WEST CONTRA COSTA INTEGRATED WASTE MANAGEMENT AUTHORITY

RESERVE POLICY STUDY
FINAL REPORT

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I. INTRODUCTION, PURPOSE AND METHODOLOGY

The West Contra Costa Integrated Waste Management Authority ("RecycleMore") adopted Resolution 06-02, a resolution to maintain an adequate reserve balance, in 2006. Conditions have changed since 2006 when Resolution 06-02 was adopted, and RecycleMore now intends to analyze its current vulnerabilities and opportunities and to adopt an updated reserve policy.

This analysis and Report is provided to assist RecycleMore in updating Resolution 06-02 regarding prudent reserves, and to establish an ongoing reserve policy that will assure RecycleMore, the member agencies and the public that adequate funds have been set aside to address contingent liabilities and opportunities.

The evaluation methodology included five basic tasks:

1) Identify and assess the vulnerability of RecycleMore to *ongoing* cost increases or revenue reductions, including reductions in the recycling rebate portion of post-collection rates; reductions in solid waste, recycling, organics, construction, demolition and/or other tonnage; on-going significant increased costs due to government mandates; and other ongoing vulnerabilities.

2) Identify and assess the vulnerability of RecycleMore to *one-time* cost increases or revenue reductions, including legal liability claims; contractor or subcontractor defaults; significant one-time increased costs due to government mandates or other factors; and other vulnerabilities.

3) Identify and assess financial opportunities to RecycleMore, including grant matching; potential Public-Private (or Public-Public) program partnerships; potential capital investments; and other opportunities.

4) Estimate the time range and cost of vulnerabilities and the time range of financial opportunities, including calculating an estimated time range and cost range for each vulnerability; assess the likelihood of multiple vulnerabilities coming due simultaneously; calculate an estimated time range and value range for each opportunity; assess the likelihood of multiple opportunities coming due simultaneously; and provide recommendations concerning how to address multiple simultaneous opportunities.

5) Analyze and provide recommendations on minimum, target and maximum reserve levels, including assessing, calculating and recommending a minimum reserve

level (floor), target reserve level (mid), and maximum reserve level (ceiling); provide recommended analysis, procedures, standards, methods and protocol to determine how to replenish reserve funds falling below the target level; provide recommended analysis, procedures, standards, methods and protocol to determine how to address reserve funds above the ceiling level; and provide other recommendations on minimum-maximum reserve levels.

The focus of the analysis and Report is the RecycleMore operating budget, operating fund and recycling special revenue fund, and the extent to which reserves should be set aside to address RecycleMore vulnerabilities and opportunities. The analysis and Report do not directly address Republic Services, Inc. or other entities' financial operations or reserves.

The assessment included interviews with RecycleMore staff and a review of key RecycleMore documents to assist in understanding and evaluating the RecycleMore organizational structure, financial obligations, legal commitments, cash management strategies, cash flow and financial condition.

An Administrative Draft Report was forwarded to the City Managers of the member cities and the Contra Costa County Administrators Office for review and comment. A conference call was held, in which three City Managers participated, as well as a representative of the County. Two other City Managers were unable to participate but were invited to submit written comments. The City Manager's consensus regarding reserves is included in this Report.

A Public Draft Report was submitted to and reviewed by the Recyclemore Internal Operations Committee. Members of the Internal Operations Committee provided additional input and invaluable insights regarding Recyclemore services, vulnerabilities and opportunities. The Internal Operations Committee input is reflected in this Final Report.

Industry standards and best management practices were drawn from Municipal Resource Group experience and the authors' experience with local government, and a variety of professional sources, including publications of the Government Finance Officers Association ("GFOA"), Government Accounting Standards Board ("GASB") and the Institute for Local Government.

GFOA recommends that the adequacy of reserves should consider each government's unique circumstances. For example, governments that may be vulnerable to natural disasters, more dependent upon a volatile revenue source, or potentially subject to cuts in state and/or federal grants may need to maintain a higher level or reserves. GFOA recommends, at a minimum, that general-purpose governments, regardless of size, maintain an unrestricted budgetary fund balance of no less than two months (17%) of regular operating revenues or regular operating expenditures. Furthermore, a government's particular situation often may require significantly more than the recommended minimum reserve level. In any case, such measures should be applied within the context of long-term forecasting, thereby avoiding the risk of placing too much emphasis on the level of reserves at any one time. In establishing a policy, GFOA recommends that a government consider a variety of factors including:

1) The predictability of revenues and volatility of expenditures.
2) The perceived exposure to significant one-time outlays.
3) The potential drain upon general fund resources by other funds as well as the availability of resources in other funds.
4) The potential impact on the entity's bond ratings.
5) Commitments and assignments of fund balance for specific purposes, which may be excluded from unrestricted fund balance.

GASB issues "Statements" providing guidance to public agencies regarding accounting standards. GASB Statement No. 54 ("GASB 54") classifies reservations of fund equity as (i) *Non-Spendable,* (assets that are not available for expenditure), (ii) *Restricted* (based on externally imposed creditors or laws), (iii) *Committed* (by formal action of the governing board), (iv) *Assigned* (indicating an intent to be used for a specific purpose) and (v) *Unassigned* (residual amounts available for expenditure).

The Report attempts to analyze the appropriate reserve levels for RecycleMore, based on GFOA and GASB guidelines and RecycleMore's unique circumstances.

The Report recommends minimum and maximum reserves for each vulnerability and opportunity. A Target Reserve is also recommended for each vulnerability and opportunity, typically at the mid-point of the minimum and maximum reserves, unless otherwise described in the Report.

II. RECYCLEMORE BACKGROUND INFORMATION

RecycleMore Background

The West Contra Costa Integrated Waste Management Authority ("RecycleMore") was formed in 1991 under a Joint Exercise of Powers Agreement in accordance with the California Integrated Waste Management Act (AB939). RecycleMore was formed for the purposes of planning and implementing measures to reduce the disposal of solid waste in accordance with State Law, and developing the Integrated Resource Recovery Facility ("IRRF") to meet the requirements of a materials recovery facility under Section 50000(a)(4) of the California Public Resource Code, for the collection, processing, recycling and transportation of solid waste and for the recovery of materials from such waste in the West Contra Costa County area, in cooperation with West County Resource Recovery, Inc. ("WCRR"), a wholly owned subsidiary of Richmond Sanitary Services, Inc. ("RSS").

The IRRF is located in the unincorporated area of North Richmond and is owned and operated by WCRR to serve taxpayers within the boundary of RecycleMore, including the unincorporated area of Contra Costa County served by RSS. RecycleMore is a regional agency and the members include the cities of El Cerrito, Hercules, Pinole, Richmond and San Pablo, and the unincorporated areas of Contra Costa County served by RSS. Each member has one representative on the RecycleMore Board of Directors, with the exceptions of the City of Richmond (which has three) and Contra Costa County (which has a non-voting representative).

RecycleMore entered into a Post-Collection Agreement ("Agreement") with RSS, West County Resource Recovery, Inc., West Contra Costa Sanitary Landfill, Inc., Golden Bear Transfer Services, Inc., and Keller Canyon Landfill Company, Inc., all of which are operating subsidiaries of Republic Services, Inc. ("Republic"), effective October 10, 2013. Post-collection materials processing facilities overseen by RecycleMore and operated by Republic under the Agreement include the Golden Bear Transfer Station, Keller Canyon Landfill, West Contra Costa Sanitary Landfill (a closed landfill that hosts a compost facility) and the West County Resource Recovery Facility that includes the household hazardous waste facility and the recycling facility. In the remainder of this Report, "Republic" shall be used to collectively refer to Republic and its operating subsidiaries.

The annual RecycleMore operating expenditure budget for FY 2017-18 is $1,161,360. FY 2017/18 Operating Fund revenues are estimated at $1,004,850, with the $156,510 deficit to be funded by drawing down on the Operating Fund balance.

Under the prior Post-Collection Agreement and RecycleMore policies and practices, approximately $6.5 million had accumulated in various reserves in prior years. In FY 2015/16, approximately $4.1 million was distributed to the member agencies. In addition, $659,481 has been designated for Contra Costa County, but not distributed.

Current estimated reserves (fund balances) are:

Operating Fund:

Fund balance, 7/1/17 (unaudited)	$1,455,104
Excess of FY 2017/18 expenditures over revenue (budgeted)	($156,510)
Fund balance, 6/30/18 (estimated)	$1,298,594

Recycling Special Revenue Fund:

Fund balance, 7/1/17 (unaudited)	$2,523,561
Less: funds designated for Contra Costa County	($659,481)
Fund balance, excluding Contra Costa County designated funds (unaudited)	$1,864,080
OPEB, PERS, one-time program expenditures, less interest income (budgeted)	($774,031)[1]
Fund balance, 6/30/18 (estimated)	$1,090,049

Together, the Operating Fund and Recycling Special Revenue Fund balances (reserves), excluding the amounts designated for Contra Costa County and for the OPEB and PERS liabilities, are estimated to be $2,388,643 at the end of FY 2017/18.

[1] $550,000 of this amount was anticipated to be used for OPEB and CalPERS reserves.

III. RECYCLEMORE VULNERABILITIES AND PROPOSED RESERVE LEVELS

This section of the Report evaluates RecycleMore's vulnerability to cost increases and revenue reductions and provides recommendations on strategies to set aside reserves to address the vulnerabilities.

III.1. VULNERABILITY TO *ONGOING* COST INCREASES OR REVENUE REDUCTIONS

III.1.A: Vulnerability to reductions in the recycling rebate portion of post-collection rates

Current Practice:
One component of the rates charged to customers under the Post-Collection Agreement is a Recycling Rebate. It is calculated using a formula described in the Agreement and adopted as part of the annual post-collection rates approved by RecycleMore. This component is a credit that is applied as a reduction in the total rates. There can be significant volatility in the Recycling Rebate component because annual adjustments under the formula are based on changes in the estimated amount of annual recycling material tonnage, and on changes in a prior twelve-month period market index. For FY 2017/18, the Recycling Rebate calculated under the formula increased by 34% to $6.15 per ton of all material types, primarily related to a significant increase in mixed paper prices over the previous year. There is concern by RecycleMore staff that significantly decreasing mixed paper prices will affect the 2019 Recycling Rebate and post-collection rates. In total, the Recycling Rebate for 2018 is estimated to be $971,577 ($6.15 multiplied by 157,980 tons), which reduces customer rates by a like amount.

Since the Recycling Rebate is a component of the total post-collection rate collected by Republic, potential Recycling Rebate volatility affects the overall rates paid by customers and impacts rate-based revenue received by Republic, but does not directly affect the RecycleMore operating budget. RecycleMore does not currently maintain a rate stabilization reserve to offset Recycling Rebate volatility.

At the November 2017 RecycleMore Board meeting, the Board considered setting aside $300,000 in a rate stabilization reserve, to stabilize customer 2019 rates, by paying Republic this amount to offset an anticipated decline in recycling revenues. The Board decided to postpone discussing the potential use of this $300,000 for rate stabilization until May 2018.

Discussion:
If the RecycleMore Board were to choose to implement rate stabilization on an ongoing basis to address the volatility of Recycling Rebate credits included in customer rates, a Recycling Rebate stabilization reserve could be established. Volatility in the Recycling

Rebate calculation since 2015 reflects an estimated maximum $300,000 difference from year to year.

Alternatively, if the RecycleMore Board were to determine that customers should bear the volatility of Recycling Rebates through the post-collection rates, then customer rates would rise as recycling revenues fall or would decline as recycling revenues increase. Under this scenario, a Recycling Rebate stabilization reserve would not be necessary.

Recommendation:
The current $6.15 per ton Recycling Rebate received by customers reduces the total rate of $98.17 per ton by 6.3%, to $92.02 per ton. By itself, the Recycling Rebate credited to the customer is a relatively small number. Looked at another way, the current Recycling Rebate is about the same magnitude as the Authority's portion of the overall post-collection rate.

This Report recommends that RecycleMore not create reserves on an ongoing basis to provide for rate stabilization to cover a declining Recycling Rebate, because the magnitude of the rebate is not a predominant portion of the overall rate paid by customers. If an ongoing Recycling Rebate rate stabilization reserve were implemented and Recycling Rebates were to significantly fall and stay low, the RecycleMore budget would be significantly impacted as RecycleMore continued to set aside an amount that could be as high as $300,000 per year, substituting the RecycleMore budget for what should otherwise be a rate-payer obligation.

Moreover, since this analysis addresses *ongoing* recycling revenue impacts, a periodic, one-year volatility in recycling revenue should not dictate an ongoing reserve program. Recycling revenue volatility in one year may be offset in subsequent years' volatility in the opposite direction.

However, if the Board were to choose to use a portion of the existing Operating Fund balance for rate stabilization related to Recycling Rebate impacts on a one-time basis for 2019 without creating an ongoing reserve, that might be an appropriate one-time measure to benefit customers without unnecessarily expanding the RecycleMore Operating Budget, if the Board believes this would be the best use of any existing excess reserves. Such a step should not create the expectation of the creation of an ongoing rate stabilization reserve.

III.1.B: Vulnerability to reductions in revenue due to reduced solid waste, recycling, organics, construction, demolition and/or other tonnage

Current Practice:
Since more than 90% of the post-collection rate revenue is collected by and retained by Republic to cover its costs and to maintain its facilities, volatility in tonnage affects the rates paid by customers, but does not significantly affect RecycleMore operating expenditures. Significant changes in tonnage may cause additional work on the part of RecycleMore staff to anticipate how these changes would impact post-collection

operations and to determine where trash or recycled goods should be directed, but fundamentally such changes would not significantly impact the RecycleMore operating expenditures.

However, RecycleMore does receive most of its revenue through the post-collection rates ($999,000 estimated in FY 2017/18), and a decline in tonnage could reduce the RecycleMore revenues. RecycleMore has little diversity in its revenue sources, and a significant reduction of tonnage may impact the sustainability of RecycleMore finances.

Discussion:
Across California, an ongoing reduction in solid waste, organics, construction and demolition and/or other materials' tonnage has resulted from customer education, environmental awareness, local and state mandates and pricing incentives. AB939 goals to reduce solid waste and increase recycling have driven such changes. As more customers recycle more materials and reduce the quantity of garbage materials going to landfills, revenues to support recycling services and basic solid waste systems will decline. Even with reduced costs resulting from smaller and fewer landfills, the revenue from refuse collection services may no longer be sufficient to support free or below-cost recycling services to a larger number of customers.

In addition, changes in the economy affecting commercial activity and construction and demolition can add volatility to the post-collection tonnage.

Recommendation:
While a decline in tonnage could be offset by either a subsequent increase in tonnage, or a rate change to reflect a more persistent decline in tonnages, RecycleMore should protect its financial sustainability against an unexpected decline in revenue associated with a reduction in post-collection tonnage by implementing a fiscal reserve. Although there is no empirical analysis to describe the magnitude of future annual tonnage reductions, it could range from 20% to 30% over the course of a full fiscal year, with a potential impact on the RecycleMore budget in the range of $200,000 to $300,000.

However, Recyclemore operates on a July 1 – June 30 fiscal year. Rates are adopted in the Fall and become effective in January. Assuming that a decline in tonnage is recognized when the budget is adopted in June, or at a point over the next several months, rates could be adjusted and become effective mid-fiscal year, thus mitigating the impact on the Recyclemore budget by 50%. Accordingly, a half-year range of $100,000 to $150,000 is recommended, with a mid-point Target Reserve of $125,000, or approximately 12.5% of Operating Revenues.

If an exposure to a significant decline in tonnage is recognized after rates are set for January, the RecycleMore Board could take emergency action to adjust rates out-of-sequence to address the financial shortfall.

III.1.C: Vulnerability to ongoing significant increased costs due to government mandates

Current Practice:
It is likely that additional government legislation affecting post-collection recycling and disposal services will be forthcoming. Such legislation typically provides sufficient notice and time for agencies to plan ahead for implementation and financing. For instance, in October 2014, the Governor signed AB 1826 mandating that local jurisdictions have an organic recycling program in place by January 1, 2016, and that businesses arrange for organic waste recycling services by April 1, 2016. However, administrative rule-making can result in unanticipated costs.

Discussion:
While legislation is typically known in advance of implementation, administrative rule-making can potentially result in unanticipated costs with less notice and time to implement by either RecycleMore or Republic, or both, resulting in additional costs to RecycleMore or reimbursements by RecycleMore to Republic. While it is not possible to precisely calculate a future cost for potential but unknown administrative rule-making and regulatory impacts, it would be prudent for RecycleMore to establish a reserve for such unanticipated costs, with a range of $50,000 to $150,000.

To the extent that RecycleMore costs increase in subsequent years, those costs can be passed on to Republic customers on an ongoing basis.

Recommendation:
RecycleMore should continue to plan for and budget for the long-term impacts of government mandates as these mandates come into existence. On a short-term basis, a reserve in the range of $50,000 to $150,000 should be established to address unanticipated costs, with a mid-point Target Reserve of $100,000, or approximately 10% of Operating Revenues.

III.1.D: Other ongoing financial vulnerabilities
None identified.

III.2. VULNERABILITY TO *ONE-TIME* COST INCREASES OR REVENUE REDUCTIONS

III.2.A: Vulnerability to legal liability claims

Current Practice:

The Post-Collection Agreement entered into between RecycleMore and Republic on October 10, 2013, cites the following in its Recitals, Determinations and Findings section:

> "WHEREAS, LOCAL AGENCIES like the Authority and the Franchise Agencies have generally been held liable under federal superfund laws for costs of cleaning up of Hazardous Waste sites that accepted Solid Waste generated within municipalities' jurisdictions. Therefore, the Authority is prudent to provide for terms and conditions of its Solid Waste Disposal in accordance with this Agreement…"

Under the Post-Collection Agreement with Republic, RecycleMore is responsible for directing the delivery of all solid waste, recycled materials, dry material, organic materials and construction and demolition materials to approved facilities, even though ownership of such materials transfers directly from customers to Republic.

In this context, RecycleMore is careful to protect its resources with insurance and indemnification language in its contracts with other parties. Regarding indemnification language, the Post-Collection Agreement provides that Republic

> "…shall hold harmless, defend and indemnify the Authority from and against any and all liability, loss, damage, expense costs (including without limitation costs and fees of litigation) of every nature arising out of or in connection with any of its obligations contained in this Agreement, except such loss or damage which was caused by active negligence or willful misconduct of the Authority…"

In general, liability insurance coverage dollar amounts and contractual indemnification language appear to be adequate to protect the interests of RecycleMore.

RecycleMore has its own general liability and auto liability insurance with a limit $2.5 million per occurrence and small deductibles. Coverage for employment practices insurance and coverage for errors and omissions insurance are included in RecycleMore's general liability policy. In addition, RecycleMore is an additional insured under Republic's general liability insurance policy, at $10 million per occurrence.

RecycleMore has its own pollution liability policy with a limit of $2.5 million per occurrence. Under this policy, RecycleMore is covered for claims, remediation costs and associated legal defense expenses in excess of the self-insured retention arising out of a pollution condition on, at, under or migrating from a covered location, subject to a $75,000 deductible for non-mold pollution conditions. RecycleMore is also covered as an additional insured under the Republic pollution liability policy, with a limit of $10 million per occurrence.

Discussion:
While the liability insurance coverage appears to be adequate in amount, there is a risk that an incident will not be covered by insurance. This is particularly the case with pollution liability insurance because of the complexity of, and coverage options available for this insurance. For instance, according to the American Bar Association, the following forms of pollution liability insurance can be separated from basic pollution liability coverage and separately priced:

- Cleanup costs associated with on-site pre-existing contamination;
- Cleanup costs associated with on-site new contamination;
- Third-party bodily injury and property damage claims resulting from on-site injuries and on-site contamination;
- Third-party bodily injury and property damage claims resulting from injuries off-site caused by contamination that migrated from the covered property;
- Third-party claims for cleanup costs associated with pre-existing contamination that migrated from the covered property;
- Third-party claims for cleanup costs associated with new contamination that migrates from the covered property;
- Third-party claims (including claims for cleanup costs, bodily injury or property damage) arising from on-site injuries on scheduled non-owned properties;
- Third-party claims (including claims for cleanup costs, bodily injury or property damage) arising from off-site injuries associated with scheduled non-owned properties;
- Claims for bodily injury, property damage or cleanup costs associated with contamination resulting from transportation of materials or wastes;
- Business interruption associated with on-site contamination.

Recommendations:
RecycleMore should maintain a reserve equal to the deductible on its pollution liability insurance policy. Currently, that deductible is $75,000. While multiple events/claims in one year are unlikely, RecycleMore should consider a range of potential reserve levels from $75,000 to $225,000 for up to three such deductibles, or for uninsured losses. The Target Reserve should be set at one deductible, currently $75,000.

RecycleMore should also annually review its insurance coverage, particularly its pollution liability coverage provided through its own policy and the pollution liability policy coverage provided through the Republic policy, so that uninsured losses may be minimized and so that RecycleMore will be fully aware of its potential exposure to losses.

III.2.B Vulnerability for contractor (Republic) or subcontractor defaults

Current Practice:
As described above under "Vulnerability to legal liability claims," Republic is responsible under the Post-Collection Agreement to indemnify RecycleMore for losses associated with its obligations under the Agreement, including work performed by subcontractors. In addition, to ensure that performance under the Post-Collection Agreement is maintained, Republic is required to provide and maintain a letter of credit or performance bond, payable to RecycleMore, securing Republic's performance of its obligations. This surety is required to be in the amount of $2 million, for the purpose of continuity of collection and processing services.

Discussion:
Since the annual cost of Republic's services is approximately $15 million dollars, the $2 million surety represents approximately 1.6 months of total services benefitting all of the franchise agencies and RecycleMore. Should there be a default and a disruption in Republic services, it would be necessary to acquire services from another service provider, which could result in delays in the collection and redirection of customer payments normally paid to Republic for services. It could also result in delays in receipt of the RecycleMore portion of customer rate-based payments or in increased costs to RecycleMore. There are currently several other large service providers in the region that could potentially step in and take over until a more permanent solution could be identified.

The 1.6 months covered by the surety would cushion the transition and provide for the costs of temporarily bringing in a new service provider, which would need to ramp up services, including customer billing services. The abrupt transitioning to a new service provider could cause a disruption in the monthly payments from Republic to RecycleMore that might last for an estimated period between 1.6 and 5 months.

Recommendations:
RecycleMore should continue to monitor the performance of Republic and its subcontractors.

RecycleMore should consider increasing the amount of the surety to an amount equal to 25% of the Republic annual revenue requirement, or an estimated $3.75 million at this time, when the Post-Collection Agreement comes up for renegotiation, to ensure an adequate surety amount.

RecycleMore should maintain a reserve to offset any potential Republic default, to provide for adequate cash flow in the event of a disruption of payments to RecycleMore, and to cover additional costs necessary to temporarily bring in a new service provider. A range between 1.6 (13%) and 5 months (42%) is recommended, which for the current budget would be between $133,000 and $417,000, with a mid-point Target Reserve of $275,000, or approximately 27.5% of Operating Revenue.

III.2.C Significant one-time costs due to government mandates or other factors

Current Practice and Discussion:
It is probable that one-time government mandates affecting post collection recycling and disposal services will be forthcoming. As described above under "Vulnerability to *ongoing* significant increased costs due to government mandates," above, legislation can be anticipated, but rule-making can sometimes create unanticipated costs. The amount proposed to be set under the "Vulnerability to ongoing significant increased costs due to government mandates," should be sufficient to cover both on-going and one-time costs due to government mandates.

Recommendation:
RecycleMore should continue to plan for and budget for government mandates as these mandates come into existence. Additional reserve for *one-time* mandates are not recommended.

III.2.D Other Cash Flow Disruptions

Current Practice:
Normally, RecycleMore receives more than 90% of its operating revenue from Republic on a consistent monthly basis. Volatility in cash flow is not typically an issue. However, other potential events could disrupt cash flow.

Discussion:
It is possible that RecycleMore would suffer a disruption in its revenue stream because of a natural disaster, such as a major fire or earthquake. This could result in the inability of customers to pay their monthly bills to Republic or could result in the inability of Republic to provide the services due to destruction of Republic facilities and/or equipment, either of which would disrupt Republic payments to RecycleMore.

Because RecycleMore's revenues are not diversified, interruption in this predominant revenue stream is a significant vulnerability, even if the likelihood is low.

In addition, it is possible that RecycleMore may encounter unexpected one-time expenses that must be paid during the current budget year and are not foreseeable.

Recommendation:
Although there is no empirical analysis to precisely estimate the magnitude of future disasters on the operations of RecycleMore or the magnitude of unexpected expenses, a potential range could be between 2 months and 6 months of disrupted operations. A minimum reserve of 17% (2 months) and a maximum reserve of 50% (6 months) of operating revenue is recommended. Based on the current budget, the range would be $167,000 to $500,000, with a mid-point Target Reserve of $333,000, or approximately 33% of Operating Revenue.

III.2.E Unfunded OPEB and Pension Liabilities

Current Practice:
RecycleMore is currently exploring the best way to use existing reserves to reduce or eliminate unfunded liabilities for Other Post-Employment Benefits (OPEB) and California Public Employees Retirement System (PERS) costs.

RecycleMore is considering a trust fund and other options for the OPEB liability, and a trust to invest independently, "paying down", and other options for the PERS unfunded liability.

The FY 2017/18 budget reserves an amount for OPEB obligations and the PERS unfunded accrued liability. The combined liability is currently calculated at $550,000.

Discussion:
It is possible that RecycleMore will face additional unfunded OPEB and PERS liabilities in the future, and, if so, RecycleMore would need to identify funds for these liabilities over a period of time.

Recommendation:
RecycleMore should not set aside additional reserve funds for future OPEB and PERS unfunded liabilities at this time, as it has just taken action to address the existing outstanding liabilities. Additional unfunded liabilities should be addressed as they come into existence and should be paid down over a timeframe that makes economic sense and that fits within the budgetary needs of RecycleMore.

III.2.F Departure of a Member Agency from RecycleMore

Current Practice and Discussion:
The RecycleMore Board met in April 2017 to discuss the results of a consultant's report concerning the impact of a potential withdrawal from RecycleMore by a member agency and producer of post-collection materials. The report concluded that such a withdrawal would increase the cost of residential monthly rates of remaining jurisdictions by an amount up to $2.24 per month. If the amount passed on to residential customers were the $2.24 per month, there would be no change to the RecycleMore annual operating budget nor to the Household Hazardous Waste annual budget adopted by RecycleMore, and residential customers would see a 7% increase in their monthly bills.

The increase in costs associated with the potential withdrawal by a member agency from RecycleMore could be absorbed by Republic customers through a rate increase of up to 7%.

Separately, a departing member agency would likely incur costs for its own separate State AB939 documents (Source Reduction and Recycling Element and Household Hazardous

Waste Element – for example) and may incur costs to which it may be contractually bound, or to otherwise comply with State requirements for waste diversion.

Recommendation:
If a member agency withdraws from RecycleMore, the cost of the annual RecycleMore and Household Hazardous Waste Budgets should be distributed among the customers, resulting in an increase of up to 7% to residential customers.

IV. CAPITAL FINANCING OPPORTUNITIES

IV.1.A Grant Matching

Current Practice and Discussion:
Various grants and loans become available to agencies like RecycleMore. Types of grants available include:

- *California Beverage Container Recycling and Litter Reduction Act.* All local agencies receive some funds from the California Beverage Container Recycling and Litter Reduction Act (also known as the Bottle Bill or by its legislative bill number, AB 2020) to help pay for local recycling programs; some can receive additional curbside supplemental payments.
- *State Agency Grants and Funds.* Many local agencies receive grants or funds from State agencies for recycling programs and facilities. These include grants to purchase waste and recycling bins for public places (parks, community centers or downtown plazas), conduct outreach to residents and businesses, or support collection events and programs.
- *CalRecycle Grants and Loans.* The California Department of Resources Recycling and Recovery (CalRecycle) offers numerous funding opportunities. Funding is for both public and private entities to help in the safe and effective management of the waste stream. Most of CalRecycle's grants are not for investments in manufacturing infrastructure, with the exception of Greenhouse Gas Recycling Fund grants (see below). The following highlights the key programs available.

CalRecycle Grant and Loan Programs include:

- *Beverage Container Recycling Grants*
  Provides funding to assist organizations in establishing convenient beverage container recycling and litter abatement projects, and to encourage market development and expansion activities for beverage container materials. (see Opportunity discussion below)
- *Farm and Ranch Cleanup Grants*
  Provides funding to cities, counties, Resource Conservation Districts, and Native American tribes for the cleanup of illegal solid waste sites on farm or ranch property.
- *Greenhouse Gas Reduction Grants*
  Provides grants to promote infrastructure development for recycling manufacturing, composting and anaerobic digestion facilities in California that divert more materials from landfills and reduce greenhouse gas emissions. (See "Current Practice and Discussion" below under "Potential Capital Investments")
- *Household Hazardous Waste (HHW) Grants*
  Provides local government funding for programs to expand or initially implement HHW programs such as collection programs, educational programs, and load checking programs, and programs emphasizing waste reduction, source reduction, reuse or recycling of HHW.

- *Local Conservation Corps Grant Program*
  Provides opportunities for the Local Conservation Corps to provide recycling services and implement litter abatement projects related to the collection and recovery of beverage containers, used oil, electronic waste and waste tires.
- *Local Enforcement Agency Grants*
  Provides grant funds, based on population and solid waste facilities, to local enforcement agencies (LEA) to assist in their solid waste facilities permit and inspection program.
- *Solid Waste Disposal and Site Cleanup Grants*
  Allows CalRecycle to expend funds directly for cleanup or emergency actions, provide loans to responsible parties who demonstrate the ability to repay State funds, or provide matching grants to local governments to assist in remediation of environmental problems at landfills.
- *Tire Recycling, Cleanup, and Enforcement Grants*
  Provides funding under several different grant programs to local governments for the purpose of diverting tires from landfill disposal by promoting markets of recycled-content products, as well as for enforcement and cleanup.
- *Used Oil Recycling Grants*
  Provides assistance to local governments, nonprofit entities, and other parties for activities that encourage appropriate disposal and recycling of used oil.
- *Used Oil Payment Program (OPP)*
  Provides assistance to local governments to develop and maintain used oil and used oil filter collection/recycling programs.
- *Beverage Container Recycling City/County Payment Program*
  Provides funding to eligible cities and counties for beverage container recycling and litter cleanup activities.
- *Recycling Market Development Zone (RMDZ) Loans*
  Provides direct loans to businesses that use postconsumer or secondary waste materials to manufacture new products, or that undertake projects to reduce the waste resulting from the manufacture of a product.
- *Greenhouse Gas Reduction Loans*
  Provides loans to promote in-state development of infrastructure to process California-generated organics and other recyclable materials into new value-added products.

IV.1.B Other Financing Resources:
The categories listed below are financial economic incentives (and disincentives) that are either currently available or could become available to increase diversion of organics and other recyclable materials. These categories focus on incentives and programs that are not offered by CalRecycle.

- *California Capital Access Program (CALCAP)*
  The California Capital Access Program (CalCAP) was created in 1994 and is run by the California Pollution Control Financing Authority (CPCFA). The program

encourages banks and other financial institutions to make loans to small businesses that have difficulty obtaining financing. Since inception, CalCAP lenders have cumulatively loaned over $2.2 billion.

- *Collateral Support Program (CSP) (part of CalCAP)*
  The California Capital Access Program Collateral Support (CalCAP CS) pledges cash to cover the collateral shortfall of loans of $100,000 or more. CalCAP CS provides up to 40% of the loan value, with the possibility of an additional 10% for businesses located in a Severely Affected Community.
- *Self-Generation Incentive Program*
  The Self-Generation Incentive Program (SGIP) provides incentives to support existing, new and emerging distributed energy resources. The SGIP provides rebates for qualifying distributed energy systems, including biogas generated by public or private producers. Each of California's four investor owned utilities offer financial incentives for biogas as part of this program.

An opportunity may exist for RecycleMore to become more active in placing recycle bins in schools and other large public or private facilities, which could be financed with grant funds and/or available RecycleMore funds. CalRecycle offers a competitive Beverage Container Recycling Grant Program, with up to $1.5 million available each year for beverage container recycling programs to governmental agencies, including joint powers authorities, and to non-profit organizations. As one example, the City of Dinuba received a $165,000 grant from CalRecycle in FY 2013/14 to increase beverage container recycling by partnering with a local disposal company and with the Dinuba Chamber of Commerce, to purchase and place 2,500 90-gallon blue recycling carts, to develop and distribute outreach materials, to develop and upload educational materials to media, and to partner with Dinuba Unified School District to get students to assist with distribution of outreach materials to the community.

Recommendation:
RecycleMore should continue to actively identify, apply for and obtain grant funding to leverage its existing resources for the handling of post-collection materials and to assist in its management over the processing of these materials.

To assist local recycling, RecycleMore should consider applying for a grant through CalRecycle to purchase 2,500 or more recycle bins and to place them in local schools and other local large private and public facilities. This might bring $165,000 or more in resources into the Recycling Fund.

RecycleMore should maintain a reserve within the Recycling Fund to provide for grant matching opportunities, to provide for costs related to grant funded projects that are not covered by grants and to cover the cost of future one-time project costs. While many recycling related grants do not appear to require grant matching, having grant matching funds available may make a grant application more competitive. A maximum of $500,000 might be reserved for this purpose.

Alternatively, if the RecycleMore Board did not want to set aside a reserve for grant matching and one-time projects, costs that would not significantly impact the annual operating budget could be financed by increasing the annual budget on a one-time basis. This might work for a $100,000 grant match or one-time project but would not finance a $500,000 project without a more significant impact on the annual RecycleMore budget.

Based on a range of $0 to $500,000, a mid-point Target Reserve of $250,000 is recommended.

IV.1.C Potential Public-Private (or Public-Public) program partnerships

Discussion:
See Potential Capital Investments below.

IV.1.D Potential Capital Investments

Current Practice and Discussion:
Recycling infrastructure includes two types of facilities: 1) facilities to collect and process recyclable materials and green/organic wastes, and 2) manufacturing facilities that produce products made of recycled content. Public companies and private companies construct, own and operate recycling facilities, such as material recovery, anaerobic digestion and composting facilities. These facilities generally are financed by one or more methods including bonds, public agency funds, Public-Private joint funding and State agencies' grants and loans.

To assist local recycling of organic materials, RecycleMore could apply for Greenhouse Gas Recycling grants or loans. Joint Powers Authorities are eligible for these grants. Unlike most State recycling related grants, these grants may be used for manufacturing facilities. CalRecycle established the Greenhouse Gas Reduction Grant and Loan Programs to provide financial incentives for capital investments in infrastructure for aerobic composting, anaerobic digestion and recycling and manufacturing facilities that will reduce greenhouse gas emissions. These grants promote California infrastructure developments that achieve greenhouse gas emission reductions by diverting more materials from landfills and by producing beneficial products such as soil amendments, renewable fuels or recycled-content products. Grants are targeted to build or expand organics infrastructure, such as composting and anaerobic digestion. The purpose of this competitive grant program is to lower overall greenhouse gas emissions by expanding existing capacity or establishing new facilities to reduce the amount of California-generated green materials, food materials, and/or alternative daily cover being sent to landfills.

Obtaining a Greenhouse Gas Reduction Grant offered through CalRecycle to assist a private company to build an improved recycling goods manufacturing facility could provide more of a local market for recyclable materials, reduce the amount of post-collection materials going to the landfill and help the local economy by creating local jobs. In addition, this facility might reduce the flow of recyclable materials leaving the local area. The West County Resource Recovery Facility receives more than 30,000 tons per year in organic materials. Santa Cruz County has used a contractor that processes approximately 40,000 tons of organic materials per year and that has produced 12 separate products including mulches, wood chips, compost, topsoil blends and soil amendments,

Recommendations:
RecycleMore should maintain a reserve within the Recycling Fund to provide for potential capital investments. While some recycling related grants for capital investments may not require grant matching, having grant matching funds or other start-up funds available may make a grant application more competitive. A range for this reserve could be between $500,000 and $1,500,000, with a mid-point Target Reserve of $1 million.

To assist local recycling, RecycleMore could explore the feasibility of assisting a local company to create an improved Recycled Goods Manufacturing Facility to produce products from organic materials or from plastic materials, and, if feasible, to apply for a Greenhouse Gas Reduction Grant to build such a facility. Up to $3 million per grant application may be available.

IV.1.E Other Opportunities - Cost Savings

Current Practice and Discussion:
Long term integrated waste management systems can also consider cost savings from strong recycling programs in future budgeting, including reductions in landfill growth and transportation charges. There are also cost savings in the field of waste management due to extended producer responsibility, which can take the form of reuse, buy-back or recycling programs paid by the producer of the product (for example, carpet, e-waste, fluorescent lighting, batteries, mattresses, paint, pharmaceuticals).

Recommendation: None.

V. SUMMARY

V.1 Estimated cost/reserves and time range for vulnerabilities (Operating Fund):

Table V.1: Operating Fund Reserve Levels

VULNERABILITY	RESERVE RANGE: FY 2017-18 AMOUNT	TARGET BASIS	FY 2017-18 TARGET RESERVE	TIME RANGE
Reduction in the recycling rebate portion of post-collection rates	None	n/a	n/a	n/a
Reductions in revenue due to reduced solid waste, recycling, organics, construction, demolition and/or other tonnage	10% to 15% of Operating Revenue: $100,000 - $150,000	12.5% of Operating Revenue	$125,000	6 months
Ongoing significant increased costs due to government mandates	5% to 15% of Operating Revenue: $50,000 - $150,000	10% of Operating Revenue	$100,000	One year
Other ongoing vulnerabilities	None identified	n/a	n/a	n/a
Legal liability claims	$75,000 - $225,000	Pollution Insurance Policy Deductible	$75,000	One year
Contractor or subcontractor defaults	13% to 42% of Operating Revenue: $133,000 - $417,000	27.5% of Operating Revenue	$275,000	1.6 – 5 months
One-time increased costs due to government mandates or other factors	None	n/a	n/a	n/a
Other cash flow disruptions	17% to 50% of Operating Revenue: $167,000 - $500,000	33% of Operating Revenue	$333,000	2 - 6 months
OPEB and CalPERS unfunded liabilities	None	Actuarial Reports	Already Reserved by FY 2017-18 Budget	n/a
Departure of Member Agency	None	n/a	n/a	n/a
Total Preliminary Target Reserve[2]	$525,000 - $1,442,000		$908,000	
Less: Unlikely occurrence of multiple events in one year[3]			($236,000)	
Recommended Target Reserve	$525,000 - $1,442,000	67% of Operating Revenue	$672,000	One year

[2] Preliminary Target Reserve assumes all event occur in one year.
[3] See Section V.2, below.

V.2 Likelihood of multiple vulnerabilities coming due simultaneously

Discussion:
The Operating Fund Preliminary Target Reserve is $908,000, assuming that all potential vulnerability events occur in a single year.

It is possible, but unlikely, that vulnerabilities for reductions in tonnage ($100,000 Target Reserve), contractor or subcontractor defaults ($275,000 Target Reserve) or other cash flow disruptions ($333,000 Target Reserve) would occur in the same year. Therefore, it does not appear necessary to set aside reserves for all three vulnerabilities. The average of these three Target Reserves is $236,000, which can be deducted from the Preliminary Target Reserve, resulting in a total net Target Reserve of $672,000 for FY 2017-18, which is equal to 67% of operating revenue on an ongoing basis.

V.3 Estimated cost/reserves and time range for opportunities (Recycling Fund):

Table V-3: Recycling Fund Reserve Levels

OPPORTUNITY	COST/ RESERVE RANGE	TARGET RESERVE	TIME RANGE
Grants	$0 - $500,000	$250,000	One year
Potential Capital Investments (including Public-Private or Public-Public Partnerships)	$500,000 - $1,500,000	$1,000,000	One to two years
Cost savings	Unknown	n/a	Long range
Total	$500,000 - $2,000,000	$1,250,000	

V.4 Likelihood of multiple opportunities coming due simultaneously, along with recommendations concerning how to address multiple simultaneous opportunities

It is unlikely, but possible, that more than one of the opportunities listed above would occur in the same year. Multiple opportunities should be pursued, assuming there are adequate resources available to take on these opportunities.

V.5 City Managers' Recommendations

For information purposes, the following is provided regarding the member agencies' City Managers' deliberations and recommendations regarding RecycleMore reserves.

In December 2017, the member agencies' City Managers provided reserve recommendations as part of the report on RecycleMore's "Framework", summarized below:

Establish three funds:

- Operating reserve equal to three months or twenty-five (25) percent of annual expenditures (which equals $290,000 for FY 2017-18).

- Emergency reserve at $300,000.
- Legal liability reserve (OPEB & PERS) at $550,000.

As mentioned in the Introduction, three City Managers reviewed an Administrative Draft of this Report, and their consensus is provided below:

- Operating Fund Reserve totaling $575,000
- Recycling Fund Reserve of $600,000
- OPEB and PERS liability reserve of $550,000

V.6 Reserve Classifications

Government Accounting Standards Board Statement No. 54 ("GASB 54") classifies reservations of fund equity as (i) *Non-Spendable* (assets that are not available for expenditure), (ii) *Restricted* (based on externally imposed creditors or laws), (iii) *Committed* (by formal action of the governing board) and required to be used for specific purposes, (iv) *Assigned* (indicating an intent to be used for a specific purpose) and (v) *Unassigned* (residual amounts available for expenditure).

Based on GASB 54, it is recommended that reserves be characterized as follows, pending confirmation by RecycleMore's independent auditor:

Table V.6

RESERVE	GASB CLASSIFICATION
Operating Fund:	
Target reserve	Assigned
Excess reserves	Unassigned
Recycling Fund:	
Target reserve	Assigned
OPEB and CalPERS reserve	Assigned
Contra Costa County reserve	Assigned
Excess reserves	Assigned

V.7 Minimum-Maximum and Target Reserve Levels

Current Practice and Discussion:

To survey the practices of other Authorities overseeing post-collection services, the existing reserves in other Authorities were reviewed. It should be noted that some Authorities own and operate facilities, some Authorities have Capital Reserves that may be accessed for operations if necessary, and there is a wide range in the size of Authorities' budgets. Following are the Operating Reserve amounts or target reserve levels, where specified, for these other Authorities for the FY 2017/18 Budgets, unless otherwise specified (available on-line):

- Central Costa County Solid Waste Authority: $282,860 Budgeted Reserve = 18.0% of Revenue (2017/18 Budget)
- Alameda County Waste Management Authority: $13,443,388 Budgeted Reserve = 92.5% of Revenue (2017/18 Budget)
- Salinas Valley Solid Waste Authority: Policy Target = 15% of Operating Expenditures
- South Bay Waste Management Authority: $42,523,900 Budgeted Reserve = 32.5% of Revenue (2015/16 Budget)
- Mojave Desert and Mountain Integrated Waste Joint Powers Authority: $120,000 Budgeted Reserve = estimated 35.6% of Revenue (2017/18 Budget)

Recommendations:

Operating Fund Reserve:
The Minimum Operating Fund Reserve should be $525,000, as identified in Table V.1.

The Maximum Operating Fund Reserve should be $1,442,000 as identified in Table V.1, considering the worst-case amounts and all events occurring in a single year.

Section V.1 summarized recommended Preliminary Operating Fund Target Reserve of $908,000. Section V.2 addressed the likelihood of multiple vulnerabilities occurring within one year and quantified a deduction of $236,000 from the Preliminary Operating Fund resulting in a total net Target Reserve of $672,000.

The Operating Fund Target Reserve should be set at 67% of Operating Revenue, which is $672,000 for FY 2017-18. In subsequent years, as Operating Revenue changes, the Target Reserve dollar amount should be adjusted to equal 67% of Operating Revenue.

If Operating Fund reserves fall below the Operating Fund Target Reserve, the shortfall should be fully addressed by:

A. First transferring any available Recycling Fund excess over the Recycling Fund Target Reserve to the extent needed for the Operating Fund to meet its Target Reserve; and

B. Adding any additional amount needed to meet the Operating Fund Target Reserve to customer rates for the following year as part of the RecycleMore component of customer rates. A de minimis amount may not warrant a rate adjustment. (A rate adjustment should not dramatically affect overall customer rates because even if the entire currently proposed $672,000 Target Reserve needed to be replenished, this would add less than 5% to the overall customer rates per ton.)

If Operating Fund reserves exceed the Operating Fund Target Reserve:

A. The excess should be transferred to the Recycling Fund to the extent that the Recycling Fund Target Reserve is not exceeded; and

B. Any remaining Operating Fund reserve in excess of the Target Reserve should, with RecycleMore Board authorization, be either credited to customers through a reduction in the amount otherwise charged for the RecycleMore component of tonnage rates, or be distributed to member agencies, contingent upon legal review by RecycleMore legal counsel. A de minimis amount may not warrant a rate adjustment or distribution.

Recycling Fund Reserve:
The Minimum Recycling Fund Reserve should be $500,000 to enable RecycleMore to provide for one-time projects and to provide a match for future grants.

The Maximum Recycling Fund Reserve should be $2,000,000 to provide funds for future major recycling program and facility investments, including grant matches, and to provide for one-time projects.

The Recycling Fund Target Reserve should be based upon the RecycleMore Board's policy priorities for near and mid-term investments in capital projects. While some capital investments can be funded through annual rate-setting, the timing and need for other capital funds may not coincide with the availability and receipt of future years' rate-based revenues. It would be prudent to maintain a Recycling Fund Target Reserve to enable the Board to commit capital funds on a timely basis as opportunities arise, rather than relying wholly on funds that would be received only after adjusting rates to fund the capital project (a delay of more than twelve months, in some cases). Based on our understanding of current RecycleMore's goals for future capital investments, a Recycling Fund Target Reserve of $1,250,000 is recommended, to provide funding for one-time expenses and an investment in a major recycling program or facility.

If Recycling Fund reserves fall below the Target Reserve, the reserve should be replenished through the following steps:

A. First, any excess over the Operating Fund Target Reserve should be transferred to the Recycling Fund to the extent needed to meet the Recycling Fund Target Reserve; and

B. Any remaining shortfall in the Recycling Fund Target Reserve should be added to customer rates over the following one- to five years as part of the RecycleMore component of customer rates to restore the Recycling Fund Target Reserve. The Recycling Fund Target Reserve should be restored as soon as possible, but customer rates should not be impacted by the combination of restoring both the Operating Fund Target Reserve and the Recycling Fund Target Reserve by more than 5% of total customer rates in any one year. If necessary to stay under this 5%

limit, the Recycling Fund Target Reserve should be restored over a period of years. A de minimis amount may not warrant a rate adjustment or distribution.

If Recycling Fund reserve exceeds the Target Reserve, the excess should be distributed as follows:

A. First, the Recycling Fund excess should be transferred to the Operating Fund to the extent that the Operating Fund Target Reserve is not exceeded; and

B. Second, any remaining Recycling Fund excess reserve should, with RecycleMore Board authorization, be either credited to customers through a reduction in the amount otherwise charged to customers for the RecycleMore component of tonnage rates, or be distributed to member agencies, contingent upon legal review by RecycleMore legal counsel. A de minimis amount may not warrant a rate adjustment or distribution.