



FINAL REPORT

Zero Waste Marin

Organics Recycling Capacity Study

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1.0 EXECUTIVE SUMMARY

Zero Waste Marin (ZWM), Zero Waste Marin is the informal operating name of the Marin County Hazardous and Solid Waste Joint Powers Authority. ZWM represents Marin County's 11 incorporated cities and towns, as well as the unincorporated areas of the County of Marin, on matters related to waste reduction and materials management. The Board is composed of representatives from the cities and towns of Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato, Ross, San Anselmo, San Rafael, Sausalito, Tiburon, and the County of Marin.

ZWM retained SCS Engineers (SCS) to complete an Organics Recycling Capacity Study (Study). The goal of the Study was to provide current, accurate data to evaluate available resources to meet jurisdictional requirements related to Section 18992.1 of SB 1383. The study also aims to update and further support ZWM's 2024 Organics Capacity data submission, which was prepared using the CalRecycle Capacity Planning Calculator Tool.

The Study includes an assessment of the gaps between existing organics generation and recycling capacity, and projected organics material generation and processing capacity. The Study also identifies quantities of organics being collected and recycled, as well as additional quantities of material that would need to be processed to comply with state and local organics diversion program requirements in place at the time. In addition, the Study includes recommendations regarding potential solutions for additional capacity development and expansion of local infrastructure to achieve state-mandated recycling goals for jurisdictions within the county.

The findings from the Study are to be included in the CalRecycle Electronic Annual Report (EAR) due August 1, 2026, and will include the county's current and projected organics recycling capacity for the period from January 1, 2025, to January 1, 2039.

1.1 KEY FINDINGS

The key findings from this Study are included below:

1. An estimated total of **117,040 tons of organic waste were generated** in Marin County in 2024. Of the 117,040 tons of organic waste, 67,730 tons (57.8 %) were diverted by some method of organics recycling, and **49,310 tons (42.1%) were disposed of in landfills.**
2. The total **projected capacity needed by 2039 for the county is 113,980 tons per year (TPY)**, which is 3,059 TPY less than the 117,040 estimated tons of organic material generated in the county in 2024 due to an estimated decrease in population by 6,659 (3%).
3. The **additional projected capacity needed by 2039 for the county is 46,250 TPY** beyond current processing capacity, assuming that all organic material is diverted from landfill disposal in line with SB 1383 requirements.
4. **Six Marin County facilities and seven out-of-county facilities were interviewed** for this project. The County's five waste haulers and 12 jurisdictions were also interviewed to confirm information and provide additional insight.

5. Overall, **there is an estimated 253,095 TPY of future available capacity** for use by the county for organics processing, which includes 71,500 TPY of additional permitted capacity expansion by 2039.
6. Four facilities are planning to increase their capacity totaling an estimated additional 71,500 TPY of capacity. Three facilities confirmed their ability to accept material from Marin County generators: West Marin Compost (WMC), Pacific Organics Solutions (POS) (Ukiah), and Napa Materials Diversion Facility (NMDF). **A total of 51,500 TPY of capacity may be available at out-of-county facilities and 20,000 at in-county facilities.** All facilities anticipate completing their expansion plans by 2029.
7. Overall, the projected amount of organic waste generation by 2039 exceeds the amount of reported organics processing capacity through current processors. However, **neighboring facilities reported having available capacity and interest in receiving this material from Marin County generators.**

1.2 INFORMATION FOR SUBMISSION TO CALRECYCLE

Senate Bill 1383 requires ZWM to submit organics data to CalRecycle in the Electronic Annual Report. The results for the 2025 EAR (due August 1, 2026) using year 2024 disposal information are presented in **Tables 1 - 4**:

Table 1. 2025 EAR Organic Waste Capacity Summary

Estimated organic waste for landfill disposal (tons)	Organic waste recycling capacity (tons)*	Needed organic waste recycling capacity (tons)
49,310	67,730	0
*Contracts were not provided upon request by facilities receiving Marin County organic waste and therefore cannot be classified as “verifiably available”.		

Table 2. Proposed Facility Expansions for Organic Waste Processing

Have the county, including cities, special districts, and Regional Agencies within the county, identified any proposed new or expanded recycling facilities that could be used to process the jurisdictions’ generated organic waste?	Identify the locations for new or expanded facilities that may be used to process the generated organic waste from the county, including cities, special districts, and Regional Agencies within the county.
Yes	<p>Quackenbush Resource Recovery (QRR) 16520 Davis Street, Clearlake, CA 95422</p> <p>West Marin Compost (WMC) 6290 Nicasio Valley Rd. Nicasio, CA 94946</p> <p>Pacific Organics Solutions (POS) 3200 Taylor Dr. Ukiah, CA 95482</p> <p>Jepson Prairie Organics (JPO) 6426 Hay Rd, Vacaville, CA 95687</p> <p>Northern Recycling, LLC (NR) 44692 County Road 28H, Woodland, CA, 95776</p> <p>Future Sonoma County (SC) Compost Facility; Sonoma County, CA</p>

Table 3. Jurisdiction Capacity Reporting Status

Identify each jurisdiction within the county that is required to submit an implementation schedule due to insufficient organic waste recycling capacity.	Identify each jurisdiction that did not provide any information regarding organic waste recycling capacity to the county within the required 120-day timeframe.
None	All jurisdictions provided the requested information within the required timeframe.

Table 4. LEA & Local Task Force Consultation Summary

Consult with the Enforcement Agency and the local task force created pursuant to Section 40950 of the Public Resources Code on the status of locations for new or expanded solid waste facilities including the potential capacity increase each facility may provide if approved.
<p>Zero Waste Marin meets regularly with the Local Enforcement Agency and Redwood Landfill & Recycling Center on the status of an expansion plan for WM Earthcare of Marin (21-AA-0068) mixed composting facility. Zero Waste Marin meets bi-monthly with the local task force regarding the expansion plan for WM Earthcare of Marin (21-AA-0068) and Marin’s overall capacity needs.</p> <p>SCS contacted all LEAs for the surveyed facilities and has verified information from Sonoma, Solano, Yolo, and Marin Counties. Solano County’s organic processing facility, Jepson Prairie Organics, and Yolo County’s facility, Northern Recycling, LLC, have no planned expansions. Additionally, there are no new organics processing facilities currently proposed, permitted, or under development in these jurisdictions. The Marin County LEA has verified that West Marin Compost has not submitted an expansion proposal and that WM Earthcare of Marin, a separate facility, has been in conversation with them regarding an expansion proposal for submission, which will initiate the EIR process. As of publication of this report, SCS was awaiting responses from LEAs in Mendocino, Lake, Napa, Sonoma, and Contra Costa Counties.</p>

Based on the data collected for this report, Marin County has adequate organics processing capacity to manage the quantity of organics generation currently being diverted. To guarantee verifiable capacity, additional contracts will need to be established with the facilities interested in receiving material from Marin County generators to process the projected quantity of organics materials generated in 2039.

SCS’ key recommendations are:

- **ZWM** to support jurisdictions and haulers in establishing agreements with multiple processing partners to diversify outlets and improve capacity reliability.
 - Jurisdictions require written documentation of available organics processing capacity in hauler contracts.
- **ZWM** to communicate with the five franchised haulers about the neighboring facilities willing to accept Marin County organics. The haulers servicing the

unincorporated county areas and the City of San Rafael should prioritize securing capacity at additional organic waste recycling facilities before 2039.

- Creating a higher demand for compost products within the county may help these surveyed facilities accept larger quantities of organic waste.
 - **ZWM and jurisdictions** to provide public education and outreach that encourages compost use in municipal landscaping, public works projects, erosion control, and local agricultural applications.
 - **ZWM and jurisdictions** to continue to offer and promote a Subsidized Compost Program and consider including other composting facilities as a provider of finished compost in this program.
 - **Jurisdictions** to coordinate with their internal departments to integrate compost procurement into existing maintenance programs and contracts and capital improvement projects, creating more consistent end-market demand.
- Encourage **jurisdictions and haulers** to partner with other processing facilities as their quantity of diverted organic waste increases.

2.0 INTRODUCTION

Zero Waste Marin (ZWM) is required to estimate the organics processing capacity needed to divert all organic waste currently sent to landfill from Marin County. “Organic Waste” defined in SB 1383 includes but is not limited to food, green material, landscape and pruning waste, organics textiles and carpets, lumber, biosolids, digestate, and sludges, so long as the solid waste contains material originating from living organisms and their metabolic waste products. Additionally, ZWM is required to estimate the organics processing capacity that will be available prior to January 1, 2039. If the available organics processing capacity is less than the estimated amount of organics in the landfill stream, ZWM will be responsible for notifying the jurisdiction(s) that they must submit an implementation plan detailing how they will secure adequate processing capacity.

In compliance with Article 11 of SB 1383, ZWM coordinated with jurisdictions, haulers, facilities, and regional special districts within the county to complete an organic waste recycling capacity study. The Study includes: an estimate of the tons of organic waste that will be disposed by the county and jurisdictions within the county; the existing organic waste recycling capacity (in and out of the county) that is available to the jurisdictions within the county; and an estimate of the new or expanded capacity, in addition to existing capacity identified, that is needed to process additional organic waste. If SCS determines additional capacity is necessary, ZWM shall also notify the applicable jurisdictions.

A county can demonstrate the capacity is verifiably available to the county or its jurisdictions through a contract, franchise, or other documentation of existing, new, or expanded capacity at a facility, activity, operation or property that recovers organic waste that will be available to the county or its jurisdiction prior to the end of the reporting period. (SB 1383 Regulations, 14 CCR § 18992.1). For the purposes of calculating the estimates required by this section, a county may subtract the waste generated in an area subject to a waiver granted by the Department pursuant to Section 18984.12. A county is not required to obtain information from a jurisdiction that is waived from all of the organic waste collection requirements of the cited chapter.

SB 1383 Regulations, 14 CCR § 18984.12 outlines the guidelines for waivers and exemptions granted by the Department. The following cities and special districts have been granted low population waivers that shall be in effect until December 1, 2028. These cities and special districts represent approximately 6.4% of Marin County’s total population.

- Almonte Sanitary District
- Alto Sanitary District
- City of Belvedere
- Bolinas Community Public Utility District
- Homestead Valley Sanitary District
- Marin City Community Services District
- Strawberry Recreation District

3.0 STUDY METHODOLOGY

Data collection consisted of three parts: 1) Conducting research of existing facilities within a 100-mile radius of Marin County; 2) Surveying jurisdictions, haulers, and organic material processing facilities; and 3) Modeling and projecting disposed and recovered organic waste compositions. After data was collected, SCS compared the projected organic capacity needs to existing facility capacity to estimate how much, if any, additional capacity was necessary.

3.1 JURISDICTION, HAULER, AND FACILITY SURVEYS

Surveys were conducted to identify existing organics recycling facilities receiving Marin County organic waste. The surveys were also used to verify the types and quantities of organic waste being processed, to estimate the current processing capacity at facilities within the county, and to calculate local and regional recycling capacity.

Three surveys were performed: one of organic materials processing facilities within the county and within 100 miles of the county, one of jurisdictions within the county, and one of haulers operating within the county. The surveyed out of county facilities were restricted to a 100-mile radius to maintain an appropriate service and transportation distance within which haulers can operationally and economically transport materials to processing facilities. The jurisdiction and hauler surveys served to aid in understanding material flow and validate facility agreements.

Research was performed to identify and collect data on active facilities in Marin County and within 100-mile radius, using CalRecycle's Solid Waste Information System (SWIS) [\(4\)](#), the Recycling & Disposal Reporting System (RDRS), and existing knowledge of facilities. SCS identified the facilities from the CalRecycle website, including the permitted volumes, annual throughput capacity, and actual incoming volumes of material. Information detailing the type and quantity of facilities is included in **Table 5** and a map of facility locations is shown in **Exhibit 8** and **Exhibit 9**.

After initial data collection, surveys were sent to the facilities to verify the types and quantities of organic waste they currently process, plans for facility modifications, and other related information. Surveys were also sent to jurisdictions and haulers. In advance of the surveys, a phone call and/or an email notice was sent by Zero Waste Marin to explain the purpose and objectives of the study and request participation in the surveys. The questions asked in the surveys distributed to facilities, jurisdictions, and haulers are included in **Appendices A - C**, respectively. All jurisdictions and waste haulers contacted responded to the surveys.

The surveyed waste haulers included:

1. Bay Cities Refuse Service
2. Marin Sanitary Service
3. Mill Valley Refuse Service
4. Recology Sonoma Marin
5. Tamalpais Community Services District

The jurisdictions surveyed included:

1. Belvedere
2. Corte Madera
3. Fairfax
4. Larkspur
5. Mill Valley
6. Novato Sanitary District
7. Ross
8. San Anselmo
9. San Rafael
10. Sausalito
11. Tiburon
12. Unincorporated Marin County

A total of 26 facilities were contacted, and 12 responded. One facility that did not respond was included because SCS was able to identify additional capacity available by 2039. Sanitary districts or agencies were also included in the list because they provide wastewater treatment services. These entities process biosolids, digestate, and sludge, including materials in the SB 1383 definition of organic waste.

The six in-county facilities included:

1. Bolinas-Stinson Resource Recovery Project (BSRRP)
2. Central Marin Sanitation Agency (CMSA)
3. Marin Resource Recovery Park (MRRP)
4. Redwood Landfill / WM Earthcare (RL)
5. West Marin Compost (WMC)
6. Novato Sanitary District (NSD)

The seven out-of-county facilities included:

1. Jepson Prairie Organics (JPO)
2. Napa Materials Diversion Facility (NMDF)
3. Northern Recycling, LLC (NR)
4. Pacific Organics Solutions (POS)
5. Quackenbush Resource Recovery (QRR)
6. West Contra Costa Sanitary Landfill (WCCSL) Compost Facility
7. Future Sonoma County (SC) Compost Facility

Information detailing the type and quantity of facilities is included below in **Table 5**.

Table 5. Facility Type and Number by County

County	Compost Facility	Wastewater Treatment Facility	Transfer/ Processor Facility	Total
Contra Costa	1	0	0	1
Lake	1	0	0	1
Marin	3	2	1	6
Mendocino	1	0	0	1
Napa	1	0	0	1
Solano	1	0	0	1
Sonoma	1	0	0	1
Yolo	1	0	0	1
Total	10	2	1	13

3.2 ORGANIC WASTE TONNAGE MODELING & PROJECTIONS

To identify the types and quantities of organic waste that are disposed, the organic composition from ZWM’s FY2025 Waste Characterization Study, performed by SCS Engineers, was used to calculate the total amount of organics bound for landfill disposal. To estimate the organics processing capacity required to manage organic waste currently disposed from Marin County generators, including future impacts associated with population fluctuation and continued improvement of organics diversion, SCS developed a forecasting model. The methodology outlined below describes how the model estimates organic material generation from both the residential and commercial sectors and incorporates quantities of organic material that are presently being processed.

Step 1. Model Disposed Organic Waste

A modeling exercise was performed to estimate the quantity of organic material in the waste stream for the ZWM service area. SCS used the annual tons of waste disposed reported for each jurisdiction collected through hauler survey responses and applied the FY2025 Waste Characterization Study data to estimate the quantity of organic waste in the disposed waste stream. Residential and commercial waste compositions were utilized to derive quantities of organics generated in each sector. The modeled composition was performed for six material types: yard waste; food; compostable paper; clean wood; mixed compostables; and potentially compostable material (such as pallets and crates, cork items, sawdust, animal bedding, etc.).

Step 2. Model Baseline 2024 Organic Waste Generation

Hauler-reported tonnage data for waste and organic material collected from incorporated jurisdictions and unincorporated areas of Marin County were used to estimate total organic material generation, both disposed and diverted, in 2024 for the residential and commercial sectors. Reported diverted organic tons were derived from hauler data provided through survey responses. The quantity of organic waste in the disposed waste stream calculated in Step 1 was combined with the hauler report diversion tons to estimate total organic waste

generation in the county. Results from the composition modeling are presented in the following sections.

Step 3: Estimated Organics Material Generation Rates and Developing Future Projections

As the population changes in the jurisdictions within Marin County, so will the quantity of waste generation. To project the change in organic waste generated, SCS utilized the population projection data from the State of California Department of Finance¹. An annual population fluctuation rate was calculated based on the projected population and applied to the estimated tons of organic waste generated. The model next takes into consideration the impact of SB 1383 and the jurisdictions' continued efforts towards diverting organic waste from landfill. SB 1383 intends to divert all organics waste from landfill. To this extent, the model calculates how much capacity would be needed if all jurisdictions reach 100% diversion of organic waste from landfill by 2039.

The quantities of organic waste accepted and processed by existing facilities were next analyzed to recognize potential gaps in processing capacity in the future.

3.3 ORGANICS CAPACITY

SCS evaluated available organics processing capacity on a facility-by-facility basis using information obtained through facility surveys for both in-county and out-of-county organics processors. Survey responses were reviewed to identify each facility's permitted processing capacity (potentials), reported throughput (actuals), material types accepted, number of operating days, and any planned capacity expansions. Reported throughput values were compared to permitted capacities to estimate existing available processing capacity under current operating conditions. Facility-reported plans for current or future capacity expansions were also reviewed and incorporated, where applicable, into the capacity assessment.

To assess capacity availability without assuming changes to existing hauling arrangements, SCS used hauler survey responses to identify the facilities to which each jurisdiction's organic waste is currently delivered. In addition, SCS contacted jurisdictions and facilities to confirm whether agreements or contracts were in place for the acceptance of organic waste from specific jurisdictions. Any contracts or agreements provided to SCS were reviewed for provisions related to capacity availability or acceptance limits.

For jurisdictions where insufficient capacity was identified under existing facility assignments, SCS evaluated unused capacity at other surveyed facilities to identify potential alternative processing pathways for organic waste. This approach allowed SCS to assess both current and potential future organics processing capacity available to manage organic waste generated in Marin County.

4.0 SURVEY RESPONSES

As part of this Study, SCS conducted coordinated surveys of waste haulers, jurisdictions, and organic waste processing facilities to support the organic waste material flow analysis and to

¹ California Department of Finance, Demographic Research Unit. (2025). Report P-2A: Total population projections, 2020–2070: California counties (2024 baseline population projections, Vintage 2025 release). California Department of Finance. [California Department of Finance – Demographic Projections](#)

validate existing and planned processing capacity. Three distinct questionnaires were developed and distributed by SCS on behalf of ZWM: a hauler survey; a jurisdiction survey; and a facility survey. The surveys were designed to supplement publicly available data sources and confirm current operational practices, service coverage, and material destinations.

In advance of the survey distribution, Zero Waste Marin notified participants of the purpose and regulatory relevance of the study, including its role in supporting compliance with CCR Title 14 § 18992.1. All jurisdictions and waste haulers contacted submitted responses, and a subset of facilities provided completed surveys. A matrix summarizing all entities contacted and those that responded is provided in **Appendix A**.

4.1 HAULER SURVEY

Five waste haulers operating within Marin County responded to the hauler survey. The hauler survey collected information on collection tonnages, generator types served, and the destinations of collected organic waste. Responses were used to confirm which facilities are currently receiving organics collected within Marin County and to help validate material flow assumptions used in the capacity analysis.

The primary findings identified through the hauler survey responses included:

- Annual reported disposal and diversion tons
- Material flow within the county

4.2 JURISDICTION SURVEY

The jurisdiction survey gathered information on local solid waste and organics programs, service arrangements with haulers, and known processing agreements for organic waste. Survey responses were received from all 12 jurisdictions represented by Zero Waste Marin, including the county unincorporated areas.

Jurisdiction responses were primarily used to confirm existing collection programs and to provide a planning-level understanding of how organic waste generated within each jurisdiction is managed. These responses also served as a cross-check against hauler and facility survey data to confirm that reported material flows and processing pathways were aligned.

Primary findings identified through the jurisdiction survey responses included:

- Organic waste collected within each jurisdiction
- Existing documents for verifying organics capacity
- List of facilities organic waste is processed

4.3 FACILITY SURVEY

Facility surveys requested information on permitted capacities, inbound tonnages, types of organic waste accepted, and any planned or potential facility modifications or expansions. A total of 26 organic waste processing facilities located within Marin County and within approximately 100 miles of the county were identified and contacted as part of this Study. Of these, 12 facilities submitted completed surveys. The responding facilities include both in-county and out-of-county facilities that currently accept, or may reasonably accept, organic

waste generated in Marin County. One facility included in the Study did not submit a survey; however, SCS was able to determine future additional capacity.

Survey responses were used to verify and supplement facility data obtained from CalRecycle's Solid Waste Information System (SWIS), the Recycling and Disposal Reporting System (RDRS), and other publicly available sources.

The facility survey results form the basis of the existing organics processing capacity assessment presented in Section 7, including the differentiation between in-county and out-of-county facilities and the evaluation of available and potential future capacity.

Primary findings identified through the facility survey responses included:

- Permitted Capacity
- Permitted Throughputs
- Actual Throughputs
- Unused Capacity
- Accepted Feedstocks
- Potential Expansions
- Current processing support needs

Table 6 identifies the accepted materials for each facility that responded to the survey.

Table 6. Organic Materials Accepted at Surveyed Facilities

Facility	County	Agricultural	Biosolids/ Sludge	Food Scraps	Green Waste	Manure	Mixed MSW	Wood / Lumber	Digestate
Bolinas-Stinson Resource Recovery Project (BSRRP)	Marin	No	No	No	Yes	No	No	No	No
Central Marin Sanitation Agency (CMSA)	Marin	No	No	Yes	No	No	No	No	No
Jepson Prairie Organics (JPO)	Solano	Yes	No	Yes	Yes	No	No	No	Yes
Marin Resource Recovery Park (MRRP)	Marin	No	No	Yes	Yes	No	No	No	No
Napa Materials Diversion Facility (NMDF)	Napa	Yes	No	Yes	Yes	No	No	No	Yes
Northern Recycling, LLC (NR)	Yolo	Yes	No	Yes	Yes	No	No	No	Yes
Novato Sanitary District (NSD)	Marin	No	Yes	No	No	No	No	No	No
Pacific Organics Solutions (POS)	Mendocino	No	No	Yes	Yes	No	No	No	No
Quackenbush Resource Recovery (QRR)	Lake	No	No	Yes	Yes	No	No	No	No
Redwood Landfill/ WM Earthcare (RL)	Marin	No	No	Yes	Yes	No	No	No	No
Future Sonoma County (SC) Compost Facility	Sonoma	No	No	Yes	Yes	No	No	No	No
West Contra Costa Sanitary Landfill (WCCSL) Compost Facility	Contra Costa	Yes	No	Yes	Yes	No	No	No	Yes
West Marin Compost (WMC)	Marin	Yes	No	No	Yes	No	No	No	No

4.4 VISUALIZED FLOW OF MATERIALS

Using survey responses, SCS visualized the flow of materials within the County from each jurisdiction. The following **Exhibits 1, 2, and 3** show the destination of the organics, recycling, and landfill streams, respectively.

Exhibit 1. Organics Material Flow Map

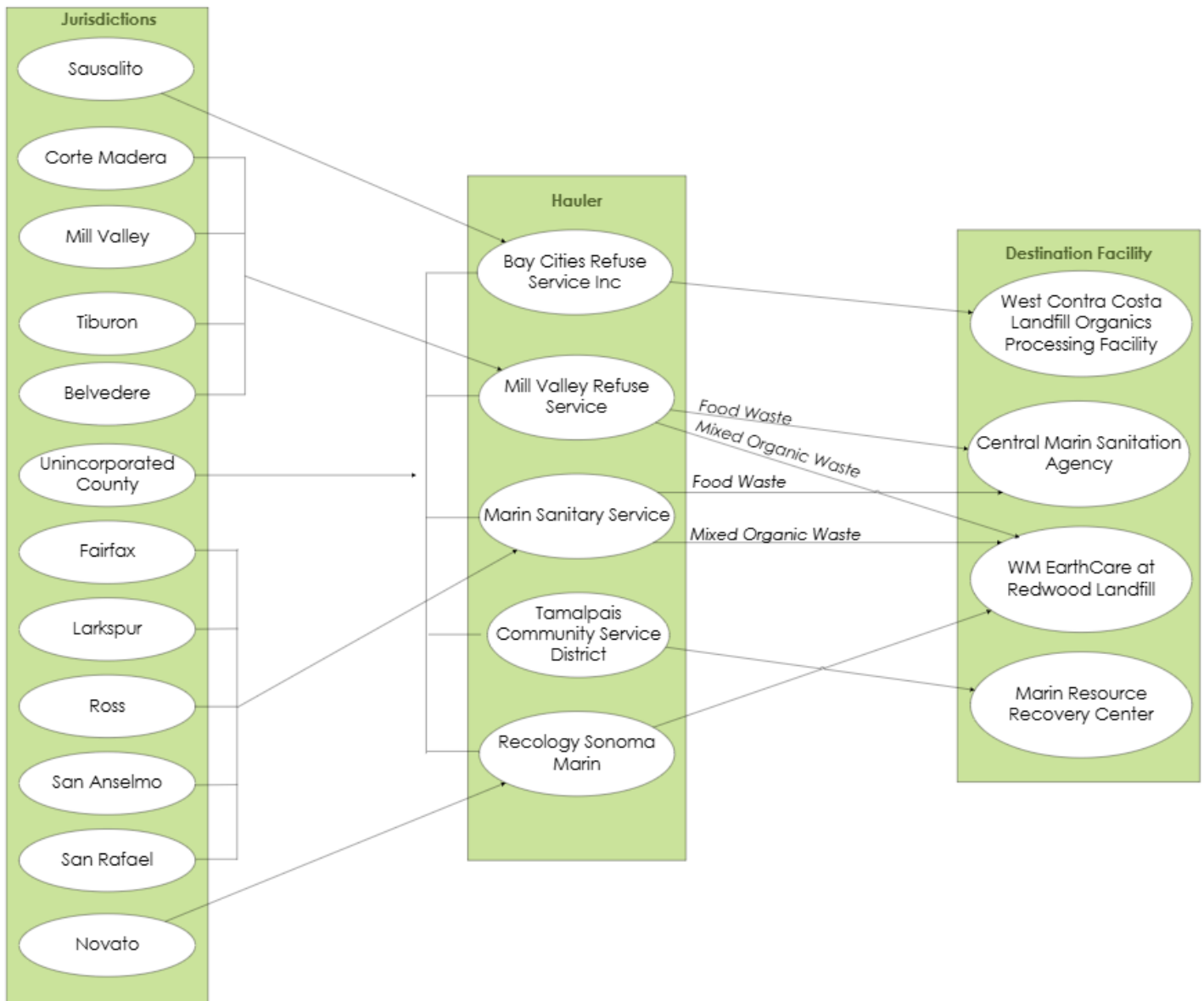


Exhibit 2. Recycling Material Flow Map

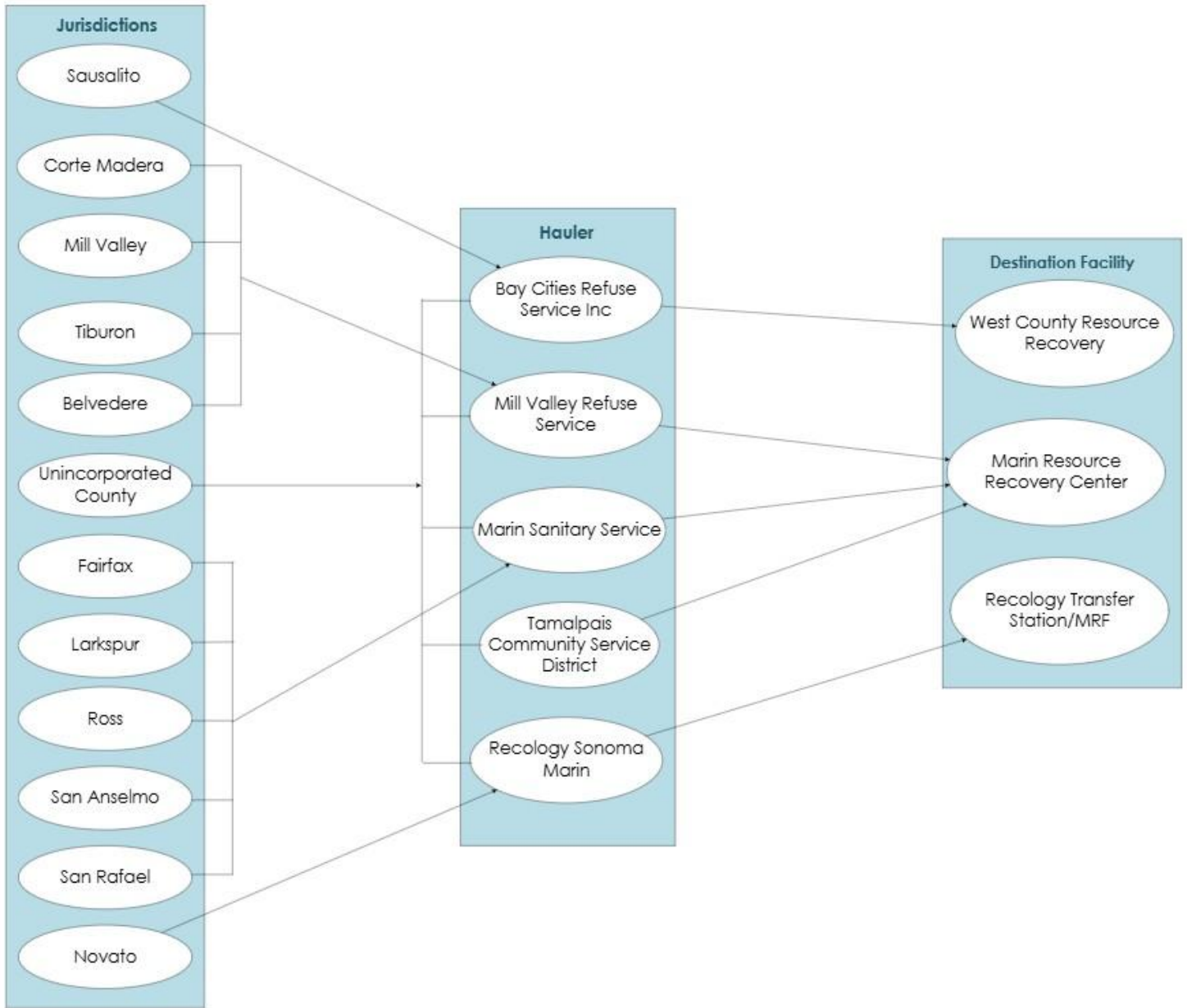
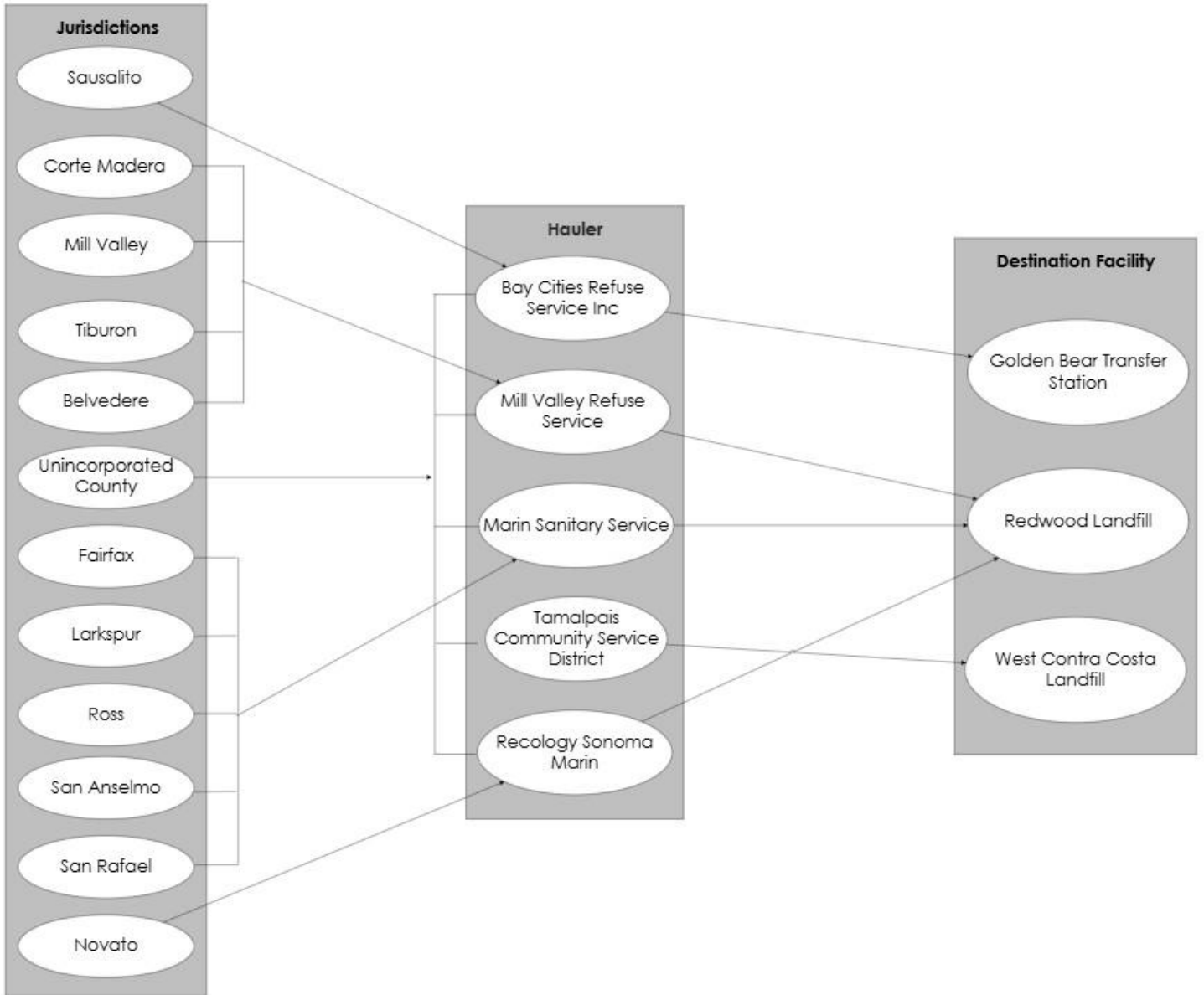


Exhibit 3. Landfill Material Flow Map



5.0 CURRENT ORGANIC WASTE GENERATION

Current organics generation was estimated by integrating hauler-reported annual disposal and diversion tons with the organic material composition from the FY 2025 Waste Characterization Study. Reported disposal tons were multiplied by the organic composition percentages to estimate the quantity of organic material remaining in the disposed waste stream. Hauler-reported organics diversion tons represent materials currently being processed at composting and other organics facilities. These disposed and diverted organic tons were then combined to calculate the total amount of organics generated within the Zero Waste Marin service area, forming the basis for the results presented in this section.

Exhibit 4 provides a visual comparison between organic material currently disposed and diverted in the residential and commercial sectors.

Exhibit 4. Disposed and Diverted Organic Materials - Residential and Commercial Sectors

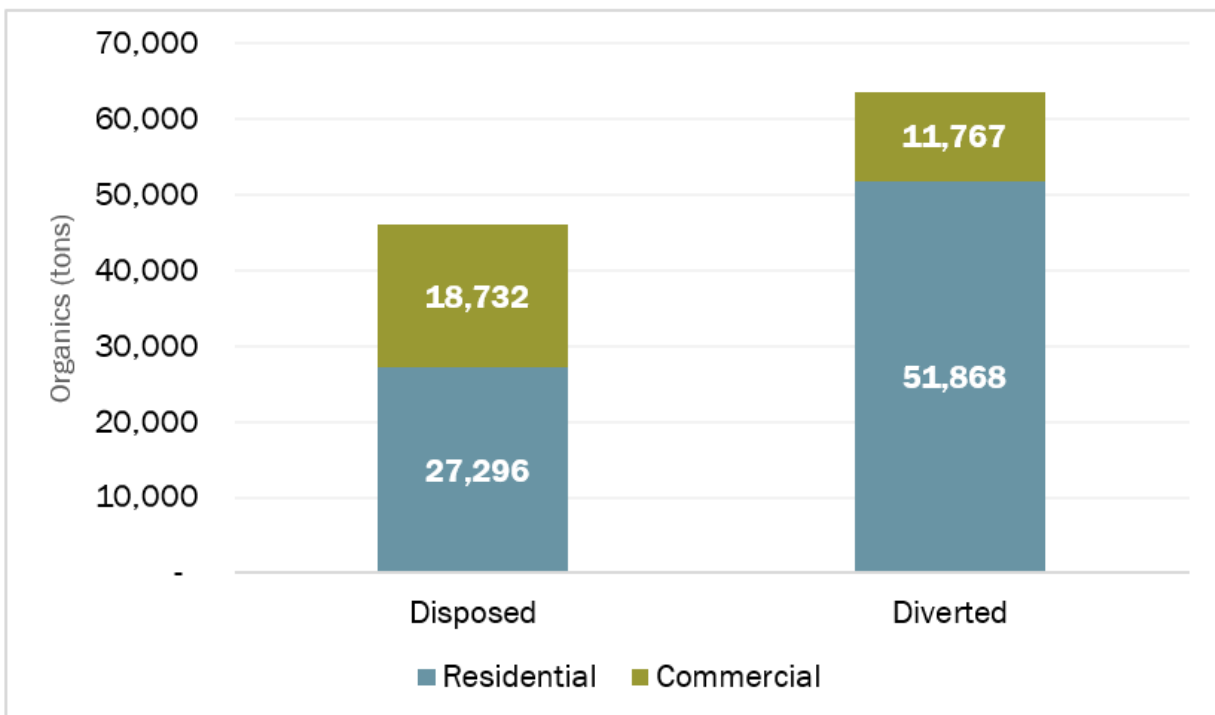
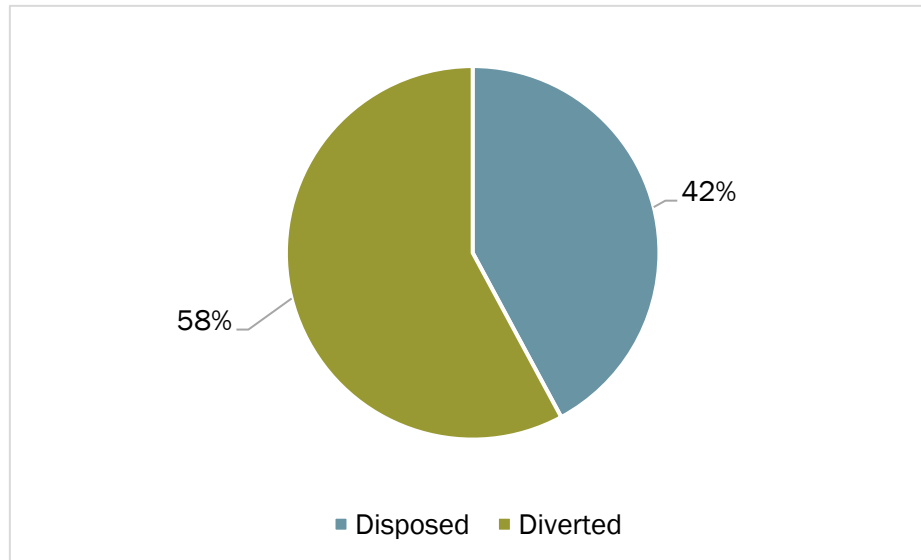


Exhibit 5 displays a comparison of organic material disposed and diverted across all sectors.

Exhibit 5. Disposed and Diverted Organic Materials

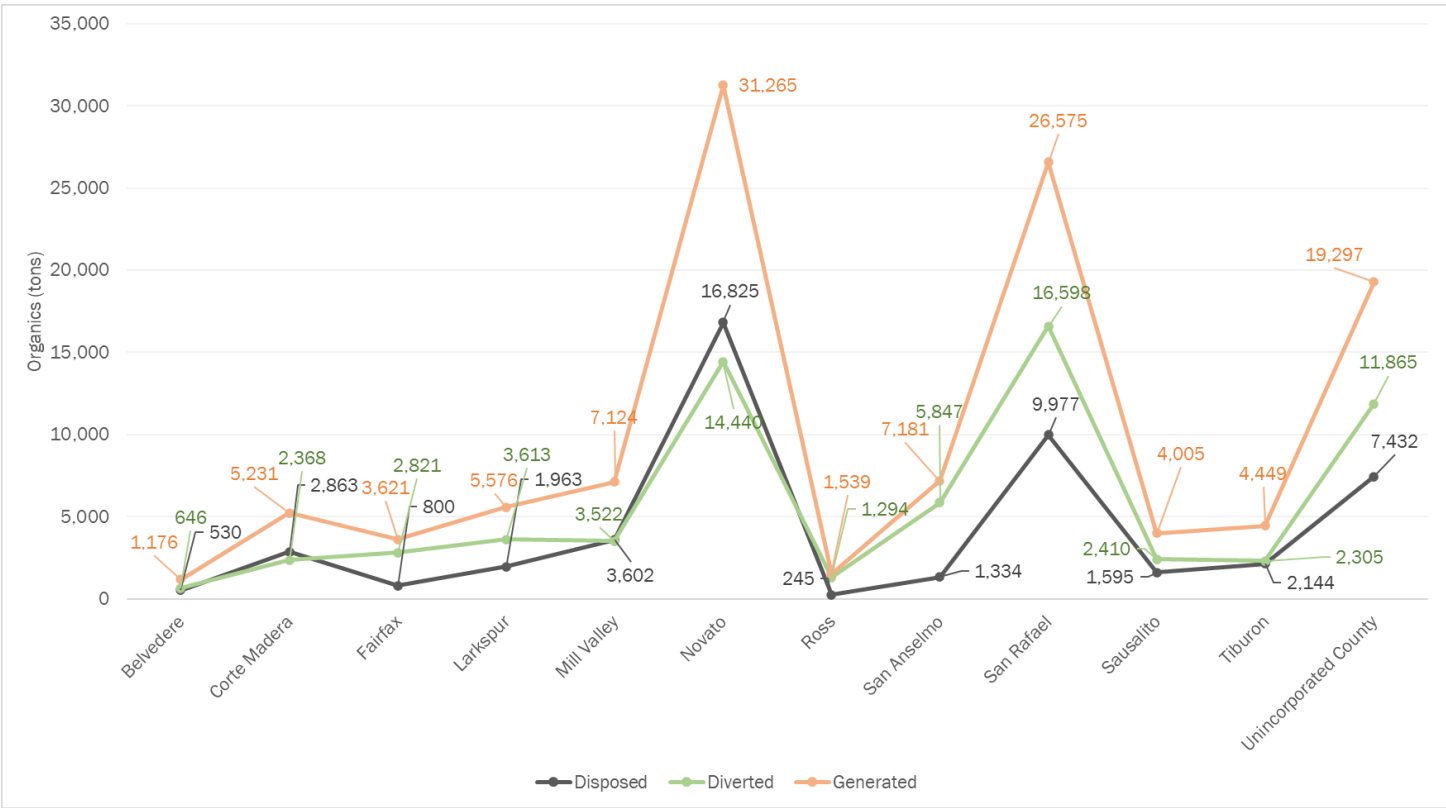


Data was provided to SCS by each jurisdiction for diverted organics tons, and total waste disposal tons for the residential and commercial sectors. Disposed organic material was determined for each jurisdiction using the waste characterization method described in **Section 3.2**, Steps 1 and 2. Each jurisdiction has different organics diversion programs and hauler agreements. The overall diversion rate for the county in 2024 was 62%. **Table 7 and Exhibit 6** display the organics generation for each jurisdiction in the county.

Table 7. 2024 Organic Waste Generation (tons)

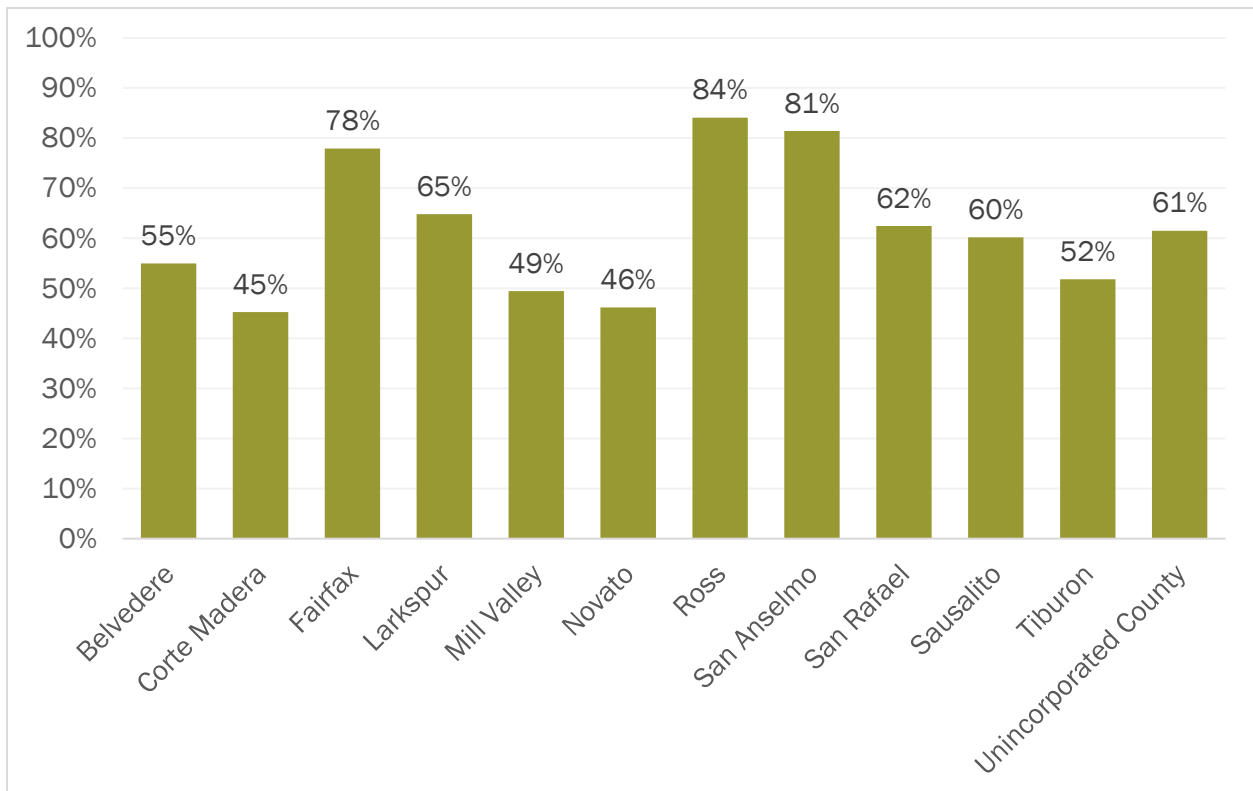
Jurisdiction	Disposed (tons)	Diverted (tons)	Total (tons)	Organics Diversion Rate
Belvedere	530	646	1,176	55%
Corte Madera	2,863	2,368	5,231	45%
Fairfax	800	2,821	3,621	78%
Larkspur	1,963	3,613	5,576	65%
Mill Valley	3,602	3,522	7,124	49%
Novato	16,825	14,440	31,265	46%
Ross	245	1,294	1,539	84%
San Anselmo	1,334	5,847	7,181	81%
San Rafael	9,977	16,598	26,575	62%
Sausalito	1,595	2,410	4,005	60%
Tiburon	2,144	2,305	4,449	52%
Unincorporated County	7,432	11,865	19,297	61%
Total	49,310	67,730	117,040	-
Average	-	-	-	62%

Exhibit 6. Disposed vs. Diverted Organics for Each Jurisdiction



The total organics diversion rate is an average of the success of the residential organics collection program and the commercial organics collection program in all of the jurisdictions. **Exhibit 7** displays a visual comparison of 2024 organics diversion rates per jurisdiction in Marin County.

Exhibit 7. Organics Diversion Rate per Jurisdiction 2024



5.1.1 Residential Sector Modeling

Waste characterization data was used to model the organic waste generation from the residential sector. The composition data was applied to county-supplied residential waste disposal quantities to estimate the quantities of organic waste generated in each jurisdiction. The model was developed to understand the breakdown of organic waste found in the residential waste stream. The residential sector generates approximately 79,164 tons of organic waste per year (diverted and sent to landfills).

Table 8 shows the breakdown of residential organic waste generation in each jurisdiction.

Table 8. Residential Organic Waste Generation

Jurisdiction	Tons Disposed	% of Countywide Disposal	Tons Diverted	% of Countywide Diversion	Tons Generated	% of Countywide Generation
Belvedere	464	1%	618	1%	1,082	1%
Corte Madera	1,420	3%	1,938	3%	3,359	3%
Fairfax	420	1%	2,126	3%	2,546	2%
Larkspur	1,032	2%	2,723	4%	3,755	3%
Mill Valley	2,254	5%	3,079	5%	5,333	5%
Novato	10,513	21%	13,021	19%	23,534	20%
Ross	129	0%	975	1%	1,104	1%
San Anselmo	701	1%	4,407	7%	5,108	4%
San Rafael	5,245	11%	12,511	18%	17,756	15%
Sausalito*	N/A	N/A	N/A	N/A	N/A	N/A
Tiburon	1,487	3%	2,038	3%	3,525	3%
Unincorporated County*	3,630	7%	8,432	12%	12,062	10%
Total	27,296	55%	51,868	77%	79,164	68%

*Sausalito and a portion of the Unincorporated Marin County disposal and diversion data is not tracked separately by residential and commercial waste sectors.

5.1.2 Commercial Sector Modeling

Waste characterization data was used to model organic waste generation from the commercial sector. The composition data was applied to county-supplied commercial waste disposal quantities to estimate the quantities of organic waste generated in Marin County. The model was developed to understand the breakdown of organic waste found in the commercial sector. The commercial sector generates approximately 30,498 tons of organic waste per year.

Table 9 shows the breakdown of commercial organic waste generation in each jurisdiction.

Table 9. Commercial Organic Waste Generation

Jurisdiction	Tons Disposed	% of Countywide Disposal	Tons Diverted	% of Countywide Diversion	Tons Generated	% of Countywide Generation
Belvedere	66	0%	28	0%	94	0%
Corte Madera	1,443	3%	430	1%	1,872	2%
Fairfax	379	1%	695	1%	1,074	1%
Larkspur	931	2%	890	1%	1,821	2%
Mill Valley	1,348	3%	443	1%	1,791	2%
Novato	6,312	13%	1,419	2%	7,731	7%
Ross	116	0%	319	0%	435	0%
San Anselmo	632	1%	1,440	2%	2,072	2%
San Rafael	4,732	10%	4,087	6%	8,819	8%
Sausalito	N/A	N/A	N/A	N/A	N/A	N/A
Tiburon	657	1%	268	0%	925	1%
Unincorporated County	2,115	4%	1,748	3%	3,862	3%
Total	18,732	38%	11,767	17%	30,498	26%

*Sausalito and a portion of the Unincorporated Marin County disposal and diversion data is not tracked separately by residential and commercial waste sectors.

6.0 PROJECTED ORGANIC WASTE GENERATION

Using the total quantities of organic waste generated by sector (residential and commercial) from **Section 5.0**, future generation was estimated using projected population change and organics diversion growth in alignment with SB 1383’s goal of diverting all organic waste from landfill. This also considers that the overall goal for each jurisdiction should be 100% organics diversion. The projections are based on achieving this goal by 2039.

Using the population projection data and the year-over-year projected population change, SCS was able to determine that Marin County will experience an approximate population decline of three percent from 2024 to 2039.

Table 10 presents the estimated change in organics generation based on population projections. Projections in diverted organics are included based on the diversion growth. The projections are calculated utilizing the reported disposal and diversion tons from each jurisdiction within the county.

Table 10. Projected Organics Generation and Diversion

Year	Population *	Organics Disposed (tons)	Organics Diverted (tons)	Organics Generated (tons)	Required growth in diversion to hit targets**	Est. Organics Diversion
2024	254,743	49,310	67,730	117,040	N/A	55.04%
2025	253,339	49,038	67,357	116,395	3.00%	58.04%
2026	252,309	19,031	96,891	115,922	3.00%	61.03%
2027	251,399	17,503	98,000	115,504	3.00%	64.03%
2028	250,434	15,983	99,077	115,060	3.00%	67.03%
2029	249,570	14,480	100,183	114,663	3.00%	70.03%
2030	248,924	12,998	101,368	114,366	3.00%	73.02%
2031	248,453	11,532	102,618	114,150	3.00%	76.02%
2032	248,187	10,080	103,948	114,027	3.00%	79.02%
2033	248,111	8,637	105,356	113,993	3.00%	82.02%
2034	248,048	7,196	106,768	113,964	3.00%	85.01%
2035	247,985	5,755	108,180	113,935	3.00%	88.01%
2036	248,001	4,317	109,625	113,942	3.00%	91.01%
2037	248,023	2,878	111,074	113,952	3.00%	94.01%
2038	248,053	1,439	112,527	113,966	3.00%	97.00%
2039	248,084	-	113,980	113,980	3.00%	100.00%

* Population fluctuation estimates from State of California Department of Finance

** California yearly waste diversion target 75% by 2025, and overall goal of 100% by 2039

7.0 EXISTING CAPACITY SUMMARY

The processing capacity for Marin County generators was verified through agreements or other forms of documentation. Available capacity was identified for four of the in-county facilities and five of the out-of-county facilities. Of the in- and out-of-county facilities, nine had limited available capacity and four had no available capacity. **Table 11** shows the estimated available and additional annual capacity.

The following definitions are provided for reference in **Table 11**:

- **Known/estimated:** Current processing throughput has been quantified. Estimated to have remaining capacity.
- **No capacity:** Assigned to sites that were estimated to have 0 tons/year of available capacity for standard residential/commercial organic waste. This was estimated based on information reported by the facility and associated reports.
- **Unknown:** Assigned to sites where their current throughput was not quantified and there was not enough available information to make any estimate about their remaining capacity.
- **Unknown but limited:** Assigned to sites where their current throughput was not quantified, but they have low permit capacity, accept green waste and/or food waste, and available information about the site implied they have little available capacity (especially for standard residential/commercial organic waste).

Table 11 shows the estimated available and additional annual capacity.

Table 11. Available and Future Capacity by Facility (Tons)

Facility	County	Capacity Status	Permitted Capacity	Current Processing	Available Capacity	Capacity Expansion
West Contra Costa Sanitary Landfill (WCCSL) Compost Facility	Contra Costa	Known/estimated	130,000	120,000	10,000	0
Quackenbush Resource Recovery (QRR)	Lake	Known/estimated	60,000	25,000	35,000	0
Bolinas-Stinson Resource Recovery Project (MSRRP)	Marin	No capacity	2,500	2,500	0	0
Central Marin Sanitation Agency (CMSA)	Marin	Known/estimated	73,267	72,263	1,004	0
Marin Resource Recovery Park (MRRP)	Marin	Known/estimated	934,560	869,778	64,782	0
Novato Sanitary District (NSD)	Marin	Unknown	0	0	0	0
Redwood Landfill/WM Earthcare (RL)	Marin	Known/estimated	156,000	126,000	30,000	0
West Marin Compost (WMC)	Marin	Known/estimated	40,000	35,000	5,000	20,000
Pacific Organics Solutions (POS)	Mendocino	Known/estimated	50,000	25,000	25,000	25,000
Napa Materials Diversion Facility (NMDF)	Napa	No capacity	180,000	180,000	0	26,500
Jepson Prairie Organics (JPO)	Solano	Known/estimated	218,400	131,805	86,595	0
Northern Recycling, LLC (NR)	Yolo	Known/estimated	260,000	230,000	30,000	0
Future Sonoma County (SC) Compost Facility	Sonoma	No Capacity	0	0	0	70,000

SCS evaluated whether organics processing capacity was verifiably available to each jurisdiction through a review of contracts, agreements, and franchise materials. It should be noted that Redwood Landfill chose not to provide contracts or service agreements for their material received from jurisdictions within Marin County. All jurisdictions except for Sausalito reported hauling their material to Redwood Landfill for processing. This was a barrier for SCS to verify capacity for these jurisdictions. For jurisdictions where contracts were not provided, SCS reviewed available franchise agreements to identify provisions related to the handling and processing of organic waste.

7.1 LEA COORDINATION

Pursuant to Section 18992.1 of SB 1383, LEAs were consulted to verify information regarding facilities that may be planned, permitted, or under review. LEAs from Marin, Solano, Mendocino, Lake, Napa, Yolo, Sonoma, and Contra Costa Counties were contacted. LEA contact information was obtained from the LEA Directory provided by CalRecycle, which provides the location and contact information for each LEA across the state. Outreach was conducted via email and telephone to verify any proposed, permitted, or under-development organics processing facilities, including potential expansions, within each jurisdiction. A summary of LEA coordination is provided below:

- **Contra Costa:** The LEA was contacted by phone however, no response was received.
- **Lake County:** The LEA was contacted by phone but was unable to verify information and forwarded the inquiry to two supervisors. SCS is pending response from these contacts.
- **Marin County:** The LEA was contacted and confirmed that the West Marin Compost facility has not submitted an expansion proposal. WM Earthcare is currently in discussions with the LEA and is finalizing a proposal for submission.
- **Mendocino County:** The LEA was contacted via phone and email, but was unable to verify information regarding the Pacific Organics Solutions facility.
- **Napa County:** The LEA was contacted via phone and email; no response was received.
- **Solano County:** The LEA was contacted by phone and verified that there are no new organics processing facilities proposed or under development, and that the Jepson Prairie Organics facility has no planned expansions.
- **Sonoma County:** The LEA was contacted by phone and indicated that the Sonoma County Compost Facility has been informally discussed; however, no permit applications have been submitted or reviewed by the LEA to date.
- **Yolo County:** The LEA was contacted by phone and confirmed that there are no new organics processing facilities proposed or under development, and that the Northern Recycling, LLC facility has no planned expansions.

At the time of publishing, additional information was pending from Mendocino, Lake, Napa, and Contra Costa Counties.

7.2 IN-COUNTY FACILITIES: MATERIALS & PROCESSING CAPACITY

A total of eight organic materials processing facilities located in Marin County were identified as part of the study. From this list, four were identified as having available processing capacity for Marin County generators. **Table 12** identifies the estimated quantity of available capacity along with the reported feedstocks accepted at each facility.

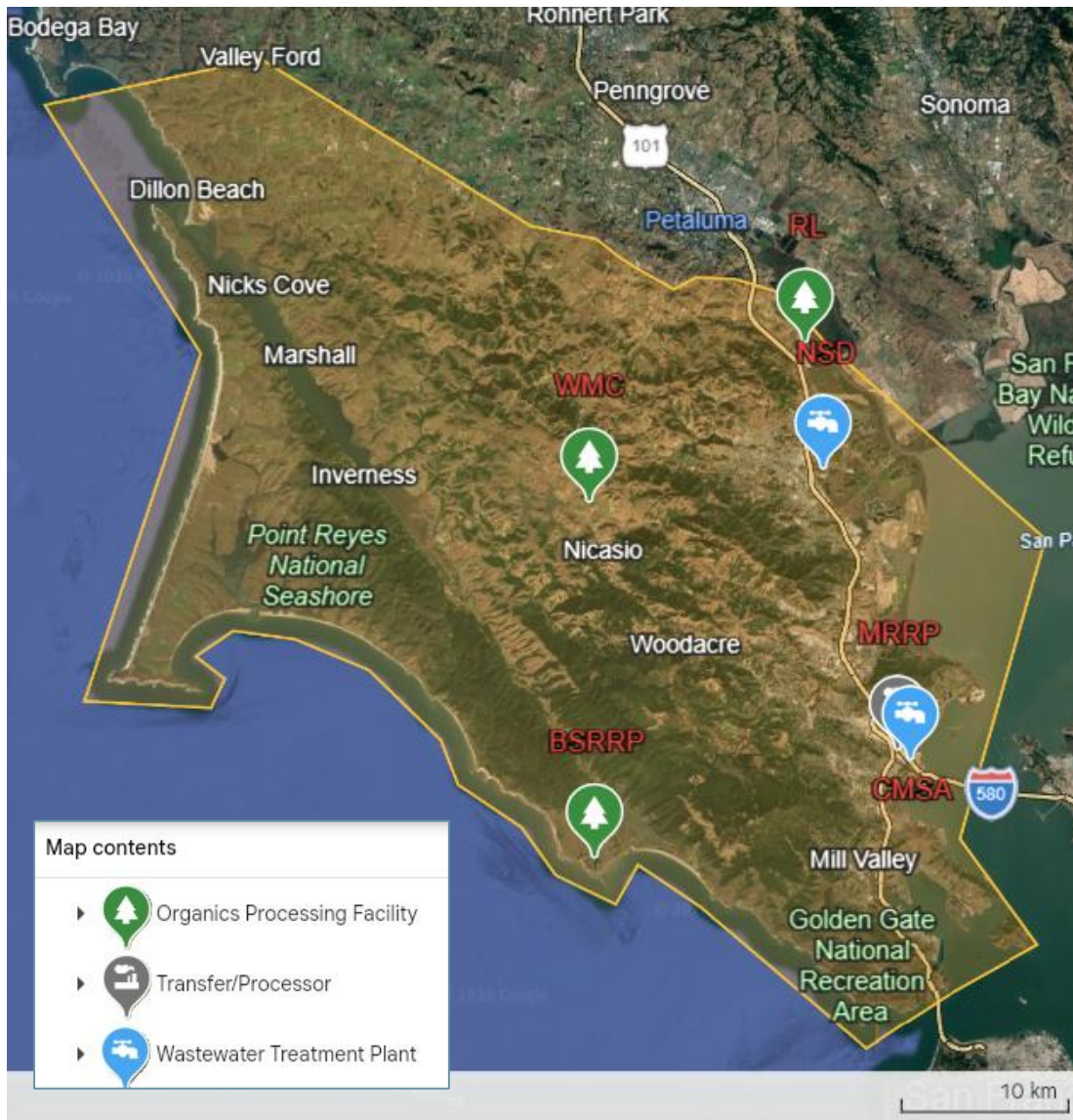
Table 12. In-County Facilities with Available Capacity

Facility	Available Capacity (tons)	Agricultural	Biosolids/ Sludge	Food Scraps	Green Waste	Digestate
West Marin Compost (WMC)	5,000	Yes	No	No	Yes	No
Central Marin Sanitation Agency (CMSA)	1,004	No	No	Yes	No	No
Redwood Landfill/ WM Earthcare (RL)	30,000	No	No	Yes	Yes	No
Marin Resource Recovery Park (MRRP)	64,782	No	No	Yes	Yes	No

Exhibit 8 displays the location of all In-County facilities listed below:

- Bolinas-Stinson Resource Recovery Project (BSRRP)
- Central Marin Sanitation Agency (CMSA)
- Marin Resource Recovery Park (MRRP)
- Redwood Landfill / WM Earthcare (RL)
- West Marin Compost (WMC)
- Novato Sanitary District (NSD)

Exhibit 8. In-County Facility Location Map



7.3 OUT-OF-COUNTY FACILITIES: MATERIALS & PROCESSING CAPACITY

A total of 18 organics material processing facilities located outside of Marin County were identified as part of the Study. From this list, five responded with interest in accepting material from Marin County generators. **Table 13** identifies the estimated quantity of available capacity along with the reported feedstocks accepted at each facility.

Table 13. Out-of-County Facilities with Available Capacity

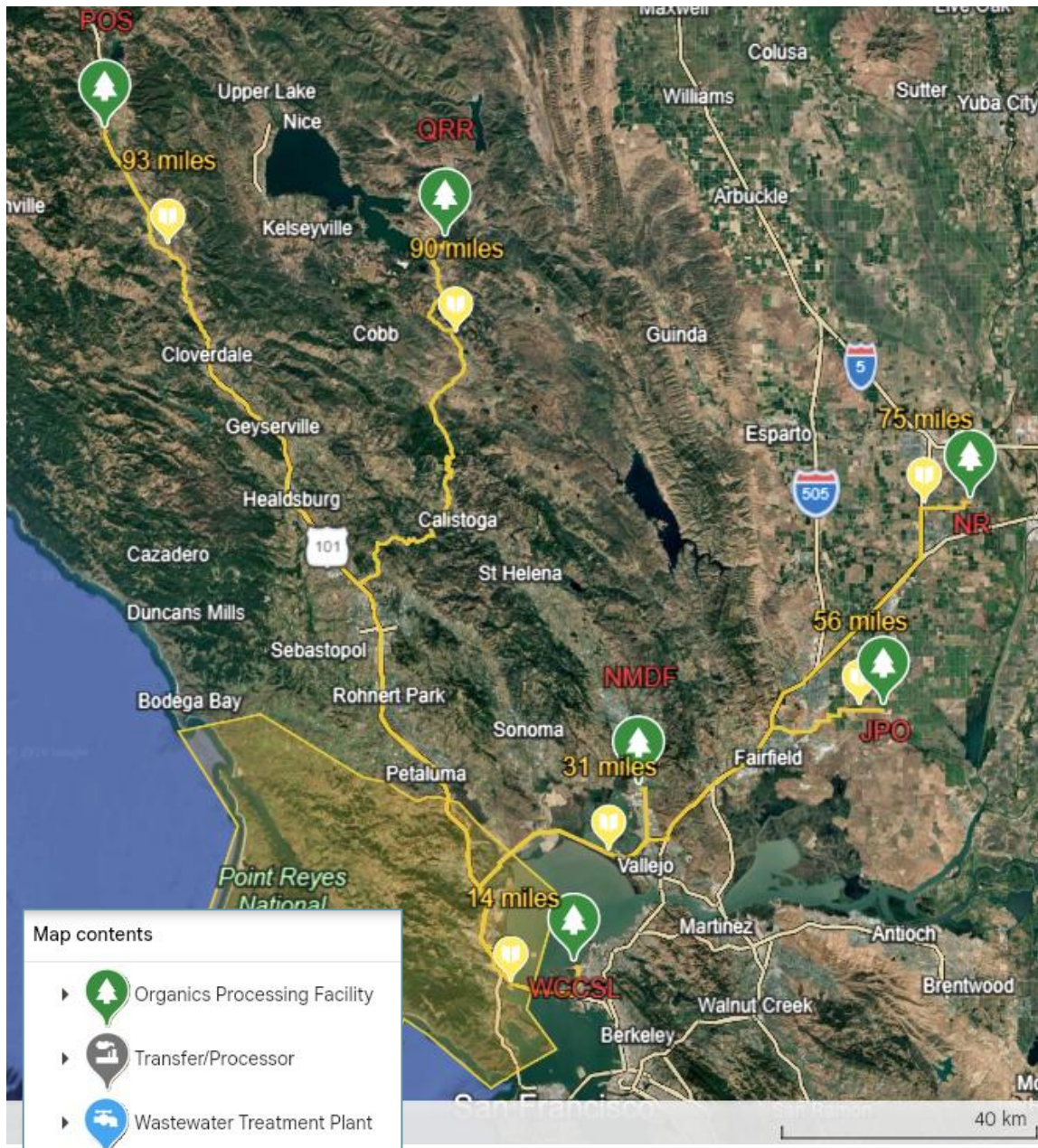
Facility	County	Available Capacity (tons)	Agricultural	Biosolids/ Sludge	Food Scraps	Green Waste	Digestate
West Contra Costa Sanitary Landfill (WCCSL) Compost Facility	Contra Costa	10,000	Yes	No	Yes	Yes	Yes
Quackenbush Resource Recovery (QRR)	Lake	35,000	No	No	Yes	Yes	No
Pacific Organics Solutions (POS)	Mendocino	25,000	No	No	Yes	Yes	No
Jepson Prairie Organics (JPO)	Solano	86,595	Yes	No	Yes	Yes	Yes
Northern Recycling, LLC (NR)	Yolo	30,000	Yes	No	Yes	Yes	Yes

Exhibit 9 displays the location of each facility along with the relative distance from Marin County.

Out-of-County Facilities included in **Exhibit 9:**

- Jepson Prairie Organics (JPO)
- Napa Materials Diversion Facility (NMDF)
- Northern Recycling, LLC (NR)
- Pacific Organics Solutions (POS)
- Quackenbush Resource Recovery (QRR)
- West Contra Costa Sanitary Landfill (WCCSL) Compost Facility
- Future Sonoma County (SC) Compost Facility (Not pictured)

Exhibit 9. Out-of-County Facility Location Map



7.4 CURRENT CAPACITY & EXPANSION CAPABILITIES

Existing organic waste processors in Marin County and within a 100-mile radius were surveyed to determine the current and future potential capacity for organics processing.

Several processors are working on expansions to their organics processing operations, including West Marin Compost (WMC), Pacific Organics Solutions, Napa Materials Diversion Facility, and a future compost facility in Sonoma County. Processors have reported that barriers to expanding their organics operations stem from a lack of funding for new equipment, expansion permitting challenges, and administration and operational logistics.

Our findings show that many facilities within Marin County have available capacity at this time and can process the organics generated in the county. **Table 14** presents estimates of current and future processing quantities and permitted capacities as obtained from surveys with organics material processing facilities.

If any planned capacity expansion projects are currently not being acted upon (ex: no permits, plans, or construction), they were deducted from the capacity expansion estimates. All biosolids data were incorporated based on wet tons provided by facility managers. Processors that are expanding organics operations were not certain of their permitted capacity, and therefore the numbers provided are an estimate.

Table 14. Current and Projected Facility Capacity Estimates (Tons/Year)

Facility	County	Permitted Capacity	Capacity Expansion
West Contra Costa Sanitary Landfill (WCCSL) Compost Facility	Contra Costa	130,000	0
Quackenbush Resource Recovery (QRR)	Lake	60,000	0
Bolinas-Stinson Resource Recovery Project (BSRRP)	Marin	2,500	0
Central Marin Sanitation Agency (CMSA)	Marin	73,267	0
Marin Resource Recovery Park (MRRP)	Marin	934,560	0
Redwood Landfill / WM Earthcare (RL)	Marin	156,000	0
West Marin Compost (WMC)	Marin	40,000	20,000
Novato Sanitary District (NSD)	Marin	-	-
Pacific Organics Solutions (POS)	Mendocino	50,000	25,000
Napa Materials Diversion Facility (NMDF)	Napa	180,000	26,500
Jepson Prairie Organics (JPO)	Solano	218,400	0
Northern Recycling, LLC (NR)	Yolo	260,000	0
Future Sonoma County (SC) Compost Facility	Sonoma	-	70,000
Total		2,104,727	141,500

Overall, there is an estimated **253,095 TPY of additional available capacity for organics processing**, which includes 71,500 TPY of additional permitted capacity expansion from the West Marin Compost (WMC), Pacific Organics Solutions (POS), and Napa Materials Diversion Facilities (NMDF). These values take into consideration facilities capable of accepting material from Marin County, the estimated quantity of unused capacity for each facility, and the estimated expansion capacity.

The Future Sonoma County (SC) compost facility is expected to be dedicated to Sonoma County generators only, and is not considered as available capacity for Marin County. The facility was included as part of the study to showcase local facilities and their capacity.

8.0 PROJECTED ORGANIC GENERATION VS. PROJECTED CAPACITY

To determine whether each jurisdiction has sufficient organics processing capacity through 2039, projected organic material generation for that year was compared against the total processing capacity available at identified facilities.

Table 15 shows the projected organics capacity needs of each jurisdiction. The data includes the estimated organics currently being disposed, the total organics diverted, and the projected capacity needed by 2039 (estimated organics currently disposed plus the projected increase in generation). Of the 12 jurisdictions, 10 have capacity confirmed with their organics processors for their capacity needs, while the remaining two jurisdictions will be able to achieve processing capacity through partnerships with other processing facilities within and outside Marin County.

The quantities of organic waste accepted and processed by existing facilities were next analyzed to recognize potential gaps in processing capacity in the future. This was done through comparison of projected organic waste tonnage and existing facility capacities. Our findings show that many facilities within Marin County have available capacity at this time and can process the organics generated in the county.

Processing capacity was first identified for jurisdictions that deliver organic waste to a single processing facility. Once those jurisdictions were accounted for, remaining available capacity was allocated to jurisdictions that utilize multiple facilities, with assignments continuing until processing capacity was identified for all jurisdictions included in the analysis.

Table 15 shows the projected organics capacity needs of each jurisdiction.

Table 15. Projected Organics Capacity Needs by Jurisdiction

Jurisdiction	Current Diversion (tons)	Projected Organics Diverted by 2039 (tons)	Enough Capacity for 2039?	Additional Capacity Needed by 2039 (tons)
Belvedere	646	1,145	Yes	499
Corte Madera	2,368	5,094	Yes	2,726
Fairfax	1,328	3,526	Yes*	705
Larkspur	357	5,431	Yes*	1,818
Mill Valley	3,910	6,938	Yes	3,415
Novato	6,270	30,448	Yes	16,008
Ross	2,821	1,499	Yes*	205
San Anselmo	3,613	6,993	Yes*	1,146
San Rafael	3,522	25,881	No	9,283
Sausalito	14,440	3,901	Yes	1,491
Tiburon	1,294	4,333	Yes	2,028
Unincorporated County	11,865	18,792	No	6,927

*Remaining capacity from Redwood Landfill/WM Earthcare and CMSA were allotted across these jurisdictions.

9.0 POTENTIAL ADDITIONAL CAPACITY

This section evaluates whether projected organics diversion needs through 2039 can be met using available processing capacity and identifies where additional capacity may be needed by jurisdiction. Building on the jurisdiction-level capacity needs summarized in **Table 15**, SCS compared each jurisdiction’s projected additional tons requiring processing to the unused and planned capacity reported by facilities currently receiving Marin County organics, as well as other surveyed in- and out-of-county processors. The results quantify remaining capacity gaps, highlight jurisdictions with the greatest unmet needs, and provide the basis for identifying potential facility pathways and implementation actions.

Table 16 identifies the capacity available for each of the facilities receiving material from Marin County jurisdictions and compares it to the additional capacity needs projected out to 2039.

Table 16. Additional Capacity Needs by 2039

Facility Accepting Materials	Unused + Expansion Capacity (Tons)	Jurisdictions Served	Additional Capacity Needed by 2039 (Tons)
Central Marin Sanitation Agency (CMSA)	1,004	<ul style="list-style-type: none"> • Unincorporated County • Fairfax • Larkspur • Ross • San Anselmo • San Rafael 	-*
Marin Resource Recovery Park (MRRP)	64,782	<ul style="list-style-type: none"> • Unincorporated Marin County 	1,348
Redwood Landfill/ WM Earthcare (RL)	30,000	<ul style="list-style-type: none"> • Belvedere • Corte Madera • Unincorporated County • Fairfax • Larkspur • Mill Valley • Novato • Ross • San Anselmo • San Rafael • Tiburon 	43,161*
West Contra Costa Sanitary Landfill (WCCSL) Compost Facility	10,000	<ul style="list-style-type: none"> • Unincorporated County • Sausalito 	1,742

*Jurisdictions reported combined diversion tons across CMSA and Redwood Landfill/WM Earthcare. The reported TPY is reflected under Redwood Landfill /WM Earthcare.

Jurisdictions that reported hauling organic waste to a single processing facility were assigned capacity first, accounting for a total of 27,766 tons of diverted material managed through sole facility partnerships. Remaining available capacity was then distributed to jurisdictions with comparatively small capacity needs (less than 2,000 tons) to address an additional 18,484 tons of projected demand as shown in **Table 17**. Capacity was allocated in a manner intended to maximize the number of jurisdictions meeting their projected needs. Following this allocation, two jurisdictions, Unincorporated Marin County and the City of San Rafael, were identified as having remaining capacity needs not fully met through their current facility partnerships. **Together, these jurisdictions are projected to require an additional 14,611 tons of processing capacity by 2039 (Tables 18 & 19).**

Table 17. Unused Capacity for Current Processors of Marin County Organics

Facility Accepting Materials	Unused Capacity + Expansion Capacity (Tons)	Additional Capacity Needed by 2039 - only singular facility/jurisdiction partnership	Additional Capacity Needed by 2039 - Jurisdiction Hauling to Multiple Facilities
Central Marin Sanitation Agency (CMSA)	1,004	0	-
Marin Resource Recovery Park (MRRP)	64,782	1,348	-
Redwood Landfill/ WM Earthcare (RL)	30,000	24,676	18,484
West Contra Costa Sanitary Landfill (WCCSL) Compost Facility	10,000	1,742	-

Table 18. Redwood Landfill & CMSA Remaining Capacity

Remaining Capacity for All Other Jurisdictions Hauling to Redwood Landfill and CMSA	Combined Capacity Needs Across Jurisdictions Hauling to both Redwood Landfill and CMSA
6,328	3,874

Remaining Capacity Calculations

- $30,000 \text{ tons} - 24,676 \text{ tons} = 5,324 \text{ tons}$ (1)
- $5,324 \text{ Redwood Landfill tons} + 1,004 \text{ CMSA tons} = 6,328 \text{ combined tons}$ (2)
- $705 \text{ tons} + 1,818 \text{ tons} + 205 \text{ tons} + 1,146 \text{ tons} = 3,874 \text{ tons}$ (3)
- $18,484 \text{ tons} - 3,874 \text{ tons} = 14,611 \text{ tons of additional capacity needed}$ (4)

Table 19. Additional Capacity Needed by 2039

Jurisdiction	Facility Accepting Materials	Additional Capacity Needed by 2039 (Tons)
Unincorporated County	<ul style="list-style-type: none"> • Redwood Landfill/ WM Earthcare • Central Marin Sanitation Agency (CMSA) 	5,329
San Rafael	<ul style="list-style-type: none"> • Redwood Landfill/ WM Earthcare • Central Marin Sanitation Agency (CMSA) 	9,283
Total		14,611

9.1 TIMELINES AND KEY MILESTONES FOR IMPLEMENTATION PATHWAYS

San Rafael and Unincorporated Marin County are projected to achieve sufficient organics processing capacity through the addition of processing partners to their currently utilized facilities (expansion), rather than through the development of new stand-alone infrastructure. The Study indicates that existing facilities serving these jurisdictions have identified expansion plans or partnership opportunities that, once implemented, will provide adequate capacity to meet projected organic material generation through 2039.

Implementation timelines for these jurisdictions are driven by the point at which projected organic generation begins to approach existing available processing capacity. Based on projected organics generation and anticipated growth, **San Rafael and Unincorporated Marin County should plan to have new or amended processing agreements in place by 2027** to ensure that sufficient capacity is available ahead of future demand and to avoid potential capacity constraints. This timing allows for contractual execution, operational coordination, and regulatory certainty in advance of the projected increase in organic material requiring processing. It should be noted that the projections developed by SCS assume that these jurisdictions will continue to improve their organics diversion in alignment with SB 1383. The projections anticipate that the City of San Rafael and Unincorporated Marin County will see an annual increase in organics diversion of 2.6 and 2.5 percent respectively.

Milestones for San Rafael and the Unincorporated Marin County include:

- **Near-term (2025–2026):** Continued use of existing processing facilities while monitoring annual organics generation relative to available capacity.
- **Mid-term milestone (by 2027):** Execution of new or expanded agreements with additional processing partners or activation of permitted expansion capacity to accommodate projected increases in organics generation.
- **Long-term (through 2039):** Maintenance of sufficient organics processing capacity to manage total projected organics generation, including growth-related increases, through fully implemented partnerships and available facility capacity.

Capacity analysis indicates that these pathways can be implemented within the planning horizon of the Study, provided that partnership agreements or expansion activations are finalized before projected generation surpasses currently available processing capacity. This phased approach allows San Rafael and the Unincorporated Marin County to maintain flexibility while ensuring that adequate organics processing capacity is available to support long term compliance and system resilience.

9.2 RECOMMENDATIONS AND STRATEGIES FOR ADDRESSING CAPACITY NEEDS

To support long-term compliance with CCR Title 14 § 18992.1 and address projected organics processing capacity needs, SCS recommends that jurisdictions consider strategies that not only secure access to processing capacity but also support the operational viability of existing facilities. Several facilities reported that, while they are permitted to process higher tonnages, they are unable to consistently reach daily throughput limits due to constraints associated with onsite material staging and downstream demand for finished compost products. Addressing these demand-side limitations can help unlock capacity that is already permitted but not fully utilized. Jurisdictions can play a key role in supporting facilities' ability to operate at higher throughputs by promoting greater demand for finished compost products within the county and region.

Additional recommended strategies for future compliance with CCR Title 14 § 18992.1 include:

- **Jurisdictions** requiring written documentation of available organics processing capacity in hauler contracts, including identification of authorized facilities, and require that an updated copy be available upon request. This will allow capacity to be clearly defined as verifiably available.
 - **ZWM** to support jurisdictions and haulers, particularly those serving the unincorporated county areas and the City of San Rafael, in establishing agreements with multiple processing partners to diversify outlets and improve capacity reliability.
- **ZWM** to communicate with the five franchised haulers about the neighboring facilities willing to accept Marin County organics. The **haulers** servicing the unincorporated county areas and the City of San Rafael should prioritize securing capacity at additional organic waste recycling facilities before 2039.
- Many facilities expressed that they are unable to reach their permitted throughputs due to the staging of material reaching their permitted capacity allowed onsite at any given time. Coordination efforts between **ZWM**, **jurisdictions**, and receiving **facilities** to help create a higher demand for compost products within the county may help these facilities accept larger quantities of organic waste.
 - **ZWM and jurisdictions** to provide public education and outreach that encourages compost use in municipal landscaping, public works projects, erosion control, and local agricultural applications.
 - **ZWM and jurisdictions** to continue to promote a Subsidized Compost Program and consider including other composting facilities as a provider of finished compost in this program.
 - **ZWM and jurisdictions** to coordinate with jurisdictions to integrate compost procurement into existing maintenance programs and capital improvement projects, creating more consistent end-market demand.
- Redwood Landfill/WM Earthcare receives material from 11 of the 12 jurisdictions within the county. Encourage **jurisdictions and haulers** to partner with other processing facilities as their quantity of diverted organic waste increases.
- Evaluate opportunities for **ZWM** to support existing facilities in their expansion efforts, where feasible, prior to relying on new or more distant facilities.

APPENDICES

Appendix A – Facility Survey

2025-2026 Marin County Organics Capacity Study Facility Survey

Survey Response Needed by Friday, February 20th

This survey is being conducted on behalf of Zero Waste Marin as part of Marin County's SB 1383 organic waste recycling capacity study. Jurisdictional input will help assess current and future capacity needs and support state compliance and planning.

Estimated Survey Completion Time: 25-30 Minutes

Contact Information:

1. Facility Name:
2. Point of Contact Name:
3. Email:
4. Phone Number:

Questions:

Definition(s):

Per 14 CCR 18992.1.(f) “For the purposes of this section (organic waste recycling capacity) only the following type of organic waste shall be included in estimates: food, green waste, landscape and pruning waste, wood, paper products, printing and writing paper, digestate and biosolids”.

Capacity:

5. What type of facility do you operate?
6. What recovered organic waste product(s) does your facility produce?
7. Permitted capacity (tons):
8. Maximum permitted throughput (tons/day):
9. What is your facility's unused organics capacity (tons)?
10. What was your total inbound quantity of organics received in 2024 (tons/year)?
11. How many tons of your capacity is confirmed through capacity agreements with Marin County generators/haulers/cities, etc.?
12. On an annual average, what percent of your inbound tons are from Marin County generators?
13. Do you have a contract, franchise agreement, or other verifiably available documentation identifying the amount of existing capacity at your facility? If yes, would you be able to provide a copy of the agreements if needed?

Feedstocks:

14. What are your permitted feedstocks?

- a. yard waste,
- b. food waste,
- c. compostable paper,
- d. agricultural,
- e. digestate,
- f. biosolids,
- g. other

15. From which sectors do you receive materials?

- a. residential,
- b. commercial,
- c. industrial,
- d. institutional

16. Do you use organics for ADC? If yes, what types of organic material and quantity (tons) are used for ADC?

17. If applicable, please report each jurisdiction's total Organic Material ADC/AIC Disposal in TPY (2024).

18. Are there scenarios when material is turned away due to daily limits, non-contracted sources, etc.?

19. Does your facility currently accept any of the following organic waste types? Select all that apply.

- a. animal waste,
- b. animal manure,
- c. compostable diapers,
- d. agricultural waste and plastics
- e. compostable plastics
- f. lined-fiber food serviceware
- g. unlined-fiber food serviceware

- h. “compostable” paper such as newspaper, napkins, paper towels, food-soiled paper, etc.
 - i. farm waste
 - j. N/A
 - k. other
20. Do you plan to accept any of the following organic waste types in the future? Select all that apply.
- a. animal waste,
 - b. animal manure,
 - c. compostable diapers,
 - d. agricultural waste and plastics
 - e. compostable plastics
 - f. lined-fiber food serviceware
 - g. unlined-fiber food serviceware
 - h. “compostable” paper such as newspaper, napkins, paper towels, food-soiled paper, etc.
 - i. farm waste
 - j. N/A
 - k. other
21. Does your facility accept biosolids and/or digestate? If yes, please report each jurisdiction’s total Biosolids and/or Digestate Disposal in tons per year (TPY) (2024). Are these materials currently being sent to an organics processor or land applied?
22. Do you accept self-hauled organic material? Self-hauled material is any material outside of material received from Franchised haulers. If yes, what quantity (tons) of your organic waste processing is from self-haulers?
23. Does your facility process compostable plastics into a finished compost product?
24. Does your facility accept and remove synthetic plastic bags when it recovers source-separated organics?
25. Is your facility having problems with contamination of organic material? If yes, please list the top 5 contaminants and how they are processed.
26. If you answered yes to Question 24, what quantity (tons) of inbound loads are turned away due to contamination?

27. If you are a composter, is your finished compost product certified organic?
28. If you are a composter, do you sell both certified organic and non-organic compost?
29. Do you have a market for both certified organic and non-organic compost?
30. What quantity (tons) of your market demand is for certified organic compost and non-organic compost?

Future Capacity by 2039

31. Do you anticipate needing additional capacity in the next 12 years?
32. Do you have any plans to expand capacity or commodities? If yes, please include the status of the expansion.
33. Is your facility looking into installing any new technologies? If yes, what technology?
34. If you currently have organics processing capacity available, are you interested in accepting material from other contract haulers or self-haulers in Marin County?
35. What are the **public facing** tipping fees or tipping fee ranges associated with organic materials (price/ton)?
36. What are the tipping fees or tipping fee ranges associated with organic materials (price/ton) **for governmental agencies/jurisdictions?**
37. What are the tipping fees or tipping fee ranges associated with organic materials (price/ton) **for private haulers/companies?**
38. Do you have any expectations for future changes in your market for organics?
39. What are your perceived barriers in expanding organic waste diversion?
40. Are you aware of any plans for new or expanded organics processing sites in a 50mi radius of Marin County? Any site closures?
41. Do you have any questions, comments, or other related information you would like to share?

Appendix B – Jurisdiction Survey

2025-2026 Marin County Organics Capacity Study Jurisdiction Survey

Survey Response Needed by Friday, February 20th

This survey is being conducted on behalf of Zero Waste Marin as part of Marin County's SB 1383 organic waste recycling capacity study. Jurisdictional input will help assess current and future capacity needs and support state compliance and planning.

Estimated Survey Completion Time: 8-10 Minutes

Contact Information:

1. Jurisdiction: [drop down menu]
2. Point of Contact Name:
3. Department:
4. Email:
5. Phone Number:

Questions:

Definition(s):

Organic waste, as defined by SB 1383: Chapter 12: Short-Lived Climate Pollutants, means “solid wastes containing material originated from living organisms and their metabolic waste products including, but not limited to, food, green material, landscape and pruning waste, organic textiles and carpets, lumber, wood, paper products, printing and writing paper, manure, biosolids, digestate, and sludges.”

6. Is your jurisdictions' existing organic waste recycling capacity clearly defined in one of the following documents? (check all that apply):
 - a. Franchise Agreement
 - b. Agreement between the hauler and the organic waste processing facility
 - c. No
 - d. Other
7. Does your hauler take the following organic materials to a facility (or facilities) for processing? Please check all that apply. (In Question 8, please list the name of the facility, the address, and corresponding organic material type(s) they process.)
 - a. Co-mingled yard waste, food waste, food-soiled fibers
 - b. Source-separated food waste
 - c. Mixed recyclables (office paper, cardboard, etc.)
 - d. Source-separated Yard Waste
 - e. Other:

8. Which facility (or facilities) does your hauler take the organic materials identified in Question 7 to? Please list the name of the facility (or facilities), the address(es), and corresponding organic material type(s).
9. Do these facilities have a contract with your hauler that guarantees processing of the following organic material types? Please select all applicable material types.
 - a. Co-mingled yard waste, food waste, food soiled fibers
 - b. Source-separated food waste
 - c. Mixed recyclables (office paper, cardboard, etc.)
 - d. Source-separated Yard Waste
 - e. Other:
10. Are you aware of any plans for new or expanded organics processing sites in a 50 mi radius? Any site closures?
11. What is your jurisdiction's projected population in 2025? Alternatively, what is your projected annual growth rate for 2039?
12. Do you have any questions, comments, or other related information you would like to share?

Appendix C – Hauler Survey

2025-2026 Marin County Organics Capacity Study Hauler Survey

Survey Response Needed by Friday, February 20th

This survey is being conducted on behalf of Zero Waste Marin as part of Marin County's SB 1383 organic waste recycling capacity study. Jurisdictional input will help assess current and future capacity needs and support state compliance and planning.

Estimated Survey Completion Time: 15-20 Minutes

Contact Information:

1. Name of Hauler:
2. Point of Contact Name:
3. Email:
4. Phone Number:

Questions:

Please complete a survey for each jurisdiction you collect from within Marin County.

Definition(s):

Per 14 CCR 18992.1.(f) “For the purposes of this section (organic waste recycling capacity) only the following type of organic waste shall be included in estimates: food, green waste, landscape and pruning waste, wood, paper products, printing and writing paper, digestate and biosolids”.

Please complete a survey for each jurisdiction you collect from within Marin County.

5. Which jurisdiction do you currently collect waste from? (Drop box)
6. What facilities do you deliver **landfill** waste to?
7. What facilities do you deliver **recycle** waste to?
8. What facilities do you deliver **organic** waste to?
9. What is the jurisdiction’s total **residential** tonnage **disposal** (2024)? (includes recycling and organic residuals).
10. What is the jurisdiction’s total **commercial** tonnage **disposal** (2024)? (includes recycling and organic residuals).
11. What is the jurisdiction’s total **residential** organic tonnage **diversion** (2024)?
12. What is the jurisdiction’s total **commercial** organic tonnage **diversion** (2024)?
13. What facility (or facilities) is the jurisdiction’s **organic material** processed? Please include the facility name(s), address(es), and tonnage of material brought to each facility.
14. Are you aware of any upcoming new organics processing facilities within a 50 mi radius? Any site closures?

15. Do you have any questions, comments, or other related information you would like to share?