

CITY OF NAPA CITY COUNCIL
AGENDA REPORT

ADMIN CALENDAR
AGENDA ITEM <ITEM_OUTLINE>
Date: <MEETING_DATE>

To: Honorable Mayor and Members of City Council
From: Jacques R. LaRochelle, Public Works Director
Prepared by: Kevin Miller, Materials Diversion Administrator
Subject: Solid Waste and Recycling Collection Rates

ISSUE STATEMENT:

Discussion and direction to staff regarding the setting of solid waste and recycling collection rates to become effective April 1, 2015 and January 1, 2016, and determine that the recommended action is exempt from CEQA.

DISCUSSION:

BACKGROUND

The City's Solid Waste and Materials Diversion Fund operates an enterprise with an annual budget of \$26 million to provide solid waste/recycling collection, operate the City's Materials Diversion Facility (MDF), and manage state mandated diversion requirements and programs. Most services are provided through a contract with Napa Recycling and Waste Services, LLC (NRWS). Collection rates have historically been set annually based on contractual obligations, increased operating expenses, and revenue projections and have now fully incorporated approximately \$1.8 million per year to mitigate the impact of heavy refuse and recycling vehicles on City streets. The current rates became effective July 1, 2011 and have not been adjusted in the intervening three and half year period.

Solid waste and recycling collection is an essential service provided by the City. Collection rates are established to recover the cost of providing the service to the customer. The Materials Diversion Division within Public Works manages the expenditures and revenues such that a high level of service is delivered at the most reasonable cost to customers. Costs typically increase each year based on inflation, contractual obligations, and maintenance requirements of the MDF. While revenues from collection rates are fairly stable each year, revenue from the sale of recyclable materials (20-25% of total Fund revenue) is highly variable and is based on the global commodity market. In recent years, recyclable materials have sold at historically high prices allowing the City to use the additional revenue (among other factors) to avoid rate increases, help fund necessary capital improvements at the MDF, contribute to designated reserve accounts and ensure the financial sustainability of the enterprise fund.

PROPOSED RATE OPTIONS

Staff has carefully reviewed projected revenues and expenses, programmatic impacts, and contractual obligations to establish a base adjustment to collection service rates necessary to cover the needs of the enterprise. The detailed rate study underlying this base rate recommendation is contained in Attachment 1 to this report. Beyond the base rate adjustment, the City has received a \$3 million State grant and staff has conducted an extensive cost/benefit analysis for potential anaerobic digestion (AD) to renewable biofuel technology and seeks direction from Council on this cutting-edge technology. Proposed rate options for two rate years (RY) are being presented to cover each of these cost components.

Option #1 – Base Rate Adjustment:

The proposed base rate increase is 4.95% for RY2015 (April-December 2015) and 3.95% for RY2016 (January-December 2016). This option covers inflation, contractual obligations to NRWS, necessary capital improvements at the MDF, new commercial and residential food composting programs, adjustments to collection rates for commercial cart customers, and projected decreases in collection service and materials sales revenues. Active and successful commercial customers participating in the new commercial food composting program can reduce their collection costs by up to 25% compared to commercial customers who choose not to participate and capture the organic fraction of the waste stream (i.e., food scraps and soiled paper). As detailed later in this staff report, it is also recommended in the base rate adjustment that commercial cart collection service rates be increased by an additional 5% per year over a five-year period to reach long-term parity with comparable per gallon charges for commercial bin service.

Option #2 – Rate Adjustment to Support Anaerobic Digestion to Biofuel Technology:

This option would add 1% to the base rate adjustment for RY2016 to prepare for the net impact of construction and operation of AD to renewable biofuel technology at the MDF. Thus, if this option is selected by Council, the rate increase would be 4.95% for RY2015 and 4.95% for RY2016.

Once the City Council has provided direction concerning the above options, staff will prepare a Proposition 218 notice listing the proposed rates and distribute it to all property owners and rate payers for a 45-day review period. Please refer to Attachment 2 to this report for rate tables showing the impact on residential rates and commercial rates for the base rate adjustment for RY2015. Staff intends to request final Council consideration of rates at a public hearing on March 17, 2015 for rates to become effective April 1, 2015 (RY2015) and January 1, 2016 (RY2016).

MAJOR FUND IMPACTS SINCE LAST RATE-SETTING PROCESS

As noted above, solid waste and recycling collection service rates were last increased by 4.85% in July 2011. Since that time several changes, both one-time and recurring, have impacted the Solid Waste and Materials Diversion Enterprise Fund (SW Fund). While not all the impacts have been favorable for City solid waste ratepayers, the

overall net impact to the SW Fund has been very favorable. This has allowed the SW Fund to avoid annual rate increases while providing sufficient funding for several major and necessary capital improvements to the MDF. Below is a brief summary of the major SW Fund impacts, with major one-time impacts listed first followed by recurring impacts:

One-time and/or Nonrecurring Major Impacts:

1. MDF Capital Improvements -- Several major capital improvement projects (CIPs) were funded and/or completed for the MDF since 2010. The most important and largest capital improvement project for the MDF is the covered compost or CASP (covered aerated static pile) and stormwater system upgrade project currently funded to \$5.91M (beyond CASP bunkers and stormwater upgrades, this project includes funding for an enclosed organics receiving building, organics pre-processing line and related engineering, permit and CEQA preparation costs). Completed MDF CIPs since 2010 total approximately \$1.45M and include the following: environmental mitigation upgrades* (i.e., two large particulate enclosures for the grinder and screener, enhanced bird control) for the wood/composting processing area (\$610K), addition of 20,000 square foot concrete pad and 400 feet of fencing for southwest corner of MDF (\$407K), an electrical transformer upgrade (\$123K), MDF lighting upgrades (\$113M), exterior/interior concrete repair (\$85K), replacement of the above-ground weigh scale (\$82K), and electrical trenching work (\$34K). * Please note that NRWS contributed 50% of environmental mitigation upgrades costs (approximately \$305K).

2. High Materials Sales Revenue -- The SW Fund benefitted greatly from better than expected, historically high prices for recyclable materials sold from the City's MDF in recent years. For City FY2009/10, the City's gross revenue from material sales was \$5.48M and reflected "middle of the road" pricing from the previous ten-year period. Starting with FY2010/11, each of the succeeding four City fiscal years outperformed the historical commodity pricing levels (\$6.27M in FY2010/11, \$6.68M in FY2011/12, \$6.35M in FY2012/13 and \$5.89M in FY2013/14). If one uses the \$5.48M material sales revenue figure as representing the long-term historical average commodity pricing for recyclable materials sales, this means that the SW Fund benefitted from a cumulative \$3.27M in "windfall" gross revenue (note: by contract, 30% of material sales are paid to NRWS, or approximately \$981K of this \$3.27M figure).

3. Accumulated Accounts Receivable Write-Off -- The City's Finance Department recently conducted an analysis and determined that the accumulated write-off for uncollectable revenue in the SW Fund from FY2004/05 through FY2012/13 is \$955,685. While the annual uncollected revenue has vastly improved in both total dollars and percentage of bad debt from its peak in City FY2010/11 (\$351,035 representing a 2.5% level of bad debt in the SW Fund) to the recommended write-off for FY2012/2013 (\$17,431 representing a 0.1% level of bad debt in the SW Fund), the full negative impact will need to be realized in the current City FY2014/15. This one-time cumulative \$956K impact of uncollectable revenue will negatively impact the SW Fund net operating position and has been fully accounted in the current rate analysis and will effectively eliminate the impact of the SW Fund's operating gain of \$985K at the end of City FY2013/14.

4. NRWS Cost Review Impact -- The second contractual "Cost Review" process conducted in CY2011 and applicable to CY2012 through CY2015 was favorable to the City rate-payer in that it "reset" the base capital and operating payment to NRWS. This was particularly true for the impact on CY2012 where the base capital and operating payment to NRWS was reduced by approximately \$135K. This one-time adjustment was largely driven by adjusting out impacts for growth from the first cost review process that did not come to fruition due to the severity of the economic downturn. While the second cost review process did include higher payments to NRWS due to projected growth impacts for CY2013, CY2014 and CY2015, the "reset" of the base contractual costs was very significant to the fund, particularly as the adjustment provided for ongoing reduced operational costs.

5. Pay-off of Solid Waste Revenue Bonds -- In May of 2014, the City Council approved an early retirement for a 15-year, \$7.5M bond issuance that had funded the City's purchase of the Napa Materials Diversion Facility (MDF) in 2004. Council resolution R2014-73 authorized use of \$891,261 in undesignated SW Fund reserves to retire the bond four years early. Because the bond was funded at a 5.65% interest rate, the early retirement means a savings of \$572,852 in avoided interest for the City rate payer.

Recurring Major Impacts:

1. Fully Indexed Mitigation of Damage to City Streets by Refuse & Recycling Vehicles -- In the City's previous rate setting, the cost of damage to City streets from heavy refuse and recycling vehicles was calculated at approximately \$1.6M per year (2009 dollars). These costs have been fully incorporated in the SW Fund collection service rate structure and have been indexed for inflation to \$1.84M in the current City FY 2014/15. The \$1.84M/year is \$284K/year more in annual costs than the previous rate-setting process had accounted for (\$1.84M/year less \$1.6M/year for 2009 repair costs) and currently represents 10.6% of budgeted collection rate revenue.

2. Adjusted SW Fund Contribution to the General Fund -- In City FY2012/13, the SW Fund transferred out \$774K to the City's general fund to pay for the cost of support services provided by the general fund to the SW Fund. In City FY2013/14, this annual contribution was adjusted down significantly to \$544K and then went down slightly again in City FY2014/15 to the current contribution level of \$480K based on the City's most recent City-wide cost allocation study. The current SW Fund contribution represents a savings to the City rate payer of approximately \$294K per year as compared to the SW Fund's peak contribution level (\$774K/year-\$480K/year = \$294/year reduction in costs).

3. Increased Gate Fee Revenue -- In City FY2009/10, the MDF's gross gate fee revenue (i.e., fees charged to self-haul and jurisdictional users of the MDF combined with MDF direct materials sales such as compost, topsoil and gravel) was \$877K. Due to a combination increased self-haul and jurisdictional usage of the MDF, enhanced MDF direct materials sales and some Council-approved gate fee increases, the gross gate fee revenue grew to a high of \$1.42M in City FY2012/13. Although the actual gate fee revenue dropped to \$1.28M in City FY2013/14, staff is projecting the gate fees to rebound to \$1.42M for RY2016 as new or existing customers bring additional materials to the MDF for processing (Sonoma Garbage, hauler for the City of Sonoma, is an example of a current MDF user who has committed more ongoing tonnage to the MDF

for processing). While increased volumes coming to the MDF do mean higher contractual processing payments by the City to NRWS, there is still a substantial ongoing positive net revenue impact to the SW Fund, particularly as compared to FY2009/10 gate fee revenue levels.

4. Low Annual NRWS Contractual Inflatons -- One of the major reasons that the SW Fund was able to avoid annual rate increases since 2011 is the difference between the projected and actual inflation indices (CPI, PPI and Fuel). Because the NRWS contractual costs account for approximately two-thirds of the annual operating expenses, even small savings compared to projected inflation levels result in significant avoided costs to the City rate payer. While the previous 3-year rate setting assumed a conservative projected average inflation of 3% per year (9.3% cumulative cost increase from RY2009/10 through RY2011/12), the actual cumulative contractual inflation during the last six-year period (FY2009/10-FY2013/14) was 6.4% when cost review-related adjustments are factored out. While this very low cumulative inflation rate can be traced to the multi-year impact of the national economic meltdown, the net recurring impact is that current inflation-based payments are approximately \$305K per year lower than if the projected 9.3% inflationary impacts had occurred.

DIVERSION AND RATE IMPACTS OF NEW DIVERSION PROGRAMS

Background:

The Integrated Waste Management Act of 1989 is commonly referred to as "AB 939." AB 939 required a minimum 50% landfill diversion level by the year 2000. The City's most recently annual diversion study places the City at a 65% diversion as of calendar year 2013. More specific details on individual programs can be found in Section 2 of the current rate study (see Attachment 1 to this report).

In 2011, AB 341 was signed into law and set a statewide goal of 75% landfill diversion by the year 2020. In 2012, the City of Napa passed its own Disposal Reduction Policy (R2012-100) as well as a sustainability plan (R2012-99) that paralleled the State goals locally and set a local policy target of achieving a minimum 75% recycling and composting level by the year 2020.

In September of 2014, the governor signed AB 1826 into law. AB 1826 requires mandatory organics diversion for large generators by April of 2016. The law has a progressively stringent timetable so that by the year 2020, nearly every food service establishment, including small generators, will be required to divert their food waste from landfills. The two new programs described below are expected to capture approximately 7,000 tons of food scraps and soiled paper for composting at the City's MDF and are expected to increase the City's recycling and composting level by 7-8% cumulatively. It is fair to say that the City and generators of organics within the City of Napa cannot reasonably expect to comply with local and state policy goals and requirements by the year 2020 without implementation of these expanded organics composting programs. This is the reason that both programs described below are part of the proposed base rate adjustment described in this staff report.

1. Expansion of Commercial Food Composting Program:

Beginning July of 2011, the City directed NRWS to implement a pilot commercial food collection and composting program. The program has grown from 15 participating businesses to 45 businesses serviced up to two times per week. The proposed expansion would provide a new commercial collection vehicle for NRWS to provide up to 100 stops per day, five days per week. As described in detail in Attachment 4 to this report, this expansion is expected to add an average of thirty businesses per quarter and would capture nearly 1,000 tons of food scraps and soiled paper for composting in RY2015 and just under 4,000 tons of additional commercial organics in RY2016. By the end of 2016, the program is expected to capture and compost just under 5,000 tons of commercially generated organics and seeks to have approximately 200 local businesses participating in the program.

In order to provide sufficient incentives for commercial customers to participate in the expanded commercial food composting program, a 25% rate savings is recommended for successful participation as compared to unsorted municipal solid waste (MSW) commercial rates. This means that in addition to the annual costs to be paid to NRWS for providing the expanded collection service (approximately \$189,118 for nine months of RY2015 and \$232,615 for twelve months for RY2016), there will be reduced commercial collection revenue impacts for the program to be successful. According to the independent program study (see Attachment 4 for full report), the reduced revenue impact will be \$116,350 for RY2015 and \$288,770 for RY2016. There are some positive revenue and cost offsets projected from the program. Disposal tips fees are projected to be reduced by \$29,124 in RY2015 and by \$232,048 in RY2016. Finally, because more organic materials is collected and composted, there is a slight increase projected from the increased compost sales with the program study projecting \$6,313 in additional material sales revenue in RY2015 and \$25,954 in RY2016.

The overall net cost of the expanded commercial food composting for RY2015 is \$270,031 and \$373,629 in RY2016. On a total cost per diverted ton basis, RY2015 is projected to cost \$298 per diverted ton (\$270,031 in net costs/906 tons) and lowers dramatically to \$81 per diverted ton (\$373,629 in net costs/4,631 tons) by the end of RY2016. This is due to a number of factors, most importantly is the assumption of steady growth of the program as it ramps up from 45 business to 200 businesses (or more) by the end of 2016. Each business added to the program represents additional diversion of commercial organics while most of the fixed program costs remain unchanged.

Using a simple figure of \$170,000 to represent 1% of current collection rate revenue over a twelve month period, expansion of the commercial food composting program requires a 1.5% increase in collection rates in RY2015 and a 2.2% increase for RY2016.

2. Citywide Expansion of Residential “Co-collected” Food Composting Program:

Beginning in late May/early June of 2013, the City (and part of unincorporated Napa County) began a residential food composting pilot program. Residents along two trash routes in the Browns Valley neighborhood (approximately 1500 households) and one

trash route in the Silverado Resort area (approximately 800 households) were given a special kitchen pail for food scraps and instructions on how to participate in the voluntary program. The basic approach of the residential pilot program was to educate residents about the expanded “compostable” materials (i.e., food scraps and soiled paper products) now to be accepted for curbside composting. The industry terms this “co-collection” because the additional compostable food scraps and soiled paper are accepted and collected along with traditional yardwaste without requiring an additional collection cart or truck. Said another way, the brown cart for traditional yard waste expands to include other compostable organic material like food scraps and soiled paper to truly become a full “compost” cart.

Results from the pilot residential area have been tracked and a detailed survey was sent out about five months after the initial pilot program kick-off. The response to the survey was very high with approximately 1 out of every 4 homes in the pilot area returning the survey. The residential pilot survey result confirmed that approximately two-thirds of the households were actively participating in the residential food composting program. Of the two out of three households that were participating in the pilot program, residents estimated that the volumes of trash in their grey trash carts went down by an average of 24%. Information was compiled from the surveys for non-participants as well in an effort to better understand the underlying reasons for non-participation in the program.

Based on the experiences from the pilot residential co-collection program, the City requested a service proposal from NRWS to expand the program Citywide starting April 1, 2015 (to correspond with RY2015 rate adjustment as well as revised compost permit and technology at the MDF).

Because the residential food composting program does not require new collection equipment (same brown cart used previously for yardwaste is utilized), new trucks (same trucks previously used for residential yardwaste are utilized) or new ongoing labor (same drivers as traditional residential yardwaste collection), the major program costs are almost exclusively nonrecurring “start-up” costs. For RY2015, the nonrecurring program costs were \$179,000 with \$105,000 for kitchen pails, \$30,000 for labor to distribute the new kitchen pails, \$22,000 for printing of detailed program brochures and \$22,000 for postcard postage/printing and brochure design costs. During the 9 months of RY2015, the program is estimated to capture an additional 1,500 tons of compostable residential food scraps and soiled paper that otherwise would have been collected as trash and sent to landfill disposal. The 1,500 tons of additional residential organics collected and composted at the MDF are projected to increase materials sales revenue by \$10,000, decrease disposal fees by \$96,000 and increase compost processing costs by \$37,000. The resulting net cost for RY2015 is \$130,000.

For RY2016, the projected quantity of additional residential organics is projected to increase by approximately 2,000 tons (full twelve months of collection vs. nine months for RY2015) and remain at that level or higher annually thereafter. The 2000 tons per year of additional composting and diversion from landfill should increase the City’s overall diversion rate by a little more than 1% per year (the impact is “doubled” in the sense that each additional ton of residential organics diversion displaces what was previously a ton of landfill disposal). Because the additional compostable tonnage

increases from 1,500 tons to 2,000 tons and the nonrecurring expenses do not apply to RY2016 or later, the residential co-collection food composting actually results in a positive net “gain” of \$62,000 per year (please see attachment 1, section 4B for more details).

Using a simple figure of \$170,000 to represent 1% of current collection rate revenue over a twelve month period, the citywide residential co-collection food composting program requires a net 0.76% rate increase in RY2015 and results in a net 0.36% decrease for RY2016.

3. Enhanced Collection of Food Scraps from Special Events within the City

Currently, there is no established service rate for food composting from special events that take place within the City of Napa. It is proposed that a new food composting rate be set at 50% savings from applicable municipal solid waste service at special events. This type of incentive would give special event organizers sufficient incentive (and penalties for contamination) to consider a three-stream approach to waste reduction at special events based on a recycling, compost and landfill (aka “trash”) collection system to maximum recycling and composting levels and minimize landfill disposal costs and impacts from special event. More detail and analysis regarding collection and composting of food scraps from special events is presented in section 1c of Attachment 4 to this report. Because both the tonnage and revenue impacts are highly variable and minimal to the overall Fund and City diversion goals, the possible minor revenue impact has not been assumed in the proposed base collection service rate.

PROPOSED 5-YEAR ADJUSTMENT FOR COMMERCIAL TRASH CART RATES

In the course of developing the proposed commercial food scrap collection rates, it was confirmed that the City’s current rates for commercial solid waste cart service are understated by approximately 25% compared to the rate for the comparable cost per cubic yard of solid waste bin service. This discrepancy presents a problem for implementing the commercial food scrap collection program in that the program must contain an economic incentive for the restaurants to put in the time and focus required to participate. Staff is recommending that the City Council adopt a 5-year phased plan to increase the rate for commercial solid waste cart service by 5% per year, in order to bring the commercial cart rate into alignment with the rates for bin service. (See report in Attachment 4 for more information.)

The impact on a typical commercial business with a 95-gallon solid waste cart emptied one time per week, would be an increase of 5% from the current rate of \$73.95 to \$77.65 (an increase of \$3.50 per month). This increase is independent of the overall rate increase being recommended for RY 2015. Under the 5-year phase in plan, in RY2016 the cost for the same 95-gallon cart would increase by another 5%. This would continue through RY2019 when the 5-year phase in would be complete.

OPTION # 1 – BASE RATE ADJUSTMENT

The Solid Waste and Materials Diversion Fund comprises a \$24-26M annual operation which includes an \$18-22M annual contract with NRWS for the collection and processing of waste and recyclable material. Operating an enterprise fund of this size and complexity requires careful budgeting to ensure that revenue derived from collection rates and material sales cover the costs of collection, recycling processing and disposal of waste. Collection rates are typically adjusted annually to reflect increased costs of operation and variability in revenue.

The primary components of the base rate adjustment are as follows:

1. Contractually required base cost and annual inflation adjustment
2. Projected revenues (without rate adjustment or new programs)
3. Impact of Reduced Payment for Materials Expenditure
4. Net impact of new programs (Commercial and Residential Food Composting)
5. Replenishment and/or annual contributions to reserves per SW Fund Fiscal Policy

These components are described briefly below and are supported by more detailed analysis in Attachments 1, 3, 4 and 5.

1. Contractually Required Base Cost and Annual Inflation Adjustment

As a result of the second NRWS Cost Review process, base costs were increased by \$31,802 in CY2014 and will increase again by \$16,736 (plus inflation) in CY2015. Additionally, an overall contractual inflation increase of \$220,000 between February 2012 and February 2014 (net 1.9% overall increase) is reflected in the annual base costs since the last rate increase was implemented. The change of 1.9% is the result of the Cost Review increases as well as combined contractual increases in the fuel index, the Producer Price Index (PPI) and Consumer Price Index (CPI). As has been the practice in previous rate setting processes, a 3% inflation increase is estimated for RY2015 and another 3% increase for RY2016. The result of projected inflation adjustments is a total annual increase of approximately \$242,000 in the fixed contractual operating costs for NRWS for nine-months of RY2015. However, because the City began paying some operating capital costs on a fixed ten-year payment schedule in October 2005, the last quarter of CY2015 (October through December 2015) reduces the capital operating payments to NRWS by approximately \$279,000. The net impact of all three factors is a \$200,000 net increase in costs for RY2015 (increase of \$220,000 in contractually inflated base costs since last rate setting, an increase of \$17,000 in cost review payment for growth impacts in CY2015, increase of \$242,000 assuming a 3% inflation escalator for nine months of April through December 2015 and a decrease in operating capital costs of \$279,000 for RY2015). The net impact cost increase of approximately \$200,000 equates to a 1.6% cost (\$200,000 in increased net costs divided by a prorated \$127,500 for 1% of collection rates over a nine-month period).

For RY2016, there are no additional cost review-based impacts to consider. A 3% projected contractual inflation adjustment over the twelve-month period of January through December 2016 results in a cost increase of approximately \$282,000.

However, because the operating capital costs reduction continue during the first year of the existing contract extension for contract (calendar) year 2016, the City rate payer will see a one-time, nonrecurring savings of \$1,238,000 in contractual operating capital costs. As will be described later in this report, the one-time \$1,238,000 nonrecurring reduction in contractual operating and capital costs is fully absorbed by the need for the one-time nonrecurring capital cost of \$1,920,000 for the covered compost and stormwater upgrade capital improvement project at the MDF. Thus, even when partially offset with a \$536,000 annual contribution to the capital replacement improvement reserve, the nonrecurring need is a net \$146,000 (\$1,920,000 in nonrecurring major capital costs less \$1,238,000 one-time nonrecurring offset and \$536,000 annual contribution to the MDF capital replacement reserve). When the nonrecurring net cost of \$146,000 is combined with the projected contractual inflation costs to NRWS of \$282,000, the combined net impact is \$428,000. The combined net impact cost increase of approximately \$428,000 equates to a 2.5% cost increase (\$428,000 in increased net costs divided by a \$170,000 for 1% of current collection rates over a full twelve-month period).

2. Projected Revenues (without rate adjustment or new programs)

Major revenue projections are described below:

A. Recyclable Material Sales – From FY2009/10 to FY2011/12, the global markets for recyclable materials were in a “bubble” of high prices. In fact, the City gross revenue from material sales increased from \$5.48M in 2009/10 to a high of \$6.68M in FY2011/12 (a \$1.2M positive swing and a cumulative 20.9% over a two-year period). The bubble has begun to deflate as material sales revenue decreased from the FY2011/12 high of \$6.68M to \$5.89M in FY2013/14 (\$790K in lower revenue and cumulative decrease of 12.1% in the subsequent two-year period). The global market for recyclables, particularly on the west coast of the United States, is primarily driven by demand and pricing from China. China’s economy, while still growing, is slowing down from double-digit economic increases. China’s economic cooling off combined with the country’s calculated push to source more waste materials from within the country mean that the steady downward trend in recyclable materials pricing is likely to continue because of China’s impact. Staff (with assistance from independent consultants to the City) have analyzed market trends and project another 4% decrease from FY2013/14 to FY2015/16 and then a leveling off for FY2016/17. In fact, the 4% projected decrease is only half of the more drastic predictions of an 8% reduction from independent consultants hired by the City (i.e., EcoNomics, Inc.). Staff projected a gross materials sales revenue decrease of 4% or approximately \$236,000 (decrease from \$5.89M in FY2013/14 to \$5.41M in FY2014/15). The projected 9-month decrease is \$197,000 for RY2015 and the full \$236,000 for RY2016. The net impact to the City rate payer is somewhat lessened since 30% of the materials sales revenue is paid to NRWS. Thus the net impact is approximately \$166K (70% of 236K) of reduced revenue. All others factors being equal, a \$166,000 reduction in material sales revenue would result in the need for a 0.98% increase in collection rate revenue (\$166,000 in reduced revenue divided by \$170,000 for every 1% of current collection service rates).

B. Solid Waste and Recycling Collection Service Revenue – Prior to any impacts of the recommended base rate increase, the overall projected revenue for nine months of

RY2015 (April through December 2015) is approximately \$12,574,000 and the projected revenue for full twelve months of RY2016 (January 2016 through December 2016) is approximately \$16,723,000. The projected collection revenue has accounted for anticipated bad debt for three lines of service (i.e., residential, commercial, roll-off) and it is shown as an expenditure offset of \$157,000 in RY2015 and \$209,000 in RY2016 (see row 93 of attachment 3).

The projected collection service revenue has fully accounted for “service migration” impacts (i.e., when customers displace trash service with enhanced recycling service and lower billable trash service through changes in size and/or frequency of collection). The projected impacts of growth, economic climate and market share (for non-exclusive roll-off service) have also been factored into the revenue projection for each rate year (see Attachment 1 for more detail). Compared to the most recent actuals (approximately \$16,636,000 for FY2013/14), the projected revenue is slightly higher for RY2015 (\$97,000 for 9-months) and slightly lower for RY2016 (\$87,000 less than FY2013/14 actuals).

The combined result of major non-programmatic revenue adjustments is a projected net decrease of \$100,000 for RY2015 and \$323,000 for RY2016.

3. Impact of Reduced Payment for Materials Expenditure

The negative rate impact of lower materials sales revenue is well document above in this report. One very significant offset to these lower material sales revenue is the City’s agreement with the Northern Recycling Operations & Waste Services, LLC (Northern) operator of the Devlin Road Transfer Station. The City has a processing agreement with Northern that was finalized in July of 2010. The agreement prescribes that certain recyclable materials flow to the City MDF. The agreement also sets payment to Northern for materials delivered to the City MDF for final processing (such as baling presorted, but loose paper fiber) or final marketing and sale of market-ready commodities (such as color sorted glass). The City retains either a small share of the revenue (either 1% or 9% depending on the type and form of the recyclable materials), but the net payment out to Northern is calculated based on the actual revenue received for a given type of recyclable material.

There is up to a six-month lag before increases and decreases in average materials sales pricing are reflected in the final payments made by the City to Northern. Because of this time lag, it is more useful to compare to the actual payments for materials from the City FY2012/13 against the projected payments out for RY2015 and RY2016. In FY2012/13, the City made 1.877M in payments for recyclable materials. If one compares this figure to the projected payments for recyclable materials for RY2015 and RY2016, there is a substantial decrease in the projected expenditures for the Northern recyclable materials delivered to the MDF because they are truly market driven (i.e., when materials sales prices go down, the payments for materials go down accordingly since they are based on a fixed percentage of the actual materials sales revenue received by the City). Thus, the \$1.145M projected for RY2015 is a \$263K reduction in expenditures compared to the prorated actual expenditures from City FY2012/13 (\$1.408M-\$1.145M = \$263K) and a projected \$316K reduced expenditure for RY2016 (FY2012/13 actual payments of \$1.877M less projected RY2016 payments of \$1.561M).

4. Net Impact of New Programs (Commercial and Residential Food Composting):

As described earlier in this report, the base rate proposal includes two new major programs necessary to be compliant with both State and local policy goals. The combined net impact of both programs (expanded commercial food composting and residential co-collected food composting program) is as follows:

RY2015 (Commercial Food Composting Expansion)	= \$270,000
RY2015 (Residential Co-collection Food Composting)	= \$130,000
TOTAL Net New Program Costs for RY2015	= \$400,000

RY2016 (Commercial Food Composting Expansion)	= \$374,000
RY2016 (Residential Co-collection Food Composting)	= (\$62,000)
TOTAL Net New Program Costs for RY2016	= \$312,000

Using a simple figure of \$170,000 to represent 1% of current collection rate revenue over a twelve month period, the total net new programmatic costs requires a 3.1% increase in RY2015 (\$400,000/\$127,500 for the nine month period) and a 1.8% increase for RY2016 (\$312,000/\$170,000 for the twelve month period).

5. Replenishment and/or Annual Contributions to Reserves per SW Fund Fiscal Policy

On June 18, 2013, as part of the process of approving the City's FY2013/14 and 2014/15 budget, the City Council amended an updated the SW Fund's Fiscal Policy (R2013-55). The Fund's Fiscal Policy lays out minimum funding targets for each reserve within the Enterprise Fund as well as a prioritization order for funding each reserve. The following provides the funding and replenishment requirements associated with the base rate projections in the prioritization order prescribed by the Fund's Fiscal Policy (please note that SW Fund's reserves are funded according the City's Fiscal Year and not necessarily a given Rate Year):

A. Liability Reserve:

This reserve is designed to fund liabilities of the City for items related to the operations of the SW Fund. These include costs of litigation related to the closure of the former Coombsville Dump Site. The minimum funding level for this reserve is \$200,000 per the Fund's Fiscal Policy; however, an additional \$150,000 was placed in this reserve based on advice from the City Attorney and Finance Director. No additional contributions to this reserve are recommended.

FY2015/16: No additional contribution required, fully funded.

FY2016/17: No additional contribution required, fully funded.

B. MDF Capital Improvement Projects Reserve:

Funds are set aside in this reserve to pay for planned Capital Improvement Projects (CIPs) at the Napa MDF in excess of \$125,000. This includes new projects required by new regulations, as well as all repair and maintenance of buildings, common areas,

paving, fencing, scales, roof repair/replacement and other MDF components that the City owns or is contractually responsible for maintaining.

The updated six-year MDF Capital Improvement Plan is Attachment 5 to this report. The Fund's Fiscal Policy currently requires a \$536,000 annual contribution to the MDF CIP reserve. The current major CIP at the MDF is the Covered Compost System and Stormwater Upgrades. The overall project budget (with a 10% contingency level applied) is \$7,830,000 with \$5,910,000 already having been appropriated through the current City FY2014/15.

FY2015/16: \$536,000 for annual contribution to MDF CIP reserves
\$1,920,000 for Covered Compost & Stormwater Upgrades CIP

FY2016/17: \$536,000 for annual contribution to MDF CIP reserves

C. Operating Reserve:

The Operating Reserve provides funds to cover unforeseen revenue shortfalls (especially for volatile secondary materials markets), unanticipated expenses and other major unanticipated or emergency expenditures that could not be foreseen during the preparation of the Solid Waste and Materials Diversion Enterprise Fund operating or capital improvement budgets. The SW Fund does not have an "emergency reserve" per se and part of the purpose of the Operating Reserve is to provide such security, particularly in periods between formal rate-setting and when various contingencies might otherwise lead to cash flow difficulties (e.g., prolonged labor strike from solid waste service provider or unanticipated permit or CEQA expense). Lastly, the reserve is sized to provide cash flow in the event of destruction of the MDF that requires the City to process its recyclable and compostable materials at other sites while the MDF is repaired and/or rebuilt. The Fund's fiscal policy demands a minimum 20% funding level based on City budgeted annual operating expenditures less debt service, capital expenses and contributions to the Street Resurfacing Fund.

FY2014/15: Fully funded per calculation on 6/30/14 (current balance as of 6/30/14 is \$4,956,476, based on adopted City budget for FY2014/15)

FY2015/16: Contribution will be recalculated given Fund expenditure budget adopted for City FY2015/16. Unknown at the time of this staff report.

D. Rate Stabilization Reserve:

This reserve provides the City with funds to levelize and/or stabilize solid waste and recycling collection rates to avoid wide swings in rates over time. This reserve has been used by the City Council at times in the past to offset potential rate increases. The SW Fund's Fiscal Policy states that this reserve generally is to be used at the time of rate setting, at the discretion of the City Council. The Operating Reserve is used to cover any unanticipated expenses or revenue shortfalls that must be addressed at other points throughout the rate year/fiscal year. The updated SW Fund Fiscal Policy in 2013 increased the minimum level of this reserve as an offset to the decrease in the minimum level of the Operating Reserve (which was lowered from a minimum 25% level to a

minimum 20%). The minimum funding level for the Rate Stabilization is 7% for City FY 2014/15, 8% for City FY2015/16 and 9% for City FY2016/17. Using the base rate adjustment described in this staff report, the contribution levels are projected as follows:

FY2015/16: Additional contribution of \$178,559 for 8% funding level

FY2016/17: Additional contribution of \$177,460 for 9% funding level

Based on these contribution amounts, the Rate Stabilization Reserve will have a projected balance of \$1,597,137 at the end of FY2016/17. This reserve balance will be important as the City moves into the next contract period and incurs significant costs to replace aging collection fleet vehicles and equipment. More detailed information on Fund reserve policy and funding is contained in Attachment 1, section 5 as well as Attachment 3.

OPTION # 2 – RATE ADJUSTMENT FOR ANAEROBIC DIGESTION (AD) TO BIOFUEL SYSTEM

A detailed description of the Anaerobic Digestion (AD) to Biofuel System was delivered to Council as item 6B of the December 16, 2014 City Council meeting (see Attachment 6 for December 16th staff report without attachments). At the December 16, 2014 City Council meeting, City staff made a presentation describing the technology and the \$3 million grant ready to be awarded to the City from the California Energy Commission (CEC). This included presentations by staff and Zero Waste Energy (technology vendor), and a cost-benefit analysis prepared by Edgar & Associates with input on financing scenario costs by the City's contracted Financial Advisor, Mr. Eric Scriven of NHA Advisors. The City Council voted to accept the CEC grant. This is the first step of many that will be required for the City to complete the work required to design, finance, construct and operate the project.

The City's cost for the project in RY2015 and RY2016 are summarized in the December 16, 2014 staff report (see Attachment 6 to this staff report). However, the financing approach and some minor refinements to the system's overall costs have been updated for this staff report. A financing approach with the no payment during year "zero" of construction (CY2016) has been submitted, at the City's request, by NHA Advisors (see Attachment 7 for updated memo). Based on these updated borrowing cost assumptions and other minor refinements to match the grant project budget in the pending agreement with the CEC, Edgar & Associates has also updated their cost-benefit analysis (see Attachment 8 for the updated cost-benefit analysis for the project).

Based on the updated AD to biofuel 20-year cost-benefit analysis, the mid-range scenario (scenario "B") projects an annual cost of \$153,336 each year during the 20-year operating and financing term. Using a simple figure of \$170,000 to represent 1% of current collection rate revenue over a twelve month period, \$153,336 represents an 0.90% annual net cost. Given the complexities of long-range forecasting in this kind of analysis, staff has rounded the annual cost figure up to a full 1% in option #2 which would be incorporated into Fund's rate base in RY2016.

Staff's Recommendation:

Staff recommends Option # 2 to cover the base contractual and programmatic obligations as well as incorporate the projected annual net cost of the Anaerobic Digestion to Biofuel technology. Staff is basing this recommendation on the clear long-term and superior environmental and sustainability advantages of the AD to biofuel system. The AD to biofuel system also insulates City rate payers from long-term volatility of global fuel prices for its refuse and recycling collection fleet. This is a form of long-term pricing and rate insurance since major increases in future fuel costs would have significant and dramatic rate impacts. If approved, a Proposition 218 notice will be sent to all property owners and rate payers reflecting rate increases shown above under Option # 2.

Council is not setting collection rates with the recommended action. Council is only authorizing a public notice regarding the proposed rates (please see Attachment 9 for draft notice). A public hearing will be held on March 17, 2015 to officially set the rates to be effective April 1, 2015 and January 1, 2016.

FINANCIAL IMPACTS:

The recommended rates will not generate revenues in excess of funds required to provide the services listed and reflect the cost of providing these services. The recommended collection service rates are projected to provide \$626,597 during RY2015 (April through December 2015) and \$868,740 in additional collection service revenue for RY2016 (January through December 2016).

Setting rates for a 2-year period instead of annually would save the Solid Waste and Materials Diversion Fund approximately \$50,000 in the second year by eliminating annual costs of preparing and mailing the Proposition 218 notice and use of outside consultants to perform the annual rate-setting analysis.

CEQA:

When the City Council sets rates in March 2015, a motion will be required for exemption from the California Environmental Quality Act pursuant to Public Resources Code Section 21080(b)(8).

DOCUMENTS ATTACHED:

1. Attachment 1. Detailed Report on the Solid Waste and Materials Diversion Fund.
This report is divided into the following Sections:
 - Section 1. Overview of Services Provided
 - Section 2. Status of City AB 939 Programs and Diversion Efforts
 - Section 3. Status of Grants Received by the City to Increase Recycling
 - Section 4. Status of New Programs and Capital Improvements Planned or Proposed for Calendar Years 2015 and 2016
 - Section 5. Status of Reserves for Solid Waste and Materials Diversion Fund

- Section 6. Projected Revenues and Expenditures for Base Rate (Option # 1)
- Section 7. Proposed Collection Rate Increase (Base Rate Option #1)
- 2. Attachment 2. Proposed Impact on Residential and Commercial Rates for RY2015
- 3. Attachment 3. Two Rate Year Solid Waste and Materials Diversion Fund Revenue and Expense Projections (showing Option #1 proposed base rates)
- 4. Attachment 4. Final Report on Expansion of Commercial Food Composting Diversion Program
- 5. Attachment 5. Six Year MDF Capital Improvement Plan
- 6. Attachment 6. December 16, 2014, Staff Report on Anaerobic Digestion (AD) to Biofuel California Energy Commission (CEC) Grant
- Attachment 7. Updated Napa Renewable Resources Project (NRRP) Financing Analysis
- 8. Attachment 8. Updated 20-year Cost-Benefit Analysis of Anaerobic Digestion to Biofuel System Scenarios
- 9. Attachment 9. Draft Proposition 218 Notice for Recommended Option #2 for RY2015 & RY2016

NOTIFICATION:

Greg Kelley, General Manager, Napa Recycling & Waste Services (courtesy copy)
 Mike Murray, CFO, Napa Recycling & Waste Services (courtesy copy)
 Karen Querin, Napa County Auditor-Controller Office (courtesy copy)
 Greg Pirie, Napa County Local Enforcement Agency (courtesy copy)

RECOMMENDED ACTION:

Staff recommends that the City Council move, second and approve each of the actions set forth below, in the form of the following motion. Move to:

1. Direct the Public Works Director, or his designee, to issue a notice of hearing to all rate payers and property owners of record of the maximum proposed solid waste and recycling collection rates to become effective April 1, 2015 and January 1, 2016.
2. Direct the Public Works Director, or his designee, to schedule a hearing for March 17, 2015, for the City Council to consider solid waste and recycling collection rates to become effective April 1, 2015 and January 1, 2016.

Attachment 1: Status of Solid Waste and Materials Diversion Fund Programs and Detailed Projections for Rate Years 2015 and 2016

Section 1. Overview of Services Provided

The Solid Waste and Materials Diversion Fund (“the Fund”) pays for solid waste and recycling collection services provided by Napa Recycling and Waste Services, LLC (NRWS) in the City of Napa, operation of the City of Napa’s Materials Diversion Facility (MDF) where the recyclables are sorted and marketed, operation of the compost facility at the Napa MDF, and provision of all of the City’s recycling programs including planning and implementing recycling programs at businesses in Napa, the Electronic Waste drop off day, the Recycle More Program, carpet recycling and other programs. The main sources of revenue to the Fund are solid waste collection revenues from residents and businesses, gate fees collected at the MDF from customers delivering yard waste, source separated concrete, wood, and other recyclable materials, and revenue from the sale of recyclable materials, compost, and topsoil from the MDF. Revenues also come from larger users for whom the Napa MDF processes curbside recyclable materials, yard waste and food scraps including the County of Napa and private companies such as Sonoma Garbage Service.

Section 2. Status of the City AB 939 Programs and Diversion Efforts

A. **RECYCLING AND POLLUTION PREVENTION ACHIEVEMENTS IN 2013:**

- In 2013, over 113,000 tons of materials were recycled or composted at the Napa Recycling & Composting Facility. By keeping these valuable resources out of the landfill, the City decreased carbon dioxide emissions by 98,888 metric tons and used 614,575 million fewer BTUs of energy. This is enough energy to power all the houses in Napa for almost three months. Additionally, these savings are the equivalent of taking 19,390 passenger cars off the road and conserving over 11 million gallons of gasoline, helping to fight climate change and reduce our dependency on fossil fuels.¹
- Reduction of 14,466 pounds of harmful air pollution each year from the use of seven clean air (compressed natural gas) collection vehicles.
- In 2013, 2,174 gallons of used motor oil was collected by NRWS’ free curbside used oil collection program, along with 815 pounds of used oil and filters. This is important because one gallon of improperly disposed motor oil can contaminate one million gallons of clean drinking water.

- Recycling and food waste composting at 90 special events in 2013 resulted in a total of 194 tons diverted from the landfill. These events included community crab feeds, Home and Garden Show, 4th of July, Napa Town and County Fair, and Coastal Cleanup Day. The Earth Day Napa event achieved a 94% diversion rate in 2013.
- Our eighth annual recycling award celebration held in April 2014 recognized the best recycling by schools, multifamily complexes, and businesses in the City of Napa as written into our contract with NRWS. Awards totaling \$7,900 were presented to 12 winning organizations.
- A total of 40 groups toured the Napa Recycling & Composting Facility in 2013. In addition, 17 recycling-focused presentations were made at private and public schools.

B. CURRENT STATUS OF CITY'S AB 939 DIVERSION EFFORTS

- Effective January 1, 2009, state law requires use of the per capita disposal and goal measurement system to determine compliance with AB 939. The per capita disposal and goal measurement system measures tons disposed by the City and also evaluates diversion program implementation efforts and results.
- Using this measurement system, the City of Napa's disposal target rate is 7.3 lbs. of solid waste per person per day. The City of Napa's 2013 calculated disposal rate as reported in the annual report was 3.4 lbs. per person per day. City staff calculates that the equivalent diversion rate would be approximately 65% for 2013. Using the per capita measurement system, jurisdictions are discouraged from comparing their own rates with those of neighboring jurisdictions due to the specificity of the per capita disposal targets.

C. NEW PROGRAMS, STAFFING, COST CHANGES AND CAPITAL IMPROVEMENTS MADE 2009-2014

1. New Position: Waste Prevention Representative: The City created the new position of Waste Prevention Representative in FY 2013/14. The position was filled in August 2014. The Waste Prevention Representative will assist businesses, residents, schools and City facilities to increase diversion of recyclable waste and organics such as food scraps. During 2015 the Waste Prevention Representative will be very involved in the roll out of the full scale Commercial Food Scrap Diversion Program to restaurants and other food scrap generators in the City. The Waste Prevention Representative will also be working with multi-family complexes and commercial businesses during 2015 and 2016 to increase diversion of recyclable materials and reduce contamination in the recyclables being collected.

2. New Recycle More Program: In April 2013 the City commenced the Recycle More Program to collect electronic waste, metal appliances, oversized metal items, and used cooking oil from residences by appointment. In November 2013 the program was expanded to include collection of clothing, other textiles (such as linens, bedding, and towels), shoes, belts, purses, handbags, backpacks, hard cover books,

compact discs (“CD’s”), digital versatile discs (“DVD’s”), tapes, toys and other similar re-useable items. For calendar year 2014 (January thorough October) the program has collected 321 tons of electronic waste, metals, textiles and re-use items and 277 gallons of used cooking oil.

3. Pilot Commercial Food Scrap Diversion Program: The City authorized NRWS to begin a pilot commercial food scrap diversion program in August 2011. The initial pilot program collected food scraps from 12 restaurants and other food scrap generators. The program expanded gradually and by February 2013 50 restaurants and food scrap producers were participating. During a typical month the program diverts an average of 50 tons of food scraps. The food scraps are composted at the Napa MDF. As described in Section 4 below, the City is planning to expand the pilot to a full-scale commercial food scrap diversion program beginning in April 2015. At its full-scale roll out, the program is projected to serve 250 restaurants and other food scrap generators and to divert approximately 1,800 tons of food scraps per year. The full roll-out is expected to be completed by the end of calendar year 2016.

4. Pilot Residential Food Scrap Diversion Program: During 2013 the City authorized NRWS to conduct a pilot residential co-collection program to add food scraps to the yardwaste collection program. The pilot commenced in June 2013 and was conducted on two residential yardwaste collection routes serving approximately 1,500 homes in the Browns Valley area of Napa. The co-collected organics (food scraps and yardwaste) were composted at the Napa MDF. The pilot program provided some data on the quantity of food scraps that residents would place in the yardwaste container in the event the program was implemented on a city-wide basis. As noted in Section 4 below, the City is planning to expand the pilot into a full-scale residential food scrap diversion program beginning in April 2015.

5. Funding of 100% of Code Enforcement Officer: The Fund pays the costs for 1.0 FTE of a Code Enforcement Officer plus a vehicle for the Officer. The Code Enforcement Officer investigates problems of overflowing solid waste containers, locations where solid waste accumulates and there is no collection service, and issues notices of violation as needed. The Officer also investigates other issues of violations of the Napa Municipal Code related to solid waste and recycling.

6. 2011 Cost Review For NRWS: The City’s contract with NRWS calls for two Cost Reviews to be performed during the life of the contract, one in 2008 and one in 2011. The final report on the 2011 Cost Review was presented to the City Council February 7, 2012 and the Council approved the recommended adjustments to NRWS’s compensation as shown below in Table 1. Note that these affect calendar years 2012-2015.

Table 1. Summary of 2011 Cost Review Recommendations

Item	Item Description	Recommended Adjustment 2012	Recommended Adjustment 2013	Recommended Adjustment 2014	Recommended Adjustment 2015
#1	Additional Carts For Service Migration	\$0	\$0	\$0	\$0
#2	Proposed Elimination of Performance Bond	\$0	\$0	\$0	\$0
#3	Proposed Curbside Collection of Electronic Waste	\$0	\$0	\$0	\$0
#4	Potential Program for Textile Recycling		\$0	\$0	\$0
#5	Residential Service Growth	(\$52,253)	\$13,554	\$16,108	\$16,108
#6	Multi-Family Service Growth	0	\$0	\$0	\$0
#7	Commercial Service Growth	(\$82,864)	\$14,438	\$15,694	\$628
#8	State Fees for Sale of Finished Compost*	\$200.00	\$0	\$0	\$0
	TOTALS	(\$134,917)	\$27,992	\$31,802	\$16,736

* As noted above, NRWS will also be paid, in arrears, for the actual mill assessment paid each calendar year for compost sold from the MDF, and for any annual increase in the cost of the compost facility license fee in excess of \$100 per two year license (up to a maximum of \$300 per two-year license as established by AB 856).

As shown in Table 1 above, the Cost Review process re-set the base Capital and Operating Cost payment to NRWS by adjusting out impacts for growth projected in the 2008 Cost Review, that never occurred due to the severity of the economic downturn. The 2011 Cost Review also projected a small amount of growth in the commercial and residential sectors, for 2013-2015.

These changes to the Operating and Capital Cost payment for NRWS have been factored into the costs described below in Section 6 (B) 4 and in Row 78 of Attachment 3.

7. Carpet Diversion Program: In August 2011 the City commenced a carpet and carpet padding diversion program. Originally the City authorized NRWS to purchase roll off boxes with lids to store and haul the used carpet and to keep it clean and dry. The carpet was hauled “loose” in the roll off boxes to a company in Sacramento for recycling. Due to changing market prices and terms for used carpet, the City later authorized NRWS to purchase two down-stroke balers so the carpet could be sorted and baled prior to shipment to markets located in Sacramento. Carpet recycling is still an evolving enterprise in California and in other states. There are many types of carpet. The two types that can be sold by the City are Type 6.0 and Type 6.6. About one-third of the collected carpet is 6.0 and another third is 6.6. The remaining one-third consists of other types of carpet that are not currently recyclable and must be delivered

to the transfer station to go to the landfill. As the carpet market evolved over the past two years, the prices that were averaging \$96 per ton (for types 6.0 and 6.6) fell to \$32 per ton. At that lower price, it would be uneconomical for the City to continue the carpet diversion program. In addition, operational challenges include keeping the carpet clean and dry. If the carpet is not clean and dry, the buyer deducts from the purchase price it pays the City. City staff contacted the Carpet America Recovery Effort (CARE), A 501 C(3) corporation whose mission is to divert at least 40% of the used carpet that is being landfilled. Staff inquired if there was any way to continue the carpet diversion program and was able to secure assistance from the CARE Rural Program for Napa's carpet recycling program. The City was able to qualify for assistance because it currently disposes of less than 200,000 tons of carpet per year (and is therefore considered "rural" under the rules of the program). Under the CARE Rural Program, NRWS is now placing the collected carpet in lidded trailers delivered to the Napa MDF by the CARE program. The CARE program provides the trailers at no charge to the City and then hauls the carpet to the processor (Green Waste located in San Jose), also at no charge to the City. There, the carpet is baled and sold to end markets. Any revenue received from sale of the carpet is retained by the CARE program, since the CARE program is paying for the trailers, the hauling of the carpet and is making the arrangements to market the carpet.

8. MDF Capital Improvements: As new light industrial uses have moved in to properties near the Napa MDF, staff determined there was a need to improve odor control at the composting facility and in the ponds that treat the water used in the compost process. The issues of bird control and visual screening also needed to be addressed. During 2012-2014 the City completed environmental mitigation improvements in and around the wood and composting processing area of the MDF including construction of two large particulate enclosures for the grinder and the screener plus enhanced bird control. The cost was \$610,000 with the City and NRWS each paying half the cost.

Additional Capital Improvements made at the MDF since 2010 include: addition of a 20,000 square foot concrete pad and 400 feet of fencing for the southwest corner of the MDF (\$407,000); an electrical transformer upgrade (\$123,000); MDF interior and exterior lighting upgrades (\$113,000); exterior and interior concrete repair (\$85,000); replacement of the above-ground weigh scale (\$82,000); and electrical trenching work (\$34,000).

Concurrent with the installation of these improvements, the California Air Resources Board was studying potential new regulations for discharges to air from composting facilities. Several alternate methods for capturing and treating discharges to the air of volatile organic compounds and particulate are currently available including placing finished compost "caps" on outdoor compost piles, using fabric covers on the piles, and a method called "covered composting" wherein the compost piles are placed in a fully enclosed building. During FY 2011/12 the City retained CH2MHill to assess the options available to the City for the composting of yardwaste, food scraps, pomace, manure, wood and other materials that would meet both the anticipated new stormwater

regulations (see Item 8 below) and the anticipated future changes to the Bay Area Air Quality Management District (BAAQMD) regulations for composting facilities. The final report was issued in August 2012. Based upon the results of the CH2MHill study, City staff determined that specific stormwater improvements and construction of a covered compost system would enable the City to comply with both the new stormwater regulations and the anticipated changes to the BAAQMD regulations for the foreseeable future. See Item #10 below for the City's work to develop the covered compost system and stormwater improvements.

9. Early Retirement of Series 2004 Revenue Bonds For Purchase of Napa Materials Diversion Facility:

When the Napa MDF was constructed, it was owned 50% by Napa Garbage Service (NGS) (the company that held the City's collection contract during the 1980's and early 1990's which was owned by the Baccigalupi family) and 50% by the City. The City repaid NGS for the land purchase and construction of the facility through the collection rates. The City-NGS contract gave the City the right to purchase NGS's half of the facility at the end of the contract. The City exercised this right in 2004, using revenue bonds to finance the purchase. The bonds were issued at an interest rate of 5.65%, which was a good rate in 2004. The bond indenture allowed the City to retire the bonds early, beginning in August 2013, with no financial penalty. In May 2014 the City Council voted to pay off the bonds as of June 30, 2014, using funds from the bond reserve account, debt service account and approximately \$891,261 from the Fund's undesignated fund balance (Operating Reserve). This saved approximately \$572,852 in interest costs for the ratepayer due to current low interest rates.

10. Covered Compost System and Stormwater Improvements: From 2012-2014 the California Water Board conducted workshops and prepared a draft of new water and wastewater discharge requirements for the state. The draft was issued for comment and state staff also held workshops to receive comments. The City submitted comments along with other local government agencies and private companies that would be affected by the new regulations. The final new stormwater regulations were issued in 2014. The Napa MDF is subject to the new regulations. As noted above, the CH2MHill study identified the MDF improvements required to comply with the new Water Board regulations, as well as the description of the Covered Aerated Static Pile (CASP) compost system.

The CASP system will provide a fully enclosed composting area where food scraps, pomace, manure and other materials that can produce odor, will be received, pre-processed, and then composted in concrete bunkers operated in an enclosed facility. The facility will use forced air to aerate the compost in the concrete bunkers, which will promote the composting process. The existing composting system, consisting of outdoor windrows (referred to as "turned windrows" because the aeration is accomplished through manual turning of the windrows by loaders) will still be used during the transition to the CASP system, but will be reserved for composting traditional public self-haul yardwaste that does not contain food scraps.

Construction of the new stormwater improvements will be conducted as soon as the CASP system is completed and operational; this is projected to be in June 2015. At that time, the outdoor windrow compost piles that currently occupy a significant footprint of space on the MDF property will be transferred to the CASP concrete bunkers for final composting. Work will then commence to fill in two of the four existing ponds used to capture and treat water runoff from the site. Two large ponds will be constructed to replace the four existing ponds. This work will be conducted over the summer months of 2015 during the dry weather. The plan is to have these stormwater improvements completed prior to the rainy season in the autumn of 2015.

The total project cost for the stormwater improvements and the new covered compost system is \$5.91 million which includes the following key components as well as overall project engineering, permitting and CEQA document preparation costs: \$1 million for the receiving building, \$200,000 for a new electrical transformer, \$900,000 for the organics (food scraps, manure, etc.) processing line, and \$2 million for the covered compost (CASP) building, bunkers and aeration system. City staff anticipates the construction of all these improvements will be completed in 2015. These improvements are being funded using a combination of funds from the City's MDF Capital Improvement Project (CIP) Reserve (described in Section 5 below) as well as the one-time non-recurring savings from the one-year extension of the existing City-NRWS agreement. The extension through calendar year 2016 creates a reduction in operating capital payments to NRWS of \$279,000 in RY 2015 and \$1,238,000 in RY 2016. See Attachment 5 for the six-year MDF Capital Replacement Plan showing this project as well as other Capital Improvement Projects planned for the MDF site over the next several years.

11. Adjustment of General Fund Costs Allocated to the Materials Diversion and Solid Waste Fund:

Each City department as well as the Enterprise Funds for solid waste and water, pay their share of overall City costs as determined by a Cost Allocation Study. At the time of the last rate setting in 2009, the Fund paid approximately \$774,000 per year to the City General Fund for all the support services provided to the Fund. In FY 2013/14 this cost allocation was adjusted to \$544,000 based upon a new Cost Allocation Study. For FY 2014/15 the allocation to the Fund is \$480,000 based upon the City's most recent Cost Allocation Study. This represents a savings of \$64,000 compared to costs in the prior fiscal year, and a savings of approximately \$249,000 per year compared to the peak cost allocation of \$774,000. See Section 6 B (1) below for the RY 2015 and RY 2016 costs to the Fund.

Section 3. Status of Grants Received By The City To Increase Recycling

A. CITY/COUNTY PAYMENT PROGRAM

In FY 2013/14 CalRecycle awarded a grant to the City in the amount of \$20,587 (which was matched by the City). This program provides funding to cities and counties to implement beverage container recycling and litter abatement projects. One of the primary goals of the grant is to increase beverage container recycling by implementing programs that increase recycling opportunities and that educate people in the Napa community about recycling beverage containers. The City of Napa is using the City/County Payment Program funds to support existing recycling programs. The funds cover costs associated with recycling equipment/infrastructure to increase recycling opportunities and capture beverage containers, fund staff time to support and promote recycling in the City, cover costs associated with public education materials that inform the public about beverage container recycling and advertise beverage containers as a prominent and important item to be recycled, and support litter abatement expenses. These grants have historically been awarded annually, and a new round of funding is expected during 2015 for FY 2015/16.

B. USED OIL RECYCLING BLOCK GRANT

The City of Napa was awarded \$21,812 by CalRecycle for FY 2014/15 to promote the recycling of used motor oil and filters within the City of Napa. Most grant dollars go toward public outreach and supporting Napa's Certified and non-certified Collection Centers that collected 19,454 gallons of used motor oil and 3,858 oil filters in FY 2013/14. The curbside used oil program collected and recycled another 2,124 gallons of used motor oil and 544 oil filters in the same period. In these outreach efforts City staff emphasizes one-to-one outreach, mostly bilingual. Ongoing examples include outreach booths or tables at the Napa DMV, the Napa-Solano flea market (cost shared with the City of Vallejo) and the Napa Town and Country Fair, as well as at workplace events, Binational Health Week events, apartment complexes, and a wide variety of other venues. Using these funds the City also contributes toward participation in two regional programs, the Adult ESL "Family Car" lessons and the "Riders Recycle" campaign. The curbside collection promotion includes a live bilingual hotline.

Section 4. New Programs and Capital Improvements Planned or Proposed For Calendar Years 2015 and 2016

A. FULL SCALE COMMERCIAL FOOD SCRAP DIVERSION PROGRAM

As noted above, the City has been conducting a pilot food scrap diversion program since August 2011. In 2011, a new change to AB 939 was signed into law (AB 341) that established a statewide goal of diverting 75% of the solid waste stream from landfill by 2020. The law required CalRecycle to prepare a statewide plan for meeting the 75% diversion goal. The draft plan relied heavily on diverting food scraps from landfill throughout the state.

AB 341 also required all businesses and multi-family complexes of 5 units or more, generating over 4 cubic yards of solid waste per week, to participate in a recycling

program. This requirement became effective July 1 2012. Due to Napa's comprehensive commercial and multi-family recycling program already in place, staff identified only 9 generators that did not have a recycling program when AB 341 became effective. Recycling programs were offered to these generators. In addition, the City was already providing (via NRWS) the data collection on the results of the commercial recycling program plus the education program required by the new law.

In September 2014 another change to AB 939 was signed into law (AB 1826) requiring all businesses generating 8 cubic yards or more of food waste (referred to as "organic waste" in the statute) per week, to participate in a food scrap diversion program beginning April 1, 2016. Businesses generating 4 cubic yards of organic waste per week must begin participating in a food scrap diversion program by January 1, 2017. Businesses producing 4 or more cubic yards of commercial solid waste per week must implement an organics diversion program by January 1, 2019. Businesses generating 2 or more cubic yards of commercial solid waste may be subject to the same requirement, at the discretion of CalRecycle, beginning in 2020.

AB 1826 also requires the City to begin offering a full-scale commercial food scrap recycling program on or before January 1, 2016. Given this requirement, staff is recommending that the existing pilot commercial food scrap program be scaled up to include all Napa food scrap generating businesses and that the program begin April 1, 2015.

Food scrap programs take time and attention to implement. Care must be taken to train each restaurant to (a) segregate the food scraps from other trash, and (b) make sure there are no plastics or glass in the food scraps. This latter requirement is crucial, because the food scraps will be composted and made into soil amendment. The soil amendment (compost) cannot be sold if there are pieces of glass or plastic in the finished product. The food scrap diversion program must also take into account the flow of food through a restaurant's kitchen, from raw food preparation, through cooking and clearing of leftover food scraps from customers. The program must fit into the chef's operations and provide a convenient method to segregate the food scraps from trash throughout the food preparation process, while taking up the least amount of space in kitchens that are usually already very full of equipment, personnel and supplies. Training of all restaurant management and staff is key to a successful program. And finally, the training and monitoring of the program must be continued periodically as staff and management turnover are frequent in the restaurant business.

Due to the time required to implement the food scrap diversion program at each restaurant, staff anticipates that by the end of calendar year 2015 there will be approximately 80 new restaurants (in addition to the 50 pilot program participants) participating in the commercial food scrap diversion program diverting an additional 906 tons of food scraps. By the end of 2016, the program will be implemented at 250 Napa restaurants, grocery stores and other food waste generators as required by AB 1826 and is projected to divert 1,885 tons of food scraps per year.

Staff and EcoNomics, Inc. developed a proposed rate for food scrap collection services based upon the costs proposed by NRWS, results from the pilot program, plus costs and results of programs in other cities in California. (See Attachment 4 “Final Report on Expansion of Commercial Food Composting Diversion Program” that describes the calculation of the costs and proposed rates for this program.) The goal of the food scrap collection rates is to provide a sufficient economic incentive to the restaurant or grocer to take the time and effort required to separate the food scraps from other trash and from recyclable materials, and to make sure there is no contamination (e.g. glass or plastics) mixed in with the food scraps. The rate must also take into account the costs for providing the program including education and training of each restaurant or grocer, collection of the food scraps, composting the food scraps and marketing the finished compost.

Based upon analysis of the above factors, staff is recommending that the rate for collection of food scraps provide the food scrap generator an economic incentive approximately equal to 25% when compared to the regular commercial collection rate for municipal solid waste. This rate provides revenue to pay for the program and also encourages the restaurants to separate the food scraps in order to save money on their collection service.

Currently there is no city-established rate for collection and composting of food scraps from special events that take place within the City. Based upon analysis of the program costs plus review of the time, focus and effort required by special event organizers to implement an effective food scrap diversion program, staff and EcoNomics are recommending that a special event food scrap rate be established that provides a savings of approximately 50% when compared to existing solid waste collection rates. This level of potential savings would give event coordinators sufficient incentive to take a “three-stream” approach to waste reduction at special events. This would involve placing and emptying three types of containers throughout the event site: one for recyclable materials, one for food scraps and soiled paper and one for solid waste. There would also be a “negative incentive” in that if contamination of the food scrap containers exceeds the City’s limit of 10%, the food scrap container collected from the event would be considered “solid waste” and the event would be charged accordingly. This charge would cover the City’s cost for the transfer station tip fee if the food scraps are too contaminated to be composted. See Section 1c and Exhibit 11 of Attachment 4 for more information. Due to the variability of the number, size and type of special events and the fact that establishment of a food scrap diversion program at events is voluntary, no increase in commercial collection revenues has been projected due to collection of food scraps at special events.

The net cost for implementation of the full-scale commercial food scrap diversion program is estimated to be \$270,030 for April-December 2015. This includes the following: reduced collection revenue of \$122,159, increased composting costs of \$23,500, avoided transfer station tipping fees of \$52,623, and increased revenue from sale of finished compost and special event food scrap collection rates of \$12,122. The net program costs projected for calendar year 2016 are \$372,116 and include the

following: \$296,516 in reduced collection revenues, \$97,172 for increased composting costs, \$33,700 in increased revenue from sale of finished compost and from special event food scrap collection rates, and \$218,975 in saved tip fees at the transfer station for the 1,885 tons of food scraps diverted by the program. Please note that these “net” cost figures do not appear in any single row in Attachment 3. This is because each segment of the overall net cost has been factored in to the appropriate cost or revenue row in the spreadsheet. Example: The avoided transfer station tipping fees of \$52,623 for RY 2015 have been factored in to the Transfer Station Tipping Fees in Row 74.

B. FULL SCALE RESIDENTIAL FOOD SCRAP DIVERSION PROGRAM

As described above, NRWS has been conducting a pilot residential food scrap diversion program since June 2013. As part of reaching the 75% diversion goal by 2020 staff is recommending that this pilot program also be expanded to full-scale implementation beginning in 2015. The program provides a pail to each residence for storage of food scraps. Each resident will empty the pail periodically into their existing yardwaste cart. The food scraps mixed in with the yardwaste will then be collected by the existing yardwaste truck and delivered to the Napa MDF for composting.

Since this program can be implemented using the existing yardwaste collection trucks and the yardwaste carts already in use by residents, the cost of implementation is lower than that for the commercial food scrap program. Staff estimates the net cost will be \$110,000 for RY2015. This net cost takes into account that the program will be operational beginning in April 2015 and includes: \$149,000 for pails, brochures and postcards, \$30,000 for pail distribution city-wide, \$37,000 for composting of the additional tonnage collected, a decrease of \$96,000 in tipping fees at the transfer station for the 1,500 tons of food scraps estimated to be collected by the program, and an increase in revenues of \$10,000 from selling the additional compost that will be created by the program.

For RY2016 staff is projecting a net “gain” or revenue from the program of \$90,000. This is calculated as follows: \$54,000 in added composting costs, \$130,000 in avoided transfer station tipping fees due to diversion of 2,000 tons of food scraps during the full calendar year (versus 2015 when the program will only be operational for 9 months of the year), and \$14,000 in revenue from sale of additional compost created by the program.

As with the commercial food scrap diversion program above, this “net” program cost for RY 2015 and the net program revenue for RY 2016 cannot be found in a single row in Attachment 3 due to the fact that each part of projected cost or revenue has been factored into the spreadsheet in the appropriate line item. Example: The increased revenue from sale of additional compost created by the program appears in Row 18 titled “MDF Gate Fees”, which includes revenues from sale of the compost created at the MDF.

C. WRITE OFF OF ACCUMULATED BAD DEBT FROM FY 2004/05 THROUGH FY 2012/13

NRWS bills customers for solid waste and recycling collection services and the revenue from customer payments comes to the City. The City-NRWS contract requires NRWS to make efforts to collect bad debts that are not paid by customers. NRWS utilizes a system of reminders and letters to customers that become delinquent in their payments. At a certain point, NRWS turns the account over to a collection agency. In FY 2010/11 the uncollected bad debt was \$351,035 or approximately 2.5% of the annual collection revenue. Staff and NRWS worked jointly along with the City's Code Enforcement officer to systematically notify customers, ask them to pay their balances, and if the balances were not paid, to stop collection services and cite the customers for code violation for lack of service. This focused effort greatly reduced the amount of bad debt. Two years later (FY 2012/13) the bad debt had fallen to \$17,431, or approximately 0.1% of the annual collection revenue.

During 2014 the Finance Department conducted an analysis and determined that the accumulated write-off for uncollected/uncollectable revenue in the Fund from FY 2003/04 through FY 2012/13 was \$955,685. In order to "write off" this amount, the Fund balance for the start of FY 2014/15 has been adjusted downward by the Finance Department by this amount.

D. ADJUSTMENT OF COMMERCIAL MSW CART RATES

In the course of developing the proposed commercial food scrap collection rates it was confirmed that the City's current rates for commercial solid waste cart service are understated by approximately 25% compared to the rate for the comparable cost per cubic yard of solid waste bin service. This discrepancy presents a problem for implementing the commercial food scrap collection program because the program must contain an economic incentive for restaurants to put in the time and focus required to participate. Staff is recommending that the City Council adopt a 5-year phased plan to increase the rate for commercial solid waste cart service by 5% per year, in order to bring the commercial cart rate into alignment with the rates for bin service. (See the report in Attachment 4 for more information.)

The impact on a typical commercial business with a 95-gallon solid waste cart emptied one time per week, would be an increase of 5% from the current rate of \$73.95 to \$77.65 (an increase of \$3.50 per month). This increase is independent of the overall rate increase being recommended for RY 2015. Under the 5-year phase in plan, in RY 2016 the cost for the same 95-gallon cart would increase by another 5%. This would continue through 2019 when the 5-year phase in would be complete.

E. ANAEROBIC DIGESTION (AD) PROJECT

Staff made a presentation to the City Council on December 16, 2014 about the \$3 million California Energy Commission (CEC) grant to the City for the proposed

Anaerobic Digestion (AD) project. This included presentations by staff, Zero Waste, and analysis of costs prepared by Edgar Associates with input on financing scenario costs by the City's Financial Advisor, Eric Scriven of NHA Advisors. The City Council voted to accept the CEC grant. This is the first step of many that will be required for the City to complete the work required to design, finance, construct and operate the project. For more information on the AD project, see the Agenda Report for Item 6B on the December 16, 2014 City Council agenda on the City's web site.

In the weeks since December 16 one change has been made to the information presented to the City Council. Staff and the City's Financial Advisor, NHA, have developed a financing scenario wherein the City would issue bonds for the AD project but pay no debt service for the year while the project is being constructed. The reason is that the projected revenues from the project would not begin until the AD facility is operational, and those revenues could then be used to offset the costs of operation and debt service. This increases the overall cost of the project and is described in Attachment 7 "Updated Napa Renewable Resources Project (NRRP) Financing Analysis". The revised debt service cost has been factored into Attachment 8 "Updated 20-Year Cost-Benefit Analysis of Anaerobic Digestion to Biofuel System Scenarios".

In order to fund the AD project, City staff is recommending that the City Council approve Option #2 described in Section 7 below. This would add 1% to the base rate increase for RY 2016 of 3.95% required for Fund operations. The total rate increase for RY 2016 would then be 4.95%. The added 1% would be used for the AD project.

Section 5. Status of Reserves for Solid Waste and Materials Diversion Fund

On August 5, 2008 the City Council adopted a Fiscal Policy for the Solid Waste and the Materials Diversion Enterprise Fund (Resolution R2008 153C) that included specific Reserve Policies and funding targets for each of the Fund reserves. At that time the City Council also approved rates for FY 2008/09 that allowed for all of the reserves to be fully funded by the end of FY 2008/09 (with the exception of the Capital Maintenance and Capital Replacement Reserves which each required an annual contribution in order to fund Capital Maintenance Items and to eventually replace or significantly retrofit the entire MDF at the end of its useful life).

On June 16, 2009, as part of the rate-setting process for FY 2009/10 - FY 2011/12, the City Council adopted revisions to the Fiscal Policy for the Fund (Resolution 2009-82). The main changes made were to exclude from calculation of the 25% floor for the Operating Reserve the following items: capital maintenance project costs, capital replacement project costs, and costs for street repair due to damage from heavy solid waste vehicles. Other refinements to the policy included specifying the procedure for placement of funds left over after completion of capital projects.

On June 18, 2013, as part of the process of approving the City's FY 2013/14 budget, the City Council again amended the Fiscal Policy of the Fund (Resolution 2013-55). The

Contribution per year
Balance at 6/30/14:
\$2,546,764
FY 2015/16 Contrib.: \$536,000 + \$1,920,000
FY 2016/17 Contribution: \$536,000

Funds are placed in this reserve to pay for planned Capital Improvement Projects (CIP) at the Napa MDF. This includes projects required by new regulations, as well as all repair and maintenance of buildings, common areas, paving, fencing, scales, roof repair and other components that the City owns or is contractually responsible for maintaining, in excess of \$125,000. The updated Six-Year Capital Improvement Plan is in Attachment 5.

Pursuant to the City's standard policy for replacement of capital assets, the amount of the annual depreciation on the Napa MDF facility is placed in this reserve in order to provide for major renovation, modernization and/or rebuilding of the MDF at the end of its useful life. The MDF offices and the materials diversion sorting building were constructed in approximately 1993 and were purchased by the City in 2004. Most materials diversion facilities in California were constructed in the mid to late 1980's or the 1990's, so they are only 25-30 years old. Some have been updated and renovated, but most have not reached the age where major renovation or reconstruction is required. It is likely that the Napa MDF will require major renovation, modernization and/or rebuilding at the age of 30-40 years.

Technology changes require replacement of the MDF sorting equipment over time as the waste stream and diversion goals change, and as the existing equipment reaches the end of its useful life. The recommended goal amount for this reserve assumes the City will procure an MDF operator/solid waste and recycling collection contractor approximately every ten years. As part of that procurement, the selected contractor will be asked to design and recommend a set of new sorting equipment for the MDF. As occurred in 2004/2005, the selected contractor will finance the purchase and installation of the new processing equipment over ten years and the City will include the capital cost of the equipment in its payments to the contractor. This is the system that is currently in place and it is working well. The next replacement of the MDF sorting equipment is planned for approximately 2017 as part of the next collection and MDF operating contract.

In order to meet the above-described costs, the Fiscal Policy requires an annual contribution of \$536,00 to this reserve. As noted in Section 2 C 8 above, work is underway at the MDF on the Covered Compost (CASP) System and Stormwater Improvements. The budget for this project (including a 10% contingency) is \$7,830,000. A total of \$5,910,000 has already been appropriated through the current Fiscal Year 2014/15.

The projected contributions to this reserve for FY 2015/16 are \$536,000 for the regular annual contribution required by the Fiscal Policy, and \$1,920,000 for the Covered

Compost and Stormwater Improvements Project. For FY 2016/17 the projected contribution is \$536,000, which is the regular CIP reserve contribution required by the Fiscal Policy.

C. Operating Reserve **Minimum: 20% of Operating Expenses**
(\$4,956,476 for FY 2014/15)
(To Be Determined for FY 2015/16)
Balance at 6/30/14: \$ 4,956,476
FY 2014/15 Contribution: None Required
FY 2015/16 Contribution: To Be Determined

The Operating Reserve provides funds to cover unforeseen revenue shortfalls (especially for volatile secondary materials markets), unanticipated expenses, and other unanticipated or emergency expenditures that could not be foreseen during preparation of the Solid Waste and Materials Diversion Fund operating budget. The Fund does not have an “emergency reserve” per se and part of the purpose of the Operating Reserve is to provide such security, particularly in periods between formal rate setting and when various contingencies might otherwise lead to cash flow difficulties. This reserve also provides funding in the event of a permit or operational change at the MDF that requires CEQA review. Lastly, the reserve is sized to provide cash flow in the event of destruction of the MDF that requires the City to process its recyclable materials and yard waste at other sites while the MDF is rebuilt.

As described above, the Fund’s Fiscal Policy requires minimum funding of the Operating Reserve at 20% of budgeted operating costs less debt service, capital expenses and street repair and maintenance costs. For FY 2014/15 the required minimum balance is \$4,956,476. The reserve currently has a balance of \$4,956,476 so no additional contribution is required.

City staff will commence preparation of the new 2-year budget for FY 2015/16 and FY 2016/17 in January and February 2015. The total of the FY 2015/16 expenditures for the Fund in the City budget will not be known until the final 2-year budget is adopted by the City Council in approximately May or June 2015. As required by the Fiscal Policy, the Finance Department will calculate and make the appropriate contribution to the Operating Reserve on June 30, 2015.

D. Rate Stabilization Reserve **Minimum: 8% of Collection Revenues**
Increasing to 10% by FY 2017/18
8% For FY 2015/16: \$1,419,676
9% for FY 2016/17: \$1,597,136
Balance at 6/30/14: \$1,241,118
FY 2015/16 Contribution: \$178,559
FY 2016/17 Contribution: \$177,460

This reserve provides the City with funds to levelize and/or stabilize solid waste and recycling collection rates to avoid wide swings in rates over time. This reserve has been used by the City Council several times in the past to offset potential rate increases. The Fiscal Policy states that this reserve is to be used only at the time of rate setting, at the discretion of the City Council. The Operating Reserve is used to cover any unanticipated expenses or revenue shortfalls that must be addressed at other points throughout the rate year or fiscal year. As noted above, the amendments to the Fund's Fiscal Policy in 2013 increased the minimum level of the Rate Stabilization Reserve as an offset to the decrease in the minimum level of the Operating Reserve. The minimum funding level for the Rate Stabilization Reserve is as follows: 7% for FY 2014/15, 8% for FY 2015/16, 9% for FY 2016/17 and 10% for FY 2017/18.

Based upon the projected collection revenue in Section 6 A below, plus the base recommended rate adjustment for RY 2015 of 4.95%, the additional contributions required to be made to the Rate Stabilization Reserve are \$178,559 to achieve the 8% level for FY 2015/16 and \$177,460 to achieve the 9% level for FY 2016/17. With these additions, the Rate Stabilization Reserve will have a projected balance of \$1,597,137 at the end of FY 2016/17.

Section 6. Projected Revenues and Expenditures

Attachment 3 shows all of the projected revenues and expenditures for the Fund for Rate Year 2015 and Rate Year 2016. The following descriptions of the projections refer to Attachment 3. The key revenue and expense line items are described in more detail below. The row numbers from Attachment 3 are included for reference to the actual spreadsheet containing all of the projected Fund revenues and expenses. Some rows were not used in the spreadsheet and only the significant revenues and expenses are described below, so there is not a discussion for every row. Several of the projected figures include cost escalation per the City's Long Term Financial Plan (LTFP). This plan is prepared by the Finance Department and includes the inflation rates to be used by City departments for each cost category included in the City's General Fund budget. In the case of other costs (such as several of the NRWS operating costs) staff has utilized different projected inflation rates that are more applicable to such costs. All projected revenues and expenses for Rate Year 2015 have been pro-rated in the spreadsheet in Attachment 3 to reflect the 9-month rate year from April 1, 2015 (when new rates are proposed to become effective) through December 31, 2015. The Rate Year 2016 figures are for the full 2016 calendar year.

A. PROJECTED REVENUES

The main revenue streams for Solid Waste and Materials Diversion Fund are:

- Collection revenues including:

- i. Payments from customers for residential, multi-family, commercial and roll off services
- ii. Payments from City Facilities for collection services
- iii. Payments from Napa Valley Unified School District (NVUSD) for collection services
- Revenues from sale of recyclable materials, compost and other materials marketed from the MDF (the City retains 70% and NRWS receives 30%)
- Gate fees received from public customers delivering loads of recyclables, wood, yard waste, concrete, etc. to the Napa MDF
- Payments from Napa County for processing recyclable materials and yard waste at the Napa MDF
- Processing fees paid by other regional users of the Napa MDF (e.g. Sonoma Garbage Service, North Bay Corp., Cultured Stone)

(1) Collection Revenues (Row 16)

Collection revenues are projected for six types of customers in the City: residential, commercial, multifamily, roll off/compactor, Napa Valley Unified School District (NVUSD) and City facilities. In the discussion below, the estimated annual revenue for RY 2015 and RY 2016 is presented along with the assumptions and data that inform the projections. City staff, consultants and NRWS all participated in reviewing the revenue history and trends to determine the projections shown below. A summary of the projected revenue for each rate year is shown in Table 2. The purpose of the revenue projection is to identify the amount of revenue that the City can expect from each service sector under existing conditions, likely future changes and trends. This data, along with information on all the projected expenses for the Fund, is analyzed to determine the amount of the rate increase required to cover all the costs for Fund operations for Rate Years 2015 and 2016. Therefore, the figures below are all shown prior to (i.e. they do not include) the proposed rate increases for RY 2015 and 2016.

The projected revenue for RY 2015 is for the period April 1 through December 31, 2015 (9 months) and is therefore, significantly lower than the revenue projected for RY 2016, which is a full calendar year. The figures and the discussion in this section do not include adjustments for new recommended programs such as the full scale commercial food scrap diversion program described in Section 4A above or for proposed adjustments to the commercial solid waste cart rates described in Section 4D above. This is because the purpose of this section is to describe the projected revenue forecast, prior to new program implementation. The programmatic adjustments are included in the figures in Row 16 in Attachment 3

The figures shown below for bad debt are listed separately in Row 93 of Attachment 3, which shows the total projected bad debt for all service sectors combined.

Table 2. Collection Revenue Projection Prior to Recommended Rate Increase

Service Line	Projected Revenue RY 2015	Bad Debt % RY 2015	Bad Debt \$ RY2015	Projected Revenue RY 2016	Bad Debt % RY 2016	Bad Debt \$ RY2016
Residential	\$5,684,171	1.5%	\$85,262	\$7,532,766	1.5%	\$112,991
Multi-family	\$1,041,431	0%	\$0	\$1,333,031	0%	\$0
Commercial	\$3,562,238	1.5%	\$51,521	\$4,549,424	1.5%	\$68,241
Roll-Off	\$2,152,450	1.0%	\$20,549	\$2,739,933	1.0%	\$27,399
NVUSD	\$218,238	0%	\$0	\$297,385	0%	\$0
City Facilities	\$225,000	0%	\$0	\$270,000	0%	\$0

a. Residential Revenue

Residential revenue consisted of \$7,590,391 or approximately 46% of the total collection revenue for calendar year 2013. (Total collection revenue was \$16,591,155 for 2013.) Residential revenue accounts for the largest percentage of collection revenue to the Fund.

The projections for RY 2015 utilize a base of \$7,603,894, which is the NRWS-billed revenue for FY 2013/14. This is the latest data available. Residential revenue grew an average of 0.5% per year for the period 2008 through 2013. The average number of residential accounts has increased from 21,154 in 2008 to 21,703 in 2014. The base revenue is projected to increase by 0.5% (per this historical trend) for RY 2015 and again by 0.5% for RY 2016.

Residential customers can choose to use 20, 35, 65 or 95 gallon carts for solid waste. The rate charged increases with the size of the cart. Over the past 6 years there has been a trend away from using the two largest size carts (65 and 95 gallons) and toward using the two smallest sized carts (20 and 35 gallons). This trend is projected to continue in RY 2015 and RY 2016. The switch to the smaller size carts decreases the amount of revenue from the residential sector. Therefore, the revenue projection contains a reduction of \$7,040 for migration from 95-gallon carts to 65 and 35-gallon carts. This is based on the historical annual average migration since 2009 and the conservative assumption that 70% of customers migrating will choose the 35-gallon cart and 30% will choose the 65-gallon cart. This assumption means that 20 of the 511 current customers with 95-gallon carts will migrate to smaller carts each year.

The residential revenue projection also contains a decrease of \$67,916 in revenue for customers migrating from 65-gallon carts. This is based upon historical average annual

migration since 2009. Per the historical trend, this assumes 30% of those leaving the 65-gallon cart will choose the 35 gallon cart and 70% will choose the 20 gallon cart. This assumption means that 340 of the 5,914 customers with 65-gallon carts will migrate to smaller carts each year.

The total projected decrease in residential revenue due to cart migration in RY 2015 is \$84,024. This has been prorated for the 9-month rate year. Historically, each sector of service (residential, commercial, multi-family and roll off) experiences some bad debt each year. Row 93 shows the projected bad debt for all the service sectors combined. The projected level of bad debt for the residential sector is 1.5%. This is based upon historical trend data provided by NRWS.

For RY 2016 the new base residential revenue of \$7,578,895 was used. To this, growth is projected to add 0.5% per the historical trend. Also following the historical trend for cart migration, \$84,024 has been deducted for RY 2016. Bad debt is again projected at 1.5% per the historical trend.

b. Multifamily Revenue

Multifamily revenue consisted of \$1,423,451 or approximately 8.6% of the total collection revenue for calendar year 2013. Multifamily revenue accounts for the fourth largest percentage of collection revenue to the Fund.

The projections for RY 2015 utilize a base of \$1,416,912 which is the amount billed by NRWS for FY 2013/14. This is the latest data available. No growth in multifamily revenue is projected for RY 2015 or RY 2016. The historical trend between calendar years 2012 and 2013 showed a drop of 3% in revenue for this sector. Revenue from the multifamily sector has never recovered to pre-recession levels (\$1,652,000 for 2008 and \$1,652,002 for 2009) despite consistently low vacancy rates (under 2.5% for the past 3 years and 1.7% for 2014) and rate increases totaling 14.7% between 2009 and 2011 (a 4.95% rate increase became effective July 1, 2009, a 4.90% rate increase became effective July 1, 2010, and a 4.85% rate increase became effective July 1, 2011).

The drop in multifamily revenue is likely due to increased recycling efforts including the activities of waste “brokers” and “consolidators”, which are private companies that manage solid waste and recycling service for multifamily properties in order to reduce costs. The work of the brokers and consolidators usually results in reducing the number, size and/or frequency of collection for bins and carts on the property.

The number of multifamily accounts in Napa has been relatively constant at 88-91 accounts for the period 2012 through 2014. Despite approvals for construction of over 150 new multifamily units (not complexes) in the past few years, none have been built. One new project is in the approval process and may be constructed, but it is not likely to be finished and occupied during the 2-year rate setting timeframe.

City staff and NRWS representatives have noted that some complexes are changing from bin and cart service to compactor service. This would shift revenue from the multifamily sector to roll off service because compactors are collected by roll off trucks.

Due to all of the above factors, the City is projecting a 2% decrease in multifamily revenue for RY 2015. Historically the multifamily sector has little to no bad debt, so no bad debt is projected for this service line.

For RY 2016, the new base revenue used in the calculations is \$1,388,574 (again, this is prior to the RY 2015 proposed rate increase being applied). The City's new Waste Prevention Specialist will focus on the multifamily sector to assist multifamily properties to increase recycling and reduce solid waste collection service. It is likely this will result in further decreases in multifamily revenues by calendar year 2016. The City is projecting a 4% decrease (\$55,543) in multifamily revenue for RY 2016 due to this work by the Waste Prevention Specialist, and the trends toward increased recycling, use of compactors, and increased activities by waste brokers and consolidators. No bad debt is projected for the multifamily sector for RY 2016.

c. Commercial Revenue

Commercial revenue billed by NRWS for FY 2013/14 was \$4,586,989. This is the latest data available. Commercial revenue is the second largest rate revenue stream to the Fund. The historical annual average growth in commercial revenue for 2008 through 2013 was 1.22%. Post-recession (2009 through 2013) average annual growth was 1.84%. Note that these relatively small increases are despite rate increases totaling 14.7% between 2009 and 2011. Staff is projecting growth equal to the annual average post-recession growth for RY 2015 and RY 2016.

Trends in the commercial sector include a switch by some businesses from bin and cart service to compactor service, similar to that being experienced in the multifamily sector. Use of waste brokers and consolidators is also continuing to occur, creating reductions in service levels at several businesses. Most of the City's "Top 25" businesses (the 25 largest commercial accounts) are already recycling significant portions of their solid waste. The opportunity remains for at least one of the Top 25 businesses to implement a significant recycling program, which would reduce revenue to the Fund. City staff plans to continue its efforts to increase recycling in the commercial sector and the new Waste Prevention Specialist will be active in this effort during RY 2015 and RY 2016.

During the past one to two years some changes in the largest commercial accounts included the remodel of the downtown Town Center, which resulted in significant tenant leakage. The new anchor tenant (Marshall's) and several new higher level tenants have signed leases for space in the Center. This will likely cause a rebound in revenue from the Center once the remodel is completed. The large Dey Labs facility has left the City. The Meritage Hotel completed an expansion project over the past several years and is now looking to expand again. Because the hotel utilizes mostly compactor (roll off) service, the expansions do not significantly affect revenue for the commercial sector.

The new Archer Hotel will be constructed but it will probably not be occupied within the 2-year timeframe of this rate setting. It is also likely to use compactor service and therefore will add revenue to the roll off service line, not to commercial service revenue.

Staff is projecting an overall 2% reduction in commercial revenue for RY 2015 due to continued efforts of businesses to increase recycling and to cut costs, and due to the work planned for the Waste Prevention Specialist to assist more businesses to increase recycling. For RY 2016 the new base revenue used in the projections is \$4,579,650 (revenue projected without factoring in the proposed RY 2015 rate increase) and this is increased by the post-recession average annual historical growth of 1.84%. Staff is projecting a reduction of 2.5% (\$114,190) in revenue due to increased recycling efforts, the activities of waste brokers and consolidators and businesses working to cut costs.

NRWS reports that bad debt in the commercial sector is averaging approximately 1.0%-1.5%. In order to arrive at a conservative projection, staff is projecting bad debt of 1.5% for the commercial sector for both RY 2015 and RY 2016. NRWS and City staff have also identified and discussed the issue of "slow pay" accounts (accounts that pay their collection bills only after 120-150 days). These tend to be the waste broker accounts. City staff will work with NRWS during 2015 to address the "slow pay" issue.

In addition to the commercial revenue projections described in this section, two added adjustments have been factored into the figures in Row 16 "Collection Revenue" in Attachment 3. These are (i) the projected decrease in revenue from restaurants and other food-generating establishments as they begin to participate in the city-wide commercial food scrap diversion program during RY 2015 and RY 2016 described in Section 4A above, and (ii) the projected increase in commercial revenue due to the 5-year phase in of the commercial solid waste cart rate adjustment discussed in Section 4D above. These adjustments to commercial revenue are described in detail in the report included in Attachment 4.

d. Roll Off/Compactor Revenue

In calendar year 2013 NRWS billed customers a total of \$2,739,993 for roll off collection service. Roll off service includes collection of debris boxes and compactors. Staff has used this as the base for making the RY 2015 and RY 2016 projections in order to be conservative. The NRWS-billed figure for FY 2013/14 was 2.04% higher and, for the reasons described below, staff believes the more conservative figure is the better number to use.

The annual average revenue growth in the roll off sector for 2008-2013 was 1.77%. The post-recession (2009-2013) annual average growth was 3.76%. As noted above, these modest increases in roll off revenue growth are despite rate increases totally 14.7% between 2009 and 2011. The roll off sector was particularly affected by the economic downturn, when most construction projects in the City were put on "hold" or cancelled.

Roll off collection service in Napa is non-exclusive. This means NRWS competes with several independent companies for the roll off business at construction job sites and at businesses and residences (e.g. for roofing and remodel projects where a debris box is needed). Pursuant to its contract with the City, NRWS must charge the City-established rates for solid waste and recycling collection in roll off containers and compactors. The City-established rates for solid waste collection are higher than those charged by competitors. The City-established rates for collection of source-separated recyclable construction and demolition materials (e.g. a debris box on a construction site that contains source separated metal or cardboard or wood) are lower than the rates charged by competitors. The City intentionally established lower rates for collection of recyclables to provide an economic incentive to construction sites to comply with the City's Construction and Demolition Debris Ordinance and to increase the City's overall level of recycling. Due to the rate differential, construction job sites frequently split the job and use NRWS to collect the boxes of source-separated recyclable materials and another company to collect the solid waste debris boxes.

Staff is projecting flat roll off revenue for Rate Year 2015. There is not a lot of new construction occurring. The few construction jobs in progress during 2014 are either completed or almost complete. The Community Development Department provided a list of all projects currently in the planning and development process. There are not any large-scale projects planned for the 2-year horizon of this rate setting. The smaller projects will likely continue, however, as noted herein, NRWS is not guaranteed to get any of these projects. If heavy rains occur, roll off business often increases due to an excess of yardwaste, leaves and tree trimmings. However, with the drought continuing, this is not likely to occur.

As noted above, some commercial and multifamily customers are switching to roll off service. This is not likely to create a large swing in the roll off revenue, but it may offset some of the revenue loss from the construction jobs that are ending or recently ended.

For RY 2016 staff is again projecting flat revenue for this sector, using the base revenue of \$2,739,993 (prior to adjustment for the proposed RY 2015 rate increase). Staff is projecting 1% bad debt in the roll off sector for RY 2015 and RY 2016. This is based upon historical trends reported by NRWS.

e. Revenue From Napa Valley Unified School District

The City and the Napa Valley Unified School District (NVUSD) entered into a Memorandum of Understanding in 2005 to have the City include NVUSD in its procurement for a solid waste and recycling collection contractor. NRWS was the selected contractor and provides collection services to NVUSD at a cost that was included in NRWS's proposal to the City. NVUSD pays NRWS (through the City) for processing its recyclable materials and for disposal of solid waste at the Transfer Station. The anticipated revenue from NVUSD for these services in RY 2015 is projected to be \$218,238. The cost for collection services in the City-NVUSD contract is

adjusted by specified inflation indexes each year. NVUSD revenue is projected to escalate by 2.2% per year for RY 2016 to \$297,385.

f. Revenue From Service to City Facilities

Beginning in July 2014 City Facilities are billed directly for the collection services received. (Prior to this time the City facilities were not billed for this service and did not pay the Fund for this service.) This projection is based upon the figures used by staff to develop the latest 2-year budget for the City. The following are the assumptions used.

City facility services are divided into the following 3 categories:

Roll-Off services (provided at Roll Off rates)
Bin and Cart Services (provided at Commercial rates)
Services to Capital Improvement Projects (CIP projects) that are (mostly) road projects

Roll Off services provided by NRWS to the City facilities during calendar year 2012 totaled \$111,856. Bin and Cart Services totaled \$179,738 for calendar year 2012. Services to CIP projects totaled \$27,175 for July through December 2012 (6 months) or \$54,350 for 12 months.

The total of the 3 above-described categories is \$345,944. As noted above, the City has recently created and filled the new position of "Waste Prevention Representative". The Waste Prevention Representative will be working with City facilities to increase recycling efforts and reduce the levels of MSW collection service required. Therefore, in the revenue projection the total annual amount of \$354,944 was reduced to \$300,000 for the first year of the Specialist's work (\$225,000 for the 9 month RY 2015) and to \$270,000 for RY 2016. No bad debt is projected since payments will be made by City departments.

(2) Revenues From MDF Gate Fees and Sales of Compost, Topsoil and Gravel (Row 18)

This category includes revenue from (a) self-haul customers paying the posted gate fees at the MDF, (b) tip fees paid by the County of Napa for processing yardwaste, recyclable materials and food scraps at the MDF, (c) payments from regional recycling and solid waste collection companies delivering materials to the MDF for processing, (d) tip fees paid by Cultured Stone for processing of rock, and (e) the sale of compost, topsoil and gravel produced at the MDF.

Self-haul customers include landscapers, construction companies, roofers and members of the public who bring a broad range of materials to the Napa MDF including yard waste, wood, concrete, and manure. The City stopped accepting self-haul dirt at the MDF as of April 1, 2012. (Self-haul dirt is accepted at the Devlin Road Transfer Station). Self-haul customers pay the posted gate fees at the MDF scale house. The

current gate fees are listed in Table 9 of Attachment 2 “Proposed Impact on Residential and Commercial Rates for RY 2015”.

In 2005, the City signed a Memorandum of Understanding (MOU) with the County of Napa to process curbside and commercial recyclable materials and to compost the yard waste collected in the County. Pursuant to the Agreement the County pays the City of Napa for composting the yard waste. The City pays the County a fixed dollar amount per ton for the curbside and commercial recyclable materials. The value received from sale of these materials roughly covers the cost of sorting and marketing the recyclable materials at the Napa MDF. In 2013 the City began composting foodwaste from the County pilot commercial food scrap collection program. The price currently paid by the County includes the incremental cost of composting the food scraps via the aerated static pile (ASP) method of composting food scraps at the MDF.

The existing MOU with the County of Napa ends in November 2015. City staff is in the process of negotiating an extension of the agreement through the end of 2019. Under the terms being discussed, the County would pay an increase of \$2/ton for yardwaste processing and would pay the current cost for NRWS’s food scrap processing in the existing composting system. The arrangements for processing recyclable materials (glass, plastics, cardboard, paper, etc.) would remain the same. Once the CASP system is operational at the MDF, the County would pay the added incremental cost per ton for composting of food scraps in the City’s new CASP system. This cost will be established as part of the upcoming negotiations between the City and NRWS for a new collection/MDF operations contract.

Depending upon market conditions and availability of other processing options, some local recycling and solid waste collection companies, such as Sonoma Garbage and North Bay Corporation, deliver materials (including yardwaste, food scraps, and/or recyclable materials) to the Napa MDF for processing. These companies usually agree to deliver a large quantity of material over a pre-established period of time and are often offered optimized pricing by the City in recognition of this commitment to use the Napa MDF. The City recently secured a commitment by Sonoma Garbage to deliver a large quantity of yardwaste to the MDF for processing. Sonoma Garbage also delivers food scraps to the MDF for composting.

Compost, topsoil and gravel produced at the Napa MDF are sold to local landscapers, wineries, contractors and the general public. Compost has been sold at an average price of \$6 per ton in the past. The City will be increasing this to \$10 per ton when the CASP system becomes operational in July 2015. As noted above, pursuant to the City’s contract with NRWS for operation of the Napa MDF, the City receives 70% of the revenue from sale of the recycled materials (glass, plastics, paper, and metals), compost, topsoil and other products produced at the MDF and NRWS receives 30% of the revenues. The revenue figures included in Row 18 include 100% of the revenues from sale of compost, gravel and topsoil. The payment to NRWS of their 30% share is described below in the “Expense” section of this report, and is included in the figures in Row 80 of Attachment 3.

The total revenues from MDF Gate Fees and sale of compost and other soil-related products produced at the MDF for RY 2015 are projected to be \$1,049,514 (based upon five months of actual revenues calculated to reflect the 9-month rate year). Staff is projecting \$1,422,993 in gate fee revenue for RY 2016 which reflects an increase of 2.2% per the City's LTFFP. These projections also factor in the impacts of the new full-scale commercial food scrap diversion program and the full-scale residential co-collected organics program.

MDF gate fees are not subject to the Proposition 218 notice requirements and, therefore, may be adjusted by the City Council at any time. The last increase in gate fees was approved by the City Council on May 6, 2014 and become effective July 1, 2014. The gate fees for yardwaste and wood were increased by \$2.00 per ton from \$38.00 per ton to \$40.00 per ton. The minimum charge per load/vehicle was increased by \$1.00 from \$15.00 to \$16.00. Staff is not recommending any additional changes to the amount charged for MDF gate fees as part of this rate setting.

(3) Sale of Secondary Materials (Row 24)

The recyclable materials processed at the Napa MDF include cardboard, junk mail, other types of paper, aluminum, plastic and glass beverage containers, other glass and plastic household containers, film plastics, used motor oil, used cooking oil, and electronic waste. The recyclable materials delivered to the MDF include materials collected in the City of Napa by NRWS, those collected in the County of Napa by NRWS's sister company Napa County Recycling and Waste Services, Inc., those received by Northern Recycling at the transfer station and delivered to the MDF for processing (see Section 6 B 5 below for details about the City's processing agreement with Northern), materials delivered by the public and materials delivered by other recycling and solid waste collection companies in the region. The materials are marketed by NRWS domestically and internationally directly to buyers and often using materials brokers.

During the past eight years the prices for recycled materials dropped significantly in during the 2008/2009 recession, then rebounded to reach an all-time high in 2011/2012. There has been a slow but steady downward trend in materials sales revenues since that time. At the time of the last rate-setting (June 2009), the secondary materials market had just experienced a steep decline in prices (during the second half of 2008). As an example, the price the City received for cardboard fell from \$180/ton in July 2008 to \$20 per ton in December 2008. During early 2009 the markets began to recover, however, it was not known exactly when and to what levels the prices would rebound. During the rate-setting in 2009, staff made conservative projections for materials sales revenue to protect the Fund in the event the recession persisted and materials sales prices did not return to the previous high levels. The following are the materials sales revenues projected in that rate-setting and the actual materials sales revenues realized over the past 5 years (note that the rate-setting projections were made for a period of 3 fiscal years so after that there were no "new" projections): FY 2009/10 projected \$5.0

million, actual \$5.48 million; FY 2010/11 projected \$5.2 million, actual \$6.27 million; FY 2011/12 projected \$5.3 million, actual \$6.68 million; FY 2013 actual revenue \$6.35 million; FY 2013/14 actual revenue \$5.89 million.

Materials sales revenue relies heavily on the international commodities markets for fiber (such as cardboard, white paper and mixed waste paper), aluminum, PET and HDPE plastics and other types of metals and plastics. As one of the fastest growing economies in the world, China has become a major purchaser and user of secondary materials (especially fiber and plastics). Due to the large market share held by China, the actions of that country have a very large influence on international prices for recycled cardboard, paper, plastics, and other materials. Since the City of Napa's materials are sold into this international market, the actions of China have a direct impact on the prices the City receives for recycled materials.

In forecasting materials sales revenues for the next two years, the City's consultant, EcoNomics, Inc., researched domestic and international price trend data and forecasts for the secondary materials markets and other commodities markets. The following is a summary of the key findings. The International Monetary Fund estimates that global commodity prices are already 8.3% lower than at the start of 2014. Across a wide range of commodities, prices are falling and sometimes falling fast. The Bloomberg Commodity Index, which acts as benchmark for commodity investments, fell to its lowest level in five years the week of October 24, 2014. Prices are being pushed down by an increasing supply of most commodities and a weakening global economy.

RISI is a fiber industry trade group that reports on paper prices and trends. RISI reports that buyers of recycled paper in China have been scaling back their purchases in light of that country's economic difficulties. They report that while buyers for Chinese paper mills are still placing orders for recycled cardboard and paper from the United States, "the interest seems to be flagging." This slowdown in shipments to China has allowed U.S. paperboard mills to aggressively drive down the price of recycled cardboard. In addition, U.S. mills actively stocked up on recycled cardboard and paper earlier in 2014, so they now have large inventories and are not actively buying more than the tonnages they have long-term contracts to purchase. This means there is currently more supply than demand for recycled fiber. RISI reports that during 2014 average cardboard prices fell from approximately \$105/ton in January to \$90/ton by the end of October 2014.

Along with the slowdown in demand for recycled materials, China has developed tighter specifications and higher standards for the recycled materials they do purchase. This has been nicknamed "the Green Fence" in the recycling industry. Since supply is ample and demand has slowed, the Chinese paper and plastics companies are getting more selective about the materials they purchase, which means recyclable materials have to be better sorted, with smaller amounts of contamination or no contamination. Paper grades have to be higher to get the same prices that lower grades formerly received.

Secondary materials marketing and pricing is dependent on shipping costs for container ships carrying the recycled materials to China. The Transpacific Stabilization

Association (TSA) is an industry association of all the major shipping lines that transport recycled materials to China. The TSA initiated a shipping rate increase effective November 1, 2014. The TSA's statement said "...the rate hike is needed in light of freight rates that have dropped below break-even levels amid weakening demand and rising costs." The statement went on to say "...low-value, low-margin cargoes, including recyclables, account for up to 40% of the entire market and are moving at rates that do not cover the variable transportation costs."

Increased shipping costs means the net price received for recyclable materials by the City will drop. For example, on a 40-foot export container filled with bales of cardboard, the increased transportation fee will result in an 8-11% drop in the net price received for each ton of baled cardboard. The reference price used to arrive at the estimated percentage decrease in the price received was \$120 per ton for baled cardboard. If the value of the cardboard were to drop to \$60 for a ton of baled cardboard, it would produce a decrease of 20% or greater in the net value received for the cardboard. This is because the increased shipping costs are fixed by the shipping lines regardless of the price paid by Chinese paper mills for the cardboard. This same shipping cost increase applies to all materials that are being shipped to China.

Due to the above-described factors plus other findings of the research, EcoNomics recommended that an 8% reduction in materials sales revenues be projected effective January 1, 2015. This would be calculated based upon actual materials sales revenues realized in FY 2013/14. EcoNomics also recommended that the 8% reduction be continued (revenue would remain flat) for 2016. City staff has chosen to take a different approach and to project a 4% reduction in revenues for RY 2015 (reduction effective March 1, 2015). Staff's projection then holds that 4% reduction steady through RY 2016. Staff's projection is shown in Row 24 of Attachment 3 "Materials Sales". It is \$4,240,572 for RY 2015 and \$5,654,096 for RY 2016.

(5) Total Projected Revenue (Row 210)

The total projected base revenue prior to applying any rate increase is \$18,618,282 as shown in column D of Row 210 in Attachment 3. With the recommended rate increase of 4.95% for RY 2015 (included in both Option #1 and in the staff-recommended Option #2) the RY 2015 revenue would total \$19,085,076. (Row 210, column E in Attachment 3.) For RY 2016 with the Option #1 increase of 3.95%, projected revenues total \$25,862,711. If the City Council approves the staff-recommended Option #2 for RY 2016 (4.95% increase) the total projected revenues would be \$26,027,440.

B. PROJECTED EXPENDITURES

The projected expenses for Solid Waste and Materials Diversion Fund for Rate Years 2015 and 2016 are listed in Attachment 3 from row 50 through row 208 and are described in detail below.

(1) Transfer to General Fund Based on Cost Allocation Study (Row 62)

As described above in Section 2 C 11, the Fund pays for support from other City departments based upon a Cost Allocation Study. The cost for RY 2015 is \$380,688 and the cost for RY 2016 is projected to be \$551,490, which includes an increase of 8.65% for inflation per the City's LTFP.

(2) Street Mitigation/Repair Costs (Row 64)

During the 2009 rate setting the City Council voted to add a cost for repair and maintenance of streets due to damage caused by the weight of the MSW, recycling and yardwaste collection vehicles and the roll-off vehicles. The cost estimate for the annual damage caused by the collection vehicles was \$1.6 million, based upon an analysis performed by Hilton, Farnkopf and Hobson in 2004 and updated in 2009. This cost was phased in over a three-year period. For this rate setting the cost has been indexed for inflation and is projected to be \$1,394,874 for RY 2015 (9-month rate year) and \$1,900,748 for RY 2016. The inflated RY 2015 cost is approximately \$284,000 more in annual costs than the cost in year three of the phase-in, which was FY 2011/12. The street mitigation/repair costs currently represent approximately 10.6% of the Fund's collection (rate-based) revenue.

(3) Transfer Station Tipping Fees (Row 74)

The Devlin Road Transfer Station is owned by the Napa Valley Waste Management Authority (NVWMA) and is currently operated by Northern under contract to the NVWMA. The tipping fee increased by \$1 per ton to \$65 per ton on October 1, 2014. This rate will increase by \$1 per year each October 1. RY 2015 projection is \$1,807,412 and the RY 2016 projection is \$2,296,234. These projections assume that tonnages disposed at the transfer station remain flat with the exception of the savings in tipping fees expected due to implementation of the full-scale commercial food scrap diversion program and the city-wide residential yardwaste/foodscrap (organics) co-collection program described above. In past years a contingency of 5% was included for the transfer station costs. City staff has removed the contingency for rate years 2015 and 2016.

(4) Payments to NRWS (Rows 78-91)

Payments to NRWS to perform solid waste and recycling collection service and to operate the Napa MDF are the largest expense of the Fund. Pursuant to the City's contract with NRWS, costs are adjusted annually on February 1 based upon a specific group of indexes for labor, fuel, supplies, etc. For purposes of this rate setting, staff has assumed 3% annual inflation for the NRWS costs. This is the inflation assumption that has historically been used. It has proved to a prudent assumption, given that these are the largest costs to the Fund. Pursuant to the City's contract with NRWS, the company is compensated in the following six ways:

a. Operating and Capital Cost Payment (Row 78):

NRWS was selected through a competitive procurement process in 2004. They proposed a base price per year to perform all residential, commercial, multi-family and roll off solid waste and recyclables collection in the City as well as operation of the Napa MDF. This price is escalated annually by a weighted group of indexes including the CPI, PPI, fuel and labor indexes. The City's contract with NRWS was originally scheduled to end December 31, 2015. During 2014 the City Council voted to extend the contract by one year on the same terms and conditions (as allowed by the terms of the contract) to December 31, 2016. At the same time, the City Council directed staff to enter into negotiations with NRWS for a new contract. The negotiations are scheduled to begin in early 2015.

The cost for RY 2015 is projected to be \$8,028,225 which assumes an increase in the combined indexes of 3%, effective February 1, 2015 and the final increase listed in the 2011 Cost Review Report (shown in Table 1 above) effective January 1, 2015. For RY 2016 staff projects a 3% increase in the composite of the indexes for the Operating and Capital Cost Payment and a decrease due to the end of the ten-year amortization of NRWS's capital equipment (trucks, other vehicles, wheeled carts, bins, roll off boxes and the MDF sorting equipment) beginning in December 2015. There is no adjustment from the Cost Review Report for 2016. The net cost for RY 2016 is projected to be \$9,755,400.

b. 3% Profit Margin (Row 79):

In addition to the Operating and Capital Cost payment, the City pays NRWS a fixed profit margin of 3%. For RY 2015 this expense is projected to be \$240,847. The profit is projected to total \$292,662 for RY 2016.

c. 30% Share of Sale of Recyclable Materials and Compost (Row 80):

As noted above the City splits revenues 70%/30% with NRWS. The projected 30% share of the revenue for rate years 2015 and 2016 is \$1,272,172. This is because materials sales revenues are projected to remain flat for RY 2016 as described in Section 6 (A) 3 above and shown in Row 24 of Attachment 3.

d. NVUSD (Row 81):

As described above, NRWS provides collection services to the school district and is paid by the City for these services. NVUSD pays the City for these costs. Pursuant to the City's contract with NRWS, these costs escalate by the CPI. The cost for RY 2015 is projected to be \$112,991 which is based upon the actuals for FY 2013/14. For RY 2016 the City is projecting an increase of 2.2% per the City LTFP for a cost of \$153,969.

e. Allowance Based Programs and Unit Costs (Rows 82 and 83):

NRWS receives additional compensation for services that are not included in the base Operating and Capital Cost Payment. Allowance Based Programs are those for which

the costs are not escalated annually (E-Waste Recycling Event, Business Recycling Awards Program and the Telephone Directory Recycling Ads). The projected RY 2015 cost is \$99,444 and the RY 2016 cost is projected at \$135,509 which includes an increase for inflation of 3%.

Unit Costs include the premium payment for composting commercial food scraps via the turned windrow system for March-June 2015 and then a premium payment for composting using the new Covered Aerated Static Pile (CASP) system that is projected to be operational by August 2015. The Unit Cost projections include the new tons of food scraps generated by the roll out of the full-scale commercial food scrap diversion program and the expansion of the residential organics co-collection program as described above. Reimbursement to NRWS for payment of the possessory use taxes assessed by the County of Napa for certain equipment at the MDF is also included in Row 83. This cost is approximately \$12,000 per year.

Historically, the City of American Canyon supplied water to the MDF for all operations. However, due to the ongoing drought and the impacts on available water for the Delta, American Canyon cannot provide the quantity of water currently required for all MDF operations (particularly composting operations). Therefore, the City is providing supplemental water (via a water truck) for the MDF. This arrangement of trucking in reclaimed water to the MDF began as a temporary measure but it now appears this will become a permanent part of MDF operations. The cost projected for RY 2015 is \$76,000 and the same cost is projected for RY 2016. The total Unit Cost payments for RY 2015 and 2016 are projected to be \$191,925 and \$272,982 respectively, assuming 3.0% inflation applied for RY 2016.

f. Payment for Processing Cost Over Baseline (Row 84):

NRWS is paid an extra payment per ton for processing tons of materials at the MDF over certain threshold limits described in the City-NRWS contract. The projected cost of the Over Baseline Payment for FY 2015 is \$1,054,372 which includes the cost of composting the additional tons of co-collected organics from the residential program expansion and the increased quantity of food scrap tons from the expansion of the commercial food scrap diversion program. For RY 2016 the cost is estimated to increase by 2.2% inflation (per the City LTFP) to \$1,515,980. (The 2.2% inflation factor has been used instead of 3% because the Over Baseline payment is indexed by the Producer's Price Index and does not include fuel or labor indexes.) In prior rate years staff included a contingency of 10% in the event the Over Baseline costs exceeded the projection. That has been eliminated in this year's projections.

g. Diversion Incentive Payments (Row 85):

With approval of the Third Amendment to the City-NRWS contract, three new Diversion Incentives for NRWS were approved by the City Council. These are the Targeted Incentive (TI) which rewards NRWS with \$100 per new roll off box of source-separated recyclable materials they collect and deliver to the MDF for sorting over and above the threshold level established in the Third Amendment; the Residue Reduction Incentive (RRI) that rewards the company for achieving residue left over after all sorting and

processing operations at the MDF that is lower than a baseline level established in the Third Amendment; and the Collection Incentive (CI) which rewards NRWS for collecting and diverting tons of recyclable materials over and above the baseline level established in the Third Amendment. The purpose of these incentives is to reward increased diversion of materials from the transfer station. The avoided tipping fees provide some funds toward payment of the incentives. The incentives in the Third Amendment are retroactive to 2010. NRWS has already been paid the incentives due to the company for calendar years 2010-2013. The Diversion Incentive payments projected for FY 2015 total \$76,500. These are increased for RY 2016 by 3% for inflation, less \$5,000 due to actuals in prior years and are projected to total \$104,244.

h. Partnership Programs (Row 86):

The two programs commenced in FY 2008/09 for color glass sorting and rigid (#1-#7) plastics sorting required the costs for 4 sorting employee positions at NRWS. The City's actual costs for its 70% share of this cost has been reduced by \$5,000 compared to the cost projected in prior years and is \$103,714 for RY 2015 and \$141,328 for Rate Year 2016 which includes a 3% increase for inflation.

i. Recycle More Program (Row 89):

As described above, NRWS now operates the Recycle More program. The costs for the program include the payment for a new vehicle (panel-type truck with a lift gate) plus certain percentages of the incremental costs for the program as described in the Third Amendment to the City-NRWS contract executed in July 2014. For RY 2015 the projected cost is \$19,125 and for RY 2016 this is increased by 3% to \$26,061.

j. Commercial Food Scrap Diversion Program (Row 91):

Also as described above, NRWS will operate the commercial food scrap diversion program as it is expanded city-wide in 2015 and 2016. Row 91 shows the projected cost of the expanded commercial food scrap program of \$189,119 for RY 2015 and \$231,102 for RY 2016. As noted above, implementation of the full-scale commercial food scrap diversion program is expected by the end of calendar year 2016.

(5) Projected Bad Debt Expense for RY 2015 and RY 2016 (Row 93)

As described in Section 6 A (1) above, bad debt for collection service revenue for rate years 2015 and 2016 was projected based upon historical trends. Row 93 shows the projected cost for the bad debt from all the collection service lines combined. The projected cost is \$157,333 for RY 2015 and \$208,632 for RY 2016.

(6) Payments for Recycled Material to Northern Recycling and Other Companies (Row 98)

As noted above, NRWS markets the recycled materials processed at the MDF. NRWS receives 30% of the revenues from sale of these materials. (This cost is shown in Row 80.) The City also has an agreement with Northern Recycling (a sister company to

NRWS that operates the transfer station under contract to the NVWMA) to process recyclable materials at the MDF. The agreement was approved by the City Council in July 2010. In addition to operating the transfer station and a sorting line for separating construction and demolition debris at the station, Northern also operates a Buy-Back Center at the station that accepts recycled materials and that pays for certain recycled materials. Under the terms of the agreement with the City, Northern agreed to deliver all of the recycled materials from the Buy Back Center (such as cardboard, aluminum, all grades of paper, all plastics, all glass, and all metal cans) to the Napa MDF for final marketing. Northern can also deliver yardwaste to the MDF if it desires. The City pays Northern 61% of the actual prices the City receives for all paper and cardboard and for plastic that are not subject to the California Redemption Value (CRV). For plastic, glass, and aluminum cans, bottles and beverage containers and all other materials subject to the California Redemption Value (CRV deposit), the City pays Northern 69% of the actual prices the City receives for these materials. Since the City splits overall revenues from sale of recycled materials with NRWS 70%/30%, the "net" revenue the City receives from the Northern materials is 9% for fiber and non-CRV plastics, and 1% for CRV plastics, glass and aluminum containers. For RY 2015 staff estimates that the materials delivered by Northern from the transfer station will account for approximately 21% of the total secondary materials sales revenue shown in Row 24 of Attachment 3. The payments to Northern are found in Row 98 of the Master Spreadsheet in Attachment 3. The additional payments in Row 98 are for payments to other companies that use the MDF for processing of materials such as Vallejo Garbage and Sonoma Garbage.

(7) Property Taxes (Row 101)

Historically, the City paid property taxes to the County of Napa for the MDF property. The property was annexed to the City in March 2014. In discussions with the County Assessor's Office staff has learned that the assessment will not be removed until January 2016, so the cost has been included for this rate setting. The County also currently assesses a possessory use tax on NRWS (as operator of the MDF) for certain equipment located at the MDF. The City reimburses NRWS for this cost (approximately \$12,000 per year) as part of the Unit-Based Costs in Row 83 described above. City staff will be holding discussions with County staff during 2015 to clarify both the property tax and possessory use tax assessment issues now that the annexation of the MDF property has been completed.

(8) MDF Scale House Bad Debt Expense (Row 104)

For transactions at the MDF scale house most customers pay using cash or a credit card. Some customers have an account to which the costs are billed. The City generates a monthly invoice for those customers. The estimated bad debt for those billed accounts is \$7,871 for RY 2015 and \$10,651 for RY 2016. This is approximately 0.75% of the total annual MDF scale house receipts.

(9) Expenses for Regular Employees (Rows 107-134)

There are five full time employees in the City's Solid Waste and Materials Diversion Division: the MDF Administrator, the Recycling Coordinator, the relatively new Waste Prevention Specialist and two Scale Attendants for the MDF Scalehouse. Costs for these personnel including wages and benefits are included in rows 106-133 of Attachment 3. The costs projected for RY 2015 are based upon the FY 2014/15 City budget. For 2016 the costs are increased by 2.5% for labor, 5.65% for retirement, 8.65% for benefits and 2.2% for all other costs per the City LTFP.

In addition to the above-described five full time employees, the Fund also pays for 1 FTE Code Enforcement officer (plus a vehicle for the officer), 0.5 FTE) of an Accounting Technician, and 0.25 FTE of the Deputy Director of Operations for the Public Works Department. These costs are also reflected in Rows 107-134. The cost for the vehicle for the Code Enforcement Officer is included in Row 146 "Service Charges – Fleet".

(10) Professional Contract Services (Rows 99, 139, 171, 177 and 206)

The City utilizes the services of consultants to provide technical analysis, planning, research and other services to the Fund. Row 99 shows the cost for engineering services for the MDF which are projected to be \$60,880 for RY 2015 and \$82,959 for RY 2016. Row 139 shows the projected cost for technical assistance with negotiations with NRWS, food scrap program troubleshooting, data analysis and achievement of the 75% diversion goal. The costs for RY 2015 and 2016 are \$142,046 and \$193,561, respectively. Row 171 shows the professional services for programmatic assistance with the fluorescent light bulb recycling program, update of the solid waste and recycling container enclosure ordinance, the carpet recycling program, and public education assistance of \$16,201 in RY 2015 and \$22,077 in RY 2016. Row 177 shows the costs related to the used oil recycling program which is partially grant-funded by the state. The RY 2015 and RY 2016 costs are \$19,786 and \$26,962. Row 205 includes a one-time cost of \$30,000 in RY 2015 for distribution of the pails for the residential co-collected organics program described in Section 4 B above, and the final payment of \$40,000 to NRWS for the Recycle More vehicle for the Recycle More program described in Section 2 C above.

(11) Professional Legal Services (Row 139)

The fund utilizes the services of the City Attorney's office for routine legal matters. For specialized issues concerning recycling, solid waste and contracts for these services, the services of outside legal counsel are used, with the activities overseen and directed by the City Attorney. The cost projected for RY 2015 is \$41,855 and for RY 2016 is \$57,034 reflecting a 2.2% increase per the City LTFP.

(12) Part-Time Employees (Rows 161-167)

There are five part-time employees, totaling approximately 1.6 FTE that perform field work, waste audits, preparation of recycling plans for businesses, and provide assistance with special events including the annual e-waste drop off event, school tours, battery collection program, the used oil recycling program, the business recycling awards program, etc. The part-time employees also assisted with the pilot commercial food scrap collection program by delivering equipment. The costs for the part-time employees are shown in Rows 160-166. The projected costs include inflation at the same rates used for full time employees per the City's LTFP.

(13) Miscellaneous (Row 206)

The cost of \$149,000 in Row 206 is a one-time cost for equipment to expand the co-collected organics (yardwaste and food scraps) collection program city-wide beginning April 2015. This includes the cost for purchase of the in-home food scrap storage pails for all residents (\$105,000), printing of brochures (\$22,000) and postcards, mailing and design costs (\$22,000).

(14) Total Projected Expenditures (Row 211)

The total projected expenditures for RY 2015 are \$18,481,978 as shown in column D of Row 211 in the spreadsheet in Attachment 3. The total projected expenditures for RY 2016 are \$25,058,648.

Section 7. Staff Recommendation and Next Steps

A. OPTIONS #1 AND #2 FOR RATE INCREASE

Staff has identified two Options for rate increases for rate years 2015 and 2016. Option #1 includes a rate increase of 4.95% for RY 2015 and an increase of 3.95% for RY 2016. These increases cover the projected expenses for the Fund including inflation, contractual payments to NRWS for collection operations and operation of the MDF, and necessary capital improvement upgrades at the MDF. This increase takes into account the collection revenue projections described above, and the projected decline in recycled materials sales revenue, also described above.

Option #1 also includes two important new diversion programs: full scale city-wide expansion of the commercial food scrap recycling and composting program and city-wide roll out of the residential co-collected organics program (food scraps collected with yardwaste). Option #1 also includes the first two years of the 5-year phase in of the commercial solid waste cart linearization plan which will bring this service into parity with comparable per gallon charges for commercial solid waste bin service. Attachment 2 shows the RY 2015 rates for each category of service, which are the same in both Options #1 and #2.

Option #2 includes all the expenses, revenue projections, new programs, and the commercial solid waste cart linearization phase-in that are included in Option #1. Option #2 adds 1% to the rate increase for RY 2016, bringing it 4.95%. The extra 1% would be used to pay for the net impact of construction and operation of the new anaerobic digestion-to-biofuel facility at the MDF.

B. EFFECTIVE DATES FOR PROPOSED NEW RATES

As noted in the main agenda report, the effective date for the recommended rate increase for 2015 would be April 1, 2015. The rates recommended for calendar year 2016 would become effective January 1, 2016. A table showing the recommended rates for RY 2015 is included in Attachment 2

C. NOTICE OF PUBLIC HEARING TO CONSIDER ADOPTION OF NEW RATES

As further noted in the main agenda report, staff is recommending that the City Council direct the Public Works Director, or his designee, to issue a notice (as required by Proposition 218) for a public hearing to be held on March 17, 2015 to consider the adoption of rates for RY 2015 and RY 2016. Attachment 9 is a working draft of the Proposition 218 notice showing both the existing rates for each type of service and the proposed RY 2015 rates for the service.

Recommended base rates to be effective April 1, 2015.

Table 1
Residential and Apartment Carts

	Cost Per Month
20 gallon	\$20.63
35 gallon	\$25.86
65 gallon	\$39.67
95 gallon	\$61.01

Table 2
Commercial and Multi-Family Bin Rates (NRWS Provided Bins) - Cost Per Month

Bin Size	1x/week	2x/week	3x/week	4x/week	5x/week	6x/week
One 1.5 yard	\$313.78	\$657.20	\$978.74	\$1,312.06	\$1,672.34	\$2,086.55
Two 1.5 yard	\$668.67	\$1,419.54	\$2,114.08	\$2,834.03	\$3,612.24	\$4,506.93
Three 1.5 yard	\$993.73	\$2,109.59	\$3,141.76	\$4,211.69	\$5,368.17	\$6,697.80
Four 1.5 yard	\$1,337.36	\$2,839.09	\$4,228.14	\$5,668.06	\$7,224.45	\$9,013.85
One 2 yards	\$403.39	\$859.13	\$1,287.53	\$1,731.61	\$2,211.49	\$2,762.92
Two 2 yards	\$859.25	\$1,855.74	\$2,781.04	\$3,740.26	\$4,776.81	\$5,967.91
Three 2 yards	\$1,241.14	\$2,680.48	\$4,017.08	\$5,402.63	\$6,899.80	\$8,620.31
Four 2 yards	\$1,670.75	\$3,608.35	\$5,407.60	\$7,272.75	\$9,288.20	\$11,604.27
One 3 yards	\$591.50	\$1,282.75	\$1,925.21	\$2,591.24	\$3,310.86	\$4,137.73
Two 3 yards	\$1,218.50	\$2,642.46	\$3,965.97	\$5,337.94	\$6,820.38	\$8,523.75
Three 3 yards	\$1,845.49	\$4,002.18	\$6,006.70	\$8,084.66	\$10,329.89	\$12,909.75
One 4 yards	\$767.96	\$1,686.62	\$2,542.80	\$3,430.34	\$4,389.17	\$5,490.51
Two 4 yards	\$1,581.98	\$3,474.45	\$5,238.17	\$7,066.52	\$9,041.66	\$11,310.46
Three 4 yards	\$2,396.01	\$5,262.25	\$7,933.53	\$10,702.68	\$13,694.18	\$17,130.39
One 6 yards	\$1,143.01	\$2,519.73	\$3,803.79	\$5,134.92	\$6,572.85	\$8,224.39
Two 6 yards	\$2,354.62	\$5,190.65	\$7,835.82	\$10,577.92	\$13,540.07	\$16,942.23

Table 3
Commercial and Multi-Family Bin Rates (Customer Provided Bins) - Cost Per Month

Bin Size	1x/week	2x/week	3x/week	4x/week	5x/week	6x/week
One 1.5 yard	\$268.87	\$605.81	\$926.36	\$1,258.68	\$1,617.46	\$2,029.19
Two 1.5 yard	\$620.18	\$1,364.04	\$2,057.50	\$2,776.37	\$3,552.96	\$4,444.94
Three 1.5 yard	\$945.68	\$2,054.62	\$3,085.71	\$4,154.56	\$5,309.44	\$6,636.41
Four 1.5 yard	\$1,288.87	\$2,783.59	\$4,171.58	\$5,610.42	\$7,165.19	\$8,951.86
One 2 yards	\$358.51	\$807.75	\$1,235.15	\$1,678.22	\$2,156.61	\$2,705.56
Two 2 yards	\$810.76	\$1,800.24	\$2,724.48	\$3,682.61	\$4,717.57	\$5,906.02
Three 2 yards	\$1,194.43	\$2,627.06	\$3,962.60	\$5,347.10	\$6,842.72	\$8,560.65
Four 2 yards	\$1,623.61	\$3,554.39	\$5,352.61	\$7,216.68	\$9,230.57	\$11,544.02
One 3 yards	\$529.35	\$1,211.61	\$1,852.71	\$2,517.34	\$3,234.91	\$4,058.32
Two 3 yards	\$1,154.47	\$2,569.21	\$3,965.97	\$5,261.83	\$6,742.13	\$8,441.94
Three 3 yards	\$1,780.85	\$3,928.19	\$5,931.29	\$8,007.79	\$10,250.89	\$12,827.17
One 4 yards	\$705.80	\$1,615.50	\$2,470.27	\$3,356.46	\$4,313.18	\$5,411.10
Two 4 yards	\$1,517.95	\$3,401.18	\$5,163.48	\$6,990.39	\$8,963.41	\$11,228.66
Three 4 yards	\$2,331.36	\$5,188.27	\$7,858.12	\$10,625.82	\$13,615.16	\$17,047.82
One 6 yards	\$1,058.69	\$2,423.22	\$3,705.42	\$5,034.68	\$6,469.78	\$8,116.63
Two 6 yards	\$2,267.76	\$5,091.25	\$7,734.49	\$10,474.67	\$13,433.91	\$16,831.26

Table 4
Commercial Carts

	Cost Per Month					
Pickup per week	1x	2x	3x	4x	5x	6x
Cart Size						
35 gallon	\$27.09	\$54.18	\$81.28	\$108.37	\$135.46	\$162.55
65 gallon	\$54.29	\$108.58	\$162.87	\$217.18	\$271.47	\$325.77
95 gallon	\$81.31	\$162.62	\$243.94	\$325.27	\$406.56	\$487.89

Note: Commercial cart rates included in Table 4 include the 4.95% Rate Year 2015 rate adjustment plus the first year of a 5-year rate linearization plan of 5% per year increases.

Table 5
Commercial and Multi-Family Compactors (Less Than 6 Yards)

Cost per Yard	\$88.06			
Chart Below for Example Purposes Only				
Compactors	1x / week	2x / week	3x / week	4x / week
1.3yd	\$496.09	\$992.18	\$1,488.27	\$1,984.37
1.5yd	\$572.41	\$1,144.83	\$1,717.24	\$2,289.65
2yd	\$763.22	\$1,526.43	\$2,289.65	\$3,052.87
3yd	\$1,144.83	\$2,289.65	\$3,434.48	\$4,579.30
4yd	\$1,526.43	\$3,052.87	\$4,579.30	\$6,105.74

Calculate rate = ((cost per yard x size bin x # of pick ups per week x 52 weeks)/12 months)

Table 6A
 Roll Off & Compactors (Larger Than 6 Yards)
 Roll Offs (Uncompacted)

Cost Per Yard (Uncompacted)	\$31.36
Roll Off (yards)	Per Service
10	\$313.59
15	\$470.39
20	\$627.18
25	\$783.98
30	\$940.77
40	\$1,254.36

Calculate rate = ((cost per yard x size bin x # of pick ups per week x 52 weeks)/12 months)

Table 6B
 Roll Off & Compactors (Larger Than 6 Yards)
 Roll Offs (Compacted)

Cost Per Yard (Compacted)	\$88.06		
Compactors (yards)	Per Month/1xwk		Per Service
6	\$2,289.65		\$528.38
10	\$3,816.09		\$880.64
15	\$5,724.13		\$1,320.95
20	\$7,632.17		\$1,761.27
25	\$9,540.22		\$2,201.59
30	\$11,448.26		\$2,641.91

Calculate rate = ((cost per yard x size bin x # of pick ups per week x 52 weeks)/12 months)

Table 6C
 Roll Off & Compactors (Larger Than 6 Yards)
 Roll Offs (Recycling)

	Rate
10 YARDS	Per Service
Asphalt	\$139.03
Concrete	\$165.51
Dirt	\$198.62
20 YARDS	
Wood	\$132.40
Yardwaste	\$225.11
30 YARDS	
Metal	\$0.00
Wood	\$165.51
Yardwaste	\$291.30
OTHER	
Manure	\$132.40
Pomace	\$132.40
Sheetrock	\$132.40
FREE RECYCLING	
Cardboard (10-40 yards)	\$0.00
Compacted Source Separate (including bales) (10-40 yards)	\$0.00
Mixed Recyclables (10-40 yards)	\$0.00

Table 6D
 Residential & Commercial Carpet (Recycling)
 (Carpet must be clean & dry – includes carpet underpadding)

Roll Off Box Size	Rate Per Service
20 Cubic Yards	\$203.77
30 Cubic Yards	\$272.56
40 Cubic Yards	\$341.34

Table 6E
Temporary Bin Sizes and Rates - MSW

Temporary Bin Sizes	Rate
1.5 yard	\$162.55
2.0 yard	\$162.55
3.0 yard	\$193.91
4.0 yard	\$225.25
6.0 yard	\$287.97
Cost Per Yard	\$31.37

Table 6F
 Split 20 Cubic Yard Roll Off Boxes
 Two Material Types Per Box
 (10 Cubic Yards of Each Material)

Materials (Two Per Split Box)	Rate Per Service
MSW & Wood	\$379.79
MSW & Yardwaste	\$426.15
MSW & Sheetrock	\$379.79
MSW & Metal	\$313.59
MSW & Cardboard	\$313.59
MSW & Mixed Recyclable Materials	\$313.59
Wood & Yardwaste	\$178.76
Wood & Sheetrock	\$132.40
Wood & Metal	\$66.20
Wood & Cardboard	\$66.20
Wood & Mixed Recyclable Materials	\$66.20
Yardwaste & Sheetrock	\$178.76
Yardwaste & Metal	\$112.56
Yardwaste & Cardboard	\$112.56
Yardwaste and Mixed Recyclable Materials	\$112.56
Sheetrock & Metal	\$66.20
Sheetrock & Cardboard	\$66.20
Sheetrock & Mixed Recyclable Materials	\$66.20
Metal & Cardboard	Free
Metal & Mixed Recyclable Materials	Free
Cardboard & Mixed Recyclable Materials	Free

Note: Mixed Recyclable Materials are also known as “Single-Stream Recyclable Materials”

Table 7A
Food Scrap Program Rates
Food Scrap Cart Rates

Pickups per week	Cost Per Month					
	1x	2x	3x	4x	5x	6x
35 gallon	\$20.32	\$40.64	\$60.96	\$81.28	\$101.59	\$121.91
65 gallon	\$40.72	\$81.43	\$122.15	\$162.89	\$203.60	\$244.33
95 gallon	\$60.98	\$121.96	\$182.95	\$243.95	\$304.92	\$365.92

Table 7B
Food Scrap Program Rates
Special Events Food Scrap Collection

35-gallon Food Scrap Cart	\$7.75
65-gallon Food Scrap Cart	\$11.61
95-gallon Food Scrap Cart	\$15.48
1.5 Cubic Yards Food Scrap Bin	\$83.69
2 Cubic Yards Food Scrap Bin	\$94.94
3 Cubic Yards Food Scrap Bin	\$117.44
4 Cubic Yards Food Scrap Bin	\$139.95
6 Cubic Yards Food Scrap Bin	\$185.67

Table 7C
Food Scrap Program Rates
Food Scrap Compactor Service

Cost Per Yard (Compacted)	\$66.05	
Compactors (yards)	Per Month/1xwk	Per Service
6	\$1,717.24	\$396.29
10	\$2,862.07	\$660.48
15	\$4,293.10	\$990.71
20	\$5,724.13	\$1,320.95
25	\$7,155.16	\$1,651.19
30	\$8,586.20	\$1,981.43

Table 8
Miscellaneous Rates

		Rate
	Residential	
	Additional Carts (\$/Cart/Month)	
1	MSW	To be provided at monthly rate multiplied by number of carts
	Recycle (after 4-35 gal or 2-95 gal)	
2	20 gallon	\$3.49
3	35 gallon	\$3.49
4	65 gallon	\$3.49
5	95 gallon	\$3.49
	Yardwaste (after 4-35 gal or 2-95 gal)	
6	20 gallon	\$3.49
7	35 gallon	\$3.49
8	65 gallon	\$3.49
9	95 gallon	\$3.49
10	Bulky Items (\$/service up to 4 items)	\$38.40
11	Each item over 4 items (\$/Item) - excluding e-waste, occ	\$15.49
12	Cardboard and single stream recyclables	Free
13	E-Waste (CRTs/LCDs), Metal Items and Cooking Oil	Free
	Extra Empty (\$/bin/Service)	
14	On day of service (Monday-Friday) up to 9 bags (30 gal.)/barrels	\$6.50/each barrel
15	On day of service (Monday-Friday) 10 or more bags/barrels	\$31.37/yard
16	Not on day of service (Monday-Friday) up to 9 bags/barrels	\$6.50/barrel + \$51.85 trip charge
17	Not on day of service (Monday-Friday) 10 or more bags/barrels	\$31.37/yard + \$51.85 trip charge
18	Not on day of service (Saturday, Sunday) up to 9 bags/barrels	\$6.50/barrel + \$149.81 trip charge
19	Not on day of service (Saturday, Sunday) 10 or more bags/barrels	\$31.37/yard + \$149.81 trip charge
	Backyard Service (includes MSW, Recycle, YW) (\$/Month)	
20	5-600 feet	\$23.41
21	601 feet or more	\$28.96
22	With doctors note	Free
	Commercial & Multi-family	
1	Bulky Items (\$/service up to 4 items)	\$76.79
2	Cardboard and single stream recyclables	Free
3	Each item over 4 items (\$/Item) - excluding e-waste, occ	\$15.49
4	E-Waste (CRTs/LCDs), Metal Items and Cooking Oil	Free
5	Pallets	\$76.79
	Extra Empty (\$/Bin/Empty) - formerly Bin Special	

Attachment 2: Proposed Impact on Residential and Commercial Rates for Rate Year 2015

	Commercial	
6	35 gallon	\$15.49
7	65 gallon	\$23.23
8	95 gallon	\$30.96
	Commercial and Multi-Family	
9	1.5 yard	\$167.38
10	2 yard	\$189.89
11	3 yard	\$234.89
12	4 yard	\$279.89
13	6 yard	\$371.33
	Miscellaneous	
14	Bin Cleaning/Bin Exchange (\$/Bin/Service)	\$209.54
15	Heavy Waste	\$92.93
16	Locking Bin or Key Fee	\$7.75
	Recycling Services (\$/Service)	
17	Single Stream Recyclables (less than 10 yard)	Free
18	Source Separated Recyclables (less than 10 yard)	Free
19	Yardwaste (less than 10 yard)	Free
	Saturday, Sunday, Holiday Service (\$/day(s)/month)	
20	35 gallon	\$116.36
21	65 gallon	\$116.36
22	95 gallon	\$116.36
	Trip Charges (\$/Trip)	
23	Up to 35 gallon	\$51.86
24	35 gallon - 6 yards	\$99.87
	Roll Off/Compactor/Temporary Bins	
1	Overweight Surcharge (10 yards and more)	Trip charge plus cost to bring in equipment capable of removing such materials plus \$92.93 per ton
	Miscellaneous	
2	Demurrage for non-removal after 3 days (\$/Bin/Day)	\$20.68
3	Trip Charge - Move/Relocate Box (\$/Box/Service)	\$166.43
4	Rental Fee (\$/day)	\$20.68
	Temporary Bins (\$/5 days)	
5	2 yard	\$162.54
6	3 yard	\$193.91
7	4 yard	\$225.25
	Other Fees	

Attachment 2: Proposed Impact on Residential and Commercial Rates for Rate Year 2015

1	City Directed Spill Clean Up	\$278.04
	Contaminated Recycling	
	Residential recyclables, yardwaste	
2	35 gallon	\$15.49
3	65 gallon	\$23.23
4	95 gallon	\$30.96
	Commercial (bins) recyclables, yardwaste	
5	1.5 yard	\$167.38
6	2 yard	\$189.89
7	3 yard	\$234.89
8	4 yard	\$279.89
9	6 yard	\$371.33
	Deposit	
10	Commercial cart	\$60.00
11	Resident	\$30.00
	Residential Cart Redelivery Charge	\$25.00
	Roll Off/Compactors/commercial bin	
12	MSW	50% of service
13	Recycle	50% of service

Table 9
City of Napa Materials Diversion Facility
Gate Fees

Material	Gate Fee
Clean Dirt (no rock or gravel)*	No longer accepted
Carpet & Underpadding (residential and commercial carpet accepted. Must be clean & dry)*	\$55 per ton
Concrete & Asphalt*	\$20 per ton
Sheetrock*	\$25 per ton
Scrap Metal	Free
Appliances	Free
Yardwaste*	\$40 per ton
Wood (untreated)*	\$40 per ton
Chipped Wood (untreated, pre-chipped trees or branches, less than 2", minimal green material)	Free
Stumps*	\$50 per ton
Tires (less than 22 inches)	\$5 per item
Electronic waste (computer equipment and TVs)	Free

* Minimum charge per load: \$16

ATTACHMENT 3

Two Rate Year Solid Waste and Materials Diversion Fund Revenue and Expense Projections (showing option 1 proposed base rates)

	A	B	C	D	E	G
6				Rate adjustment	4.95%	3.95%
7		Gain/loss			603,098	804,063
8		Gain/loss after funding reserves			(111,461)	90,603
9						
10	Key	Type	Object Category	RY 2015 Prior to Rate Adj	RY 2015 After Rate Adj	RY2016 After Rate Adj
14	51002 - MDF - Debt Service	Revenue	36101-Investment Earnings	160,594	160,594	230,185
16	51004 - MDF - Contractor Service	Revenue	34401-Refuse collection charges	12,573,564	13,040,358	17,745,961
18	51005 - MDF - Facility	Revenue	34402-MDF Gates Fees	1,049,514	1,049,514	1,422,993
24	51006 - MDF - Operations & Admin	Revenue	34403-Material Sales	4,240,572	4,240,572	5,654,096
25	51006 - MDF - Operations & Admin	Revenue	35001-Miscellaneous	12,405	12,405	16,904
26	51006 - MDF - Operations & Admin	Revenue	36101-Investment Earnings	11,415	11,415	15,555
28	51006 - MDF - Operations & Admin	Revenue	36201-Rents and Royalties	35,006	35,006	47,702
30	51007 - MDF - Non-Grant Recycling	Revenue	34106-Sale of Goods	3,805	3,805	5,185
31	51008 - MDF - Non Gen Fund Items	Revenue	35001-Miscellaneous	3,653	3,653	4,978
33	51008 - MDF - Recycling Grants	Revenue	33401-State Operating-Categor	39,572	39,572	53,923
37	51010 - MDF - Capital Replacement	Revenue	61510-Trsf In Materials Diversion	450,512	450,512	613,898
40	51999 - SB MDF - Nonrecurring	Revenue	34402-MDF Gates Fees	0	0	0
43	51999 - SB MDF - Nonrecurring	Revenue	61510-Trsf In Materials Diversion	37,670	37,670	51,332
44	51999 - SB MDF - Nonrecurring	Revenue	61511-Trsf In NR MDF	0	0	0
45	Projected Gain over 20% Oper. Reserve	Revenue				0
46	Total Revenue			18,618,282	19,085,076	25,862,711
50	51001 - MDF - Gen Fund Transfers	Expenditures	51998-Interdept Charges for Labor	6,863	6,863	9,379
51	51001 - MDF - Gen Fund Transfers	Expenditures	53201-Professional-Contract Services	1,370	1,370	1,867
52	51001 - MDF - Gen Fund Transfers	Expenditures	54302-Facilities Repair and Maint	1,500	1,500	2,044
54	51001 - MDF - Gen Fund Transfers	Expenditures	54601-Property Taxes	0	0	0
56	51001 - MDF - Gen Fund Transfers	Expenditures	55102-Service Charges - IT	3,044	3,044	4,148
60	51001 - MDF - Gen Fund Transfers	Expenditures	57410-Depreciation expense	0	0	0
62	51001 - MDF - Gen Fund Transfers	Expenditures	62100-Intrfd Tsr Out to General Fd	380,688	380,688	551,490
64	51001 - MDF - Non Gen Fund Items	Expenditures	62302-Intrfd Tsr Out to Str Rsrfd	1,394,874	1,394,874	1,900,748
65	51001 - MDF - Non Gen Fund Items	Expenditures	62510-Interfund Trsfr to MDF	450,512	450,512	613,898
66	51001 - MDF - Non Gen Fund Items	Expenditures	62519-Interfund Trsfr to MDF-NR	37,670	37,670	51,332
72	51002 - MDF - Debt Service	Expenditures	53101-Banking Fees	0	0	0
74	51003 - MDF - Trsf St Tip Fees	Expenditures	58901-Transfer Station Tip Fees	1,807,412	1,807,412	2,296,234
78	51004 - MDF - Contractor Service	Expenditures	58902-Operating and Capital Cost	8,028,225	8,028,225	9,755,400
79	51004 - MDF - Contractor Service	Expenditures	58903-Base Profit Margin (3%)	240,847	240,847	292,662
80	51004 - MDF - Contractor Service	Expenditures	58904-Sale of Recyclables 30% share	1,272,172	1,272,172	1,272,172
81	51004 - MDF - Contractor Service	Expenditures	58905-NVUSD	112,991	112,991	153,969
82	51004 - MDF - Contractor Service	Expenditures	58906-Allowance Based Programs	99,444	99,444	135,509
83	51004 - MDF - Contractor Service	Expenditures	58907-Unit Costs	191,925	191,925	272,982
84	51004 - MDF - Contractor Service	Expenditures	58908-Proc Fee thru put ovr basline	1,054,372	1,054,372	1,515,980
85	51004 - MDF - Contractor Service	Expenditures	58909-Diversion Incentive	76,500	76,500	104,244
86	51004 - MDF - Contractor Service	Expenditures	58912-Partnership Programs	103,714	103,714	141,328
89	51004 - MDF - Contractor Service	Expenditures	58913-Recycle More Route (Recurring)	19,125	19,125	26,061
90	51004 - MDF - Contractor Service	Expenditures	58914-Commercial Food Scrap Route	0	0	0
91	51004 - MDF - Contractor Service	Expenditures	58915-Commercial Food Scrap Expansion	189,119	189,119	231,102
93	51004 - MDF - Contractor Service	Expenditures	58690-Bad Debt Expense	157,333	157,333	208,632
96	51005 - MDF - Facility	Expenditures	51998-Interdept Charges for Labor	7,816	7,816	10,651
98	51005 - MDF - Facility	Expenditures	58911-Payment for Material	1,145,223	1,145,223	1,560,557
99	51005 - MDF - Facility	Expenditures	53201-Professional-Contract Services	60,880	60,880	82,959
100	51005 - MDF - Facility	Expenditures	54302-Facilities Repair and Maint	22,069	22,069	30,073
101	51005 - MDF - Facility	Expenditures	54601-Property Taxes	42,726	42,726	58,221
103	51005 - MDF - Facility	Expenditures	55103-Service Charges - Liability	7,792	7,792	10,618
104	51005 - MDF - Facility	Expenditures	58690-Bad Debt Expense	7,871	7,871	10,726
107	51006 - MDF - Operations & Admin	Expenditures	51100-Regular Employees	380,202	380,202	519,609
108	51006 - MDF - Operations & Admin	Expenditures	51199-Distributed Vacancy Factor	(10,569)	(10,569)	(14,444)
109	51006 - MDF - Operations & Admin	Expenditures	51200-Part-Time Employees	10,901	10,901	14,898
110	51006 - MDF - Operations & Admin	Expenditures	51300-Overtime	7,604	7,604	10,392
112	51006 - MDF - Operations & Admin	Expenditures	51402-Holiday Pay	3,432	3,432	4,690
113	51006 - MDF - Operations & Admin	Expenditures	51404-Uniform pay	534	534	730
114	51006 - MDF - Operations & Admin	Expenditures	51405-Specialty Pay	6,192	6,192	8,462
115	51006 - MDF - Operations & Admin	Expenditures	51406-Boot-Tool Allowance	285	285	390

ATTACHMENT 3

Two Rate Year Solid Waste and Materials Diversion Fund Revenue and Expense Projections (showing option 1 proposed base rates)

	A	B	C	D	E	G
9				RY 2015 Prior to	RY 2015 After	RY2016 After
10	Key	Type	Object Category	Rate Adj	Rate Adj	Rate Adj
116	51006 - MDF - Operations & Admin	Expenditures	51998-Interdept Charges for Labor	55,222	55,222	75,470
118	51006 - MDF - Operations & Admin	Expenditures	52101-Dental	5,734	5,734	8,307
119	51006 - MDF - Operations & Admin	Expenditures	52102-Health Insurance	34,629	34,629	50,166
120	51006 - MDF - Operations & Admin	Expenditures	52103-Life Insurance	753	753	1,091
121	51006 - MDF - Operations & Admin	Expenditures	52104-Employee Assistance Program	312	312	452
122	51006 - MDF - Operations & Admin	Expenditures	52110-Health In Lieu	13,089	13,089	18,962
123	51006 - MDF - Operations & Admin	Expenditures	52199-EE Contrib Contra Expense	(17,223)	(17,223)	(24,950)
124	51006 - MDF - Operations & Admin	Expenditures	52201-Medicare	5,949	5,949	8,618
125	51006 - MDF - Operations & Admin	Expenditures	52301-Retirement Contributions-PERS	94,413	94,413	132,996
126	51006 - MDF - Operations & Admin	Expenditures	52302-Retirement Contributions-PARS	279	279	393
127	51006 - MDF - Operations & Admin	Expenditures	52401-Tuition Reimbursements	476	476	690
128	51006 - MDF - Operations & Admin	Expenditures	52501-Unemployment Compensation	809	809	1,172
129	51006 - MDF - Operations & Admin	Expenditures	52601-Workers Compensation	7,643	7,643	11,072
131	51006 - MDF - Operations & Admin	Expenditures	52902-Deferred Compensation	4,262	4,262	6,174
132	51006 - MDF - Operations & Admin	Expenditures	52903-Management Leave	4,492	4,492	6,139
133	51006 - MDF - Operations & Admin	Expenditures	52904-Vacation Payout Act Employees	3,655	3,655	4,995
134	51006 - MDF - Operations & Admin	Expenditures	52909-Retiree Health (GASB45)	10,817	10,817	15,670
135	51006 - MDF - Operations & Admin	Expenditures	56101-General Supplies	33,557	33,557	45,727
136	51006 - MDF - Operations & Admin	Expenditures	56106-Postage	532	532	725
137	51006 - MDF - Operations & Admin	Expenditures	56202-Electricity/Natural Gas	3,031	3,031	4,130
138	51006 - MDF - Operations & Admin	Expenditures	53101-Banking Fees	105,818	105,818	144,195
139	51006 - MDF - Operations & Admin	Expenditures	53201-Professional-Contract Services	142,046	142,046	193,561
140	51006 - MDF - Operations & Admin	Expenditures	53202-Prof-Legal Services	41,855	41,855	57,034
142	51006 - MDF - Operations & Admin	Expenditures	54401-Rental of Land/Buildings	28,918	28,918	39,406
143	51006 - MDF - Operations & Admin	Expenditures	54403-Rental of Vehicles	381	381	519
146	51006 - MDF - Operations & Admin	Expenditures	55101-Service Charges - Fleet	19,065	19,065	25,979
148	51006 - MDF - Operations & Admin	Expenditures	55105-Service Charges - Central Stores	1,147	1,147	1,563
149	51006 - MDF - Operations & Admin	Expenditures	55301-Communications	3,251	3,251	4,430
151	51006 - MDF - Operations & Admin	Expenditures	55801-Travel	7,055	7,055	9,614
152	51006 - MDF - Operations & Admin	Expenditures	55901-Dues	761	761	1,037
153	51006 - MDF - Operations & Admin	Expenditures	55902-Training	761	761	1,037
154	51006 - MDF - Operations & Admin	Expenditures	58801-Miscellaneous	13,698	13,698	18,666
155	51006 - MDF - Operations & Admin	Expenditures	57601-Capital Outlay	4,500	4,500	4,500
161	51007 - MDF - Recycling Programs	Expenditures	51200-Part-time Employees	57,950	57,950	79,198
163	51007 - MDF - Recycling Programs	Expenditures	52201-Medicare	876	876	1,269
164	51007 - MDF - Recycling Programs	Expenditures	52301-Retirement Contributions-PERS	2,570	2,570	3,620
165	51007 - MDF - Recycling Programs	Expenditures	52302-Retirement Contributions-PARS	1,203	1,203	1,695
166	51007 - MDF - Recycling Programs	Expenditures	52501-Unemployment Compensation	517	517	749
167	51007 - MDF - Recycling Programs	Expenditures	52601-Workers Compensation	778	778	1,127
168	51007 - MDF - Recycling Programs	Expenditures	55401-Advertising	30,440	30,440	41,480
170	51007 - MDF - Recycling Programs	Expenditures	56105 - Equipment < \$5000	15,000	15,000	20,440
171	51007 - MDF - Recycling Programs	Expenditures	53201-Professional-Contract Services	16,201	16,201	22,077
173	51007 - MDF - Recycling Programs	Expenditures	55501-Other Purchased Services	19,786	19,786	26,962
175	51007 - MDF - Recycling Programs	Expenditures	58801-Miscellaneous	31,962	31,962	43,554
176	51007 - MDF - Recycling Programs	Expenditures	58802-Rebates/Refunds	11,415	11,415	15,555
177	51008 - MDF - Recycling Grants	Expenditures	53201-Professional-Contract Services	19,786	19,786	26,962
178	51008 - MDF - Recycling Grants	Expenditures	51200-Part-time Employees	7,625	7,625	10,390
179	51008 - MDF - Recycling Grants	Expenditures	56101-General Supplies	23,798	23,798	32,429
180	51008 - MDF - Recycling Grants	Expenditures	58801-Miscellaneous	8,726	8,726	11,891
185	51009 - MDF - Capital Maintenance	Expenditures	54501-Construction Services	22,500	22,500	30,000
186	51009 - MDF - Capital Maintenance	Expenditures	57201-Buildings	37,500	37,500	50,000
187	51009 - MDF - Capital Maintenance	Expenditures	57301-Imprvmnts other than Building	0	0	
188	51009 - MDF - Capital Maintenance	Expenditures	57412-Capitalization of Capital Exp	0	0	0
189	51009 - MDF - Capital Maintenance	Expenditures	57601-Capital Outlay	0	0	0
197	51010 - MDF-Capital Replacement	Expenditures	57601-Capital Outlay	0	0	1,920,000
206	51999 - SB MDF - Nonrecurring	Expenditures	53201-Professional-Contract Services	70,000	70,000	
207	51999 - SB MDF - Nonrecurring	Expenditures	58801-Miscellaneous	149,000	149,000	
208	Total Expenditures			18,481,978	18,481,978	25,058,648

ATTACHMENT 3

Two Rate Year Solid Waste and Materials Diversion Fund Revenue and Expense Projections (showing option 1 proposed base rates)

	A	B	C	D	E	G
9						
10	Key	Type	Object Category	RY 2015 Prior to Rate Adj	RY 2015 After Rate Adj	RY2016 After Rate Adj
209	SUMMARY					
210	Total Revenues			18,618,282	19,085,076	25,862,711
211	Total Expenses			18,481,978	18,481,978	25,058,648
212	Net Operating Results-Prior to Reserves			136,304	603,098	804,063
213						
214						
215	RESERVES FUNDING	6/30/14 balance				
216	Operating Reserve (20% of Operating Expenses less Debt service, CIP, and Street Maintenance)	4,956,476			0	0
217	Rate Stabilization Reserve (7% of Collection Revenue for FY14/15, 8% for FY15/16, and 9% for FY 16/17)	1,241,118			178,559	177,460
218	CIP Reserve (\$536K/yr)	2,546,764			536,000	536,000
219	Liability Reserve (\$350K balance)	350,000				
220	Total	9,094,358			714,559	713,460
221						
222						
223	Calculation of operating reserve					
224	Operating expenses less debt service, CIP, and street maintenance				23,077,900	23,077,900
225	Target (20%) to reach budget and fiscal policy operating reserve requirement				4,615,580	4,615,580
229						
230	Calculation of rate stabilization reserve					
232	Target to reach budget and fiscal policy requirement (FY16 8%, FY17 9%)				1,419,677	1,597,137



MEMORANDUM

DATE: January 12, 2014

TO: Kevin Miller
City of Napa
Materials Diversion Administrator

FROM: Trevor S Blythe
Vice-President, Project Implementation

RE: Cost and Revenue Impact Analysis on City's Materials Diversion and Solid Waste Enterprise Fund of Expanding Pilot Food Scrap Diversion Program to a Full Scale Program

Background:

In July 2011, the City directed NRWS to implement a pilot food scrap diversion program. The program aimed to divert food scraps generated by food service establishments away from the landfill. Food scrap materials are taken to the City's Materials Diversion Facility (MDF) where they are composted and converted into a soil amendment. The program benefits the City by reducing the amount of tons delivered to the Devlin Road Transfer Station, which costs approximately \$64 per ton, and by increasing the revenue of materials sold the City receives through the sale of finished compost. The cost of the pilot program (paid to NRWS for collection services) ranged from \$5,430.67 per month for 20 stops to \$7,972 per month for 55 stops. Current pilot participants receive food scrap collection service at no charge provided they do not reduce their baseline garbage service levels. As of November 2014, the program has 45 participating restaurants.

In September 2014, Governor Brown signed Assembly Bill 1826 into law. AB 1826 makes it mandatory for large generators of food waste, such as restaurants and hospitals, to divert these materials away from the landfill by April 1, 2016. By the year 2020, nearly every food service establishment, including small generators, will be required to divert their food waste from landfills. In addition, Assembly Bill 341 passed in October 2011 set a statewide goal of 75% landfill diversion by the year 2020. To comply with AB 341 and to encourage waste reduction, the City Council established a 75% diversion goal for the year 2020 in its Disposal Reduction Policy (Resolution R2012 -100) on July 24, 2012. By expanding the number of restaurants that participate in the food scrap diversion program, the City will achieve compliance with state laws and meet the disposal reduction goals of the City Council. Staff anticipates that nearly 5,000 tons of additional diversion could result from expanding the current food scrap diversion program to the

remaining 200 non-participating restaurants, increasing the City’s diversion rate by 6%, from approximately 65% to 71%.

The following analysis calculates the projected net fiscal impact on the City’s Materials Diversion and Solid Waste enterprise fund (“enterprise fund”) of the expanded food scrap diversion program. The City’s consultant, EcoNomics, was the lead on developing the revenue impact analysis. Per the City’s direction, EcoNomics also assessed the impact of charging a rate for food scrap collection at commercial premises and special events (both services are currently provided for free). This analysis included performing sensitivity analysis on what this rate should be, given:

1. The costs for the program and
2. The need to incentivize the food scrap generators to participate in the program.

Various potential rates were compared to the existing rates for collection of Municipal Solid Waste (MSW) from existing restaurants. EcoNomics also studied the impact of reducing food scrap compactor collection rates. The impact on the enterprise fund from the expanded food scrap collection program for each rate year can be broken into the following four categories, which are described in detail in this report and include references to Excel worksheets as supporting documentation when noted:

Net Projected Impact on the City’s Rate Fund of the Expanded Food Scrap Collection Program

	RY 2015	RY 2016
Section 1. Impact of increased food scrap program collection rate revenue and decreased garbage service revenue	-\$116,349.87	-\$288,770.48
Section 2. Impact of increased collection payment to NRWS	-\$189,118.24	-\$232,615.44
Section 3. Impact of increased food scrap processing costs and decreased landfill disposal costs	\$29,124.49	\$121,802.92
Section 4. Impact of increased material sales revenue	\$6,313.14	\$25,954.02
Total	-\$270,030.50	-\$373,628.98

NOTE: Please refer to Exhibit 1: Rate Year 2015 and 2016 Net Revenue Impact Analysis for additional information about how the net impact analysis was calculated for rate years 2015 and 2016.

The total net cost to the City’s enterprise fund of the expanded food scrap collection program is projected to be as follows:

- Rate Year 2015 (April 1 – December 31, 2015): -\$270,030.50
- Rate Year 2016 (January 1 – December 31, 2016): -\$373,628.98

The cost increase would require the following approximate rate increases:

- Rate Year 2015: 1.6% increase
- Rate Year 2016: 2.2% increase

Section 1. Impact of Increased Food Scrap Program Collection Rate Revenue and Decreased Garbage Revenue

The rate structure for food scrap collection service was designed to provide a cost incentive for participating restaurants. The current pilot program is offered at no charge provided the restaurant does not reduce their garbage service. Therefore, the current participating restaurants are not realizing a disposal cost reduction since they have not been able to reduce their garbage collection service to accommodate the decrease in garbage volume resulting from the food scraps being collected. When the full-scale commercial food scrap collection program begins on April 1, 2015, EcoNomics is recommending that food scrap collection service be offered at a 25% savings when compared to equivalent MSW service.

To arrive at a cost for food scrap carts, EcoNomics examined (1) the level of incentive required to motivate food scrap generators to participate and (2) the projected reduction in MSW cart and bin revenue to arrive at a net cost of the total food waste program. As a result of that analysis, EcoNomics confirmed that the discrepancy between the rates for wheeled cart service compared to the rates for the equivalent per-gallon cost of commercial bin service exists and presents a problem for implementing the food scrap collection program. Further analysis determined that the cost for commercial cart service is understated by approximately 25% in the current Napa rate structure.

One goal of the food scrap collection rate is to provide a sufficient economic benefit for food scrap collection service to incentivize customers to utilize the program, versus continuing to dispose of food scraps as MSW at the current MSW rate. If the existing commercial cart rate is artificially low compared to the cost of providing the service, this will skew the relationship between commercial food composting cart rates and commercial garbage cart rates.

In discussions with City staff, it was decided that correcting the discrepancy in a single rate year could create too large an economic impact for existing commercial cart customers. A 5-year phase-in plan (as was employed previously for a similar situation involving 65-gallon residential cart service) could be utilized to correct the discrepancy and arrive at a more equitable and linear cost distribution for commercial MSW cart rates.

Customers currently pay an average of \$0.75 per gallon for commercial MSW cart service and an average of \$1.02 per gallon for commercial MSW bin service. The five-year rate levelization plan would increase commercial MSW cart rates by 5% each year to bring the per-gallon cart rates in alignment with equivalent per-gallon bin service rates. The 5% per year increase would be in addition to any council-approved rate adjustments needed to cover changes in costs of service and inflation. The impact of the 5% commercial MSW cart rate increase on all commercial customers for rate year 2015

is projected to be an increase of \$33,477 and an increase of \$46,868 in rate year 2016 (see Exhibit 12: Levelized Commercial MSW Cart Rate Impact). The most common MSW cart service is the 95-gallon serviced 1 day per week. The current commercial cart rate for monthly MSW service of a 95-gallon cart emptied one time per week is \$73.95. A 5% increase (independent of any overall increase the City Council chooses to adopt) would increase the monthly cost to \$77.65 (an increase of \$3.70). The rate impact of the 5% per year increase in MSW cart service on the **restaurant community** is discussed below.

EcoNomics projects that restaurants currently participating in the food scrap diversion program will pay an average rate increase of \$5.67 per month in rate year 2015 and an additional \$5.95 per month in rate year 2016 as a result of the 5% per year increase in commercial garbage cart service rates (see Exhibit 7: Average Impact Analysis of 5% MSW Commercial Cart Rate Increase on Participating Restaurants). Restaurants that are not currently enrolled in the food scrap diversion program will see a monthly increase of \$2.14 per month in rate year 2015 and \$2.25 per month in rate year 2016 as a result of the 5% per year increase in garbage cart service rates (see Exhibit 5: Average Impact Analysis of 5% MSW Commercial Cart Rate Increase on Non-Participating Restaurants).

To identify the rate impact of charging customers a food scrap collection rate that provides a savings of roughly 25% compared to the rate for comparable MSW service, EcoNomics developed a “calculator” (Excel spreadsheet) that projects and analyzes the rates of different service and inventory scenarios for MSW, recycling, and food scrap collection and diversion programs. The calculator automatically compares a baseline service scenario with a service scenario that includes food scrap collection to calculate the rate impact on the restaurants’ monthly bill and on the City’s rate revenue.

Using the rate calculator described above, EcoNomics ran service cost simulations for 45 restaurants currently participating in the pilot program as well as 111 non-participating restaurants to accomplish the following:

- 1) Assess if the restaurants could reduce their disposal costs by implementing a food scrap diversion program using the proposed economic incentive of approximately 25% for collection of food scraps compared to non-participation and continuing to put food scraps in the MSW container and pay the MSW rate for this material;
- 2) Calculate the aggregate reduction in rate revenue the City would realize as a result of each restaurant participating in the program if a 25% economic incentive was used.

1a. Revenue impact results for currently participating restaurants

Table 1.1 shows an example of the rate impact calculations for a common service scenario for current restaurants participating in the pilot food scrap collection program.

Table 1.1. Service Levels for Common Restaurant Service Scenario

Service Line	Number of Container(s)	Size of Container(s) in Cubic Yards	Collection Frequency (days per week)	Cubic Yards Per Week	Generator Savings	Cost Per Month
Garbage	1	3	2	6	-	\$1,222.25
Recycling	1	3	2	6	100%	\$-
Food Scraps	3	65-gallon	2	2	100%	\$-
Total	5	-	-	14	-	\$1,222.25

The scenario above represents a restaurant that has one 3-yard MSW bin picked-up two days per week, one 3-yard recycling bin serviced 2 days per week, and three 65-gallon food scrap carts collected 2 days per week. The property currently has a total of 14 cubic yards of materials being collected by NRWS. The restaurants’ garbage is likely being over-serviced in this scenario because restaurants that participate in the pilot program were instructed by the City not to reduce the level of their trash service regardless of the amount of food scraps that were diverted.

The City requested that businesses not reduce garbage service in order to avoid negative rate impacts during the pilot program, in exchange for the pilot program being provided at no charge to the participants. This particular restaurant is diverting 2 cubic yards of food scraps per week through the food scrap diversion program and can reduce its trash service accordingly. If the proposed food scrap rate is approved by the City Council and becomes effective on April 1, 2015, this restaurant will be charged for food scrap collection at new food scrap rate which represents a 25% savings compared to equivalent garbage service, and the restaurant will also be able to reduce its garbage service. Table 1.2 shows the rate impact of these actions on the restaurant.

Table 1.2. Impact of Proposed New Rates on Restaurant Currently Enrolled in the Pilot Food Scrap Collection Program – Cost Savings of \$268.32 per month (a 22% reduction)

Service Line	Number of Container(s)	Size of Container(s) in Cubic Yards	Collection Frequency (days per week)	Cubic Yards Per Week	Generator Savings	Cost Per Month
Garbage	1	4	1	4	-	\$731.74
Recycling	1	3	2	6	100%	\$0
Food Scraps	3	65-gallon	2	2	25%	\$222.19
Total	5	-	-	12	-	\$953.93

As Table 1.2 shows, the restaurant has diverted 2-cubic yards of food scraps per week, and therefore can reduce the volume of MSW being collected by NRWS by 2 cubic yards. To accomplish this, the restaurant can replace its 3-yard trash bin picked-up 2 days per week with a larger 4-yard trash bin collected only 1 day per week. Downsizing the trash

service by 2 cubic yards per week results in a cost reduction of \$490 per month for the restaurant. The cost of food scrap collection service increases from \$0 per month to \$222.19. Therefore, this restaurant can save \$268.32 per month by reducing its garbage service and by continuing to participate in the food scrap collection program.

Of the restaurants currently participating in the food scrap diversion program, half will realize cost savings by “right-sizing” their trash service if the proposed food scrap rate is approved by the City Council and becomes effective on April 1, 2015. These cost savings range from to \$24 per month to \$742 per month. The remaining 50% of the currently participating restaurants will realize a rate *increase* if the proposed food scrap rates become effective even assuming these restaurants downsize their trash service. However, these restaurants may have the option to downsize their current inventory and collection frequency of food scrap carts. During “ride alongs” with the food scrap driver conducted in May and June of 2014, EcoNomics noted that restaurants utilized only about 40% of the total food scrap cart capacity they had on site. EcoNomics anticipates that restaurants can and should scale back food scrap service significantly as a cost-cutting measure if the new food scrap rate is approved and becomes effective. NRWS and City staff will assist these restaurants in implementing these service level reductions as the full-scale program is rolled out.

When the above simulation was applied to all 45 restaurants currently participating in the pilot food scrap program, EcoNomics found that using the 25% economic incentive would save restaurants that are currently part of the pilot program an average of \$61.68 per month during rate year 2015. Please refer to Exhibit 6: Service and Inventory List of Currently Participating Accounts for the details of the aggregate rate impact analysis for participating restaurants. If the currently participating restaurant also decided to “right-size” its food scrap collection service, each restaurant would save on average over \$100 per month (see Exhibit 9: Impact of Right-sizing Carts). EcoNomics expects that 90% of current restaurant participants will reduce the inventory or frequency of collection of their current food scrap cart inventory if and when the collection rate for this service line is initiated on April 1, 2015. The assumption used by EcoNomics in calculating these rate revenue impact projections, is that the “right-sizing” of food scrap collection service among currently participating restaurants would take place gradually over the first rate year. Similarly, in EcoNomics’ projections, it anticipated that the “right-sizing” of garbage service among participating restaurants would take place over the course of the second quarter of 2015. This is based upon EcoNomics’ experience implementing commercial food scrap collection service in other cities. The aggregate rate impact of currently participating restaurants right-sizing their garbage service and their food scrap collection service during rate years 2015 and 2016 is included as Table 1.3 below.

Table 1.3: Aggregate Annual Revenue Impact of Currently Participating Restaurants Right-sizing their Garbage and Food Scrap Service

	RY2015	RY2016
Revenue Impact of Participating Restaurants Right-sizing MSW Service (includes new FW rate revenue)	-\$24,641.69	-\$33,436.01
Revenue Impact of Participating Restaurants Right-sizing Food Scrap Cart Inventory when Rate is Enacted	-\$28,947.48	-\$174,008.35
Net Impact on City Rate Fund	-\$53,589.17	-\$207,444.36

1b. Revenue impact results for non-participating restaurants

To identify restaurants that are currently not participating in the food scrap diversion program, EcoNomics obtained a list of all permitted food service establishments from the County of Napa Health Department. The list included all permitted food service establishments within the City, broken into 3 risk categories by the County: high, medium, and low. The categorizations, which were based on the frequency of inspections and the nature of the food service establishment, were useful in determining which restaurants would be likely participants in the food scrap program. In using the County list of permitted food service establishments, EcoNomics noted that the risk categories roughly corresponded to the size of the restaurant, cafeteria, etc. It also allowed for the identification of coffee shops, pizza outlets, bars, and other types of food service establishments. Table 1.4 below provides a directory of the County’s risk based categorization system as modified for purposes of this study. It shows the number of non-participating restaurants that belong to each category, and the expected amount of restaurants that will subscribe to the food scrap diversion program based on the modified food service category.

Table 1.4: Modified Categorization Directory and Expected Participation

Modified “Risk” Category	High	Medium	Low
Type of Food Service Facilities (FSE)	Hospitals, full-prep restaurants, fast food restaurants, retirement centers, schools, caterers, delicatessens with extensive food preparation, full grocery stores, wineries that conduct full food preparation (i.e. using their kitchen more than once per week), and jail facilities.	Delicatessens that prepare sandwiches and salads, pizza places, butcher shops, convenience stores with prepared food, commissaries, bakeries, medium risk winery kitchens	Bars that only prepare beverages, gas stations without food prep, coffee houses, convenience stores without prepared foods, bakeries, low risk caterers, and low-risk wineries.
Number of Non-participating FSE in Napa	152	88	87
Anticipated Number of Food Scrap Diversion Participants from Risk Category	152	33	18

The total number of non-participating restaurants that are expected to participate in the food scrap diversion program is 203. Of these 203 accounts, 111 had their own trash accounts through NRWS. To determine the rate impact and the potential cost-savings if these restaurants subscribed to the food scrap diversion program, EcoNomics entered service data for 111 non-participating restaurants that had their own trash account into the incentive calculator. Please refer to Exhibit 4: Service and Inventory List of Non-Participating Accounts for the details of the aggregate rate impact analysis for all non-participating restaurants.

Table 1.5 shows an example of the rate impact calculations for a common service scenario among restaurants that are not currently participating in the food scraps collection program.

Table 1.5. Common Service Levels for Restaurant Not Participating in the Food Scrap Diversion Pilot Program

Service Line	Number of Container(s)	Size of Container(s) in Cubic Yards	Collection Frequency (days per week)	Cubic Yards Per Week	Generator Savings	Cost Per Month
Garbage	1	4	2	8	-	\$1,607.07
Recycling	1	4	2	8	100%	\$0
Total	2	-	-	16	-	\$1,607.07

The scenario above represents a restaurant that has 1 4-yard trash bin picked-up two days per week, 1 4-yard recycling bin serviced 2 days per week, and no food scrap service. The property currently has a total 16 cubic yards of volume being collected by NRWS. This particular restaurant is probably generating over 3-yards of food scraps per week. This projection uses data from five of EcoNomics’ client food diversion programs and CalRecycle estimates that 40% of the garbage generated by restaurants is food scraps. If the proposed food scrap collection rate is approved by the City Council and becomes effective on April 1, 2015, this restaurant will be able to implement a food scrap collection program using a rate that provides a 25% savings compared to equivalent garbage service. Table 1.6 shows the rate impact of the restaurant implementing a food scrap diversion program.

Table 1.6. Impact of New Rates on Restaurant Currently Enrolled in the Pilot Food Scrap Collection Program – Cost Savings of \$162.63 per month (a 10% reduction)

Service Line	Number of Container(s)	Size of Container(s) in Cubic Yards	Collection Frequency (days per week)	Cubic Yards Per Week	Generator Savings	Cost Per Month
Garbage	1	3	2	6	-	\$1,222.25
Recycling	1	4	2	8	100%	\$0
Food Scraps	3	65-gallon	2	2	25%	\$222.19
Total	5	-	-	16	-	\$1,444.44

As Table 1.6 shows, the restaurant has diverted 2-cubic yards of food scraps per week and can therefore reduce the volume of garbage being collected by NRWS by 2 cubic yards per week. To accomplish this, the restaurant can replace its 4-yard trash bin picked-up 2 days per week with a smaller 3-yard trash bin being collected 2 days per week. Downsizing the trash service by 2 cubic yards per week results in a cost reduction of \$384 per month for the restaurant. The cost of food scrap collection service increases from \$0 per month to \$222.19. Therefore, this restaurant can save \$162.63 per month by right-sizing its garbage service through participation in the food scrap collection program.

After calculating incentives for all 111 non-participating restaurants that have their own accounts through NRWS, EcoNomics found that restaurants not currently participating in the food scrap program save an average of \$96.31 per month by implementing a food scrap diversion program with the 25% economic incentive for food scraps and by reducing their garbage service. EcoNomics found that 82% of non-participating restaurants could realize cost-savings by participating in the food scrap collection program and downsizing their garbage service. The cost savings that can be realized by restaurants ranges from \$12.27 per month to \$1,023 per month. Table 1.7 shows the aggregate rate impact for rate years 2015 and 2016 of new restaurants implementing a food scrap diversion program at a pace of 10 per month beginning April 1, 2015 and ending December 31, 2016. The analysis assumes that each new restaurant implementing a food scrap diversion program reduces its MSW cost by an average of \$96.31 per month.

Table 1.7: Net Revenue Impact to City Fund of New Restaurants Implementing Food Scrap Service

	RY 2015	RY 2016
Net Revenue Impact of Implementing Food Waste Program at New Restaurants	-\$43,339.62	-\$174,008.35

Table 1.8 shows the total expected revenue impact for rate years 2015 and 2016 for current restaurants right-sizing their garbage and food waste inventory and for new restaurants initiating food scrap programs.

Table 1.8: Projected Rate Revenue Impact of Expanded Food Scrap Diversion Program

	RY 2015	RY 2016
Revenue Impact of Participating Restaurants Right-sizing MSW Service (includes new FW rate revenue)	-\$24,641.69	-\$33,436.01
Revenue Impact of Participating Restaurants Right-sizing FW Cart Inventory when Rate is Enacted	-\$28,947.48	-\$55,431.34
Net Revenue Impact of Implementing Food Waste Program at New Restaurants (assumes implementation pace of <u>10</u> restaurants per month)	-\$43,339.62	-\$174,008.35
Total Net Revenue Change from Rates	-\$96,928.79	-\$262,875.70

1c. Revenue impacts from special events collection

EcoNomics calculated the revenue impact of initiating a rate for special event collection of food scraps. Special event food scrap collection service is currently being offered at no charge to event organizers. In 2013, NRWS provided food scrap collection service at 46 events and collected nearly 90 tons of food scraps. Using the City’s high-end average weight per food scrap cart of 250 lbs., EcoNomics estimated approximately 700 food scrap carts are deployed at special events per year. In order to provide an economic incentive for event organizers, EcoNomics is recommending that food scrap collection service be offered at a customer savings of 50% compared to equivalent trash service. This would result in a rate of \$11.07 per 65-gallon food scrap cart. Using this rate for each 65-gallon food cart deployed at a special event, the City of Napa will receive an estimated \$7,745.50 per year in additional revenue from special event food scrap service. Table 1.9 shows the projected rate impacts for rate years 2015 and 2016 of charging a rate for food scrap collection at special events. Additional analysis can be found in Exhibit 11: Special Event Analysis.

Table 1.9: Revenue Impact from Charging 50% the Cost of Equivalent Garbage Service Rate for Special Event Food Scrap Collection

	RY 2015	RY 2016
Net Revenue Impact of Providing Special Event Food Scrap Service at 50% the Cost of Garbage Special Event Service	\$5,809.13	\$7,745.50

1d. Revenue impacts from food scrap compactor rate decrease

EcoNomics analyzed the revenue impacts of creating an economic incentive for customers who currently subscribe to compactor collection service for food scraps. There is currently one customer in the City with compactor service for food scraps and it pays the MSW rate for this service. This customer currently generates over \$11,200 in rate revenue per month from food scrap compactor service. Applying the same economic incentive (resulting in a 25% savings over MSW service) that is recommended for the full-scale cart and bin food scrap collection program to food scrap compactor service, the City would lose approximately \$2,800 per month from this customer. Table 1.10 shows the revenue impact of providing a 25% savings to customers subscribing to food scrap compactor service in rate years 2015 and 2016. Additional analysis can be found in Exhibit 10: Food Scrap Compactor Analysis.

Table 1.10: Revenue Impact from Charging 25% the Cost of Equivalent Garbage Service Rate for Food Scrap Compactor Service

	RY 2015	RY 2016
Net Revenue Impact of Providing Food Scrap Compactor Service at 25% economic incentive compared to the Cost of Garbage Compactor Service	-\$25,230.21	-\$33,640.28

Table 1.11 shows the projected net revenue impact of all the rate-related changes detailed in tables 1.1-1.10.

Table 1.11: Net Revenue Impact of Implementing an Expanded Food Scrap Program Rate

	RY 2015	RY 2016
1a. Revenue Impact of Participating Restaurants Right-sizing MSW Service (includes new FW rate revenue)	-\$24,641.69	-\$33,436.01
1a. Revenue Impact of Participating Restaurants Right-sizing FW Cart Inventory when Rate is Enacted	-\$28,947.48	-\$55,431.34
1b. Net Revenue Impact of Implementing Food Waste Program at New Restaurants (assumes implementation pace of 10 restaurants per month)	-\$43,339.62	-\$174,008.35
1c. Net Revenue Impact of Providing Special Event Food Scrap Service with economic incentive roughly equal to 50% the Cost of Garbage Special Event Service	\$5,809.13	\$7,745.50
1d. Net Revenue Impact of Providing Food Scrap Compactor Service with economic incentive roughly equal to 50% the Cost of Garbage Compactor Service	-\$25,230.21	-\$33,640.28
Net Rate Revenue Impact	-\$116,349.87	-\$288,770.48

Please refer to Table 1 in Exhibit 2: Rate Year 2015 Revenue Impacts of Expanded Food Scrap Diversion Program and Exhibit 3: Rate Year 2016 Revenue Impacts of Expanded Food Scrap Diversion Program for additional information about how the rate revenue impact was calculated for rate years 2015 and 2016.

Section 2. Impact of Increased Collection Payment to NRWS

NRWS currently provides food scrap collection services for the 45 restaurants participating in the pilot program. NRWS receives \$7,972.95 per month from the City to provide food scrap collection services two days per week for up to 60 restaurants. On May 28, 2014, NRWS submitted a cost proposal for a full-scale food scrap diversion program that could service up to 100 restaurants per day, 5 days per week. The proposal would cost the City \$226,941.89 per year or \$18,911.82 per month, an increase of 237% compared to the current monthly collection payment to NRWS. The general cost components of the proposal are included as Table 2.1 below.

Table 2.1. Cost Components of NRWS Full Scale Food Scrap Collection Proposal

Cost Component	Proposed Cost	Percent of Total
Direct Labor	\$99,884.41	44%
Direct Truck	\$38,159.49	17%
Direct Equipment	\$695.94	0%
Container Delivery & Cleaning	\$24,950.24	11%
Shop	\$3,225.17	1%
Administrative	\$1,952.03	1%
Capital	\$51,464.65	23%
Profit	\$6,609.96	3%
Total	\$226,941.89	100%

SOURCE: NRWS Cost Proposal

Based on EcoNomics’ analysis, the route capacity of 100 restaurants per day serviced up to 5 days per week is sufficient to service all 250 restaurants in the City that are expected to participate in the food scrap program when fully implemented. EcoNomics found that the average restaurant requires two 65-gallon food scrap carts serviced 2 days per week. Using this average, NRWS will need to make 500 stops per week, which is what it has proposed. NRWS’ proposed route capacity of 500 stops per week might be insufficient if additional restaurants open in the City or restaurants contribute more food scraps to the program than expected. NRWS’ detailed cost proposal is included as Exhibit 8: NRWS Cost Proposal for Expanded Food Scrap Collection Service. Table 2.2 below shows the impact of the increased collection payments to NRWS for rate year 2015 and 2016.

Table 2.2. Impact of Increased Collection Payments to NRWS for Rate Years 2015 and 2016

	RY 2015	RY 2016
Impact of Increased Collection Payments to NRWS	-\$189,118.24	-\$232,615.44

Section 3. Impact of Increased Food Scrap Processing Costs and Decreased Landfill Disposal Costs

To calculate the expected tonnage of food scraps collected from a full-scale food scrap diversion program, EcoNomics analyzed the average monthly weight contribution for each restaurant participating in the pilot program. Initially, EcoNomics analyzed NRWS’ monthly food scrap collection productivity reports from August 2011 to October 2014. The NRWS productivity reports included monthly data collected from the pilot program, including average number of stops on the route, the number of carts serviced per month (known as ‘lifts’), the monthly tons collected, etc. By dividing the total number of tons collected per month by the total number of lifts reported by NRWS, EcoNomics calculated the average weight of a cart at the time of service. Using the NRWS reports, the average weight per cart at time of service was approximately 135 lbs. per lift.

This weight per lift of 135 lbs. conflicted with data gathered by EcoNomics in its work with several other cities to implement food scrap diversion programs. For example, the City of Rancho Mirage has had a food scrap program in place for over 6 years and the average cart weight per service is 268 lbs. EcoNomics also conducted a field weight audit for the City of Laguna Hills in 2009 and actually weighed a 65-gallon cart full of post-consumer food scraps. The cart weighed approximately 330 lbs. when full. Comparatively, the cart weights calculated using the NRWS food scrap productivity reports appeared to be light. The reasoning for the lighter-than-expected food scrap carts may be that the service is offered at no charge to restaurants, therefore the restaurants have no incentive to fully utilize their cart inventory if there is no marginal cost to having additional, unused carts. The City would charge a rate for food scrap collection service when the full-scale food scrap program is initiated in April 2015, therefore the cart weight projections should be adjusted to reflect optimal capacity utilization by the participating restaurant. In other words, when the restaurant has to pay for each food scrap cart, it will be more likely to use only the carts that are needed and remove unused carts. Both Laguna Hills and Rancho Mirage charge a rate for food scrap collection and have higher cart weights than Napa's pilot program.

To field check the data, EcoNomics conducted two "ride-alongs" with the NRWS food scrap collection route driver in May and June of 2014 to assess the fullness of the food scrap carts at the time of collection and the number of carts collected per account. The ride along found that the average fullness of the carts serviced was 37%. Using 37% fullness, EcoNomics extrapolated that the average weight per full cart would be closer to 260 lbs., which is in-line with the cart weights observed in other cities. To further confirm the weight of a full cart, EcoNomics coordinated with the City to conduct field cart weight audits. The results of the cart weight audits found that the average weight of a full cart ranged between 215 lbs. for primarily pre-consumer food scrap materials (i.e. produce trimmings) and 250 lbs. for primarily post-consumer food scrap materials (i.e. plate scrapings), averaging out to 235 lbs. per full cart.

EcoNomics used data from its field observations conducted in May and June of 2014 to determine the average food scrap generation rate for participating restaurants was four full carts per week. Using the average cart weight of 235 lbs., the expected tonnage contribution per restaurant was calculated to be approximately 2 tons of food scraps per month. Per the City's direction, EcoNomics' participation projections assumed that 10 new restaurants per month would initiate participation in the food scrap diversion program beginning April 1, 2015. Using these projections, EcoNomics developed the quarterly food scrap diversion collection tonnage assumptions shown in Table 3.1 below:

Table 3.1: Quarterly Restaurant Participation and Food Scrap Generation Projections

Rate Year	Quarter	Number of Participating Restaurants	Expected Tons of Food Scraps per Quarter
Rate Year 2015	Q2 2015	30	60
	Q3 2015	60	121
	Q4 2015	90	181
Rate Year 2016	Q1 2016	120	242
	Q2 2016	150	302
	Q3 2016	180	362
	Q4 2016	200	403

To assess the impact of processing the additional tonnage collected from the restaurants, EcoNomics multiplied the tons of organics collected by the following processing costs:

1. Yardwaste processing cost of \$22.48 per ton in 2015 and \$22.98 in 2016.
2. Aerated Static Pile (ASP) processing cost premium of \$6.09 until July 2015 and \$3.05 until Feb 2016 when it increases to \$3.11.

Using the cost per ton assumptions above, Economics projected the following negative revenue impacts during rate year 2015 and rate year 2016 due to increased processing costs for the expanded organics program:

Table 3.2: Fiscal Impact of Increased Food Scrap Processing Costs for Expanded Program

	RY 2015	RY 2016
Baseline Yard Waste Processing Costs for Organics	-\$20,371.68	-\$85,592.76
Aerated Static Pile Premium Processing Cost	-\$3,127.36	-\$11,579.09
Total Increased Processing Costs	-\$23,499.04	-\$97,171.85

However, the increased cost of processing the additional food scraps is offset by the avoided cost of disposing of the food scraps at the Devlin Road Transfer Station (DRTS). The cost of disposal at DRTS is \$64 per ton. This cost will escalate by \$1 per ton effective October 1, 2015 and by an additional \$1 per ton effective October 1, 2016. The avoided transfer station and disposal cost of the expanded food scrap diversion program is included below for Rate Year 2015 and 2016:

Table 3.3: Avoided Disposal Cost Impacts of Expanded Food Scrap Diversion Program

	RY 2015	RY 2016
Avoided Disposal Costs of Expanded Food Waste Program	\$52,623.5292	\$218,974.77

When the costs of increased processing shown in Table 3.2 and the avoided disposal costs shown in Table 3.3 are combined, the net rate impacts can be seen in Table 3.4.

Table 3.4: Net Impact of Increased Processing Costs and Avoided Disposal Costs of Expanded Food Scrap Diversion Program

	RY 2015	RY 2016
Increased Processing Cost of Expanded Food Scrap Program	-\$23,499.04	-\$97,171.85
Avoided Disposal Costs of Expanded Food Waste Program	\$52,623.53	\$218,974.77
Net Benefit to City Rate Fund	\$29,124.49	\$121,802.92

Section 4. Impact of Increased Material Sales Revenue

A result of the expanded food scrap collection program is that more tons of organics will be processed through the City’s composting facility. The City projects that it will sell finished compost to customers for \$10 per cubic yard beginning in 2015. By increasing the tonnage of organics processed, the City will also increase its revenue from the sale of compost. The impact of the increase in revenue from the sale of composting was calculated using the following assumptions:

1. Price per cubic yard of finished compost: \$10
2. Contamination rate of food scraps (i.e. the percent of the food scraps collected that could not be composted): 30%
3. Volume reduction of composting process (i.e. the amount of water that evaporates during the decomposition process): 50%

The assumptions above are conservative so as not to overstate the additional revenue projected from the sale of finished compost. Table 4.1 below shows the projected increase in revenue from the sale of finished compost if the food scrap program were expanded to 200 additional restaurants.

Table 4.1: Projected Increase in Revenue from the Sale of Finished Compost

	RY 2015	RY 2016
Additional Revenue from the sale of finished compost	\$6,313.14	\$25,954.02

Section 5. Net Impact on Rates

The total expected impact on the City's enterprise fund of the expanded food scrap collection program can be seen in Table 5.1 below. It shows the projected net impact of the expanded program to cost the City rate fund \$270,030.50 in rate year 2015 and \$373,628.98 in rate year 2016. This increase would require a rate increase of approximately 1.6% for 2015 and 2.2% in 2016 to cover the projected shortfall.

Table 5.1. Net Projected Impact on The City's Rate Fund of the Expanded Food Scrap Collection Program

	RY 2015	RY 2016
1. Impact of increased food scrap program collection rate revenue and decreased garbage service revenue	-\$116,349.87	-\$288,770.48
2. Impact of increased collection payment to NRWS	-\$189,118.24	-\$232,615.44
3. Impact of increased food scrap processing costs and decreased landfill disposal costs	\$29,124.49	\$121,802.92
4. Impact of increased material sales revenue	\$6,313.14	\$25,954.02
Total	-\$270,030.50	-\$373,628.98

NOTE: Please refer to Exhibit 1: Rate Year 2015 and 2016 Net Revenue Impact Analysis for additional information about how the net impact analysis was calculated for rate years 2015 and 2016.

List of Exhibits

- Exhibit 1: Rate Year 2015 and 2016 Net Revenue Impact Analysis
- Exhibit 2: Rate Year 2015 Revenue Impacts of Expanded Food Scrap Diversion Program
- Exhibit 3: Rate Year 2016 Revenue Impacts of Expanded Food Scrap Diversion Program
- Exhibit 4: Service and Inventory List of Non-Participating Accounts
- Exhibit 5: Average Impact Analysis of 5% MSW Commercial Cart Rate Increase on Non-Participating Restaurants
- Exhibit 6: Service and Inventory List of Currently Participating Accounts
- Exhibit 7: Average Impact Analysis of 5% MSW Commercial Cart Rate Increase on Participating Restaurants
- Exhibit 8: NRWS Cost Proposal for Expanded Food Scrap Collection Service
- Exhibit 9: Impact of Right-sizing Carts
- Exhibit 10: Food Scrap Compactor Analysis
- Exhibit 11: Special Event Analysis
- Exhibit 12: Levelized Commercial MSW Cart Rate Impact

Exhibit 1: Rate Year 2015 and 2016
Net Revenue Impact Analysis

RATE YEAR ----->	2015	2016
Revenue Impacts of Rate Migration and 25% Food Scrap (FS) Charge	\$96,928.79	\$262,875.70
Baseline Yardwaste Processing Costs for Organics	\$20,371.68	\$85,592.76
Attachment T ASP Premium Processing Cost	\$3,127.36	\$11,579.09
Revenue Reduction from FW Compactor Rate Incentive	\$25,230.21	\$33,640.28
Subtotal from Migration/25% FS Charge/Processing	\$145,658.05	\$393,687.84
Increased Revenue from Sale of Finished Compost	\$6,313.14	\$25,954.02
Reduction in TS Tip Fees with 10% FW Residue	\$52,623.53	\$218,974.77
Increased Revenue from Special Event Composting Rates	\$5,809.13	\$7,745.50
Subtotal from Increased Revenue and Tip Fee Reduction	\$64,745.79	\$252,674.29
Food Scrap Program Payment to NRWS for Collection	\$170,206.42	\$232,048.08
Net Impact on Rates	\$251,118.67	\$373,061.63

Total New Tons of Food Scraps Processed per Year	906	3,725
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Exhibit 2: Rate Year 2015
Revenue Impacts of Expanded Food Scrap Diversion Program

Table 1: Rate Year 2015 Revenue Impacts by Category

	Mar-15	Q2	Q3	Q4	Total
Revenue Impact of Participating Restaurants Right-sizing MSW Service (includes new Food Scrap rate revenue)	\$0.00	\$6,137.29	\$9,252.20	\$9,252.20	\$24,641.69
Revenue Impact of Participating Restaurants Right-sizing Food Scrap Cart Inventory when Rate is Enacted	\$0.00	\$5,543.13	\$10,316.39	\$13,087.95	\$28,947.48
Net Revenue Impact of Implementing Food Scrap Program at New Restaurants (assumes implementation pace of 10 restaurants per month)	\$0.00	\$5,778.62	\$14,446.54	\$23,114.46	\$43,339.62
Total Net Revenue Change from Rates	\$0.00	\$17,459.04	\$34,015.13	\$45,454.62	\$96,928.79

Table 1.1: Assumptions Used to Calculate Table 1 Revenue Analysis

Aggregate Reduction in Rate Revenue for Participating Restaurants for Right Sizing MSW Service	\$3,084.07
Estimated Aggregate Monthly FW Cart Rate Revenue Reduction after Current Restaurants Right Size Cart Inventory	\$5,132.53
Estimated Net Rate Revenue Loss per Implementation of New Food Scrap Account	\$96.31
Percent Increase in MSW Carts with Levelized Rates for RY 2015	5%
Assumed Rate of New Restaurant Implementation per Month	10
Current Participating Restaurants	50

Table 2: Calendar Year 2015 NRWS Payment

	Q2	Q3	Q4	Total
Full Scale Food Scrap Collection Payment to NRWS	\$56,735.47	\$56,735.47	\$56,735.47	\$170,206.42

Table 2.1: Assumptions Used to Calculate Table 2 NRWS Payment

Annual Payment to NRWS per Proposal for Full Food Scrap Route (Collection Only)	\$226,941.89
Monthly Payment of NRWS Payment for Calendar Year 2015	\$18,911.82

Table 3A: Calendar Year 2015 Tip Fee Analysis - using Actual Observed Data

	Q2	Q3	Q4	Total
Total New Participating Restaurants	30	60	90	90
New Tons of Commercial Food Scraps Generated	120.81	302.02	483.23	906.05
Baseline Yardwaste Processing Costs for Food Scraps	\$2,716.22	\$6,790.56	\$10,864.90	\$20,371.68
Attachment T ASP Premium Processing Cost	\$735.85	\$919.81	\$1,471.70	\$3,127.36
Revenue from Sale of Finished Compost	\$841.75	\$2,104.38	\$3,367.01	\$6,313.14
Reduction in Transfer Station Tip Fees Less Residue Disposal Cost	\$6,958.48	\$17,396.21	\$28,268.84	\$52,623.53
Net Cost or Benefit to City	\$0.00	\$4,348.16	\$11,790.21	\$19,299.25

Exhibit 2: Rate Year 2015
Revenue Impacts of Expanded Food Scrap Diversion Program

	NRWS Reports	Actual Observed
Table 3.1. Assumptions Used for Table 3A Tip Fee Analysis		
Average Yards of Food Scraps per Month Per Restaurant	5.97	5.20
Density of Food Scraps (lbs. per cubic yard)	500	775
Monthly Tonnage per Restaurant	1.02	2.01
Composting Volume Reduction (Percent reduced)	50%	70%
Food Scraps Residue Percentage	5%	10%
2015 Baseline Processing Cost per Ton of Food Scraps	\$ 22.48	\$ 22.48
Feb 2016 Inflation Adjustment for Yardwaste Processing Cost	2.20%	2.20%
2015 Attachment T ASP Processing Premium	\$ 6.09	\$ 6.09
Feb 2015 Inflation Adjustment for Attachment T ASP Processing Premium	2.20%	2.20%
2015 Attachment T ASP Processing Premium Post July 2015 per NRWS Proposal	\$ 3.05	\$ 3.05
Revenue per Cubic Yard for Finished Compost	\$ 10.00	\$ 10.00
2015 MSW Disposal Cost at TS - Q1 - Q3	\$ 64.00	\$ 64.00
2015 MSW Disposal Cost at TS - Q4	\$ 65.00	\$ 65.00

Table 4: Special Event Revenue Analysis

Number of Food Scrap Carts Deployed Per Year (2013)	700.00	←--assumes 255 lbs. per full cart
Current Cost per 65-gallon Food Scrap Cart	\$ -	
Cart Rate Discount	50%	
Proposed Cost per 65-gallon Food Scrap Cart	\$ 11.07	
Net Rate Revenue from Special Event Composting Program	\$ 7,745.50	

Table 5: FW Compactor Analysis

Current Average Monthly Revenue for Food Scrap Compactor	\$ 11,213.43
Revenue with Proposed Rate (25% Discount)	\$ 8,410.07

Table 5: Calendar Year 2015 Revenue Impacts

		Q2	Q3	Q4	Total
Revenue Impacts of Rate Migration and 25% FW Charge	\$0.00	\$17,459.04	\$34,015.13	\$45,454.62	\$96,928.79
Baseline Yardwaste Processing Costs for Food Scraps	\$0.00	\$2,716.22	\$6,790.56	\$10,864.90	\$20,371.68
Attachment T ASP Premium Processing Cost	\$0.00	\$735.85	\$919.81	\$1,471.70	\$3,127.36
Revenue Reduction from FS Compactor Rate Incentive	\$0.00	\$8,410.07	\$8,410.07	\$8,410.07	\$25,230.21
Subtotal from Migration/25% FS Charge/Processing	\$0.00	\$20,911.12	\$41,725.50	\$57,791.22	\$145,658.05
Increased Revenue from Sale of Finished Compost	\$0.00	\$841.75	\$2,104.38	\$3,367.01	\$6,313.14
Reduction in TS Tip Fees with 10% FW Residue	\$0.00	\$6,958.48	\$17,396.21	\$28,268.84	\$52,623.53
Increased Revenue from Special Event Composting Rates	\$0.00	\$1,936.38	\$1,936.38	\$1,936.38	\$5,809.13
Subtotal from Increased Revenue and Tip Fee Reduction	\$0.00	\$7,800.24	\$19,500.59	\$31,635.85	\$64,745.79
Food Scrap Collection Program Payment to NRWS	\$0.00	\$56,735.47	\$56,735.47	\$56,735.47	\$170,206.42
Net Impact on Rates	\$0.00	\$69,846.35	\$78,960.39	\$82,890.84	\$251,118.67

Exhibit 3: Rate Year 2016
Revenue Impacts of Expanded Food Scrap Diversion Program

Table 1: Rate Year 2016 Revenue Impacts by Category

	Q1	Q2	Q3	Q4	Total
Revenue Impact of Participating Restaurants Right-sizing MSW Service (includes new food scrap rate revenue)	\$8,359.00	\$8,359.00	\$8,359.00	\$8,359.00	\$33,436.01
Revenue Impact of Participating Restaurants Right-sizing food scrap Cart Inventory when Rate is Enacted	\$13,857.83	\$13,857.83	\$13,857.83	\$13,857.83	\$55,431.34
Net Revenue Impact of Implementing Food Scrap Program at New Restaurants (assumes implementation pace of 10 restaurants per month)	\$31,039.33	\$39,504.60	\$47,969.87	\$55,494.55	\$174,008.35
Total Net Revenue Change from Rates	\$53,256.16	\$61,721.44	\$70,186.71	\$77,711.39	\$262,875.70

Table 1.1: Assumptions Used to Calculate Table 1 Revenue Analysis

Aggregate Reduction in Rate Revenue for Participating Restaurants for Right Sizing MSW Service	\$2,786.33
Estimated Aggregate Monthly FS Cart Rate Revenue Reduction after Current Restaurants Right Size Cart Inventory	\$5,132.53
Estimated Net Rate Revenue Loss per Implementation of New Food Scrap Account	\$94.06
Percent Increase in MSW Carts with Levelized Rates for RY 2016	5%
Assumed Rate of New Restaurant Implementation per Month	10
Current Participating Restaurants	50

Table 2: Calendar Year 2016 NRWS Payment

	Q1	Q2	Q3	Q4	Total
Full Scale Food Scrap Collection Payment to NRWS	\$56,735.47	\$58,437.54	\$58,437.54	\$58,437.54	\$232,048.08

Table 2.1: Assumptions Used to Calculate Table 2 NRWS Payment

Annual Payment to NRWS per Proposal for Full Food Scrap Route (Collection Only)	\$226,941.89
Monthly Payment to NRWS for Jan - March 2016	\$18,911.82
Inflation Escalation Effective Feb 1, 2016	3.0%
Inflated Payment to NRWS	\$233,750.15
Monthly Payment to NRWS for April 1, 2016 - December 31, 2016	\$19,479.18

Table 3: Calendar Year 2016 Tip Fee Analysis - using Actual Observed Data

	Q1	Q2	Q3	Q4	Total
Total New Participating Restaurants	120	150	180	200	200
New Tons of Commercial Food Scraps Collected	664.44	845.65	1,026.86	1,187.94	3,724.88
Baseline Yardwaste Processing Costs for Food Scraps	\$15,267.90	\$19,431.87	\$23,595.84	\$27,297.15	\$85,592.76
Attachment T ASP Premium Processing Cost	\$2,053.27	\$2,632.14	\$3,196.16	\$3,697.52	\$11,579.09
Revenue from Sale of Finished Compost	\$4,629.64	\$5,892.26	\$7,154.89	\$8,277.23	\$25,954.02
Reduction in Transfer Station Tip Fees Less Residue Disposal Cost	\$38,869.65	\$49,470.47	\$60,071.28	\$70,563.37	\$218,974.77
Net Cost or Benefit to City	\$26,178.12	\$33,298.72	\$40,434.17	\$47,845.92	\$147,756.94

Exhibit 3: Rate Year 2016
Revenue Impacts of Expanded Food Scrap Diversion Program

	NRWS Reports	Actual Observed
Table 3.1. Assumptions Used for Tables 3A Tip Fee Analysis		
Average Yards of Food Scraps per Month Per Restaurant	5.97	5.20
Density of Food Scraps (lbs. per cubic yard)	500	775
Monthly Tonnage per Restaurant	1.02	2.01
Composting Volume Reduction (Percent reduced)	50%	70%
Food Scrap Residue Percentage	5%	10%
2015 Baseline Processing Cost per Ton Food Scraps	\$ 22.98	\$ 22.98
Feb 2016 Inflation Adjustment for Yardwaste Processing Cost	2.20%	2.20%
2015 Attachment T ASP Processing Premium	\$ 6.23	\$ 6.23
Feb 2016 Inflation Adjustment for Attachment T ASP Processing Premium	2.20%	2.20%
2015 Attachment T ASP Processing Premium Post July 2015 per NRWS Proposal	\$ 3.11	\$ 3.11
Revenue per Cubic Yard for Finished Compost	\$ 10.00	\$ 10.00
2016 MSW Disposal Cost at TS - Q1 - Q3	\$ 65.00	\$ 65.00
2016 MSW Disposal Cost at TS - Q4	\$ 66.00	\$ 66.00

Table 4: Special Event Revenue Analysis

Number of Food Scrap Carts Deployed Per Year (2013)	700	<--assumes 255 lbs. per full cart
Current Cost per 65-gallon Food Scrap Cart	\$0	
Cart Rate Discount	50%	
Proposed Cost per 65-gallon Food Scrap Cart	\$ 11.07	
Net Rate Revenue from Special Event Composting Program	\$ 7,745.50	

Table 5: Food Scrap Compactor Analysis

Current Average Monthly Revenue for Food Scrap Compactor	\$ 11,213.43
Revenue with Proposed Rate (25% Discount)	\$ 8,410.07

Table 4: Calendar Year 2016 Revenue Impacts

	Q1	Q2	Q3	Q4	Total
Revenue Impacts of Rate Migration and 25% FS Charge	\$53,256.16	\$61,721.44	\$70,186.71	\$77,711.39	\$262,875.70
Baseline Yardwaste Processing Costs for Food Scraps	\$15,267.90	\$19,431.87	\$23,595.84	\$27,297.15	\$85,592.76
Attachment T ASP Premium Processing Cost	\$2,053.27	\$2,632.14	\$3,196.16	\$3,697.52	\$11,579.09
Revenue Reduction from FS Compactor Rate Discount	\$8,410.07	\$8,410.07	\$8,410.07	\$8,410.07	\$33,640.28
Subtotal from Migration/25% FS Charge/Processing	\$70,577.33	\$83,785.44	\$96,978.71	\$108,706.07	\$393,687.84
Increased Revenue from Sale of Finished Compost	\$4,629.64	\$5,892.26	\$7,154.89	\$8,277.23	\$25,954.02
Reduction in TS Tip Fees with 10% FS Residue	\$38,869.65	\$49,470.47	\$60,071.28	\$70,563.37	\$218,974.77
Increased Revenue from Special Event Food Scrap Rates	\$1,936.38	\$1,936.38	\$1,936.38	\$1,936.38	\$7,745.50
Subtotal from Increased Revenue and Tip Fee Reduction	\$43,499.29	\$55,362.73	\$67,226.17	\$78,840.60	\$252,674.29
Food Scrap Collection Program Payment to NRWS	\$56,735.47	\$58,437.54	\$58,437.54	\$58,437.54	\$232,048.08
Net Impact on Rates	\$83,813.51	\$86,860.25	\$88,190.08	\$88,303.01	\$373,061.63

Exhibit 4. Service and Inventory List of Non-Participating Accounts
Includes Analysis of Rate Impact of Aggregate 'Right-sizing' of MSW Service

Restaurant Name	Address	Inventory - MSW	Size - MSW	Freq-MSW	Yards of MSW/week	Montly MSW Revenue	Actual or Estimated	Inventory - Recycling	Size - Recycling	Freq- Recycling	Yards of Recycling per Week	Total Yards per Week	Total Lifts per Week	Notes	Prior Rate	New Rate	Delta (Net Revenue to City)	INCENTIVE TO GENERATOR?	PERCENT INCREASE OR DECREASE?	
COMMUNITY ACTION OF NAPA VALLEY	100 Hartle CT Napa, CA 94559	1.00	0.50	1.00	0.50	\$ 73.95	Actual	2										YES	-17%	
DENNY'S	1000 Imola AVE Napa, CA 94559	1.00	3.00	3.00	9.00	\$ 1,834.42	Actual	1.00	4	0.50	1.00	8.00	11.00	5.00				YES	-17%	
BELLA GOURMET LLC	1000 MAIN ST 100 NAPA, CA 94559																			
QUEEN OF THE VALLEY MEDICAL CENTER	1000 TRANCAS ST NAPA, CA 94558																			
CARPE DIEM	1001 SECOND ST NAPA, CA 94559																			
BIG D BURGERS	1005 SILVERADO TRL NAPA, CA 94559	1.00	0.50	1.00	0.50	\$ 73.95	Actual	1.00	6.00	1.00	6.00	6.50	2.00					YES	-17%	
BOUNTY HUNTER	101 S COOMBS ST G NAPA, CA 94559	1.00	3.00	1.00	3.00	\$ 563.60	Actual	1.00	2.00	1.00	2.00	5.00	2.00					YES	-21%	
THE BURR-EATERY	101 S COOMBS ST G NAPA, CA 94559																			
THE KITCHEN @ COOMBS	101 S COOMBS ST Y-15 NAPA, CA 94559																			
RISTORANTE ALLEGRIA	1026 1st St Napa, CA 94559																			
CITY WINERY NAPA	1030 MAIN ST NAPA, CA 94559																			
ANDIES CAFE	1042 FREEWAY DR NAPA, CA 94558																			
EMBASSY SUITES	1075 CALIFORNIA BLVD NAPA, CA 94559							2.00	4.00	2.00	16.00	16.00	4.00	Compactor for MSW						
ECONOMY FOOD MARKET	1100 Imola AVE Napa, CA 94559																			
SHIRO ISLAND	1106 FIRST ST NAPA, CA 94559																			
JAX DINER	1122 1ST ST A NAPA, CA 94559																			
COLE'S CHOP HOUSE	1122 MAIN ST NAPA, CA 94559	1.00	2.00	3.00	6.00	\$ 1,226.80	Actual	1.00	4.00	2.00	8.00	22.00	21.00							
NVUSD: SILVERADO MIDDLE SCHOOL	1133 COOMBSVILLE RD NAPA, CA 94558							4.00	0.50	4.00	8.00							YES	-15%	
SIAM THAI HOUSE	1139 Lincoln AVE Napa, CA 94558	2.00	0.50	1.00	1.00	\$ 147.90	Actual	1.00	0.50	1.00	0.50	1.50	3.00					YES	-17%	
TORC	1140 MAIN ST NAPA, CA 94559																			
JOY LUCK HOUSE	1144 JORDAN LN NAPA, CA 94559	1.00	0.20	1.00	0.70	\$ 98.59	Actual	1.00	6.00	1.00	6.00	6.70	3.00					NO	0%	
FOSTER FREEZE	1195 W IMOLA AVE Napa, CA 94558	1.00	4.00	1.00	4.00	\$ 731.74	Actual	1.00	4.00	2.00	8.00	12.00	3.00					YES	-13%	
TAQUERIA ROSITA	1214 MAIN ST NAPA, CA 94559	2.00	0.50	2.00	2.00	\$ 295.80	Actual	1.00	3.00	2.00	7.00	9.00	8.00					YES	-17%	
THAI KITCHEN	1222 Trancas ST Napa, CA 94558	1.00	0.50	1.00	0.50	\$ 73.95	Actual	1.00	0.50	1.00	0.50	1.00	2.00					YES	-17%	
CHIRP BAKERY	1226 SALVADOR AVE NAPA, CA 94558																			
Covenant Presbyterian Church	1226 SALVADOR AVE NAPA, CA 94558																			
MY PAMPERED TRAVELER	1226 SALVADOR AVE NAPA, CA 94558																			
PARKER HALL CATERING	1226 SALVADOR AVE NAPA, CA 94558																			
PRIVATE RESERVE JETS CATERING	1226 SALVADOR AVE NAPA, CA 94558																			
SEVEN COURSES	1226 SALVADOR AVE NAPA, CA 94558																			
TASTE NAPA VALLEY	1226 SALVADOR AVE NAPA, CA 94558																			
CAPP HERITAGE VINEYARDS	1245 FIRST ST NAPA, CA 94559																			
CEJA VINEYARDS TASTING ROOM	1248 First St Napa, CA 94559																			
RICE GARDEN	1312 Trancas ST Napa, CA 94558																			
1313 MAIN STREET	1313 MAIN ST NAPA, CA 94559																			
UPTOWN THEATER	1350 THIRD ST NAPA, CA 94559																			
GARDEN OF EATIN'	1375 Trower AVE Napa, CA 94558																			
NVUSD: VINTAGE HIGH SCHOOL	1375 Trower AVE Napa, CA 94558																			
EIKO'S	1385 NAPA TOWN CTR NAPA, CA 94559																			
EMPIRE	1400 FIRST ST NAPA, CA 94559																			
MINI MANGO THAI BISTRO	1408 CLAY ST NAPA, CA 94559	1.00	1.50	1.00	1.50	\$ 298.98	Actual	5.00	0.50	1.00	2.50	4.00	6.00					YES	-26%	
EMMY LOU'S DINER	1429 W IMOLA AVE Napa, CA 94558	2.00	0.50	1.00	1.00	\$ 147.90	Actual	1.00	4.00	1.00	5.00	6.00	5.00					YES	-17%	
NATION'S #10	1441 3RD ST Napa, CA 94559	1.00	6.00	1.00	6.00	\$ 1,089.10	Actual	1.00	6.00	1.00	6.00	12.00	2.00					YES	-12%	
WAHSING CHINESE RESTAURANT	1445 W IMOLA AVE NAPA, CA 94558	1.00	2.00	1.00	2.00	\$ 384.36	Actual	1.00	0.50	1.00	2.00	2.00	1.00					YES	-23%	
WENDY'S	1450 Trancas ST Napa, CA 94558	1.00	4.00	3.00	12.00	\$ 2,422.88	Actual	1.00	6.00	2.00	12.00	24.00	5.00					YES	-9%	
SIZZLER STEAKHOUSE	1501 TRANCAS ST NAPA, CA 94558	1.00	2.00	2.00	4.00	\$ 818.61	Actual	1.00	4.00	2.00	12.00	16.00	12.00					YES	-26%	
ALEXIS BAKING COMPANY	1517 3RD ST NAPA, CA 94559	1.00	2.00	2.00	4.00	\$ 818.61	Actual	1.00	3.00	2.00	7.00	11.00	6.00					YES	-26%	
EL GUADALAJARA RESTAURANT	1520 SILVERADO TRL NAPA, CA 94559	1.00	0.20	1.00	0.70	\$ 98.59	Actual	2.00	0.50	1.00	6.00	6.70	4.00					YES	-12%	
FRIDA'S MEXICAN GRILL	1533 TRANCAS ST NAPA, CA 94558	1.00	2.00	1.00	2.00	\$ 384.36	Actual	1.00	3.00	1.00	5.00	7.00	6.00					YES	-23%	
TACO BELL #1827	155 Soscol AVE Napa, CA 94558	1.00	6.00	2.00	12.00	\$ 2,400.89	Actual	1.00	6.00	3.00	18.00	30.00	5.00					YES	-11%	
GENOVA DELICATESSEN	1550 Trancas ST Napa, CA 94558	1.00	3.00	1.00	3.00	\$ 1,090.85	Actual	1.00	4.00	2.00	9.50	12.50	6.00	3-yr compactor				YES	-20%	
TANNYA'S TAQUERIA	1601 JEFFERSON ST NAPA, CA 94559	1.00	0.30	1.00	0.30	\$ 49.38	Actual	1.00	0.50	1.00	4.00	4.30	2.00					NO	25%	
SAFEWAY STORES INC. #913	1620 CLAY ST NAPA, CA 94558																			
CARL'S JR. #783	1631 Imola AVE W Napa, CA 94559	1.00	3.00	1.00	3.00	\$ 1,090.85	Actual	1.00	3.00	2.00	6.00	9.00	3.00	3-yr compactor				YES	-20%	
JACK IN THE BOX #435	1641 TRANCAS ST NAPA, CA 94558	1.00	3.00	5.00	15.00	\$ 3,154.70	Actual	1.00	6.00	3.00	18.00	33.00	8.00					YES	-11%	
RESTAURANT CUVÉE	1650 Soscol AVE Napa, CA 94559																			
MANDARIN PALACE	1675 TRANCAS ST NAPA, CA 94558	2.00	0.30	2.00	1.20	\$ 197.52	Actual	5.00	0.50	1.00	2.50	3.70	9.00					YES	-56%	
Chipotle Mexican Grill	1715 TRANCAS ST D NAPA, CA 94558	1	4.00	5.00	20.00	4182.16	Actual	1	4.00	6.00	24.00	44.00	11.00					YES	-11%	
JUQUILITA MARKET	1725 W IMOLA AVE NAPA, CA 94559																			
LAS PALMAS	1730 YAJOME ST NAPA, CA 94558	1.00	0.50	2.00	1.00	\$ 147.90	Actual	1.00	6.00	1.00	6.00	7.00	3.00					YES	-17%	
SARAH HELLER	1755 INDUSTRIAL WAY 28 NAPA, CA 94558																			

Exhibit 4. Service and Inventory List of Non-Participating Accounts
Includes Analysis of Rate Impact of Aggregate 'Right-sizing' of MSW Service

Restaurant Name	Address	Inventory - MSW	Size - MSW	Freq-MSW	Yards of MSW/week	Montly MSW Revenue	Actual or Estimated	Inventory - Recycling	Size - Recycling	Freq- Recycling	Yards of Recycling per Week	Total Yards per Week	Total Lifts per Week	Notes	Prior Rate	New Rate	Delta (Net Revenue to City)	INCENTIVE TO GENERATOR?	PERCENT INCREASE OR DECREASE?	
VERY TALL CHEF	1755 INDUSTRIAL WAY 28 NAPA, CA 94558	2.00	0.50	1.00	1.00	\$ 147.90	Actual	3.00	0.50	1.00	1.50	2.50	5.00					YES	-25%	
CREATIVE PALATE WORKS	1760 Industrail WAY 2 Napa, CA 94559																			
Hacienda Taqueria Napa	1851 OLD SONOMA RD NAPA, CA 94559	1.00	2.00	1.00	2.00	\$ 384.36	Actual	3.00	3.00	2.00	18.00	20.00	7.00					YES	-23%	
APPLEBEE'S GRILL & BAR - Old Seville	195 Soscol AVE Napa, CA 94559	1.00	3.00	1.00	3.00	\$ 1,161.03	Actual	1.00	4.00	3.00	12.00	15.00	4.00					YES	-61%	
LA TAQUIZA	2007 Redwood RD Napa, CA 94558	1.00	3.00	1.00	3.00	\$ 563.60	Actual	1.00	2.00	1.00	2.00	5.00	2.00					YES	-21%	
IHOP#1720	201 SOSCOL AVE NAPA, CA 94559	1.00	3.00	2.00	6.00	\$ 1,222.25	Actual	1.00	4.00	2.00	8.00	14.00	4.00					YES	-15%	
RALEY'S #319	217 SOSCOL AVE NAPA, CA 94558																			
AFC SUSHI BAR (RALEYS) #319	217 SOSCOL AVE NAPA, CA 94559																			
OLIVE TREE INN	221 SILVERADO TRL NAPA, CA 94558																			
JACK'S BAR & GRILL	2295 STREBLOW DR NAPA, CA 94558	1	3.00	1.00	3.00	\$ 563.60						3.00	1.00					YES	-6%	
BUTTERCREAM BAKERY	2297 JEFFERSON ST NAPA, CA 94558	1	6.00	1.00	6.00	\$ 1,089.10	Actual	1 4	4.00 0.50	2.00 2.00	12.00	18.00	11.00					YES	-12%	
REDWOOD RETIREMENT RESIDENCE	2350 REDWOOD RD NAPA, CA 94558																			
LUCKY #730	2355 CALIFORNIA BLVD NAPA, CA 94558							1.00	4.00	1.00	4.00	4.00	1.00	Compactor service						
CONCORDIA MANOR	2435 SUTHERLAND DR NAPA, CA 94558	1.00	4.00	1.00	4.00	\$ 1,607.07	Actual	1.00	4.00	1.00	4.00	8.00	2.00					YES	-56%	
LA MORENITA TAQUERIA	2440 Jefferson ST Napa, CA 94558	1.00	4.00	3.00	12.00	\$ 2,422.88	Actual	2.00	0.50	2.00	2.00	14.00	7.00					YES	-9%	
RIDGEVIEW KITCHEN	2447 OLD SONOMA RD NAPA, CA 94559																			
HARVEST MIDDLE SCHOOL	2449 Old Sonoma RD Napa, CA 94558																			
NVUSD: NAPA HIGH SCHOOL	2475 Jefferson ST Napa, CA 94558																			
FALCOR NAPA VALLEY	2511 NAPA VALLEY CORPORATE DR	1.00	0.50	1.00	0.50	\$ 73.95	Actual	1.00	6.00	1.00	6.00	6.50	2.00					YES	-17%	
TAQUERIA LA JEREZANA	2520 JEFFERSON ST NAPA, CA 94558	1	0.50	1.00	0.50	\$ 73.95	Actual	1	0.50	1.00	0.50	1.00	2.00					YES	-17%	
PANDA EXPRESS	255 Soscol AVE Napa, CA 94559	1	3.00	3.00	9.00	\$ 1,834.42	Actual	1	3.00	3.00	9.00	18.00	6.00					YES	-4%	
TAQUERIA EL QUINTO PATIO	2555 Kilburn AVE Napa, CA 94558																			
MI CASITA	2580 JEFFERSON ST NAPA, CA 94558																			
NAPA ELKS RESTAURANT	2840 Soscol AVE Napa, CA 94558	1.00	4.00	1.00	4.00	\$ 731.74	Actual	1.00	6.00	1.00	6.00	10.00	2.00					YES	-17%	
BURGER KING #2534	3025 Jefferson ST Napa, CA 94558	1	4.00	1.00	4.00	\$ 731.74	Actual	1	6.00	2.00	12.00	16.00	3.00					YES	-17%	
CHINA HOUSE	2940 JEFFERSON ST NAPA, CA 94558	1	2.00	1.00	2.00	\$ 384.36	Actual	1	2.00	1.00	2.00	4.00	2.00					YES	-42%	
KENTUCKY FRIED CHICKEN	295 SOSCOL AVE NAPA, CA 94559	1.00	3.00	2.00	6.00	\$ 1,222.25	Actual	1.00	4.00	2.00	8.00	14.00	4.00					YES	-15%	
GARCIA'S RESTAURANT	2962 JEFFERSON ST NAPA, CA 94558	1	2.00	1.00	2.00	\$ 384.36	Actual	1	4.00	1.00	4.00	6.00	2.00					YES	-23%	
AZTECA MARKET NAPA	2995 JEFFERSON ST NAPA, CA 94559	1.00	2.00	1.00	2.00	\$ 384.36	Actual	1.00	4.00	2.00	8.00	10.00	3.00					YES	-23%	
BURGER KING	287 Soscol AVE Napa, CA 94558																			
TAQUERIA TRES HERMANOS #2	3069 JEFFERSON ST NAPA, CA 94558																			
JEFFERSON CAFE	3070 JEFFERSON ST NAPA, CA 94558	1.00	1.50	1.00	1.50	\$ 298.98	Actual	1.00	4.00	1.00	4.00	5.50	2.00					YES	-26%	
MARY'S PIZZA SHACK	3085 JEFFERSON ST NAPA, CA 94558	1.00	4.00	2.00	8.00	\$ 1,607.07	Actual	1 1	4.00 0.50	2.00 1.00	8.50	16.50	5.00					YES	-10%	
TACO BELL #17181	3177 Jefferson ST Napa, CA 94558	1.00	2.00	3.00	6.00	\$ 2,649.87	Actual	1.00	4.00	3.00	12.00	18.00	6.00					YES	-59%	
SUSHI HAKU	3206 JEFFERSON ST NAPA, CA 94558	1.00	2.00	1.00	2.00	\$ 384.36	Actual	2.00	0.50	1.00	1.00	3.00	3.00					YES	-23%	
MC DONALD'S	3224 JEFFERSON ST Napa, CA 94558	1.00	2.00	2.00	4.00	\$ 1,768.21	Actual	2.00	4.00	2.00	16.00	20.00	6.00					YES	-66%	
GOLDEN BAGEL	3240 Jefferson ST Napa, CA 94558	1	2.00	1.00	2.00	\$ 384.36	Actual	1 5	2.00 0.50	2.00 1.00	6.50	8.50	8.00					YES	-23%	
KENTUCKY FRIED CHICKEN #610502	3246 Jefferson ST Napa, CA 94558																			
BENE GUSTO LLC - Brown's Valley Market	3253 BROWNS VALLEY RD NAPA, CA 94558	1	2.00	1.00	2.00	\$ 384.36	Actual	1	4.00	2.00	8.00	10.00	3.00					YES	-23%	
BROWNS VALLEY MARKET	3263 BROWNS VALLEY RD NAPA, CA 94558	1.00	0.50	1.00	0.50	\$ 73.95	Actual	1.00	4.00	1.00	4.00	4.50	2.00					YES	-17%	
NAPA MOOSE #516	3275 Browns Valley RD Napa, CA 94558	3	0.50	1.00	1.50	\$ 174.39	Actual	7	0.50	1.00	3.50	5.00	10.00					NO	27%	
JUJU'S KITCHEN	3375 California BLVD Napa, CA 94558	1.00	0.30	1.00	0.30	\$ 49.38	Actual	2.00	0.50	1.00	1.00	1.30	3.00					NO	25%	
SAFEWAY STORES INC. #2449	3375 JEFFERSON ST NAPA, CA 94559																			
MINI GARDEN RESTAURANT	3381 California WAY Napa, CA 94558	1.00	0.50	3.00	1.50	\$ 221.85	Actual	1.00	4.00	2.00	8.00	9.50	5.00					NO	0%	
SQUEEZE INN HAMBURGERS	3383 Solano AVE Napa, CA 94558	1.00	1.50	1.00	1.50	\$ 298.98	Actual	1.00	0.50	1.00	0.50	2.00	2.00					YES	-26%	
AFC SUSHI (VALLER GAS)	3385 SOLANO AVE NAPA, CA 94558																			
NAPA VALLEY MARRIOTT	3425 SOLANO AVE NAPA, CA 94558						Actual	4.00	4.00	5.00	80.00	80.00	20.00	MSW compactor					NO	100%
SPRINGS OF NAPA	3460 VILLA LN NAPA, CA 94558																			
HILTON GARDEN INN	3585 SOLANO AVE NAPA, CA 94558	1.00	6.00	1.00	6.00	\$ 1,089.10	Actual	1.00 4.00	3.00 0.50	2.00 1.00	8.00	14.00	7.00					YES	-4%	
NVUSD: REDWOOD MIDDLE SCHOOL	3600 Oxford ST Napa, CA 94558																			
KIKKA (WHOLE FOODS)	3682 Bel Aire Plaza Napa, CA 94558																			
TASTE OF THE HIMALAYAS	376 SOSCOL AVE NAPA, CA 94559	1.00	0.50	1.00	0.50	\$ 73.95	Actual	3.00	0.50	1.00	1.50	2.00	4.00					YES	-17%	
FIREWOOD CAFE	3824 Bel Aire Plaza Napa, CA 94558	1.00	4.00	2.00	8.00	\$ 1,607.07	Actual	1.00	4.00	2.00	8.00	16.00	4.00					YES	-10%	
NAPA POINT BREWING LLC	388 DEVLIN RD NAPA, CA 94558																			
LA RAZA MARKET (& TAQUERIA)	40 AVON AVE NAPA, CA 94558	1	0.20	1.00	0.20	24.64	Actual	1	3.00	1.00	3.00	3.20	2.00					NO	150%	
TAQUERIA MARIA #5	40 AVON AVE NAPA, CA 94558																			
FUME BISTRO	4050 BYWAY E NAPA, CA 94558	1	3.00	2.00	6.00	1222.25	Actual	1	3.00	3.00	9.00	15.00	5.00					YES	-15%	
CELADON	500 MAIN ST G NAPA, CA 94559						Actual	2	4.00	3.00	24.00	24.00	6.00	MSW compactor					NO	
LA TAPATIA MARKET	504 BROWN ST NAPA, CA 94559	1.00	4.00	1.00	4.00	\$ 731.74	Actual	3.00 1.00	4.00 4.00	3.00 2.00	36.00 12.00	40.00 20.00	10.00 12.00					YES	-17%	
COMPADRES RIO GRILL	505 LINCOLN AVE NAPA, CA 94558	1.00	4.00	2.00	8.00	\$ 1,607.07	Actual	8.00	0.50	1.00								YES	-10%	
ST. CLAIR BROWN WINERY-COMMISSARY	520 California BLVD 17 Napa, CA 94558																			
WINERY CHEFS	520 California BLVD 17 Napa, CA 94558	3	0.50	1.00	1.50	\$ 221.85	Actual	3	0.50	1.00	1.50	3.00	6.00					YES	-17%	
OXBOW SCHOOL	530 3RD ST NAPA, CA 94559		6.00	0.30	1.80	\$ 296.28	Actual	9	0.50	1.00	4.50	6.30	15.00					YES	-12%	
ANGELE	540 Main ST Napa, CA 94559																			
NAPA GENERAL STORE	540 Main ST Napa, CA 94559																			

Exhibit 4. Service and Inventory List of Non-Participating Accounts
Includes Analysis of Rate Impact of Aggregate 'Right-sizing' of MSW Service

Restaurant Name	Address	Inventory - MSW	Size - MSW	Freq- MSW	Yards of MSW/week	Montly MSW Revenue	Actual or Estimated	Inventory - Recycling	Size - Recycling	Freq- Recycling	Yards of Recycling per Week	Total Yards per Week	Total Lifts per Week	Notes	Prior Rate	New Rate	Delta (Net Revenue to City)	INCENTIVE TO GENERATOR?	PERCENT INCREASE OR DECREASE?	
SALVATION ARMY, THE	590 Franklin ST Napa, CA 94558	1	3.00	1.00	3.00	563.6	Actual	1	4.00	2.00	11.00	14.00	9.00					YES	-21%	
AFC SUSHI @ NOB HILL FOODS	611 TRANCAS ST NAPA, CA 94558							6	0.50	1.00										
NOB HILL FOODS #623	611 TRANCAS ST NAPA, CA 94558																			
SUPPERTIME	623 FACTORY STORES DR NAPA, CA 94558																			
HUNAN CHINA EXPRESS	625 FACTORY STORES DR NAPA, CA 94558																			
SOSCOL CAFE	632 Soscol AVE Napa, CA 94558	1.00	1.50	1.00	1.50	\$ 298.98	Actual	1.00	4.00	1.00	4.00	5.50	2.00					YES	-26%	
TAQUERIA MARIA	640 THIRD ST NAPA, CA 94559	3	0.50	1.00	1.50	\$ 221.85	Actual	1	3.00	2.00	6.00	7.50	5.00					YES	-11%	
HIGH TECH BURRITO	641 Trancas ST Napa, CA 94558	1	2.00	1.00	2.00	384.36	Actual	1	6.00	2.00	13.50	15.50	6.00					YES	-42%	
FILIPPI'S PIZZA GROTTO	645 1ST ST NAPA, CA 94559	1.00	2.00	1.00	2.00	\$ 384.36	Actual	3	0.50	1.00								YES	-42%	
HOP HING'S KITCHEN	647 TRANCAS ST NAPA, CA 94558	1	1.50	1.00	1.50	298.98	Actual	1	4.00	3.00	12.00	14.00	4.00					YES	-42%	
FRATTI GELATO CAFE	670 MAIN ST NAPA, CA 94559								0.50	1.00	0.50	2.00	2.00					YES	-26%	
WAL-MART	681 LINCOLN AVE NAPA, CA 94558																			
THE PEAR	720 MAIN ST NAPA, CA 94558																			
TAQUERIA MICHOCAN	721 LINCOLN AVE NAPA, CA 94558																			
ELAINE BELL CATERING	776 Technology WAY Napa, CA 94558																			
MC DONALD'S	806 W IMOLA AVE Napa, CA 94559	1.00	2.00	2.00	4.00	\$ 1,507.37	Actual	2.00	4.00	2.00	16.00	20.00	6.00	COMPACTOR				YES	-37%	
VELO PIZZERIA	807 MAIN ST NAPA, CA 94559																			
SPECIAL OCCASIONS	812 THIRD ST NAPA, CA 94559																			
IN-N-OUT BURGER #126	820 W IMOLA AVE NAPA, CA 94559						Actual	1.00	6.00	3.00	24.00	24.00	15.00	MSW Compactor						
ASIA CAFE	825 MAIN ST NAPA, CA 94559	1.00	0.20	2.00	0.40	\$ 49.28	Actual	4.00	0.50	3.00								NO		
ZUZU RESTAURANT	829 Main St Napa, CA 94558																		NO	25%
JACK IN THE BOX #4362	850 IMOLA AVE NAPA, CA 94559	1.00	4.00	3.00	12.00	\$ 2,422.88	Actual	1.00	4.00	2.00	8.00	20.00	5.00					YES	-9%	
EL RANCHO GRANDE	891 SILVERADO TRL NAPA, CA 94559	2.00	0.50	1.00	1.00	\$ 147.90	Actual	1.00	6.00	1.00	6.00	7.00	3.00					NO	0%	
DOWNTOWN JOE'S RESTAURANT	902 Main St Napa, CA 94559																			
NAPA VALLEY BISTRO	975 CLINTON ST NAPA, CA 94559																			
BUJI BISTRO	976 PEARL ST NAPA, CA 94559																			
NAPA VALLEY YACHT CLUB	100 RIVERSIDE DR NAPA, CA 94558																			
YO BELLE FROZEN YOGURT	1000 MAIN ST STE 110 NAPA, CA 94559																			
STARBUCK'S COFFEE 17602	1006 FIRST ST NAPA, CA 94559																			
LUCERO OLIVE OIL LLC	1012 FIRST ST NAPA, CA 94559																			
FAIRVIEW MARKET & DELI	1017 COOMBSVILLE RD NAPA, CA 94558	2.00	0.50	2.00	2.00	\$ 147.90	Actual	1.00	6.00	1.00	6.00	8.00	5.00					NO	100%	
VERMEIL WINES	1018 FIRST ST NAPA, CA 94559																			
GUSTAVO WINE	1021 MCKINSTRY ST NAPA, CA 94559																			
DON PERICO RESTAURANT		1.00	2	1	2.00	384.36	Actual	1.00	2	2	4.00	7.50	6.00					YES	-23%	
PAPA JOE'S		1.00	1.5	1	1.50	298.98	Actual	1.00	6	1	6.00	9.00	5.00					YES	-26%	
SEVEN ELEVEN FOOD STORE #14152E	1136 Imola AVE Napa, CA 94558							3.00	0.5	1	1.50									
STARBUCK'S	1200 LINCOLN AVE NAPA, CA 94558	1	3.00	3.00	9.00	\$ 1,834.42	Actual	1	3.00	4.00	12.00	21.00	7.00					YES	-17%	
BILCO'S	1234 3RD ST Napa, CA 94559							3.00	0.5	1	1.50									
AZZURRO PIZZERIA	1260 Main St Napa, CA 94559																			
EXPONENT SUBWAY NAPA DT INC	1317 FIRST ST NAPA, CA 94559																			
ANETTE'S CHOCOLATE FACTORY	1321 FIRST ST NAPA, CA 94559																			
JOHN ANTHONY VINEYARDS	1440 FIRST ST NAPA, CA 94559																			
BEL AIRE SHELL #135642	1491 TRANCAS ST NAPA, CA 94558																			
LA VINA MARKET	1514 PINE ST NAPA, CA 94559																			
BOYS & GIRLS CLUB OF NAPA	1515 PUEBLO AVE NAPA, CA 94558																			
FAZZERATTI'S PIZZA	1517 W IMOLA AVE NAPA, CA 94559	1	2.00	1.00	2.00	384.36	Actual	1	6.00	2.00	12.00	14.00	3.00					YES	-23%	
FRESH & EASY MARKET	1525 W IMOLA AVE NAPA, CA 94559	1	3.00	2.00	6.00	1222.25	Actual					6.00	2.00					YES	-15%	
VAL'S LIQUORS	1531 3RD ST Napa, CA 94559																			
VALLEY OAK	1600 Myrtle AVE Napa, CA 94558																			
RIVER TERRACE INN	1600 Soscol AVE Napa, CA 94559						Actual	1	6.00	3.00	18.00	18.00	3.00					NO	100%	
SPA AT SILVERADO	1605 ATLAS PEAK RD NAPA, CA 94558																			
K & P SUBWAY		1.00	1.5	1	1.50	298.98	Actual	1.00	4	2	8.00	10.50	5.00							
SEVEN ELEVEN FOOD STORE	1670 SILVERADO TRL NAPA, CA 94558							2.00	0.5	1	1.00							YES	-26%	
DOMINO'S PIZZA (JOHN HAIRE TRUST TSB)	1700 W IMOLA AVE NAPA, CA 94559																			
PANERA BREAD	1725 TRANCAS ST STE C NAPA, CA 94558	1	4.00	3.00	12.00	2422.88	Actual	1	4.00	3.00	12.00	24.00	6.00					YES	-9%	
HALLELUJAH HOUSE	1760 INDUSTRIAL WAY NAPA, CA 94558																			
NAPA VALLEY CATERING		3.00	0.5	1	1.50	\$ 221.85	Actual	1.00	2	1	2.00	4.50	6.00							
SWEET ON CAKE	1760 INDUSTRIAL WAY NAPA, CA 94558							2.00	0.5	1	1.00							YES	-17%	
LOBA QUIZNO'S - (SOSCOL CENTER BUS PAR	1800 SOSCOL AVE A NAPA, CA 94559																			
PAPA MURPHY'S - (SOSCOL CENTER BUS PA	1800 SOSCOL AVE B NAPA, CA 94559																			
HIDALGO'S LITTLE MARKET	1847 OLD SONOMA RD NAPA, CA 94558	1.00	0.50	1.00	0.50	\$ 73.95	Actual	1.00	4.00	1.00	4.00	4.50	2.00					YES	-17%	
SEVEN ELEVEN FOOD STORE	1925 Sierra AVE Napa, CA 94558																			
CASH & CARRY SALAMI LADY	1964 IROQUOIS ST NAPA, CA 94559																			

Exhibit 4. Service and Inventory List of Non-Participating Accounts
Includes Analysis of Rate Impact of Aggregate 'Right-sizing' of MSW Service

Restaurant Name	Address	Inventory - MSW	Size - MSW	Freq-MSW	Yards of MSW/week	Montly MSW Revenue	Actual or Estimated	Inventory - Recycling	Size - Recycling	Freq- Recycling	Yards of Recycling per Week	Total Yards per Week	Total Lifts per Week	Notes	Prior Rate	New Rate	Delta (Net Revenue to City)	INCENTIVE TO GENERATOR?	PERCENT INCREASE OR DECREASE?
REDWOOD ROAD CHEVRON	2008 REDWOOD RD NAPA, CA 94558																		
SEVEN ELEVEN FOOD STORE #14135G	2010 REDWOOD RD NAPA, CA 94558																		
TARGET T-1026	205 SOSCOL AVE NAPA, CA 94559																		
JUVENILE HALL	212 WALNUT ST NAPA, CA 94559	1.00	3.00	3.00	9.00	\$ 1,834.42	Actual	2.00	4.00	2.00	16.00	25.00	7.00				YES	-13%	
LAWLER'S	2232 Jefferson St Napa, CA 94558																		
LITTLE CAESAR'S PIZZA -(MILL VALLEY INVE	2375 CALIFORNIA BLVD C NAPA, CA 94559																		
TYLERS PIZZA PLACE	2410 JEFFERSON ST NAPA, CA 94558	1.00	0.30	1.00	0.30	\$ 49.38	Actual	2.00	0.50	1.00	1.00	1.30	3.00				NO	75%	
LA MORENITA MARKET	2434 Jefferson ST Napa, CA 94558	1	4.00	3.00	12.00	2,422.88	Actual	2	0.50	1.00	1.00	13.00	5.00				YES	-9%	
STARBUCK'S COFFEE #5361	247 SOSCOL AVE NAPA, CA 94559	1.00	3.00	5.00	15.00	\$ 3,154.70	Actual	1.00	4.00	5.00	20.00	35.00	10.00				YES	-10%	
JOEY'S BAKERY	2556 Jefferson St Napa, CA 94558	2.00	0.50	2.00	2.00	\$ 295.80	Actual	4.00	0.50	1.00	2.00	4.00	8.00				YES	-25%	
JAMBA JUICE #496	259 SOSCOL AVE NAPA, CA 94558	1.00	3.00	2.00	6.00	1,222.25	Actual	1.00	3.00	1.00	3.00	9.00	3.00				YES	-15%	
TOGO'S - BASKIN ROBBINS	269 SOSCOL AVE NAPA, CA 94559	1.00	2.00	2.00	4.00	818.61	Actual	1.00	4.00	6.00	24.00	26.00	8.00				YES	-26%	
SEVEN ELEVEN FOOD STORE #14138B	2906 1ST ST Napa, CA 94558																		
KWIKEE MART	2984 JEFFERSON ST NAPA, CA 94558																		
PIZZA GUYS	3000 JEFFERSON ST NAPA, CA 94558	1.00	2.00	1.00	2.00	384.36	Actual	1.00	4.00	1.00	4.00	6.00	2.00				YES	-42%	
MARIPOSA ICE CREAMERY	3095 JEFFERSON ST NAPA, CA 94558																		
PIZZA HUT	3150 Jefferson ST Napa, CA 94558																		
SUBWAY SANDWICHES #27175	3214 JEFFERSON ST NAPA, CA 94558																		
BROWNS VALLEY YOGURT/ESPRESSO -(Cat	3265 BROWNS VALLEY RD NAPA, CA 94558																		
ROUND TABLE PIZZA	3331 Solano AVE Napa, CA 94558	1.00	2.00	2.00	2.00	818.61	Actual	1.00	4.00	2.00	8.00	10.00	4.00				YES	-26%	
AFC SUSHI @SAFEWAY #2449	3375 Jefferson ST Napa, CA 94558																		
ST. JOHNS LUTHERAN CHURCH & SCHOOL	3521 LINDA VISTA AVE NAPA, CA 94558																		
SIFT CUPCAKE & DESSERT BAR	3816 BEL AIRE PLAZA NAPA, CA 94558																		
YO 'BELLE	3900 BEL AIRE PLAZA STE E NAPA, CA 94558																		
NEKTER JUICE BAR	3900 BEL AIRE PLAZA STE F NAPA, CA 94558																		
TARGET STORE T-1438	4000 BEL AIRE PLZ NAPA, CA 94558																		
BEST WESTERN-IVY HOTEL	4195 SOLANO AVE NAPA, CA 94558																		
LANE 33	494 SOSCOL AVE Napa, CA 94559																		
SWEETIE PIES	520 MAIN ST NAPA, CA 94559																		
SILO'S	530 Main St Napa, CA 94559																		
VINTAGE SWEET SHOPPE	530 Main St Napa, CA 94559																		
NAPA VALLEY EXPOSITION	575 THIRD ST NAPA, CA 94559																		
SUBWAY #39361	621 Factory Store DR B Napa, CA 94558																		
JAMBA JUICE #356	623 TRANCAS ST NAPA, CA 94558																		
NEW YORK PIZZA KITCHEN	657 TRANCAS ST NAPA, CA 94558																		
STARBUCK'S #5993	663 TRANCAS ST NAPA, CA 94558	1.00	4.00	3.00	12.00	2,422.88	Actual	1.00	6.00	2.00	12.00	24.00	5.00				YES	-12%	
LINCOLN AVENUE CHEVRON	695 LINCOLN AVE NAPA, CA 94558																		
HEAVENLY YOGURT OF NAPA	707 LINCOLN AVE NAPA, CA 94559																		
TASTE AT OXBOW	708 FIRST ST NAPA, CA 94559																		
WINES BY MARK HEROLD	710 FIRST ST NAPA, CA 94558																		
R & K SUBWAY	710 LINCOLN AVE NAPA, CA 94558																		
CHEVRON STATION #1541	800 W IMOLA AVE NAPA, CA 94559																		
ST. CLAIR BROWN WINERY	816 VALLEJO ST NAPA, CA 94558																		
MOLINARI CAFE	828 BROWN ST NAPA, CA 94559																		
NEW TECHNOLOGY HIGH	920 Yount St Napa, CA 94559																		
SMALL WORLD MARKET, THE	928 COOMBS ST NAPA, CA 94559																		
CADET WINE & BEER	930 FRANKLIN ST NAPA, CA 94559																		
MELTED	966 PEARL ST NAPA, CA 94559	1	0.50	1.00	0.50	73.95	Actual	1	0.50	1.00	0.50	1.00	2.00				YES	-17%	
SEVEN ELEVEN FOOD STORE	985 Lincoln Ave Napa, CA 94558																		
NAPA JUNIOR GIRLS SOFTBALL	Freeway DR Napa, CA 94558																		
AFC SUSHI @SAFEWAY #2605	Hunt ST SAINT HELENA, CA 94574																		
BACK ROOM WINES	1000 Main ST 120 Napa, CA 94559																		
BRIGITTE'S NATURALLY ALIVE	101 S COOMBS ST 4 NAPA, CA 94558																		
MELISSA TEAFF CATERING	101 S COOMBS ST 4 NAPA, CA 94558																		
PLATYPUS TOURS LIMITED	101 S COOMBS ST 4 NAPA, CA 94558																		
QUAIL POINT CHOCOLATE	101 S COOMBS ST 4 NAPA, CA 94558																		
CALWINE	1014 CLINTON ST NAPA, CA 94559																		
JAVA HUT (DRIVE-UP)	1037 SILVERADO TRL NAPA, CA 94558																		
CLASSIC CAR WASH	1050 FREEWAY DR NAPA, CA 94558																		
NAPA GIRLS FASTPITCH ASSOC.	1201 ELM ST NAPA, CA 94559																		
NAPA VALLEY TRADITIONS	1202 Main ST Napa, CA 94558																		
FLYERS #281	1300 TRANCAS ST NAPA, CA 94558																		
SEE'S CANDIES	1301 Trancas ST Napa, CA 94558																		
VAL'S LIQUORS	132 Soscol AVE Napa, CA 94558																		
GENERAL NUTRITION CENTER	1325 NAPA TOWN CTR NAPA, CA 94559																		
NAPA HIGH BOOSTERS-EAST	1420 MENLO AVE NAPA, CA 94558																		
VINTAGE HGIH ATHLETIC BOOSTERS-WEST	1420 MENLO AVE NAPA, CA 94558																		
PURECRU WINE EXPERIENCE	1463 FIRST ST NAPA, CA 94559																		
RITE AID #5928	1491 W IMOLA AVE NAPA, CA 94558																		
COMMUNITY ACTION OF NAPA VALLY-NAPA	1500 JEFFERSON ST NAPA, CA 94558																		

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Includes Analysis of Rate Impact of Aggregate 'Right-sizing' of MSW Service

Restaurant Name	Address	Inventory - MSW	Size - MSW	Freq- MSW	Yards of MSW/week	Montly MSW Revenue	Actual or Estimated	Inventory - Recycling	Size - Recycling	Freq- Recycling	Yards of Recycling per Week	Total Yards per Week	Total Lifts per Week	Notes	Prior Rate	New Rate	Delta (Net Revenue to City)	INCENTIVE TO GENERATOR?	PERCENT INCREASE OR DECREASE?
CVS PHARMACY #9214	1558 TRANCAS ST NAPA, CA 94558																		
NAPA VALLEY WINE & CIGAR	161 Silverado TRL Napa, CA 94558																		
GOLDEN CARROT NATURAL FOODS	1621 W IMOLA AVE Napa, CA 94559																		
HAPPY'S DONUT TREE TOO	1655 W IMOLA AVE Napa, CA 94558																		
STONE'S SPORTS BAR & LOUNGE	1679 W IMOLA AVE Napa, CA 94559																		
WALGREENS #11822	1685 TRANCAS ST NAPA, CA 94558																		
JEFFERSON MART	1704 JEFFERSON ST NAPA, CA 94559																		
JARVIS CONSERVATORY	1711 Main ST Napa, CA 94559																		
VITAMIN SHOPPE	1735 TRANCAS ST STE A NAPA, CA 94558																		
IMOLA CHEVRON	1775 W IMOLA AVE NAPA, CA 94559																		
TESORO/SHELL #68172	1800 W IMOLA AVE NAPA, CA 94558																		
FAMILY DRUG PHARMACY	1805 OLD SONOMA RD NAPA, CA 94559																		
ABC FOODS	1825 Old Sonoma RD Napa, CA 94558	1	0.2		1.0.2	\$ 24.64	Actual	3		3.2	18	18.2	7.00					NO	150%
A & B MARKET	1855 OLD SONOMA RD Napa, CA 94558	1	0.3		1.0.3	\$ 49.38	Actual											NO	25%
SALVADOR CHEVRON	1895 SALVADOR AVE NAPA, CA 94558																		
RANCHO GORDO	1924 YAJOME ST NAPA, CA 94559	1	0.2		1.0.8	\$ 123.40	Actual	1	4	1	4	4.8	4.00					YES	-10%
ARCO GAS STATION: #2106	198 SOSCOL AVE NAPA, CA 94558	2	0.30		1.00														
WINE VALLEY LODGE	200 S COOMBS ST NAPA, CA 94559																		
REDWOOD LIQUOR	2030 REDWOOD RD A NAPA, CA 94558																		
PUEBLO MARKET	2107 W PUEBLO AVE NAPA, CA 94558							1	4	1.4	4	4	1.00					NO	100%
HOME DEPOT #6652, THE	225 SOSCOL AVE NAPA, CA 94559																		
NAPA VALLEY COLLEGE - LIBRARY KITCHEN	2277 NAPA VALLEJO HWY NAPA, CA 94558																		
ARCO STATION #82857	2303 JEFFERSON ST NAPA, CA 94558																		
NAPA COUNTY HEALTH & HUMAN SERVICES	2344 OLD SONOMA RD NAPA, CA 94559																		
LA MORENITA DISCOUNT STORE	2412 JEFFERSON ST NAPA, CA 94559																		
FAST & EASY #59	2442 W IMOLA AVE NAPA, CA 94559																		
NAPA GAS & GROCERY	2500 LAUREL ST NAPA, CA 94559																		
DULCERIA LA ROSA#5	2564 Jefferson ST Napa, CA 94558																		
AMIGOS MARKET	2877 SOLANO AVE NAPA, CA 94558	1.00	0.3	1	0.30	\$ 49.38	Actual	1.00	2	1	2.00	3.30	4.00					NO	25%
BROWNS VALLEY CHEVRON	2896 1ST ST NAPA, CA 94559							2.00	0.5	1	1.00								
CVS PHARMACY	291 S COOMBS ST NAPA, CA 94559																		
GREEN DOOR, THE	2955 Solano AVE. Napa, CA 94558																		
NAPA SHELL #135640	300 LINCOLN AVE NAPA, CA 94558																		
CONSERV FUEL	3001 JEFFERSON ST NAPA, CA 94558																		
HAWTHORN INN & SUITES	314 SOSCOL AVE NAPA, CA 94559																		
JENNY CRAIG WEIGHT LOSS	3202 Jefferson ST Napa, CA 94559																		
LA FORET	3261 BROWNS VALLEY RD NAPA, CA 94558																		
ROSS DRESS FOR LESS INC #170	3331 JEFFERSON ST NAPA, CA 94558																		
PEET'S COFFEE & TEA	3678 BEL AIRE PLZ NAPA, CA 94558																		
TESORO/SHELL #68169	385 SILVERADO TRL NAPA, CA 94558																		
COST PLUS WORLD MARKET	3934 Bel Aire Plaza Napa, CA 94558																		
ORCHARD SUPPLY COMPANY #370	3980 BEL AIRE PLAZA NAPA, CA 94558																		
PHARMACA	4020 BEL AIRE PLAZA NAPA, CA 94558																		
CAMPUS KITCHENS (BISTRO J)	4026 MAHER ST NAPA, CA 94558																		
JUSTIN SIENA SNACK SHACK	4026 MAHER ST NAPA, CA 94558																		
NAPA SAINTS FOOTBALL & CHEER	4026 Maher ST Napa, CA 94558																		
NAPA MASONIC HALL ASSOCIATION	4125 SOLANO AVE NAPA, CA 94558	3	0.5		1.1.5	\$ 221.85	Actual	2	0.5	1.1	2.5	5.00						YES	-17%
CHURCHILL MANOR	485 Brown ST Napa, CA 94558	1	2		1.2	\$ 384.36	Actual	4	0.5	1.2	4	5.00						YES	-23%
NAPA RIVER INN	500 Main ST Napa, CA 94559						Actual	2	4.00	3.00	24.00	42.00	42.00					NO	100%
USA GASOLINE #68171	603 LINCOLN AVE NAPA, CA 94558							12	0.50	3.00	18.00								
WHOLE SPICE INC	610 First ST 13 Napa, CA 94559																		
ANETTE'S CHOCOLATES	610 FIRST ST 7 NAPA, CA 94559																		
OLIVE PRESS, THE	610 First ST 7 Napa, CA 94559																		
MARSHALLS FARM HONEY	610 FIRST ST NAPA, CA 94559																		
NAPASTAK	610 FIRST ST UNIT 14 NAPA, CA 94558																		
NAPA VALLEY DISTILLERY	610 FIRST ST UNIT 8 NAPA, CA 94559																		
SUPPERTIME	621 FACTORY STORES DR A NAPA, CA 94558																		
CVS PHARMACY #1804	675 TRANCAS ST NAPA, CA 94558																		
NAPA FOOD FAIR	719 LINCOLN AVE NAPA, CA 94558	1	0.2		1.0.2	24.64	Actual	1	6	3.18	18.2	4.00						NO	150%
A-1 FOOD STORE	75 Coombs ST Napa, CA 94559																		
NAPA LITTLE LEAGUE	80 GARIFELD LN NAPA, CA 94558																		
HENRY'S	823 MAIN ST NAPA, CA 94559																		
CONFERENCE CENTER SATALITE KITCHEN	875 BORDEAUX WAY NAPA, CA 94558						Actual	4	3	6	120	120	36.00						
MERITAGE BAR (POOL & LOBBY BAR)	875 BORDEAUX WAY NAPA, CA 94558																		
NEW BISTRO KITCHEN @ MERITAGE RESORT	875 BORDEAUX WAY NAPA, CA 94558							2	4	6								NO	100%
SIENA RESTAURANT @ MERITAGE	875 BORDEAUX WAY NAPA, CA 94558																		
TRINITAS TASTING ROOM (IN CAVE)	875 BORDEAUX WAY NAPA, CA 94558																		

Exhibit 4. Service and Inventory List of Non-Participating Accounts
Includes Analysis of Rate Impact of Aggregate 'Right-sizing' of MSW Service

Restaurant Name	Address	Inventory - MSW	Size - MSW	Freq- MSW	Yards of MSW/week	Monthly MSW Revenue	Actual or Estimated	Inventory - Recycling	Size - Recycling	Freq- Recycling	Yards of Recycling per Week	Total Yards per Week	Total Lifts per Week	Notes	Prior Rate	New Rate	Delta (Net Revenue to City)	INCENTIVE TO GENERATOR?	PERCENT INCREASE OR DECREASE?
All Restaurant <u>AVERAGE</u> MSW and Recycling Service Levels, MSW Revenue, and Lifts		1.21	1.95	1.54	3.71	\$ 767.82		1.88	2.88	1.80	9.38	13.11	5.75		\$ 75,246.01	\$ 69,885.53	\$ -11,962.29	94%	
		Average MSW Containers per Account	Average MSW Size (CY)	Average MSW Freq	Average MSW Yards/week per Account	Average MSW Revenue per Month		Average Number of Recycling Containers per Account	Average Recycling Size (CY)	Average Recycling Freq	Average Recycling Yards/week per Account	Average Total Yards per Week per Account	Average Lifts per Week per Account		Current Revenue	Revenue with FS Rates and MSW Reductions	Lost Monthly Rate Revenue for Current Accounts	Percent of Current Accounts that will Realize Cost Savings After MSW Reductions	
All Restaurant <u>TOTAL</u> MSW and Recycling Service Levels, MSW Revenue, and Lifts		104.00			389.70	\$ 75,246.01		196.00			1087.50	1468.50	638.00		\$ 716.63	\$ 629.60	\$ -105.86		
		Total MSW Containers			MSW Yards/week	MSW Revenue per Month		Total Recycling Containers			Total Recycling Yards/week	Total Yards per Week	Total Lifts per Week		Current Average Revenue per Account	Average Revenue per Account with 25% FS Discount	Average Monthly Delta per Account with MSW Service Reductions and FW Charge		

RY 2015

-\$	103.72	\$	96.31
RY 2015 Average Monthly Delta per Account with MSW Service Reductions and FS Charge		RY 2015 Average Monthly Delta per Account with MSW Service Reductions and FS Charge AT 75% LEVELIZED RATE for NON PARTICIPATING RESTAURANTS	

RY 2016

-\$	101.46	\$	94.06
RY 2016 Average Monthly Delta per Account with MSW Service Reductions and FS Charge		RY 2016 Average Monthly Delta per Account with MSW Service Reductions and FS Charge AT 75% LEVELIZED RATE for NON PARTICIPATING RESTAURANTS	

Total Accounts
Standalone Service

Non Partic Non Standalone

Accounts

Number of Account with 35-gallons	7
Number of Account with 65-gallons	8
Number of Account with 95-gallons	25
Number of Account with 1.5 cubic yard bins	7
Number of Account with 2 cubic yard bins	23
Number of Account with 3 cubic yard bins	18
Number of Account with 4 cubic yard bins	15
Number of Account with 6 cubic yard bins	4
	107

Exhibit 5: Average Impact Analysis of 5% MSW Commercial Cart Rate Increase on Non-Participating Restaurants

Carts	Accounts		Current Cart Rate Revenue for Non-participating Restaurants with Standalone Service	EXPECTED INCREASE (5% in RY 2015)	Increase in Aggregate MSW Cart Revenue	Average Rate Impact per Non-Participating Standalone Account in RY 2015	Expected Increases (+5% in RY 2016)	Increase in Aggregate MSW Cart Revenue for RY 2016	Average Rate Impact per Non-Participating Standalone Account for RY 2016
32	25	Accounts with 95-gal MSW	\$ 3,502.14	\$ 3,677.25	\$ 175.11	\$ 2.14	\$ 3,861.11	\$ 183.86	\$ 2.25
15	8	Accounts with 65-gal MSW	\$ 839.46	\$ 881.43	\$ 41.97		\$ 925.50	\$ 44.07	
1	7	Accounts with 35-gal MSW	\$ 419.14	\$ 440.10	\$ 20.96		\$ 462.10	\$ 22.00	
48	40		\$ 4,760.74	\$ 4,998.78	\$ 238.04		\$ 5,248.72	\$ 249.94	

Exhibit 6. Service and Inventory List of Currently Participating Accounts
Includes Analysis of Rate Impact of Aggregate 'Right-sizing' of MSW Service

Restaurant Name	Address	Inventory MSW	Size MSW	Free MSW	Yards of MSW/Week	Monthly MSW Revenue	Actual or Estimated	Inventory Recycling	Size Recycling	Free Recycling	Yards of Recycled/Week	Monthly Recycled Revenue	Actual or Estimated	Inventory Food Scrap	Size Food Scrap	Free Food Scrap	Yards of Food Scrap/Week	Monthly Food Scrap Revenue	Actual or Estimated	Total Yards per Week	Total Revenue per Week	Total Units per Week	Notes	Prior Rate	New Rate	Delta (Net Revenue Chg)	INCENTIVE TO GENERATION ?	PERCENT INCREASE (OR DECREASE)
FAGINI'S AT THE THOMAS	813 MAIN ST, NAPA, CA 94550	1	3	0.3	6.40	\$ 888.84	Actual	0.3	1	0.0	0.3	1.20	0.00	0.3	1	0.0	0.3	1.20	0.00	0.00	1.50	6.00	24	NO	0%	0%	0%	
CONCORDIANO DI PRATELLI	1240 CLIFTON ST, NAPA, CA 94550	1	0.3	0.0	3.00	\$ 441.70	Actual	0.3	1	0.0	0.3	1.20	0.00	0.3	1	0.0	0.3	1.20	0.00	0.00	1.50	6.00	24	NO	0%	0%	0%	
FEARL	1139 PEARL ST, NAPA, CA 94550	1	0.3	0.0	1.50	\$ 221.85	Actual	0.3	1	0.0	0.3	1.20	0.00	0.3	1	0.0	0.3	1.20	0.00	0.00	1.50	6.00	24	NO	0%	0%	0%	
KINYON CULINARY SERVICES INC	20 ENTERPRISE CT, NAPA, CA 94550	1	0.5	0.0	0.50	\$ 73.95	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	4.00	16.00	48	NO	33%	0%	0%	
STARBUCKS #11231	2400 REDWOOD RD, NAPA, CA 94550	1	1.00	2.00	4.00	\$ 5,742.21	Actual	0.3	1	0.3	1.20	4.80	0.00	0.3	1	0.3	1.20	4.80	0.00	0.00	6.00	24.00	72.00	NO	0%	0%	0%	
SMOKER GRILLING COMPANY	2746 OLD SONOMA RD, NAPA, CA 94550	2	0.5	1.00	1.00	\$ 147.90	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
SMOKEY'S & THE OYSTER GUY	886 SOCOLA AVE, NAPA, CA 94550	1	0.3	1.00	0.50	\$ 73.95	Actual	0.3	1	0.0	0.3	1.20	0.00	0.3	1	0.0	0.3	1.20	0.00	0.00	1.50	6.00	24	NO	0%	0%	0%	
MONDRIAN CAFE	813 MAIN ST, NAPA, CA 94550	1	0.3	1.00	0.50	\$ 73.95	Actual	0.3	1	0.0	0.3	1.20	0.00	0.3	1	0.0	0.3	1.20	0.00	0.00	1.50	6.00	24	NO	0%	0%	0%	
BURGEREAT	967 FIRST ST, NAPA, CA 94550	1	0.3	1.00	0.50	\$ 73.95	Actual	0.3	1	0.0	0.3	1.20	0.00	0.3	1	0.0	0.3	1.20	0.00	0.00	1.50	6.00	24	NO	0%	0%	0%	
RED ROCK CAFE	1010 LINCOLN AVE, NAPA, CA 94550	1	1.00	1.50	2.00	\$ 3,000.00	Actual	0.3	1	0.3	1.20	4.80	0.00	0.3	1	0.3	1.20	4.80	0.00	0.00	6.00	24.00	72.00	NO	0%	0%	0%	
CALVINE	1113 MAIN ST, NAPA, CA 94550	1	0.5	1.00	0.50	\$ 73.95	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
BUENAVISTA COOKING SCHOOL	1510 SOUTHWEST DR, NAPA, CA 94550	1	0.5	1.00	0.50	\$ 73.95	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
DIVENTI	1990 TROWER AVE, NAPA, CA 94550	1	1.5	1.0	1.50	\$ 208.98	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
RED ROCK NORTH	4084 BIRWAY EAST, NAPA, CA 94550	1	0.50	1.00	1.50	\$ 221.85	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
RED HEN CANTINA	4175 SOLANO AVE, NAPA, CA 94550	1	4	1	8.00	\$ 1,454.47	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
ROCKY HUNTER	895 FIRST ST, NAPA, CA 94550	1	3	1	3.00	\$ 561.00	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
COUNTY OF NAPA JAIL	1125 THIRD ST, NAPA, CA 94550	1	1	1	1.00	\$ 14.00	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
GRACE'S TABLE INC	1400 SECOND ST, NAPA, CA 94550	2	0.5	2	2.00	\$ 295.80	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
NORMAN ROSE TAVERN	1429 FIRST ST, NAPA, CA 94550	1	0.5	1	1.00	\$ 147.90	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
FOOD MIA	104 FRANCIS ST, NAPA, CA 94550	2	0.5	1	1.00	\$ 147.90	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
GENOTRE	1425 FIRST ST, NAPA, CA 94550	2	0.5	3	3.00	\$ 441.70	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
DIRA NAVA NAPA	1450 FIRST ST, NAPA, CA 94550	1	2	2	2.00	\$ 2,856.46	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
VILLA DONNA BAKERY	1614 BEL AIR PLAZA, NAPA, CA 94550	1	0.0	0.5	2.00	\$ 3,000.00	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
LEONDO TRATORIA	4112 SOLANO AVE, NAPA, CA 94550	2	1.5	1.5	1.50	\$ 208.98	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
ALEXANDRIA SQUARE	829 MAIN ST, NAPA, CA 94550	2	0.5	1.00	0.50	\$ 73.95	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
TRANCAS STEAKHOUSE	999 TRANCAS ST, NAPA, CA 94550	1	4.00	1.00	4.00	\$ 731.74	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
Meadows of Napa Valley	1800 ATENIA PKWY, NAPA, CA 94550	1	1	1	1.00	\$ 14.00	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
OLIV MARKET	1730 OLD SONOMA RD, NAPA, CA 94550	1	4	1	4.00	\$ 1,088.40	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
NAPA NURSING CENTER	1375 VILLA LN, NAPA, CA 94550	1	4	2	8.00	\$ 2,008.96	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
TRADER JOES #128	3624 BEL AIR PLAZA, NAPA, CA 94550	1	4	4	4.00	\$ 3,268.56	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
LAUREN	2112 FRANCIS ST, NAPA, CA 94550	1	1	1	1.00	\$ 14.00	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
BLACK BEAR DINER	355 SOCOLA AVE, NAPA, CA 94550	1	4	3	3.00	\$ 2,422.86	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
MI FAMILIA MARKET INC	2555 KILBURN AVE, NAPA, CA 94550	5	3	2	6.00	\$ 2,181.70	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
HEALTH AND HUMAN SERVICES	2344 OLD SONOMA RD, NAPA, CA 94550	1	4	2	8.00	\$ 1,007.07	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
BREKBRK ELEMENTARY SCHOOL	1590 14th St, NAPA, CA 94550	1	0.5	1	1.00	\$ 147.90	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
NAPA VALLEY COLLEGE	2277 NAPA VALLEY HWY, NAPA, CA 94550	1	0.5	1	1.00	\$ 147.90	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
MIL ANTONIOS	290 JEFFERSON ST, NAPA, CA 94550	1	0.5	1	1.00	\$ 147.90	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
STARBUCKS COFFEE #004	1140 FRANCIS ST, NAPA, CA 94550	1	1.00	2.00	12.00	\$ 2,400.00	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
LUCAS BAKERY	2414 JEFFERSON ST, NAPA, CA 94550	1	0.5	1	1.00	\$ 147.90	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
RANCH MARKET	4215 SOLANO AVE, NAPA, CA 94550	1	2.00	2.00	4.00	\$ 814.61	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
C-CASA	500 FIRST ST, NAPA, CA 94550	1	0.2	1	0.20	\$ 28.64	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
WINE TRAIN	801 EIGHTH ST, NAPA, CA 94550	1	0.0	1.00	2.00	\$ 395.35	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
CHIVY'S LINDO MARKET	1014 WINE COUNTRY AVE, NAPA, CA 94550	1	0.5	1	1.00	\$ 147.90	Actual	0.5	1	0.0	0.5	2.00	0.00	0.5	1	0.0	0.5	2.00	0.00	0.00	2.50	10.00	30.00	NO	0%	0%	0%	
CHANNEL PRODUCTIONS, INC	700 MAIN ST, NAPA, CA 94550	1	0.5	1	1.00	\$ 147.90	Actual	0.5	1	0.0	0.5	2.00																

ATTACHMENT 4

Exhibit 7: Average Impact Analysis of 5% MSW Commercial Cart Rate Increase on Participating Restaurants

Table 1: Average Impact on Participating Accounts of 5% Increase in MSW Cart Rate (i.e. MSW Cart Levelization)

Carts	Accounts		Current Cart Rate Revenue for Participating Restaurants	EXPECTED INCREASE (5% in RY 2015)	Increase in Aggregate MSW Cart Revenue	Average Rate Impact per Participating Standalone Account in RY 2015	Expected Increases (+5% in RY 2016)	Increase in Aggregate MSW Cart Revenue for RY 2016	Average Rate Impact per Participating Standalone Account for RY 2016
35	18	Accounts with 95-gal MSW	\$ 4,658.85	\$ 4,891.79	\$ 232.94	\$ 5.67	\$ 5,136.38	\$ 244.59	\$ 5.95
5	3	Accounts with 65-gal MSW	\$ 987.60	\$ 1,036.98	\$ 49.38		\$ 1,088.83	\$ 51.85	
1	1	Accounts with 35-gal MSW	\$ 24.64	\$ 25.87	\$ 1.23		\$ 27.17	\$ 1.29	
41	22		\$ 5,671.09	\$ 5,954.64	\$ 283.55		\$ 6,252.38	\$ 297.73	

Table 2: Average Impact on Participating Accounts of 5% Increase on MSW Cart Rate and Corresponding Impact on Food Scrap Rate that is a 25% Discount on MSW Cart Service

Carts	Accounts	Current Rate for a MSW 65-gallon Cart 2x/week	Current Rate for a FW 65-gallon Cart 2x/week with a 25% Incentive	Current Aggregate Monthly FW Revenue	LEVELIZED Rate for a MSW 65-gallon Cart 2x/week	LEVELIZED RATE with FS Cart at 75% of LEVELIZED MSW	Aggregate Monthly FS Revenue with LEVELIZED RATE	Monthly Increase in FS Rate Revenue with LEVELIZED FS Cart	Average Additional Revenue Per Participating Account from LEVELIZED FS CART
166	50	\$ 98.75	\$ 74.06	\$ 12,294.38	\$ 103.69	\$ 77.77	\$ 12,909.09	\$ 614.72	\$ 12.29

Assumptions:			
Customer base:		accounts	
Number of carts:		Size:	
Annual lifts:			
Disposal:		pounds per cart	
Employees:		1	
Payroll tax rate:		0.0625 FICA	
		0.0145 Medicare	
		0.05 SU1, first \$7,000	
		0.008 FUTA, first \$7,000	
Health:	\$	1,858.00 per month	
Compliance:	\$	100.00 Boots	
	\$	117.60 Medical	
	\$	126.00 Safety equipment	
Uniforms:	\$	75.00	
Depreciation period:		24 months	
No. of Trucks:		1 # of trucks	Type: Resi SL
No. of Accounts:		Total	
Carts/Bins on service:		Total	

							Annual Expense
							Rate
DISPOSAL							
	City of Napa MDF	tons disposed					\$ -
	BioBag	Waste bags					\$ -
							\$ -
DIRECT LABOR							
		Usage Allocation ==>	100%				
	Employee						
	Wages	per hour	2080	\$	27.20	\$	56,576.00
	Payroll taxes					\$	4,762.35
	Worker's Comp Insurance	per \$100 of wages			9.49%	\$	5,369.06
	Pension	per hour	2080	\$	5.03	\$	10,462.40
	Health & Welfare	per month	12	\$	1,858.00	\$	22,296.00
	Compliance			\$	343.60	\$	343.60
	Uniforms	annual	1	\$	75.00	\$	75.00
						\$	99,884.41
DIRECT TRUCK							
		Usage Allocation ==>	100%				
	Fuel - CNG	gallons	6468	\$	3.05	\$	19,695.06
	Operating Supplies	\$ 182,676.96 1 out of 27 trucks		\$	6,765.81	\$	6,765.81
	Outside Services	\$ 61,093.16 1 out of 27 trucks		\$	2,262.71	\$	2,262.71
	Insurance			\$	2,672.25	\$	2,672.25
	Damage Claims	\$ 5,768.77 1 out of 27 trucks		\$	213.66	\$	213.66
	Licenses			\$	3,700.00	\$	3,700.00
	Tires	6 tires, changed annually		\$	2,850.00	\$	2,850.00
						\$	38,159.49
DIRECT EQUIPMENT							
	Insurance - Property			\$	40,927.68	0.61%	\$ 249.66
	Property taxes	per \$100		\$	40,927.68	1.09	\$ 446.28
						\$	695.94
CONTAINER DELIVERY & CLEANING							
		Usage Allocation ==>	31%	80 days per year			
	Employee						
	Wages	per hour	638	\$	18.50	\$	11,803.00
	Payroll taxes					\$	1,314.83
	Worker's Comp Insurance	per \$100 of wages			9.49%	\$	1,120.10
	Pension	per hour	638	\$	5.03	\$	3,209.14
	Health & Welfare	per month	3.7	\$	1,858.00	\$	6,874.60
	Compliance			\$	343.60	\$	105.32
	Uniforms	annual	31%	\$	75.00	\$	23.25
	Operating Supplies					\$	500.00

					<u>\$ 24,950.24</u>
SHOP					
	Oil, Air & Oil Filters	\$ 65,282.85	1 out of 27 trucks	\$ 2,417.88	\$ 2,417.88
	Fluids	\$ 7,088.26	1 out of 27 trucks	\$ 262.53	\$ 262.53
	Parts	\$ 14,708.40	1 out of 27 trucks	\$ 544.76	\$ 544.76
					<u>\$ 3,225.17</u>
ROUTE SUPERVISION					
ADMINISTRATIVE					
	Telephone			\$	900.00
	Data connection			\$	600.00
	Software maintenance			\$	425.00
	Insurance - Property	\$ 3,306.45		0.61%	\$ 20.17
	Property taxes	\$ 628.95		1.09%	\$ 6.86
					<u>\$ 1,952.03</u>
PUBLIC EDUCATION					
CAPITAL	Allocation:				
	Truck	\$ 426,178.20	S/L - 120 months	10.0%	\$ 42,617.82
	Equipment	\$ 40,927.68	S/L - 60 months	20.0%	\$ 8,185.54
	Office Requirment & Software	\$ 3,306.45	S/L - 60 months	20.0%	\$ 661.29
		\$ 467,105.88			
	Interest				\$ -
					<u>\$ 51,464.65</u>
					<u>\$ 220,331.93</u>
PROFIT				3%	\$ 6,609.96
TOTAL					<u>\$ 226,941.89</u>
START-UP (Pilot)					\$ -
					\$ -
					\$ -
					\$ -
	Total				<u>\$ -</u>
CAPITAL EXPENDITURES					
Truck:	Labrie Automizer, 29 cyd, right hand arm			\$	421,222.20
	Wrap and graphics			\$	4,956.00
	Subtotal - Truck			\$	426,178.20
Equipment:	#536, 65 gal Schaefer containers			\$	36,029.94
	Cart Cleaning system			\$	4,897.75
	Subtotal - Equipment			\$	40,927.68
Office Equipment & Software:	Tablet			\$	628.95
	Soft-pak license			\$	2,677.50
	Subtotal - Office Equipment & Software			\$	3,306.45
	Total			\$	<u>467,105.88</u>

# of work days	
Jan	23
Feb	20
Mar	21
Apr	22
May	22
Jun	21
Jul	23
Aug	21
Sep	22
Oct	23
Nov	20
Dec	23
	<u>261</u>

Exhibit 9: Impact of Right-sizing Carts

TABLE 1: EXPECTED IMPACT OF FOOD SCRAP CART 'DOWN-SIZING' FOR CURRENT PARTICIPANTS

	Food Scrap Cart Count	Food Scrap Revenue per Month with 25% Discount	Food Scrap Revenue per Month with 25% Savings ON LEVELIZED MSW RATES
Current Number of Carts	166	\$ 12,293.96	\$ 12,909.09
Optimal Number of Carts for Current Participants	100	\$ 7,406.00	\$ 7,776.56
Difference	66	-\$ 4,887.96	-\$ 5,132.53
Potential Rate Reduction per Account if Food Scrap Carts are "Right Sized"			-\$ 102.65

TABLE 2: EXPECTED REVENUE IMPACT OF FOOD SCRAP CART RATE LEVELIZATION PER MONTH ON NON-PARTICIPATING ACCOUNTS

Expected Average Number of Carts Serviced 2x/week for New Accounts	2
Expected Rate Revenue using 75% of Current MSW Rate per Account	\$ 148.13
Expected Rate Revenue using 75% Cost of LEVELIZED MSW CART RATE	\$ 155.53
Additional Revenue per Account with 75% of LEVELIZED MSW RATE	\$ 7.41

Exhibit 10: FOOD SCRAP COMPACTOR ANALYSIS

	TONS PER MONTH	ESTIMATED PULLS	RATE REVENUE TO CITY
Sep-14	35.04	5	\$ 12,586.50
Aug-14	46.14	6	\$ 15,103.80
Jul-14	27.68	4	\$ 10,069.20
Jun-14	26.8	4	\$ 10,069.20
May-14	34.61	5	\$ 12,586.50
Apr-14	27.6	4	\$ 10,069.20
Mar-14	25.41	4	\$ 10,069.20
Feb-14	34.79	5	\$ 12,586.50
Jan-14	34.54	5	\$ 12,586.50
Dec-13	29.79	5	\$ 12,586.50
Nov-13	34.56	5	\$ 12,586.50
Oct-13	23.53	4	\$ 10,069.20
Sep-13	26.04	4	\$ 10,069.20
Aug-13	26.95	5	\$ 12,586.50
Jul-13	23.26	4	\$ 10,069.20
Jun-13	23.83	4	\$ 10,069.20
May-13	34.47	5	\$ 12,586.50
Apr-13	38.05	4	\$ 10,069.20
Mar-13	39.15	5	\$ 12,586.50
Feb-13	21.5	4	\$ 10,069.20
Jan-13	22.12	4	\$ 10,069.20
Dec-12	22.38	4	\$ 10,069.20
Nov-12	27.46	5	\$ 12,586.50
Oct-12	20.78	4	\$ 10,069.20
Sep-12	21.64	4	\$ 10,069.20
Aug-12	28.58	5	\$ 12,586.50
Jul-12	22.23	4	\$ 10,069.20
Jun-12	33.5	6	\$ 15,103.80
May-12	22.06	4	\$ 10,069.20
Apr-12	18.97	4	\$ 10,069.20
Mar-12	23.23	4	\$ 10,069.20
Feb-12	20.04	4	\$ 10,069.20
Jan-12	24.27	4	\$ 10,069.20
AVERAGE	27.91	4.45	11,213.43

Exhibit 11: Special Event Analysis

NRWS/NCRWS Special Event Report: 2013

		Totals	Tons Collected
2013 totals to date	Special Events:		
	Total number of events	90	
	Total number of events with Recycling service	75	
	Total number of events with Composting/Yardwaste service	46	
	Total number of events with Trash service	73	
	Total number of events with Electronics Recycling/Reuse service	3	15.99
	Total Recycling tonnage:		105.20
	Total Composting tonnage:		88.67
	Total Trash tonnage:		93.78
	Total Diversion rate:		67%



ECONOMICS SPECIAL EVENT ANALYSIS

88.67 TONS OF FOOD SCRAPS COLLECTED IN 2013

255.00 ESTIMATED LBS PER FOOD SCRAP CART COLLECTED

695.45 ESTIMATED ANNUAL FOOD SCRAP CARTS IN 2013

700 ROUNDED TO NEAREST HUNDRED

Exhibit 12:
Levelized Commercial MSW Cart Rate Impact

Table 1: Current MSW Rates with Incentives for Carts

	Napa Trash Rates							
	35-gallon	65-gallon	95-gallon	1.5-yd	2-yd	3-yd	4-yd	6-yd
1x/week	\$ 24.64	\$ 49.38	\$ 73.95	\$ 298.98	\$ 384.36	\$ 563.60	\$ 731.74	\$ 1,089.10
2x/week	\$ 49.28	\$ 98.75	\$ 147.90	\$ 626.20	\$ 818.61	\$ 1,222.25	\$ 1,607.07	\$ 2,400.89
3x/week	\$ 73.92	\$ 148.13	\$ 221.86	\$ 932.58	\$ 1,226.80	\$ 1,834.41	\$ 2,422.87	\$ 3,624.38
4x/week	\$ 98.56	\$ 197.53	\$ 295.83	\$ 1,250.18	\$ 1,649.94	\$ 2,469.02	\$ 3,268.55	\$ 4,892.73
5x/week	\$ 123.20	\$ 246.90	\$ 396.77	\$ 1,593.46	\$ 2,107.18	\$ 3,154.70	\$ 4,182.15	\$ 6,262.84
6x/week	\$ 147.84	\$ 296.29	\$ 443.74	\$ 1,988.14	\$ 2,632.61	\$ 3,942.57	\$ 5,231.55	\$ 7,836.48

Table 2: Cost per Gallon for Current Services

	Current Napa Trash Rates per Gallon							
	35-gallon	65-gallon	95-gallon	1.5-yd	2-yd	3-yd	4-yd	6-yd
	35	65	95	303	404	606	808	1212
1	\$ 0.70	\$ 0.76	\$ 0.78	\$ 0.99	\$ 0.95	\$ 0.93	\$ 0.91	\$ 0.90
2	\$ 0.70	\$ 0.76	\$ 0.78	\$ 1.03	\$ 1.01	\$ 1.01	\$ 0.99	\$ 0.99
3	\$ 0.70	\$ 0.76	\$ 0.78	\$ 1.03	\$ 1.01	\$ 1.01	\$ 1.00	\$ 1.00
4	\$ 0.70	\$ 0.76	\$ 0.78	\$ 1.03	\$ 1.02	\$ 1.02	\$ 1.01	\$ 1.01
5	\$ 0.70	\$ 0.76	\$ 0.84	\$ 1.05	\$ 1.04	\$ 1.04	\$ 1.04	\$ 1.03
6	\$ 0.70	\$ 0.76	\$ 0.78	\$ 1.09	\$ 1.09	\$ 1.08	\$ 1.08	\$ 1.08

Table 3: Average Cost per Gallon for 1.5 - 6 yard bins per service frequency

Average 1x/week	\$ 0.93
Average 2x/week	\$ 1.01
Average 3x/week	\$ 1.01
Average 4x/week	\$ 1.02
Average 5x/week	\$ 1.04
Average 6x/week	\$ 1.08

Table 4: Adjusted Cost for MSW Cart Service

	35-gallon	65-gallon	95-gallon
1x/week	\$ 32.71	\$ 60.74	\$ 88.77
2x/week	\$ 70.56	\$ 131.04	\$ 191.51
3x/week	\$ 105.91	\$ 196.70	\$ 287.48
4x/week	\$ 142.57	\$ 264.76	\$ 386.96
5x/week	\$ 182.17	\$ 338.31	\$ 494.45
6x/week	\$ 227.67	\$ 422.81	\$ 617.96



Table 5: Analysis of 35-gallon Cart Increase Impact

	35-gallon carts				Number of 35-gallon carts currently in service	Current Monthly Revenue	Monthly Revenue with Revised Rate	Increase in Monthly Rate Revenue	Percent Increase in Monthly Rate Revenue
	Current	Proposed	Increase	% Increase					
1x/week	\$ 24.64	\$ 32.71	\$ 8.07	33%	274	\$ 6,751.36	\$ 8,961.60	\$ 2,210.24	33%
2x/week	\$ 49.28	\$ 70.56	\$ 21.28	43%	5	\$ 246.40	\$ 352.79	\$ 106.39	43%
3x/week	\$ 73.92	\$ 105.91	\$ 31.99	43%	0	\$ -	\$ -	\$ -	0%
4x/week	\$ 98.56	\$ 142.57	\$ 44.01	45%	0	\$ -	\$ -	\$ -	0%
5x/week	\$ 123.20	\$ 182.17	\$ 58.97	48%	0	\$ -	\$ -	\$ -	0%
6x/week	\$ 147.84	\$ 227.67	\$ 79.83	54%	0	\$ -	\$ -	\$ -	0%
Total					279	\$ 6,997.76	\$ 9,314.39	\$ 2,316.63	33%

Exhibit 12:
Levelized Commercial MSW Cart Rate Impact

Table 6: Analysis of 65-gallon Cart Increase Impact

	65-gallon carts				Number of 65-gallon carts currently in service	Current Monthly Revenue	Monthly Revenue with Revised Rate	Increase in Monthly Rate Revenue	Percent Increase in Monthly Rate Revenue
	Current	Proposed	Increase	% Increase					
1x/week	\$ 49.38	\$ 60.74	\$ 11.36	23%	238	\$ 11,752.44	\$ 14,456.31	\$ 2,703.87	23%
2x/week	\$ 98.75	\$ 131.04	\$ 32.29	33%	11	\$ 1,086.25	\$ 1,441.40	\$ 355.15	33%
3x/week	\$ 148.13	\$ 196.70	\$ 48.57	33%	0	\$ -	\$ -	\$ -	0%
4x/week	\$ 197.53	\$ 264.76	\$ 67.23	34%	0	\$ -	\$ -	\$ -	0%
5x/week	\$ 246.90	\$ 338.31	\$ 91.41	37%	0	\$ -	\$ -	\$ -	0%
6x/week	\$ 296.29	\$ 422.81	\$ 126.52	43%	3	\$ 888.87	\$ 1,268.44	\$ 379.57	43%
Total					252	\$ 13,727.56	\$ 17,166.15	\$ 3,438.59	25%

Table 7: Analysis of 95-gallon Cart Increase Impact

	95-gallon carts				Number of 95-gallon carts currently in service	Current Monthly Revenue	Monthly Revenue with Revised Rate	Increase in Monthly Rate Revenue	Percent Increase in Monthly Rate Revenue
	Current	Proposed	Increase	% Increase					
1x/week	\$ 73.95	\$ 88.77	\$ 14.82	20%	562	\$ 41,559.90	\$ 49,891.55	\$ 8,331.65	20%
2x/week	\$ 147.90	\$ 191.51	\$ 43.61	29%	57	\$ 8,430.30	\$ 10,916.34	\$ 2,486.04	29%
3x/week	\$ 221.86	\$ 287.48	\$ 65.62	30%	13	\$ 2,884.18	\$ 3,737.25	\$ 853.07	30%
4x/week	\$ 295.83	\$ 386.96	\$ 91.13	31%	0	\$ -	\$ -	\$ -	0%
5x/week	\$ 396.77	\$ 494.45	\$ 97.68	25%	2	\$ 793.54	\$ 988.90	\$ 195.36	25%
6x/week	\$ 443.74	\$ 617.96	\$ 174.22	39%	0	\$ -	\$ -	\$ -	0%
Total					634	\$ 53,667.92	\$ 65,534.04	\$ 11,866.12	22%

Table 8: Total Impact of Cart Rate Increase

	Current Monthly Revenue	Monthly Revenue with Revised Rate	Increase in Monthly Rate Revenue from MSW Carts	Percent Increase
35-gallon	\$ 6,997.76	\$ 9,314.39	\$ 2,316.63	33%
65-gallon	\$ 13,727.56	\$ 17,166.15	\$ 3,438.59	25%
95-gallon	\$ 53,667.92	\$ 65,534.04	\$ 11,866.12	22%
Total	\$ 74,393.24	\$ 92,014.58	\$ 17,621.34	24%

Table 9: Total Impact of 5% Cart Rate Increase in RY 2015

	Current Monthly Revenue	Monthly Revenue with 5% Rate Increase	Increase in Monthly Rate Revenue from MSW Carts	RY 2015 Additional Revenue
35-gallon	\$ 6,997.76	\$ 7,347.65	\$ 349.89	\$ 3,148.99
65-gallon	\$ 13,727.56	\$ 14,413.94	\$ 686.38	\$ 6,177.40
95-gallon	\$ 53,667.92	\$ 56,351.32	\$ 2,683.40	\$ 24,150.56
Total	\$ 74,393.24	\$ 78,112.90	\$ 3,719.66	\$ 33,476.96



Table 10: Total Impact of 5% Cart Rate Increase in RY 2016

	Current Monthly Revenue at End of RY 2015	Monthly Revenue with 5% Rate Increase	Increase in Monthly Rate Revenue from MSW Carts	RY 2016 Additional Revenue
35-gallon	\$ 7,347.65	\$ 7,715.03	\$ 367.38	\$ 4,408.59
65-gallon	\$ 14,413.94	\$ 15,134.63	\$ 720.70	\$ 8,648.36
95-gallon	\$ 56,351.32	\$ 59,168.88	\$ 2,817.57	\$ 33,810.79
Total	\$ 78,112.90	\$ 82,018.55	\$ 3,905.65	\$ 46,867.74



Attachment 5. Six Year MDF Capital Replacement Plan

MDF Property Category	IFAS CIP/JL #	Year Last Repaired or Replaced	Budget Year	Done?	Useful Life	Estimated Year of Next Replacement / Repair	Estimated Cost (2014\$)	EXPENDITURES (\$2014 escalated)					
								Year 1 FY14-15	Year 2 FY15-16	Year 3 FY16-17	Year 4 FY17-18	Year 5 FY18-19	Year 6 FY19-20
CIP FUNDED FROM OPERATING RESERVE (UNDESIGNATED FUNDS) - Projects \$125,000 or less													
ADMINISTRATION BUILDING													
Roof replacement	MD24PW01	1994	FY24	NA	30	FY24	55,900						
Roof repair	MD12PW01	2005	FY12	No	7	FY12	10,500						
Exterior painting	MD15PW01	2007	FY15	No	7	FY15	18,700				21,700		
Interior painting (NRWS responsibility)	NA - Contractor Responsibility	2005		NA	7								
Carpeting	MD13PW01	2005	FY13	No	7	FY13	40,900						
Lighting upgrade	MS10PW04	FY10	FY10	Yes	10	FY20	11,700						
HVAC	MD15PW02	1994	FY15		20	FY15	28,000				32,500		
Subtotal							165,700	-	-	-	54,200	-	-
MRF BUILDING													
Exterior painting	MD11PW01	1994	FY11	No	7	FY18	53,600				62,400		
Exterior metal doors	MD16PW01	2005	FY16	No	10	FY16	21,000				24,400		
Roof over wash rack	51-7013-2-001-57	FY10	FY10	Yes	20	FY30	44,300						
Roll-doors	MD16PW02	2005	FY16		10	FY16	52,500				60,900		
Paint booth	51-7013-2-001-57	FY08	FY28	Yes	20	FY28	166,400						
Periodic repair of roof (fixed amount)		FY14	FY19 (5yrs)		5	FY19, FY24, etc.	30,000					30,000	
Periodic repair of interior concrete (every 5 years)	MD15PW03	FY08	FY15	Partial	5	FY15, FY20, etc.	35,000	36,300					45,600
Bathrooms repair	MD14PW01	1994	FY14	Yes	20	FY14	30,200						
Lighting upgrade	MS10PW04		FY10	Yes	10	FY20	58,200						75,900
Interior walls / painting (contractor responsibility)	NA - Contractor Responsibility			NA	7								
Subtotal							491,200	36,300	-	-	147,700	30,000	121,500
COMMON AREAS													
Fencing (perimeter)													
West boundary	MD26PW01	2005	Partial	Partial	20	FY26	19,900						
Other (partial replacement)	MD15PW04	1994	FY15	No	20	FY15	83,000				141,300		
Vehicle weigh scale (Elevated)	MS11PW04	2011	FY11	Yes	20	FY31	95,500						
Vehicle weigh scale (Ground)	MD16PW03	1996	FY16	No	20	FY16	-				111,000		
Scalehouse improvements	MD15PW05	2010	FY10	Yes	5	FY15	13,600				15,800		
Paved surfaces							-						
Periodic repair of exterior concrete pads annually	MD14PW02	1994	FY11	Yes	5-10	FY13	31,200	30,000	30,000	30,000	30,000	30,000	30,000

Attachment 5. Six Year MDF Capital Replacement Plan

MDF Property Category	IFAS CIP/JL #	Year Last Repaired or Replaced	Budget Year	Done?	Useful Life	Estimated Year of Next Replacement / Repair	Estimated Cost (2014\$)	EXPENDITURES (\$2014 escalated)					
								Year 1 FY14-15	Year 2 FY15-16	Year 3 FY16-17	Year 4 FY17-18	Year 5 FY18-19	Year 6 FY19-20
Concrete assessment		NA	FY14	No	5	FY14	13,600						
Electrical transformer additional	MS10PW02	1994	FY10	No	15	FY11	137,300						
Electrical trenching	MS11PW06	2010	FY11	Yes	15	FY26	39,600						
Lighting upgrade (incl pond)	MS10PW04	2010	FY10	Yes	10	FY20	58,200						75,900
Environmental mitigation-encl.	MS11PW02	2011	FY11	Yes	15	FY26	285,100						
Environmental mitigation - birds	MS11PW03	2011	FY11	Yes	15	FY26	69,900						
Truck wash station (contractor responsibility)				NA									
Subtotal							846,900	30,000	30,000	30,000	298,100	30,000	105,900
Miscellaneous projects (b)								125,000	125,000	125,000	125,000	125,000	125,000
SUBTOTAL OP RESERVE							1,503,800	191,300	155,000	155,000	625,000	185,000	352,400
MAJOR MDF CIPS FUNDED FROM MDF CIP RESERVE - Projects over \$125,000													
Roof replacement	MD14PW03	2005	FY14	Yes	20	FY15	382,700						
Parking lots	MD15PW06	1994	FY15	No	20	FY15	133,900						161,600
Levitin Way (asphalt)	ST08PW001	2009	FY10	Yes	15	FY25	581,700						
New pad for SW corner	MS10PW01	NA - New	FY11	Yes	20	FY31	682,900						
Existing concrete pads partial replacement (a)	MD16PW04	1994	FY16	No	25	FY15, FY20, etc.	1,686,700						2,115,800
Covered composting (including stormwater)	MS11PW07	NA - New	FY11	No	15	Current & Ongoing	7,830,000	2,480,000	1,920,000				
SE corner cover structure	MD15PW07	NA - New	FY15	No	15	FY15	436,200						526,900
SUBTOTAL FROM MDF CIP RESERVE							11,734,100	2,480,000	1,920,000	-	-	688,500	2,115,800
TOTAL							13,237,900	2,671,300	2,075,000	155,000	625,000	873,500	2,468,200

Escalation rate = 3.85%/year

a) Assumes replacement of 20% of exterior concrete every 5 years.

b) Miscellaneous projects include other unallocated capital improvement projects: Drains, plumbing, telecommunications, landscaping, lighting/security/fire, utilities (potable water supply, sewer system, stormwater system), awnings.

**CITY OF NAPA CITY COUNCIL
AGENDA REPORT**

ADMIN CALENDAR
AGENDA ITEM 6.B.
Date: December 16, 2014

To: Honorable Mayor and Members of City Council
From: Jacques R. LaRochelle, Public Works Director
Prepared by: Kevin Miller, Materials Diversion Administrator
Subject: Agreement with the California Energy Commission to Receive Grant Funding of \$3 Million for an Anaerobic Digestion to Biofuel Facility

ISSUE STATEMENT:

Adopt a resolution authorizing the Public Works Director, or his designee, to enter into an agreement with the California Energy Commission to receive \$3,000,000 in grant funding for an Anaerobic Digestion facility to produce transportation fuel (compressed renewable natural gas or RNG) at the City's Materials Diversion Facility, and determine that the project was the subject of previous CEQA analysis.

DISCUSSION:

The City's Materials Diversion Facility (MDF), which is located in south Napa County, has been in operation since the early 1990's and receives and processes all residential and commercial source-separated recyclables and yardwaste generated within the City and collected by the City's authorized hauler, Napa Recycling & Waste Services LLC (NRWS). The MDF also receives and processes materials delivered by haulers servicing surrounding jurisdictions (such as the unincorporated Napa County) and by private (self-haul) customers. In 2004, the City purchased the MDF and in 2005, NRWS took over as the City's contracted operator. The MDF property was annexed into the City of Napa in March, 2014.

The City has developed a plan for the Napa Renewable Resources Project (NRRP), which, among other things, envisions enhanced composting technology and anaerobic digestion for management of the City's organic waste streams. In late 2011, CH2M Hill Engineers was hired by the City to review the long term needs of the MDF and develop a master plan and long-term site optimization for the facility. In cooperation with the City's current operator NRWS, many MDF features and systems were reviewed in light of the upcoming needs and demands, including covered composting system technology and "dry" anaerobic digestion to biofuel (AD) system technology.

The AD technology identified as most suitable by CH2MHill was submitted to the California Energy Commission (CEC) for grant funding on March 25, 2014, and was awarded the maximum possible award of \$3 million in July 2014.

In July 2012, the City adopted a Sustainability Plan (R2012 99), which identified the construction of an AD to biofuel system to provide renewable transportation fuel as an initiative requiring the receipt of a grant for consideration and possible implementation. The AD system would produce approximately 328,000 diesel gallon equivalents of low carbon intensity RNG fuel, allowing for the entire waste collection fleet to be powered by fuel made from the organic waste collected.

The agreement with the CEC would terminate at the end of March 2018. The agreement requires the submittal of monthly progress reports, six months of operations data gathering following start up, and the submittal of a final report. Invoices are submitted monthly to document match fund expenditures and request reimbursement of expenses through grant funds. There are no payback provisions associated with the CEC grant funds and the equipment purchased vests with the grant recipient.

The AD to biofuel system would produce a fuel that has been found by the California Air Resources Board to be “carbon negative.” By using organic waste as a feedstock instead of fossil CNG that has been stored underground for millions of years, the climate impact from the combustion of the fuel is greatly reduced. Additionally, the methane emissions that would have escaped if the organic material had been landfilled are avoided. The combination of these effects results in a carbon negative fuel, meaning that its use actually prevents more greenhouse gas emissions than would be generated.

Staff is recommending that the City enter into an agreement with the California Energy Commission for the grant funds related to this project. However, prior to proceeding with the project, future Council actions will be required related to rates, budget, and bond financing. Staff expects to conduct a solid waste rate workshop at the January 20, 2015 Council meeting.

FINANCIAL IMPACTS:

As shown in Attachment 2 to this staff report, capital expenditures are projected to range from about \$15 million to \$15.7 million, less the \$3 million CEC grant, depending on whether the contingency is set at 10% or 15%. A financial cost-benefit analysis was conducted using a 20-year time horizon to compare potential scenarios and estimate the net present value of the project, which is also the time required to retire the debt. Three scenarios were analyzed, representing a worst case, a reasonable best case and mid-range (conservative but realistic) scenario. The results and the assumptions of each scenario are shown in Attachment 2. It is assumed that 100% of the capital cost would be borrowed, less the \$3 million grant funding. An analysis of the outlook and cost of bond financing is presented in Attachment 3. This analysis indicates an annual debt service cost for scenario A of \$1,004,000, \$925,000 for scenario B and \$900,000 for scenario C. Staff has also requested an analysis for the cost of an “interest-only” debt payment for year zero of the cost-benefit analysis (year of construction) so that the AD to biofuel system positive revenue/reduced cost benefit can better align with the burden of the full debt service. Staff intends to have this cost option and analysis available by the time of the administrative report to Council on this item.

The most likely mid-range scenario, identified as Scenario B in Attachment 2, results in a net present value (NPV) of -\$2,386,780, or a cost of approximately \$120,000 per year once the AD to biofuel system is fully operational (planned for April 2017). \$120,000 per year translates into approximately 0.71% of current collection service rate revenue. Scenario A, the worst case, results in a NPV of -\$6,576,212 (-\$329,000 per year) and Scenario C in a NPV of +\$2,472,687 (+\$124,000 per year)

The mid-range Scenario B is considered conservative and reasonable, while Scenario A is considered to be extremely conservative, with very pessimistic assumptions used throughout. Scenario C is considered to be a plausible outcome, as well, but with more optimistic, yet also reasonable, projections. Some of the principle parameters that vary among scenarios, which are provided in detail in Attachment 2, are the revenue generated by environmental assets, such as carbon and renewable fuel credits, the projected avoided retail fuel cost, and labor savings derived from overnight fueling of collection vehicles on-site as opposed to driving to the existing CNG fueling station. If Scenario B continued the same “floor” level sale of federal RINs (renewable identification numbers) and state level LCFS (Low Carbon Fuel Standards) credits continuing for all 20 years (scenario B assumes that LCFS credit will end in 2020 with authority under Executive Order S-01-07 and assumed a 1.5% per year annual fuel price escalation (scenario B assumes current pricing to remain constant for 20 years), the 20-year NPV becomes a positive \$188,105.

As noted above, the financial implications of the project have been analyzed very thoroughly, but there are a number of non-monetary benefits that should also be considered including the following:

- A 100% clean air “carbon negative” vehicle fuel for the refuse and recycling fleet that isn’t tied to market price fluctuations.
- A truly “Closed Loop” sustainable infrastructure (with the collected feedstock feeding the system to provide fuel for the collection).
- Incorporation of the best available technology for air emission control, odor containment and storm water management.
- Significant progress towards fulfillment of the City’s sustainability plan for both the City and Community-wide plan.
- A locally available and renewable source of biofuel that does not depend on so-called “fracking” technology and the environmental impacts associated with that source of natural gas.
- Use of commercially proven, community-scale technologies, with two existing operating AD facilities located in Northern California and one coming online this month in South San Francisco (that will also convert biogas to fuel) that are all developed by the City’s selected technology vendor, Zero Waste Energy LLC.

CEQA:

City staff recommends that the City Council determine that the potential environmental effects of the Recommended Action described in this Agenda Report were adequately examined as part of Resolution No. PC2013-15, dated November 7, 2013, wherein the City Planning Commission adopted a Mitigated Negative Declaration (MND) for the Napa Renewable Resources Project, pursuant to CEQA Guidelines Sections 15063 and

15162. A Notice of Determination for the MND finding was filed on February 3, 2014 (File # 12-0022, State Clearinghouse Number 2013092036).

DOCUMENTS ATTACHED:

1. Attachment 1: Resolution authorizing the Public Works Director, or his designee, to enter into an agreement with the California Energy Commission to receive \$3,000,000 in grant funding.
2. Attachment 2: Scenario Comparison Table.
3. Attachment 3: Napa Renewable Resources Project (NRRP) Financing Analysis.

NOTIFICATION:

Courtesy Copy to:

Greg Kelley, General Manager/Managing Partner, Napa Recycling & Waste Services
Mike Murray, Controller/Chief Financial Officer, Napa Recycling & Waste Services
Evan Edgar, Edgar and Associates
Greg Pirie, Local Enforcement Officer, County of Napa
Karen Querin, Auditor-Controller's Office, County of Napa

RECOMMENDED ACTION:

Staff recommends that the City Council move, second and approve each of the actions set forth below, in the form of the following motion. Move to:

Adopt a resolution authorizing the Public Works Director, or his designee, to enter into an agreement with the California Energy Commission to receive a Grant Award of \$3 million for an Anaerobic Digestion facility to produce a renewable transportation fuel (RNG) at the Napa Materials Diversion Facility.



4040 Civic Center Drive, Suite 200
San Rafael, CA 94903

Office: 415.785.2025
www.NHAadvisors.com

January 13, 2015

Kevin Miller
Solid Waste Fund Manager
Recycling and Waste Services
City of Napa
955 School Street
Napa, CA 94559

RE: Napa Renewable Resources Project (NRRP) Financing Analysis

Dear Mr. Miller:

The City of Napa is contemplating financing a portion of its Napa Renewable Resources Project ("NRRP"). Currently, it is estimated that \$12 million of external project funding will be required. Recent conversations regarding useful life of the equipment to be installed, rate payer impacts, as well as high rate of change/innovation/uncertainty in the recycling industry resulted in key assumptions of a 20 year financing term utilizing a level payment structure.

In the Summer of 2013, the then outstanding 2004 Solid Waste Revenue Bonds' credit rating was confirmed at "AA-" by Standard and Poors, Inc. This exceptional rating was confirmed for, among other things, strong debt service coverage, a very high liquidity position and excellent operating results over the previous several audit periods.

The City has advised that it expects that the Anaerobic Digesters' ("AD") portion of the NRRP funding needs will be required in approximately 7-12 months (Summer/Fall of 2015); however, it must put into place a rate structure now that, if this AD portion of the NRRP is approved by City Council, will accommodate the anticipated incremental operating revenues/costs, as well as the project's internal and external financing costs.

Producing estimated payment alternatives now for a potential financing which may occur in 7-12 months is an approximation at best. There are key uncertainties that will directly affect the interest rates that will be achieved at the time that the external funding is secured. Interest rates will change, the general view of recycling industry municipal credits will change as the industry evolves, the City of Napa's recycling enterprise credit itself may change. Whether each of these individually and collectively result in an increase or decrease in interest rates for this external funding, only time will tell. However, given the need to be guarded and maintaining the interests of the rate payers and the City of Napa's financial well-being, it is important that these uncertainties be examined and understood in terms of potential sensitivities to the future financing.

NHA surveyed recent AA- transactions priced in the market (2 general obligation bonds, 2 water revenue bonds and 1 storm water revenue bond). Transactions are typically priced based upon a "spread" to the municipal bond industry's "AAA" index (the "Municipal Market Data" index). Thus, as interest rates

change from week to week or even day to day, broker-dealers and investors account for this by pricing a particular transaction, based upon its credit and other key characteristics, by putting a “spread” to that day’s MMD. Spreads can change for a specific issuer, a specific rating, a specific transaction type depending upon general market conditions or specific issuer or transaction type concerns. Since general obligation and water revenue bonds are typically highly sought after investments, these transaction types typically secure “tighter” (i.e. smaller / lower) spreads to MMD for comparably rated transactions (e.g. redevelopment tax allocation bonds, general fund leases). Solid waste revenue transactions, while it can be argued have essential services related security, do have the perception of being at lower level of essentiality than water or sewer. Thus, NHA has made inquiries with two bond underwriters as to their opinion with respect to the spread that a solid waste credit may carry vis-à-vis a similarly rated general obligation or water credit. Additionally, NHA also inquired what spread differential might be incurred if the proposed transaction secured an A+ rating versus the current AA- credit rating. Again, given the timing of the likely funding of this transaction, and also the fact that the current overall NRRP funding plan contemplates utilization of approximately \$9 million of the enterprise fund’s reserves (albeit these are currently designated for capital projects), as well as the potential impact of the fast changing recycling business environment, we think it prudent to conservatively accommodate any potential negative impact that these factors could have on the proposed financing’s rating. Finally, we also have included in the analysis additional scenarios that utilize an additional 50 basis points (.50%) throughout the interest rate scale should rates go up during the next 7-12 months.

Based upon our conversations with Piper Jaffray and Stifel Nicolaus (two of the most active underwriters of California tax exempt bonds), we have constructed an expected interest rate “scale” for AA- and A+ tax exempt rates in today’s market. This interest rate scale accounts for a water revenue transaction and then, per these underwriter’s opinions, adds an additional 10 basis points (.10%) per year to account for the solid waste revenue credit. Below, we provide the methodology of how this is derived using the MMD index yields as of October 27, 2014 and applying spreads as noted previously.

California Tax-Exempt Spreads to MMD
UPDATED 10/27/2014

Security Type: Utility Revenue Bond
Call Provision: 10 Year Par Call
Bond Component: Current Interest Bonds

Year	MMD	Coupon	Water/WW				Napa SW (+ .10%)		Add .50% Napa SW (+ .10%)	
			AA-		A+		AA-	A+	AA-	A+
			Spread to MMD	Yield	Spread to MMD	Yield	Yield	Yield	Yield	Yield
1	2017	0.14%	3.00%	0.00%	0.14%	0.10%	0.24%	0.74%	0.84%	
2	2018	0.36%	4.00%	0.00%	0.36%	0.15%	0.46%	0.96%	1.11%	
3	2019	0.58%	4.00%	0.00%	0.58%	0.20%	0.68%	1.18%	1.38%	
4	2020	0.83%	4.00%	0.00%	0.83%	0.20%	0.93%	1.43%	1.63%	
5	2021	1.08%	4.00%	0.00%	1.08%	0.25%	1.18%	1.68%	1.93%	
6	2022	1.32%	5.00%	0.00%	1.32%	0.30%	1.42%	1.92%	2.22%	
7	2023	1.56%	5.00%	0.05%	1.61%	0.35%	1.71%	2.21%	2.51%	
8	2024	1.75%	5.00%	0.10%	1.85%	0.35%	1.95%	2.45%	2.70%	
9	2025	1.88%	5.00%	0.15%	2.03%	0.40%	2.13%	2.63%	2.88%	
10	2026	2.00%	5.00%	0.20%	2.20%	0.45%	2.30%	2.80%	3.05%	
11	2027	2.10%	5.00%	0.25%	2.35%	0.50%	2.45%	2.95%	3.20%	
12	2028	2.20%	5.00%	0.30%	2.50%	0.55%	2.60%	3.10%	3.35%	
13	2029	2.27%	5.00%	0.35%	2.62%	0.60%	2.72%	3.22%	3.47%	
14	2030	2.33%	5.00%	0.35%	2.68%	0.60%	2.78%	3.28%	3.53%	
15	2031	2.38%	5.00%	0.35%	2.73%	0.60%	2.83%	3.33%	3.58%	
16	2032	2.43%	5.00%	0.35%	2.78%	0.60%	2.88%	3.38%	3.63%	
17	2033	2.49%	5.00%	0.35%	2.84%	0.60%	2.94%	3.44%	3.69%	
18	2034	2.55%	5.00%	0.35%	2.90%	0.60%	3.00%	3.50%	3.75%	
19	2035	2.60%	5.00%	0.35%	2.95%	0.60%	3.05%	3.55%	3.80%	
20	2036	2.65%	5.00%	0.35%	3.00%	0.60%	3.10%	3.60%	3.85%	

Utilizing these interest rates, we ran 4 bond scenarios that raised the \$12 million needed for external funding: 20 year transactions using estimated current rates for AA- and A+, as well as these same scenarios utilizing current rates plus .50% to gauge sensitivity to account for a potential increase in rates between now and Summer/Fall, 2015. Additionally, we use conservative assumptions as to costs (under \$200,000 plus 1.00% underwriting fee) and the funding of an IRS tax code compliant debt service reserve. No prefunded interest is assumed as rates will be in place at the time of the installation of the AD equipment. Each of the scenarios is structured with level debt service. The results of these assumptions are shown in the table below.

20 Year Term				
Bond Year	Napa SW (+ .10%)		Add .50%	
	AA-	A+	Napa SW (+ .10%)	A+
	D/S	D/S	D/S	D/S
1	899,100	914,250	929,800	950,350
2	898,300	913,300	933,700	948,950
3	898,500	913,300	933,300	948,350
4	898,100	912,700	932,300	947,150
5	897,100	916,500	930,700	950,350
6	895,500	914,500	933,500	947,750
7	899,000	912,500	931,000	950,000
8	896,250	914,500	932,500	951,000
9	897,500	915,250	932,750	950,750
10	897,500	914,750	931,750	949,250
11	896,250	913,000	929,500	951,500
12	898,750	915,000	931,000	947,250
13	894,750	915,500	931,000	946,750
14	894,500	914,500	929,500	949,750
15	897,750	917,000	931,500	951,000
16	894,250	912,750	931,750	950,500
17	899,250	912,000	930,250	948,250
18	897,250	914,500	932,000	949,250
19	898,500	915,000	931,750	948,250
20	(1,500)	(3,500)	-	(1,250)

As noted in the interest rates exhibit shown on the previous page, the rates presented were at near all-time lows. The 20 year term loans payment's range from approximately \$900,000 to \$950,000, depending upon rating and additional "cushion" applied due to future market uncertainty. These payments are approximately \$220,000 to \$270,000 higher than the annual payments on the recently paid off 2004 Bonds. If a full 1.00% is added to current rates (.50% above the .50% already added) for the A+ rated transaction, the 20 year term annual payment would be approximately \$985,000.

Additionally, should the AD portion of the NRRP project delivered cost be \$12.7 million, the annual payment on this worst case scenario would be approximately \$1,004,000. This payment assumes worst case interest rates (A+ / +.50% cushion). Also, should the City elect to not make a payment during the year of construction and then pay off a \$12.0 million loan using a "level" payment structure during the ensuing 20 year term, the estimated annual payment would range from \$960,000 (AA- rated) to \$1,016,000 (A+ / +.50% cushion). Should the higher cost (\$12.7 million) and highest interest rate assumption be realized, this payment would be approximately \$1,073,000.

By way of comparison to our summary analysis presented in August, this analysis does not show options relating to a private placement sale or scenarios showing that no debt service reserve need be funded. Given the length of time before this financing occurs, NHA believes that it is prudent to present only the public offering sale method and debt service reserve included scenarios. While one assumption we do not show (private placement) currently offers a higher cost result and one (no debt service reserve) would likely lower the overall cost of any financing, there is no guarantee that either of these options would be available to the City in 7-12 months time.

Finally, it must be reiterated that these rates are for a tax-exempt transaction. As such, it is imperative that bond counsel be brought in to ascertain that any operator contract in place at the time of the financing is considered a "Qualified Management Contract" ("QMC") per IRS regulations. If bond counsel cannot make the determination that the contract is QMC (which largely rests upon the fixed versus incentivized compensation formula to the operator), then the transaction is considered a "private activity" bond and must be issued as taxable which would greatly increase the interest rates and annual payment in each of the scenarios shown. By way of an example, if rates for a tax exempt bond are 3.10% (AA-/20 year/Current Rate scenario shown above), a comparable taxable bond would yield 4.65% assuming a 33% marginal tax rate. This would have the effect of increasing the AA- / 20 year / Current Rate scenario annual payment from approximately \$900,000 to \$988,000.

It should be noted that the City could avoid incurring the rate penalty of entering the market as a taxable bond due to having a non-QMC contract in place. This could be achieved by the private operator, Napa Recycling and Waste Services ("NRWS"), utilizing a conduit type funding method through the California Pollution Control Financing Authority ("CPCFA" / web link provided below). To achieve this, NRWS would be the issuer of the bonds, through the CPCFA conduit, and secure an "allocation" from CPCFA to issue "private-activity" tax exempt bonds. These allocations can be secured from CPCFA for the right type of projects. Based upon our investigation, the AD portion of the NRRP would qualify for a CPCFA allocation. However, while the security for such a conduit bond would largely be similar—net pledged revenues of the enterprise—such a transaction would inextricably link NRWS to the City-owned facility and could potentially reduce the City's ability to remedy contractual disputes or even change operators should it be required. Absent the need for a non-QMC contract, and also based upon the fact that the City owns the facility, NHA recommends that the City secure funding directly from the most cost effective source of funds at the time of its choosing.

We are pleased to present this analysis to the City of Napa. NHA stands ready to answer any questions regarding the assumptions underlying this analysis or provide additional analysis as required.

Sincerely,



Eric J. Scriven
Principal

Cc: Roberta Raper, City of Napa
Chris Shoop, City of Napa
Cerene St. John, It's A Natural Product, Inc.

California Pollution Control Financing Authority Web Link:
<http://www.treasurer.ca.gov/cpcfa/bondfinancing.asp>

ATTACHMENT 8

Updated 20-year Cost-Benefit Analysis of Anaerobic Digestion to Biofuel System Scenarios

Scenario	Total Cost (Million \$)	Borrowed (Million \$)	Cash	Contingency	Average Annual Debt Service	NPV	Annualized NPV (20 Years)
A	\$15,927,845	\$12,927,845	0	15%	\$1,019,598	(\$6,957,570)	(\$347,879)
B	\$15,235,330	\$12,235,330	0	10%	\$965,550	(\$3,066,726)	(\$153,336)
C	\$15,235,330	\$12,235,330	0	10%	\$955,829	\$2,212,150	\$110,608

Note: Each net present value is based on a 20-year time horizon, which is equal to the time to retire the debt.

COMPARISON OF THREE SCENARIOS – ASSUMPTIONS USED IN THE FINANCIAL ANALYSIS

Common to All Three Scenarios

- The total capital cost is \$13,850,300 for all scenarios.
- A discount rate of 5% is used to determine the net present value.
- The CIP management/admin fee to NRWS is set at 3% for all three scenarios.
- BioCNG fuel is valued at 95% of Napa CNG retail for all three scenarios, which is \$2.91 per gasoline gallon equivalent.
- Brokerage costs for Low Carbon Fuel Standard and EPA RINs are set at a cost of to 10% of LCFS and 15% of RINs.
- Because the AD digestate is largely decomposed before being placed in the aerated static pile composting system, the residence or “dwell time” is reduced from 45 days to 15 days. This results in an additional 13,000 tons per year (tpy) of capacity in the ASP system for additional material. Although the gate fee is \$40 - \$45/ton, this additional capacity is conservatively valued at \$10/ton in the financial model.
- Approximately 4,533 tons per year of organic material is lost during AD as it is transformed to gas and liquid. This allows an additional 4,533 tpy to be accepted by the facility. This additional capacity is valued at the gate fee amount.
- The reduction in material mass and material decomposition occurring in the AD system results in an electricity savings valued at \$20,000/year in the ASP compost system.
- The 4,533 tpy is transformed to 2,227 tpy of compost that sells for \$18/ton, with a 1% annual escalator in price.
- 25,000 tpy of organic feedstock.
- 328,000 diesel gallon equivalents of BioCNG fuel are produced, or enough to fuel 35 trucks using 35 gallons per day.

- Gate fees increase 50 cents per ton per year.
- Annual capital investments of \$30,000 are assumed.
- Annual General and Administrative costs of 1% of annual revenues are assumed.

Scenario A

- 15% contingency on total project cost.
- Average annual Debt Service of \$1,019,598 on a total amount borrowed of \$12,927,845 (20 year public issue)
- No revenue from EPA RINS or Low Carbon Fuel Standard (LCFS) carbon credits.
- No labor savings included for time saved driving to get fuel at the existing CNG facility, which is valued at \$92,592,
- No savings included of the estimated \$36,730/year of labor savings compared to the current system, \$10,527 in savings on fuel (for loader, etc.), and savings of \$7,004 for extended loader life.
- Operations and maintenance costs are \$827,073 in the first year, with a 1% annual cost escalator.
- No annual increase in fuel value (i.e. no increase in retail price).

Scenario B

- 10% contingency on total project cost.
- Average annual Debt Service of \$965,550 on a total amount borrowed of \$12,235,300 (20 year public issue)
- RINs are conservatively valued at 25 cents (current trading value is 60 cents). LCFS carbon credits are conservatively valued at \$20/credit and terminate in 2020 (3 years) – November auction yielded \$26/LCFS credit..
- NRWS-projected driver overtime savings for on-site fueling of \$92,592 is included.
- 50% of the savings is included of the estimated \$36,730/year of labor savings compared to the current system, \$10,527 in savings on fuel (for loader, etc.), and savings of \$7,004 for extended loader life.
- Operations and maintenance costs are \$855,544 in the first year, with a 1% annual cost escalator.
- No annual increase in fuel value (i.e. no increase in retail price).

Scenario C

- 10% contingency on total project cost.
- Annual Debt Service of \$900,000 on a total amount borrowed of \$12,235,300 (20 year public issue)
- RINs are valued at 50 cents (currently trading at 60 cents). LCFS carbon credits are valued at \$26, the average auction value for November, and continue through the entire 20 year time horizon.
- NRWS-projected driver overtime savings for on-site fueling of \$92,592 is included.
- 50% of the savings is included of the estimated \$36,730/year of labor savings compared to the current system, \$10,527 in savings on fuel (for loader, etc.), and savings of \$7,004 for extended loader life.
- Operations and maintenance costs are \$852,073 in the first year, with a 1% annual cost escalator.
- A 1% annual increase in fuel value.

CITY OF NAPA
 NOTICE OF PUBLIC HEARING ON PROPOSED CHANGES TO RATES FOR COLLECTION OF SOLID WASTE

The Napa City Council will hold a public hearing on Tuesday, March 17, 2015, to consider proposed changes to the rates charged for collection of solid waste and recyclable materials from residential, multi-family, and commercial customers for the next two years. **All rates are proposed to be increased 4.95% effective April 1, 2015, and 4.95% effective January 1, 2016.** These rate increases are based on (a) calculations for Operating and Capital Cost Payments to Napa Recycling & Waste Services as described in the Contract for the Collection and Transportation of Municipal Solid Waste, Recyclable Materials, and Yardwaste and the Operation of the Napa Materials Diversion Facility; (b) increases in fees at the transfer station used by the City, (c) costs to repair street damage caused by heavy refuse and recycling vehicles; and (d) revenues and expenditures in the City's Solid Waste & Materials Diversion Enterprise Fund. The specific proposed maximum residential rates to be charged for each of the two upcoming years are shown in the table below. The specific commercial, multi-family, and roll off rates proposed to become effective April 1, 2015 are shown in the tables below and on the reverse side of this notice. Rate tables showing the specific maximum commercial, multi-family and roll off rates proposed to become effective January 1, 2016 may be viewed on the City's web site at www.cityofnapa.org/recycle.

The hearing will be held at the City Council meeting room, City Hall, 955 School Street, Napa, and will begin at 6:30 pm. If you would like to receive a copy of the staff report to the City Council that explains the rationale for the proposed rate increases in detail, please contact the Office of the City Clerk at P.O. Box 660, Napa, CA, 94559-0660. Or you may download the staff report directly via the internet at www.cityofnapa.org/recycle. The staff report is also available for review at the City Clerk's office at City Hall. Written comments on the proposed changes to collection rates may be submitted to the City Clerk at: P.O. Box 660, Napa, CA 94559-0660. Written protests may also be submitted in person at the hearing.

City Clerk
 Date: **January 30, 2015**

SUMMARY OF ALL PROPOSED INCREASES TO MONTHLY RATES

PROPOSED RESIDENTIAL RATES FOR THE NEXT TWO YEARS

Rates include weekly collection of recyclable materials and greenwaste.

Cart Size	Existing Rate	Proposed Percentage Increase April 1, 2015	Proposed Rate Effective April 1, 2015	Proposed Percentage Increase January 1, 2016	Proposed Rate Effective January 1, 2016
20 gallon	\$19.66	4.95%	\$20.63	4.95%	\$21.65
35 gallon	\$24.64	4.95%	\$25.86	4.95%	\$27.14
65 gallon	\$37.80	4.95%	\$39.67	4.95%	\$41.63
95 gallon	\$58.13	4.95%	\$61.01	4.95%	\$64.03

PROPOSED COMMERCIAL AND MULTI-FAMILY RATES EFFECTIVE APRIL 1, 2015

NOTE REGARDING COMMERCIAL RATES: All the commercial rates with the proposed increase of 4.95% effective on April 1, 2015 are shown below in detail. Each of these rates will be increased on January 1, 2016 by an additional 4.95%.

Company Provided Bins

Existing	Rate with Proposed 4.95% Increase
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Bin Size	1x/wk	2x/wk	3x/wk	4x/wk	5x/wk	6x/wk	1x/wk	2x/wk	3x/wk	4x/wk	5x/wk	6x/wk
One 1.5 yd.	\$298.98	\$626.20	\$932.58	\$1,250.18	\$1,593.46	\$1,988.14	\$313.78	\$657.20	\$978.74	\$1,312.06	\$1,672.34	\$2,086.55
Two 1.5 yd.	\$637.13	\$1,352.59	\$2,014.37	\$2,700.36	\$3,441.87	\$4,294.36	\$668.67	\$1,419.54	\$2,114.08	\$2,834.03	\$3,612.24	\$4,506.93
Three 1.5yd	\$946.86	\$2,010.09	\$2,993.58	\$4,013.04	\$5,114.98	\$6,381.90	\$993.73	\$2,109.59	\$3,141.76	\$4,211.69	\$5,368.17	\$6,697.80
Four 1.5 yd	\$1,274.28	\$2,705.18	\$4,028.72	\$5,400.72	\$6,883.71	\$8,588.71	\$1,337.36	\$2,839.09	\$4,228.14	\$5,668.06	\$7,224.45	\$9,013.85
One 2 yd.	\$384.36	\$818.61	\$1,226.80	\$1,649.94	\$2,107.18	\$2,632.61	\$403.39	\$859.13	\$1,287.53	\$1,731.61	\$2,211.49	\$2,762.92
Two 2 yd.	\$818.72	\$1,768.21	\$2,649.87	\$3,563.85	\$4,551.51	\$5,686.43	\$859.25	\$1,855.74	\$2,781.04	\$3,740.26	\$4,776.81	\$5,967.91
Three 2 yd.	\$1,182.60	\$2,554.05	\$3,827.61	\$5,147.81	\$6,574.37	\$8,213.73	\$1,241.14	\$2,680.48	\$4,017.08	\$5,402.63	\$6,899.80	\$8,620.31
Four 2 yd.	\$1,591.95	\$3,438.16	\$5,152.55	\$6,929.73	\$8,850.12	\$11,056.95	\$1,670.75	\$3,608.35	\$5,407.60	\$7,272.75	\$9,288.20	\$11,604.27
One 3 yd.	\$563.60	\$1,222.25	\$1,834.41	\$2,469.02	\$3,154.70	\$3,942.57	\$591.50	\$1,282.75	\$1,925.21	\$2,591.24	\$3,310.86	\$4,137.73
Two 3 yd.	\$1,161.03	\$2,517.83	\$3,778.91	\$5,086.17	\$6,498.69	\$8,121.72	\$1,218.50	\$2,642.46	\$3,965.97	\$5,337.94	\$6,820.38	\$8,523.75
Three 3 yd.	\$1,758.45	\$3,813.42	\$5,723.39	\$7,703.34	\$9,842.68	\$12,300.86	\$1,845.49	\$4,002.18	\$6,006.70	\$8,084.66	\$10,329.89	\$12,909.75
One 4 yd.	\$731.74	\$1,607.07	\$2,422.87	\$3,268.55	\$4,182.15	\$5,231.55	\$767.96	\$1,686.62	\$2,542.80	\$3,430.34	\$4,389.17	\$5,490.51
Two 4 yd.	\$1,507.37	\$3,310.58	\$4,991.11	\$6,733.23	\$8,615.21	\$10,777.00	\$1,581.98	\$3,474.45	\$5,238.17	\$7,066.52	\$9,041.66	\$11,310.46
Three 4 yd.	\$2,283.00	\$5,014.05	\$7,559.34	\$10,197.88	\$13,048.29	\$16,322.43	\$2,396.01	\$5,262.25	\$7,933.53	\$10,702.68	\$13,694.18	\$17,130.39
One 6 yd.	\$1,089.10	\$2,400.89	\$3,624.38	\$4,892.73	\$6,262.84	\$7,836.48	\$1,143.01	\$2,519.73	\$3,803.79	\$5,134.92	\$6,572.85	\$8,224.39
Two 6 yd.	\$2,243.56	\$4,945.83	\$7,466.24	\$10,079.01	\$12,901.45	\$16,143.14	\$2,354.62	\$5,190.65	\$7,835.82	\$10,577.92	\$13,540.07	\$16,942.23

Customer Owned Bins

Existing	Rate with Proposed 4.95% Increase
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Bin Size	1x/wk	2x/wk	3x/wk	4x/wk	5x/wk	6x/wk	1x/wk	2x/wk	3x/wk	4x/wk	5x/wk	6x/wk
One 1.5 yd.	\$256.19	\$577.24	\$882.67	\$1,199.31	\$1,541.17	\$1,933.48	\$268.87	\$605.81	\$926.36	\$1,258.68	\$1,617.46	\$2,029.19
Two 1.5 yd.	\$590.93	\$1,299.70	\$1,960.46	\$2,645.42	\$3,385.38	\$4,235.29	\$620.18	\$1,364.04	\$2,057.50	\$2,776.37	\$3,552.96	\$4,444.94
Three 1.5yd	\$901.08	\$1,957.71	\$2,940.17	\$3,958.61	\$5,059.02	\$6,323.40	\$945.68	\$2,054.62	\$3,085.71	\$4,154.56	\$5,309.44	\$6,636.41
Four 1.5 yd	\$1,228.08	\$2,652.30	\$3,974.83	\$5,345.80	\$6,827.24	\$8,529.64	\$1,288.87	\$2,783.59	\$4,171.58	\$5,610.42	\$7,165.19	\$8,951.86
One 2 yd.	\$341.60	\$769.65	\$1,176.89	\$1,599.07	\$2,054.89	\$2,577.95	\$358.51	\$807.75	\$1,235.15	\$1,678.22	\$2,156.61	\$2,705.56
Two 2 yd.	\$772.52	\$1,715.33	\$2,595.98	\$3,508.92	\$4,495.06	\$5,627.46	\$810.76	\$1,800.24	\$2,724.48	\$3,682.61	\$4,717.57	\$5,906.02
Three 2 yd.	\$1,138.09	\$2,503.15	\$3,775.70	\$5,094.90	\$6,519.98	\$8,156.88	\$1,194.43	\$2,627.06	\$3,962.60	\$5,347.10	\$6,842.72	\$8,560.65
Four 2 yd.	\$1,547.03	\$3,386.75	\$5,100.15	\$6,876.30	\$8,795.21	\$10,999.54	\$1,623.61	\$3,554.39	\$5,352.61	\$7,216.68	\$9,230.57	\$11,544.02
One 3 yd.	\$504.38	\$1,154.46	\$1,765.33	\$2,398.61	\$3,082.33	\$3,866.91	\$529.35	\$1,211.61	\$1,852.71	\$2,517.34	\$3,234.91	\$4,058.32
Two 3 yd.	\$1,100.02	\$2,448.03	\$3,778.91	\$5,013.65	\$6,424.14	\$8,043.77	\$1,154.47	\$2,569.21	\$3,965.97	\$5,261.83	\$6,742.13	\$8,441.94
Three 3 yd.	\$1,696.86	\$3,742.92	\$5,651.54	\$7,630.10	\$9,767.40	\$12,222.17	\$1,780.85	\$3,928.19	\$5,931.29	\$8,007.79	\$10,250.89	\$12,827.17
One 4 yd.	\$672.51	\$1,539.30	\$2,353.76	\$3,198.15	\$4,109.75	\$5,155.88	\$705.80	\$1,615.50	\$2,470.27	\$3,356.46	\$4,313.18	\$5,411.10
Two 4 yd.	\$1,446.36	\$3,240.76	\$4,919.94	\$6,660.69	\$8,540.65	\$10,699.06	\$1,517.95	\$3,401.18	\$5,163.48	\$6,990.39	\$8,963.41	\$11,228.66
Three 4 yd.	\$2,221.40	\$4,943.56	\$7,487.49	\$10,124.65	\$12,973.00	\$16,243.75	\$2,331.36	\$5,188.27	\$7,858.12	\$10,625.82	\$13,615.16	\$17,047.82
One 6 yd.	\$1,008.76	\$2,308.93	\$3,530.65	\$4,797.22	\$6,164.63	\$7,733.81	\$1,058.69	\$2,423.22	\$3,705.42	\$5,034.68	\$6,469.78	\$8,116.63
Two 6 yd.	\$2,160.80	\$4,851.12	\$7,369.69	\$9,980.63	\$12,800.30	\$16,037.41	\$2,267.76	\$5,091.25	\$7,734.49	\$10,474.67	\$13,433.91	\$16,831.26

PROPOSED COMMERCIAL MSW CART RATES EFFECTIVE APRIL 1, 2015

	1x/week		2x/week		3x/week		4x/week		5x/week		6x/week	
	Current	Proposed	Current	Proposed	Current	Proposed	Current	Proposed	Current	Proposed	Current	Proposed
35 gallon	\$24.64	\$27.09	\$49.28	\$54.18	\$73.92	\$81.28	\$98.56	\$108.37	\$123.20	\$135.46	\$147.84	\$162.55
65 gallon	\$49.38	\$54.29	\$98.75	\$108.58	\$148.13	\$162.87	\$197.53	\$217.18	\$246.90	\$271.47	\$296.29	\$325.77
95 gallon	\$73.95	\$81.31	\$147.90	\$162.62	\$221.86	\$243.94	\$295.83	\$325.27	\$369.77	\$406.56	\$443.74	\$487.89

*Commercial cart rates above include the 4.95% Rate Year 2015 rate adjustment plus a 5% increase to make the cost per gallon of commercial cart service more equal to commercial bin service.

COMERCIAL AND MULTI-FAMILY COMPACTORS (Less Than 6 Yards)

- Existing Compacted Rate Per Yard = \$83.91
- To calculate rate per month = ((cost per yard x size bin x # of pick ups per week x 52 weeks)/12 months)
- Proposed Compacted Rate Per Yard = \$88.06

ROLL OFFS (Uncompacted)

- Existing Uncompacted Rate Per Yard = \$29.88
- Proposed Uncompacted Rate per Yard = \$31.36

Size of Roll Off (yards)	Current Rate Per Service	Proposed Rate Per Service
10	\$298.80	\$313.59
15	\$448.20	\$470.39
20	\$597.60	\$627.18
25	\$747.00	\$783.98
30	\$896.40	\$940.77
40	\$1,195.20	\$1,254.36

To calculate rate per month: ((rate per yard x size of bin x # number of pickups per week x 52 weeks)/12 months)
 To calculate rate per service: Size of Bin x Uncompacted Rate Per Yard

ROLL OFFS (Compacted)

- Existing Compacted Rate Per Yard = \$83.91
- Proposed Compacted Rate Per Yard = \$88.06

Size of Compactor (yards)	Current Rate Per Month (1x week service)	Proposed Rate Per Month (1xweek service)	Current Rate Per Service	Proposed Rate Per Service
6	\$2,181.66	\$2,289.65	\$503.46	\$528.38
10	\$3,636.10	\$3,816.09	\$839.10	\$880.64
15	\$5,454.15	\$5,724.13	\$1,258.65	\$1,320.95
20	\$7,272.20	\$7,632.17	\$1,678.20	\$1,761.27
25	\$9,090.25	\$9,540.22	\$2,097.75	\$2,201.59
30	\$10,908.30	\$11,448.26	\$2,517.30	\$2,641.91

To calculate rate per month: ((rate per yard x size of bin x # number of pickups per week x 52 weeks)/12 months)
 To calculate rate per service: Size of Bin x Uncompacted Rate Per Yard

Temporary Bin Sizes and Rates – MSW

Temporary Bin Sizes	Current Rate	Proposed Rate
1.5 yard	\$154.88	\$162.55
2.0 yard	\$154.88	\$162.55
3.0 yard	\$184.76	\$193.91
4.0 yard	\$214.63	\$225.25
6.0 yard	\$274.39	\$287.97
Cost Per Yard	\$29.89	\$31.37

ROLL OFFS (Recycled Materials)

	Current Rate	Proposed Rate		Current Rate	Proposed Rate
10 YARDS	Per Service	Per Service	30 YARDS	Per Service	Per Service
Asphalt	\$132.47	\$139.03	Metal	\$0.00	\$0.00
Concrete	\$157.70	\$165.51	Wood	\$157.70	\$165.51
Dirt	\$189.25	\$198.62	Yardwaste	\$277.56	\$291.30
20 YARDS			OTHER		
Wood	\$126.16	\$132.40	Manure	\$126.16	\$132.40
Yardwaste	\$214.49	\$225.11	Pomace	\$126.16	\$132.40
			Sheetrock	\$126.16	\$132.40

Residential & Commercial Carpet Roll-off Service (Recycling)

Roll Off Box Size	Current Rate	Proposed Rate
20 Cubic Yards	\$194.16	\$203.77
30 Cubic Yards	\$259.70	\$272.56
40 Cubic Yards	\$325.24	\$341.34

Commercial Food Scrap Rates*

Cart Size	1x/week	2x/week	3x/week	4x/week	5x/week
35 gallon	\$20.32	\$40.64	\$60.96	\$81.28	\$101.59
65 gallon	\$40.72	\$81.43	\$122.15	\$162.89	\$203.60
95 gallon	\$60.98	\$121.96	\$182.95	\$243.95	\$304.92

Special Events Food Scrap Collection – rate per container per service**

35-gallon Food Scrap Cart	\$7.75
65-gallon Food Scrap Cart	\$11.61
95-gallon Food Scrap Cart	\$15.48
1.5 Cubic Yards Food Scrap Bin	\$83.69
2 Cubic Yards Food Scrap Bin	\$94.94
3 Cubic Yards Food Scrap Bin	\$117.44
4 Cubic Yards Food Scrap Bin	\$139.95
6 Cubic Yards Food Scrap Bin	\$185.67

Food Scrap Compactor Service*

Cost Per Yard (Compacted)	\$66.05	
Compactors (yards)	Per Month/1xwk	Per Service
6	\$1,717.24	\$396.29
10	\$2,862.07	\$660.48
15	\$4,293.10	\$990.71
20	\$5,724.13	\$1,320.95
25	\$7,155.16	\$1,651.19
30	\$8,586.20	\$1,981.43

*Commercial food scrap rates are new as of April 1, 2015 and provide a 25% cost savings when compared to equivalent MSW cart service.

**Special event food scrap composting rates are new as of April 1, 2015 and provide a 50% cost-savings when compared to equivalent MSW service.

Split 20-cubic Yard Roll-off Boxes – 2 Material Types per Box

Materials (Two Per Split Box)	Current Rate Per Service	Proposed Rate Per Service
MSW & Wood	\$361.88	\$379.79
MSW & Yardwaste	\$406.05	\$426.15
MSW & Sheetrock	\$361.88	\$379.79
MSW & Metal	\$298.80	\$313.59
MSW & Cardboard	\$298.80	\$313.59
MSW & Mixed Recyclable Materials	\$298.80	\$313.59
Wood & Yardwaste	\$170.33	\$178.76
Wood & Sheetrock	\$126.16	\$132.40
Wood & Metal	\$63.08	\$66.20
Wood & Cardboard	\$63.08	\$66.20
Wood & Mixed Recyclable Materials	\$63.08	\$66.20

Materials (Two Per Split Box) Cont.	Current Rate Per Service	Proposed Rate Per Service
Yardwaste and sheetrock	\$170.33	\$178.76
Yardwaste & Metal	\$107.25	\$112.56
Yardwaste & Cardboard	\$107.25	\$112.56
Yardwaste and Mixed Recyclable Materials	\$107.25	\$112.56
Sheetrock & Metal	\$63.08	\$66.20
Sheetrock & Cardboard	\$63.08	\$66.20
Sheetrock & Mixed Recyclable Materials	\$63.08	\$66.20
Metal & Cardboard	Free	Free
Metal & Mixed Recyclable Materials	Free	Free
Cardboard & Mixed Recyclable Materials	Free	Free

MISCELLANEOUS CHARGES

The proposed increases of 4.95% effective April 1, 2015 is shown in the miscellaneous rates below. An additional 4.95% increase effective January 1, 2016 will apply to the following miscellaneous charges.

		Current Rate	Proposed Rate
	Residential		
	Additional Carts (\$/Cart/Month)		
1	MSW	to be provided at monthly rate multiplied by number of carts	to be provided at monthly rate multiplied by number of carts
	Recycle (after 4-35 gal or 2-95 gal)		
2	20 gallon	\$3.33	\$3.49
3	35 gallon	\$3.33	\$3.49
4	65 gallon	\$3.33	\$3.49
5	95 gallon	\$3.33	\$3.49
	Yardwaste (after 4-35 gal or 2-95 gal)		
6	20 gallon	\$3.33	\$3.49
7	35 gallon	\$3.33	\$3.49
8	65 gallon	\$3.33	\$3.49
9	95 gallon	\$3.33	\$3.49
10	Bulky Items (\$/service up to 4 items)	\$36.59	\$38.40
11	Each item over 4 items (\$/Item) - excluding e-waste, occ	\$14.76	\$15.49
12	Cardboard and single stream recyclables	Free	Free
13	E-Waste (CRTs/LCDs), Metal Items and Cooking Oil	Free	Free
	Extra Empty (\$/bin/Service)		
14	On day of service (Monday-Friday) up to 9 bags (30 gal.)/barrels	\$6.19/each barrel	\$6.50/each barrel
15	On day of service (Monday-Friday) 10 or more bags/barrels	\$29.89/yard	\$31.37/yard
16	Not on day of service (Monday-Friday) up to 9 bags/barrels	\$6.19/barrel + \$49.40 trip charge	\$6.50/barrel + \$51.85 trip charge
17	Not on day of service (Monday-Friday) 10 or more bags/barrels	\$29.89/yard + \$49.40 trip charge	\$31.37/yard + \$51.85 trip charge
18	Not on day of service (Saturday, Sunday) up to 9 bags/barrels	\$6.19/barrel + \$142.74 trip charge	\$6.50/barrel + \$149.81 trip charge
19	Not on day of service (Saturday, Sunday) 10 or more bags/barrels	\$29.89/yard + \$142.74 trip charge	\$31.37/yard + \$149.81 trip charge
	Backyard Service (includes MSW, Recycle, YW) (\$/Month)		
20	5-600 feet	\$22.31	\$23.41
21	601 feet or more	\$27.59	\$28.96
22	With doctors note	Free	Free
	Commercial & Multi-family		
1	Bulky Items (\$/service up to 4 items)	\$73.17	\$76.79
2	Cardboard and single stream recyclables	Free	Free
3	Each item over 4 items (\$/Item) - excluding e-waste, occ	\$14.76	\$15.49
4	E-Waste (CRTs/LCDs), Metal Items and Cooking Oil	Free	Free
5	Pallets	\$73.17	\$76.79
	Extra Empty (\$/Bin/Empty) - formerly Bin Special		
	Commercial		
6	35 gallon	\$14.76	\$15.49
7	65 gallon	\$22.13	\$23.23
8	95 gallon	\$29.5	\$30.96
	Commercial and Multi-Family		
9	1.5 yard	\$159.49	\$167.38
10	2 yard	\$180.93	\$189.89
11	3 yard	\$223.81	\$234.89
12	4 yard	\$266.69	\$279.89

		Current Rate	Proposed Rate
13	6 yard	353.82	\$371.33
	Miscellaneous		
14	Bin Cleaning/Bin Exchange (\$/Bin/Service)	199.66	\$209.54
15	Heavy Waste	88.55	\$92.93
16	Locking Bin or Key Fee	7.38	\$7.75
	Recycling Services (\$/Service)		
17	Single Stream Recyclables (less than 10 yard)	Free	Free
18	Source Separated Recyclables (less than 10 yard)	Free	Free
19	Yardwaste (less than 10 yard)	Free	Free
	Saturday, Sunday, Holiday Service (\$/day(s)/month)		
20	35 gallon	110.87	\$116.36
21	65 gallon	110.87	\$116.36
22	95 gallon	110.87	\$116.36
	Trip Charges (\$/Trip)		
23	up to 35 gallon	49.41	\$51.86
24	35 gallon - 6 yards	95.16	\$99.87
	Roll Off/Compactor/Temporary Bins		
1	Overweight Surcharge (10 yards and more)	Trip charge plus cost to bring in equipment capable of removing such materials plus \$88.55 per ton	Trip charge plus cost to bring in equipment capable of removing such materials plus \$92.93 per ton
	Miscellaneous		
2	Demurrage for non-removal after 3 days (\$/Bin/Day)	\$19.70	\$20.68
3	Trip Charge - Move/Relocate Box (\$/Box/Service)	\$158.58	\$166.43
4	Rental Fee (\$/day)	\$19.70	\$20.68
	Temporary Bins (\$/5 days)		
5	2 yard	\$154.87	\$162.54
6	3 yard	\$184.76	\$193.91
7	4 yard	\$214.63	\$225.25
	Other Fees		
1	City Directed Spill Clean Up	\$264.93	\$278.04
	Contaminated Recycling Fees		
	Residential recyclables, yardwaste		
2	35 gallon	\$14.76	\$15.49
3	65 gallon	\$22.13	\$23.23
4	95 gallon	\$29.5	\$30.96
	Commercial (bins) recyclables, yardwaste		
5	1.5 yard	\$159.49	\$167.38
6	2 yard	\$180.93	\$189.89
7	3 yard	\$223.81	\$234.89
8	4 yard	\$266.69	\$279.89
9	6 yard	\$353.82	\$371.33
	Deposit		
10	Commercial cart	\$60	\$60.00
11	Resident	\$30	\$30.00
	Residential Cart Redelivery Charge	\$25.00	\$25.00
	Roll Off/Compactors/commercial bin		
12	MSW	50% of service	50% of service
13	Recycle	50% of service	50% of service