, it seemed timely to present information to the Board in an effort to reaffirm current practices or consider new direction.

VRSD provides two main core services, solid waste operations and water/wastewater operations, primarily on behalf of residents of Ventura County. Solid waste operations includes the operation of the Toland Road Landfill for active disposal of Municipal Solid Waste, and post-closure maintenance, monitoring, and reporting activities at five other landfills. Water/wastewater operations encompass operation and maintenance activities at 20 various sites and facilities for various public and private client entities. VRSD's third department, the Central Administration Department, employs staff and other resources to enable and support the two operating departments with necessary administrative, fiscal, human resources, and contract management services, among others.

A more detailed way to describe VRSD's water/wastewater activities is by the breadth of services VRSD provides to its clients. VRSD wholly operates the Saticoy Sanitary District and the Triunfo Sanitation District on behalf of the respective elected boards of directors for these agencies. Since neither of these agencies employs any staff other than their board members, VRSD provides all of their management and operations staff. VRSD also provides water/wastewater services to 18 other clients on a limited basis, as defined by the scopes of services in their contracts with VRSD. All of these other clients employ their own staff, so VRSD does not wholly manage nor wholly operate these entities.

The Solid Waste Department and the Water/Wastewater (WWW) Department employ staff and other resources generally dedicated to their operations. All expenses associated with the Central Administration Department are considered overhead or indirect costs since they exist to facilitate the services provided by the two direct cost operating departments. Therefore, in accordance with normal accounting procedures, the indirect costs of Central Administration are typically assigned to the operating departments in each year's budget. This is important so each operating department's true costs will be known as accurately as possible. This is particularly important to ensure full cost recovery in the case where VRSD's services are paid for by outside entities to which service is provided.

Moreover, even though VRSD is a service-supported agency that does not receive property tax monies to support operations, all funding ultimately comes from citizens who benefit from and pay for these services. It is reasonable for the citizens who receive these services to expect a fair cost for the services they receive rather than funding services that other segments of customers receive. Of course, the cost of services that the public funds should include both direct and indirect costs. There should be an expectation that indirect costs are assigned fairly, since if any segment of customers paid less than their fair share of costs, they would enjoy this benefit only at the expense of some or all other segments of customers who paid more than their fair share of the costs.

A. Costs of and Benefitting Programs of the Central Administration Department

Attachment 1 lists each of the cost components (column one) of the Central Administration Department, which totals \$4,354,004 (see the second column). This is the amount of indirect cost that needs to be assigned to VRSD's direct cost programs or operations. For purposes of this board letter and the calculations prepared for the demonstrations herein, costs have been broken into four main areas by department or client. From this point forward in this letter, for reasons of simplicity and consistency, these four categories will be referred to as programs.

Solid Waste	All solid waste operations, including Toland Road Landfill, micro-turbines, biosolids, and post-closure activities
SSD	All operations and management associated with the Saticoy Sanitary District
TSD	All operations and management associated with the Triunfo Sanitation District
Other Customers	All other VRSD clients, primarily water and wastewater

The next four columns of Attachment 1 show each of the four programs above as column headings, and then in each row there is an indication if that particular program receives a benefit from this particular cost component. A check mark indicates that the program benefits from this cost and a blank space indicates that it does not. This graphic is useful in demonstrating and framing the cost allocation methodologies which are demonstrated herein.

At this point, it is helpful to discuss the historical indirect cost allocation methodology and the associated historical manner for collection of these costs, both of which appear to have contributed to VRSD's recovering less than an appropriate amount of indirect charges from external clients.

B. VRSD's Historical Central Administration Cost Allocation Methodology

VRSD's historical Central Administration cost allocation methodology has been to allocate these indirect costs based on operating revenues from the different programs. Using operating revenues as a cost allocation basis is non-standard, and it is not clear why VRSD has employed this allocation base.

The basic, inherent problem with this methodology is that it assumes that the hours placed in a program's budget are correct and that the revenues associated with that program are representative of the benefits received by that program. If this were true,

those revenues would yield a reasonable allocation amount. Unfortunately, this method assumes the result of the allocation calculation before actually doing the allocation, thus biasing the allocation results. Instead, an indirect cost allocation should yield a reasonable amount for that program's budget, which can then be placed into the program's budget.

Using program operating revenue as an allocation basis simply may not yield a reasonable indirect cost allocation. There are many more appropriate allocation bases which for the same, slightly more, or even slightly less effort would yield a significantly more reasonable and accurate allocation of indirect costs for VRSD's Central Administration Department.

### C. Historical Indirect Cost Recovery Methodology

Once accurate or reasonable indirect cost allocation amounts are determined for each program, the next decision is to decide upon the best method to collect those amounts from the various programs. For the Solid Waste Department, the indirect costs are simply entered as an expense in the operating budget.

For the WWW Department, whose clients and revenue sources are external to VRSD, these indirect costs need to be collected through contractual terms and related service billings. The historical method for cost recovery used by VRSD has been to charge overhead costs embedded in the labor service billing rates. Supplies, services and equipment have been billed at cost plus a completely arbitrary 15% markup to cover overhead costs.

The main problem with recovering Central Administration Department overhead costs as part of the billing rate is that the hours in the budget would need to exactly match the hours actually billed in a given year to ensure the collection of all of the overhead. Historically, the budgeted hours have exceeded the actual hours charged in any given year, resulting in less overhead costs recovered than are actually expended. For example, the WWW Department has accumulated a deficit in the amount of approximately \$5 million due to this happening repeatedly, as shown in the VRSD Comprehensive Annual Financial Report for the Year Ending on June 20, 2017.

There are several manners in which this situation could be rectified.

- (1) Bill programs for the unrecovered overhead expenses at the end of the fiscal year (practically, in the next fiscal year).
- (2) Budget more accurately so that the actual hours worked equal The budgeted hours.
- (3) Bill the year's overhead costs on a monthly basis to ensure that actual overhead costs are all collected and in a timely manner.

Of these three methods to alleviate this problem, staff favors the third method. The first method alone is not timely, but it has merit over time for continuing clients. The second

method is an impossibility in the purest sense. However, staff is committed to reducing the discrepancy between worked vs. budgeted hours in the future. The third method has the best chance for success in ensuring that the appropriate amount of revenues are collected. It could be argued, however, that there should be an adjustment or true-up in the event that indirect costs billed do not actually represent actual indirect costs for the fiscal year.

Therefore, it is recommended that the Board direct staff to proceed in this manner (third option) in the preparation of the FY2018-2019 budgets. This action would end the past practice of including all Central Administration Department overhead costs within the WWW labor service billing rate. VRSD would also cease to include the 15% markup of supplies, services and equipment that Central Administration allocates to the Solid Waste Department, SSD, and TSD. This may require the contracts with SSD and TSD to be renegotiated or amended, however.

While preparing to develop several scenarios for the Central Administration Department indirect cost allocation for the VRSD Board's review, staff developed a set of ideas to guide the process. These concepts are set forth in a document, titled *Notes on Indirect Cost Allocation*, which is included as Attachment 2 to this board letter. It may be useful for the Board Directors to read this document as a way to glean insight into staff's objectives in developing the allocation scenarios below.

#### D. Different Scenarios for VRSD Central Administration Cost Allocation Methodology

Staff contemplated various methodologies to allocate the Central Administration Department's indirect costs to the four programs. In the end, the nine scenarios presented below are those which staff found most salient for providing useful information to the Board. The chart for each scenario is accompanied by supporting information such as, the allocation base used, costs which were excluded from the base calculations, and pros and cons that staff has produced to assist the VRSD Board in evaluating the scenarios.

Attachment 3 to the board letter shows all of the same charts together for ease of examination and comparison by the Board. It also includes a calculation guide showing exactly which numbers input into the charts are hard inputs, and it shows how all other values are calculated.

#### E. DISCUSSION OF THE NINE CENTRAL ADMINISTRATION INDIRECT COST ALLOCATION METHODOLOGIES

##### Scenario 1: VRSD Operating Revenues as the Allocation Base

This scenario represents the historical methodology that was used to prepare the FY2017-2018 Budget and which was discussed above in this board letter. Staff believes the Board should at least consider other methodologies beginning in FY2018-2019 for the reasons stated above.

Scenario 1: Existing Methodology - Allocation Base of Operating Revenues								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin Billed Directly	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	13,639,508	70.0%	-	2,090,957	2,090,957	11,350,741	N/A	N/A
SSD	403,636	2.1%	81,348	61,878	143,226	444,575	N/A	N/A
TSD	3,593,520	18.4%	1,277,366	550,892	1,828,257	14,728,146	N/A	N/A
Other Customers	1,849,875	9.5%	7,976	283,589	291,565	1,617,332	N/A	N/A
	\$ 19,486,539	100%	\$ 1,366,689	2,987,315	\$ 4,354,004			

Note: Allocations bases have historically been based on three year averages.

### Scenario 2: Allocation Base of All Operating Expenses

The crux of the theory behind this allocation base is that the total expense budget of a program is a reasonable indicator of the complexity of the program, and the overhead costs associated with administering this program should be proportional to the complexity of the program.

Allocation Base: Each Program's Operating Expense Budget  
 Costs Excluded from Allocation Bases for all Programs:

- Debt Service
- Capital Project Costs
- Depreciation and Amortization
- Central Administration Department Overhead

Pros:

- Expense based allocation bases are sound indicators of programs' complexities

Cons:

- May cause over-allocation to TSD because of high costs of water purchases in allocation base

Scenario 2: Allocation Base of All Operating Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	9,654,184	38.4%	-	1,301,796	1,301,796	11,350,741	(789,160)	-7%
SSD	303,846	1.2%	37,944	40,971	78,915	444,575	(64,310)	-14%
TSD	13,567,320	54.0%	925,753	1,829,454	2,755,207	14,728,146	926,950	6%
Other Customers	1,617,332	6.4%	-	218,085	218,085	1,617,332	(73,479)	-5%
	\$ 25,142,683	100.0%	\$ 963,697	3,390,307	\$ 4,354,004			

Scenario 2A: Allocation Base of All Operating Expenses

This is the same as Scenario 2 except that amounts that are allocated to a subset of programs (in this case SSD and TSD) because they benefit only these programs include overhead costs in them. All other comments from Scenario 2 are still valid.

Allocation Base: Each Program's Operating Expense Budget  
 Costs Excluded from Allocation Bases for all Programs:

- Debt Service
- Capital Project Costs
- Depreciation and Amortization
- Central Administration Department Overhead

Pros:

- Expense based allocation bases are sound indicators of programs' complexities
- Including overhead costs in the 100% subset allocation results in slightly less cost in the general allocation, and this may be more appropriate

Cons:

- May cause over-allocation to TSD because of high costs of water purchases in allocation base

Scenario 2A: Allocation Base of All Operating Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	9,654,184	38.4%	-	1,171,121	1,171,121	11,350,741	(919,835)	-8%
SSD	303,846	1.2%	43,636	36,859	80,494	444,575	(62,731)	-14%
TSD	13,567,320	54.0%	1,260,382	1,645,813	2,906,195	14,728,146	1,077,937	7%
Other Customers	1,617,332	6.4%	-	196,194	196,194	1,617,332	(95,371)	-6%
	\$ 25,142,683	100.0%	\$ 1,304,017	3,049,987	\$ 4,354,004			

Scenario 3: Allocation Base of Employee Salary and Benefit Costs

Salary expenses are often used as a default allocation base, so this scenario is included in this board letter. One disadvantage in utilizing this allocation base for VRSD is the large amount of management staff costs related to TSD and SSD operations are supplied by VRSD's consultants, and these costs are not fully captured in this employee salary allocation base.

Allocation Base: Employee Salary and Benefit Costs

Costs Excluded from Allocation Bases for all Programs:

- Central Administration Department Overhead

Pros:

- Generally, expense based allocation bases are sound indicators of programs' complexities; however, see cons below.

Cons:

- Not really appropriate for VRSD since a large amount of management staff costs related to TSD and SSD operations are from VRSD’s consultants, which are not captured in the allocation base, thus skewing the results

Scenario 3: Allocation Base of Salary and Employee Benefit Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	3,016,709	45.9%	-	1,557,773	1,557,773	11,350,741	(533,184)	-5%
SSD	181,940	2.8%	37,944	93,950	131,894	444,575	(11,331)	-3%
TSD	2,015,622	30.7%	925,753	1,040,830	1,966,583	14,728,146	138,326	1%
Other Customers	1,351,237	20.6%	-	697,754	697,754	1,617,332	406,189	25%
	\$ 6,565,508	100.0%	\$ 963,697	3,390,307	\$ 4,354,004			

Scenario 3A: Allocation Base of Employee Salary and Benefit Costs

This is the same as Scenario 3 except that amounts that are allocated to a subset of programs (in this case SSD and TSD), because they benefit only these programs include overhead costs in them. All other comments from Scenario 3 are still valid.

Allocation Base: Employee Salary and Benefit Costs

Costs Excluded from Allocation Bases for all Programs:

- Central Administration Department Overhead

Pros:

- Generally, expense based allocation bases are sound indicators of programs’ complexities; however, see cons below.
- Including overhead costs in the 100% subset allocation results in slightly less cost in the general allocation, and this may be more appropriate

Cons:

- Not really appropriate for VRSD since a large amount of management staff costs related to TSD and SSD operations are from VRSD’s consultants, which are not captured in the allocation base, thus skewing the results

Scenario 3A: Allocation Base of Salary and Employee Benefit Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	3,016,709	45.9%	-	1,401,403	1,401,403	11,350,741	(689,554)	-6%
SSD	181,940	2.8%	43,636	84,520	128,155	444,575	(15,070)	-3%
TSD	2,015,622	30.7%	1,260,382	936,351	2,196,733	14,728,146	368,475	3%
Other Customers	1,351,237	20.6%	-	627,713	627,713	1,617,332	336,149	21%
	\$ 6,565,508	100.0%	\$ 1,304,017	3,049,987	\$ 4,354,004			

**Scenario 4: Allocation Base of All Operating Expenses with a 50% Discount to TSD's Water Purchases**

This scenario is patterned after Scenario 2, with one adjustment. In this scenario, TSD's Total Operating Expenses were reduced by \$4,666,370 (50% of the water purchase costs of \$9,332,739) prior to the allocation being performed. This scenario has been included for demonstration purposes, which will be discussed with the VRSD Board.

Allocation Base: Each Program's Operating Expense Budget  
 Costs Excluded from Allocation Bases for all Programs:

- Debt Service
- Capital Project Costs
- Depreciation and Amortization
- Central Administration Department Overhead
- 50% of TSD's Water Purchases

Pros:

- Expense based allocation bases are sound indicators of programs' complexities

Cons:

- None Identified

Scenario 4: Allocation Base of All Operating Expenses (with a 50% Discount to TSD's Water Purchases)								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	9,654,184	47.1%	-	1,598,464	1,598,464	11,350,741	(492,493)	-4%
SSD	303,846	1.5%	37,944	50,308	88,252	444,575	(54,973)	-12%
TSD	8,900,951	43.5%	925,753	1,473,750	2,399,503	14,728,146	571,245	4%
Other Customers	1,617,332	7.9%	-	267,785	267,785	1,617,332	(23,779)	-1%
	\$ 20,476,314	100.0%	\$ 963,697	3,390,307	\$ 4,354,004			

Scenario 4A: Allocation Base of All Operating Expenses with a 50% Discount to TSD's Water Purchases

This is the same as Scenario 4 except that amounts that are allocated to a subset of programs (in this case SSD and TSD), because they benefit only these programs include overhead costs in them. All other comments from Scenario 4 are still valid.

Allocation Base: Each Program's Operating Expense Budget

Costs Excluded from Allocation Bases for all Programs:

- Debt Service
- Capital Project Costs
- Depreciation and Amortization
- Central Administration Department Overhead
- 50% of TSD's Water Purchases

Pros:

- Expense based allocation bases are sound indicators of programs' complexities
- Including overhead costs in the 100% subset allocation results in slightly less cost in the general allocation, and this may be more appropriate

Cons:

- None Identified

Scenario 4A: Allocation Base of All Operating Expenses (with a 50% Discount to TSD's Water Purchases)								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	9,654,184	47.1%	-	1,438,009	1,438,009	11,350,741	(652,947)	-6%
SSD	303,846	1.5%	43,636	45,259	88,894	444,575	(54,331)	-12%
TSD	8,900,951	43.5%	1,260,382	1,325,814	2,586,196	14,728,146	757,938	5%
Other Customers	1,617,332	7.9%	-	240,905	240,905	1,617,332	(50,660)	-3%
	\$ 20,476,314	100.0%	\$ 1,304,017	\$ 3,049,987	\$ 4,354,004			

Scenario 5: Allocation Base of All Operating Expenses, Permit Fees Excluded

This scenario is patterned after Scenario 2, with one adjustment. In this scenario, permit fees for VRSD, TSD, and SSD have also been excluded, as these are sometimes believed to skew results.

Allocation Base: Each Program's Operating Expense Budget

Costs Excluded from Allocation Bases for all Programs:

- Debt Service
- Capital Project Costs
- Depreciation and Amortization
- Central Administration Department Overhead
- Permit Fees for VRSD, SSD, and TSD

Pros:

- Expense based allocation bases are sound indicators of programs' complexities

Cons:

- None Identified

Scenario 5: Allocation Base of All Budgeted Operation Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	8,129,734	35.0%	-	1,186,932	1,186,932	11,350,741	(904,024)	-8%
SSD	291,145	1.3%	37,944	42,507	80,451	444,575	(62,775)	-14%
TSD	13,188,940	56.8%	925,753	1,925,571	2,851,324	14,728,146	1,023,067	7%
Other Customers	1,611,633	6.9%	-	235,297	235,297	1,617,332	(56,268)	-3%
	\$ 23,221,452	100.0%	\$ 963,697	\$ 3,390,307	\$ 4,354,004			

Scenario 5A: Allocation Base of All Operating Expenses, Permit Fees Excluded

This is the same as Scenario 5 except that amounts that are allocated to a subset of programs (in this case SSD and TSD), because they benefit only these programs include overhead costs in them. All other comments from Scenario 5 are still valid.

Allocation Base: Each Program's Operating Expense Budget  
 Costs Excluded from Allocation Bases for all Programs:

- Debt Service
- Capital Project Costs
- Depreciation and Amortization
- Central Administration Department Overhead
- Permit Fees for VRSD, SSD, and TSD

Pros:

- Expense based allocation bases are sound indicators of programs' complexities
- Including overhead costs in the 100% subset allocation results in slightly less cost in the general allocation, and this may be more appropriate

Cons:

- None Identified

Scenario 5A: Allocation Base of All Budgeted Operation Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	8,129,734	35.0%	-	1,067,788	1,067,788	11,350,741	(1,023,169)	-9%
SSD	291,145	1.3%	43,636	38,240	81,875	444,575	(61,350)	-14%
TSD	13,188,940	56.8%	1,260,382	1,732,281	2,992,663	14,728,146	1,164,406	8%
Other Customers	1,611,633	6.9%	-	211,678	211,678	1,617,332	(79,887)	-5%
	\$ 23,221,452	100.0%	\$ 1,304,017	\$ 3,049,987	\$ 4,354,004			

It is recommended that the VRSD Board consider both Recommendations A and B, and direct staff accordingly. The Board could choose to approve Recommendation A alone, Recommendation B alone, both, or neither. Should the Board approve one of the scenarios in this board letter as part of Recommendation A, it is worth noting again that the calculations in these demonstration scenarios are prepared with FY2017-2018 budget numbers. Since budgets change slightly each year, the Board would be approving an allocation concept to use rather than the absolute dollar values or percentage increases in the demonstrated scenarios herein.

If you should have any questions or need additional information, please contact me by phone at (805) 658-4600 or via email at ChrisTheisen@vrsd.com.

CHRIS THEISEN, GENERAL MANAGER

APPROVED FOR AGENDA:



Chris Theisen, General Manager

- Attachments:
1. Costs of and Benefitting Programs of the Central Administration Department
  2. Notes on Indirect Cost Allocation
  3. All Allocation Scenarios Shown Together, Including Calculation Guide
  4. Central Administration Costs which are 100% Dedicate to SSD or TSD

**Costs of and Benefitting Programs of The Central Administration Department**

Description	CA Expense	Program			
		Solid Waste	TSD	SSD	Other Customers
Fiscal Assistant	87,360	✓	✓	✓	✓
Fiscal Assistant	99,840		✓		
Fiscal Assistant	99,840	✓	✓	✓	✓
Management Analyst	137,280		✓		
Administrative Assistant	116,480	✓	✓	✓	✓
Director of Finance	249,600	✓	✓	✓	✓
Senior Accountant	138,112	✓	✓	✓	✓
Management Analyst	147,680	✓	✓	✓	✓
Accountant	135,200		✓		
Fiscal Assistant	22,880	✓	✓	✓	✓
Fiscal Assistant	89,440	✓	✓	✓	✓
Senior Management Analyst	156,000	✓	✓	✓	✓
Fiscal Assistant	87,360	✓	✓	✓	✓
Fiscal Assistant	87,360	✓	✓	✓	✓
Fiscal Assistant	83,200		✓		
General Manager	272,480	✓	✓	✓	✓
Human Resources Manager	172,640	✓	✓	✓	✓
Executive Assistant/Clerk of the Board	116,480	✓	✓	✓	✓
Accountant	135,200	✓	✓	✓	✓
40520-Interest & Dividends-Securities - UB	(700)	✓	✓	✓	✓
Worker's Comp Expense: Retro Adj/Dividend	(52,168)	✓	✓	✓	✓
Board Member Fees	61,380	✓	✓	✓	✓
Board Member Expenses	43,511	✓	✓	✓	✓
Insurance Expense	(37,769)	✓	✓	✓	✓
Personal Vehicle Mileage	1,500	✓	✓	✓	✓
Conference and Seminar Expenses	13,050	✓	✓	✓	✓
TSD District Manager Conferences	1,500		✓		
General Administrative Expenses	59,730	✓	✓	✓	
VCREA - Storage Fees	100				✓
TSD - General Administrative Expenses	38,935		✓		
Unanticipated Costs	157,284	✓	✓	✓	✓
Website Development	20,000	✓	✓	✓	✓
Legal Services	204,000	✓	✓	✓	✓
Accounting and Auditing Services	29,000	✓	✓	✓	✓
IT Maintenance Agreements	117,588	✓	✓	✓	✓
Information Technology Services	231,096	✓	✓	✓	✓
Other Professional Services - Accounting	57,340	✓	✓	✓	✓
Other Professional Services - HR	36,520	✓	✓	✓	✓
Hosting/SW Maint & Special Mailers - TSD	8,000		✓		
Mark Norris	258,720		✓	✓	
The PRD Group	150,000		✓		
Debra West	52,000		✓	✓	
Temporary Labor	50,000	✓	✓	✓	✓
Employee Safety Supplies	7,000	✓	✓	✓	✓
Permits, Licenses and Fees	27,950	✓	✓	✓	✓
Permits, Licenses and Fees	1,060		✓		
Bank analysis fees	1,294			✓	
Gas, Diesel and fuel	2,500	✓	✓	✓	✓
Operating Supplies	23,359	✓	✓	✓	✓
Supplies for Fixture Counts	2,000		✓		
Other Operating Services	16,524	✓	✓	✓	✓
Utilities	57,940	✓	✓	✓	✓
Automotive Equipment Maintenance	3,020	✓	✓	✓	✓
Equipment Rental/Lease	7,720	✓	✓	✓	✓
Building Rent/Lease	119,934	✓	✓	✓	✓
Depreciation Expense	120,587	✓	✓	✓	✓
Bank analysis fees	3,288		✓		
Furniture and Fixtures	7,500	✓	✓	✓	✓
Computer Equipment	22,959	✓	✓	✓	✓
ISF Fleet use-net	(5,680)	✓	✓	✓	✓
	\$ 4,354,004				

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## NOTES ON INDIRECT COST ALLOCATION

The total cost for an organization to provide its products or services can be broken into two general categories, indirect and direct. Direct costs are directly attributable to a particular product or service, and indirect costs are incurred in order to generally facilitate the provision of the products or services. Said another way, direct costs can be easily associated with a particular product or service, and indirect costs are not similarly easily associated. Indirect costs are, nonetheless, necessary because they represent true expenses which enable the organization to offer various products or services.

There are various reasons an organization may want to decide how much of its indirect costs should be attributable to each of the various products or services it provides. The most basic of these is simply to understand the true cost of providing each service or product for a variety of reasons. This may be particularly important in order to individually evaluate products or services for profitability, or in the case of a not-for-profit organization, for full cost recovery through rates or fees for a given service, program or operating unit. Government entities typically use cost allocation to try to represent the true costs of a particular operating unit in accordance with accepted accounting practices.

The allocation base is the quantity that is used to allocate indirect costs to direct cost programs. It is assumed in this methodology that the allocation base represents a proportional method to assign costs. Therefore, the higher the percentage of the allocation base that can be attributable to a given direct program or cost object, the higher the amount of the total indirect costs that this program or cost object should be assigned. For example, if the allocation base for a particular indirect cost is chosen to be full time equivalent positions (FTE's) and a particular program contains 45% of the total FTE's in an organization, that program should be assigned 45% of these indirect costs.

In a complex organization, it is fairly typical to use many different bases of all allocation in an attempt to most accurately allocate costs. For example, the indirect cost of computer operations may utilize for its base the number of computers in each program; payroll or human resources might use the number of employees or FTE's; and facility maintenance might use square feet of facility space utilized by a given program. Absent any other obvious choice, operating expense budget is typically used as a default, since it is a general indicator of the complexity (read utilizer of indirect services) of a program.

An important concept of indirect cost allocation is that only programs which benefit from an indirect cost activity should be allocated costs from that activity, insomuch as this is discernable and calculable. For example, if an organization needs to allocate costs across several programs, and only a subset of these programs benefits from an indirect cost service, then only this subset of programs, and not all programs, should be assigned costs from this indirect cost service.

Another central concept of indirect cost allocation is that the amount of work spent preparing cost allocations should be commensurate with the benefit received from this effort. Extremely

complex cost allocation plans can be prepared with a multitude of allocation bases deemed most appropriate for each type of indirect cost. Further, in a complex organization, many indirect cost programs benefit from other indirect cost programs. Strictly speaking, costs of this type need to be assigned to the indirect cost programs which benefit from them, which in turn need to be assigned to other direct cost programs and other indirect cost programs (sometimes to those from which they were just assigned). While a solution such as this is certainly solvable using an iterative procedure, there needs to be a realistic reason to undertake this level of computation when the final result will be a slightly more accurate solution to something which was, in essence, a subjective estimation to begin with. Said another way, unless there is a compelling reason to produce a complex, computationally eloquent solution, it is a waste of the organization's resources to do so.

Perhaps the most significant (and likely the most difficult to wrap one's head around) concept of indirect cost allocation is that it does not represent the "right" manner in which to assign indirect costs to direct cost programs. Rather, it merely represents the best estimate of how these costs should be assigned. Further, the best estimate (e.g., the choice of allocation base) needs to be prepared by a human being, and, as such, it is subjective by definition. There is no perfect or even a correct solution to the indirect cost allocation problem. At a minimum, then, the solution should be transparent, understandable, and reasonable.

Importantly, the only question that an allocation answers is how costs will be assigned, because the indirect costs that needs to be allocated are known amounts. Mathematically, indirect cost allocation is truly a "zero sum game." The implications of this are that any one direct cost entity which somehow benefits from the allocation can do so only to the detriment of other entities.

**All Allocation Scenarios Shown Together, Including Calculation Guide**

Scenario 1: Existing Methodology - Allocation Base of Operating Revenues								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin Billed Directly	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	13,639,508	70.0%	-	2,090,957	2,090,957	11,350,741	N/A	N/A
SSD	403,636	2.1%	81,348	61,878	143,226	444,575	N/A	N/A
TSD	3,593,520	18.4%	1,277,366	550,892	1,828,257	14,728,146	N/A	N/A
Other Customers	1,849,875	9.5%	7,976	283,589	291,565	1,617,332	N/A	N/A
	\$ 19,486,539	100%	\$ 1,366,689	2,987,315	\$ 4,354,004			

Scenario 2: Allocation Base of All Operating Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	9,654,184	38.4%	-	1,301,796	1,301,796	11,350,741	(789,160)	-7%
SSD	303,846	1.2%	37,944	40,971	78,915	444,575	(64,310)	-14%
TSD	13,567,320	54.0%	925,753	1,829,454	2,755,207	14,728,146	926,950	6%
Other Customers	1,617,332	6.4%	-	218,085	218,085	1,617,332	(73,479)	-5%
	\$ 25,142,683	100.0%	\$ 963,697	3,390,307	\$ 4,354,004			

Scenario 2A: Allocation Base of All Operating Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	9,654,184	38.4%	-	1,171,121	1,171,121	11,350,741	(919,835)	-8%
SSD	303,846	1.2%	43,636	36,859	80,494	444,575	(62,731)	-14%
TSD	13,567,320	54.0%	1,260,382	1,645,813	2,906,195	14,728,146	1,077,937	7%
Other Customers	1,617,332	6.4%	-	196,194	196,194	1,617,332	(95,371)	-6%
	\$ 25,142,683	100.0%	\$ 1,304,017	\$ 3,049,987	\$ 4,354,004			

Scenario 3: Allocation Base of Salary and Employee Benefit Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	3,016,709	45.9%	-	1,557,773	1,557,773	11,350,741	(533,184)	-5%
SSD	181,940	2.8%	37,944	93,950	131,894	444,575	(11,331)	-3%
TSD	2,015,622	30.7%	925,753	1,040,830	1,966,583	14,728,146	138,326	1%
Other Customers	1,351,237	20.6%	-	697,754	697,754	1,617,332	406,189	25%
	\$ 6,565,508	100.0%	\$ 963,697	\$ 3,390,307	\$ 4,354,004			

Scenario 3A: Allocation Base of Salary and Employee Benefit Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	3,016,709	45.9%	-	1,401,403	1,401,403	11,350,741	(689,554)	-6%
SSD	181,940	2.8%	43,636	84,520	128,155	444,575	(15,070)	-3%
TSD	2,015,622	30.7%	1,260,382	936,351	2,196,733	14,728,146	368,475	3%
Other Customers	1,351,237	20.6%	-	627,713	627,713	1,617,332	336,149	21%
	\$ 6,565,508	100.0%	\$ 1,304,017	\$ 3,049,987	\$ 4,354,004			

**All Allocation Scenarios Shown Together, Including Calculation Guide**

Scenario 4: Allocation Base of All Operating Expenses (with a 50% Discount to TSD's Water Purchases)								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	9,654,184	47.1%	-	1,598,464	1,598,464	11,350,741	(492,493)	-4%
SSD	303,846	1.5%	37,944	50,308	88,252	444,575	(54,973)	-12%
TSD	8,900,951	43.5%	925,753	1,473,750	2,399,503	14,728,146	571,245	4%
Other Customers	1,617,332	7.9%	-	267,785	267,785	1,617,332	(23,779)	-1%
	\$ 20,476,314	100.0%	\$ 963,697	\$ 3,390,307	\$ 4,354,004			

Scenario 4A: Allocation Base of All Operating Expenses (with a 50% Discount to TSD's Water Purchases)								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	9,654,184	47.1%	-	1,438,009	1,438,009	11,350,741	(652,947)	-6%
SSD	303,846	1.5%	43,636	45,259	88,894	444,575	(54,331)	-12%
TSD	8,900,951	43.5%	1,260,382	1,325,814	2,586,196	14,728,146	757,938	5%
Other Customers	1,617,332	7.9%	-	240,905	240,905	1,617,332	(50,660)	-3%
	\$ 20,476,314	100.0%	\$ 1,304,017	\$ 3,049,987	\$ 4,354,004			

Scenario 5: Allocation Base of All Budgeted Operation Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	8,129,734	35.0%	-	1,186,932	1,186,932	11,350,741	(904,024)	-8%
SSD	291,145	1.3%	37,944	42,507	80,451	444,575	(62,775)	-14%
TSD	13,188,940	56.8%	925,753	1,925,571	2,851,324	14,728,146	1,023,067	7%
Other Customers	1,611,633	6.9%	-	235,297	235,297	1,617,332	(56,268)	-3%
	\$ 23,221,452	100.0%	\$ 963,697	\$ 3,390,307	\$ 4,354,004			

Scenario 5A: Allocation Base of All Budgeted Operation Expenses								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	8,129,734	35.0%	-	1,067,788	1,067,788	11,350,741	(1,023,169)	-9%
SSD	291,145	1.3%	43,636	38,240	81,875	444,575	(61,350)	-14%
TSD	13,188,940	56.8%	1,260,382	1,732,281	2,992,663	14,728,146	1,164,406	8%
Other Customers	1,611,633	6.9%	-	211,678	211,678	1,617,332	(79,887)	-5%
	\$ 23,221,452	100.0%	\$ 1,304,017	\$ 3,049,987	\$ 4,354,004			

**All Allocation Scenarios Shown Together, Including Calculation Guide**

Calculation Guide								
1	2	3	4	5	6	7	8	9
Program	Base Amount	Percent of Total	Central Admin 100 % Subset Allocation	Central Admin General Allocation	Total Central Admin Costs Charged	FY17-18 Adopted Operating Expense Budget	Increase (Decrease) to Operating Expense Budget from Scenario 1	Percent Increase (Decrease) to Operating Expense Budget From Scenario 1
Solid Waste	A	F	K	P	U	Z	2D	2H
SSD	B	G	L	Q	V	2A	2E	2I
TSD	C	H	M	R	W	2B	2F	2J
Other Customers	D	I	N	S	X	2C	2G	2K
	E	J	O	T	Y			

A = The allocation base amount for the Solid Waste Program (hard input)

B = The allocation base amount for the Saticoy Sanitary District Program (hard input)

C = The allocation base amount for the Triunfo Sanitation District Program (hard input)

D = The allocation base amount for the Other Customers Program (hard input)

E = A + B + C + D

F = A/E

G = B/E

H = C/E

I = D/E

J = F + G + H = I (Must equal 100%)

K = The total cost of Central Administration Department indirect costs which are 100% dedicated to the Solid Waste Program

L = The total cost of Central Administration Department indirect costs which are 100% dedicated to the Saticoy Sanitary District Program

M = The total cost of Central Administration Department indirect costs which are 100% dedicated to the Triunfo Sanitation District Program

N = The total cost of Central Administration Department indirect costs which are 100% dedicated to the Other Customers Program

O = K + L + M + N

P = F \* T

Q = G \* T

R = H \* T

S = I \* T

T = O - P + Q + R + S

U = K + P

V = L + Q

W = M + R

X = N + S

Y = U + V + W + X

Z = The current operating expense budget for the Solid Waste Program (hard input)

2A = The current operating expense budget for the Saticoy Sanitary District Program (hard input)

2B = The current operating expense budget for the Triunfo Sanitation District Program (hard input)

2C = The current operating expense budget for the Other Customers Program (hard input)

2D = Z - \$2,090,957 (Same cell location from Scenario No. 1)

2E = 2A - \$143,226 (Same cell location from Scenario No. 1)

2F = 2B - \$1,828,257 (Same cell location from Scenario No. 1)

2G = 2C - \$291,565 (Same cell location from Scenario No. 1)

2H = 2D/Z (in percent)

2I = 2E/2A (in percent)

2J = 2F/2B (in percent)

2K = 2G/2C (in percent)

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**Central Administration Costs which are 100% Dedicated to SSD or TSD**

Description	Expenses	TSD	SSD	Grand Total
Fiscal Assistant	-	99,840	-	99,840
Fiscal Assistant	-	83,200	-	83,200
Management Analyst	-	137,280	-	137,280
Accountant	-	135,200	-	135,200
Fiscal Assistant	87,360	-	-	87,360
Fiscal Assistant	99,840	-	-	99,840
Administrative Assistant	116,480	-	-	116,480
Director of Finance	249,600	-	-	249,600
Senior Accountant	138,112	-	-	138,112
Management Analyst	147,680	-	-	147,680
Fiscal Assistant	22,880	-	-	22,880
Fiscal Assistant	89,440	-	-	89,440
Senior Management Analyst	156,000	-	-	156,000
Fiscal Assistant	87,360	-	-	87,360
Fiscal Assistant	87,360	-	-	87,360
General Manager	272,480	-	-	272,480
Human Resources Manager	172,640	-	-	172,640
Executive Assistant/Clerk of the Board	116,480	-	-	116,480
Accountant	135,200	-	-	135,200
40520-Interest & Dividends-Securities - UB	(700)	-	-	(700)
Worker's Comp Expense: Retro Adj/Dividend	(52,168)	-	-	(52,168)
Board Member Fees	61,380	-	-	61,380
Board Member Expenses	43,511	-	-	43,511
Insurance Expense	(37,769)	-	-	(37,769)
Personal Vehicle Mileage	1,500	-	-	1,500
Conference and Seminar Expenses	13,050	-	-	13,050
TSD District Manager Conferences	-	1,500	-	1,500
General Administrative Expenses	59,730	-	-	59,730
VCREA - Storage Fees	100	-	-	100
TSD - General Administrative Expenses	-	38,935	-	38,935
Unanticipated Costs	157,284	-	-	157,284
Website Development	20,000	-	-	20,000
Attorney Services	204,000	-	-	204,000
Accounting and Auditing Services	29,000	-	-	29,000
IT Maintenance Agreements	117,588	-	-	117,588
Information Technology Services	231,096	-	-	231,096
Other Professional Services - Accounting	57,340	-	-	57,340
Other Professional Services - HR	36,520	-	-	36,520
Hosting/SW Maint & Special Mailers - TSD	-	8,000	-	8,000
Mark Norris - TSD	-	219,450	-	219,450
Mark Norris - SSD	-	-	34,650	34,650
Mark Norris - VRSD	4,620	-	-	4,620
The PRD Group - TSD	-	150,000	-	150,000
Debra West - TSD	-	46,000	-	46,000
Debra West - SSD	-	-	2,000	2,000
Debra West - VRSD	4,000	-	-	4,000
Temporary Labor	50,000	-	-	50,000
Employee Safety Supplies	7,000	-	-	7,000
Permits, Licenses and Fees	27,950	-	-	27,950
Permits, Licenses and Fees - TSD	-	1,060	-	1,060
Bank analysis fees - SSD	-	-	1,294	1,294
Gas, Diesel and fuel	2,500	-	-	2,500
Operating Supplies	23,359	-	-	23,359
Supplies for Fixture Counts - TSD	-	2,000	-	2,000
Other Operating Services	16,524	-	-	16,524
Utilities	57,940	-	-	57,940
Automotive Equipment Maintenance	3,020	-	-	3,020
Equipment Rental/Lease	7,720	-	-	7,720
Building Rent/Lease	119,934	-	-	119,934
Depreciation Expense	120,587	-	-	120,587
Bank analysis fees - TSD	-	3,288	-	3,288
Furniture and Fixtures	7,500	-	-	7,500
Computer Equipment	22,959	-	-	22,959
ISF Fleet use-net	(5,680)	-	-	(5,680)
<b>Total Other Central Administrative Costs</b>	<b>\$3,390,307</b>	<b>\$ 925,753</b>	<b>\$ 37,944</b>	<b>\$ 4,354,004</b>

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