



County of Santa Barbara - Solid Waste System
Consultant's Report and Feasibility Study
Related to the Solid Waste System
Revenue Certificates of Participation, Series 2018



HF&H Consultants, LLC

October 8, 2018

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- A. Comprehensive Financial Projections for Revenue COPs (Base Case)
- B. Reduced Recycling Commodity Prices Sensitivity Analysis (Scenario 1)
- C. Elimination of Commodity Revenue, Except CRV Sensitivity Analysis (Scenario 2)
- D. Reduced Self-Haul Tonnage Sensitivity Analysis (Scenario 3)
- E. Reduced Volume Through ADF Sensitivity Analysis (Scenario 4)
- F. Board Resolution #18-150
- G. Coastal Zone Boundary Determination Memorandum from the California Coastal Commission

GLOSSARY

ADF - Anaerobic Digestion Facility
APCD - Santa Barbara County Air Pollution Control District
ATC - Authority to Construct
Base Case - Base Case Projected Operating Results
Bekon - Bekon Energy Technologies Inc.
BioMAT - Bioenergy Market Adjusting Tariff
Board - County of Santa Barbara Board of Supervisors
C&D - Construction and Demolition
CAFR – County of Santa Barbara Comprehensive Annual Financial Report
CalRecycle - State of California Department of Resources, Recycling and Recovery
CCRWQCB - California Central Coast Regional Water Quality Control Board
CEC - California Energy Commission
CEQA - California Environmental Quality Act
CESQG - Conditionally Exempt Small Quantity Generator
CHP - Combined heat and power
CHWCC - Community Hazardous Waste Collection Center
CMU - Compost management unit
CO_{2e} - Carbon dioxide equivalent
COPs - County of Santa Barbara Solid Waste System Revenue Certificates of Participation, Series 2018
County - County of Santa Barbara
CPUC - California Public Utilities Commission
CRV - California Redemption Value
CSSRM - Comingled source separated recyclable materials
DBC - Diani Building Corporation
DEI - D. Edwards, Inc.
Financial Close - The date of execution and delivery of the COPs
Forecast - California County-Level Economic Forecast 2015-2040 in September 2015
Gold Coast - Gold Coast Materials Recycling Facility
HF&H - HF&H Consultants
HHW - Household hazardous waste
IVDR - In-Vessel Digestion Report
JTD - Joint Technical Document
KNN - KNN Public Finance, LLC
LEA - Local Enforcement Agency
MarBorg - MarBorg Industries [MarBorg Recovery LP]
Material Delivery Agreements - Material Delivery Commitment and Processing Services Agreements
MRF - Material Recovery Facility
MSB - MSB Investors, LLC
MSW - Municipal solid waste
Mustang - Mustang Renewable Power Ventures LLC
MW - Megawatts

NPDES - National Pollution Discharge Elimination System

Post-TRRP - Once the TRRP commences operations

PPA - Power Purchase Agreement

Projections - County's projected financial results of operations dated October 1, 2018

Projects – The four major projects identified in Section 1.2 of this Feasibility Report

PTO - Permit to Operate

Public Participants - Cities of Santa Barbara, Goleta and Solvang

RCSI - Report of Composting Site Information

RCRA - The Federal Resource Conservation and Recovery Act

RPS - State of California mandated Renewable Portfolio Standards

RRWMD - County of Santa Barbara Department of Public Works, Resource Recovery and Waste Management Division

SBCAPCD - Santa Barbara County Air Pollution Control District

SCE - Southern California Edison

SCRTS - South Coast Recycling and Transfer Station

SEIR - Subsequent Environmental Impact Report

SSOM - Source separated organic materials

State - State of California

SVLRC - Simi Valley Landfill and Recycling Center

SYVRTS - Santa Ynez Valley Recycling and Transfer Station

SWFP - Solid Waste Facility Permit

SWPPP - Stormwater Pollution Prevention Plan

System - Recycling programs for commingled recyclables and green-waste collection, programs for residential and small business hazardous waste, sharps and pharmaceutical collection, electronic waste collection and recycling, public education, the operation of four recycling and transfer stations, the operation of one household hazardous waste collection center, operation of the Tajiguas Landfill, and management of nine closed landfills

TPR - Transfer Processing Report

TPY - Tons per year

TRRP - Tajiguas Resource Recovery Project

VDRS - Van Dyk Recycling Solutions

Waste Service Agreement - Contract between the County of Santa Barbara and MSB for Development and Operation of the TRRP

WDRs - Waste Discharge Requirements

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SECTION 1.0 INTRODUCTION

1.1 Background

The County of Santa Barbara (County) covers approximately 2,735 square miles and has a population of approximately 453,500 including the incorporated communities (cities) of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang. The County of Santa Barbara Department of Public Works, Resource Recovery and Waste Management Division (RRWMD) is responsible for the management of several of the County's solid waste facilities and programs. RRWMD is also responsible for administering the franchise agreements for the collection of solid waste materials from residents and businesses in the unincorporated areas of the County by private solid waste collection firms, as well as the enforcement of local solid waste management ordinances.

RRWMD's mission is to protect the public health by providing County residents with cost-effective, innovative, and environmentally-sound solutions in waste management. RRWMD provides an integrated waste management system consisting of: recycling programs for commingled recyclables and green-waste collection, hazardous waste programs for residential and small business, sharps and pharmaceutical collection, electronic waste collection and recycling, public education, the operation of four recycling and transfer stations, the operation of one household hazardous waste collection center, operation of the Tajiguas Landfill, and management of nine closed landfills (System). Municipal solid waste (MSW) currently delivered to the Tajiguas Landfill is generated by residents and businesses in the cities of Santa Barbara, Goleta and Solvang (Public Participants), the City of Buellton, the unincorporated areas of southern Santa Barbara County, and the Santa Ynez and Cuyama Valleys.

The County, in cooperation with Public Participants and the City of Buellton, has been developing the Tajiguas Resource Recovery Project (TRRP) since 2009, in order to extend the useful life of the Tajiguas Landfill, recover material from the solid waste stream for recycling and composting, and reduce greenhouse gas emissions.

- In 2009, the County prepared and released a Request for Proposals for a Waste Conversion Facility capable of diverting 60% of the material that was being buried at the Tajiguas Landfill generated by the cities of Buellton, Goleta, Santa Barbara, Solvang, and the southern Santa Ynez and New Cuyama unincorporated areas.
- In 2012, the project proposed by Mustang Renewable Power Ventures LLC (Mustang), an affiliate of MSB Investors, LLC (MSB), was selected as the most advantageous proposal for the County. Public Participants approved resolutions indicating their continued interest in the project. At that time, the County of Santa Barbara Board of Supervisors (Board) directed staff to fund the preparation of the Final Subsequent Environmental Impact Report for the TRRP.
- In July 2015, the Board directed staff to consider publicly financing the facility to potentially reduce TRRP costs by 30% from MSB's private financing proposal.
- In April 2016, staff returned to the Board with the results of studies to evaluate the financial and technical feasibility of the TRRP, the financial impact of public financing on the County Public Works Department as well as the overall cost to the ratepayers, and a negotiated set of Deal Points with the selected vendor. At that time, the Board instructed staff to develop and negotiate a full contract between the County of Santa Barbara and MSB, including the contracts between MSB and its primary subcontractors, which are Diani Building Corporation (DBC), Van Dyk Baler

Corporation dba Van Dyk Recycling Solutions (VDRS), Bekon Energy Technologies Inc. (Bekon), and Mustang and MarBorg Recovery LP (MarBorg) for Development and Operation of the TRRP (Waste Service Agreement). In addition, staff was directed to provide recommendations from the County's Debt Advisory Committee related to public financing for the TRRP.

- In July, 2016, the Board:
 1. Made the required California Environmental Quality Act (CEQA) findings for approval of the proposed project including the processing of comingled source separated recyclable materials (CSSRM);
 2. Certified the Final Subsequent Environmental Impact Report (EIR) and adopted the mitigation measures, with their corresponding monitoring requirements, as the Mitigation Monitoring and Reporting Program for this project;
 3. Received the Debt Advisory Committee's recommendation concerning the potential use of public financing for this project;
 4. Approved the Waste Service Agreement between the County and MSB for the Development and Operation of the TRRP; and
 5. Directed the Public Works Department to:
 - i. Negotiate Material Delivery Commitment and Processing Services Agreements (Material Delivery Agreements) with the Public Participants;
 - ii. Work with the Treasurer-Tax Collector, Auditor-Controller, County Counsel, and County Executive Office to pursue public financing to construct the facility;
 - iii. Seek grant funding, if available;
 - iv. Obtain local, state and federal permits to the extent required by law;
 - v. Relocate existing operations facilities at the Tajiguas Landfill as identified in the project description to accommodate construction of the project; and,
 - vi. Return to the Board for final approval of items (i) and (ii).
- In December, 2016, the Board:
 1. Approved the Material Delivery Agreements between the County and the cities of Goleta, Santa Barbara and Solvang and with MarBorg Industries (for the City of Buellton);
 2. Approved the Disposal Agreement between the County of Santa Barbara and MarBorg Industries for the disposal of waste collected at MarBorg's Construction and Demolition Debris Sorting Facility in Santa Barbara;
 3. Approved the Amended Waste Service Agreement between the County and MSB for the Development and Operation of the TRRP;
 4. Determined that the previously certified Final Subsequent EIR and Final Subsequent EIR Revision Letter and Errata for the TRRP certified on July 12, 2016 provided adequate environmental review pursuant to Section 15162 of the State Guidelines for Implementation of CEQA to satisfy the CEQA requirement for this action, and that no subsequent EIR or Negative Declaration shall be prepared for this project;
 5. Held a public hearing in accordance with the Tax and Equity Fiscal Responsibility Act of 1982 and approved public financing for the primary purpose of the design, acquisition and construction of improvements to the County's System;

6. Adopted a Resolution authorizing the execution and delivery of a 2017 Installment Purchase Contract, a Trust Agreement and a Contract of Purchase; approving execution of an Assignment Agreement and Certificates of Participation to finance certain capital improvements to the solid waste system, approving a Preliminary Official Statement for said Certificates of Participation; authorizing the execution and delivery of a Continuing Disclosure Agreement; and, authorizing certain other actions in connection with the financing;
 7. Authorized the Treasurer-Tax Collector to abandon the issuance of Revenue Certificates of Participation if market conditions are deemed financially unfavorable; and
 8. Determined that the above actions are governmental funding mechanisms and/or fiscal activities that are not a project under CEQA.
- In February, 2017, the Board:
 1. Approved direct agreements between the County, MSB and the entities related to the Development and Operation of the TRRP including: Diani for Construction of AD & MRF; Bekon & Diani for AD Equipment; Bekon for AD Operations; Mustang for AD Operations; VDRS for MRF Equipment; MarBorg for MRF Operations; and MarBorg for MRF Diversion Guarantee. The direct agreement provides a mechanism to assign the primary subcontracts to the County in the event MSB defaults or files bankruptcy. Construction and operation of the facilities under the direct agreements would proceed as analyzed in the certified Final Subsequent EIR;
 2. Approved the First Amendment to the Amended Contract between the County of Santa Barbara and MSB for Development and Operation of the TRRP; and,
 3. Approved Budget Revision Request #BJE-0004878 to account for the appropriation related to the debt issuance for the TRRP; and determined that the previously certified Final Subsequent EIR (12EIR-000-00002, SCH No. 2012041068) and Final Subsequent EIR Revision Letter and Errata (dated May 2, 2016) for the TRRP certified on July 12, 2016 are adequate environmental review pursuant to Section 15162 of the State Guidelines for Implementation of CEQA to satisfy CEQA's requirement for this action, and that no subsequent EIR or Negative Declaration shall be prepared for this project.
 - Subsequent to the Board's February, 2017 meeting;
 1. The County priced the County of Santa Barbara Solid Waste System Revenue Certificates of Participation, Series 2017 to fund the TRRP. However, between the pricing and anticipated closing of the 2017 COPs, the TRRP was found to be partially within the Coastal Zone and therefore the 2017 COPs did not close; and,
 2. The TRRP design was revised to relocate the AD Facility and related facilities outside the Coastal Zone. Changes to the project include decommissioning and installing replacement Landfill Gas Control System equipment and a Comprehensive Plan Amendment to adjust the Waste Facility Overlay Boundary to include a revised location for the AD Facility, adding 4.48 acres within the landfill's permitted operational area boundary, and removing a 55.55 acre area of dense native vegetation not needed for waste disposal operations. An Addendum to the certified Final Subsequent EIR (dated August 11, 2017 and revised on October 26, 2017) was prepared for the Revised TRRP.
 - In November, 2017, the Board:
 1. Made the required findings for approval of the Comprehensive Plan Amendment, specified in

- the Board Agenda Letter, including CEQA findings;
2. After considering the environmental review documents (Revised Addendum to the Subsequent EIR) together with Subsequent EIR No. 12EIR-00000-00002, SCH #2012041068 certified by the Board on July 12, 2016 and Subsequent EIR Revision Letter and Errata dated May 27, 2016, found that no subsequent environmental review document shall be prepared pursuant to CEQA Guidelines Section 15162 related to the Revised TRRP, since there are no substantial changes proposed in the project and no substantial changes have occurred with respect to the circumstances under which the project is undertaken that will require major revisions to the EIR due to new or substantially increased significant impacts, and there is no new information of substantial importance showing new or substantially increased significant impacts or impacts to new or previously analyzed mitigation measures or alternatives that would substantially reduce significant impacts;
 3. Received the Planning Commission's conformity report required by Government Code Section 65402(a). The Planning Commission's staff report, dated August 14, 2017, and the Planning Commission Action letter for the hearing held on August 30, 2017;
 4. Adopted a resolution amending the Comprehensive Plan (17GPA-00000-00002), including amending the Tajiguas Landfill "Waste Disposal Facility Overlay" boundary to eliminate approximately 55.55 acres not needed for the solid waste disposal operations and to include approximately 4.48 acres to accommodate construction of the Revised TRRP;
 5. Approved and authorized the chair to execute the Second Amendment to the Amended Contract between the County of Santa Barbara and MSB for Development and Operation of the Revised TRRP addressing changes to the TRRP; and,
 6. Directed the Public Works Department and Treasurer-Tax Collector working with County Executive Office, Auditor-Controller, and County Counsel to update the necessary documents to finance the construction of the project.

Subsequent to the Board's November, 2017 meeting, the Gaviota Coast Conservancy filed a lawsuit challenging the County's approval of the TRRP. The County reached a settlement with the Gaviota Coast Conservancy when in June 2018, the Board adopted Resolution #18-150 establishing a policy with respect to certain future landfilling activities at the Tajiguas Landfill and the use of the Baron Ranch property. By adopting the Resolution, the Board agreed:

1. To cease burial of residual and solid waste at the Tajiguas Landfill when it reaches its permitted capacity of 23,300,000 cubic yards except for emergency debris;
 2. To not seek expansion of the Tajiguas Landfill capacity except for emergency debris;
 3. When seven years of remaining disposal capacity is reached based on the County's annual report to CalRecycle, to begin to seek locations other than the Gaviota Coast for solid waste residual disposal; and,
 4. To limit the use of Baron Ranch primarily to open space, recreation, and agricultural uses.
- On September 11, 2018 the Board:
 1. Adopted a resolution authorizing the Public Works Department to accept and execute a grant of \$4 million from CalRecycle, awarded on July 2, 2018, for part of the TRRP's organics processing capital costs. This was a competitive grant applied for by Public Works in response to the July 2016 Board action directing staff to seek available grant funding.

- On September 18, 2018 the Board:
 1. Approved and authorized the Chair to execute the Third Amendment to the Amended Contract between the County of Santa Barbara and MSB for Development and Operation of the Tajiguas Resource Recovery Project, which addresses changes to the costs and construction schedule of the Tajiguas Resource Recovery Project; and,
 2. Determined that the previous Final Subsequent EIR SCH #2012041068 and Subsequent EIR Revision Letter and Errata dated May 27, 2016 certified by the Board of Supervisors on July 12, 2016 and Final Subsequent EIR Addendum dated August 11, 2017 (revised October 26, 2017) considered by the Board of Supervisors on November 14, 2017 are adequate review pursuant to California Environmental Quality Act Guidelines Section 15162, no substantial changes are proposed, and no new information of substantial importance has come to light regarding environmental effects of the project or of the sufficiency or feasibility of mitigation measures, and therefore the Third Amendment to the contract with MSB is within the scope of the project covered by the prior environmental review and no subsequent Environmental Impact Report or Negative Declaration shall be prepared for this action.

1.2 The Projects

The County is seeking to finance \$143,077,000 for three major projects (Projects):

1. **The TRRP** – Payment of \$134,977,000 to construct the facility consists of:
 - \$117,458,000 to MSB for construction of the TRRP including the Material Recovery Facility (MRF), Anaerobic Digestion Facility (ADF), Composting Management Unit (CMU), and Landfill Gas Engines;
 - \$2,531,000 to MSB for the cost of the SoCal Edison Interconnection, Construction & Start-up Insurance, Start-up and Acceptance, and Contract Administration,
 - \$5,508,000 to MSB for Permits and Entitlements;
 - \$5,390,000 to MSB for Design and Engineering;
 - \$3,090,000 to MSB for its Development fee; and,
 - \$1,000,000 to Simplus Management for Project Construction Management and Oversight Services.
2. **Landfill Closure Costs** – The Tajiguas landfill is completing regulatory closure of about 50% of the active landfill (60 acres). The cost for closure is \$6,300,000.
3. **Storm Water Improvements** – To comply with new regulations, storm water improvements are needed at the South Coast Recycling and Transfer Station (SCRTS) at a cost of \$1,800,000.

The amounts described above for the TRRP are \$19,007,000 more from February 2017 (MSB First Amendment) due to increases in project costs and costs related to relocating the ADF Facility to be outside the Coastal Zone. The changes are as follows:

- \$3,305,000 increases for permits and entitlements, design and engineering, and insurance costs;
- \$8,621,000 increases for general conditions, site work, construction, building and equipment costs;
- \$1,956,000 increase for steel tariffs;

- \$9,275,000 increase for new Landfill Gas System related to the relocation of the ADF Facility; and,
- \$4,150,000 decrease in RRWMD costs for landfill post closure expenses, land purchases, contract management, and site improvements.

1.3 Purpose of Feasibility Report

The purpose of this Feasibility Report is to render a professional opinion, based on the procedures we performed and subject to the limitations described below, on whether it is reasonable to believe the System will be able to repay on a timely basis the proposed Solid Waste System Revenue Certificates of Participation, Series 2018 (COPs) being executed and delivered to finance facility improvements as represented in the County's projected financial results of operations dated October 1, 2018 (Projections). We understand that this Feasibility Report will be included in the offering documents to be prepared in connection with the offering of COPs to finance the project costs.

1.4 Scope of Feasibility Report

The Feasibility Report provides:

- An overview of the existing System;
- A description of the Projects;
- A description of competing facilities; and,
- Historical and projected financial results of operations of the System (including sensitivities regarding waste volumes and composition, revenues from the sale of recovered materials, and facility operations).

1.5 General Methodology and Scope of Work

HF&H Consultants, LLC (HF&H) prepared this Feasibility Report. Founded in 1989, HF&H has conducted more than 1,900 solid waste planning, procurement and financial studies for more than 275 California counties, cities and districts in the past 29 years. Since 1995, HF&H has performed more than 20 engagements for the County. These engagements directly contribute to our understanding of the issues that must be addressed in this study. They include alternative funding strategies for the TRRP as well as negotiating the Waste Service Agreement and the Material Delivery Agreements, which are directly related to the County's future facility plans.

HF&H collected information and documents from the County staff, architectural and engineering firm D. Edwards, Inc. (DEI), legal counsel, and other sources.

Among the documents reviewed are: County's Audited Comprehensive Annual Financial Report (CAFR) for FY 2013 through FY 2018 that includes the Solid Waste System; historical and projected information on System tonnage (incoming and out-going); procurement and proposal documents for the TRRP; the Final Subsequent EIR for the TRRP; solid waste collection franchise agreements with the cities of Santa Barbara, Goleta, Solvang, and Buellton as well as the County of Santa Barbara for collection of material in the unincorporated area; the Waste Service Agreement; the Material Delivery Agreements between the County and the Public Participants; and, the Material Delivery Agreement between the County and MarBorg with respect to waste collected in the City of Buellton. We have relied on this information and the data in these documents and have assumed they were accurate.

The scope of our analysis was limited to those tasks we believe are necessary to determine the reasonableness of the projected financial results of operations prepared by County Staff with assistance from the County's municipal advisor KNN Public Finance, LLC (KNN) dated August 14, 2018. The specific tasks we performed included:

1. Reviewing the mathematical accuracy, logical consistency and reasonableness of the waste volume and financial Projections;
2. Reconciling the reported historical financial data contained in the Projections to the County's CAFR;
3. Reconciling the reported historical tonnage data contained in the Projections to the County's reports;
4. Identifying assumed values for key variables that affect the Projections;
5. Reviewing the underlying source documents to ensure they support the assumed value of the key variables contained in the Projections;
6. Reviewing the reasonableness of the County staff's analysis of alternatives to the TRRP;
7. Performing sensitivity analyses using different assumed values for key variables; and,
8. Reviewing the financing costs and debt service requirements as provided by the County's municipal advisor.

1.6 Limitations

Every engagement includes certain limitations. The major limitations related to this engagement are:

1. Our analysis relied in part on documents prepared by other independent accountants, consultants and engineers as well as County staff whom we believe to be knowledgeable as well as professionally and technically qualified to perform the work;
2. We have not audited any financial statements (although Brown Armstrong Accountancy Corporation performed an audit of the County's CAFR which includes the Solid Waste System), nor have we performed an independent review of the plans and operations of the MRF (although D. Edwards, Inc. (DEI) performed an independent review of the MRF) or of the ADF (although the County performed such a review);
3. We have not reviewed the individual subcontracts to be entered into by MSB with its various key subcontractors and equipment suppliers (DBC, Van Dyk, Bekon, and MarBorg) or ancillary documents entered into by the County, MSB, DBC, Van Dyk, Bekon or MarBorg;
4. Forecasted results are based on reasonable assumptions about future events, as described in Section 4.0 Projected Financial Results of Operations. However, actual results are often different than anticipated and that difference can be material;
5. The County's Projections are assumed to be in compliance with legislation and regulations currently in effect. If future legislation or regulations related to solid waste management are enacted, such legislation or regulations could have a material impact on future operations; and,
6. We assume no responsibility to update the Feasibility Report for events and circumstances occurring after the date the Feasibility Report is issued.
7. Rounding differences caused by stored values in electronic models may exist.

1.7 Conclusions

1.7.1 Reasonableness of County-Projected Construction Costs and Schedule

General

The Waste Service Agreement between the County and MSB and subsequent Amendments (1, 2, and 3) for the Development and Operation of the TRRP (Sections 10.2.A, B, and C) states that the Pre-Construction, Development, and Construction Equipment costs are agreed sums (which were determined by MSB and reviewed by the County and its independent consultant, DEI) negotiated between the County and MSB. Payment of such amount shall constitute the full and complete payment from the County for such Facility costs and MSB relinquishes any and all claims against the County for such costs.

Exhibit C of the Waste Service Agreement provides a Project Development Schedule prepared by MSB and reviewed by the County and its independent consultant, DEI, against which MSB's progress will be monitored by the County. Section 4.2.A.1 includes an obligation of MSB to achieve full operations at the Site no later than 24 months from the delivery of the COPs (Financial Close).

Section 13.2.B of the Waste Service Agreement states that MSB and/or its primary subcontractors shall provide one or more performance bond(s), or other surety device as may be reasonably required by the County in the aggregate amount of \$117,458,000 (the estimated full cost of Construction of the TRRP of \$119,989,000 exclusive of the costs of the SoCal Edison Interconnection, Construction & Start-up Insurance, Start-up & Acceptance and Contract Administration \$2,531,000 in the aggregate), securing the Construction of the TRRP. Such bond shall be issued by a surety company or companies rated "A" or better pursuant to current AM Best Company ratings and listed in the United States Treasury Department's Circular 570. Such surety shall be an admitted surety in California. MSB may discontinue maintaining this performance bond upon written County approval, which shall be provided within ten (10) week days of issuance of the Notice to Proceed with Full Operations, as provided in Section 4.9.B of the Waste Service Agreement.

Material Recovery Facility

DEI, the County's independent MRF technical consultant, determined that the construction and equipping costs and schedule proposed by MSB and used in the Projections are comparable to similar facilities except for the cost of equipment, which is less expensive. (Refer to discussion in Section 3.2.1) We believe that the approach and scope of the DEI review was consistent with providing an opinion about the adequacy of the proposed TRRP construction and equipping costs and schedule, this review was performed by qualified consultants, and the conclusions of DEI are reasonable in light of its findings.

Therefore, we believe that assumptions related to MRF construction and equipping costs and schedule included in the Projections and reflected in the Waste Service Agreement are reasonable.

Anaerobic Digestion Facility and Composting

Dry anaerobic digestion facilities are common in Europe, but recently are being constructed in California where three are in operation and another four (including the TRRP) are in the permitting stage according to information from CalRecycle's May 2017 list, which is the most current information available (<http://www.calrecycle.ca.gov/organics/conversion/ADProjects.pdf>). A facility in San José, California is of comparable size to that proposed in the TRRP.

The County did not commission an independent ADF technical consultant to perform a review of MSB's construction and equipping costs and schedule and issue an opinion, and we have not performed such a review. The County has determined, based on similar equipment used in anaerobic digestion of organic material, site visits and discussions with operators of existing facilities and consultant review of different aspects of the ADF, that it is reasonable to proceed with the ADF project based on MSB's proposed construction and equipping costs, schedule and performance guarantees.

Based on our review of the Waste Service Agreement as described above, the County has agreed to a fixed priced construction cost arrangement, certain cost, revenue and risk sharing arrangements, a guaranteed completion schedule, and negotiated performance guarantees. Subject to the occurrence of events that excuse performance by MSB under the Waste Service Agreement, MSB is responsible for construction cost overruns, schedule delays, and damages for failure to meet performance guarantees. The County is not responsible for such costs.

If a delay in completion occurs, regardless of whether due to MSB fault or uncontrollable circumstances, and the approximate 25,000 tons of organic material assumed to be produced at the ADF annually were delivered and disposed in the landfill, disposal capacity at the landfill would be reduced by approximately four months. Similarly, if ADF operations are interrupted for any reason, a one year cessation of operations would reduce expected disposal capacity by four months.

1.7.2 Reasonableness of Assumptions Regarding Permitting

The County and MSB have been working with numerous local and state permitting agencies. The County certified the Subsequent EIR on July 12, 2016 and filed the Notice of Determination on the same day. The period in which a lawsuit could be filed challenging the EIR for the County's approval of the project had expired and the project was scheduled to proceed.

County Staff subsequently discovered that part of the AD Facility, as designed, was located within the Coastal Zone. The TRRP was redesigned with the AD Facility moved to a different section of the landfill to be located outside of the Coastal Zone (see Figure 3-1 for TRRP site map). An Addendum to the final EIR established that the relocation of the AD Facility did not substantially change the overall project and was approved by the Board on November 14, 2017. The Gaviota Coast Conservancy filed a lawsuit against the County during the period in which the EIR could be challenged. While the lawsuit temporarily delayed the project, the County reached a settlement with Gaviota Coast Conservancy in June 2018 allowing the project to proceed as planned.

The County has received a determination from the California Coastal Commission that the TRRP is located outside of the coastal zone and is not subject to the permit requirements of the Coastal Act of 1976. See Attachment G.

[The Authority to Construct (ATC) approval is expected from the Santa Barbara County Air Pollution Control District (APCD) in October 2018.] Temporary office and storage relocation and project grading has been authorized by the Local Enforcement Agency (LEA). [Approval of the amended Joint Technical Document (JTD) is expected to be received in mid-November, 2018.] Other permit applications are being prepared and have been submitted and are undergoing review. MSB represents that all of the permitting agencies have been consulted throughout the project development and CEQA review period to ensure that the facilities can be permitted. Prior to issuance of the COPs, MSB will be required to represent that any and all permits required for construction and necessary for the County's issuance of a Notice to Proceed with Construction in accordance with Section 4.7.B of the Waste Service Agreement are in effect.

Therefore, we believe the assumptions in the County's Projections that the permits necessary to start construction will be received on time to start construction of the TRRP are reasonable.

1.7.3 Efficacy of Technologies

MRF Facility

DEI found that the MRF system design and equipment components proposed by MSB were: similar to other MRFs that recently have been developed in California; based on relevant waste composition data; appropriate for the application; and, the throughput Projections appeared reasonable. We believe that the approach and scope of the DEI review was consistent with providing an opinion about the efficacy of MSB's proposed MRF technology, this review was performed by qualified consultants, and the conclusions are reasonable in light of their findings. Therefore, we believe that assumptions related to the efficacy of the MRF to perform in accordance with the Projections are reasonable.

Anaerobic Digestion Facility

Bekon is the primary subcontractor for the ADF. Bekon designs and operates ADFs in Europe, where these facilities are more common than in California. A similar dry fermentation anaerobic digestion technology facility is in operation in San José, California. The County did not commission an independent ADF technical consultant to perform an engineering review of whether the Bekon designed equipment will perform as projected and to issue an opinion on this technology and this project, and we have not performed such a review. The County has determined, based on similar equipment used in anaerobic digestion of organic material primarily outside of the United States and one similarly sized anaerobic digestion facility in the United States, site visits to these projects, discussions with operators of existing facilities and consultant review of different aspects of the ADF, that it is reasonable to proceed with the ADF based on the Bekon design as applied to MSW within the County.

Based on Bekon's past experience, the review and evaluation made by the County, and the determination made by the County, we believe that the assumptions related to the efficacy of the ADF to perform in accordance with the County's Projections are reasonable.

We note, however, that while similar equipment has been used to process MSW, use of the Bekon equipment has been limited to date to SSOM in Europe and has not been used on a commercial basis on organic material derived from mixed MSW in the United States. Therefore, we have included certain sensitivity analyses (Section 4.3.4) to present the possible impact if the ADF does not perform as expected.

1.7.4 Reasonableness of Waste Delivery Projections

The County is projecting tonnage at 319,012 tons per year at the TRRP (190,717 tons processed at the MRF / ADF / CMU) with no increase or decrease during the period of its Projections. Based on actual volumes (309,798 in FY 2016 and 316,808 in FY 2017) and the terms of the Material Delivery Agreements between the County and the Public Participants and between the County and MarBorg for materials collected in the City of Buellton, we believe the projected waste delivery assumptions used in the County's Projections are reasonable.

However, while the materials collected by the Public Participants' franchised collection companies and MarBorg's collections of materials from the City of Buellton are subject to the Material Delivery Agreements, the self-haul material (which comprises 32% of the total projected post-TRRP material stream) is not. As a result, the County has negotiated a 22 year disposal agreement with MarBorg to

deliver its self-haul tons (approximately 16% (or half) of the 32% described above) at a lower tip fee. The Public Participants' have also agreed in the Material Delivery Agreements to charge a lower tip fee to these self-haul customers. These lower fees are intended to be economically advantageous to these generators, relative to the other options available. Therefore, we believe the volume of the self-haul materials assumed in the County's Projections is reasonable.

1.7.5 Reasonableness of the Projected Financial Results of Operations

Based on our review, as expressed more fully in Section 5.0 Conclusion, we have no reason to believe the Base Case Projected Operating Results (Base Case) as prepared by the County and presented in this Feasibility Report are not reasonable. The Base Case Projected Operating Results are estimated to be adequate to pay annual operating expenses and achieve the debt service coverage ratios shown in Figure 1-1 during the term of the financing and assume no additional debt, consistent with the County's capital plans.

These Projections are based on certain assumptions regarding future events. Actual results may be different and the differences may be material. For this reason, we have prepared certain sensitivity analyses to present possible results from adverse changes in the value of key assumptions. These sensitivity analyses are presented in Sections 4.0.

Figure 1-1: Debt Service Coverage Ratios – Public Participants

Base Case						
Fiscal Year	Revenue (000's)	Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee ⁽¹⁾	Tip Fee Percentage Change
2020	\$ 41,684	\$ 27,274	\$ 14,410	3.82 X	\$ 150.00	
2021	\$ 41,804	\$ 28,751	\$ 13,052	1.80 X	\$ 155.00	3.3%
2022	\$ 46,088	\$ 28,775	\$ 17,313	1.79 X	\$ 160.00	3.2%
2023	\$ 46,894	\$ 30,365	\$ 16,528	1.65 X	\$ 166.00	3.8%
2024	\$ 48,398	\$ 31,750	\$ 16,648	1.60 X	\$ 172.00	3.6%
2025	\$ 49,907	\$ 32,875	\$ 17,032	1.59 X	\$ 178.00	3.5%
2026	\$ 51,422	\$ 34,031	\$ 17,391	1.57 X	\$ 184.00	3.4%
2027	\$ 52,782	\$ 35,220	\$ 17,562	1.54 X	\$ 190.00	3.3%
2028	\$ 54,562	\$ 36,442	\$ 18,120	1.53 X	\$ 197.00	3.7%
2029	\$ 56,347	\$ 37,699	\$ 18,648	1.53 X	\$ 204.00	3.6%
2030	\$ 58,138	\$ 38,991	\$ 19,147	1.52 X	\$ 211.00	3.4%
2031	\$ 59,935	\$ 40,174	\$ 19,762	1.52 X	\$ 218.00	3.3%
2032	\$ 61,922	\$ 41,540	\$ 20,381	1.51 X	\$ 226.00	3.7%
2033	\$ 63,914	\$ 42,945	\$ 20,969	1.50 X	\$ 234.00	3.5%
2034	\$ 66,096	\$ 44,390	\$ 21,706	1.51 X	\$ 243.00	3.8%
2035	\$ 68,356	\$ 45,876	\$ 22,480	1.51 X	\$ 252.00	3.7%
2036	\$ 70,622	\$ 47,403	\$ 23,219	1.51 X	\$ 261.00	3.6%
2037	\$ 72,896	\$ 48,974	\$ 23,922	1.50 X	\$ 270.00	3.4%
2038	\$ 75,177	\$ 50,590	\$ 24,588	1.50 X	\$ 279.00	3.3%
2039	\$ 77,649	\$ 52,251	\$ 25,398	1.50 X	\$ 289.00	3.6%

While the Projections include annual Public Participant revenue growth of approximately 3.5% and an increase in expenses of 3%, the County's intention is to set the annual tip fee to achieve the minimum coverage ratio of 1.50 to meet the COPs repayment requirement.

SECTION 2.0 OVERVIEW OF EXISTING SOLID WASTE SYSTEM

2.1 County of Santa Barbara

The County of Santa Barbara was established by an act of the Legislature of the State of California (State) on February 18, 1850 and encompasses approximately 2,735 square miles of which approximately one-third is located in the Los Padres National Forest. The County is a general law county and political subdivision of the State of California, and its rights, powers, privileges, authority, functions, and duties are established by the Constitution and laws of the State.

2.2 County Population and Economic Conditions and Projections

The Economic Analysis Branch, Office of State Planning, California Department of Transportation issued its California County-Level Economic Forecast 2015-2040 (Forecast). The most recent Forecast was completed in September 2015 using actual information for the State, the nation, and the region through June of 2013 to conduct the Forecast which spans the 2015 to 2040 period. The Forecast's highlights for Santa Barbara County, projecting the annual increases in population, taxable sales, per capita income, and inflation from 2020 through 2039, corresponding to the COP repayment period, are included in Figure 2-1.

Figure 2-1: California Economic Forecast Projections

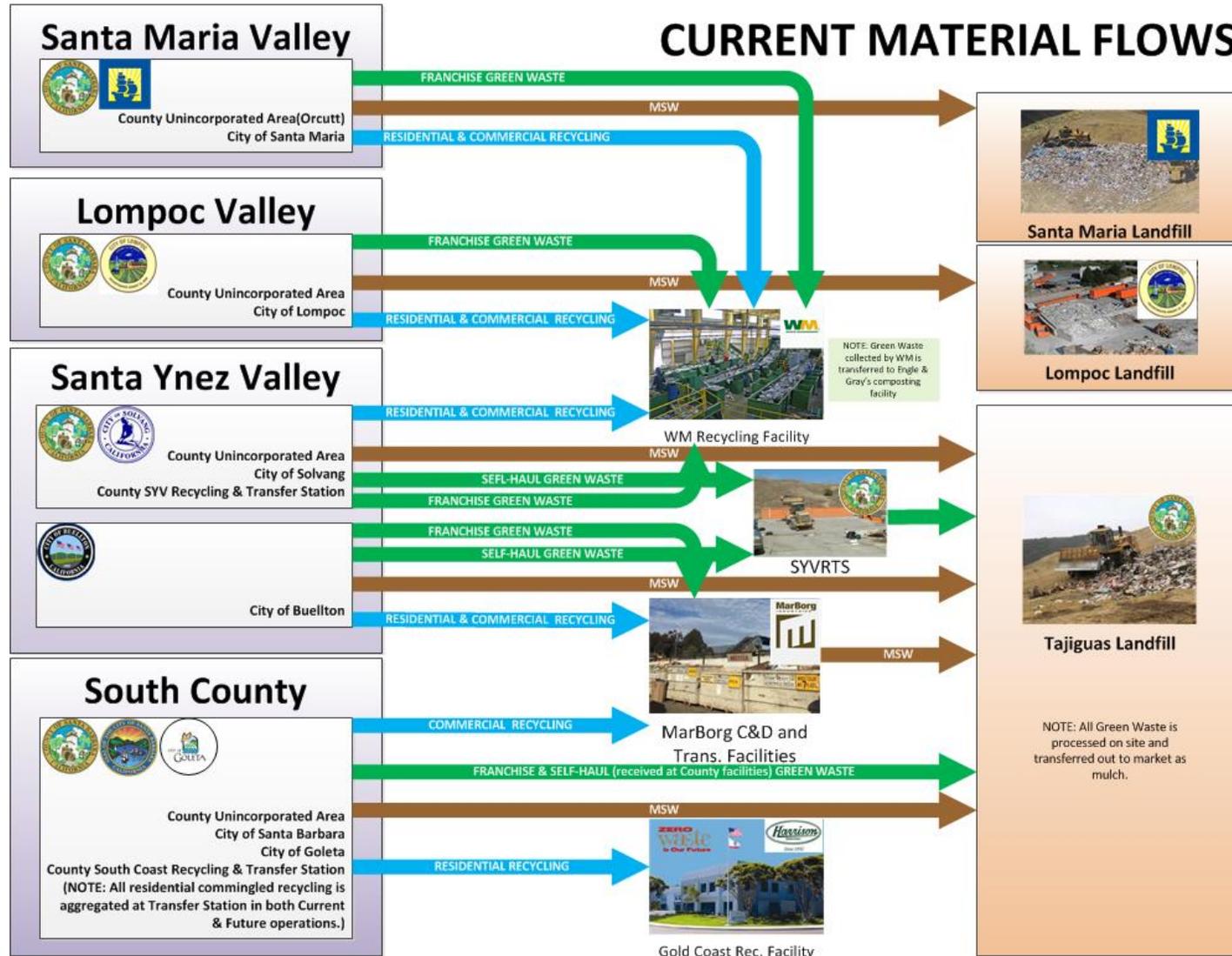
Year	Population	Taxable Sales	Per Capita Income	Inflation
2020	0.6%	4.4%	1.9%	2.8%
2021	0.7%	4.1%	1.7%	2.9%
2022	0.6%	4.4%	1.7%	2.9%
2023	0.6%	3.6%	1.4%	2.5%
2024	0.6%	3.1%	1.1%	2.4%
2025	0.6%	3.1%	0.8%	2.6%
2026	0.6%	2.9%	0.5%	2.7%
2027	0.6%	2.8%	0.4%	2.7%
2028	0.6%	3.0%	0.5%	2.5%
2029	0.6%	2.8%	0.7%	2.3%
2030	0.6%	2.9%	0.8%	2.2%
2031	0.6%	2.7%	0.9%	2.1%
2032	0.6%	2.8%	0.6%	2.3%
2033	0.5%	2.6%	0.9%	1.9%
2034	0.5%	2.7%	0.8%	2.1%
2035	0.5%	2.8%	0.8%	2.2%
2036	0.5%	3.0%	0.5%	2.6%
2037	0.5%	3.0%	0.3%	2.7%
2038	0.5%	2.8%	0.5%	2.5%
2039	0.5%	3.0%	0.3%	2.7%

The assumptions contained in the County Projections regarding inflation (i.e., 3.0%) are consistent with those presented above.

2.3 Existing Collection, Processing and Disposal Arrangements

The existing collection, processing, and disposal arrangements are graphically described in Figure 2-2 and discussed below.

Figure 2-2: Current Material Flow Diagram



2.3.1 North County Cities Collection and Processing Arrangements

The cities of Lompoc and Santa Maria in the north part of the County have city-operated collection operations. Both have three container collection systems: MSW; CSSRM; and, green-waste. MSW is disposed at each city's own landfill (the City of Lompoc Landfill and the Santa Maria Regional Landfill) and this material will not be processed at the TRRP.

CSSRM and green-waste are processed by Waste Management.

2.3.2 South County and Santa Ynez Valley Collection and Processing Arrangements

The South County and Santa Ynez Valley cities all have exclusive franchise agreements for the hauling of MSW, CSSRM and, green-waste. Currently, MarBorg serves as the hauler for all of the jurisdictions, except for Solvang, where Waste Management (dba – Health Sanitation Services) is the provider. All of the existing franchise agreements contain specific provisions regarding the ability of each jurisdiction to control and direct the flow of material. See Figure 2-3 for a summary of the Public Participants' collection contract terms.

Almost all residents of these communities are a part of a three bin curbside collection system that includes:

- MSW in a brown cart;
- CSSRM in a blue cart; and,
- Green-waste in a green cart.

Figure 2-3: Summary of Cities' Collection Contract Terms

City	Hauler	Current Termination Date	City Authority to Direct Flow to County	Billings Agent
City of Buellton	MarBorg	June 30, 2027	Contract Between City of Buellton and MarBorg Industries, Article 5	Hauler
City of Goleta	MarBorg	June 30, 2031	Franchise Agreement between City of Goleta and MarBorg Industries, Article 7	Hauler
City of Santa Barbara	MarBorg	June 7, 2023	Contract Between City of Santa Barbara and MarBorg Industries, Article 3	City
City of Solvang	Waste Management (dba Health Sanitation Service)	June 30, 2028	Agreement Between City of Solvang and Health Sanitation Service Article 5	Hauler

All brown cart MSW is collected and then brought to the Tajiguas Landfill for disposal. In some cases, MSW collected by MarBorg is consolidated at their MRF/Transfer Station in the City of Santa Barbara and brought to the Tajiguas Landfill in larger capacity transfer trucks.

Green-waste collected by MarBorg in green carts in the unincorporated area and the cities of Goleta and Santa Barbara is delivered to the Tajiguas landfill for processing and marketing as a mulch product. In the future, this franchised green-waste will continue to be processed at the Tajiguas Landfill.

CSSRM collected by MarBorg in blue carts, excluding Buellton, is delivered to the South Coast Recycling and Transfer Station (SCRTS) where the materials are consolidated and transferred to Gold Coast Recycling in Ventura. CSSRM collected in larger bins or dumpsters, and all CSSRM collected in Buellton, is delivered to MarBorg's sorting facility. In the future, all the CSSRM collected by MarBorg will be processed at the TRRP pursuant to the Material Delivery Agreements.

Green-waste collected from Buellton will continue to be processed by Marborg outside of the TRRP.

Green-waste and CSSRM collected from the Santa Ynez Valley and North County unincorporated areas and the City of Solvang is processed in the North County, currently by Waste Management. In the future, it is anticipated that this material will continue to be managed in the North County and will not be processed at the TRRP.

2.3.3 Existing County Collection and Processing Arrangements

The County administers two waste collection permitting systems in the County unincorporated area.

1. The County has entered exclusive franchise agreements with private hauling companies to provide the regular collection of MSW, CSSRM, and green-waste from residents and businesses in the unincorporated area of the County. Food-waste is being collected from businesses on a pilot basis in the South County.

Each hauler is required to recover or divert from landfilling a specific percentage of material collected in each service area. These requirements are part of the County's overall program for meeting the State's goal of diverting 75% of the waste generated in the County from landfill disposal by 2020. The franchise agreements direct the haulers to deliver materials to designated processing and disposal facilities.

- Waste collected in the South County, Santa Ynez, and New Cuyama service areas is required to be delivered to the Tajiguas Landfill. In the future, it is anticipated that this material will continue to be delivered to the TRRP.
- Waste collected in the North County service areas around the cities of Lompoc and Santa Maria is delivered to the City of Lompoc and City of Santa Maria landfills. Green-waste and CSSRM collected from the Santa Ynez and North County unincorporated areas is processed in the North County, currently by Waste Management. This material is not now delivered to County facilities. In the future, it is anticipated that this material will continue to be managed in the North County and outside of the County's facilities.

RRWMD staff is responsible for managing these agreements. Management responsibilities include identification of services to be provided, negotiation of service agreements, development of rates, mediation of customer complaints/service issues, and performance tracking.

2. For the collection of bulky, construction related, or large quantities of organic refuse, the County has designed a collection system by issuing permits to a limited number of businesses (referred to as unscheduled haulers) who are allowed to collect this irregularly generated material with roll-off containers from customers in the unincorporated area of the County.

The RRWMD manages the permit program and permittees are required to divert from landfill disposal 50% of the material collected on an annual basis. The permits do not designate processing or disposal facilities to be used to manage the collected materials.

To support these programs, the County has adopted ordinances including:

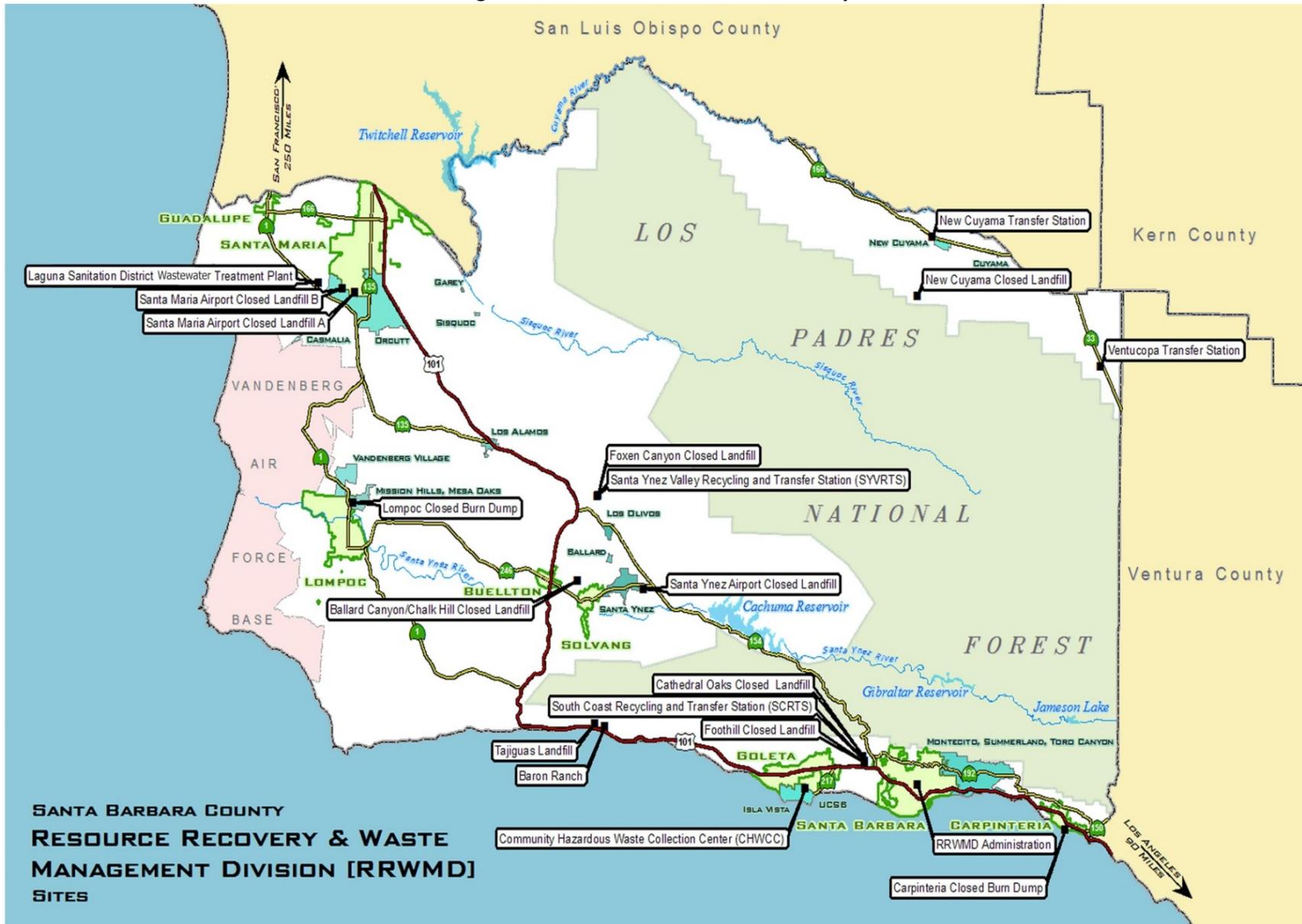
- The County's solid waste management ordinance that mirrors State regulations requiring removal of putrescible solid waste from premises. It allows a resident or business in the unincorporated area the option to subscribe to trash collection service or self-haul their waste material.
- In 2003, the Board approved a Mandatory Commercial Recycling Ordinance with penalties imposed on customers that do not have recycling services or an exemption.
- In 2008, the Board approved an amendment to the County Planning and Development Department's *Environmental Thresholds and Guidelines Manual* that requires proposed construction projects that exceed 350 tons of waste material to prepare a waste management plan prior to the initiation of the project; and the requirement of unscheduled permit holders to divert from disposal 50% of all material collected annually.

2.4 County Facilities

The RRWMD is responsible for the management of solid waste processing and disposal throughout many parts of the County and for solid waste collection in the unincorporated area. The RRWMD's solid waste program includes the collection of solid waste in the unincorporated area, recycling of recyclables, green-waste, and the disposal of solid waste.

The System includes several different types of solid waste facilities, which are owned by the County. Their types and location are presented in Figure 2-4.

Figure 2-4: Solid Waste Facilities in County



2.4.1 Recycling and Transfer Stations

The RRWMD operates four recycling and waste transfer stations in the County. The County owned and operated facilities work to remove items from the waste stream that can be reused, recycled and, in addition, act as revenue streams.

- The SCRTS received 72,419 tons of material in FY 2017. Of that material:
 - 25,212 tons were transferred to the Tajiguas Landfill for disposal;
 - 21,731 tons of comingled recyclables were transferred to Gold Coast Recycling for processing;
 - 23,964 tons of green-waste were either processed on-site or transferred to another County facility for processing and marketing; and,
 - The remaining 1,512 tons were recovered for recycling.

Tonnage figures for FY 2018 were not available by material at the time of writing this report. Preliminary estimates are 73,135 tons.

- The Santa Ynez Valley Recycling & Transfer Station received 26,292 tons of material in FY 2017. Of that material:
 - 13,598 tons were transferred to the Tajiguas Landfill for disposal;
 - 12,475 tons of green-waste were either processed on-site or transferred to another County facility for processing and marketing; and,
 - The remaining 219 tons were recovered for recycling.

Tonnage figures for FY 2018 were not available by material at the time of writing this report. Preliminary estimates are 28,849 tons.

- The New Cuyama and Ventucopa transfer stations are located in Northeastern Santa Barbara County far from the County's main population area. The material collected at these facilities is hauled to the Tajiguas Landfill for disposal and to MarBorg's sorting facility to recover recyclables. In FY 2017, 1,058 tons of material was received at the New Cuyama facility and 38 tons of material was received at the Ventucopa facility.

2.4.2 Landfills

Tajiguas Landfill

The Tajiguas Landfill is a Class III non-hazardous solid waste disposal facility located in the County, approximately 26 miles west of the City of Santa Barbara, as shown in Figure 2-5.

The County is the owner and RRWMD is the permitted operator of the Tajiguas Landfill. The total site area of the Tajiguas Landfill is 497 acres, with a permitted operational area of 357 acres, a total permitted waste footprint of 118 acres, and a permitted capacity of 23.3 million cubic yards. At current rates of disposal, the Tajiguas Landfill is expected to close in 2026. The TRRP is expected by County staff to extend this date to 2036. State regulations require the County to annually assess the remaining landfill capacity countywide and to report its plan to provide not less than 15 years of disposal capacity. The County will

have to develop plans to transfer material and transport it for disposal at another landfill site or evaluate its options once there is 7 years of remaining capacity in accordance with the Gaviota Coast Conservancy settlement.

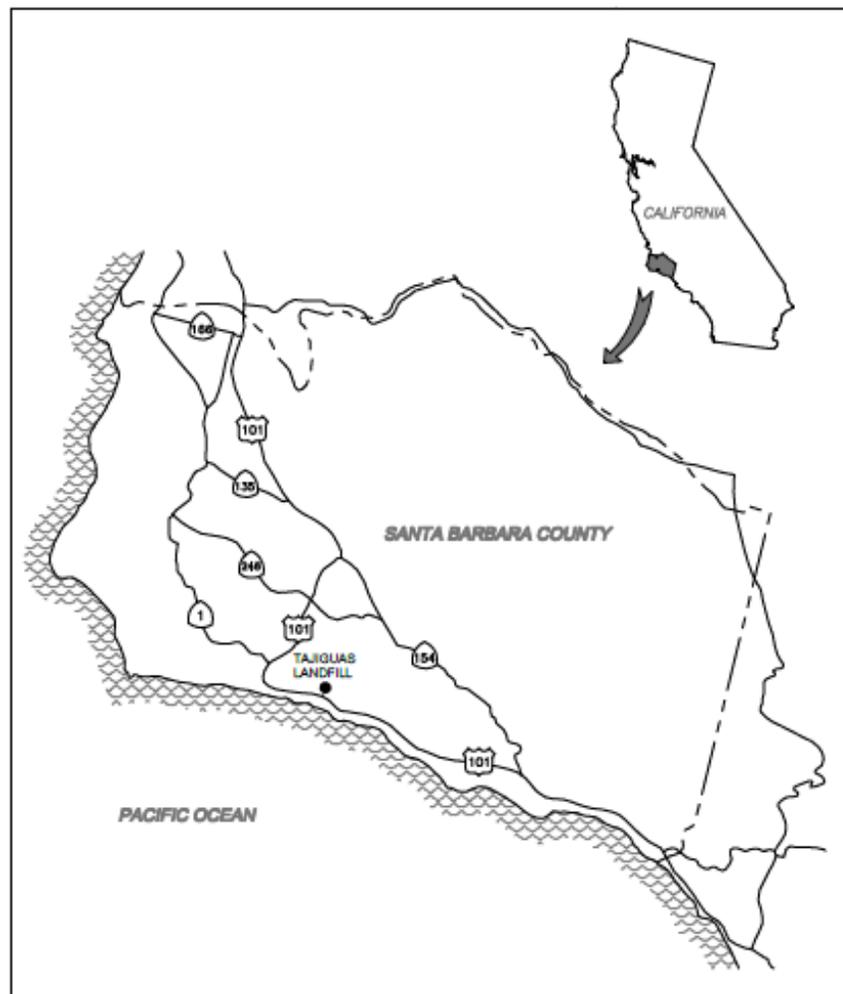
MSW currently delivered to the Tajiguas Landfill is generated by residents and businesses in the cities of Santa Barbara, Goleta, Buellton, and Solvang, the unincorporated areas of southern Santa Barbara County, and the Santa Ynez and Cuyama Valleys. MSW is transported to the Tajiguas Landfill directly from the collection routes or through the SCRTS, the Santa Ynez Valley Recycling and Transfer Station, the New Cuyama Transfer Station, and the Ventucopa Transfer Station, all operated by RRWMD.

For FY 2017, the Tajiguas Landfill disposed of 206,065 tons of material, ground 48,201 tons of green-waste that was used as mulch, and used as alternative daily cover 24,999 tons of material from a construction and demolition debris facility operated by MarBorg.

Tonnage figures for FY 2018 were not available by material at the time of writing this report. Preliminary estimates are 228,685 tons.

Over the past 15 years, methane gas has been collected and used as fuel to power an engine driven turbine to produce 2.8 megawatts of electricity that is sold to Southern California Edison (SCE).

Figure 2-5: Location of Tajiguas Landfill



Closed Landfills

There are several closed landfills throughout the County. Seven were closed prior to the enactment of Subtitle D and two after the enactment. The federal Resource Conservation and Recovery Act (RCRA) was enacted in 1976. The 1984 amendments to RCRA Subtitle D led to the regulations in Part 258 (40 CFR Part 258) of RCRA, which set minimum standards for solid waste landfills such as the Tajiguas Landfill. Subtitle D requires funds be set aside for completing closure of the landfill and for post closure maintenance for 30 years after final closure certification. Annually, the County must report to the State the status of these accounts. Landfills closed prior to Subtitle D do not have these fiscal requirements. Instead, the County purchases pollution liability insurance. The County reports funding for these facilities is provided from other revenues available to the County's Resource Recovery Fund. Ballard Canyon is the most active landfill, which was closed prior to the effective date of Subtitle D. A down gradient plume exists that requires on-going monitoring. The monitoring reports, which are on file with the State Water Resources Control Board, indicate the pollutants of concern continue to degrade and attenuate. Pre-Subtitle D landfills are listed in Figure 2-6.

Figure 2-6: Pre Subtitle D Landfills

Landfill	Closure Date
Ballard Canyon/Chalk Hill Landfill	1969
Foothill Landfill	1967
Santa Maria Airport Landfill	Cell A in 1960, Cell B in 1973
Santa Ynez Airport Landfill	1970
Lompoc Burn Dump	1960
Cathedral Oaks Landfill	1956
Carpinteria Burn Dump	1956

The County's updated Closure and Post Closure Plan were approved by state regulatory agencies during FY 2018. The liability recognized for the estimated landfill closure and post closure care cost is \$30,263,053 and \$29,245,493 as of June 30, 2018, and 2017, respectively. It is estimated that an additional \$4,348,960 will be recognized as landfill closure and post closure care expenses between June 30, 2018, and the date the landfill is expected to be filled to capacity (in the year 2026, which is expected to increase to 2036 assuming timely completion and expected performance of the TRRP). The current estimated total cost of the landfill closure and post closure care of \$34,612,013 is based on the amount that would be paid if all equipment, facilities and services required to close, monitor and maintain the landfill were required as of June 30, 2018. However, the actual cost of the landfill closure and post closure care may be higher due to inflation, changes in technology, or changes in landfill laws and regulations.

The County is required by State and federal laws and regulations to make annual contributions to finance closure and post closure care. At June 30, 2018, and 2017, cash and investments of \$20,353,676 and \$19,269,667 were held to meet the State requirements. These investments are presented on the County Resource Recovery Fund statements of net position as restricted assets. It is anticipated that future inflation costs will be financed in part from earnings on investments of these funds. The County meets the financial assurance test for federal purposes. The remaining portion of anticipated future inflation costs (including inadequate earnings on investments, if any) and additional costs that might arise from changes in post closure requirements (due to changes in technology or more rigorous environmental regulations, for example) are expected to be covered by charges to future landfill users, which is reflected in the Projections.

Figure 2-7: Post Subtitle D Landfills

Landfill	Closure Date	Restricted Cash for Closure and Post Closure	Restricted Cash for Corrective Action	Total
Foxen Canyon	2007	\$ 545,151	\$ 297,909	\$ 843,060
New Cuyama	1998	\$ 118,961	\$ 719,418	\$ 838,379
Tajiguas Landfill	2036 with TRRP, 2026 without TRRP	\$ 17,662,640	\$ 1,009,597	\$ 18,672,237
Total Restricted Cash ⁽¹⁾		\$ 18,326,752	\$ 2,026,924	\$ 20,353,676

⁽¹⁾ Note 16 from FY 2017/2018 Comprehensive Annual Financial Report

2.4.3 Hazardous Waste Collection Centers

The Community Hazardous Waste Collection Center (CHWCC) is managed by the RRWMD and is jointly sponsored by the County of Santa Barbara and the Cities of Goleta and Santa Barbara. Households in the cities of Goleta, Santa Barbara, as well as the unincorporated areas may dispose of household hazardous waste (HHW) for free on Saturdays and on Sundays. Businesses in the cities of Goleta and Santa Barbara, as well as the unincorporated areas that qualify as a Conditionally Exempt Small Quantity Generator (CESQG) are eligible to use the CHWCC on Fridays. Businesses are charged a user fee of \$24.00 for processing and administration costs, and a disposal fee based on the types and quantities of waste being disposed.

The Santa Ynez Valley Recycling and Transfer Station collects antifreeze, vehicular batteries, motor oil, oil filters, and latex paint from households (no businesses) on Saturdays.

2.5 Other Facilities

2.5.1 Non-County Owned Recyclables Processing Facilities

In the Santa Ynez Valley, blue bin CSSRM is collected by MarBorg in the City of Buellton and processed and shipped out for sale. With the commencement of TRRP operations, this material will be processed at the TRRP, according to the Material Delivery Agreements.

In the City of Solvang and the unincorporated area of the Santa Ynez Valley, CSSRM is collected by Waste Management and taken to Waste Management's MRF near Santa Maria, where the material is processed and shipped out for sale. This material averages about 11,000 tons per year and is currently not planned to be processed at the TRRP.

In the South County (including the cities of Santa Barbara and Goleta), CSSRM is collected by MarBorg and brought to the SCRTS where the material is consolidated and taken to the Gold Coast MRF (Gold Coast) in Ventura. Gold Coast is currently contracted to separate, bale and sell the recovered recyclables. About 18% of the material brought to Gold Coast is non-recyclable and is back-hauled by the County and disposed at the Tajiguas Landfill. A small portion of mixed recyclables collected from commercial customers serviced by MarBorg are brought back to MarBorg's MRF/Transfer Station in the City of Santa Barbara where recovered materials are separated, baled and sold, and the non-recyclable residual is

delivered to the Tajiguas Landfill for burial. This franchised material averages about 10,000 tons per year or about 30% of the CSSRM and will be processed at the TRRP starting in late 2020, pursuant to the Material Delivery Agreements between the County and the respective jurisdictions.

2.5.2 Non-County Owned Green-Waste Processing Facilities

In the City of Buellton, green bin green-waste is collected by MarBorg and processed at MarBorg's facility in the City of Santa Barbara. In the City of Solvang and in the unincorporated area of the Santa Ynez Valley, green bin green-waste is collected by Waste Management and is taken to Waste Management's yard in Santa Maria where it is processed and delivered to the Engel & Gray facility for composting.

2.5.3 Non-County Owned Landfills

The Santa Maria Regional Landfill is a Class III non-hazardous solid waste disposal facility located in and owned by the City of Santa Maria. It is approximately 63 miles north of Santa Barbara and has a maximum capacity of 858 tons per day. This landfill is expected to close in the next 10 years. The landfill receives waste primarily from the City of Santa Maria and the unincorporated service areas nearby. The City is developing the City of Santa Maria Integrated Waste Management Facility as a replacement for the existing Santa Maria Regional Landfill.

The City of Lompoc Sanitary Landfill is a Class III non-hazardous solid waste disposal facility located in and owned by the City of Lompoc. It is approximately 54 miles north of Santa Barbara and has a maximum capacity of 400 tons per day. The landfill receives waste primarily from the City of Lompoc and the unincorporated service areas nearby. According to the Lompoc staff, the Lompoc Landfill does not currently accept waste from outside the Lompoc Valley area.

2.6 Historical Solid Waste Quantities and Composition

Figures 2-8 through 2-11 provide a summary of the tonnage of material by type accepted at the Tajiguas Landfill delivered by the County and the cities' franchised haulers (both franchised and non-franchised tons), by the general public, and from sources outside the jurisdiction of the County. With the implementation of the TRRP, these materials are anticipated to be delivered to the Tajiguas Landfill to be processed at the TRRP, ground to make mulch, or disposed in the Tajiguas Landfill.

The historical figures are presented through FY 2017 since detailed data was not available for FY 2018 at the time this report was compiled. RRWMD has indicated it does not expect total FY 2018 volumes to be materially different from the historical figures.

Figure 2-8 presents five-year historical municipal solid waste tonnage classified as franchised and non-franchised and by jurisdiction of origin.

**Figure 2-8: Historical MSW Tonnage by Source
Fiscal Year Ended June 30**

MSW Franchised	FY 2013	% of Total	FY 2014	% of Total	FY 2015	% of Total	FY 2016	% of Total	FY 2017	% of Total
County	31,598	18%	30,423	17%	30,458	17%	31,508	16%	36,133	18%
Santa Barbara	50,848	29%	50,562	28%	50,674	28%	51,124	26%	53,694	26%
Goleta	19,300	11%	19,001	11%	19,567	11%	20,229	10%	21,223	10%
Buellton	3,542	2%	3,584	2%	3,651	2%	3,837	2%	4,193	2%
Solvang	4,332	2%	4,168	2%	4,291	2%	4,344	2%	4,082	2%
Other	3,926	2%	4,019	2%	2,876	2%	3,006	2%	3,261	2%
Subtotal	113,547	65%	111,757	63%	111,517	61%	114,048	57%	122,587	59%
MSW Self-Haul										
County	13,352	8%	14,821	8%	15,736	9%	18,807	9%	17,649	9%
Santa Barbara	19,910	11%	22,709	13%	23,821	13%	29,196	15%	25,724	12%
Goleta	7,144	4%	8,170	5%	8,767	5%	10,955	5%	9,546	5%
Buellton	1,140	1%	1,369	1%	1,469	1%	1,868	1%	1,645	1%
Solvang	746	0%	702	0%	701	0%	848	0%	887	0%
Other	19,449	11%	19,199	11%	19,945	11%	24,556	12%	28,026	14%
Subtotal	61,741	35%	66,970	37%	70,439	39%	86,230	43%	83,478	41%
MSW Total	175,288	100%	178,727	100%	181,956	100%	200,278	100%	206,065	100%

Figure 2-9 presents five-year historical CSSRM tonnage by jurisdiction of origin.

**Figure 2-9: Historical CSSRM Tonnage by Agency
Fiscal Year Ended June 30**

Recyclables Franchised	FY 2013	% of Total	FY 2014	% of Total	FY 2015	% of Total	FY 2016	% of Total	FY 2017	% of Total
County	9,068	28%	9,215	27%	9,352	27%	9,290	27%	9,470	29%
Santa Barbara	16,359	50%	16,687	50%	17,088	50%	17,522	50%	15,465	47%
Goleta	5,606	17%	5,715	17%	5,744	17%	5,971	17%	6,088	18%
Buellton	913	3%	951	3%	991	3%	980	3%	943	3%
Solvang	-	0%	-	0%	-	0%	-	0%	-	0%
Other	783	2%	1,008	3%	941	3%	1,031	3%	1,249	4%
Recyclables Total	32,729	100%	33,576	100%	34,115	100%	34,794	100%	33,215	100%

Figure 2-10 presents five-year historical SSOM tonnage by jurisdiction of origin.

**Figure 2-10: Historical SSOM Tonnage by Agency
Fiscal Year Ended June 30**

Green-Waste Franchised	FY 2013	% of Total	FY 2014	% of Total	FY 2015	% of Total	FY 2016	% of Total	FY 2017	% of Total
County	17,697	34%	16,515	33%	15,554	33%	15,691	32%	17,881	34%
Santa Barbara	14,834	29%	14,392	29%	13,831	29%	13,698	28%	13,846	26%
Goleta	5,449	11%	4,929	10%	4,784	10%	5,243	11%	5,276	10%
Buellton	577	1%	557	1%	501	1%	499	1%	566	1%
Solvang	-	0%	-	0%	-	0%	-	0%	-	0%
Other	697	1%	622	1%	689	1%	697	1%	692	1%
Subtotal	39,254	76%	37,016	75%	35,360	75%	35,828	73%	38,261	73%
Green-Waste Self-Haul										
County	3,830	7%	3,680	7%	3,397	7%	3,758	8%	4,645	9%
Santa Barbara	3,211	6%	3,207	6%	3,021	6%	3,281	7%	3,597	7%
Goleta	1,179	2%	1,098	2%	1,045	2%	1,256	3%	1,371	3%
Buellton	125	0%	124	0%	109	0%	120	0%	147	0%
Solvang	-	0%	-	0%	-	0%	-	0%	-	0%
Other	151	0%	139	0%	150	0%	167	0%	180	0%
Subtotal	8,496	16%	8,248	17%	7,722	16%	8,581	18%	9,940	19%
Green-Waste Total	47,751	92%	45,264	92%	43,082	91%	44,409	91%	48,201	92%
Food-Waste Franchised										
County	14	0%	16	0%	38	0%	45	0%	61	0%
Santa Barbara	3,003	6%	3,151	6%	3,211	7%	3,207	7%	3,197	6%
Goleta	-	0%	1	0%	23	0%	40	0%	90	0%
Buellton	25	0%	29	0%	16	0%	11	0%	7	0%
Solvang	-	0%	-	0%	-	0%	-	0%	-	0%
Other	941	2%	950	2%	1,002	2%	1,258	3%	955	2%
Subtotal	3,984	8%	4,148	8%	4,290	9%	4,561	9%	4,310	8%
Organics Total	51,735	100%	49,411	100%	47,372	100%	48,970	100%	52,511	100%

Figure 2-11 presents five-year historical "Other" self-haul tonnage.

**Figure 2-11: Historical ADC Tonnage
Fiscal Year Ended June 30**

Other Self-Haul	FY 2013	% of Total	FY 2014	% of Total	FY 2015	% of Total	FY 2016	% of Total	FY 2017	% of Total
C&D Dirt Tailings for ADC	24,986	100%	29,995	100%	25,042	100%	25,757	100%	25,017	100%
Other Total	24,986	100%	29,995	100%	25,042	100%	25,757	100%	25,017	100%

Figure 2-12 shows the combined five-year historical summary of tonnage presented in Figures 2-8 through 2-11 by type and origin of material. Data presented in Figure 4-3 (in Section 4.0 Projected Financial Results of Operations) includes County projected tonnage after commencement of TRRP operations.

Figure 2-12: Historical Total Tonnage by Agency
Fiscal Year Ended June 30

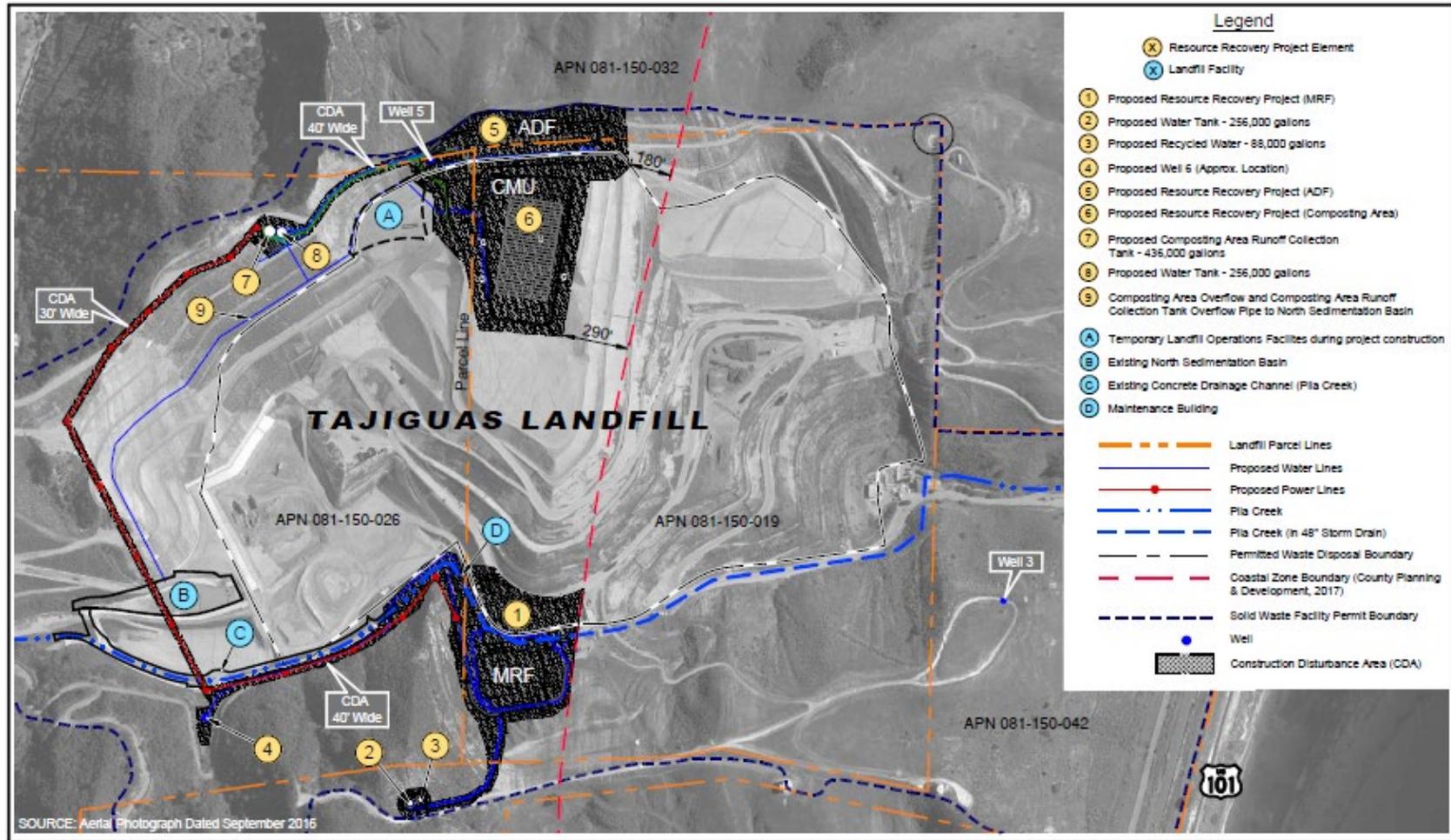
Summary by Type and Origin	FY 2013	% of Total	FY 2014	% of Total	FY 2015	% of Total	FY 2016	% of Total	FY 2017	% of Total
County										
Municipal Solid Waste	44,950	16%	45,243	16%	46,194	16%	50,315	18%	53,782	19%
Recyclables	9,068	3%	9,215	3%	9,352	3%	9,290	3%	9,470	3%
Organic Materials	21,542	8%	20,211	7%	18,989	7%	19,494	7%	22,587	8%
Subtotal	75,560	27%	74,670	26%	74,535	26%	79,099	28%	85,839	30%
Santa Barbara										
Municipal Solid Waste	70,758	25%	73,272	26%	74,495	26%	80,321	28%	79,419	28%
Recyclables	16,359	6%	16,687	6%	17,088	6%	17,522	6%	15,465	5%
Organic Materials	21,047	7%	20,750	7%	20,063	7%	20,186	7%	20,640	7%
Subtotal	108,165	38%	110,708	39%	111,645	40%	118,028	42%	115,524	41%
Goleta										
Municipal Solid Waste	26,444	9%	27,171	10%	28,334	10%	31,184	11%	30,769	11%
Recyclables	5,606	2%	5,715	2%	5,744	2%	5,971	2%	6,088	2%
Organic Materials	6,629	2%	6,029	2%	5,852	2%	6,539	2%	6,737	2%
Subtotal	38,679	14%	38,915	14%	39,930	14%	43,694	15%	43,594	15%
Buellton										
Municipal Solid Waste	4,682	2%	4,953	2%	5,120	2%	5,704	2%	5,838	2%
Recyclables	913	0%	951	0%	991	0%	980	0%	943	0%
Organic Materials	727	0%	710	0%	627	0%	630	0%	719	0%
Subtotal	6,322	2%	6,614	2%	6,738	2%	7,314	3%	7,501	3%
Solvang										
Municipal Solid Waste	5,078	2%	4,871	2%	4,992	2%	5,191	2%	4,969	2%
Recyclables	-	0%	-	0%	-	0%	-	0%	-	0%
Organic Materials	-	0%	-	0%	-	0%	-	0%	-	0%
Subtotal	5,078	2%	4,871	2%	4,992	2%	5,191	2%	4,969	2%
Other										
Municipal Solid Waste	23,376	8%	23,218	8%	22,821	8%	27,563	10%	31,288	11%
Recyclables	783	0%	1,008	0%	941	0%	1,031	0%	1,249	0%
Organic Materials	1,790	1%	1,711	1%	1,842	1%	2,122	1%	1,827	1%
C&D Dirt Tailings for ADC	24,986	9%	29,995	11%	25,042	9%	25,757	9%	25,017	9%
Subtotal	50,935	18%	55,931	20%	50,645	18%	56,472	20%	59,381	21%
Total	284,739	100%	291,709	100%	288,485	100%	309,798	100%	316,808	100%

SECTION 3.0 THE TAJIGUAS RESOURCE RECOVERY PROJECT

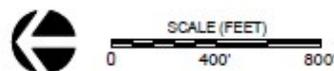
The County proposes to add to the current Tajiguas Landfill disposal and green-waste processing operations expanded resource recovery operations with a MRF, a dry fermentation ADF, a compost management unit (CMU), and landfill gas engines as shown in Figure 3-1 on the following page.

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Figure 3-1: The TRRP Site



Prepared by:
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 861-302-1292 kularconsult.com



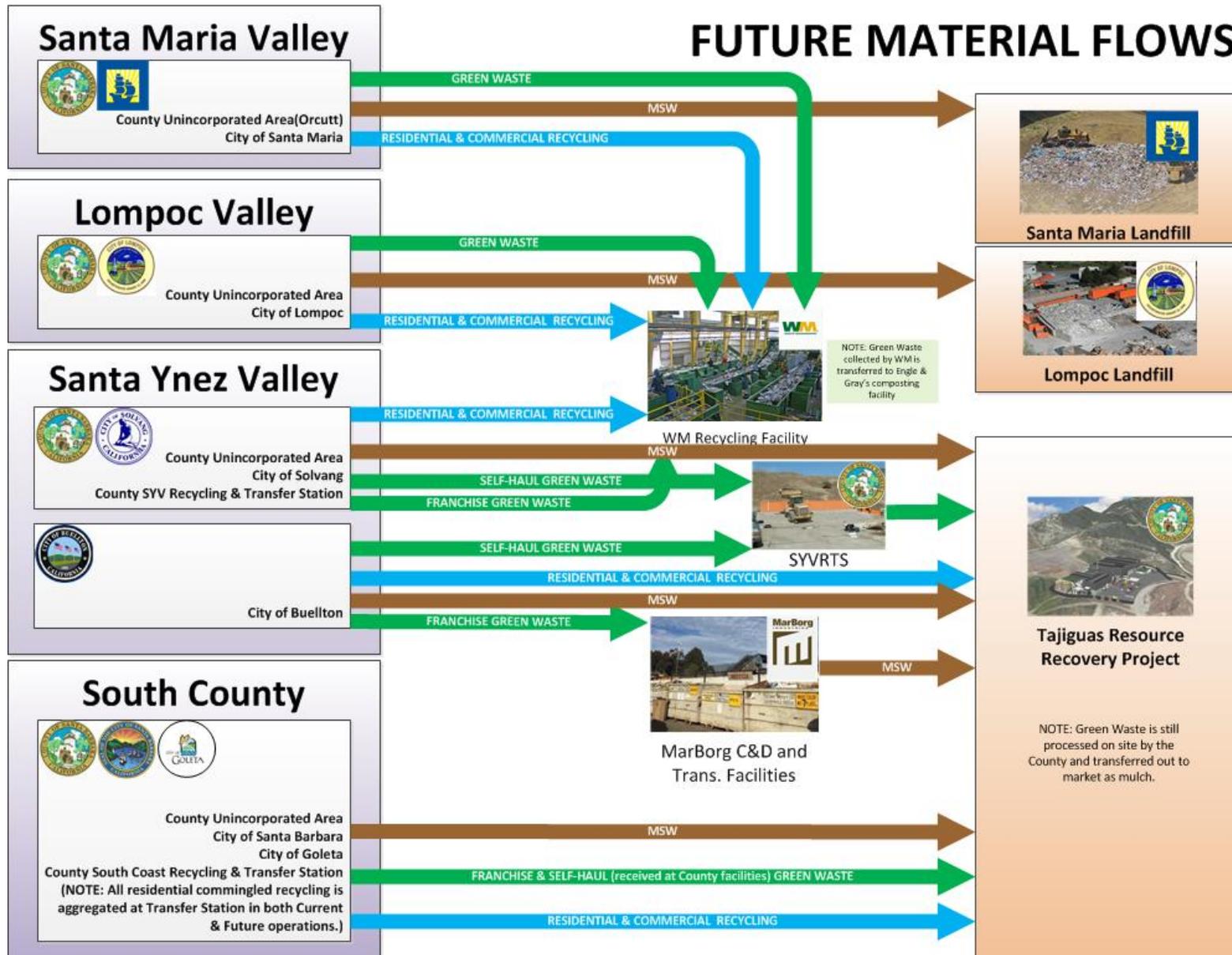
Tajiguas Resource Recovery Project
REVISED PROJECT FACILITIES PLAN
FIGURE 2

These facilities are designed to process MSW that is currently delivered to the landfill for disposal, CSSRM as well as SSOM from unincorporated areas in the South County of Santa Barbara, Santa Ynez and New Cuyama Valleys and the cities of Santa Barbara, Goleta, Buellton, and Solvang.

The future collection, processing, and disposal arrangements once the TRRP commences operations are graphically described in Figure 3-2 and discussed on the following page.

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Figure 3-2: Future Material Flow Diagram



3.1 Need for Changes to System

The TRRP is intended by the County and the Public Participants to address:

- Several local needs and State requirements for the increased diversion of discarded materials from landfill disposal;
- Greenhouse gas reduction goals;
- State mandates including: State Assembly Bill 32; State-wide Anaerobic Digestion Initiative; State Assembly Bill 341; Public Resources Code Division 30, Part 2, Chapter 4, Section 41701; State Assembly Bill 1826; State Assembly Bill 876; State Assembly Bill 1045, State Senate Bill 1383; and,
- Federal Initiatives.

Generally, these requirements impose an obligation on the County and Public Participants to create programs to address certain goals. Failure to establish such programs can result in fines of up to \$10,000 per day. However, while the TRRP is intended to fulfill the obligations of the County and Public Participants, failure to implement the TRRP does not mean that such fines would necessarily be imposed. Alternatively, other programs would have to be adopted.

3.1.1 Extension of Landfill Life

Based on current waste diversion programs and disposal rates, the Tajiguas Landfill is currently projected to reach its permitted disposal capacity (23.3 million cubic yards) in approximately 2026. With the diversion projected to be provided by the TRRP, the permitted disposal capacity is not projected to be reached until approximately 2036. As a result, it is anticipated that the region will meet the CalRecycle 15-year disposal capacity requirement. In accordance with this same requirement, beginning in 2029, as part of the Gaviota Coast Conservancy settlement, the County will have to reassess the remaining capacity of the Tajiguas Landfill and may have to develop plans to transfer residual material for disposal at another landfill site. See Board Resolution #18-150 (Attachment F).

3.1.2 Development of Processing Infrastructure

The TRRP provides the infrastructure necessary to support existing and future waste management programs for processing recyclables and organic materials. As a result, it is expected that the region will meet AB 1826's organics processing infrastructure requirement as well as the State's requirement for 15 years of organics processing capability.

3.1.3 Diversion of Materials

Implementation of the TRRP, which is expected to divert 60% of the tons currently disposed at the Tajiguas Landfill, is projected by the County to increase the region's diversion rate, as reported to CalRecycle by at least 12%, from 73% to more than 85%, without any changes to current collection programs.

The County currently reports a diversion rate of approximately 73% based on its 2016 per-capita disposal rate of 4.1 pounds per day per resident compared to the CalRecycle target of 7.4 pounds per day per resident. The County's projections that result in the additional 12% diversion are based on the assumption that 60% of the remaining 27% of volume (that was actually disposed in FY 2017) will be diverted from disposal through processing at the TRRP.

As a result, the TRRP is expected to allow the region to meet AB 341's 75% recycling goal in 2021. In addition, the project is expected to process both SSOM as well as organics sorted from mixed waste. This

will allow the jurisdictions using the facility to meet SB 1383, which requires a 50% reduction in statewide disposal of organics by 2020 and a 75% reduction in the disposal of organics by 2025.

3.1.4 Greenhouse Gas Reduction

The Subsequent Environmental Impact Report (SEIR) on this project calculated reductions in GHGs per one year of operation to be 110,000 Metric Tons Carbon Dioxide Equivalent (MTCO_{2e}) and the current version of EPA's WARM Model shows an annual reduction of 134,223 MTCO_{2e}. This is roughly equivalent to taking 22,000 to 28,000 passenger vehicles off the road annually.

Reduced landfill activity and increases in recycling are both included in the County's Energy & Climate Action Plan. The plan conservatively calculates the impact of this project by limiting recycling projections to State Mandates. The TRRP is a significant component of several of the South County jurisdictions' Climate Action Plans, which demonstrate how each community plans to comply with greenhouse gas emission reduction requirements of AB 32.

3.1.5 Unmet Needs Shaped by SB 1383 and AB 1594

The County and Public Participants need to plan and implement programs to comply with SB 1383 and AB 1594. SB 1383 requires significant diversion and processing of organic materials. AB 1594 disallows diversion credit for use of organics as ADC.

SB 1383, Organics Waste Diversion

In September 2016, the Governor of California signed SB 1383 (Lara, Chapter 395, Statutes of 2016) that established methane emissions reduction targets in a state-wide effort to reduce short-lived climate pollutants (SLCP). Among other things, SB 1383 focuses on organic waste methane emission reductions including definition of 3 state-wide targets: (1) 50% reduction in disposal of organic waste from 2014 levels by 2022; (2) 75% reduction by 2025; and, (3) recovery of not less than 20% of currently-disposed edible food for human consumption. SB 1383 grants CalRecycle the regulatory authority to achieve these three organic waste reduction targets. The legislation identifies key requirements and compliance milestones. The regulations, which will provide more specificity, are expected to be promulgated by CalRecycle in early 2019.

AB 1594, Yard Trimmings Diversion, Not ADC

In September 2014, Governor Brown signed Assembly Bill (AB) 1594 (Williams, Chapter 719, Statutes of 2014), mandating that as of January 1, 2020, the use of green-waste as ADC will no longer constitute diversion through recycling and will instead be considered disposal in terms of measuring a jurisdiction's annual 50 percent per capita disposal rate (Public Resources Code (PRC) Section 41781.3).

3.2 TRRP Facility and Technology Description

The TRRP will be located at the Tajiguas Landfill. The landfill property totals approximately 497 acres. The MRF will be located on approximately 5.8 acres. The ADF will be located on approximately 3.9 acres. The CMU will occupy approximately an additional 5 acres. Supporting facilities and infrastructure (wells, tanks, piping, etc.) will be located on the landfill property outside of these areas. Construction of the facilities will require approximately 31,420 cubic yards of cut and 103,100 cubic yards of fill material.

The TRRP is designed to process MSW currently delivered to the Tajiguas Landfill for disposal as well as to process CSSRM and SSOM from the Public Participants' existing and future recycling programs.

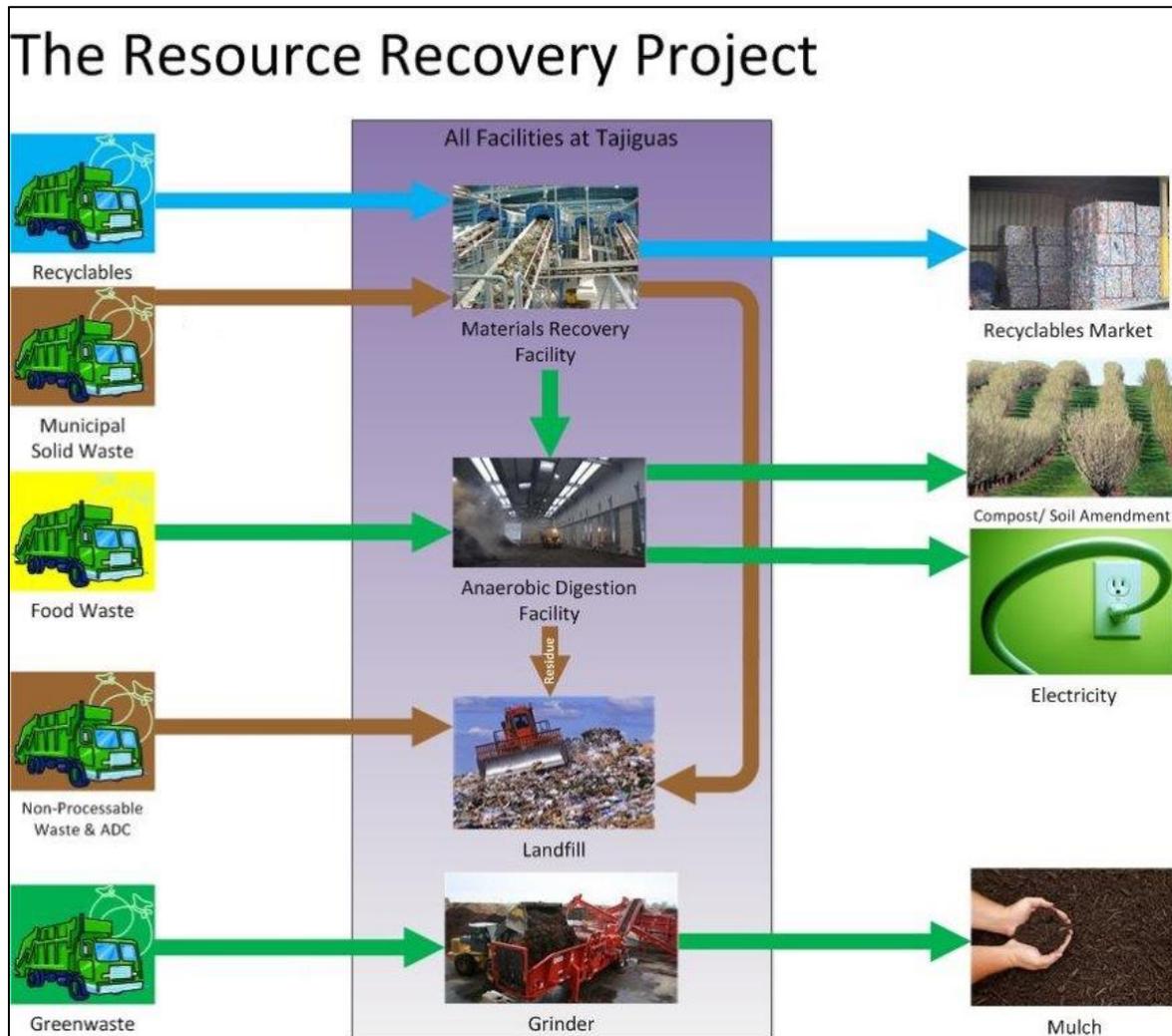
The TRRP is comprised of four elements:

1. The MRF (approximately \$66.9 million in development, construction and equipping costs);
2. The ADF (including energy facility);
3. The CMU (that together with the ADF totals approximately \$57.8 million in development, construction, and equipping costs); and,
4. The Landfill Gas Engines (approximately \$9.2 million in development, construction and equipping costs).

All of the four components will be located on the Tajiguas Landfill property.

The future processing and disposal arrangements, among the TRRP and Tajiguas Landfill operations are graphically described in Figure 3-3 and discussed below.

Figure 3-3: Internal TRRP and Tajiguas Material Flow Diagram



3.2.1 Material Recovery Facility

Description

The MRF is comprised of a 66,500 square foot facility to be located on the existing landfill operations deck located outside the coastal zone. It is expected to process CSSRM and MSW. As designed, the MRF will include a tipping floor and load out waste transfer area (24,800 square feet), and a waste processing and recyclables storage area (41,700 square feet). Additionally, there will be office space and a visitor viewing area.

The MRF has a design capacity of up to 290,000 tons per year of MSW and CSSRM and is designed to recover up to 126,000 tons per year of recyclables. The MSW processing line will sort MSW into three streams: recyclables for sale; organics for processing in the ADF; and, residue that will be disposed in the existing landfill.

The MRF waste processing equipment includes a size reducer, bag openers, shredders, trommel screens, conveyors, air separators, and a rolling bed dryer. All processing equipment will be electrically powered. Mobile equipment will be used to load material into the MRF equipment and into trucks to export material from the site.

The MRF facility is designed to sort MSW into three streams:

- **Recyclables** (i.e., glass, metal, paper, plastic, wood) – recovered and processed for sale;
- **Organics** – recovered for processing in the Anaerobic Digestion Facility; and
- **Residue** – materials left over after all recyclables and organics are recovered that would be disposed of at the existing landfill.

Evaluation

The County engaged DEI (a project management and environmental services firm based in Brea, California) to review the technical, contractual, scheduling and cost components for the MRF portion of the TRRP. DEI reviewed a wide variety of technical, contractual, financial, environmental, and other documentation provided by Mustang and the County. The DEI team also conducted interviews with the equipment manufacturer and project developer, as well as toured facilities (in person and via video) that utilize comparable equipment and system components to those proposed for the TRRP. The review of this documentation formed the foundation of its findings, analysis and recommendations presented in its report dated August 20, 2015.

After the delays caused by the discovery of the ADF crossing the coastal zone boundary, the subsequent redesign of the TRRP and relocation ADF, and the Gaviota Coast Conservancy lawsuit, DEI was again engaged by the County to review and assess the design changes affecting the MRF since its original report was issued in 2015. DEI issued its updated report on September 25, 2018.

The September 25, 2018 DEI report noted that the MRF portion of the TRRP remained in the same general location as that reviewed in 2015 and that the primary change in the TRRP design is related to the relocation of the ADF to the east side of the landfill and the management of organic waste transported from the MRF to the ADF. Additionally, DEI reviewed the revised TRRP to determine whether recommendations from the August 20, 2015 report were incorporated in the design changes.

August 20, 2015 Report

In the August 20, 2015 report, DEI reviewed the proposed performance of equipment and system components based on the project requirements for an overall design capacity to process a minimum of 210,000 tons per year (TPY), up to 250,000 of mixed MSW with a targeted diversion rate of 60% from the MSW stream. We have presented DEI's key findings below from its August 20, 2015 report along with updates from the September 25, 2018 report as noted in *italics*.

Equipment Components and Systems

- DEI's review of the information available, along with interviews with the TRRP Developer (MSB, formerly Mustang known as MSB Investors LLC, a Mustang subsidiary) and Equipment Vendor (Van Dyk Recycling Solutions (VDRS)) found "there appears to have been a high level of due diligence performed to understand the composition of the waste streams that will be directed to the TRRP MRF. This has been incorporated into the selection of equipment and the system design components to maximize recovery volumes."
- "While the overall system design is unique to the project and is somewhat complex due to its emphasis on automation, the primary pieces of equipment that make up the system are not unique and are used routinely in systems throughout California, the U.S. and Europe."
- "While all the equipment appears to fit and routine maintenance can be accomplished, major maintenance and any replacement of equipment could be a challenge. Additional discussion with Mustang and VDRS should occur and they should demonstrate how major service and replacement of equipment can be accomplished."
- *The equipment budget was increased in order to add up to eight stationary cranes to help expedite necessary repair and maintenance activities.*
- "An issue associated with the MSW storage area is that, when partially or entirely full, there is a potential to block the area in front of the single stream recycling infeed hopper which could hinder the processing of that material."
- With the storage for the incoming MSW material being less than ideal (typically at least one day's storage is preferred), DEI feels that a well implemented operations plan, which includes contingencies ..., will need to be followed in order to manage and process the 800 tons per day of material."
- *The tipping floor was redesigned to provide a more efficient use of floor space.*

Construction and Equipment Cost Budget

The findings presented below are highlights from DEI's original report dated August 20, 2015.

- "Reviewing the results of the building comparison (TRRP vs. Similar) shows that the cost per square foot for the two buildings was very close, with the Diani Estimate at \$184.63 per sq. ft. and the similar project at \$186.27 per sq. ft. Using this comparison as an indicator of the quality of the estimate, DEI's conclusion is that the quantities and unit costs of the estimate for the proposed project are consistent with other similar facilities."
- "The detailed review of the grading, pile and concrete estimate shows a good level of detail and the unit costs used, with a couple of exceptions, were in line with what the concrete contractor that was consulted with has observed in the Santa Barbara area."
- "The Diani estimate at \$2.22 million compares closely to the biofilter estimate prepared using

information from a developer who has installed multiple digesters.”

- “Comparing costs show that the proposed equipment is less expensive as compared to the comparable equipment.”
- “DEI feels that a contingency budget of 2.49% of the MRF capital cost estimate is low.”

In the September 25, 2018 report, DEI did not perform a detailed review of the building construction and equipment costs. However, DEI did provide an overall review as noted:

- *“Reviewing the Second Amended Exhibit I – Second Amended Development Cost Detail shows that the cost for the MRF construction (not including equipment) increased from \$38,372,000 in December 2016 to \$40,544,500 in August 2018 representing an increase of \$2,182,500 or 5.7 percent.”*

The report stated the increase is due to combination of factors including CPI increases and increases in steel costs due to a recent tariff. DEI estimated the CPI increased by 6.5% between December 2016 and August 2018. Disaggregating the increase in steel costs (approximately 20.5% or \$722,728 for steel materials only) from the total increase of \$2,182,500 leaves an approximate increase of 3.68% for inflation.

- *“The equipment costs for the MRF total \$24,230,000 in 2016 and \$26,400,000 in 2018 for a total increase of \$2,170,000 or 8.9 percent over this period of time. DEI’s understanding through discussions with VDRS is that price increases associated with the supply of MRF equipment, has been more closely associated with sort line improvements with very little increase attributed to CPI or delay related increases.”*

DEI’s conclusions were:

- *“The increase in costs for construction after subtracting the allowance provided for the steel tariff is approximately 3.68 percent which is less than the calculated CPI increase of 6.5 percent over the review period.”*
- *“Following the review of the changes made to the equipment sorting system, DEI’s opinion is that the price increase of \$2,170,000 for equipment appears to be fair. A detailed review of each component cost was not performed.”*
- *“DEI feels that some of the recommendations made in its original report regarding the capital cost estimate for the MRF have not been addressed. These include:”*
 - *“The contingency of \$820,000 on a \$40,544,500 project or 2 percent is low.”*
 - *“An independent detailed cost estimate should be performed.”*

According to the County, revised cost estimates have included many of the items that would have needed to be part of the contingency. Therefore, the County believes the contingency of 2.0% is adequate.

DEI provided additional comments regarding cost increases and steel tariffs:

- *“While the 20.5% increase in material cost associated with the steel tariff is appropriate, talking with contractors who construct similar pre-engineered steel buildings indicate that the increase could be from 20% to as high as 30%.”*
- *“Through conversations with contractors who build similar facilities feel that an appropriate annual increase factor for these projects could be at least twice the normal CPI increase.”*

- *"There needs to be a supply and demand increase consideration since the construction industry is extremely busy right now. DEI has observed this on other projects particularly in the municipal project area."*
- *"The overall price increases for both the construction and equipment supply seem appropriate given the delay in the project for additional environmental review and the imposition of the steel tariff."*

In reply to the above concerns, the County noted that it has a fixed price contract with MSB for completion of the project construction.

Organization and Staffing

- *"MRF staffing levels and allocations appear reasonable and should facilitate required uptime, maintenance cost control and effective operation of automated systems."*
- *"DEI finds the high level of system automation to be an appropriate approach for this project and finds the balance of proposed staffing in conjunction with automation to also be reasonable."*

Routine Maintenance and Replacement Schedule and Cost

- *"Generally, first year annual cost allocations appear reasonable."*
- *"The 2% annual inflation factor applied to MRF maintenance cost is at the low end of acceptability for this category."*

The maintenance budget was increased to meet the request of VDRS, the equipment manufacturer and installer, to support the recommendation contained in the August 20, 2015 report.

Specific Components

- *"On the aggregate, DEI finds the projected budgets for specific components, including spare parts, utilities, administrative and management costs and consumables to be reasonable and in line with comparable facility operating experience."*

Relocation of the ADF

As previously noted, DEI's September 25, 2018 report highlights the relocation of the ADF as the primary change in the TRRP design and its effect on the management of organics material from the MRF sorting process. Under the original plan this material was to be transported by conveyer to the ADF. Under the revised plan, the material will be transported by transfer truck to the ADF approximately 2,200 feet to the east.

DEI noted the design features of the relocated ADF include:

- *"Organic materials are conveyed in uncovered conveyors to an area outside and on the south west corner of the MRF building."*
- *"The material is loaded directly into trailers (we assume walking floor or end dump type) that are positioned in concrete bunker stalls. The design provides for the ability to position three (3) trucks for loading."*
- *"One of the concrete bunker stalls is also identified as dual purpose with the idea of using it as a glass bunker if not being used for loading out organic material"*
- *"This loading area is not inside of a building and is not covered."*

DEI's conclusions regarding the relocation is as follows:

- *“DEI is concerned about this purposed change to the MRF and the potential for the generation and release of odors as well as the generation of surface water that could potentially have come in contact with the organic material. While the plan is operationally feasible, DEI recommends the following design and operational considerations for the effective management of this organic material.”*
 - *“All conveyors that exit the enclosed MRF building should be enclosed and have a negative pressure applied to the head space above the conveyor to minimize the release of odors. The air collected from the head space can be routed to the biofilter for processing prior to being released to the atmosphere.”*
 - *“The entire organics management and loading area should be enclosed or at a minimum covered. This will assist in the control of odor from this operation and the release of surface water from the operation. If enclosed, air can be collected and routed to the biofilter for processing prior to being released to the atmosphere. If an enclosure is implemented, the conveyors will not need to be covered.”*
 - *“The operator should have enough trailers to ensure that there is always a trailer positioned for loading inside of the bunker stalls.”*
 - *“The combined use, organic material, or glass, in one of the bunker stalls is not a good idea. These types of operational considerations are not practical and will likely result in the contamination of organic material going to the AD Facility.”*
 - *“The County must make certain there is a well thought out plan for the organic storage area. The plan must provide enough, compliant storage and a transportation plan. The plan must account for storage during times when the MRF is operating and the AD is not. Options may include pre-loading available trailers from a stacking/leveling conveyor or a managed stockpile utilizing a bucket loader of appropriate size. DEI recommends flexible conveyor system that can accommodate trailers or stack material for later loading.”*
 - *“Trucking is a practical solution for the delivery of organic material to the AD Facility from the MRF.”*

In reply to DEI's concerns regarding the ADF relocation, MSB provided a response on September 26, 2018 that it could revise the plan to include a fully-enclosed conveyer system and covering the organic truck loading bays. MSB and Diani will absorb the cost associated with this revision.

Additionally MSB is evaluating the alternative of a fully-enclosed conveyer system to transport the material from the MRF directly to the ADF receiving area without any trucking.

HF&H Conclusions

We believe that assumptions related to the efficacy of the MRF to perform in accordance with the County's Projections are reasonable, because:

- DEI found that the MRF system design and equipment components proposed by Mustang: were similar to other MRFs that recently have been developed in California; were based on relevant waste composition data; are appropriate for the application; and, the throughput Projections appeared reasonable; and,
- We believe that the approach and scope of the DEI review was consistent with providing an opinion about the design, construction, and schedule of Mustang's proposed (and MSB contracted) MRF technology, this review was performed by qualified consultants, and the

conclusions are reasonable in light of their findings in their August 20, 2015 and September 25, 2018 reports.

3.2.2 Anaerobic Digestion Facility

Description

The ADF is comprised of a 68,550 square foot facility that includes an energy facility and percolate storage tanks. The ADF includes: sixteen digesters (38,000 square feet); a mixing area (16,600 square feet); a delivery area (2,300 square feet); a compost load out area (7,000 square feet); an engine room (1,900 square feet); and, a control room (1,500 square feet).

The ADF has a design capacity of up to 73,600 tons per year to process organics recovered from the MRF and SSOM. As designed, the biogas collected from the digesters will be converted into energy using a turbine engine and is expected to generate approximately 1+ net megawatts of renewable power after providing the MRF's electric needs for sale to SCE. Digestate (organic material remaining after the anaerobic digestion process) will be composted with open windrows in the CMU.

The ADF is designed to convert all organics recovered from the MSW and SSOM into:

- **Biogas** (primarily composed of methane and CO₂) – that would be used to power two (2) 157,337 horsepower onsite combined heat and power (CHP) engines driving electric power generators that would generate approximately 1+ net megawatts (MW) of renewable power continuously to power the MRF and to sell to SCE. The Energy Facility will be located on the south side of the ADF; and,
- **Digestate** – that can then be cured into compost and/or soil amendments. The curing would require an approximately five-acre area (located at one or more sites on the landfill's permitted operations and/or waste disposal footprint). The compost and/or soil amendments would be marketed for agricultural or landscape use or used for reclamation projects. No net revenue is anticipated from the sale of the compost, but the disposal expense that would otherwise be incurred is avoided and the landfill capacity is increased.

Evaluation

ADFs are common in Europe. A recent publication, *Anaerobic Digestion of the Organic Fraction of Municipal Solid Waste in Europe* by De Baere and Mattheeuws, reported AD processing of municipal solid waste is a common practice in Europe with over 200 plants operating in 17 countries. Bekon has seven facilities that process 30,000 or more tons per year and numerous smaller facilities operating in Europe.

Based on a partial list of anaerobic digestion projects (the most recent data available dated May 2017) available on the CalRecycle website, there are 16 operational projects in California and 11 in the permitting or pending phase. Of these, eight of the projects use dry digestion and three of these are operational. This ADF is similar to the dry fermentation anaerobic digestion facility in San José, California. That facility can process up to 90,000 tons per year of food scraps, yard waste, and other compostable materials from the City's businesses. The San José facility generates approximately 1.6 megawatts of power. Two smaller dry anaerobic digestion facilities are operating in the areas of South San Francisco and Marina, California.

We are not aware that any of these California projects use the Bekon technology. In addition, we are not aware of any installation where the Bekon technology accepts residue from a MRF's processing of

municipal solid waste, although other waste streams may have similarly high levels of contamination. However, a similar dry fermentation anaerobic digester currently operating in the City of San José, California is processing the organic residue from a MRF on a similar scale to the ADF proposed to be built at the Tajiguas Landfill.

The County did not engage an independent engineering firm to review the technical, contractual, scheduling, and cost components for the ADF portion of the TRRP and issue an opinion.

The County has determined that it is reasonable to proceed with the ADF based on the Bekon designs, its review of similar equipment used in the anaerobic digestion of organic material primarily outside of the United States, its review of the San José ADF, and its consultant's review of different aspects of the ADF.

HF&H Conclusion

We believe that assumptions related to the efficacy of the ADF to perform in accordance with the County's Projections are reasonable because:

- Bekon technology has been demonstrated to work in European applications;
- Similar technology is operating at comparable volumes in San José, California;
- The County concluded that it was reasonable to proceed with the project, after its review of the technology, site visits and discussions with operators of existing facilities and its consultant review of different aspects of the ADF; and,
- MSB and Bekon are contractually assuming the financial risk of the technology's failure to perform, subject to specified liquidated damages and limitations of liability.

While Bekon's technology has been operated in Europe at a smaller capacity and similar equipment has been used to process MSW in California, use of the Bekon equipment has been limited so far to SSOM in Europe and not used on a commercial basis on organic material derived from mixed MSW in the United States. Therefore, it is also not unreasonable to believe that unanticipated events may occur that could affect the cost of the facility and the commencement of operations. Our review of the Waste Service Agreement found that MSB and Bekon are contractually responsible for any additional costs necessary to meet the acceptance test requirements. Further, in the event the ADF were delayed in operations for one year, we calculated that the annual additional volume of material that would be disposed of rather than diverted would reduce the landfill life by 4 months.

3.2.3 Compost Management Unit

Description

The CMU will be located on five acres at the Tajiguas Landfill. The digestate will be transferred from the ADF to the CMU by truck.

It is anticipated that the CMU would operate up to six days a week, using a six- to eight-week aerobic curing phase to produce up to 25,000 tons of compost and/or soil amendments per year. Organics starting from MSW could be processed separately to avoid contamination of the SSOM by the contaminants found in organics from MSW that is not suitable for all compost end users.

MSB has proposed an extensive processing and screening process to remove contaminants from the digested and composted organic material that it believes will meet the State's composting regulations. MSB is confident with its ability to find a beneficial use for this product without the pressure to receive

revenue for its end use. In addition, MSB may be assessed liquidated damages if the required diversion guarantee (including beneficial use of the soil amendment) is not achieved, thereby creating an incentive to meet the performance specifications.

Evaluation

There are approximately 67 active composting operations in California, and there are many such operations composting green-waste from municipal collection operations. There are some operations in California (e.g., the City of San José) that are composting digestate from ADF operations.

Santa Barbara County has a large agricultural industry. Engel and Gray have sold compost to this market from its Santa Maria facility. However, developing the market to accept additional material may take time.

The Projections assume that the CMU will generate 22,278 tons of fair quality compost expected to be suitable for the field crop and non-irrigated rangeland markets. MSB projects 34% (7,647 tons per year) of the compost from the TRRP will be collected from the facility by customers at no charge and that 66% (14,631 tons per year) of the compost will have to be transported by the compost facility operator to non-food crop agricultural customers who will not be charged for the product at a cost to the operator for transportation expense of \$6.15 per ton. This cost is included in the Projections.

HF&H Conclusion

We believe that assumptions related to the efficacy of the CMU to perform in accordance with the County's Projections are reasonable, because:

- Composting municipal green-waste is a common practice in California;
- The County has a large potential market and the operator has experience; and,
- No revenues are anticipated to be received from the sale of such compost.

However, marketing of the finished material may take time and additional tons may have to be transported to customers who will not be charged for the product, particularly true for the compost product containing residue from the processing of mixed MSW and CSSRM. Therefore, we have performed a sensitivity analysis (Section 4.3.4) to determine the impact if this residue was not processed through the ADF and CMU and found that this would increase the tip fee by 1.0%.

3.2.4 Landfill Gas Engines

The Revised TRRP includes decommissioning the existing LFG Control System in place (engine and flare) and installing new engines to provide up to 2.8 megawatts of electricity, one enclosed flare and one switchgear/transformer on the operations deck just south of the MRF building. The new engines and flare would be connected to the existing LFG collection network of wells and pipelines adjacent to their location consistent with on-going LFG collection system deployment for Landfill operations, and would be connected to the existing electrical distribution network. The power transmission lines serving the MRF would also serve the new engines and supporting equipment.

The new engines would each be housed in a 756 square foot container with noise attenuating features, and provided with engine exhaust silencers and acoustical gaskets on the doors. The engines would be provided with APCD-required control systems to reduce oxides of nitrogen (NOx) emissions. The new flare would be six feet in diameter and 50 feet in height, and located on a concrete pad. The switchgear and transformers would also be located on a concrete pad. Up to 2.8 megawatts of electricity would be produced by the facility and excess power would be distributed to the regional power grid.

3.3 TRRP Construction and Operations Schedule

It is expected to take approximately 24 months from the notice to proceed to acceptance of the TRRP, as shown in Figure 3–4.

Figure 3-4: Estimated TRRP Timeline

#	Milestone	Commence Date	Completion Date
1	Notice to Proceed with Construction	November 21, 2018	November 21, 2018
2	Grading, Site Preparation, Utilities (MRF and ADF)	November 27, 2018	June 29, 2019
3	ADF Foundations & Slab	April 23, 2019	August 23, 2019
4	MRF Foundations & Slab	April 30, 2019	August 28, 2019
5	MRF Building Construction	August 13, 2019	November 25, 2019
6	ADF Building Construction	February 2, 2020	April 27, 2020
7	MRF Equipment Installation	August 12, 2019	May 8, 2020
8	MRF Start-up & Acceptance Testing	May 11, 2020	July 10, 2020
9	ADF Start-up & Acceptance Testing	June 9, 2020	November 11, 2020
10	CMU Construction	November 12, 2018	June 5, 2020
11	MRF Operation Date	June 5, 2020	August 4, 2020
12	ADF Operation Date	July 5, 2020	September 5, 2020
13	CMU Operation Date	August 5, 2020	October 5, 2020
14	CHP Electricity Delivery to Grid	September 5, 2020	October 5, 2020
15	TRRP Acceptance	October 5, 2020	November 5, 2020

3.4 TRRP Facility Contractor and Primary Subcontractors

3.4.1 MSB Contractor

In 2009, the County released a Request for Proposal for a Waste Conversion Facility capable of diverting from disposal 60% of the material that was being disposed of at the Tajiguas Landfill from the cities of Buellton, Goleta, Santa Barbara, Solvang and Southern Santa Ynez and New Cuyama unincorporated areas. An advisory group evaluated the various proposals and interviewed the different proponents. In 2012, the proposal by Mustang was selected as the most advantageous and all participating jurisdictions adopted a TRRP Term Sheet with Mustang. In July 2015, the Board directed staff to consider a publicly financed facility to reduce costs from Mustang's proposed private financing approach. In April 2016, the Board reviewed the analyses of the public financing approach and directed staff to negotiate a Waste Service Agreement (including design, construction, equipping, and operations) with Mustang. In July 2016, the Board approved the Waste Service Agreement with MSB Investors, LLC (MSB), a single purpose limited liability company created by Mustang. In December 2016, February 2017, November 2017, and September 2018 respectively, the Board approved an Amended Contract and Amendments 1, 2 and 3 to the Waste Services Agreement with MSB.

Mustang is a Brownfields and industrial developer who has worked with environmental regulatory agencies (California Departments of Toxic Substances Control, Resource Recycling and Recovery, Regional Water Quality Control Boards, Air Quality Management Districts and County Health Departments) in obtaining permit approvals for projects.

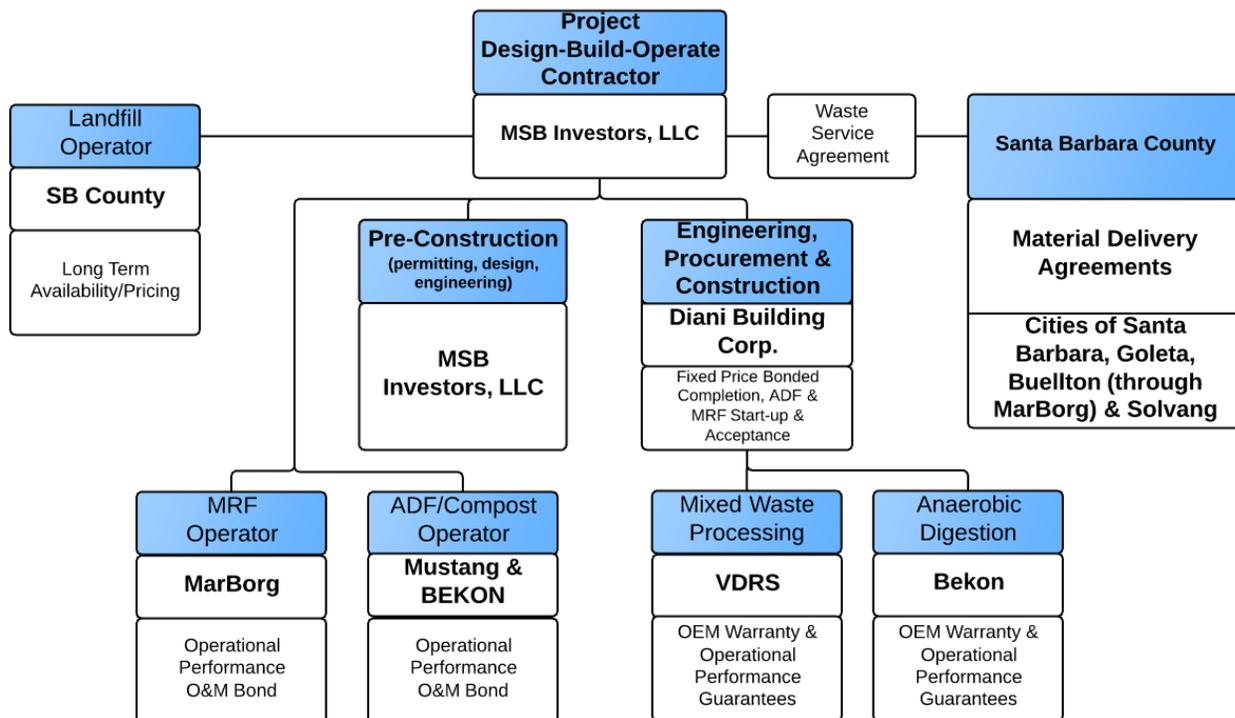
MSB is a limited liability company organized and operating under the laws of the State of California. It was created in 2012 by Mustang Renewable Power Ventures, LLC for the purpose of developing, constructing and operating the TRRP. MSB's independent accountants (HBLA Certified Public Accountants, Inc.) state in its preliminary Independent Auditor's Report, that as of December 31, 2017,

MSB has approximately \$6.4 million in equity with approximately \$11.4 million in assets (comprised largely of the CHP Engines and Predevelopment costs for the TRRP). MSB management represents that it has the capability of performing all of its obligations under the Waste Service Agreement and is not aware of any facts, circumstances, or conditions that could reasonably be expected to render MSB financially incapable of performing its obligations under the Waste Service Agreement.

MSB and the County have attempted to manage project construction and operating risks through performance bonds and insurance policies that were determined by the County and Public Participants. These policies include performance bonds for construction (\$117,458,000) and operations (\$14,034,336), equipment warranties, and a variety of insurance policies, including Builders Risk, Commercial, Professional & General Liability, Property/ Hazard, and Pollution Legal Liability to protect MSB and the County during the construction and operational periods. Such policies shall be issued by a surety company or companies rated “A” or better pursuant to current AM Best Company ratings and listed in the United States Treasury Department’s Circular 570. Such surety shall be an admitted surety in California. MSB may discontinue maintaining this performance bond upon written County approval, which shall be provided within ten week days of issuance of the Notice to Proceed with Full Operations, as provided in Section 4.9.B of Material Service Agreement. As the owner of the facility, the County plans to procure property insurance when the TRRP is operational.

MSB has no experience constructing, equipping, or operating MRF or ADFs. MSB has contracted with DBC, VDRS, Bekon, and MarBorg to construct, equip and operate the MRF and the ADF/CMU, each of whom have significant experience and expertise in their respective fields. A description of the organization and contract structure of the TRRP is presented in Figure 3-5 below.

Figure 3-5: TRRP Organizational & Contract Structure



3.4.2 Primary Engineering, Procurement and Construction Subcontractor

MSB has entered into an agreement with Diani Building Corporation (DBC) to serve as the primary contractor. DBC is a 60+ year old construction firm and is able to provide experienced Project Manager/Superintendent, Principals and the support staff of Project Engineers, Estimators, Safety and Quality staff.

DBC's team of professional managers and constructors has supplied planning, design and construction services to the private and public market sectors. Construction services shall be provided through DBC's Santa Maria corporate office.

DBC has worked on several projects throughout the Santa Barbara County area including projects for military, public works, and educational market sectors. A few of its projects include:

- Santa Barbara Museum of Art in Santa Barbara, CA for the Museum
- Hearst Castle Visitor Center in San Simeon, CA for the State of California.
- Hazardous Waste Facility, Santa Maria, CA for the City of Santa Maria.
- US Army Community and Family Support Center and Youth Center at the Lemoore Naval Air Station, in Lemoore, CA.
- Ground-Base Midcourse Missile Defense, Vandenberg Air Force Base, CA and Fort Greely, AK.
- The Arts and Music Building and High Technology Learning Center at Cuesta Community College in San Luis Obispo, CA.

3.4.3 Primary Equipment Subcontractors

Van Dyk Recycling Solutions – MRF Equipment Contractor

Mustang has entered into an agreement with VDRS to provide processing equipment for the MRF. VDRS' experience with mixed municipal solid waste material recovery includes the projects identified in Figure 3-6. VDRS plans to install a Bollegraaf sorting system within the MRF. VDRS is the exclusive distributor of Bollegraaf Recycling Solutions and TOMRA Sorting Solutions in North America. VDRS reports that it has installed over 1,800 recycling systems of which 480 are complete MRFs including 22 built in North America, 17 of which are capable of processing 50+ tons per hour of single stream material.

Figure 3-6 presents a summary of some of VDRS' reference projects. We have not listed numerous smaller and older projects.

Figure 3-6: Summary of Selected Van Dyk Facilities

Location (Owner)	Feedstock /Tons Per Day	Product	Status
City of Industry, CA (Grand Central Recycling)	Commercial Mixed MSW /500	Recyclables	In Operation Since 2012 Planned updates 2019
Brooklyn, New York (SIMS Metal)	Mixed MSW and Commingled /950	Recyclables	In Operation Since 2013
Johnston, RI (Rhode Island Resource Recovery Corporation)	Single Stream /350	Recyclables	In Operation Since 2012
Los Angeles, CA (Crown Disposal)	Mixed MSW and C&D /1000	Recyclables	In Operation Since 2000 Updated in 2018
San Diego, CA (EDCO)	Commercial Waste, C&D, and Residential Single Stream,1,000	Recyclables	In Operation Since 2004 Updated in 2018
San Antonio (Waste Management)	Mixed MSW /400	Recyclables and Pelletized Fuel	In Operation Since 2011
Toronto, Canada (Dongara)	Single Stream and Mixed Commercial MSW/600	Recyclables and Pelletized Fuel	In Operation Since 2013
Bridgeport, CT (USA Recycling)	Single Stream /150	Recyclables	In Operation Since 2014
Escondido, CA (SANCO Environmental Services)	Commercial and Residential Single Stream /500	Recyclables	In Operation Since 2017
Puebla, Mexico (CIP)	Residential MSW /800	Recyclables, Organics and Fuel	In Operation Since 2017 Updated in 2018
Dallas, TX (FCC)	Commercial and Residential Single Stream /700	Recyclables	In Operation Since 2017
Plano, TX (Republic Services)	Commercial and Residential Single Stream /500	Recyclables	In Operation Since 2018
Moscow, Russia (MAG Group)	Mixed MSW /750 Commercial and Residential Single Stream /200	Recyclables + Organics	In Operation Since 2018
Houston, TX (FCC)	Commercial and Residential Single Stream /700	Recyclables	Planned startup 10/2018
Fulcrum Bio Energy	Mixed MSW /2000	Recyclables & Organic Feedstock for Bio Diesel	Planned startup 6/2019

Bekon – AD Equipment Contractor

Mustang has entered into a subcontract with Bekon to provide equipment for the ADF. Bekon's dry fermentation anaerobic digestion technology experience includes the projects identified in Figure 3-7. Since 1999, Bekon has installed its equipment in commercial scale facilities in Germany, Italy, Switzerland, and at a pilot test plant in Mexico.

Bekon was founded in Munich, Germany in 1992. It represents itself as a worldwide technology leader in the construction of dry fermentation biogas and composting facilities. In 2016, Bekon was acquired by the Eggersmann Group, a family-owned business currently with 750 employees. In 2017, the Eggersmann Group reported sales of 160M€. The Eggersmann Group is headquartered in Marienfeld in Northern Germany and provides recycling technologies as well as construction and plant operation services.

Bekon reports numerous operating projects (Figure 3-7) of greater than 30,000 metric tons per year, as well as numerous smaller projects. (The recently expanded Rendsburg facility now process 70,000 metric tons per year (77,000 tons), slightly larger than the 75,000 tons per year proposed for the TRRP.)

However, none of these facilities are in the United States where waste composition and regulations differ from those in Europe. Further, none of these facilities use the highly contaminated organic residue remaining after the processing of municipal solid waste as feedstock and such materials may affect the ability to use compost byproduct for certain purposes. Mustang represents that the Steinfurt, Germany facility has operated with 10-20% inert contaminants and the Pohlsche Heide facility with 15-30%, which may be consistent with the contamination level of the organic fraction of municipal solid waste residue.

Figure 3-7: Summary of Bekon AD Facilities

Location	Feed Stock (000's Metric Tons per Year)	Power Output	Status
Dresden, Germany	Source Separate Organic Waste, 31	800KW	In operation since January 2017
Steinfurt, Germany	Source Separated Organic Waste, 45	1,054 KW	In operation since November 2013
Hamburg, Germany	Source Separated Organic Waste, 60	1,500 kW	In operation since 2013
Rimini, Italy	Source Separated Organic Waste, 35	1,000 KW	In operation since December 2012
Voltanta, Italy	Source Separated Organic Waste, 35	1,000 KW	In operation since December 2012
Mainz, Germany	Source Separate Organic Waste, 40	1,200 KW	In operation since 2012
Gütersloh, Germany	Source Separated Organic Waste, 35	800 KW	In operation since 2011
Naples, Italy	Source Separated Organic Waste, 35	1,052 KW	In operation since August 2011
Cesena, Italy	Source Separated Organic Waste, 35	1,000 KW	In operation since December 2009
Pohlsche Heide, Germany	Source Separate Organic Waste, 40	1,000 KW	In operation since November 2009
Rendsburg, Germany	Source Separated Organic Waste, 70	1,050 KW	In operation since November 2008, Expansion in operation since 2017

3.4.4 Primary Operations Subcontractors

MarBorg Recovery, LP – MRF Operations Contractor

MSB has entered into a subcontract with MarBorg to operate the MRF. MarBorg is a family owned business with approximately 300 employees. MarBorg and its related businesses have served Santa Barbara County as a waste hauler and recycler for over 80 years. MarBorg serves over 40,000 individual residential and business accounts. Currently, MarBorg also processes over 250,000 tons of material every year from residents and business in the County through several local recycling facilities.

In the early 1990s, MarBorg began recycling C&D material at its corporation yard located at 136 N. Quarantina Street in the City of Santa Barbara. As those operations grew, MarBorg built and equipped an

80,000 square foot recycling facility across the street from its corporation yard to process larger volumes of waste. At this downtown recycling facility, it currently processes and markets annually 77,000 tons of mixed C&D material, 35,000 tons of source separated C&D material, 76,000 tons of self-haul mixed waste, 6,000 tons of franchise commercial waste and a portion of the 15,000 tons of commercial source separated recyclables that it collects. It also accepts and processes electronics and household hazardous wastes at this facility.

MarBorg also operates a commercial recycling facility located at 20 David Love Place, in Goleta. For over a decade, MarBorg has processed and marketed the commercial CSSRM from its franchise contracts in the County of Santa Barbara, City of Santa Barbara, City of Goleta and the University of California, Santa Barbara. MarBorg also processes all residential and commercial CSSRM from the City of Buellton. In total, this facility processes up to 15,000 tons of CSSRM per year.

In addition to these two local processing facilities, MarBorg also collects and markets CSSRM from two Buy Back Centers. One facility is located at its commercial recycling operation in Goleta, CA and the second location is in the City of Santa Barbara at 725 Cacique Street. Both of these operations also serve as drop-off locations for universal waste and HHW for all of its customers.

Mustang and Bekon – ADF/CMU Operations Contractor

MSB entered into a subcontract with Bekon to operate the ADF and CMU. Mustang plans to assist Bekon with all regulatory compliance, human resources, accounting, and financial reporting required of Bekon. Bekon is expected to send an operational specialist from Germany to be the ADF/Composting supervisor/manager. He is expected to hire, train, and supervise all staff.

In addition, Eggersmann (the group that Bekon is a part of) also operates five plants. Among them are four combined biogas and composting plants in Nieheim, Gütersloh, Enger, and Iffezheim, Germany. For other plants in Europe, it has operation service agreements in place. Its experience in operating dry fermentation biogas and composting plants dates back to 1992.

Eggersmann reports that approximately 175,000 metric tons per year are processed in affiliate facilities collecting 1,500,000 habitants' organic waste. Some characteristics of these plants are described below:

- In Gütersloh, Germany, approximately 65,000 tons per year have been processed since 1992;
- The plant in Nieheim, Germany has been operational since 1999 with an annual throughput of 85,000 tons per year;
- In Enger, Germany, a Bekon mini system was installed and commissioned in December 2017; capacity is 5,000 tons per year.
- In Iffezheim, Germany, a combined AD and composting plant for 20,000 tons per year is in operation since 2017; and,
- Furthermore, there are two transfer stations operated by an Eggersmann affiliate, one in Bielefeld, and the other one in Alte Schanze.

All the compost marketing and sales activities of the self-operated plants are managed under the brand BioTerra. Eggersmann reports around 180 farmers are compost customers with an agricultural application area of 4,500 acres. Finally, the compost is also marketed in private gardens, greenhouses and in the

landscaping industry. Besides the product marketing, BioTerra also provides soil sampling and analysis for their customers.

MSB represents that Bekon has reviewed the current CalRecycle compost regulations and US Composting Council standards and has confirmed they are comparable to German/European Union compost quality standards.

MSB reports that Bekon has estimated that the finished compost of approximately 22,000 TPY (of which 25% is estimated to be from clean SSOM and 75% is estimated to be from organics from mixed waste) should be identical to that produced and marketed by Z-Best Composting in Gilroy, California. MSB and Bekon estimate that this amount of compost is expected to require approximately 100-200 acres of land application (hay, alfalfa, beans) to wholesale markets in north Santa Barbara County. The 2017 Santa Barbara County Agricultural Committee Crop Report estimates there are 10,529 acres of field crops potentially requiring compost. Santa Maria based DBC (the primary subcontractor for construction) will assist with compost marketing and trucking logistics as it has relationships with farmers in the County. DBC represents it has previously hauled agricultural plastic from more than three dozen of the largest farmers for more than ten years in North Santa Barbara County to landfill and recycling markets.

3.5 TRRP Contractual Descriptions

3.5.1 County and Public Participants Material Delivery Agreements

The Material Delivery Agreements by and between the County and the Public Participants include the following provisions:

- A term through the maturity of the COPs;
- Obligates the Public Participants to direct their franchised waste haulers to direct the flow of all Acceptable Material collected to the County designated facilities;
- Obligates the County to receive and process and dispose of the materials delivered by the Public Participants; and,
- Establishes the County's right to set and collect charges for the material delivered sufficient to provide net revenue equal to 150% of the debt service, as required by the COP documents.

The County and the Public Participants approved the Material Delivery Agreements on the following dates:

- City of Goleta, November 1, 2016;
- City of Solvang, November 28, 2016; and,
- City of Santa Barbara, December 13, 2016.

The City of Buellton requested that its franchised collection contractor (MarBorg) contract with the County for delivery of material from the City of Buellton. The County and MarBorg have entered into a Material Delivery Agreement that was approved by the Board on December 13, 2016 for delivery of material from the City of Buellton. The current term of the franchise agreement between the City of Buellton and MarBorg expires in 2027; therefore, a new Material Delivery Agreement with the County will need to be entered with any subsequent franchise collection contractor if MarBorg does not continue as collection contractor for the City of Buellton.

Since the execution of the Material Delivery Agreements, the County has worked collaboratively with the Public Participants to address the relocation and redesign of the anaerobic digester and the subsequent delay in implementing the project. Regular meetings with the Public Participants have been held to provide timely updates on revisions to the project design and timeline. Material that is expected to be managed by the TRRP but is currently processed elsewhere, continues to be processed at available existing facilities, where feasible. Receiving a lower volume of material has reduced expected tipping fee revenue to the County and this reduction in current revenue has been shared with the Public Participants and is reflected in the financial analysis contained in this report. In addition, in response to a request from staff of two of the Public Participants, the prescribed tip fee of \$110 per ton for FY 2019 was reduced, after approval by the County Board of Supervisors, to \$102 per ton due to the delay in the project and this change is also reflected in the financial analysis contained in this report.

3.5.2 County/MSB Waste Service Agreement Description (and MSB Subcontracts)

The Waste Service Agreement was approved by the Board on July 12, 2016. The Waste Service Agreement was amended on February 14, 2017, November 14, 2017, and September 18, 2018 to reflect the changes necessary for financing and a delay in the commencement of the project. It was effective on its execution subject to the satisfaction within 180 days of certain conditions precedent to its effectiveness. The Waste Service Agreement has a 12-year term (a 2-year construction period and a 10-year operating period) with an exclusive right by the County to extend the contract up to 5 years.

Direct agreements have been approved by the Board for all primary subcontracts to facilitate the assignment of those subcontracts to the County or the County's designee in the event MSB Investors defaults or files bankruptcy. The direct agreements provide an efficient and streamlined assignment process which allows the County to continue operation of the TRRP without interruption.

Development and Construction

MSB is responsible for:

- Obtaining and maintaining conformance with all permits and terms of approvals (including licenses or agreements for use of equipment and/or software) necessary for the development and operation of the TRRP (Section 5.1.C);
- Designing the TRRP to meet agreed upon plans and specifications attached to the Waste Service Agreement and conditions related to all permits and approvals (including the mitigation measures required by the environmental impact report) (Section 4.6.A);
- Constructing and equipping the TRRP at an agreed upon amount of \$119,583,000 or such lesser amount as the parties may agree, using the agreed upon Construction Company (DBC) and Equipment Suppliers (VDRS for the MRF technology and Bekon for the ADF technology). Construction is to occur in accordance with an approved construction schedule. TRRP is to operate in accordance with agreed-upon performance requirements, as described in the Waste Service Agreement. MSB has assumed industry-standard risks of construction and the payment of liquidated damages for failure to perform (Section 10.2.C);
- Acquiring, financing, and maintaining all rolling stock, maintenance equipment, furnishings and office equipment to meet agreed upon performance requirements described in the Waste Service Agreement. Ownership of this equipment shall be transferred to the County, at no cost, upon the end of their depreciable lives, except for such equipment which shall have remaining depreciable lives which the County has unilateral option (but is not obligated) to acquire, at net book value or outstanding debt balance whichever is greater, upon termination or expiration of the Waste

Service Agreement (Section 5.5A);

- Performing acceptance tests and obtaining acceptance of the TRRP by the County in accordance with testing procedures (including schedule) agreed to by the parties and described in the Waste Service Agreement. MSB will assume industry standard risks of performance (including, but not limited to, MSB expending any amounts required to achieve the acceptance of the TRRP without compensation from the County, and the payment by MSB to the County of liquidated damages for delay and failure to perform) (Section 4.8.B); and,
- Providing construction bonds, equipment guarantees, performance bonds, and insurance related to the construction and operation of the TRRP as described in the Waste Service Agreement (Section 13.2.B).

The County is responsible for:

- Financing the TRRP through the issuance of the COPs (Section 4.5.B);
- Performing as lead agency for the Environmental Impact Report (Section 4.5.B);
- Completing, prior to MSB beginning construction, any necessary site remediation related to past County activities.(Section 4.1.B); and,
- Providing MSB notices to proceed with construction, acceptance testing, and operations in accordance with the conditions described in the Waste Service Agreement (Section 4.1.B).

Operation

MSB and its operating subcontractors (MarBorg to operate the MRF and Bekon to operate the ADF) are responsible for:

- Receiving, processing and marketing acceptable materials, in accordance with agreed upon performance requirements described in the Waste Service Agreement (including but not limited to days and hours of operations, minimum throughput and recovery guarantees, marketing standards, maximum disposal guarantees, vehicle turnaround times, safety and security standards, environmental standards as well as maintenance of a humane work environment). (Section 5.1.C);
- Using agreed upon primary subcontractors, and assuming industry standard risks of performance including the payment of liquidated damages for failure to perform (Section 5.1.C);
- Marketing available capacity at the TRRP to companies and agencies who are not already delivering Acceptable Material under a Material Delivery Agreement with the County, subject to County approval (Section 5.1.C);
- Paying for the disposal of residue from processing that exceeds 35.2% of materials delivered to the TRRP (subject to periodic waste composition verification in accordance with procedures mutually agreed upon and described in the Waste Service Agreement) (Section 10.5);
- Complying with additional guarantees (including but not limited to development, construction, equipment, throughput, electric output, environmental and vehicle turnaround, etc.) described in the Waste Service Agreement. (Section 6.1.B);
- Delivering residue from the processing of materials to the County for transport to the Tajiguas Landfill (Section 5.1.C);
- Maintaining and repairing the TRRP in accordance with the agreed-upon maintenance manual

and practices described in the Waste Service Agreement and MSB will assume industry standard risks of performance including the payment of liquidated damages for failure to perform (Section 5.6.C);

- Providing qualified, experienced, and trained management, supervisorial, technical and line staff (Section 11.1.C);
- Making payments described in the Waste Service Agreement to the County (including a share of revenues from the sale of recyclable materials and products developed at the TRRP if such revenues exceed a baseline level as provided for in the Waste Service Agreement) (Section 5.1.B);
- Keeping records (including those related to tonnages received and processed, billing, development, operations, marketing (including broker inspection reports), and financial transactions), providing County access to such records and providing monthly and annual reports (including adverse reports) as well as timely notices (e.g., 24-hour notice of non-compliance with performance guarantees), as described in the Waste Service Agreement (Section 5.1C);
- Paying all fines and penalties (including liquidated damages) related to non-compliance with permits, approvals, and Waste Service Agreement terms (Section 14.1.A); and,
- Indemnifying the County and providing insurance, indemnities, bonds, and further assurances in accordance with County standards, as described in the Waste Service Agreement (Section 13.2).

The County is responsible for:

- Receiving, inspecting, accepting, weighing, directing, and charging customers for materials delivered to the Tajiguas Landfill in accordance with Material Delivery Agreements between the Public Participants (including the County as franchisor of solid waste services in the unincorporated area of the County) and the County, and with respect to Buellton waste, between MarBorg and the County (Section 5.1.B);
- Making payments to MSB calculated in accordance with County-approved rates, and tonnage delivered to the TRRP (Section 5.1.B);
- Disposing of residue from the TRRP at the Landfill (Section 5.1.B);
- Indemnifying MSB with regard to the TRRP site and providing insurance and bonds in accordance with terms described in the Waste Service Agreement (Section 5.1B); and,
- Participating with MSB in marketing available capacity at the TRRP to companies and agencies who are not already delivering acceptable material under a Material Delivery Agreement with the County (Section 5.1.B).

Contractor Compensation

Pre-Construction, Development, and Construction and Equipping Compensation

- Compensation for Pre-Construction costs (Permits and Entitlements of \$5,508,000 and Design and Engineering of \$5,390,000) totaling \$10,898,000, or such lesser amount as the parties may agree as of the financial close (Section 10.2.A);
- County shall pay MSB a Development Fee totaling \$3,090,000 for construction and equipping management (Section 10.2B); and,
- Construction and Equipment Costs – County shall pay MSB \$119,989,000 or such lesser amount as the parties may agree based on MSB's actual expenses necessarily incurred (Section 10.2.C).

Operation Compensation

- MSB's annual compensation for all costs of and profits for providing service shall be paid by the County exclusively from:
 - A per ton rate, which is calculated based on MSB receiving the revenues from the sale of recyclable materials up to a baseline;
 - A share of revenues received from the sale of recyclable materials and products produced at the TRRP as well as energy sales above a baseline; and,
 - Per ton rates applied to tons received at the Landfill as spot market materials based on terms mutually agreed to at the time the spot market materials are committed to including the sharing of any net benefits) and directed by the County to the TRRP.
- The initial per ton rate paid MSB by County shall be \$28.79 per ton as identified in MSB's pro-forma financial results of operations;
- The initial per ton rate shall be adjusted annually in accordance with certain cost indices, as agreed to by the parties and described in the Waste Service Agreement;
- County shall make payment to MSB monthly for materials delivered to TRRP;
- County shall make annual payment to MSB for annual revenues received less than projected (unless such lesser revenues result from MSB's failure to perform), from:
 - Recyclable material sales less than \$6,233,679;
 - Energy sales to the public utility less than \$2,309,229; and,
 - Compost sales revenues (expense) less than (\$93,747).
- MSB shall make payment to the County annually, as follows:
 - Additional revenue received greater than projected from the sale of recyclables (\$6,233,679) will be shared :
 - With 100% being received by County up to \$9,464,000;
 - With 75% being received by the County and 25% by MSB and MarBorg up to the point that MSB and MarBorg receive an additional \$500,000 in income (i.e., total additional revenue of \$2 million); and,
 - Thereafter, the County will receive 90%, and MSB and MarBorg will receive 10% of incremental additional revenues above \$11,464,000.
 - Additional revenue received greater than projected from the sale of compost (a cost of \$93,747) will be shared with:
 - 75% being received by the County and 25% by MSB and Bekon up to the point that MSB and Bekon receive an additional \$250,000 in income (i.e., total additional revenue of \$1 million); and,
 - Thereafter, the County will receive 90%, and MSB and Bekon will receive 10% of incremental additional revenues above revenue of \$836,040.
 - Additional revenue received from the sale of electricity greater than \$2,309,229 plus a reimbursement of \$146,500 for AD startup funding will be shared with:
 - 100% received by County up to \$2,455,729;

- 75% being received by the County and 25% by MSB up to the point that MSB receives an additional \$500,000 in income (i.e., total additional revenue of \$2 million); and,
 - Thereafter, the County will receive 90%, and MSB will receive 10% of incremental additional revenues above \$4,309,229.
- MSB shall ensure that throughout the term of the Waste Service Agreement the County receives “most-favored” rates, unless specifically waived by the County; and,
 - The Acceptable Material Charge shall be adjusted in accordance with the change in the Consumer Price Index, for material changes directed by the County, force majeure events, and changes in law (including labor law), and in accordance with procedures described in the Waste Service Agreement. Rates shall not be adjusted for increased costs of TRRP development, construction, or operations; MSB’s failure to perform; or changes in tonnage or composition of material delivered. Notwithstanding the foregoing, the \$28.79/ton tip fee paid to Mustang for not less than 143,038 tons per year (based on 75% of the 190,717 franchised tons assumed to be delivered) is to be paid irrespective of whether the delivered tonnage is less than 143,038. The rates will be adjusted to satisfy the COP covenants.

The tip fee paid to MSB has increased from \$15.15 per ton when the County priced its Series 2017 COPs (that did not close) to \$28.79 per ton currently. This is primarily the result of significant changes in recycling markets. The most significant and relevant change is the new set of policies adopted by China restricting and, in some cases, banning the importation of recyclables. Policies in China have a global impact that has resulted in historically low commodity prices particularly for the fibers and mixed plastics materials. Sections 4.3.1 and 4.3.2 include sensitivity analysis’ to evaluate potential impacts to the Public Participant tip fee if there are further declines in commodity pricing.

Over the past year, the existing MRFs that process County’s recyclables have had to change their operations in an effort to meet new higher quality standards, and work closely with brokers to find new markets for their commodities outside of China. Responding to these changes, Gold Coast Recycling, which is the current processor of recyclables for the South Coast of Santa Barbara, has doubled their quality control staff on their sorting lines for reclaimed fiber products (mixed paper and card board), and slowed down the conveyer belt speeds. Adapting to market changes in the longer term, Gold Coast Recycling is scheduled to close down this fall for six weeks in order to install \$6 million of new equipment.

While the increase in the fee paid to MSB is substantial, it is believed within the recycling industry that the new standards for recyclables are here to stay and that investment within the industry to build more modern MRFs, such as the one designed for the TRRP, will be required for jurisdictions to continue to have access to global recycling markets.

3.6 Permitting

The development of the TRRP requires approval/permits from a number of regulatory authorities. Figure 3-8 provides a brief summary prepared by the County of those permits and approvals and their status.

Figure 3-8: TRRP Permit Requirements

Permit/Approval	Issuing Agency	Status	Actual/Expected Completion Date
Discretionary Permits/Approvals			
General Plan Consistency GC 65402a determination (L)	Santa Barbara County Planning and Development	Complete	8/30/2017
TRRP Approval/EIR Certification (L)	Santa Barbara County Board of Supervisors	Complete	7/12/2016
Revised TRRP EIR Addendum(L)	Santa Barbara County Board of Supervisors	Complete	11/14/2017
Approval of Material Delivery Agreements (L)	Cities of Santa Barbara*, Goleta*, Solvang*	Complete	12/13/2016
Approval of Material Delivery Agreement with MarBorg for materials generated in the City of Buellton; and , approval of Disposal Agreement with MarBorg	MarBorg	Complete	12/13/2016
Authority to Construct (L) (Revised to include Landfill Gas Engines)	Santa Barbara County Air Pollution Control District (staff issued)*	In progress	October 2018
Approval of Material Delivery Agreements and release Funding Package (L)	Santa Barbara County Board of Supervisors	Complete	12/13/2016
Solid Waste Facility Permit (SWFP) Revision (S)	Santa Barbara County Environmental Health Services/Local Enforcement Agency*, CalRecycle concurrence*	Complete	2/2/2017

**Figure 3-8: TRRP Permit Requirements
(Continued)**

Permit/Approval	Issuing Agency	Status	Actual/Expected Completion Date
Ministerial Permits/Approvals			
Revised Industrial Storm Water Permit (S)	Central Coast Regional Water Quality Control Board	In progress	February 2019
Construction Storm Water Permit (S)	Central Coast Regional Water Quality Control Board	Complete	September 17, 2018
On-site Sewage Disposal System Permit (L)	Central Coast Regional Water Quality Control Board	In progress	February 2019
Non-transient, Non-community Water System Permit (L)	Santa Barbara County Environmental Health Services	In Progress	February 2019
Amended Joint Technical Document (amendment for the changes in the locations of the TRRP facilities within the existing permitted operational area)	Santa Barbara County Environmental Health Services/Local Enforcement Agency	In progress	October 31, 2018
Structural Building Permit Authorization (L)**	Santa Barbara County P&D Building and Safety	Completed for MRF In progress for ADF	May 2018 February 1, 2019
Interconnection agreement (L)	SCE	In progress	October 2018
Permit To Operate (L)	Santa Barbara County Air Pollution Control District (staff issued)*	Issued after construction of the permitted facility and the passing of acceptance testing.	October 2020

*CEQA Responsible Agency (is expected to use county's certified EIR in their permitting/approval process).

** Building permits or similar authorizations are issued sequentially throughout project construction.

L- Local Permits, S- State Permits

3.6.1 County of Santa Barbara Approval

The Board has the overall authority to approve the TRRP (including implementing agreements) and certify the EIR. RRWMD is the CEQA Lead Agency and the Applicant for the TRRP. The County released the Draft Subsequent Environmental Impact Report (SEIR) on August 11, 2014. Public comments on the Draft SEIR closed on October 9, 2014. The project was approved and the Final SEIR was certified by the Board on July 12, 2016. After discovering the design for the ADF was within the Coastal Zone, the TRRP layout was revised to relocate the ADF outside the Coastal Zone and addendum EIR was approved by the Board on

November 14, 2017. The Gaviota Coast Conservancy filed a lawsuit within the challenge period of the addendum EIR against the County to challenge the County's approval of the TRRP. The County and the Gaviota Coast Conservancy reached a settlement included in Resolution #18-150 approved by the Board on June 19, 2018.

3.6.2 Santa Barbara County Air Pollution Control District

Air emission permits are required by the Santa Barbara County Air Pollution Control District (SBCAPCD). The TRRP will require an ATC and a Permit to Operate (PTO) from the SBCAPCD. The ATC is required before the installation of the project engines. Site preparation work may occur prior to the issuance of the ATC. The ATC permit is expected to be issued in October 2018.

3.6.3 California Central Coast Regional Water Quality Control Board

The California Central Coast Regional Water Quality Control Board (CCRWQCB) issued Waste Discharge Requirements (WDRs) R3-2010-0006 on February 4, 2010 for the Tajiguas Landfill. The CCRWQCB also regulates construction and industrial stormwater discharge requirements under the National Pollution Discharge Elimination System (NPDES). The Tajiguas Landfill currently operates under WDID 34S000451. MSB and County staff have met with the CCRWQCB staff on numerous occasions since 2012. CCRWQCB staff have given their concurrence and preliminary acceptance of the CMU Report prepared by MSB's engineers detailing the stormwater design and engineering and operational procedures to be followed by MSB in the development and operations of the CMU. The CCRWQCB is not requiring updated landfill WDR's, but a revised Stormwater Pollution Prevention Plan (SWPPP) pursuant to the Industrial General Stormwater Permit is required to be submitted that includes the TRRP facilities and the landfill. Additionally, the RRWMD is preparing a revision to the landfill's Joint Technical Document (JTD) that will reflect the MRF and ADF/CMU. The JTD is required for the Tajiguas Landfill's Solid Waste Facilities Permit issued by CalRecycle and the LEA and the landfill's WDRs issued by the CCRWQCB. A construction SWPPP was needed and was approved once submitted on September 17, 2018.

3.6.4 CalRecycle Administered by County Environmental Health Services Department

CalRecycle has lead agency authority in California for permitting all waste disposal and processing facilities.

The Tajiguas Landfill operates pursuant to a Solid Waste Facility Permit (SWFP) # 42-AA- 0015, which was issued on February 10, 2014 by the LEA with concurrence of CalRecycle. RRWMD filed an amendment to the JTD on August 22, 2016 that was approved on September 21, 2016, for the relocation of the landfill operations facilities off of the operations deck and authorizing the grading required for the project. A Revision to the SWFP is also required for the operation of TRRP facilities. MSB prepared a Transfer Processing Report (TPR) and a combined In-Vessel Digestion Report (IVDR) and Report of Composting Site Information (RCSI) to support the application to revise the SWFP for the Tajiguas Landfill to include the TRRP facilities. The TPR, IVDR and RCSI were included as appendices to the revised JTD. The Revised SWFP was submitted on October 31, 2016 and approved on February 2, 2017.

3.6.5 California Energy Commission

The California Energy Commission (CEC) is required to certify the ADF as a qualified renewable power generator. CEC renewable certification is required in order for California based utilities to purchase renewable energy from the ADF to meet their State of California mandated Renewable Portfolio Standards (RPS) (20% by 2012 and 33% by 2020).

The CEC issued a Pre-Certification approval determining the TRRP ADF as an RPS eligible facility as of March 13, 2014. The facility is anticipated to receive its Final RPS eligibility certification upon commencement of operations anticipated during the second half of FY 2021.

3.6.6 California Public Utilities Commission

The California Public Utilities Commission (CPUC) is not required to approve the TRRP's renewable Power Purchase Agreement (PPA) executed with SCE under the contemplated Bioenergy Market Adjusting Tariff (BioMAT) because BioMAT was approved by the CPUC Decision D. 14-12-081 and D. 15-09-004.

3.6.7 Southern California Edison

SCE and MSB are expected to execute an Interconnection Agreement and PPA, allowing the electricity produced by the ADF to be sold into the SCE power grid. The PPA was executed on November 30, 2017. MSB expects that the Interconnection Agreement will be executed prior to October 31, 2018.

3.6.8 Contractor's Representation Regarding Permits Required for Construction

As condition of closing the COPs, MSB will be required to represent that any and all permits required for construction and necessary for the County's issuance of a Notice to Proceed with Construction in accordance with the Waste Service Agreement are in effect.

3.7 Alternative Facilities

3.7.1 Summary of Alternatives

Alternative facilities for the processing and disposal of this material include:

- Disposal
 - Simi Valley Landfill (74.4 miles from Tajiguas Landfill)
 - Santa Maria Integrated Waste Management Facility (60.6 miles from Tajiguas Landfill)
- Processing
 - Gold Coast MRF in Ventura (48.5 miles from Tajiguas Landfill)
 - Engel and Gray Composting Facility in Santa Maria (65.8 miles from Tajiguas Landfill)

As shown in Figure 3-9 on the following page, these facilities are located at significant distance from the Tajiguas Landfill site.

3.7.2 Description of Disposal Alternatives

The EIR alternative analysis for the TRRP identified exporting waste for disposal to the Simi Valley Landfill and Recycling Center and the future Santa Maria Integrated Waste Management Facility. These are described below and an economic comparison is presented in Figure 3-10.

Simi Valley Landfill

The County could continue to dispose of waste at the Tajiguas Landfill through approximately 2026. The County could then transfer all MSW at SCRTS and the MarBorg Construction and Demolition Recycling and Transfer Facility for transport to the Simi Valley Landfill and Recycling Center (SVLRC), owned by Waste Management and located approximately 60 miles from Santa Barbara. Upgrades to the SCRTS would be required under this alternative. CSSRM would be processed at the Gold Coast MRF in Ventura. Source separated green-waste collected in the South County would be processed at the Tajiguas Landfill.

The SVLRC has permitted tonnage of 6,000 tons per day of MSW with an estimated closure date of 2052, based on the maximum permitted disposal rate. Current tonnage is 2,521 tons per day. The TRRP EIR reported that 2.7 million tons of MSW from Tajiguas could be accommodated between 2026 and 2036, although this could be reduced by tonnage from other regional landfills.

Santa Maria Landfill

The County could continue to dispose of waste at the Tajiguas Landfill until approximately 2026. It would then transfer all MSW at SCRTS and the MarBorg C&D Regional Transfer Facility for transport to the proposed Santa Maria Integrated Waste Management Facility, approximately 70 miles from the City of Santa Barbara. CSSRM would be processed at the Gold Coast MRF in Ventura. Source separated green-waste collected in the South County would be processed at the Tajiguas Landfill.

The City of Santa Maria plans to construct a new solid waste landfill with permitted tonnage of 1,600 tons per day with an estimated closure date of 2105, based on the maximum permitted disposal rate. A Final EIR was completed in 2010, the project was approved by its City Council, and CalRecycle has issued a Solid Waste Facility Permit. Permits from other regulatory agencies are pending. The TRRP EIR reported that the City anticipates the Santa Maria IWMF would be operational in approximately 2020 depending on the remaining capacity of the existing Santa Maria Regional Landfill. The TRRP EIR reports that the Santa Maria IWMF EIR assumed it would receive 500 tons/day of MSW from Tajiguas Landfill; therefore, the overall volume of waste from Tajiguas Landfill could be accommodated.

Processing Alternatives

Under each of the disposal alternatives described, processing is assumed to continue as is with CSSRM processed at Gold Coast and green-waste processed at the Tajiguas Landfill. Each location presents an added level of complexity due to evolving restrictions on material qualities, especially in the fibers markets, and changes in legislation with SB 1383 and AB 1594 affecting green-waste and organics processing requirements.

Changes in recycling markets, primarily China's Green Fence and National Sword regulations, are placing severe restrictions on the level of contamination that is allowed in material shipped overseas. According to the County, Gold Coast is near capacity and unable to process its material to achieve an acceptable level of contamination. Minimal equipment is scheduled to be installed this fall in an effort to meet the new market requirements.

The TRRP is designed to achieve a higher quality material and without its construction, the County will likely need to find multiple MRFs to have its CSSRM processed into a marketable commodity. While policies in China have effectively eliminated it as an importer of TRRP materials, other markets with less rigorous policies are opening in other South East Asian Countries, as well as Mexico and India. Newer MRFs, such as the TRRP, are expected to be better positioned to market their output as compared with less efficient and aging MRFs. However, pricing is expected to be volatile, and in light of these uncertainties, Section 4.3.2 provides a sensitivity analysis that eliminates all but the CRV revenue from the TRRP.

Recent legislation signed by the Governor will affect green-waste and organics processing and end use. SB 1383 requires 75% of all organics to be removed from landfilled material by 2025 and AB 1594 eliminates the diversion credit on green-waste used as ADC. The County's green-waste is currently processed at the Tajiguas Landfill and used as either a mulch or ADC.

Without the TRRP, the County will need to find third-party alternatives for processing its green-waste and SSOM materials. The closest possible location, Engel and Gray Composting in Santa Maria has represented to the County that it cannot process its material due to high levels of contamination in the commercial food-waste. The second closest facility capable of composting food-waste located in Ventura County was recently closed due to permitting issues.

3.7.3 Contractual Waste Flow Control

The County, Public Participants, and MarBorg (for materials it collects under agreement with the City of Buellton) have entered into Material Delivery Agreements to contractually obligate the Public Participants to direct their material streams to the County. The Public Participants represent that they have the right to direct materials collected through franchise agreements (between the Public Participants, Waste Management, and MarBorg) to the County.

The potential for the non-franchised waste to be taken to a disposal site other than County facilities is primarily a function of local policies, available capacity, transportation costs, time, and tipping fees. The primary existing landfill that might compete with the Tajiguas Landfill for non-franchised waste is the Simi Valley Landfill. It has a lower cost of disposal but a higher cost of transportation. In the future, the Santa Maria Integrated Waste Management Facility may have a lower tip fee, but would also have a higher cost of transportation.

3.7.4 Economic Competitiveness

As described earlier in the report, 32% of the material to be delivered to the TRRP is considered to be self-haul waste. County staff prepared an estimate of comparative costs per ton for alternative disposal facilities as shown in Figure 3-10. In order to secure the MSW self-haul fraction of the waste stream, two strategies have been adopted by the County. MarBorg (which controls approximately 67% or 52,291 tons of the MSW self-haul stream) has entered a Disposal Agreement with the County to deliver its processed self-haul material to the Tajiguas Landfill at a price competitive with the alternatives at \$104 per ton beginning in FY 2021. Second, the rate is also expected to be \$104 per ton for the remaining MSW self-haul stream (projected to be 19,000 tons) in order to incentivize self-haulers to bring their materials to the TRRP.

Figure 3-10: Comparison of Competing Facility Cost Per Ton

Rate Per Ton	Tajiguas Resource Recovery Project	Santa Maria Landfill	Simi Valley Landfill
Facility Disposal Cost ⁽¹⁾	\$104.00	\$71.00	\$69.50
Transportation Cost ⁽²⁾	N/A	\$26.19	\$31.20
Total Disposal Cost <i>Difference to TRRP</i>	\$104.00	\$97.19 -6.5%	\$100.70 -3.2%

⁽¹⁾ The rates for Santa Maria and Simi Valley are published MSW rates as of August 2018.

⁽²⁾ Incremental roundtrip distance to landfills is 122.4 miles to Santa Maria Landfill and 145.8 miles to Simi Valley Landfill using SCRTS as staging area.

As shown in Figure 3-10, the projected County self-haul costs for 2021 are competitive (less than a 10% difference) compared to the current costs of alternative landfills competing for the same self-haul material.

While the County's projections include 19,000 tons of self-haul material that are not under contract, Section 4.3.3 of this Feasibility Report provides a sensitivity analysis showing the rate impact to the Public Participants if the County does not receive this material.

SECTION 4.0 PROJECTED FINANCIAL RESULTS OF OPERATIONS

4.1 Projected Financial Results of Operations (Base Case)

The County staff assisted by KNN prepared the County's Projections that include historical operating results for the five Fiscal Years ending 2017; preliminary operating results for FY 2018; budgeted forecast for FY 2019; and, projected financial results through the COP repayment period ending in FY 2020 through FY 2039.

The County has eliminated from its current cost of operations approximately \$4.2 million of County operating expenses for the first year of TRRP operations in FY 2021. These costs were either one-time costs that are no longer necessary or will be paid by MSB and already included in the TRRP costs.

Figure 4-1 sets forth the current tip fees and future tip fees contained in the Material Delivery Agreements and Disposal Agreements.

Figure 4-1: Anticipated Tip Fee

Fiscal Year Ending June 30,	Rate (Public Participants)
2019	\$ 102.00
2020	\$ 150.00
2021	\$ 155.00
2022	\$ 160.00
2023	\$ 166.00

The increased tip fee from \$102 to \$150 per ton is due to a variety of factors. Year 2 of the Material Delivery Agreements prescribed a tip fee of \$110 per ton. Due to the delay in the initiation of project construction, two of the Public Participants requested that a reduced tip fee be charged. In response to that request, the County Board of Supervisors approved a reduced rate of \$102 per ton rather than the prescribed \$110 per ton. In addition, as the financial model for the revised project was being completed, County staff prepared two options for the Public Participants to consider for a Year 3 tipping fee; 1) \$144 per ton with a higher rate escalation for the first 3 years, or 2) \$150 per ton with an even escalation over future years. Representatives for the Public Participants chose \$150 per ton in an effort to stabilize rates in the future. The Material Delivery Agreements do not require additional approval, however, RWRMD staff has held several workshops with the Public Participants to share the project updates. Some of the jurisdictions are providing updates to their City Councils either through their subcommittees or the full Council.

To consider the effect of this increase on the residents and businesses receiving solid waste management services, it is important to note that, on average, 50-60% of a typical service bill is the cost to collect material from a customer, 30-40% for managing the waste collected, and 10% for government fees. As a result, an increase in the tipping fees for processing and disposing of material is diluted as the majority of the service cost is related to collecting material. An increase in the tipping fee from \$102 to \$150 per ton would result in an approximate increase of \$6 per month to the typical ratepayer. After this initial increase, increases to the ratepayer in subsequent years will be closer to \$1 per month.

Figure 4-2 summarizes the Base Case projected financial information for FY 2020 through FY 2039. The projected results are presented in Attachment A.

While the Projections include annual growth to Public Participant revenue of approximately 3.5% and an increase in expenses of 3%, the County's intention is to set the annual tip fee to achieve the minimum coverage ratio of 1.50 to meet the COPs repayment requirement.

Figure 4-2: Summary of Financial Results of Operations

Base Case						
Fiscal Year	Revenue (000's)	Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee ⁽¹⁾	Tip Fee Percentage Change
2020	\$ 41,684	\$ 27,274	\$ 14,410	3.82 X	\$ 150.00	
2021	\$ 41,804	\$ 28,751	\$ 13,052	1.80 X	\$ 155.00	3.3%
2022	\$ 46,088	\$ 28,775	\$ 17,313	1.79 X	\$ 160.00	3.2%
2023	\$ 46,894	\$ 30,365	\$ 16,528	1.65 X	\$ 166.00	3.8%
2024	\$ 48,398	\$ 31,750	\$ 16,648	1.60 X	\$ 172.00	3.6%
2025	\$ 49,907	\$ 32,875	\$ 17,032	1.59 X	\$ 178.00	3.5%
2026	\$ 51,422	\$ 34,031	\$ 17,391	1.57 X	\$ 184.00	3.4%
2027	\$ 52,782	\$ 35,220	\$ 17,562	1.54 X	\$ 190.00	3.3%
2028	\$ 54,562	\$ 36,442	\$ 18,120	1.53 X	\$ 197.00	3.7%
2029	\$ 56,347	\$ 37,699	\$ 18,648	1.53 X	\$ 204.00	3.6%
2030	\$ 58,138	\$ 38,991	\$ 19,147	1.52 X	\$ 211.00	3.4%
2031	\$ 59,935	\$ 40,174	\$ 19,762	1.52 X	\$ 218.00	3.3%
2032	\$ 61,922	\$ 41,540	\$ 20,381	1.51 X	\$ 226.00	3.7%
2033	\$ 63,914	\$ 42,945	\$ 20,969	1.50 X	\$ 234.00	3.5%
2034	\$ 66,096	\$ 44,390	\$ 21,706	1.51 X	\$ 243.00	3.8%
2035	\$ 68,356	\$ 45,876	\$ 22,480	1.51 X	\$ 252.00	3.7%
2036	\$ 70,622	\$ 47,403	\$ 23,219	1.51 X	\$ 261.00	3.6%
2037	\$ 72,896	\$ 48,974	\$ 23,922	1.50 X	\$ 270.00	3.4%
2038	\$ 75,177	\$ 50,590	\$ 24,588	1.50 X	\$ 279.00	3.3%
2039	\$ 77,649	\$ 52,251	\$ 25,398	1.50 X	\$ 289.00	3.6%

4.2 Key Assumptions and Support

4.2.1 Projected Material Volumes and Composition

The County projects material volumes to be delivered as shown in Figure 4-3. Once the TRRP commences operations (Post-TRRP), franchised volumes are projected to be 68% of the total material stream and self-haul and other sources are projected to be 32% of the total material stream.

Figure 4-3: Projected TRRP Material Volumes and Rates

MATERIAL SOURCE	SOUTH COAST RECYCLING AND TRANSFER STATION TONS	SANTA YNEZ RECYCLING AND TRANSFER STATION TONS	TAJIGUAS LANDFILL TONS	TOTAL TONS	% of TOTAL TONS	RATE	TOTAL 2021 REVENUE	% of TOTAL REVENUE
Public Participants / Buellton								
MSW - Franchised (Flow Agreement)								
City of Santa Barbara Franchise			60,463	60,463	19%	\$ 155.00	\$ 9,371,765	24%
City of Goleta Franchise			22,074	22,074	7%	\$ 155.00	\$ 3,421,470	9%
Unincorporated Franchise			36,933	36,933	12%	\$ 155.00	\$ 5,724,615	15%
City of Buellton Franchise			4,064	4,064	1%	\$ 155.00	\$ 629,920	2%
City of Solvang Franchise			3,632	3,632	1%	\$ 155.00	\$ 562,960	1%
Recyclables			34,247	34,247	11%	\$ 155.00	\$ 5,308,285	14%
Food Waste			4,304	4,304	1%	\$ 155.00	\$ 667,120	2%
Other Agencies			6,000	6,000	2%	\$ 155.00	\$ 930,000	2%
Subtotal Public Participant / Buelton	-	-	171,717	171,717	54%		\$ 26,616,135	68%
Transfer Station Self-Haul								
Self-Haul	12,000	7,000		19,000	6%	\$ 104.00	\$ 1,976,000	5%
Subtotal Transfer Station Self-Haul	12,000	7,000	-	19,000	6%		\$ 1,976,000	5%
Total Public Participants / Buellton / Self-Haul	12,000	7,000	171,717	190,717	60%		\$ 28,592,135	73%
MSW - Non-Franchised Contract								
MarBorg Contract			52,291	52,291	16%	\$ 104.00	\$ 5,438,264	14%
Total Contract			52,291	52,291	16%		\$ 5,438,264	14%
Other Material - Non-TRRP								
Franchised Waste	7,000	731		7,731	2%	\$ 155.00	\$ 1,198,305	3%
Hard To Handle	4,698	5,897		10,595	3%	\$ 116.00	\$ 1,229,020	3%
C & D Materials	1,263	328		1,591	0%	\$ 84.00	\$ 133,644	0%
Self Haul Direct			3,126	3,126	1%	\$ 155.00	\$ 484,530	1%
Green/Wood Waste - Franchised			37,764	37,764	12%	\$ 45.00	\$ 1,699,380	4%
Dirt Tailings for ADC			15,000	15,000	5%	\$ 20.00	\$ 300,000	1%
Metal	145	52		197	0%	\$ 10.00	\$ 1,970	0%
Subtotal Other Material - Non-TRRP	13,106	7,008	55,890	76,004	24%		\$ 5,046,849	13%
Grand Total	25,106	14,008	279,898	319,012	100%		\$ 39,077,248	100%

The County’s projections are consistent with historical figures. Franchised volumes have typically exceeded 60% of the total material delivered to Tajiguas Landfill as shown in Figure 4-4.

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Figure 4-4: Summary Historical Franchised Vs. Non-Franchised Material

Franchised (MSW, Recycling, Organic, Other)	FY 2013	% of Total	FY 2014	% of Total	FY 2015	% of Total	FY 2016	% of Total	FY 2017	% of Total
County	58,378	21%	56,169	19%	55,402	19%	56,534	18%	63,545	20%
Santa Barbara	85,044	30%	84,792	29%	84,804	29%	85,551	28%	86,202	27%
Goleta	30,356	11%	29,647	10%	30,118	10%	31,483	10%	32,678	10%
Buellton	5,057	2%	5,121	2%	5,160	2%	5,327	2%	5,709	2%
Solvang	4,332	2%	4,168	1%	4,291	1%	4,344	1%	4,082	1%
Other	6,348	2%	6,599	2%	5,507	2%	5,992	2%	6,158	2%
Subtotal	189,515	67%	186,496	64%	185,282	64%	189,231	61%	198,373	63%
Non-Franchised (MSW, Recycling, Organic, Other)										
County	17,182	6%	18,501	6%	19,133	7%	22,565	7%	22,295	7%
Santa Barbara	23,121	8%	25,916	9%	26,841	9%	32,477	10%	29,321	9%
Goleta	8,324	3%	9,268	3%	9,812	3%	12,211	4%	10,916	3%
Buellton	1,265	0%	1,493	1%	1,578	1%	1,987	1%	1,792	1%
Solvang	746	0%	702	0%	701	0%	848	0%	887	0%
Other	44,587	16%	49,332	17%	45,138	16%	50,480	16%	53,224	17%
Subtotal	95,224	33%	105,213	36%	103,203	36%	120,568	39%	118,435	37%
MSW Total	284,739	100%	291,709	100%	288,485	100%	309,798	100%	316,808	100%

The County's Projections assume no change in material volume or composition for FY 2020 through FY 2039. Total volumes have changed the last 4 years by 2.45% in FY 2014 over FY 2013, (-1.11%) in FY 2015 over FY 2014, 7.39% in FY 2016 over FY 2015, and 2.26% in FY 2017 over FY 2016.

Figure 4-3 presents projected Post-TRRP tonnage based on the Delivery Agreements with the Public Participants, MarBorg, and detailed waste stream allocations. Figure 4-4 provides a historical summary of total franchised vs. non-franchised tonnage and by jurisdiction of origin. (Figures 2-8 through 2-11 also present historical figures in this manner.)

Figure 4-5 presents a reconciliation from the most recently completed year, FY 2017, to the commencement of operations. Total tonnage is projected to increase by about 2,200 tons as shown.

Figure 4-5: Tonnage Reconciliation

Tonnage Reconciliation	FY 2017 Tons	Projected Tons	Change	Explanation
MSW Franchised	122,587	127,166	4,579	Increase franchised tonnage processed at MarBorg Facilities that will be under contract and processed at TRRP.
MSW - SCRTS and SYRTS	19,161	19,000	(161)	Nominal Variance.
MSW - MarBorg and Self Haul	64,316	81,531	17,215	Increase in non-franchised tonnage processed at MarBorg facilities that will be under contract and processed at TRRP for 8,500 tons and 10,000 tons currently classified as ADC material.
Recyclables	33,215	34,247	1,032	Nominal Variance.
Organics	52,511	42,068	(10,443)	Higher greenwaste tons than projected. Low projection is retained as a conservative measure to reduce downside risk.
Dirt Tailings for ADC	25,017	15,000	(10,017)	Reduced need for ADC after commencement of TRRP due to reduction in disposal tonnage at Tajiguas Landfill.
Total Tons	316,808	319,012	2,204	

4.2.2 Historical Operating Revenues and Expenses

Historical operating revenues and expenses for FY 2013 through FY 2018, based on current facility operations, are presented in Figure 4-6. The historical results were obtained from the County's CAFRs.

The information in the CAFRs set forth only total revenues (both operating and non-operating revenue). Operating revenues include tip fees from refuse and green-waste, recyclable sales, energy sales, HHW fees, and other program (e.g., franchise fees for unincorporated areas and contracted services for other cities) fees revenue. Non-operating revenues include rental income, State revenue, gain or loss on asset sales and other county programs and fees.

Figure 4-6: Historical Operating Revenues and Expenses

Fiscal Year Ending June 30, In 000's	Historical ⁽¹⁾					
	2013	2014	2015	2016	2017	2018
Operating Revenue	22,381	23,440	23,184	24,617 ⁽³⁾	26,053 ⁽³⁾	30,721
Non-Operating Revenues	1,413	1,265	1,030	1,246	1,077	992
Total Revenues	23,794	24,705	24,214	25,863	27,130	31,713
Operating Expenses						
Salaries & Benefits	7,552	8,190	7,870	8,537	8,464	9,583
Services & Supplies	4,101	4,585	4,351	4,271	4,462	5,596
Contractual Services	5,782	5,591	5,067	6,429	11,328	5,329
Depreciation and Amortization	2,025	2,243	2,391	2,438	2,538	2,396
County Overhead Allocation	258	120	253	317	281	386
Closure/Post Closure	665	(565)	6,126 ⁽²⁾	725	1,982	1,018
Total Operating Expenses	20,383	20,164	26,058	22,717	29,055	24,308
Operating Income	3,411	4,541	(1,844)	3,146	(1,925)	7,405

⁽¹⁾ From County Comprehensive Annual Financial Reports. Excludes Interest Expense.

⁽²⁾ In 2015, the County recognized charge of \$5,998K for under funded closure liability.

⁽³⁾ In 2018, the County restated the Resource Recovery fund's financial statements to recognize other operating revenues of \$1,361K in FY 2016 and \$924K in FY 2017. These adjustments are not reflected in Figure 4-6 but would increase total revenues and operating income for FY 2016 and FY 2017.

4.2.3 Projected Operating Revenues and Expenses and Debt Service Coverage Ratios

Attachment A shows the County's projected operating results for FY 2020 through FY 2039. This period includes the 20-year repayment period on the COPs beginning in FY 2019. Based on the information provided, the County expects to achieve debt service coverage ratios that meet or exceed 1.50 times debt service for each year through FY 2039.

4.2.4 Summary of Other Significant Assumptions and Support

The County's expected financial results of operations is presented in Attachment A.

The Projections in Attachment A were provided by the County and based on:

- The County's CAFRs from FY 2013 through FY 2017;
- The County's preliminary operating results for FY 2018 (final audited results were not available when the County prepared its model);
- The County's budget forecast for FY 2019;
- Commencement of the new MRF, ADF, and CMU as of the second half of FY 2021; and,

- COP repayment starting in FY 2019 as scheduled:
 - Principal and Interest payment in FY 2019;
 - Interest only payments in FY 2020 and FY 2021; and,
 - Principal and interest payments from FY 2022 through FY 2039.

The projection of revenues and expenses is presented in two subsections below:

- Revenues for current and expected operations; and,
- Expenses for current and expected operations.

Revenues

The primary source of revenue is expected to be from the tip fees charged on all inbound material to the facility. Tip fee revenue is projected to be approximately 90% of the total revenue in the Base Case (ranging from 82% in 2020 to 91% by 2039). The remaining 10% of revenue is from non-operating revenues. Based on the last 6 years of financial performance, through FY 2018, tip fee revenues increased by a cumulative average growth rate of 6.4% annually.

Tip Fees

The Projections prepared by the County assume a starting rate (FY 2019) of \$102 per ton for the Franchised Public participants and the materials MarBorg collects in Buellton and \$98 per ton for the MarBorg and self-haul volumes. The second year rate (FY 2020) is \$150 per ton for the franchised Public Participants and \$101 per ton for the MarBorg and self-haul volumes. Thereafter, the rates are increased by approximately 3.5% for the Public Participants and approximately 3% for MarBorg and self-haul in order for the County to maintain not less than the required debt service coverage ratio throughout the COP repayment period ending in FY 2039. Figure 4-7 presents the County's projected tip fees for the franchised, MarBorg, and self-haul Public Participants.

Figure 4-7: Projected Tip Fees

Fiscal Year	Public Participants		Self-Haul	
	Rate	Percentage Change	Rate	Percentage Change
2019	\$ 102.00		\$ 98.00	
2020	\$ 150.00	47.1%	\$ 101.00	3.1%
2021	\$ 155.00	3.3%	\$ 104.00	3.0%
2022	\$ 160.00	3.2%	\$ 107.00	2.9%
2023	\$ 166.00	3.8%	\$ 110.00	2.8%
2024	\$ 172.00	3.6%	\$ 113.00	2.7%
2025	\$ 178.00	3.5%	\$ 116.00	2.7%
2026	\$ 184.00	3.4%	\$ 119.00	2.6%
2027	\$ 190.00	3.3%	\$ 123.00	3.4%
2028	\$ 197.00	3.7%	\$ 127.00	3.3%
2029	\$ 204.00	3.6%	\$ 131.00	3.1%
2030	\$ 211.00	3.4%	\$ 135.00	3.1%
2031	\$ 218.00	3.3%	\$ 139.00	3.0%
2032	\$ 226.00	3.7%	\$ 143.00	2.9%
2033	\$ 234.00	3.5%	\$ 147.00	2.8%
2034	\$ 243.00	3.8%	\$ 151.00	2.7%
2035	\$ 252.00	3.7%	\$ 156.00	3.3%
2036	\$ 261.00	3.6%	\$ 161.00	3.2%
2037	\$ 270.00	3.4%	\$ 166.00	3.1%
2038	\$ 279.00	3.3%	\$ 171.00	3.0%
2039	\$ 289.00	3.6%	\$ 176.00	2.9%

While the Projections include annual growth to revenue of approximately 3.5% for the Public Participants, the County's intention is to set the rate annually to achieve the minimum coverage ratio of 1.50 to meet the COPs repayment requirement.

Green-Waste Fees

The County is projecting green-waste tip fees to increase by 3.0% each year through 2039.

Other Operating Revenues

Other operating revenues are projected to increase at rates varying from 0.0% to 3.0% through 2039.

Other Revenues

Other revenues are projected to remain flat through 2039 except for 2020 when the County expects to receive a CalRecycle grant of \$3.2 million and 2022 when the County will begin receiving revenue from an SCE rebate.

Expenses

The County's 6-year (ending FY 2018) historical growth rate for operating expenses (excluding non-cash charges for depreciation and amortization and closure/post closure charges) was 3.3%. This included an

unusual increase in contract services in FY 2017 for approximately \$5.0 million that did not reoccur in FY 2018. When excluding this one-time charge, the historical growth rate averages 2.7%. The TRRP's expenses are projected to grow at an annual rate of 3.0%.

Following commencement of TRRP operations, the County projects non-TRRP related operating expenses (excluding non-cash charges for depreciation and amortization and closure/post closure charges) to decrease by 40% or \$5.0 million in FY 2021 over projected FY 2020 expenses. This decrease is attributable to labor, operational, and subcontractor expenses that are expected to be eliminated once the TRRP begins operations. This decrease is offset by the payment of \$2.7 million to MSB for the operating cost to operate the TRRP and a one-time contract buyout cost of \$2.5 million relating to landfill gas operations. Thereafter, costs are projected to increase by 3% per year through FY 2039.

4.3 Sensitivity Analyses

The County staff's projected operating information in Attachment A serves as the "Base Case" for the sensitivity analysis. The sensitivity analysis is provided to evaluate how changes in some of the assumed values for the Base Case may affect the facility tipping fee and the associated impacts on self-haul customers and franchised ratepayers.

We have prepared, four "downside" scenarios:

1. Reduce recycling commodity prices;
2. Elimination of all recycling commodity revenue except for California Redemption Value (CRV);
3. Reduced Self Haul Tonnage; and,
4. Reduced Volume Through the ADF.

The sensitivity analyses present the effects of the four assumptions to the Base Case projected financial results of operations. Each scenario is evaluated independently to the Base Case Projections.

4.3.1 Sensitivity Analysis: 20% Reduced Recyclable Prices

Commodity prices in the Base Case are reflective of actual average pricing for June 2018, which factors in the impact of lower prices driven by policy changes in China. The County is projecting recycling commodity revenue to remain flat from FY 2020 through FY 2039

Recyclable materials commodity prices regularly go through periods of fluctuation in pricing supply and demand. Prices tend to vary based on the quality of material and as noted, recent policy changes in China have placed severe restrictions on acceptable levels of contamination for materials it imports that has resulted in lower commodity prices.

Figure 4-8 illustrates the decline in actual commodity prices for the County's commingled material from Gold Coast for June 2018 used in the Base Case and compared to the 12-month average ending in June 2018, and to the 5 year and 10 year averages ending June 2018. While it would be reasonable to estimate that the market will experience future fluctuations, the current market conditions have many concerned that the current depressed prices could be a long term shift and a "new normal" in the recycling industry.

Figure 4-8: Comparison of Historical Commodity Averages

Commodity	1 - Month Average June 2018 (Base Case)	12-Month Average through June 2018	Percentage Change to Base Case	5-Year Average through June 2018	Percentage Change to Base Case	10-Year Average through June 2018	Percentage Change to Base Case
Cardboard	\$ 94.98	\$ 132.54	-28.3%	\$ 147.95	-35.8%	\$ 148.10	-35.9%
Newspaper	\$ 25.00	\$ 39.31	-36.4%	\$ 86.24	-71.0%	\$ 106.07	-76.4%
HDPE Color	\$ 267.89	\$ 260.73	2.7%	\$ 375.54	-28.7%	\$ 442.26	-39.4%
HDPE Natural	\$ 696.32	\$ 514.99	35.2%	\$ 596.36	16.8%	\$ 639.24	8.9%
PETE	\$ 1,355.00	\$ 1,309.28	3.5%	\$ 1,442.97	-6.1%	\$ 1,656.16	-18.2%
Scrap Metal	\$ 130.00	\$ 119.17	9.1%	\$ 85.98	51.2%	\$ 103.84	25.2%
Aluminum Cans	\$ 4,320.00	\$ 4,133.33	4.5%	\$ 3,951.17	9.3%	\$ 3,979.45	8.6%
Mixed Paper	\$ 25.00	\$ 39.31	-36.4%	\$ 86.05	-70.9%	\$ 99.61	-74.9%
Mixed Glass	\$ 48.12	\$ 52.29	-8.0%	\$ 68.45	-29.7%	\$ 106.78	-54.9%
Scrap Plastic	\$ 37.50	\$ 36.88	1.7%	\$ 87.46	-57.1%	\$ 90.04	-58.4%

Reducing the County’s assumed value of the recyclables revenue from the current pricing results in the financial results of operations as summarized in Figure 4-9.

As shown in Attachment B (Reduced Recycling Commodity Prices), an additional 20% reduction in prices for recycling commodities will require higher tip fees payable by the Public Participants in FY 2024 through FY 2039 pursuant to the Material Delivery Agreements in order to achieve the required 1.50 debt service coverage. Additionally, in the MSB Agreement under Operating Expenses (Contractual Services MRF/AD in Attachment B), the County is obligated to increase the rate paid to MSB when commodity revenue decreases.

Figure 4-9: Sensitivity Analysis: Impact of 20% Reduced Recyclable Prices

Fiscal Year	Revenue (000's)	Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee ⁽¹⁾
2020	\$ 41,684	\$ 27,274	\$ 14,410	3.82 X	\$ 150.00
2021	\$ 41,804	\$ 29,375	\$ 12,429	1.72 X	\$ 155.00
2022	\$ 46,088	\$ 30,022	\$ 16,067	1.66 X	\$ 160.00
2023	\$ 46,894	\$ 31,612	\$ 15,282	1.52 X	\$ 166.00
2024	\$ 48,557	\$ 32,997	\$ 15,560	1.50 X	\$ 172.87
2025	\$ 50,187	\$ 34,121	\$ 16,066	1.50 X	\$ 179.54
2026	\$ 51,858	\$ 35,277	\$ 16,581	1.50 X	\$ 186.39
2027	\$ 53,586	\$ 36,466	\$ 17,119	1.50 X	\$ 194.40
2028	\$ 55,411	\$ 37,689	\$ 17,723	1.50 X	\$ 201.65
2029	\$ 57,280	\$ 38,946	\$ 18,334	1.50 X	\$ 209.11
2030	\$ 59,182	\$ 40,238	\$ 18,944	1.50 X	\$ 216.72
2031	\$ 60,969	\$ 41,420	\$ 19,549	1.50 X	\$ 223.66
2032	\$ 63,014	\$ 42,787	\$ 20,227	1.50 X	\$ 231.98
2033	\$ 65,105	\$ 44,192	\$ 20,913	1.50 X	\$ 240.52
2034	\$ 67,225	\$ 45,637	\$ 21,588	1.50 X	\$ 249.18
2035	\$ 69,423	\$ 47,122	\$ 22,301	1.50 X	\$ 257.85
2036	\$ 71,726	\$ 48,650	\$ 23,075	1.50 X	\$ 267.04
2037	\$ 74,074	\$ 50,221	\$ 23,853	1.50 X	\$ 276.45
2038	\$ 76,472	\$ 51,836	\$ 24,636	1.50 X	\$ 286.09
2039	\$ 78,980	\$ 53,497	\$ 25,483	1.50 X	\$ 296.29

⁽¹⁾ For Public Participants / Franchised Haulers

As shown in Figure 4-10 below, the tip fee would increase from FY 2024 through FY 2039 over the Base Case in order to achieve the required 1.50 debt service coverage ratio.

Figure 4-10: Comparison of Reduced Recycling Prices Scenario to Base Case

Fiscal Year	Base Case		20% Decrease in Commodity Revenue		% Change in Tip Fee
	Debt Service Coverage	Tip Fee	Debt Service Coverage	Tip Fee ⁽¹⁾	
2020	3.82 X	\$ 150.00	3.82 X	\$ 150.00	0.0%
2021	1.80 X	\$ 155.00	1.72 X	\$ 155.00	0.0%
2022	1.79 X	\$ 160.00	1.66 X	\$ 160.00	0.0%
2023	1.65 X	\$ 166.00	1.52 X	\$ 166.00	0.0%
2024	1.60 X	\$ 172.00	1.50 X	\$ 172.87	0.5%
2025	1.59 X	\$ 178.00	1.50 X	\$ 179.54	0.9%
2026	1.57 X	\$ 184.00	1.50 X	\$ 186.39	1.3%
2027	1.54 X	\$ 190.00	1.50 X	\$ 194.40	2.3%
2028	1.53 X	\$ 197.00	1.50 X	\$ 201.65	2.4%
2029	1.53 X	\$ 204.00	1.50 X	\$ 209.11	2.5%
2030	1.52 X	\$ 211.00	1.50 X	\$ 216.72	2.7%
2031	1.52 X	\$ 218.00	1.50 X	\$ 223.66	2.6%
2032	1.51 X	\$ 226.00	1.50 X	\$ 231.98	2.6%
2033	1.50 X	\$ 234.00	1.50 X	\$ 240.52	2.8%
2034	1.51 X	\$ 243.00	1.50 X	\$ 249.18	2.5%
2035	1.51 X	\$ 252.00	1.50 X	\$ 257.85	2.3%
2036	1.51 X	\$ 261.00	1.50 X	\$ 267.04	2.3%
2037	1.50 X	\$ 270.00	1.50 X	\$ 276.45	2.4%
2038	1.50 X	\$ 279.00	1.50 X	\$ 286.09	2.5%
2039	1.50 X	\$ 289.00	1.50 X	\$ 296.29	2.5%

⁽¹⁾ For Public Participants / Franchised Haulers

4.3.2 Sensitivity Analysis: Elimination of Recycling Commodity Revenue, Except CRV

The Base Case assumes recycling commodity revenue remains the same as the June 2018 average for the 20-year COPs repayment schedule. As shown in Figure 4-8 above, commodity prices through June 2018 are lower than the previous 1 year average, 5 year average, and 10 year average.

Given the downward trend in recent years and uncertainties about the world economy and future demand, this sensitivity presents a “worst-case” scenario eliminating all commodity revenue except that covered in the *California Beverage Container Recycling and Litter Reduction Act*, often referred to as the “Bottle Bill”. Under this program, the State collects a deposit on certain containers and pays redemption and processing fees to processors when the materials are recycled. Figure 4-11 summarizes the impact to the rate, if all Non-CRV revenue is eliminated.

As shown in Attachment C (Elimination of Commodity Revenue, Except CRV), losing all recycling revenue except for CRV revenue will require higher tip fees payable by the Public Participants FY 2022 through FY

2039 pursuant to the Material Delivery Agreements in order to achieve the required 1.50 debt service coverage. Additionally, in the MSB Agreement under Operating Expenses (Contractual Services MRF/AD in Attachment B), the County is obligated to increase the rate paid to MSB when commodity revenue decreases.

Figure 4-11: Sensitivity Analysis Eliminating Non-CRV Commodity Revenue

Fiscal Year	Revenue (000's)	Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee ⁽¹⁾
2020	\$ 41,684	\$ 27,274	\$ 14,410	3.82 X	\$ 150.00
2021	\$ 41,804	\$ 30,416	\$ 11,388	1.57 X	\$ 155.00
2022	\$ 46,640	\$ 32,104	\$ 14,537	1.50 X	\$ 163.02
2023	\$ 48,739	\$ 33,694	\$ 15,045	1.50 X	\$ 176.11
2024	\$ 50,638	\$ 35,079	\$ 15,560	1.50 X	\$ 184.27
2025	\$ 52,269	\$ 36,203	\$ 16,066	1.50 X	\$ 190.94
2026	\$ 53,940	\$ 37,359	\$ 16,581	1.50 X	\$ 197.80
2027	\$ 55,667	\$ 38,548	\$ 17,119	1.50 X	\$ 205.80
2028	\$ 57,493	\$ 39,771	\$ 17,723	1.50 X	\$ 213.06
2029	\$ 59,362	\$ 41,028	\$ 18,334	1.50 X	\$ 220.51
2030	\$ 61,264	\$ 42,320	\$ 18,944	1.50 X	\$ 228.12
2031	\$ 63,051	\$ 43,502	\$ 19,549	1.50 X	\$ 235.07
2032	\$ 65,096	\$ 44,869	\$ 20,227	1.50 X	\$ 243.38
2033	\$ 67,186	\$ 46,274	\$ 20,913	1.50 X	\$ 251.92
2034	\$ 69,307	\$ 47,719	\$ 21,588	1.50 X	\$ 260.59
2035	\$ 71,505	\$ 49,204	\$ 22,301	1.50 X	\$ 269.25
2036	\$ 73,807	\$ 50,732	\$ 23,075	1.50 X	\$ 278.45
2037	\$ 76,156	\$ 52,303	\$ 23,853	1.50 X	\$ 287.85
2038	\$ 78,554	\$ 53,918	\$ 24,636	1.50 X	\$ 297.50
2039	\$ 81,062	\$ 55,579	\$ 25,483	1.50 X	\$ 307.69

⁽¹⁾ For Public Participants / Franchised Haulers

As shown in Figure 4-12 below, the tip fee would increase from FY 2022 through FY 2039 over the Base Case in order to achieve the required 1.50 debt service coverage ratio.

Figure 4-12: Comparison of Eliminating Non-CRV Recycling Revenue to Base Case

Fiscal Year	Base Case		Eliminate Non-CRV Commodity Revenue		% Change in Tip Fee
	Debt Service Coverage	Tip Fee	Debt Service Coverage	Tip Fee ⁽¹⁾	
2020	3.82 X	\$ 150.00	3.82 X	\$ 150.00	0.0%
2021	1.80 X	\$ 155.00	1.57 X	\$ 155.00	0.0%
2022	1.79 X	\$ 160.00	1.50 X	\$ 163.02	1.9%
2023	1.65 X	\$ 166.00	1.50 X	\$ 176.11	6.1%
2024	1.60 X	\$ 172.00	1.50 X	\$ 184.27	7.1%
2025	1.59 X	\$ 178.00	1.50 X	\$ 190.94	7.3%
2026	1.57 X	\$ 184.00	1.50 X	\$ 197.80	7.5%
2027	1.54 X	\$ 190.00	1.50 X	\$ 205.80	8.3%
2028	1.53 X	\$ 197.00	1.50 X	\$ 213.06	8.2%
2029	1.53 X	\$ 204.00	1.50 X	\$ 220.51	8.1%
2030	1.52 X	\$ 211.00	1.50 X	\$ 228.12	8.1%
2031	1.52 X	\$ 218.00	1.50 X	\$ 235.07	7.8%
2032	1.51 X	\$ 226.00	1.50 X	\$ 243.38	7.7%
2033	1.50 X	\$ 234.00	1.50 X	\$ 251.92	7.7%
2034	1.51 X	\$ 243.00	1.50 X	\$ 260.59	7.2%
2035	1.51 X	\$ 252.00	1.50 X	\$ 269.25	6.8%
2036	1.51 X	\$ 261.00	1.50 X	\$ 278.45	6.7%
2037	1.50 X	\$ 270.00	1.50 X	\$ 287.85	6.6%
2038	1.50 X	\$ 279.00	1.50 X	\$ 297.50	6.6%
2039	1.50 X	\$ 289.00	1.50 X	\$ 307.69	6.5%

⁽¹⁾ For Public Participants / Franchised Haulers

4.3.3 Sensitivity Analysis: 19,000 TPY Reduced Self-Haul Tonnage

The County's revenue from tip fees is based on the assumption that self-haul tonnage (not subject to the Material Delivery Agreements or MarBorg's Disposal Agreement) will continue to be delivered to Tajiguas. The total tonnage not subject to the Material Delivery Agreements is 71,291 of which 52,291 tons comes from MarBorg, 12,000 tons comes from South Coast Recycling and Transfer Station non-franchised customers, and 7,000 tons comes from Santa Ynez Recycling and Transfer Station MSW self-haul customers (see Figure 4-3). MarBorg, as the MRF operator, has an incentive to bring material to the TRRP and has entered a Disposal Agreement with the County, but the other self-haulers do not have such a commitment. While current estimates of competitive costs of landfill disposal indicate that it may be more cost effective for customers to go to the Tajiguas Landfill, those estimates may be incorrect, and the actual comparison may be different. Figure 4-13 summarizes the impact of reducing the self-haul tonnage by the 19,000 tons annually that comes from self-haul customers other than MarBorg.

Figure 4-13: Sensitivity Analyses Reflecting 19,000 Fewer Tons per Year of Self Haul Material

Fiscal Year	Revenue (000's)	Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee ⁽¹⁾
2020	\$ 41,684	\$ 27,274	\$ 14,410	3.82 X	\$ 150.00
2021	\$ 39,828	\$ 28,751	\$ 11,076	1.53 X	\$ 155.00
2022	\$ 44,055	\$ 28,775	\$ 15,280	1.58 X	\$ 160.00
2023	\$ 45,410	\$ 30,365	\$ 15,045	1.50 X	\$ 169.32
2024	\$ 47,310	\$ 31,750	\$ 15,560	1.50 X	\$ 177.80
2025	\$ 48,941	\$ 32,875	\$ 16,066	1.50 X	\$ 184.78
2026	\$ 50,612	\$ 34,031	\$ 16,581	1.50 X	\$ 191.95
2027	\$ 52,339	\$ 35,220	\$ 17,119	1.50 X	\$ 200.37
2028	\$ 54,165	\$ 36,442	\$ 17,723	1.50 X	\$ 208.04
2029	\$ 56,033	\$ 37,699	\$ 18,334	1.50 X	\$ 215.91
2030	\$ 57,935	\$ 38,991	\$ 18,944	1.50 X	\$ 223.94
2031	\$ 59,722	\$ 40,174	\$ 19,549	1.50 X	\$ 231.30
2032	\$ 61,767	\$ 41,540	\$ 20,227	1.50 X	\$ 240.03
2033	\$ 63,858	\$ 42,945	\$ 20,913	1.50 X	\$ 248.99
2034	\$ 65,978	\$ 44,390	\$ 21,588	1.50 X	\$ 258.07
2035	\$ 68,177	\$ 45,876	\$ 22,301	1.50 X	\$ 267.26
2036	\$ 70,479	\$ 47,403	\$ 23,075	1.50 X	\$ 276.97
2037	\$ 72,827	\$ 48,974	\$ 23,853	1.50 X	\$ 286.90
2038	\$ 75,226	\$ 50,590	\$ 24,636	1.50 X	\$ 297.06
2039	\$ 77,733	\$ 52,251	\$ 25,483	1.50 X	\$ 307.78

⁽¹⁾ For Public Participants / Franchised Haulers

As shown in Figure 4-14 below, the Public Participant tip fee would increase from year FY 2023 through FY 2039 over the Base Case in order to achieve the required 1.50 debt service coverage ratio.

Figure 4-14: Comparison of Reduced Self-Haul to Base Case

Fiscal Year	Base Case		Reduce Self-Haul Volume		% Change in Tip Fee
	Debt Service Coverage	Tip Fee ⁽¹⁾	Debt Service Coverage	Tip Fee ⁽¹⁾	
2020	3.82 X	\$ 150.00	3.82 X	\$ 150.00	0.0%
2021	1.80 X	\$ 155.00	1.53 X	\$ 155.00	0.0%
2022	1.79 X	\$ 160.00	1.58 X	\$ 160.00	0.0%
2023	1.65 X	\$ 166.00	1.50 X	\$ 169.32	2.0%
2024	1.60 X	\$ 172.00	1.50 X	\$ 177.80	3.4%
2025	1.59 X	\$ 178.00	1.50 X	\$ 184.78	3.8%
2026	1.57 X	\$ 184.00	1.50 X	\$ 191.95	4.3%
2027	1.54 X	\$ 190.00	1.50 X	\$ 200.37	5.5%
2028	1.53 X	\$ 197.00	1.50 X	\$ 208.04	5.6%
2029	1.53 X	\$ 204.00	1.50 X	\$ 215.91	5.8%
2030	1.52 X	\$ 211.00	1.50 X	\$ 223.94	6.1%
2031	1.52 X	\$ 218.00	1.50 X	\$ 231.30	6.1%
2032	1.51 X	\$ 226.00	1.50 X	\$ 240.03	6.2%
2033	1.50 X	\$ 234.00	1.50 X	\$ 248.99	6.4%
2034	1.51 X	\$ 243.00	1.50 X	\$ 258.07	6.2%
2035	1.51 X	\$ 252.00	1.50 X	\$ 267.26	6.1%
2036	1.51 X	\$ 261.00	1.50 X	\$ 276.97	6.1%
2037	1.50 X	\$ 270.00	1.50 X	\$ 286.90	6.3%
2038	1.50 X	\$ 279.00	1.50 X	\$ 297.06	6.5%
2039	1.50 X	\$ 289.00	1.50 X	\$ 307.78	6.5%

⁽¹⁾ For Public Participants / Franchised Haulers

4.3.4 Sensitivity Analysis: 16,000 TPY Reduced Volume Through ADF

The Base Case assumes that annually 15,553 tons of MRF Residue from the processing of mixed MSW and CSSRM will be part of the feedstock of the ADF. The Bekon reference projects identified the material they received as SSOM. The Residue from the MRF has a higher amount of contamination and may result in excessive compost contamination making sale or disposition of the compost difficult or more expensive. As shown in Attachment E (Reduced Volume through ADF), the impact of reducing the volume of the material processed through the ADF is that revenues from the sale of electricity are reduced, which results in slightly higher payments from the County to MSB pursuant to the Waste Service Agreement shown under Operating Expenses (Contractual Services MRF/AD) and that a greater volume of material will need to be disposed in the Tajiguas Landfill. Figure 4-15 summarizes the impact of reducing the throughput to the ADF by this amount.

Figure 4-15: Sensitivity Analysis Reducing 16,000 TPY Through ADF

Fiscal Year	Revenue (000's)	Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee ⁽¹⁾
2020	\$ 41,684	\$ 27,274	\$ 14,410	3.82 X	\$ 150.00
2021	\$ 41,804	\$ 29,039	\$ 12,765	1.76 X	\$ 155.00
2022	\$ 46,088	\$ 29,350	\$ 16,738	1.73 X	\$ 160.00
2023	\$ 46,894	\$ 30,940	\$ 15,953	1.59 X	\$ 166.00
2024	\$ 48,398	\$ 32,325	\$ 16,072	1.55 X	\$ 172.00
2025	\$ 49,907	\$ 33,450	\$ 16,457	1.54 X	\$ 178.00
2026	\$ 51,422	\$ 34,606	\$ 16,816	1.52 X	\$ 184.00
2027	\$ 52,914	\$ 35,795	\$ 17,119	1.50 X	\$ 190.72
2028	\$ 54,740	\$ 37,017	\$ 17,723	1.50 X	\$ 197.98
2029	\$ 56,608	\$ 38,274	\$ 18,334	1.50 X	\$ 205.43
2030	\$ 58,510	\$ 39,566	\$ 18,944	1.50 X	\$ 213.04
2031	\$ 60,298	\$ 40,749	\$ 19,549	1.50 X	\$ 219.98
2032	\$ 62,342	\$ 42,115	\$ 20,227	1.50 X	\$ 228.30
2033	\$ 64,433	\$ 43,520	\$ 20,913	1.50 X	\$ 236.84
2034	\$ 66,553	\$ 44,965	\$ 21,588	1.50 X	\$ 245.51
2035	\$ 68,752	\$ 46,451	\$ 22,301	1.50 X	\$ 254.17
2036	\$ 71,054	\$ 47,979	\$ 23,075	1.50 X	\$ 263.36
2037	\$ 73,402	\$ 49,549	\$ 23,853	1.50 X	\$ 272.77
2038	\$ 75,801	\$ 51,165	\$ 24,636	1.50 X	\$ 282.41
2039	\$ 78,308	\$ 52,826	\$ 25,483	1.50 X	\$ 292.61

⁽¹⁾ For Public Participants / Franchised Haulers

As shown in Figure 4-16 below, the tip fee would need to increase from FY 2027 through FY 2039 over the Base Case in order to achieve the required 1.50 debt service coverage ratio.

Figure 4-16: Comparison of Reducing ADF Volume to Base Case

Fiscal Year	Base Case		Eliminate Paper Fines from AD Facility		% Change in Tip Fee
	Debt Service Coverage	Tip Fee ⁽¹⁾	Debt Service Coverage	Tip Fee ⁽¹⁾	
2020	3.82 X	\$ 150.00	3.82 X	\$ 150.00	0.0%
2021	1.80 X	\$ 155.00	1.76 X	\$ 155.00	0.0%
2022	1.79 X	\$ 160.00	1.73 X	\$ 160.00	0.0%
2023	1.65 X	\$ 166.00	1.59 X	\$ 166.00	0.0%
2024	1.60 X	\$ 172.00	1.55 X	\$ 172.00	0.0%
2025	1.59 X	\$ 178.00	1.54 X	\$ 178.00	0.0%
2026	1.57 X	\$ 184.00	1.52 X	\$ 184.00	0.0%
2027	1.54 X	\$ 190.00	1.50 X	\$ 190.72	0.4%
2028	1.53 X	\$ 197.00	1.50 X	\$ 197.98	0.5%
2029	1.53 X	\$ 204.00	1.50 X	\$ 205.43	0.7%
2030	1.52 X	\$ 211.00	1.50 X	\$ 213.04	1.0%
2031	1.52 X	\$ 218.00	1.50 X	\$ 219.98	0.9%
2032	1.51 X	\$ 226.00	1.50 X	\$ 228.30	1.0%
2033	1.50 X	\$ 234.00	1.50 X	\$ 236.84	1.2%
2034	1.51 X	\$ 243.00	1.50 X	\$ 245.51	1.0%
2035	1.51 X	\$ 252.00	1.50 X	\$ 254.17	0.9%
2036	1.51 X	\$ 261.00	1.50 X	\$ 263.36	0.9%
2037	1.50 X	\$ 270.00	1.50 X	\$ 272.77	1.0%
2038	1.50 X	\$ 279.00	1.50 X	\$ 282.41	1.2%
2039	1.50 X	\$ 289.00	1.50 X	\$ 292.61	1.3%

⁽¹⁾ For Public Participants / Franchised Haulers

SECTION 5.0 CONCLUSION

5.1 Consultant's Conclusions

On the basis of our review and analysis and the assumptions set forth in this Feasibility Report, we conclude:

1. The County's estimates of future capital and operating costs and revenues for the TRRP appear reasonable in light of the County's independent consultant's review of the MRF, the estimates of MSB and its subcontractors, and the Waste Service Agreement with MSB for the construction and operation of the facilities based on these estimates.
2. The County's assumption that the TRRP will be placed in service by January 2021 appears reasonable in light of the status of necessary permits and the Waste Service Agreement with MSB.
3. Based on DEI's evaluation, we believe the assumptions related to the efficacy of the MRF to perform in accordance with the Projections is reasonable and, based on Bekon's past experience and the determination made by the County after its review, we believe the efficacy of the ADF to perform in accordance with the Projections is reasonable.
4. We believe the waste delivery assumptions in the County's Projections are reasonable based on:
 - Historical quantities of waste, the modest 0.7% increase in tonnage between 2017 and the commencement of operations, and the assumption of no increase in quantity during the period of the County's Projections;
 - The Material Delivery Agreements that will secure the projected waste streams from the Public Participants;
 - The Material Delivery Agreement with MarBorg for materials generated in the City of Buellton and a disposal agreement with MarBorg that will secure the projected processed self-haul waste from MarBorg; and,
 - The County's expectation is that it will set the remaining self-haul rates to be competitive with the market.
5. The County's estimates of future operating costs and income appear reasonable in light of historical performance and its assumptions regarding future conditions. However, there will usually be differences between projected and actual results and this difference can be material. As illustrations of these differences, we have included in this Feasibility Report alternative financial results based on different assumptions regarding key factors.
6. For the Base Case Projected Operating Results, annual inflation-adjusted tip fees, revenues from product sales and miscellaneous income as presented in this Feasibility Report are estimated to be adequate to pay annual operating expenses and achieve the following debt service coverage ratios during the term of the financing (see Figure 5-1).

Figure 5-1: Reasonable Debt Service Coverage Ratios

Base Case						
Fiscal Year	Revenue (000's)	Expense (000's)	Net Revenue (000's)	Debt Service Coverage	Tip Fee ⁽¹⁾	Tip Fee Percentage Change
2020	\$ 41,684	\$ 27,274	\$ 14,410	3.82 X	\$ 150.00	
2021	\$ 41,804	\$ 28,751	\$ 13,052	1.80 X	\$ 155.00	3.3%
2022	\$ 46,088	\$ 28,775	\$ 17,313	1.79 X	\$ 160.00	3.2%
2023	\$ 46,894	\$ 30,365	\$ 16,528	1.65 X	\$ 166.00	3.8%
2024	\$ 48,398	\$ 31,750	\$ 16,648	1.60 X	\$ 172.00	3.6%
2025	\$ 49,907	\$ 32,875	\$ 17,032	1.59 X	\$ 178.00	3.5%
2026	\$ 51,422	\$ 34,031	\$ 17,391	1.57 X	\$ 184.00	3.4%
2027	\$ 52,782	\$ 35,220	\$ 17,562	1.54 X	\$ 190.00	3.3%
2028	\$ 54,562	\$ 36,442	\$ 18,120	1.53 X	\$ 197.00	3.7%
2029	\$ 56,347	\$ 37,699	\$ 18,648	1.53 X	\$ 204.00	3.6%
2030	\$ 58,138	\$ 38,991	\$ 19,147	1.52 X	\$ 211.00	3.4%
2031	\$ 59,935	\$ 40,174	\$ 19,762	1.52 X	\$ 218.00	3.3%
2032	\$ 61,922	\$ 41,540	\$ 20,381	1.51 X	\$ 226.00	3.7%
2033	\$ 63,914	\$ 42,945	\$ 20,969	1.50 X	\$ 234.00	3.5%
2034	\$ 66,096	\$ 44,390	\$ 21,706	1.51 X	\$ 243.00	3.8%
2035	\$ 68,356	\$ 45,876	\$ 22,480	1.51 X	\$ 252.00	3.7%
2036	\$ 70,622	\$ 47,403	\$ 23,219	1.51 X	\$ 261.00	3.6%
2037	\$ 72,896	\$ 48,974	\$ 23,922	1.50 X	\$ 270.00	3.4%
2038	\$ 75,177	\$ 50,590	\$ 24,588	1.50 X	\$ 279.00	3.3%
2039	\$ 77,649	\$ 52,251	\$ 25,398	1.50 X	\$ 289.00	3.6%

⁽¹⁾ For Public Participants / Franchised Haulers

While we believe the base model is reasonable, it contains certain assumed values for key factors and alternative values may also be reasonable. For this reason, we performed an analysis to determine the impact on the debt service coverage ratio if assumptions regarding these key factors were to change and the subsequent effect on disposal rates to the Public Participants.

Figure 5-2 shows the change in debt service coverage and the corresponding rate under each scenario described in Section 4.0 Projected Financial Results of Operations. The County's COPs financing documents require a debt service coverage ratio of at least 1.50 times operating income. While the Projections include annual growth to revenue of approximately 3.5% and increase to expenses of 3%, the County's intention is to set the annual tip fee to achieve the minimum coverage ratio of 1.50 to meet the COPs repayment requirement.

Figure 5-2: Change in Coverage Ratio and Rate with All Sensitivity Scenarios

Fiscal Year	Base Case		20 % Decrease in Commodity Revenue		Eliminate Non-CRV Commodity Revenue		Reduced Self-Haul Volume		Eliminate MRF Residue from AD Facility	
	Debt Service Coverage	Tip Fee ⁽¹⁾	Debt Service Coverage	Tip Fee ⁽¹⁾	Debt Service Coverage	Tip Fee ⁽¹⁾	Debt Service Coverage	Tip Fee ⁽¹⁾	Debt Service Coverage	Tip Fee ⁽¹⁾
2020	3.82 X	\$ 150.00	3.82 X	\$ 150.00	3.82 X	\$ 150.00	3.82 X	\$ 150.00	3.82 X	\$ 150.00
2021	1.80 X	\$ 155.00	1.72 X	\$ 155.00	1.57 X	\$ 155.00	1.53 X	\$ 155.00	1.76 X	\$ 155.00
2022	1.79 X	\$ 160.00	1.66 X	\$ 160.00	1.50 X	\$ 163.02	1.58 X	\$ 160.00	1.73 X	\$ 160.00
2023	1.65 X	\$ 166.00	1.52 X	\$ 166.00	1.50 X	\$ 176.11	1.50 X	\$ 169.32	1.59 X	\$ 166.00
2024	1.60 X	\$ 172.00	1.50 X	\$ 172.87	1.50 X	\$ 184.27	1.50 X	\$ 177.80	1.55 X	\$ 172.00
2025	1.59 X	\$ 178.00	1.50 X	\$ 179.54	1.50 X	\$ 190.94	1.50 X	\$ 184.78	1.54 X	\$ 178.00
2026	1.57 X	\$ 184.00	1.50 X	\$ 186.39	1.50 X	\$ 197.80	1.50 X	\$ 191.95	1.52 X	\$ 184.00
2027	1.54 X	\$ 190.00	1.50 X	\$ 194.40	1.50 X	\$ 205.80	1.50 X	\$ 200.37	1.50 X	\$ 190.72
2028	1.53 X	\$ 197.00	1.50 X	\$ 201.65	1.50 X	\$ 213.06	1.50 X	\$ 208.04	1.50 X	\$ 197.98
2029	1.53 X	\$ 204.00	1.50 X	\$ 209.11	1.50 X	\$ 220.51	1.50 X	\$ 215.91	1.50 X	\$ 205.43
2030	1.52 X	\$ 211.00	1.50 X	\$ 216.72	1.50 X	\$ 228.12	1.50 X	\$ 223.94	1.50 X	\$ 213.04
2031	1.52 X	\$ 218.00	1.50 X	\$ 223.66	1.50 X	\$ 235.07	1.50 X	\$ 231.30	1.50 X	\$ 219.98
2032	1.51 X	\$ 226.00	1.50 X	\$ 231.98	1.50 X	\$ 243.38	1.50 X	\$ 240.03	1.50 X	\$ 228.30
2033	1.50 X	\$ 234.00	1.50 X	\$ 240.52	1.50 X	\$ 251.92	1.50 X	\$ 248.99	1.50 X	\$ 236.84
2034	1.51 X	\$ 243.00	1.50 X	\$ 249.18	1.50 X	\$ 260.59	1.50 X	\$ 258.07	1.50 X	\$ 245.51
2035	1.51 X	\$ 252.00	1.50 X	\$ 257.85	1.50 X	\$ 269.25	1.50 X	\$ 267.26	1.50 X	\$ 254.17
2036	1.51 X	\$ 261.00	1.50 X	\$ 267.04	1.50 X	\$ 278.45	1.50 X	\$ 276.97	1.50 X	\$ 263.36
2037	1.50 X	\$ 270.00	1.50 X	\$ 276.45	1.50 X	\$ 287.85	1.50 X	\$ 286.90	1.50 X	\$ 272.77
2038	1.50 X	\$ 279.00	1.50 X	\$ 286.09	1.50 X	\$ 297.50	1.50 X	\$ 297.06	1.50 X	\$ 282.41
2039	1.50 X	\$ 289.00	1.50 X	\$ 296.29	1.50 X	\$ 307.69	1.50 X	\$ 307.78	1.50 X	\$ 292.61

⁽¹⁾ For Public Participants / Franchised Haulers

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ATTACHMENT A: COMPREHENSIVE FINANCIAL PROJECTIONS FOR REVENUE COPS (BASE CASE)

County of Santa Barbara - Resource Recovery <i>(in thousands of dollars)</i>												
	Historical (1)					Preliminary Budget		Projections==>				
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Fiscal Year Ending June 30,												
Public Participants (2)												
Tonnage						171,717	171,717	171,717	171,717	171,717	171,717	171,717
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 99.00	\$ 102.00	\$ 150.00	\$ 155.00	\$ 160.00	\$ 166.00	\$ 172.00
SCRT / SYRT - Self-Haul Tonnage						19,000	19,000	19,000	19,000	19,000	19,000	19,000
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 95.00	\$ 98.00	\$ 101.00	\$ 104.00	\$ 107.00	\$ 110.00	\$ 113.00
Marborg Contract												
Tonnage						52,291	52,291	52,291	52,291	52,291	52,291	52,291
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 95.00	\$ 98.00	\$ 101.00	\$ 104.00	\$ 107.00	\$ 110.00	\$ 113.00
Other Material Tonnage (3)												
						76,004	76,004	76,004	76,004	76,004	76,004	76,004
Total Tonnage						319,012	319,012	319,012	319,012	319,012	319,012	319,012
Revenues												
Charges for services	\$ 16,098	\$ 17,208	\$ 17,306	\$ 19,154	\$ 20,919	\$ 26,256	\$ 25,598	\$ 34,177	\$ 37,217	\$ 40,296	\$ 41,700	\$ 43,107
Other operating revenues (4)	6,283	6,232	5,878	5,463	2,906	3,351	3,766	2,906	3,172	3,440	3,521	3,604
Use of money and property	244	590	510	606	146	223	135	135	135	135	135	135
Other non-operating revenues (5)	1,169	675	520	640	3,160	2,175	2,702	4,465	1,279	2,218	1,538	1,552
Total Revenues (6)	23,794	24,705	24,214	25,863	27,130	32,005	32,201	41,684	41,804	46,088	46,894	48,398
Operating Expenses												
Salaries & Benefits	\$ 7,552	\$ 8,190	\$ 7,870	\$ 8,537	\$ 8,464	\$ 9,582	\$ 9,947	\$ 10,246	\$ 10,553	\$ 10,196	\$ 10,502	\$ 10,817
Services & Supplies	3,297	3,798	3,519	3,561	3,596	4,566	7,478	6,394	2,182	2,354	2,725	3,106
Contractual Services	5,782	5,591	5,067	6,429	11,328	5,329	5,297	7,999	10,556	7,281	7,500	7,725
Contractual Services MRF/AD	0	0	0	0	0	0	0	0	2,746	6,577	7,202	7,592
County Overhead Allocation	258	120	253	317	281	386	614	632	651	670	690	711
Other Charges (7)	804	787	832	710	866	912	890	917	944	973	1,002	1,032
Closure/postclosure costs (8)	665	(565)	6,126	725	1,982	1,018	1,055	1,087	1,119	723	745	767
Total Operating Expenses	18,358	17,921	23,667	20,279	26,517	21,793	25,281	27,274	28,751	28,775	30,365	31,750
Net Revenues	5,436	6,784	547	5,584	613	10,212	6,920	14,410	13,052	17,313	16,528	16,648
Solid Waste Revenue COP Debt Service												
						0	1,833	3,770	7,246	9,691	10,030	10,373
Surplus Revenue (9)						10,212	5,087	10,639	5,806	7,622	6,498	6,274
Solid Waste Revenue COP D/S Coverage (Annual)						N/A	3.77x	3.82x	1.80x	1.79x	1.65x	1.60x
Notes:												
(1) From County CAFRs and County Public Works Department. Excludes Interest and Depreciation Expense.												
(2) For historical tonnages, please refer to Figures 2-8 through 2-11 of Feasibility Report.												
(3) Other Volumes includes additional material processed outside of the TRRP. Please refer to Figure 4-3 of Feasibility Report.												
(4) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.												
(5) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, and container sales.												
(6) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.												
(7) Other Charges include: County Services, Motor Pool, and Utilities												
(8) Only cash contribution to Closure/Post closure Fund used to calculate Net Revenues and Debt Service Coverage.												
(9) Represents the amount in the Surplus Fund (held by the County) prior to expenditures on any System capital improvements, payment of subordinate obligations, and the replenishment of the System operating reserve. Surplus amounts on hand following the prior payments will be use to replenish the Jurisdictional Rate Stabilization Fund and/or make dividend payments to the Public Participants.												

ATTACHMENT A: COMPREHENSIVE FINANCIAL PROJECTIONS FOR REVENUE COPS (BASE CASE CONTINUED)

County of Santa Barbara - Resource Recovery															
<i>(in thousands of dollars)</i>															
	Projections==>														
Fiscal Year Ending June 30,	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Public Participants (2)															
Tonnage	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717
Tip Fee	\$ 178.00	\$ 184.00	\$ 190.00	\$ 197.00	\$ 204.00	\$ 211.00	\$ 218.00	\$ 226.00	\$ 234.00	\$ 243.00	\$ 252.00	\$ 261.00	\$ 270.00	\$ 279.00	\$ 289.00
SCRT / SYRT - Self-Haul Tonnage	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
Tip Fee	\$ 116.00	\$ 119.00	\$ 123.00	\$ 127.00	\$ 131.00	\$ 135.00	\$ 139.00	\$ 143.00	\$ 147.00	\$ 151.00	\$ 156.00	\$ 161.00	\$ 166.00	\$ 171.00	\$ 176.00
Marborg Contract															
Tonnage	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291
Tip Fee	\$ 116.00	\$ 119.00	\$ 123.00	\$ 127.00	\$ 131.00	\$ 135.00	\$ 139.00	\$ 143.00	\$ 147.00	\$ 151.00	\$ 156.00	\$ 161.00	\$ 166.00	\$ 171.00	\$ 176.00
Other Material Tonnage (3)															
Tonnage	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004
Total Tonnage	319,012	319,012	319,012	319,012	319,012	319,012	319,012	319,012	319,012	319,012	319,012	319,012	319,012	319,012	319,012
Revenues															
Charges for services	\$ 44,516	\$ 45,929	\$ 47,416	\$ 49,089	\$ 50,765	\$ 52,445	\$ 54,128	\$ 55,997	\$ 57,870	\$ 59,929	\$ 62,064	\$ 64,202	\$ 66,345	\$ 68,492	\$ 70,826
Other operating revenues (4)	3,690	3,777	3,867	3,958	4,052	4,149	4,247	4,348	4,452	4,558	4,666	4,778	4,892	5,008	5,128
Use of money and property	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
Other non-operating revenues (5)	1,566	1,580	1,364	1,379	1,394	1,410	1,426	1,441	1,458	1,474	1,491	1,507	1,525	1,542	1,560
Total Revenues (6)	49,907	51,422	52,782	54,562	56,347	58,138	59,935	61,922	63,914	66,096	68,356	70,622	72,896	75,177	77,649
Operating Expenses															
Salaries & Benefits	\$ 11,142	\$ 11,476	\$ 11,820	\$ 12,175	\$ 12,540	\$ 12,917	\$ 13,304	\$ 13,703	\$ 14,114	\$ 14,538	\$ 14,974	\$ 15,423	\$ 15,886	\$ 16,362	\$ 16,853
Services & Supplies	3,200	3,296	3,394	3,496	3,601	3,709	3,820	3,935	4,053	4,175	4,300	4,429	4,562	4,699	4,840
Contractual Services	7,956	8,195	8,441	8,694	8,955	9,224	9,500	9,785	10,079	10,381	10,693	11,013	11,344	11,684	12,035
Contractual Services MRF/AD	7,991	8,401	8,821	9,251	9,693	10,145	10,462	10,937	11,424	11,923	12,435	12,959	13,497	14,048	14,612
County Overhead Allocation	733	755	777	800	824	849	875	901	928	956	984	1,014	1,044	1,076	1,108
Other Charges (7)	1,063	1,095	1,128	1,162	1,196	1,232	1,269	1,307	1,347	1,387	1,429	1,471	1,516	1,561	1,608
Closure/postclosure costs (8)	790	814	838	863	889	916	943	971	1,001	1,031	1,061	1,093	1,126	1,160	1,195
Total Operating Expenses	32,875	34,031	35,220	36,442	37,699	38,991	40,174	41,540	42,945	44,390	45,876	47,403	48,974	50,590	52,251
Net Revenues	17,032	17,391	17,562	18,120	18,648	19,147	19,762	20,381	20,969	21,706	22,480	23,219	23,922	24,588	25,398
Solid Waste Revenue COP Debt Service															
Surplus Revenue (9)	6,322	6,337	6,150	6,304	6,425	6,518	6,729	6,897	7,027	7,314	7,612	7,835	8,020	8,164	8,410
Solid Waste Revenue COP D/S Coverage (Annual)	1.59x	1.57x	1.54x	1.53x	1.53x	1.52x	1.52x	1.51x	1.50x	1.51x	1.51x	1.51x	1.50x	1.50x	1.50x
Notes:															
(1) From County CAFRs and County Public Works Department. Excludes Interest and Depreciation Expense.															
(2) For historical tonnages, please refer to Figures 2-8 through 2-11 of Feasibility Report.															
(3) Other Volumes includes additional material processed outside of the TRRP. Please refer to Figure 4-3 of Feasibility Report.															
(4) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.															
(5) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, and container sales.															
(6) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.															
(7) Other Charges include: County Services, Motor Pool, and Utilities															
(8) Only cash contribution to Closure/Post closure Fund used to calculate Net Revenues and Debt Service Coverage.															
(9) Represents the amount in the Surplus Fund (held by the County) prior to expenditures on any System capital improvements, payment of subordinate obligations, and the replenishment of the System operating reserve. Surplus amounts on hand following the prior payments will be use to replenish the Jurisdictional Rate Stabilization Fund and/or make dividend payments to the Public Participants.															

ATTACHMENT B: REDUCED RECYCLING COMMODITY PRICES (SCENARIO 1)

County of Santa Barbara - Resource Recovery												
<i>(in thousands of dollars)</i>												
Fiscal Year Ending June 30,	Historical (1)					Preliminary	Budget	Projections==>				
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Public Participants (2)												
Tonnage						171,717	171,717	171,717	171,717	171,717	171,717	171,717
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 99.00	\$ 102.00	\$ 150.00	\$ 155.00	\$ 160.00	\$ 166.00	\$ 172.87
SCRT / SYRT - Self-Haul Tonnage												
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 95.00	\$ 98.00	\$ 101.00	\$ 104.00	\$ 107.00	\$ 110.00	\$ 113.00
Marborg Contract												
Tonnage						52,291	52,291	52,291	52,291	52,291	52,291	52,291
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 95.00	\$ 98.00	\$ 101.00	\$ 104.00	\$ 107.00	\$ 110.00	\$ 113.00
Other Material Tonnage (3)												
						76,004	76,004	76,004	76,004	76,004	76,004	76,004
Total Tonnage						319,012						
Revenues												
Charges for services	\$ 16,098	\$ 17,208	\$ 17,306	\$ 19,154	\$ 20,919	\$ 26,256	\$ 25,598	\$ 34,177	\$ 37,217	\$ 40,296	\$ 41,700	\$ 43,265
Other operating revenues (4)	6,283	6,232	5,878	5,463	2,906	3,351	3,766	2,906	3,172	3,440	3,521	3,604
Use of money and property	244	590	510	606	146	223	135	135	135	135	135	135
Other non operating revenues (5)	1,169	675	520	640	3,160	2,175	2,702	4,465	1,279	2,218	1,538	1,552
Total Revenues (6)	23,794	24,705	24,214	25,863	27,130	32,005	32,201	41,684	41,804	46,088	46,894	48,557
Operating Expenses												
Salaries & Benefits	\$ 7,552	\$ 8,190	\$ 7,870	\$ 8,537	\$ 8,464	\$ 9,582	\$ 9,947	\$ 10,246	\$ 10,553	\$ 10,196	\$ 10,502	\$ 10,817
Services & Supplies	3,297	3,798	3,519	3,561	3,596	4,566	7,478	6,394	2,182	2,354	2,725	3,106
Contractual Services	5,782	5,591	5,067	6,429	11,328	5,329	5,297	7,999	10,556	7,281	7,500	7,725
Contractual Services MRF/AD (7)	0	0	0	0	0	0	0	0	3,369	7,824	8,448	8,838
County Overhead Allocation	258	120	253	317	281	386	614	632	651	670	690	711
Other Charges (8)	804	787	832	710	866	912	890	917	944	973	1,002	1,032
Closure/post closure costs (9)	665	(565)	6,126	725	1,982	1,018	1,055	1,087	1,119	723	745	767
Total Operating Expenses	18,358	17,921	23,667	20,279	26,517	21,793	25,281	27,274	29,375	30,022	31,612	32,997
Net Revenues	5,436	6,784	547	5,584	613	10,212	6,920	14,410	12,429	16,067	15,282	15,560
Solid Waste Revenue COP Debt Service						0	1,833	3,770	7,246	9,691	10,030	10,373
Surplus Revenue (10)						10,212	5,087	10,639	5,183	6,376	5,252	5,187
Solid Waste Revenue COP D/S Coverage (Annual)						N/A	3.77x	3.82x	1.72x	1.66x	1.52x	1.50x
Notes:												
(1) From County CAFRs and County Public Works Department. Excludes Interest and Depreciation Expense.												
(2) For historical tonnages, please refer to Figures 2-8 through 2-11 of Feasibility Report.												
(3) Other Volumes includes additional material processed outside of the TRRP. Please refer to Figure 4-3 of Feasibility Report.												
(4) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.												
(5) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, and container sales.												
(6) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.												
(7) Decrease in Recyclable Revenue results in increase in Tip Fee and increased payment to MSB.												
(8) Other Charges include: County Services, Motor Pool, and Utilities												
(9) Only cash contribution to Closure/Post closure Fund used to calculate Net Revenues and Debt Service Coverage.												
(10) Represents the amount in the Surplus Fund (held by the County) prior to expenditures on any System capital improvements, payment of subordinate obligations, and the replenishment of the System operating reserve. Surplus amounts on hand following the prior payments will be use to replenish the Jurisdictional Rate Stabilization Fund and/or make dividend payments to the Public Participants.												

ATTACHMENT B: REDUCED RECYCLING COMMODITY PRICES (SCENARIO 1 CONTINUED)

County of Santa Barbara - Resource Recovery															
<i>(in thousands of dollars)</i>															
Fiscal Year Ending June 30,	Projections==>														
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Public Participants (2)															
Tonnage	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717
Tip Fee	\$ 179.54	\$ 186.39	\$ 194.40	\$ 201.65	\$ 209.11	\$ 216.72	\$ 223.66	\$ 231.98	\$ 240.52	\$ 249.18	\$ 257.85	\$ 267.04	\$ 276.45	\$ 286.09	\$ 296.29
SCRT / SYRT - Self-Haul Tonnage	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
Tip Fee	\$ 116.00	\$ 119.00	\$ 123.00	\$ 127.00	\$ 131.00	\$ 135.00	\$ 139.00	\$ 143.00	\$ 147.00	\$ 151.00	\$ 156.00	\$ 161.00	\$ 166.00	\$ 171.00	\$ 176.00
Marborg Contract															
Tonnage	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291
Tip Fee	\$ 116.00	\$ 119.00	\$ 123.00	\$ 127.00	\$ 131.00	\$ 135.00	\$ 139.00	\$ 143.00	\$ 147.00	\$ 151.00	\$ 156.00	\$ 161.00	\$ 166.00	\$ 171.00	\$ 176.00
Other Material Tonnage (3)															
	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004
Total Tonnage	319,012														
Revenues															
Charges for services	\$ 44,797	\$ 46,366	\$ 48,220	\$ 49,939	\$ 51,698	\$ 53,488	\$ 55,161	\$ 57,089	\$ 59,060	\$ 61,058	\$ 63,132	\$ 65,305	\$ 67,523	\$ 69,787	\$ 72,157
Other operating revenues (4)	3,690	3,777	3,867	3,958	4,052	4,149	4,247	4,348	4,452	4,558	4,666	4,778	4,892	5,008	5,128
Use of money and property	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
Other non operating revenues (5)	1,566	1,580	1,364	1,379	1,394	1,410	1,426	1,441	1,458	1,474	1,491	1,507	1,525	1,542	1,560
Total Revenues (6)	50,187	51,858	53,586	55,411	57,280	59,182	60,969	63,014	65,105	67,225	69,423	71,726	74,074	76,472	78,980
Operating Expenses															
Salaries & Benefits	\$ 11,142	\$ 11,476	\$ 11,820	\$ 12,175	\$ 12,540	\$ 12,917	\$ 13,304	\$ 13,703	\$ 14,114	\$ 14,538	\$ 14,974	\$ 15,423	\$ 15,886	\$ 16,362	\$ 16,853
Services & Supplies	3,200	3,296	3,394	3,496	3,601	3,709	3,820	3,935	4,053	4,175	4,300	4,429	4,562	4,699	4,840
Contractual Services	7,956	8,195	8,441	8,694	8,955	9,224	9,500	9,785	10,079	10,381	10,693	11,013	11,344	11,684	12,035
Contractual Services MRF/AD (7)	9,238	9,648	10,068	10,498	10,939	11,392	11,709	12,184	12,671	13,170	13,681	14,206	14,743	15,294	15,859
County Overhead Allocation	733	755	777	800	824	849	875	901	928	956	984	1,014	1,044	1,076	1,108
Other Charges (8)	1,063	1,095	1,128	1,162	1,196	1,232	1,269	1,307	1,347	1,387	1,429	1,471	1,516	1,561	1,608
Closure/post closure costs (9)	790	814	838	863	889	916	943	971	1,001	1,031	1,061	1,093	1,126	1,160	1,195
Total Operating Expenses	34,121	35,277	36,466	37,689	38,946	40,238	41,420	42,787	44,192	45,637	47,122	48,650	50,221	51,836	53,497
Net Revenues	16,066	16,581	17,119	17,723	18,334	18,944	19,549	20,227	20,913	21,588	22,301	23,075	23,853	24,636	25,483
Solid Waste Revenue COP Debt Service															
	10,711	11,054	11,413	11,815	12,223	12,629	13,032	13,484	13,942	14,392	14,867	15,384	15,902	16,424	16,988
Surplus Revenue (10)	5,355	5,527	5,706	5,908	6,111	6,315	6,516	6,742	6,971	7,196	7,434	7,692	7,951	8,212	8,494
Solid Waste Revenue COP D/S Coverage (Annual)	1.50x														
Notes:															
(1) From County CAFRs and County Public Works Department. Excludes Interest and Depreciation Expense.															
(2) For historical tonnages, please refer to Figures 2-8 through 2-11 of Feasibility Report.															
(3) Other Volumes includes additional material processed outside of the TRRP. Please refer to Figure 4-3 of Feasibility Report.															
(4) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.															
(5) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, and container sales.															
(6) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.															
(7) Decrease in Recyclable Revenue results in increase in Tip Fee and increased payment to MSB.															
(8) Other Charges include: County Services, Motor Pool, and Utilities															
(9) Only cash contribution to Closure/Post closure Fund used to calculate Net Revenues and Debt Service Coverage.															
(10) Represents the amount in the Surplus Fund (held by the County) prior to expenditures on any System capital improvements, payment of subordinate obligations, and the replenishment of the System operating reserve. Surplus amounts on hand following the prior payments will be use to replenish the Jurisdictional Rate Stabilization Fund and/or make dividend payments to the Public Participants.															

ATTACHMENT C: ELIMINATION OF COMMODITY REVENUE, EXCEPT CRV (SCENARIO 2)

County of Santa Barbara - Resource Recovery

(in thousands of dollars)

Fiscal Year Ending June 30,	Historical (1)					Preliminary	Budget	Projections==>				
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Public Participants (2)												
Tonnage						171,717	171,717	171,717	171,717	171,717	171,717	171,717
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 99.00	\$ 102.00	\$ 150.00	\$ 155.00	\$ 163.02	\$ 176.11	\$ 184.27
SCRT / SYRT - Self-Haul Tonnage						19,000	19,000	19,000	19,000	19,000	19,000	19,000
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 95.00	\$ 98.00	\$ 101.00	\$ 104.00	\$ 107.00	\$ 110.00	\$ 113.00
Marborg Contract												
Tonnage						52,291	52,291	52,291	52,291	52,291	52,291	52,291
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 95.00	\$ 98.00	\$ 101.00	\$ 104.00	\$ 107.00	\$ 110.00	\$ 113.00
Other Material Tonnage (3)						76,004	76,004	76,004	76,004	76,004	76,004	76,004
Total Tonnage						319,012	319,012	319,012	319,012	319,012	319,012	319,012
Revenues												
Charges for services	\$ 16,098	\$ 17,208	\$ 17,306	\$ 19,154	\$ 20,919	\$ 26,256	\$ 25,598	\$ 34,177	\$ 39,077	\$ 40,848	\$ 43,545	\$ 45,347
Other operating revenues (4)	6,283	6,232	5,878	5,463	2,906	3,351	3,766	2,906	3,172	3,440	3,521	3,604
Use of money and property	244	590	510	606	146	223	135	135	135	135	135	135
Other non operating revenues (5)	1,169	675	520	640	3,160	2,175	2,702	4,465	(581)	2,218	1,538	1,552
Total Revenues (6)	23,794	24,705	24,214	25,863	27,130	32,005	32,201	41,684	41,804	46,640	48,739	50,638
Operating Expenses												
Salaries & Benefits	\$ 7,552	\$ 8,190	\$ 7,870	\$ 8,537	\$ 8,464	\$ 9,582	\$ 9,947	\$ 10,246	\$ 10,553	\$ 10,196	\$ 10,502	\$ 10,817
Services & Supplies	3,297	3,798	3,519	3,561	3,596	4,566	7,478	6,394	2,182	2,354	2,725	3,106
Contractual Services	5,782	5,591	5,067	6,429	11,328	5,329	5,297	7,999	10,556	7,281	7,500	7,725
Contractual Services MRF/AD (7)	0	0	0	0	0	0	0	0	4,410	9,906	10,530	10,920
County Overhead Allocation	258	120	253	317	281	386	614	632	651	670	690	711
Other Charges (8)	804	787	832	710	866	912	890	917	944	973	1,002	1,032
Closure/post closure costs (9)	665	(565)	6,126	725	1,982	1,018	1,055	1,087	1,119	723	745	767
Total Operating Expenses	18,358	17,921	23,667	20,279	26,517	21,793	25,281	27,274	30,416	32,104	33,694	35,079
Net Revenues	5,436	6,784	547	5,584	613	10,212	6,920	14,410	11,388	14,537	15,045	15,560
Solid Waste Revenue COP Debt Service						0	1,833	3,770	7,246	9,691	10,030	10,373
Surplus Revenue (10)						10,212	5,087	10,639	4,142	4,846	5,015	5,187
Solid Waste Revenue COP D/S Coverage (Annual)						N/A	3.77x	3.82x	1.57x	1.50x	1.50x	1.50x

Notes:

- (1) From County CAFRs and County Public Works Department. Excludes Interest and Depreciation Expense.
- (2) For historical tonnages, please refer to Figures 2-8 through 2-11 of Feasibility Report.
- (3) Other Volumes includes additional material processed outside of the TRRP. Please refer to Figure 4-3 of Feasibility Report.
- (4) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.
- (5) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, and container sales.
- (6) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.
- (7) Decrease in Recyclable Revenue results in increase in Tip Fee and increased payment to MSB.
- (8) Other Charges include: County Services, Motor Pool, and Utilities
- (9) Only cash contribution to Closure/Post closure Fund used to calculate Net Revenues and Debt Service Coverage.
- (10) Represents the amount in the Surplus Fund (held by the County) prior to expenditures on any System capital improvements, payment of subordinate obligations, and the replenishment of the System operating reserve. Surplus amounts on hand following the prior payments will be use to replenish the Jurisdictional Rate Stabilization Fund and/or make dividend payments to the Public Participants.

ATTACHMENT C: ELIMINATION OF COMMODITY REV. EXCEPT CRV (SCENARIO 2 CONTINUED)

County of Santa Barbara - Resource Recovery															
<i>(in thousands of dollars)</i>															
Fiscal Year Ending June 30,	Projections==>														
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Public Participants (2)															
Tonnage	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717
Tip Fee	\$ 190.94	\$ 197.80	\$ 205.80	\$ 213.06	\$ 220.51	\$ 228.12	\$ 235.07	\$ 243.38	\$ 251.92	\$ 260.59	\$ 269.25	\$ 278.45	\$ 287.85	\$ 297.50	\$ 307.69
SCRT / SYRT - Self-Haul Tonnage	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
Tip Fee	\$ 116.00	\$ 119.00	\$ 123.00	\$ 127.00	\$ 131.00	\$ 135.00	\$ 139.00	\$ 143.00	\$ 147.00	\$ 151.00	\$ 156.00	\$ 161.00	\$ 166.00	\$ 171.00	\$ 176.00
Marborg Contract															
Tonnage	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291
Tip Fee	\$ 116.00	\$ 119.00	\$ 123.00	\$ 127.00	\$ 131.00	\$ 135.00	\$ 139.00	\$ 143.00	\$ 147.00	\$ 151.00	\$ 156.00	\$ 161.00	\$ 166.00	\$ 171.00	\$ 176.00
Other Material Tonnage (3)															
	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004
Total Tonnage	319,012														
Revenues															
Charges for services	\$ 46,879	\$ 48,448	\$ 50,302	\$ 52,021	\$ 53,780	\$ 55,570	\$ 57,243	\$ 59,171	\$ 61,142	\$ 63,140	\$ 65,214	\$ 67,387	\$ 69,605	\$ 71,869	\$ 74,239
Other operating revenues (4)	3,690	3,777	3,867	3,958	4,052	4,149	4,247	4,348	4,452	4,558	4,666	4,778	4,892	5,008	5,128
Use of money and property	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
Other non operating revenues (5)	1,566	1,580	1,364	1,379	1,394	1,410	1,426	1,441	1,458	1,474	1,491	1,507	1,525	1,542	1,560
Total Revenues (6)	52,269	53,940	55,667	57,493	59,362	61,264	63,051	65,096	67,186	69,307	71,505	73,807	76,156	78,554	81,062
Operating Expenses															
Salaries & Benefits	\$ 11,142	\$ 11,476	\$ 11,820	\$ 12,175	\$ 12,540	\$ 12,917	\$ 13,304	\$ 13,703	\$ 14,114	\$ 14,538	\$ 14,974	\$ 15,423	\$ 15,886	\$ 16,362	\$ 16,853
Services & Supplies	3,200	3,296	3,394	3,496	3,601	3,709	3,820	3,935	4,053	4,175	4,300	4,429	4,562	4,699	4,840
Contractual Services	7,956	8,195	8,441	8,694	8,955	9,224	9,500	9,785	10,079	10,381	10,693	11,013	11,344	11,684	12,035
Contractual Services MRF/AD (7)	11,320	11,730	12,150	12,580	13,021	13,473	13,930	14,266	14,753	15,252	15,763	16,288	16,825	17,376	17,941
County Overhead Allocation	733	755	777	800	824	849	875	901	928	956	984	1,014	1,044	1,076	1,108
Other Charges (8)	1,063	1,095	1,128	1,162	1,196	1,232	1,269	1,307	1,347	1,387	1,429	1,471	1,516	1,561	1,608
Closure/post closure costs (9)	790	814	838	863	889	916	943	971	1,001	1,031	1,061	1,093	1,126	1,160	1,195
Total Operating Expenses	36,203	37,359	38,548	39,771	41,028	42,320	43,502	44,869	46,274	47,719	49,204	50,732	52,303	53,918	55,579
Net Revenues	16,066	16,581	17,119	17,723	18,334	18,944	19,549	20,227	20,913	21,588	22,301	23,075	23,853	24,636	25,483
Solid Waste Revenue COP Debt Service	10,711	11,054	11,413	11,815	12,223	12,629	13,032	13,484	13,942	14,392	14,867	15,384	15,902	16,424	16,988
Surplus Revenue (10)	5,355	5,527	5,706	5,908	6,111	6,315	6,516	6,742	6,971	7,196	7,434	7,692	7,951	8,212	8,494
Solid Waste Revenue COP D/S Coverage (Annual)	1.50x														
Notes:															
(1) From County CAFRs and County Public Works Department. Excludes Interest and Depreciation Expense.															
(2) For historical tonnages, please refer to Figures 2-8 through 2-11 of Feasibility Report.															
(3) Other Volumes includes additional material processed outside of the TRRP. Please refer to Figure 4-3 of Feasibility Report.															
(4) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.															
(5) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, and container sales.															
(6) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.															
(7) Decrease in Recyclable Revenue results in increase in Tip Fee and increased payment to MSB.															
(8) Other Charges include: County Services, Motor Pool, and Utilities															
(9) Only cash contribution to Closure/Post closure Fund used to calculate Net Revenues and Debt Service Coverage.															
(10) Represents the amount in the Surplus Fund (held by the County) prior to expenditures on any System capital improvements, payment of subordinate obligations, and the replenishment of the System operating reserve. Surplus amounts on hand following the prior payments will be use to replenish the Jurisdictional Rate Stabilization Fund and/or make dividend payments to the Public Participants.															

ATTACHMENT D: REDUCED SELF HAUL TONNAGE (SCENARIO 3)

County of Santa Barbara - Resource Recovery												
<i>(in thousands of dollars)</i>												
	Historical (1)					Preliminary Budget		Projections==>				
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Fiscal Year Ending June 30,												
Public Participants (2)												
Tonnage						171,717	171,717	171,717	171,717	171,717	171,717	171,717
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 99.00	\$ 102.00	\$ 150.00	\$ 155.00	\$ 160.00	\$ 169.32	\$ 177.80
SCRT / SYRT - Self-Haul Tonnage												
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 95.00	\$ 98.00	\$ 101.00	\$ 104.00	\$ 107.00	\$ 110.00	\$ 113.00
Marborg Contract												
Tonnage						52,291	52,291	52,291	52,291	52,291	52,291	52,291
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 95.00	\$ 98.00	\$ 101.00	\$ 104.00	\$ 107.00	\$ 110.00	\$ 113.00
Other Material Tonnage (3)												
						76,004	76,004	76,004	76,004	76,004	76,004	76,004
Total Tonnage						300,012	300,012	300,012	300,012	300,012	300,012	300,012
Revenues												
Charges for services	\$ 16,098	\$ 17,208	\$ 17,306	\$ 19,154	\$ 20,919	\$ 26,256	\$ 25,598	\$ 34,177	\$ 35,241	\$ 38,263	\$ 40,217	\$ 42,019
Other operating revenues (4)	6,283	6,232	5,878	5,463	2,906	3,351	3,766	2,906	3,172	3,440	3,521	3,604
Use of money and property	244	590	510	606	146	223	135	135	135	135	135	135
Other non-operating revenues (5)	1,169	675	520	640	3,160	2,175	2,702	4,465	1,279	2,218	1,538	1,552
Total Revenues (6)	23,794	24,705	24,214	25,863	27,130	32,005	32,201	41,684	39,828	44,055	45,410	47,310
Operating Expenses												
Salaries & Benefits	\$ 7,552	\$ 8,190	\$ 7,870	\$ 8,537	\$ 8,464	\$ 9,582	\$ 9,947	\$ 10,246	\$ 10,553	\$ 10,196	\$ 10,502	\$ 10,817
Services & Supplies	3,297	3,798	3,519	3,561	3,596	4,566	7,478	6,394	2,182	2,354	2,725	3,106
Contractual Services	5,782	5,591	5,067	6,429	11,328	5,329	5,297	7,999	10,556	7,281	7,500	7,725
Contractual Services MRF/AD	0	0	0	0	0	0	0	0	2,746	6,577	7,202	7,592
County Overhead Allocation	258	120	253	317	281	386	614	632	651	670	690	711
Other Charges (7)	804	787	832	710	866	912	890	917	944	973	1,002	1,032
Closure/postclosure costs (8)	665	(565)	6,126	725	1,982	1,018	1,055	1,087	1,119	723	745	767
Total Operating Expenses	18,358	17,921	23,667	20,279	26,517	21,793	25,281	27,274	28,751	28,775	30,365	31,750
Net Revenues	5,436	6,784	547	5,584	613	10,212	6,920	14,410	11,076	15,280	15,045	15,560
Solid Waste Revenue COP Debt Service						0	1,833	3,770	7,246	9,691	10,030	10,373
Surplus Revenue (9)						10,212	5,087	10,639	3,830	5,589	5,015	5,187
Solid Waste Revenue COP D/S Coverage (Annual)						N/A	3.77x	3.82x	1.53x	1.58x	1.50x	1.50x
Notes:												
(1) From County CAFRs and County Public Works Department. Excludes Interest and Depreciation Expense.												
(2) For historical tonnages, please refer to Figures 2-8 through 2-11 of Feasibility Report.												
(3) Other Volumes includes additional material processed outside of the TRRP. Please refer to Figure 4-3 of Feasibility Report.												
(4) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.												
(5) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, and container sales.												
(6) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.												
(7) Other Charges include: County Services, Motor Pool, and Utilities												
(8) Only cash contribution to Closure/Post closure Fund used to calculate Net Revenues and Debt Service Coverage.												
(9) Represents the amount in the Surplus Fund (held by the County) prior to expenditures on any System capital improvements, payment of subordinate obligations, and the replenishment of the System operating reserve. Surplus amounts on hand following the prior payments will be use to replenish the Jurisdictional Rate Stabilization Fund and/or make dividend payments to the Public Participants.												

ATTACHMENT D: REDUCED SELF HAUL TONNAGE (SCENARIO 3 CONTINUED)

County of Santa Barbara - Resource Recovery															
<i>(in thousands of dollars)</i>															
Fiscal Year Ending June 30,	Projections==>														
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Public Participants (2)															
Tonnage	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717
Tip Fee	\$ 184.78	\$ 191.95	\$ 200.37	\$ 208.04	\$ 215.91	\$ 223.94	\$ 231.30	\$ 240.03	\$ 248.99	\$ 258.07	\$ 267.26	\$ 276.97	\$ 286.90	\$ 297.06	\$ 307.78
SCRT / SVRT - Self-Haul Tonnage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tip Fee	\$ 116.00	\$ 119.00	\$ 123.00	\$ 127.00	\$ 131.00	\$ 135.00	\$ 139.00	\$ 143.00	\$ 147.00	\$ 151.00	\$ 156.00	\$ 161.00	\$ 166.00	\$ 171.00	\$ 176.00
Marborg Contract															
Tonnage	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291
Tip Fee	\$ 116.00	\$ 119.00	\$ 123.00	\$ 127.00	\$ 131.00	\$ 135.00	\$ 139.00	\$ 143.00	\$ 147.00	\$ 151.00	\$ 156.00	\$ 161.00	\$ 166.00	\$ 171.00	\$ 176.00
Other Material Tonnage (3)															
Tonnage	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004
Total Tonnage	300,012														
Revenues															
Charges for services	\$ 43,550	\$ 45,119	\$ 46,973	\$ 48,692	\$ 50,451	\$ 52,242	\$ 53,915	\$ 55,842	\$ 57,814	\$ 59,811	\$ 61,885	\$ 64,059	\$ 66,276	\$ 68,540	\$ 70,911
Other operating revenues (4)	3,690	3,777	3,867	3,958	4,052	4,149	4,247	4,348	4,452	4,558	4,666	4,778	4,892	5,008	5,128
Use of money and property	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
Other non-operating revenues (5)	1,566	1,580	1,364	1,379	1,394	1,410	1,426	1,441	1,458	1,474	1,491	1,507	1,525	1,542	1,560
Total Revenues (6)	48,941	50,612	52,339	54,165	56,033	57,935	59,722	61,767	63,858	65,978	68,177	70,479	72,827	75,226	77,733
Operating Expenses															
Salaries & Benefits	\$ 11,142	\$ 11,476	\$ 11,820	\$ 12,175	\$ 12,540	\$ 12,917	\$ 13,304	\$ 13,703	\$ 14,114	\$ 14,538	\$ 14,974	\$ 15,423	\$ 15,886	\$ 16,362	\$ 16,853
Services & Supplies	3,200	3,296	3,394	3,496	3,601	3,709	3,820	3,935	4,053	4,175	4,300	4,429	4,562	4,699	4,840
Contractual Services	7,956	8,195	8,441	8,694	8,955	9,224	9,500	9,785	10,079	10,381	10,693	11,013	11,344	11,684	12,035
Contractual Services MRF/AD	7,991	8,401	8,821	9,251	9,693	10,145	10,462	10,937	11,424	11,923	12,435	12,959	13,497	14,048	14,612
County Overhead Allocation	733	755	777	800	824	849	875	901	928	956	984	1,014	1,044	1,076	1,108
Other Charges (7)	1,063	1,095	1,128	1,162	1,196	1,232	1,269	1,307	1,347	1,387	1,429	1,471	1,516	1,561	1,608
Closure/postclosure costs (8)	790	814	838	863	889	916	943	971	1,001	1,031	1,061	1,093	1,126	1,160	1,195
Total Operating Expenses	32,875	34,031	35,220	36,442	37,699	38,991	40,174	41,540	42,945	44,390	45,876	47,403	48,974	50,590	52,251
Net Revenues	16,066	16,581	17,119	17,723	18,334	18,944	19,549	20,227	20,913	21,588	22,301	23,075	23,853	24,636	25,483
Solid Waste Revenue COP Debt Service	10,711	11,054	11,413	11,815	12,223	12,629	13,032	13,484	13,942	14,392	14,867	15,384	15,902	16,424	16,988
Surplus Revenue (9)	5,355	5,527	5,706	5,908	6,111	6,315	6,516	6,742	6,971	7,196	7,434	7,692	7,951	8,212	8,494
Solid Waste Revenue COP D/S Coverage (Annual)	1.50x														
Notes:															
(1) From County CAFRs and County Public Works Department. Excludes Interest and Depreciation Expense.															
(2) For historical tonnages, please refer to Figures 2-8 through 2-11 of Feasibility Report.															
(3) Other Volumes includes additional material processed outside of the TRRP. Please refer to Figure 4-3 of Feasibility Report.															
(4) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.															
(5) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, and container sales.															
(6) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.															
(7) Other Charges include: County Services, Motor Pool, and Utilities															
(8) Only cash contribution to Closure/Post closure Fund used to calculate Net Revenues and Debt Service Coverage.															
(9) Represents the amount in the Surplus Fund (held by the County) prior to expenditures on any System capital improvements, payment of subordinate obligations, and the replenishment of the System operating reserve. Surplus amounts on hand following the prior payments will be use to replenish the Jurisdictional Rate Stabilization Fund and/or make dividend payments to the Public Participants.															

ATTACHMENT E: REDUCED VOLUME THROUGH ADF (SCENARIO 4)

County of Santa Barbara - Resource Recovery												
(in thousands of dollars)												
Fiscal Year Ending June 30,	Historical (1)					Preliminary	Budget	Projections==>				
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Public Participants (2)												
Tonnage						171,717	171,717	171,717	171,717	171,717	171,717	171,717
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 99.00	\$ 102.00	\$ 150.00	\$ 155.00	\$ 160.00	\$ 166.00	\$ 172.00
SCRT / SYRT - Self-Haul Tonnage												
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 95.00	\$ 98.00	\$ 101.00	\$ 104.00	\$ 107.00	\$ 110.00	\$ 113.00
Marborg Contract												
Tonnage						52,291	52,291	52,291	52,291	52,291	52,291	52,291
Tip Fee	\$ 77.00	\$ 82.00	\$ 82.00	\$ 84.00	\$ 87.00	\$ 95.00	\$ 98.00	\$ 101.00	\$ 104.00	\$ 107.00	\$ 110.00	\$ 113.00
Other Material Tonnage (3)												
Total Tonnage						319,012	319,012	319,012	319,012	319,012	319,012	319,012
Revenues												
Charges for services	\$ 16,098	\$ 17,208	\$ 17,306	\$ 19,154	\$ 20,919	\$ 26,256	\$ 25,598	\$ 34,177	\$ 37,217	\$ 40,296	\$ 41,700	\$ 43,107
Other operating revenues (4)	6,283	6,232	5,878	5,463	2,906	3,351	3,766	2,906	3,172	3,440	3,521	3,604
Use of money and property	244	590	510	606	146	223	135	135	135	135	135	135
Other non-operating revenues (5)	1,169	675	520	640	3,160	2,175	2,702	4,465	1,279	2,218	1,538	1,552
Total Revenues (6)	23,794	24,705	24,214	25,863	27,130	32,005	32,201	41,684	41,804	46,088	46,894	48,398
Operating Expenses												
Salaries & Benefits	\$ 7,552	\$ 8,190	\$ 7,870	\$ 8,537	\$ 8,464	\$ 9,582	\$ 9,947	\$ 10,246	\$ 10,553	\$ 10,196	\$ 10,502	\$ 10,817
Services & Supplies	3,297	3,798	3,519	3,561	3,596	4,566	7,478	6,394	2,182	2,354	2,725	3,106
Contractual Services	5,782	5,591	5,067	6,429	11,328	5,329	5,297	7,999	10,556	7,281	7,500	7,725
Contractual Services MRF/AD	0	0	0	0	0	0	0	0	3,033	7,152	7,777	8,167
County Overhead Allocation	258	120	253	317	281	386	614	632	651	670	690	711
Other Charges (7)	804	787	832	710	866	912	890	917	944	973	1,002	1,032
Closure/postclosure costs (8)	665	(565)	6,126	725	1,982	1,018	1,055	1,087	1,119	723	745	767
Total Operating Expenses	18,358	17,921	23,667	20,279	26,517	21,793	25,281	27,274	29,039	29,350	30,940	32,325
Net Revenues	5,436	6,784	547	5,584	613	10,212	6,920	14,410	12,765	16,738	15,953	16,072
Solid Waste Revenue COP Debt Service												
						0	1,833	3,770	7,246	9,691	10,030	10,373
Surplus Revenue (9)												
						10,212	5,087	10,639	5,518	7,047	5,923	5,699
Solid Waste Revenue COP D/S Coverage (Annual)												
						N/A	3.77x	3.82x	1.76x	1.73x	1.59x	1.55x
<u>Notes:</u>												
(1) From County CAFRs and County Public Works Department. Excludes Interest and Depreciation Expense.												
(2) For historical tonnages, please refer to Figures 2-8 through 2-11 of Feasibility Report.												
(3) Other Volumes includes additional material processed outside of the TRRP. Please refer to Figure 4-3 of Feasibility Report.												
(4) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.												
(5) Non-Operating Revenues includes rental income, State revenue, Federal revenue; oil, e-waste, and container sales.												
(6) Includes Operating and Non-Operating Revenues excluding interest expense. Includes earnings on cash.												
(7) Other Charges include: County Services, Motor Pool, and Utilities												
(8) Only cash contribution to Closure/Post closure Fund used to calculate Net Revenues and Debt Service Coverage.												
(9) Represents the amount in the Surplus Fund (held by the County) prior to expenditures on any System capital improvements, payment of subordinate obligations, and the replenishment of the System operating reserve. Surplus amounts on hand following the prior payments will be use to replenish the Jurisdictional Rate Stabilization Fund and/or make dividend payments to the Public Participants.												

ATTACHMENT E: REDUCED VOLUME THROUGH ADF (SCENARIO 4 CONTINUED)

County of Santa Barbara - Resource Recovery															
<i>(in thousands of dollars)</i>															
Fiscal Year Ending June 30,	Projections==>														
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Public Participants (2)															
Tonnage	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717	171,717
Tip Fee	\$ 178.00	\$ 184.00	\$ 190.72	\$ 197.98	\$ 205.43	\$ 213.04	\$ 219.98	\$ 228.30	\$ 236.84	\$ 245.51	\$ 254.17	\$ 263.36	\$ 272.77	\$ 282.41	\$ 292.61
SCRT / SVRT - Self-Haul Tonnage	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
Tip Fee	\$ 116.00	\$ 119.00	\$ 123.00	\$ 127.00	\$ 131.00	\$ 135.00	\$ 139.00	\$ 143.00	\$ 147.00	\$ 151.00	\$ 156.00	\$ 161.00	\$ 166.00	\$ 171.00	\$ 176.00
Marborg Contract															
Tonnage	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291	52,291
Tip Fee	\$ 116.00	\$ 119.00	\$ 123.00	\$ 127.00	\$ 131.00	\$ 135.00	\$ 139.00	\$ 143.00	\$ 147.00	\$ 151.00	\$ 156.00	\$ 161.00	\$ 166.00	\$ 171.00	\$ 176.00
Other Material Tonnage (3)															
Tonnage	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004	76,004
Total Tonnage	319,012														
Revenues															
Charges for services	\$ 44,516	\$ 45,929	\$ 47,548	\$ 49,267	\$ 51,027	\$ 52,817	\$ 54,490	\$ 56,417	\$ 58,389	\$ 60,387	\$ 62,460	\$ 64,634	\$ 66,851	\$ 69,115	\$ 71,486
Other operating revenues (4)	3,690	3,777	3,867	3,958	4,052	4,149	4,247	4,348	4,452	4,558	4,666	4,778	4,892	5,008	5,128
Use of money and property	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
Other non-operating revenues (5)	1,566	1,580	1,364	1,379	1,394	1,410	1,426	1,441	1,458	1,474	1,491	1,507	1,525	1,542	1,560
Total Revenues (6)	49,907	51,422	52,914	54,740	56,608	58,510	60,298	62,342	64,433	66,553	68,752	71,054	73,402	75,801	78,308
Operating Expenses															
Salaries & Benefits	\$ 11,142	\$ 11,476	\$ 11,820	\$ 12,175	\$ 12,540	\$ 12,917	\$ 13,304	\$ 13,703	\$ 14,114	\$ 14,538	\$ 14,974	\$ 15,423	\$ 15,886	\$ 16,362	\$ 16,853
Services & Supplies	3,200	3,296	3,394	3,496	3,601	3,709	3,820	3,935	4,053	4,175	4,300	4,429	4,562	4,699	4,840
Contractual Services	7,956	8,195	8,441	8,694	8,955	9,224	9,500	9,785	10,079	10,381	10,693	11,013	11,344	11,684	12,035
Contractual Services MRF/AD	8,566	8,976	9,396	9,826	10,268	10,720	11,037	11,512	11,999	12,498	13,010	13,534	14,072	14,623	15,188
County Overhead Allocation	733	755	777	800	824	849	875	901	928	956	984	1,014	1,044	1,076	1,108
Other Charges (7)	1,063	1,095	1,128	1,162	1,196	1,232	1,269	1,307	1,347	1,387	1,429	1,471	1,516	1,561	1,608
Closure/postclosure costs (8)	790	814	838	863	889	916	943	971	1,001	1,031	1,061	1,093	1,126	1,160	1,195
Total Operating Expenses	33,450	34,606	35,795	37,017	38,274	39,566	40,749	42,115	43,520	44,965	46,451	47,979	49,549	51,165	52,826
Net Revenues	16,457	16,816	17,119	17,723	18,334	18,944	19,549	20,227	20,913	21,588	22,301	23,075	23,853	24,636	25,483
Solid Waste Revenue COP Debt Service															
Tonnage	10,711	11,054	11,413	11,815	12,223	12,629	13,032	13,484	13,942	14,392	14,867	15,384	15,902	16,424	16,988
Surplus Revenue (9)	5,747	5,762	5,706	5,908	6,111	6,315	6,516	6,742	6,971	7,196	7,434	7,692	7,951	8,212	8,494
Solid Waste Revenue COP D/S Coverage (Annual)	1.54x	1.52x	1.50x												
Notes:															
(1) From County CAFRs and County Public Works Department. Excludes Interest and Depreciation Expense.															
(2) For historical tonnages, please refer to Figures 2-8 through 2-11 of Feasibility Report.															
(3) Other Volumes includes additional material processed outside of the TRRP. Please refer to Figure 4-3 of Feasibility Report.															
(4) Other Operating Revenues include Program Fees, Energy Revenue and HHW Revenue and County Services.															
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(7) Other Charges include: County Services, Motor Pool, and Utilities															
(8) Only cash contribution to Closure/Post closure Fund used to calculate Net Revenues and Debt Service Coverage.															
(9) Represents the amount in the Surplus Fund (held by the County) prior to expenditures on any System capital improvements, payment of subordinate obligations, and the replenishment of the System operating reserve. Surplus amounts on hand following the prior payments will be use to replenish the Jurisdictional Rate Stabilization Fund and/or make dividend payments to the Public Participants.															

ATTACHMENT F: BOARD RESOLUTION #18-150

RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA

**A RESOLUTION TO CEASE BURIAL OF
RESIDUALS AND SOLID WASTE AT
TAJIGUAS LANDFILL WHEN THE
LANDFILL REACHES PERMITTED
CAPACITY AND TO SEEK OTHER
RESIDUAL DISPOSAL OPTIONS**

Resolution No. 18-150

WHEREAS, Article XI, section 7 of the California Constitution authorizes cities and counties to protect public health and safety by taking measures in furtherance of their authority over police and sanitary matters; and,

WHEREAS, the Legislation of the State of California, by enactment of the California Integrated Waste Management Act (AB 939), Global Warming Solutions Act (AB 32), Mandatory Commercial Recycling and 75% Diversion Goal (AB 341), Mandatory Commercial Organics Recycling (AB 1826), 15 Year Disposal Capacity policy (PRC Division 30, Part 2, Chapter 4, Section 1701), Compostable Organics Infrastructure (AB 876), and Short Lived Climate Pollutants (SB 1383) established a solid waste management program which requires cities and counties to implement solid waste management plans and develop programs to be in compliance with these provisions; and,

WHEREAS, the County currently manages many solid waste resources to provide an integrated waste management system for the communities of Buellton, Goleta, Santa Barbara, and Solvang as well as the unincorporated South Coast and Santa Ynez Valley areas; and,

WHEREAS, solid waste resources managed by the County include collection and processing of commingled recyclables, green waste, and food waste; hazardous and universal waste programs for residents and businesses; education; operation of four recycling and transfer stations, one hazardous waste collection center, and one Class III landfill; and,

WHEREAS, the Tajiguas Landfill is owned and operated by the County and has been in operation for more than half of a century since 1967 for disposal of municipal solid waste such as residential and commercial waste collected by contracted and franchised haulers, waste from four area transfer stations, residuals from commingled recyclables processed off-site, self-hauled waste, and other hard to handle materials; and,

WHEREAS, the Tajiguas Landfill currently operates under a variety of permits issued by CalRecycle, Regional Water Quality Control Board, the County and the Air Pollution Control District, and has a permitted maximum capacity of 23.3 million cubic yards of waste; and,

WHEREAS, on July 12, 2016, the County approved the contract and certified the Subsequent Environmental Impact Report ("Subsequent EIR") No. 12EIR-00000-00002 for the Tajiguas Resource Recovery Project ("Project"); and,

WHEREAS, the Project is composed of a material recovery facility and anaerobic digester that will be capable of recovering up to 60% of waste currently being disposed as well as process both source separated recyclables as well as organics generated by the community in addition to being largely energy self-sufficient; and,

ATTACHMENT F: BOARD RESOLUTION #18-150

A RESOLUTION TO CEASE BURIAL OF RESIDUALS AND SOLID WASTE AT TAJIGUAS LANDFILL WHEN THE LANDFILL REACHES PERMITTED CAPACITY AND TO SEEK OTHER RESIDUAL DISPOSAL OPTIONS

WHEREAS, the Project will provide a long-term solution to the region's solid waste management needs including enabling all participating jurisdictions to be in compliance with the growing number of stringent waste management regulations and greenhouse gas reduction requirements; and,

WHEREAS, the development of the Project has been a collaborative effort involving staff from the cities of Buellton, Goleta, Santa Barbara, Solvang, and the County as well as involving public outreach including over 140 presentations to interested parties; and,

WHEREAS, on November 14, 2017, the County considered the Revised Tajiguas Resource Recovery Project ("Revised Project") and adopted findings, including California Environmental Quality Act findings; approved the Comprehensive Plan Amendment amending the Tajiguas Landfill "Waste Disposal Facility Overlay;" received the Planning Commission's Government Code section 65402 conformity report; approved the Second Amendment to the Amended Contract Between the County and Respondent MSB Investors, LLC; and, considered a Revised Addendum to the Subsequent EIR together with the Subsequent EIR No. 12EIR-00000-00002, State Clearing House No. 201204 certified by the Board on July 12, 2016 and Subsequent EIR Revision Letter and Errata dated May 27, 2016; and,

WHEREAS, in 2004, the US Department of Interior evaluated a 76 miles segment of the Gaviota Coast for its significance, suitability and feasibility for inclusion in the National Park System and concluded that the Gaviota Coast contains nationally significant natural and cultural resources and was suitable but not feasible for inclusion in the National Park System;

WHEREAS, the U.S. Department of Interior study found that the Gaviota Coast includes one the rarest global biomes unique to the United States with 1400 species that occupy the healthiest remaining coastal ecosystem in southern California that serves as an ecological transition zone between northern and southern California ecological provinces for both terrestrial and marine species which contributes to the area's extraordinary biotic diversity; and,

WHEREAS, the scenic, biological, cultural, agricultural and recreational resources of the Gaviota Coast are of exceptional value and importance to the community; and,

WHEREAS, the Board recognizes that the Community Vision articulated in the Gaviota Coast Plan of preserving the rural character of Gaviota by protecting and enhancing its varied and unique natural and cultural resources, agricultural productivity, and by enhancing and expanding public recreation and access opportunities consistent with the capacity of its resources; and,

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Santa Barbara County hereby establishes a policy:

- i. To cease burial of residuals and solid waste at the Tajiguas landfill when it reaches the existing permitted capacity of 23,300,000 cubic yards except for emergency debris;

ATTACHMENT F: BOARD RESOLUTION #18-150

A RESOLUTION TO CEASE BURIAL OF RESIDUALS AND SOLID WASTE AT TAJIGUAS LANDFILL WHEN THE LANDFILL REACHES PERMITTED CAPACITY AND TO SEEK OTHER RESIDUAL DISPOSAL OPTIONS

- ii. To not seek an expansion of the Tajiguas landfill capacity other than for emergency debris;
- iii. When seven years of remaining disposal capacity is reached based on the County's annual report to CalRecycle, to begin to seek locations other than the Gaviota Coast for solid waste residual disposal (a new landfill and/or contracting with other existing landfills); and,
- iv. To limit use of Baron Ranch primarily to open space, recreation and agricultural uses.

PASSED AND ADOPTED by the Board of Supervisors of the County of Santa Barbara, State of California this 19th day of June, 2018 by the following vote:

AYES: Supervisors Williams, Wolf, Hartmann, Adam, and Lavagnino

NOES: None

ABSTAIN: None

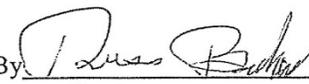
ABSENT: None



DAS WILLIAMS, CHAIR
BOARD OF SUPERVISORS
ATTEST: APPROVED AS TO FORM:

MONA MIYASATO
CLERK OF THE BOARD

MICHAEL C. GHIZZONI
COUNTY COUNSEL

By: 

Deputy

By: 

Deputy

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ATTACHMENT G: COASTAL ZONE BOUNDARY DETERMINATION MEMORANDUM FROM THE CALIFORNIA COASTAL COMMISSION

STATE OF CALIFORNIA – NATURAL RESOURCES AGENCY

EDMUND G. BROWN, JR., GOVERNOR

CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400
TDD (415) 597-5885



MEMORANDUM

September 21, 2018

To: Deanna Christensen, Supervisor, South Central Coast District Office

From: Darryl Rance, Mapping/GIS Program

Cc: Diane Black, Director, Development Services, Santa Barbara County Planning and Development

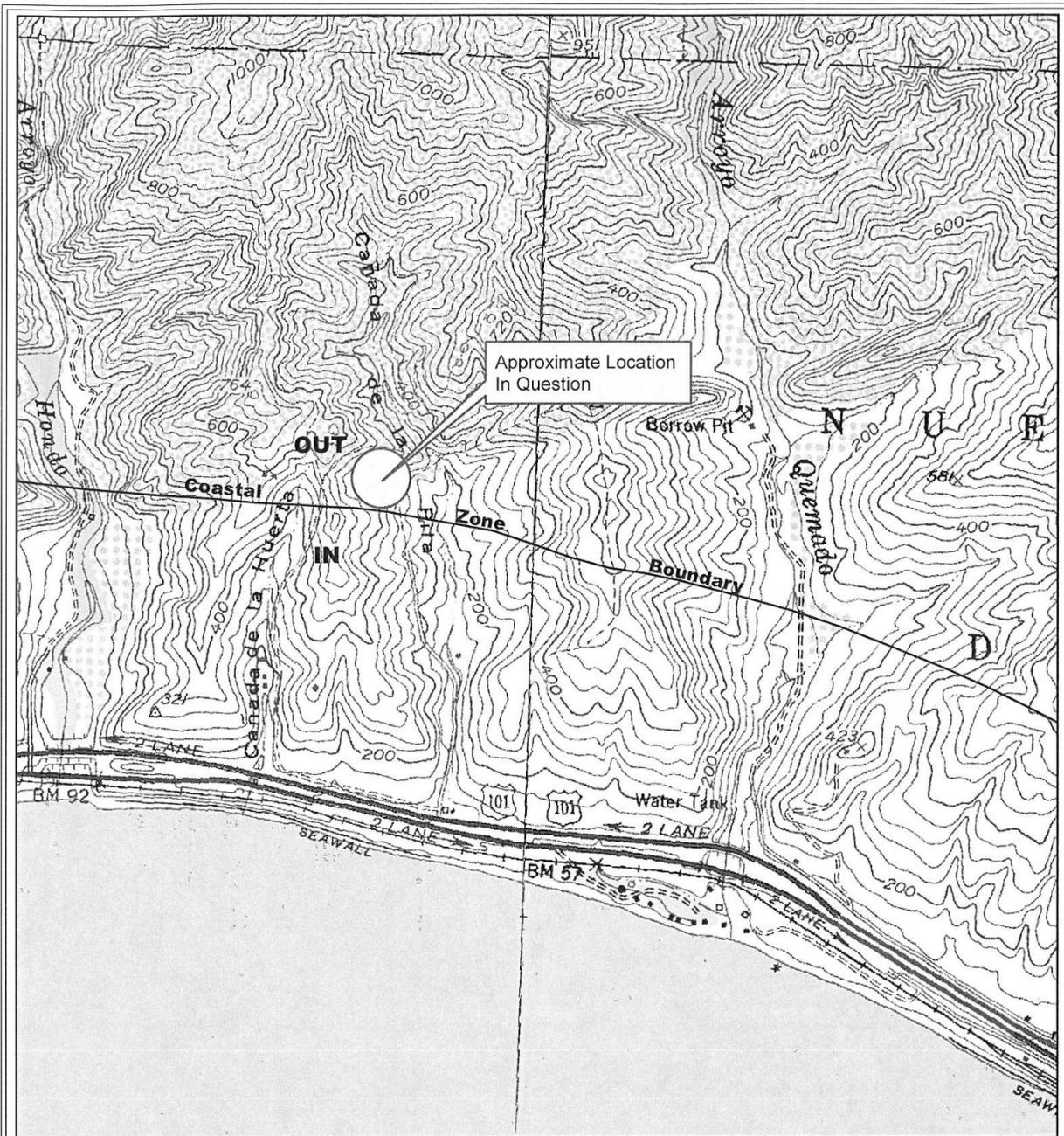
Subject: Coastal Zone Boundary Determination No. 07-2018, Resource Recovery Project, Tajiguas Landfill, Santa Barbara County.

A boundary determination has been requested for the Resource Recovery Project at the Tajiguas Landfill in Santa Barbara County. Enclosed is a copy of a portion of the Coastal Zone Boundary Maps 121 & 122 (Gaviota & Tajiguas Quadrangles) with the approximate location of the subject project indicated. See Exhibit 1. Also included is a Site Plan exhibit that depicts the Resource Recovery Project with the coastal zone boundary added. See Exhibit 2.

Based on the information provided and available in our office, the Resource Recovery Project at the Tajiguas Landfill, as shown on Exhibit 2, is located outside of the coastal zone and is not subject to the permit requirements of the Coastal Act of 1976.

Please contact me at (415) 904-5335 if you have any questions regarding this determination.

ATTACHMENT G: COASTAL ZONE BOUNDARY DETERMINATION MEMORANDUM FROM THE CALIFORNIA COASTAL COMMISSION



BD 07-2018
Tajiguas Landfill
Resource Recovery Project
Santa Barbara County

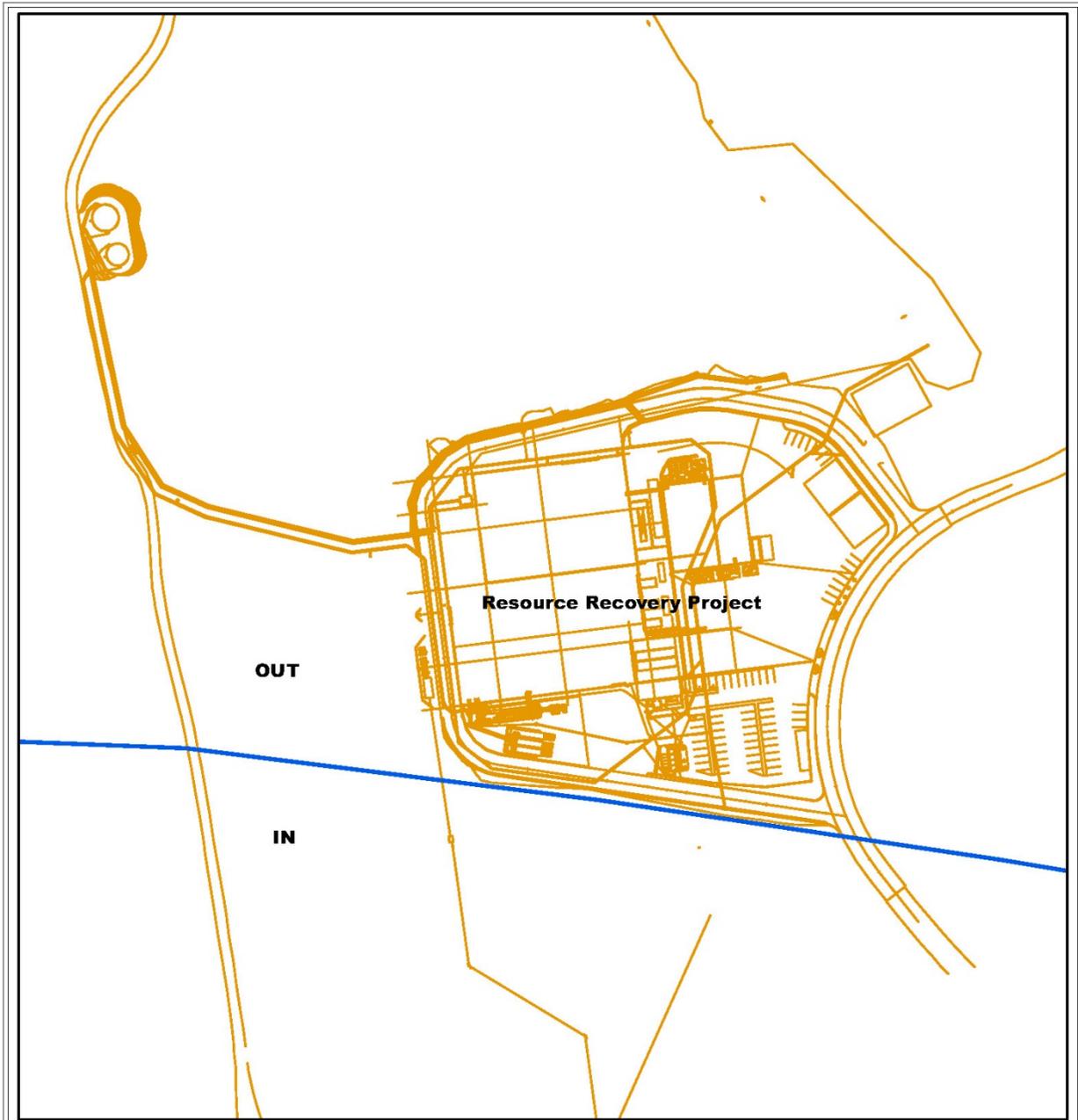
Portion of Coastal Zone
Boundary Maps 121 & 122
(Gaviota & Tajiguas Quadrangles)



Exhibit 1

DR 9/2018

ATTACHMENT G: COASTAL ZONE BOUNDARY DETERMINATION MEMORANDUM FROM THE CALIFORNIA COASTAL COMMISSION



BD 07-2018
Tajiguas Landfill
Resource Recovery Project
Santa Barbara County



— Coastal Zone Boundary



Exhibit 2

DR 09/2018