

MARIN COUNTY HAZARDOUS & SOLID WASTE
JOINT POWERS AUTHORITY

EXECUTIVE COMMITTEE MEETING

Wednesday, October 21, 2009
Suite 200-A Conference Room
65 Mitchell Blvd., San Rafael

2:00 -3:00 PM

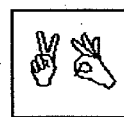
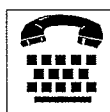
AGENDA

Call to Order.

1. Approval of Executive Committee Minutes from April 15, 2009. (Action)
2. Novato Household Hazardous Waste Grant. (Action)
3. Nondisposal Facility Element Amendment. (Information/Action)
4. Draft Zero Waste Feasibility Study Presentation. (Information/Action)
5. Legislative Support Letters and Platform. (Information/Action)
6. MarinRecycles.org Website Update. (Information/Action)
7. Report on JPA HHW Facility and CIWMB Grant. (Information/Action)
8. 2008 Annual Report Submittal. (Information)
9. Open Time.
10. Next scheduled Executive Board Meeting to be held on Wednesday, January 20, 2010,
2:00 – 3:00 PM, 65 Mitchell Blvd., San Rafael.
Next scheduled JPA Board Meeting to be held on Thursday, January 28, 2010.
11. Adjourn.

The full agenda including staff reports can be viewed at www.marinrecycles.org/mins_agendas.cfm

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All public meetings and events sponsored or conducted by the County of Marin are held in accessible sites. Requests for accommodations may be requested by calling (415) 473-4381 (voice) (415) 473-3232 (TTY) at least **four work days** in advance of the event. Copies of documents are available in alternative formats, upon written request.

Contact the County's Waste Management Division, at 499-6647 for more information

Draft**MARIN COUNTY HAZARDOUS & SOLID WASTE
MANAGEMENT JOINT POWERS AUTHORITY**

Executive Committee
 Wednesday, April 15, 2009
 65 Mitchell Blvd., Suite 200-A
 San Rafael, CA 94903

MINUTES**MEMBERS PRESENT**

Matthew Hymel, County of Marin
 George Rodericks, Town of Belvedere
 Ken Nordhoff, San Rafael

MEMBERS ABSENT

Debbie Stutsman, San Anselmo (Chair)

STAFF PRESENT

Michael Frost, JPA
 Eric Lueder, JPA
 Alex Soulard, JPA
 Jeff Rawles, JPA Consultant

OTHERS PRESENT

Patty Garbarino, Marin Sanitary Service
 Jon Elam, Tamalpais CSD
 Carrie Bachelder, Away Station
 Bruce Richard, Redwood Grove Consulting
 Tamara Hull, Local Task Force
 Keith Schoenthal, San Rafael Fire
 Richard Tagore-Erwin, R3 Consulting Group

Call to Order The Executive Committee meeting came to order at 2:07 PM.

1. Approve Executive Committee minutes from January 21, 2009. M/s Nordhoff, Hymel to approve the January 21, 2009 Executive Committee meeting minutes. The motion was unanimously approved.
2. FY 09-10 Budget Process, Budget Sub-Committee Recommendation and Fee Schedule. Staff discussed the fiscal year 2009-2010 budget noting a 2 percent increase in tipping fees; and the Local Task Force recommendation to spend \$50,000 for a public outreach campaign. Budgetary demands of the HHW facility have increased and the facility may be forced to reduce operation hours. Patty Garbarino stated that the increasing amount of materials banned from the landfills has put increased demand on the facility. Marin Sanitary Service (MSS) has concerns about illegal dumping that would occur if the facility was closed an additional day. The committee requested MSS and the San Rafael Fire Department update the HHW facility contract in the near future. JPA staff to review the HHW operational decisions to keep the facility successful. M/s Hymel, Nordhoff to approve and recommend the full JPA Board Approve the FY 09-10 budget and fee schedule, while allowing JPA staff to work with City Staff on changes to incorporate HHW Facility budget needs and additional funding for public outreach campaign. The motion was unanimously approved.
3. Contract with Marin Sanitary Service for HHW Facility Grant. Staff reported on contract concerns with the \$300,000 California Integrated Waste Management Board HD16F facility grant awarded last year to the JPA. The grant work plan specifies improvements

at the HHW owned by Marin Sanitary Service, but conflicting grant language requires the JPA to retain ownership of improvements. M/s Nordhoff, Hymel to authorize Michael Frost to sign an agreement with Marin Sanitary Service if the legal issues can be resolved.

4. JPA Audit and Financial Statements for year ending June 30, 2008. Staff presented the Auditors Report and statements. M/s Hymel, Nordhoff to accept the Audit and Financial Statements. The motion was unanimously approved.
5. Plastic Bag Fee Legislation and LTF Recommendation. The Local Task Force recommended the JPA develop local bag bans and support statewide legislation for plastic bag fees. Staff reported the details of AB 87 and AB 68, which place a 25 cent fee on single use bags and grant funds back to local agencies. Staff drafted letters of support for each of the bills. M/s Nordhoff, Hymel to have the vice chair sign both letters of support for the bills. The motion was unanimously approved.
6. Zero Waste Feasibility Study Presentation. Staff introduced Richard Tagore Erwin of R3 Consulting Group. Mr. Tagore-Erwin presented the preliminary findings of the Zero Waste Feasibility Study and requested input from the Executive Committee. He described their process of data collection and their meetings with haulers and facilities to date. He outlined potential policy changes, facility siting, and contract adjustments that are potential methods for increased diversion and conservation. The Committee requested the final report to include projected costs associated with recommended programs. A similar version of the presentation will be presented at a public input meeting on May 14, 2009 and at the JPA Board Meeting on May 28, 2009.
7. 2007 Annual Report Submittal. Staff presented the 2007 Annual Report that was submitted to the California Integrated Waste Management Board. Also provided as an attachment was a description of new SB 1016 regulations that only track disposal as the compliance factor for AB939. The report included the diversion rate at 65 percent and State changes in Biomass and Inert regulations. Committee members suggested that it may be a good time to focus on Marin's high waste generation rate to inspire personal changes in Marin.
8. Open Time. No comments received.
9. Adjourn.

Next Executive Board Meeting to be held on Wednesday, July 15, 2009, 2:00 – 3:00 PM, 65 Mitchell Blvd., San Rafael.

Next JPA Board Meeting to be held on Thursday, May 28, 2009, 9:00 – 10:00 AM, MMWD, 220 Nellen Avenue, Corte Madera.

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:

George Rodericks

October 21, 2009

Corte Madera:

David Bracken

To: Executive Committee Members

County of Marin:

Matthew Hymel

From: Michael Frost

Fairfax:

Michael Rock

Re: Novato Household Hazardous Waste Grant

Larkspur:

Jean Bonander

In the budget for FY 09-10, the JPA allocated funds for the sixth year to Novato Sanitary District to augment Novato's Household Hazardous Waste Program. The Novato Sanitary District accepted the \$40,355 grant at their September 28, 2009 meeting.

Mill Valley:

Ann Montgomery

Novato:

Michael Frank

It is requested that your Committee approve and authorize your Chair to sign the grant contract with Novato Sanitary District.

Ross:

Gary Broad

Attachment

San Anselmo:

Debbie Stutsman

San Rafael:

Ken Nordhoff

Sausalito:

Adam Politzer

Tiburon:

Margaret Curran



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Marin County Hazardous and Solid Waste Management Joint Powers Authority Household Hazardous Waste Grant Agreement

This Agreement is made and entered into this ____ day of _____ 20__ by and between the Marin County Hazardous and Solid Waste Management Joint Powers Authority, hereinafter referred to as "JPA" and Novato Sanitary District, hereinafter referred to as "DISTRICT."

RECITALS

Whereas DISTRICT has requested a grant to aid in Household Hazardous Waste services, and

Whereas JPA has determined that it has the capacity to award a grant to DISTRICT for assistance to DISTRICT in providing a household hazardous waste program for DISTRICT, and

Whereas in consideration of JPA awarding said grant to DISTRICT, DISTRICT agrees to provide household hazardous waste services and education to the residents of Novato Sanitary District as set forth below; and

Whereas DISTRICT warrants that it is qualified and competent to render the aforesaid services; and

Whereas the parties agree that the award of this grant does not constitute any kind of precedent for future actions on the part of the JPA; and

NOW THEREFORE and in consideration of the agreements made herein, the parties agree as follows:

1. SERVICES

District agrees to provide all the services described in Exhibit A attached hereto and by this reference made a part hereof.

2. GRANT

JPA hereby grants to DISTRICT that amount as set forth in Exhibit B, which is attached hereto and incorporated herein by reference, for the purpose of assisting DISTRICT in its collection of household hazardous wastes.

3. AVAILABILITY OF FUNDS

The JPA's obligations under this contract are contingent upon and subject to the availability of funds for this grant.

4. TIME OF PAYMENT

Payment of grant funds shall be made within the timeframe of January 1, 2010 and June 30, 2010. The timing of payment shall be within the discretion of the JPA, depending upon revenue availability.

5. PERFORMANCE TIME

All the work required to be done pursuant to the award of this grant, shall be completed and ready for submittal no later than June 30, 2010.

6. NON-DISCRIMINATORY CONDUCT

DISTRICT shall not unlawfully discriminate against any individual based upon race, color, religion, nationality, sex, sexual orientation, age or condition of disability in any activity related to use of funds under this grant.

7. INSURANCE

All required insurance coverages shall be substantiated with a certificate of insurance and must be signed by the insurer or its representative evidencing such insurance to JPA. The general liability policy shall be endorsed naming the Marin County Hazardous and Solid Waste Management Joint Powers Authority as an additional insured. The certificate(s) of insurance and required endorsement shall be furnished to the JPA prior to commencement of work. Each certificate shall provide for thirty (30) days advance notice to JPA of any cancellation in coverage. Said policies shall remain in force through the life of this Contract and shall be payable on a per occurrence basis only, except those required by paragraph 7.4 which may be provided on a claims-made basis consistent with the criteria noted therein.

Nothing herein shall be construed as a limitation of District's liability, and District shall indemnify and hold the JPA, its employees, officers, and agents, harmless and defend the JPA against any and all claims, damages, losses and expense that may arise by reason of the District's negligent actions or omissions. JPA agrees to timely notify District of any negligence claim.

Failure to provide and maintain the insurance required by this Contract will constitute a material breach of the agreement. In addition to any other available remedies, JPA may suspend payment to the District for any services provided during any time that insurance was not in effect and until such time as the District provides adequate evidence that District has obtained the required coverage.

A request for a waiver of any of the following insurance requirements must be set forth on **Exhibit "C"** attached hereto. A waiver must address reduced amounts of coverage or the type of coverage waived entirely.

7.1 GENERAL LIABILITY

The District shall maintain a commercial general liability insurance policy in an amount of no less than one million dollars (\$1,000,000.00) with a two million dollar (\$2,000,000.00) aggregate limit. The JPA shall be named as an additional insured on the commercial general liability policy and the Certificate of Insurance shall include an additional endorsement page.
(see sample form: ISO - CG 20 10 11 85).

☐ **Insurance Reduction or Waiver of Coverage Requested (Exhibit "C")**

7.2 AUTO LIABILITY

Where the services to be provided under this Contract involve or require the use of any type of vehicle by District in order to perform said services, District shall also provide comprehensive business or commercial automobile liability coverage including non-owned and hired automobile liability in the amount of one million dollars combined single limit (\$1,000,000.00).

☐ **Insurance Reduction or Waiver of Coverage Requested (Exhibit "C")**

7.3 WORKERS' COMPENSATION

The District acknowledges the State of California requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code. If District has employees, a copy of the certificate evidencing such insurance or a copy of the Certificate of Consent to Self-Insure shall be provided to JPA prior to commencement of work.

☐ Insurance Reduction or Waiver of Coverage Requested (Exhibit "C")

7.4 PROFESSIONAL LIABILITY INSURANCE

Coverages required by this paragraph may be provided on a claims-made basis with a "Retroactive Date" either prior to the date of the Contract or the beginning of the contract work. If the policy is on a claims-made basis, coverage must extend to a minimum of twelve (12) months beyond completion of contract work. If coverage is cancelled or non-renewed, and not replaced with another claims made policy form with a "retroactive date" prior to the Contract effective date, the district must purchase "extended reporting" coverage for a minimum of twelve (12) months after completion of contract work. District shall maintain a policy limit of not less than \$1,000,000 per incident. The amount of the policy deductible or self-insured retention must be declared on Exhibit "C", only if it exceeds \$100,000. If the deductible or self-insured retention amount exceeds \$100,000, the JPA may ask for evidence that district has segregated amounts in a special insurance reserve fund or district's general insurance reserves are adequate to provide the necessary coverage and the JPA of Marin may conclusively rely thereon.

District's Professional Liability Insurance may be provided, in part, by self-insurance or large deductible as long as district provides: (1) evidence to the JPA that district has segregated amounts in a special insurance reserve fund meeting the contract's insurance requirements and restricted specifically to this project or (2) district's general insurance reserves are adequate to provide the necessary coverage and the JPA of Marin may conclusively rely thereon.

Amount of professional liability deductible if under \$100,000 = \$0

☒ Insurance Reduction or Waiver of Coverage Requested (Exhibit "C")

8. LICENSING AND PERMITS

DISTRICT shall maintain the appropriate licenses and/or permits, if any, that are required and applicable to activities related to this agreement.

9. TIME OF AGREEMENT

This agreement shall commence on date Agreement is entered into on first page, and shall terminate on June 30, 2010.

10. RIGHT OF REVIEW AND AUDIT

JPA shall have the right to review the books and records related to the activities that are the subject of this agreement and maintained by DISTRICT, upon reasonable notice to DISTRICT. Reasonable notice shall be defined as two business days.

11. TERMINATION

If DISTRICT fails to provide the Household Hazardous Waste services described in Exhibit A, or otherwise fails to comply with the terms of this Agreement, the JPA may terminate this Agreement by giving thirty calendar days notice.

12. RELATIONSHIP BETWEEN THE PARTIES

It is expressly agreed that in the performances of services related to this Agreement, DISTRICT and the agents and employees thereof, shall act in an independent capacity from the JPA and not as officers, employees or agents of the JPA.

13. AMENDMENT

This Agreement may be amended or modified only by written agreement of all parties.

14. JURISDICTION AND VENUE

This Agreement shall be construed in accordance with the laws of the State of California and the parties hereto agree that venue shall be in MARIN County, California.

15. INDEMNIFICATION

DISTRICT agrees to indemnify, defend, and hold JPA harmless from any and all liabilities including, but not limited to, litigation costs and attorneys fees which it may incur as a consequence of this Agreement and from any and all claims and losses to anyone who may be injured or damaged by reason of DISTRICT's activities related to this Agreement.

16. COMPLIANCE WITH APPLICABLE LAWS

DISTRICT shall comply with any and all federal, state and local laws related to the activities covered by this Agreement.

17. NOTICE

This Agreement shall be managed and administered on JPA's behalf by and all notices shall be given to JPA at the following location:

Marin County Department of Public Works, Waste Division
Attention: Michael Frost, Deputy Director
PO Box 4186
San Rafael, CA 94913

Notices shall be given to DISTRICT at the following address:

Beverly James, General Manager
Novato Sanitary District
500 Davidson Street
Novato, California 94945

18. INTEGRATION CLAUSE

This Agreement constitutes the entire and exclusive Agreement among the parties with respect to the subject matter herein.

IN WITNESS WHEREOF, the parties hereunto have executed this Contract on the date first above written.

APPROVED BY
MARIN HAZARDOUS AND SOLID WASTE
MANAGEMENT JOINT POWERS AUTHORITY:

By: _____
CHAIR

NOVATO SANITARY DISTRICT:

By: Beverly B. James
Name: Beverly B. James
Federal Tax I.D.# 94-6024067
Telephone No. 415-892-1694

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EXHIBIT "A"

GRANT SERVICES TO BE PROVIDED

BY DISTRICT

Grant funds shall be used only to supplement or expand Novato Sanitary District's Household Hazardous Waste program by providing permanent collection opportunities, with corresponding and effective publicity campaigns. Activities should complement Marin's Regional Household Hazardous Waste Program.

REPORTING

The DISTRICT shall submit to JPA Staff no later than April 7, 2010, a Progress Report detailing a full accounting of grant expenses and activities incurred to date. Additionally, a Final Report shall be submitted to JPA Staff no later than June 30, 2010. These reports shall minimally include the following information:

- A description of how JPA grant funds were used to supplement and further the DISTRICT's existing program.
- An evaluation of the programs goals and objectives.
- A detail of the Grant budget, including an expenditure itemization.
- Volume of material collected (recycled and disposed).
- Program residential participation rates.
- CESQG (Conditionally Exempt Small Quantity Generator) participation rates.
- Public awareness activities.

EXHIBIT "B"
COMPENSATION OR FEES TO BE PAID
TO DISTRICT

GRANT TERM

The term of the grant shall commence on date Agreement is entered into on first page, and shall terminate on June 30, 2010. All costs must be incurred during the grant term.

GRANT FUNDING

Grant funds shall be used only to supplement or expand Novato Sanitary District's Household Hazardous Waste program by providing permanent collection opportunities, with corresponding and effective publicity campaigns. Activities should complement Marin's Regional Household Hazardous Waste Program.

ELIGIBLE COSTS

All costs must be directly related to the development and/or management of the approved grant project. Such costs may include materials, services, equipment, and facilities that increase opportunities for the proper collection and management of unwanted household hazardous products provided that they are reasonable, cost-effective, and focused on local and/or Marin County Regionwide needs.

PAYMENT OF GRANT FUNDS

Grant funds totaling forty thousand three hundred fifty five dollars (\$40,355) will be paid between January 1 and June 30, 2010, as JPA revenue become available. Additionally, notwithstanding any other provisions of this agreement, the JPA's obligations under this Contract are contingent upon and subject to the availability of funds for this grant.

EXHIBIT "C"

INSURANCE REDUCTION/WAIVER (if applicable)

CONTRACTOR: *Novato Sanitary District*

CONTRACT TITLE: *Household Hazardous Waste Grant Agreement*

This statement shall accompany all requests for a reduction/waiver of insurance requirements. Please check the box if a waiver is requested or fill in the reduced coverage(s) where indicated below:

	Check Where Applicable	Requested Limit Amount
General Liability Insurance	<input type="checkbox"/>	\$
Automobile Liability Insurance	<input type="checkbox"/>	\$
Workers' Compensation Insurance	<input type="checkbox"/>	\$
Professional Liability Deductible	<input checked="" type="checkbox"/>	\$

Please set forth the reasons for the requested reductions or waiver.

Professional Liability is not required for this type of service.

Contract Manager Signature: _____

Date: _____

Extension: _____

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:
George Rodericks

Corte Madera:
David Bracken

County of Marin:
Matthew Hymel

Fairfax:
Michael Rock

Larkspur:
Jean Bonander

Mill Valley:
Anne Montgomery

Novato:
Michael Frank

Ross:
Gary Broad

San Anselmo:
Debbie Stutsman

San Rafael:
Ken Nordhoff

Sausalito:
Adam Politzer

Tiburon:
Margaret Curran

Date: October 21, 2009

To: Executive Committee Members

From: Michael Frost

Re: Nondisposal Facility Element Amendment

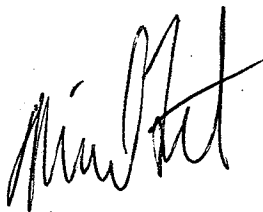
The California Integrated Waste Management Board (CIWMB) has requested the JPA amend its Nondisposal Facility Element (NDFE) to reflect Redwood Landfill's composting operation and changes to their permit. Staff prepared and circulated the amended document to the Local Task Force on July 7, 2009.

As required by State law, the Local Task Force had a 90 day review period to submit comments, which ended on October 1, 2009. Staff received comments solely from Redwood Landfill. The comments clarified permit restrictions of their planned facilities. JPA staff worked with County Environmental Health Division, who serve as the State approved Local Enforcement Agency (LEA) to ensure the changes were applicable and warranted before making appropriate revisions to the NDFE.

The document identifies facilities that are required to be permitted as Solid Waste Facilities but are not disposal facilities such as materials recovery facilities, compost facilities, and transfer stations. The NDFE may also discuss other utilized resources such as Redwood Empire Disposal's recycling facilities in Santa Rosa.

It is requested that your Committee recommend the full JPA Board approve the attached Nondisposal Facility Element at their next meeting. Once approved by the JPA Board the document will be sent to the CIWMB, which will have 30 days to determine the completeness of the amendment.

Attachment



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Nondisposal Facility Element for the Marin County Hazardous and Solid Waste Management Joint Powers Authority

Approved _____

**Marin County Hazardous and Solid Waste
Management Joint Powers Authority**

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APPENDICES

Appendix A	Resolution of Approval from the California Integrated Waste Management Board (Attached once approved)
Appendix B	Resolution Establishing the Marin County Hazardous and Solid Waste Management Joint Powers Authority as a Regional Agency
Appendix C	Local Task Force Comments

Executive Summary

Introduction

California Public Resources Code (PRC), Sections 41730 et seq., require every California city and county to prepare and adopt a Nondisposal Facility Element (NDFE) for all new Nondisposal Facilities, and any expansion of existing Nondisposal facilities, which will be needed to implement local Source Reduction and Recycling elements (SRREs). A Nondisposal facility is defined as any solid waste facility required to obtain a state solid waste facility permit except a disposal facility or transformation facility (PRC Section 40151).

The NDFE identifies the utilization of transfer station and material recovery facilities (MRFs) as Nondisposal facilities necessary to implement the Marin County Hazardous and Solid Waste Management Joint Powers Authority (JPA) goals. Tables 1-1 through 1-4, attached, identify the Nondisposal facilities the JPA utilizes to implement its SRRE and meet the solid waste diversion requirements of PRC Section 41780.

Marin's Non-Disposal Facility System

There are primary nondisposal facilities currently utilized in the diversion of commercial and residential materials in Marin County. The first and the principal source of waste diversion for Marin County is Marin Recycling and Resource Recovery Center in San Rafael which recovers substantial amounts of materials from curbside collection, drop-off, Cal. Redemption, debris boxes and self-haulers. This facility is directly next to the Marin Sanitary transfer station which is permitted by the LEA and used to consolidate loads of municipal solid waste. The second nondisposal facility utilized in Marin County is Marin Sanitary Inert which accepts waste from Marin Sanitary's residential and commercial accounts. Redwood Landfill Biosolids Co-Composting Facility is the main composting operation within Marin. This facility currently processes green waste from all incoming sources and will begin a pilot program for potential composting of foodwaste.

In addition to the in-County facilities there are many facilities identified in Section 2 that are outside of Marin for processing of recyclables, compost, and biomass, which are used by Marin's haulers and facilities to process additional tonnages. Staff has organized the facilities in order of both their proximity to Marin and in order of the greatest handlers of Marin generated materials, although the infrastructure is bound to change as markets, permitting, and consumption changes over time.

Section 1 – In County Facilities

Title 14 of the California Code of Regulations, Division 7, Chapter 9, Article 6.4 outlines the information that is required for each type of facility. Sections 18753 and 18754 specifically describe what is required for Nondisposal Facilities and Transfer Stations within a jurisdiction.

In addition to these requirements staff has identified the type of material the facility processes to paint a more accurate picture of Marin's activities. All jurisdictions have been identified as the Marin County Hazardous and Solid Waste Management Joint Powers Authority (JPA) since the JPA is a regional jurisdiction as approved by all the Marin municipalities and the CIWMB.

Section 18753. Description of Nondisposal Facilities within a Jurisdiction.

The NDFE shall identify all existing, expansion of existing, and proposed nondisposal facilities located within a jurisdiction which recover for reuse or recycling at least five percent of the total volume of material received by the facility.

- (a) Each facility description shall include, but is not limited to:
 - (1) type of facility;
 - (2) facility capacity;
 - (3) anticipated diversion rate or expected diversion rate from the total amount of the waste that the facility receives; and,
 - (4) participating jurisdictions.
- (b) Each facility location description may include, but is not limited to:
 - (1) address of the facility; or,
 - (2) description of the general area, (include a land use map, zoning map, or other type of planning map).

Section 18754. Description of Transfer Stations within a Jurisdiction.

The NDFE shall identify existing, expansion of existing, and proposed transfer stations located within a jurisdiction, which recover less than five percent of the volume of materials received for reuse or recycling.

- (a) Each facility description shall include, but is not limited to:
 - (1) name of facility; and;
 - (2) participating jurisdictions;
 - (3) facility capacity.
- (b) Each facility location description may include, but is not limited to:
 - (1) address of the facility; or,
 - (2) description of the general area, (include a land use map, zoning map, or other type of planning map).

Name of Facility: Redwood Landfill – Biosolids Co-Composting Facility
(SWFP # 21-AA-0001)

Type of Facility: Composting

Facility Capacity: Current: 170 tons per day of feedstock
Planned: potentially up to 514 tons per day of feedstock.

Anticipated Diversion Rate: Greater than 95% Diversion

Type of Material: Green/yard/wood waste, food waste, Class B Biosolids, and
active and finished compost.

Participating Jurisdictions: The Marin County Hazardous and Solid Waste Management
Joint Powers Authority

Location of Facility: 8950 Redwood Highway, Novato, CA 94945

Name of Facility: Redwood Landfill – Material Recovery Facility
(Planned Facility*)

Type of Facility: Material Recovery Facility

Facility Capacity: 400 tons per day of feedstock.

Anticipated Diversion Rate: Approximately 70% Diversion

Type of Material: Construction/demolition, wood waste, and other debris related materials.

Participating Jurisdictions: The Marin County Hazardous and Solid Waste Management Joint Powers Authority

Location of Facility: 8950 Redwood Highway, Novato, CA 94945

* Currently permitted to accept up to 400 tons per day of non-hazardous separated or commingled materials for recycling until Material Recovery Facility is permitted and operational.
(See JTD, Table 5-6, dated November 17, 2008.)

Name of Facility: Marin Sanitary Service Transfer Station
(SWIS # 21-AA-0005)

Type of Facility: Transfer Station

Facility Capacity: Cumulative total of 2,640 tons per day. This includes material brought/delivered to MRRC, residual waste from sorting at MRRC that is taken to Transfer Station, and material brought directly to the Transfer Station.

Anticipated Diversion Rate: Less than 5% Diversion

Type of Material: Municipal solid waste from residential customers

Participating Jurisdictions: The Marin County Hazardous and Solid Waste Management Joint Powers Authority

Location of Facility: 565 Jacoby Street, San Rafael, CA 94901

Name of Facility: Marin Sanitary Service Resource Recovery Ctr.
(SWIS # 21-AA-0005)

Type of Facility: Material Recovery Facility

Facility Capacity: Cumulative total of 2,640 tons per day. This includes material brought/delivered to MRRC, residual waste from sorting at MRRC that is taken to Transfer Station, and material brought directly to the Transfer Station.

Anticipated Diversion Rate: Approximately 70% Diversion

Type of Material: Construction/demolition, woodwaste, and other debris related materials.

Participating Jurisdictions: The Marin County Hazardous and Solid Waste Management Joint Powers Authority

Location of Facility: 565 Jacoby Street, San Rafael, CA 94901

Name of Operation: Marin Sanitary Service Type A Inert Processing Operation
(SWIS # 21-AA-0059, Permitted with an Enforcement Agency Notification)

Type of Operation: This is an Inert Debris Type A Processing Operation, not a Facility.

Operation Capacity: Average of 250 tons per day of soil and Type A Inert Debris (e.g. concrete, asphalt), with less than 10% residuals such as plastic, drywall and lumber. Peak tonnage of 750 tpd. Volume of material on-site (incl. both processed and un-processed) may not exceed 22,500 cubic yards.

Anticipated Diversion Rate: Greater than 90% diversion

Type of Material: Construction/demolition, and inert material

Participating Jurisdictions: The Marin County Hazardous and Solid Waste Management Joint Powers Authority

Location of Operation: 1050 Andersen Drive, San Rafael, CA 94901

Name of Operation: Bolinas-Stinson Beach Resource Recovery Operation
(SWIS # 21-AA-0060, Permitted with an Enforcement Agency Notification)

Type of Operation: Composting Facility.

Operation Capacity: Peak loading of 120 Cubic Yards. 8000 Cubic Yards Annually.

Anticipated Diversion Rate: Over 90% diversion.

Type of Material: Clean Green Material

Participating Jurisdictions: The Marin County Hazardous and Solid Waste Management Joint Powers Authority

Location of Operation: Olema-Bolinas Road (APN 193-030-38), Bolinas, CA 94924

Name of Operation: McEvoy Ranch
(SWIS #21-AA-0058, Permitted with an Enforcement Agency Notification)

Type of Operation: Composting Operation.

Operation Capacity: Peak loading of 100 cubic yards. Total annual volume of material is 800 cubic yards per year.

Anticipated Diversion Rate: Over 95% diversion.

Type of Material: Olive oil mill waste, livestock manure, landscape and orchard debris.

Participating Jurisdictions: Approximately 75% of material is generated on-site, with 25% (i.e. livestock manure) from nearby area (e.g. West Marin).

Location of Operation: 5935 Redhill Road, Petaluma (Marin Co.), CA, 94952

Section 2 – Out of County Facilities

Title 14 of the California Code of Regulations, Division 7, Chapter 9, Article 6.4 outlines the information that is required for each type of facility. Sections 18753.5 and 18754.5 specifically describe what is required for Nondisposal Facilities and Transfer Stations that are utilized outside of a jurisdiction. Since the only transfer station used is within Marin no transfer stations are identified in this section.

In addition to these requirements staff has identified the capacity of the facility when available and the type of material the facility processes to paint a more accurate picture of Marin's activities. All tonnage estimates for the amount of waste transported to the facilities are based upon the most current reports from Marin's haulers.

Section 18753.5. Description of Nondisposal Facilities outside a Jurisdiction

The NDFE shall identify all existing, expansion of existing, and proposed nondisposal facilities which a jurisdiction, plans to utilize, but which are not located within the jurisdiction, and which recover for reuse or recycling at least five percent of the total volume of material received by the facility.

(a) Each facility description shall include, but is not limited to:

(1) type of facility;

(2) estimated amount of the waste the jurisdiction will transport to the facility;

(3) anticipated diversion rate or expected diversion rate from the total amount of the waste that the facility receives; and,

(4) location of facility.

Name of Operation: North Bay Corporation MRF
(SWIS #49-AA-0399(temp.), SWFP)

Type of Operation: Transfer/Processing Facility

Operation Capacity: 600 Tons per Day

Anticipated Diversion Rate: Over 90% diversion.

**Anticipated Amount of Waste
From Jurisdiction to Facility:** Approximately 13,500 tons annually

Type of Material: Curbside Residential and Commercial Recyclables

Location of Operation: 3417 Standish Ave., Santa Rosa, CA 94507

Name of Operation: Redwood Empire Recycling
(Planned Facility)

Type of Operation: Transfer/Processing Facility

Operation Capacity: Capacity of facility not regulated under permit.

Anticipated Diversion Rate: Over 90% diversion.

**Anticipated Amount of Waste
From Jurisdiction to Facility:** Approximately 1,500 tons annually

Type of Material: Curbside Residential and Commercial Recyclables

Location of Operation: 3400 Standish Ave
Santa Rosa, CA 95407

Name of Operation: Northern Recycling Compost-Zamora
(SWIS #57-AA-0029, an Enforcement Agency
Notification)

Type of Operation: Composting Facility.

Operation Capacity: Design Capacity of 100,000 cubic yards. Permitted tonnage of
300 tons per day and 120 vehicles per day.

Anticipated Diversion Rate: Over 90% diversion.

**Anticipated Amount of Waste
From Jurisdiction to Facility:** Approximately 20,000 tons annually.

Type of Material: Green Material

Location of Operation: 11220 County Road 94, Zamora, CA 95698

Name of Facility: Woodland Bio-Mass Power Limited

Type of Facility: Biomass Facility

Facility Capacity: 200,000 tons annually

Anticipated Diversion Rate: Greater than 95% Diversion

**Anticipated Amount of Waste
From Jurisdiction to Facility:** Approximately 30,000 tons annually.

Type of Material: Woodwaste and other burnable items.

Location of Facility: 1786 E Kentucky Ave, Woodland, CA 95776

Name of Facility: West County Resource Recovery Facility Central Processing Facility (SWFP # 07-AA-0034)

Type of Facility: Material Recovery Facility/Transfer Station

Facility Capacity: 1200 tons per day

Anticipated Diversion Rate: Approximately 85% Diversion

Anticipated Amount of Waste From Jurisdiction to Facility: Approximately 3500 tons annually

Type of Material: Curbside Residential and Commercial Recyclables

Location of Facility: 101 Pittsburg Ave., Richmond, CA 94801

Name of Facility: West Contra Costa SLF Composting Facility
(SWFP # 07-AA-0044)

Type of Facility: Composting Facility

Facility Capacity: 200 tons per day

Anticipated Diversion Rate: Greater than 95% Diversion

**Anticipated Amount of Waste
From Jurisdiction to Facility:** Approximately 1,500 tons annually.

Type of Material: Green Materials

Location of Facility: Foot Of Parr Blvd., Richmond, CA 94801

Name of Facility: Strategic Material
(No SWFP Required for this type of facility)

Type of Facility: Recycling Facility

Facility Capacity: Not limited by permits

Anticipated Diversion Rate: Greater than 90% Diversion

**Anticipated Amount of Waste
From Jurisdiction to Facility:** Approximately 250 Tons Annually

Type of Material: Recyclable Glass

Location of Facility: 1931 Fairway Drive, San Leandro, CA

Name of Facility: Smurfit Stone Container Corporation, Recycling Division
(No permit required for this type of facility)

Type of Facility: Recycling Facility

Facility Capacity: 15,000 tons per month

Anticipated Diversion Rate: Greater than 95% Diversion

**Anticipated Amount of Waste
From Jurisdiction to Facility:** Approximately 1,500 tons annually

Type of Material: Curbside Residential and Commercial Recyclables

Location of Facility: 800 77th Avenue, Oakland, CA 94621

Name of Facility: Dutra Materials Richmond Quarry
(No SWFP Required, SMARA ID #91-07-0006 mining permit)

Type of Facility: Recycling of Concrete and Asphalt

Facility Capacity: Not limited by permits.

Anticipated Diversion Rate: Greater than 95%

**Anticipated Amount of Waste
From Jurisdiction to Facility:** Approximately 2,000 Tons Annually

Type of Material: Concrete and Asphalt

Location of Facility: 961 Western Drive, Richmond, CA

Name of Facility: Dutra Materials Petaluma Facility
(Planned only at this time)

Type of Facility: Recycling of Concrete and Asphalt

Facility Capacity: Under negotiation with Sonoma County

Anticipated Diversion Rate: Greater than 95%

**Anticipated Amount of Waste
From Jurisdiction to Facility:** To Be Determined Once Facility is Operational

Type of Material: Concrete and Asphalt

Location of Facility: 3355 Petaluma Blvd. South, Petaluma, CA

Name of Facility: Sims Metal Management – Licensed Scrap Metal Dealer
(No permit required for this type of facility)

Type of Facility: Scrap Metal Purchasing and Export Yard

Facility Capacity: 1,000 tons per day

Anticipated Diversion Rate: 100% Recycled

**Anticipated Amount of Waste
From Jurisdiction to Facility:** Approximately 300 tons annually

Type of Material: Scrap Metal

Location of Facility: 600 South 4th Street, Richmond, CA 94804

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APPENDIX B

REVISED HAZARDOUS AND SOLID WASTE JOINT POWERS AGREEMENT COUNTY OF MARIN

This Agreement is entered into this 1st day of July, 1996 pursuant to the provisions of Title 1, Division 7, Chapter 5, Article 1 (Section 6500 et seq.) of the California Government Code relating to the joint exercise of powers among the following parties: The County of Marin (hereafter referred to as the "County"), the Cities of Belvedere, Larkspur, Mill Valley, Novato, San Rafael, and Sausalito, and the Towns of Corte Madera, Fairfax, Ross, San Anselmo, and Tiburon (hereafter collectively referred to as the "Cities and Towns"), which are all within the County of Marin.

PREAMBLE

The principle objectives of the agencies signatory to this Agreement are as follows:

A. Scope of the Agreement. The principle responsibilities of the new Authority, established by this Agreement, are to meet the goals of the Source Reduction and Recycling Element mandated by State Public Resources Code Sections 40900 to 43000 and the adoption and implementation of the Household Hazardous Waste Element required by Sections 25135 to 25135.8 of the Health and Safety Code.

Responsibilities for programs in the Certified Unified Program Agency (CUPA), which include the Hazardous Materials Business Plan Program, Risk Management and Prevention Plan Program, Aboveground Storage Tank Program, Underground Storage Tank Program, the Hazardous Waste Generator Program and the Tiered Permit On-Site Treatment Program, are to be managed as provided for by state law. The City of San Rafael will continue to administer its own CUPA programs. The County will administer these programs for the remaining Cities and Towns.

Operation of a household hazardous waste collection program is also mandated by state law. The County, the Cities and Towns will establish a local program that is available to their residents.

B. Limiting Membership in the Authority. Membership in the Authority will be limited to the County, the Cities and Towns. The districts included under the previous agreement are not signatories to this agreement and will not serve in any governing role. Representatives of the districts would continue to be included on the AB 939 Local Task Force.

C. Governing Structure. The day-to-day administration of the Authority will be vested with an Executive Committee responsible to the Board of Directors for the administration and management of Authority affairs. The Executive Committee will be comprised of the Chair and Vice Chair of the governing Board plus three Board members from the County, the City of San Rafael and the City of Novato.

The Board of Directors shall be comprised of one representative for each member agency. The Board member may be a member of the agency's City/Town Council or Board of Supervisors or the agency's staff.

A majority of the members of the Board of Directors will constitute a quorum for purposes of conducting business, and a majority of a quorum will be authorized to act on behalf of the Authority.

D. AB 939 Local Task Force. The Board will establish and be advised by an AB 939 Local Task Force, whose composition, duties and authority are specified in Public Resources Code Section 40950. The Task Force will include at least two representatives of waste haulers, one representative of an environmental organization, two representatives of special districts involved in the regulation and disposal of waste, and five public representatives appointed by the member agencies serving on the Executive Committee established in this Agreement.

If a conflict between this preamble and the specifications contained in Article 1 through Article 17 is presented, it is the intent of this Agreement that the Articles are to be considered determinative.

ARTICLE 1: FACTS AND DECLARATIONS

Solid Waste Management

WHEREAS, Sections 40900 to 43000 of the State Public Resources Code requires the County and each of its Cities to prepare, adopt, and implement source reduction and recycling elements and requires the County to prepare a county-wide siting element and a county integrated waste management plan; and

WHEREAS, the County, Cities, and Towns believe it would be to their mutual advantage and the public benefit to coordinate their power and authority to implement integrated waste management programs which meet the waste management requirements of State law; and

Hazardous Waste Management

WHEREAS, Government Code Section 66780.8 and Health and Safety Code Section 25135 through 25135.8 establishes a planning process and requirements for the preparation, adoption, amendment, administration, and enforcement of County hazardous waste management plans; and

Existing Solid Waste Management System

WHEREAS, an effective system of solid waste collection, recycling, diversion and disposal currently exists within the county involving the franchised waste haulers.

Role of Districts

WHEREAS, the Sanitary Districts of Almonte, Alto, Homestead Valley, Las Gallinas, Novato, and Ross Valley, and the Community Service Districts of Marin City and Tamalpais, and the Bolinas Community Public Utility District, and the Strawberry Recreation District and the Stinson Beach County Water District (hereafter collectively referred to as the "Districts") play a role in the regulation of the existing solid waste management system and will continue to exercise responsibilities in the effort to fully comply with State solid waste diversion goals; and

WHEREAS, the County, Cities and Towns acting through this Agreement intend to strengthen the existing solid waste management system in the operation and development of future waste management activities; and

Joint Planning and Implementation

WHEREAS, the County, Cities and Towns believe that many of the programs and facilities described in the above mentioned elements and plans will be both long-term and most cost-effectively provided on a multi-jurisdictional or county-wide basis; and

WHEREAS, the County, Cities and Towns believe that a separate, special purpose agency responsible for, and capable of, preparation, adoption, revision, amendment, administration, and enforcement of the Marin County Integrated Waste Management Plan and, the Marin County Hazardous Waste Management Plan (hereafter referred to as the "Plans"), and planning, financing, implementing, managing, and maintaining of the related programs would be most cost-effective on a County-wide basis; and

WHEREAS, the Joint Exercise of Powers Act (Government Code Section 6500 et seq.) provide for joint action by two or more public agencies, and Public Resources Code section 41823 authorizes a city or county or agency formed under a joint exercise of powers agreement for the purpose of preparing and implementing source reduction and recycling elements on a county-wide integrated waste management plan; and

WHEREAS, it is the intent of the contracting agencies to utilize these statutory authorizations in this Agreement; and

Public Involvement

WHEREAS, the County, Cities and Towns intend to encourage ongoing community involvement in the development and implementation of future solid and hazardous waste activities by utilizing an AB 939 Task Force, advisory committees, community meetings, and other similar mechanisms to obtain public participation in these activities; and

Legislation and Markets

WHEREAS, the County, Cities and Towns intend to actively promote markets for recycled materials and advocate legislation which furthers the reduce, reuse, recycle hierarchy; and

Promoting Cost Effective Programs

WHEREAS, in the planning and implementation of countywide programs, the County, Cities and Towns intend to give particular attention to the cost-effectiveness of programs; and

Sharing Of Costs In An Equitable Manner

WHEREAS, it is the intent of the County, Cities and Towns that costs for planning and implementing solid and hazardous waste programs will be based on a fair and equitable allocation system that considers previous investments of each member, the relative benefits to each member and the actual cost of service; and

NOW, THEREFORE, the Agencies agree as follows:

ARTICLE 2: DEFINITIONS

Certain words as used in this Agreement shall be defined as follows:

- A. "Agencies" shall mean the County, Cities and Towns.
- B. "Agreement" shall mean this agreement that establishes the County of Marin Hazardous and Solid Waste Joint Powers Authority.
- C. "Authority" shall mean the County of Marin Hazardous and Solid Waste Joint Powers Authority.
- D. "Board" shall mean the governing body of the County of Marin Hazardous and Solid Waste Joint Powers Authority.

- E. "County" shall mean the County of Marin.
- F. "Cities" shall mean the cities of Belvedere, Larkspur, Mill Valley, Novato, San Rafael, and Sausalito.
- G. "Towns" shall mean the Towns of Corte Madera, Fairfax, Ross, San Anselmo, and Tiburon.
- H. "Executive Committee" shall mean the committee composed of the Chair and Vice-Chair of the Governing Board plus three additional members of the Governing Board as appointed by the Governing Board.
- I. "Hazardous Waste Facility" shall mean a facility which includes all contiguous land and structures used for the handling, treating, recycling, storing or disposing of hazardous wastes.
- J. "Members" shall mean the County, Cities or Towns which are signatories to this Agreement.
- K. "Quorum" shall mean a majority of the Board Members.

ARTICLE 3: PURPOSE

3.1 Purpose of Agreement

The purpose of this Agreement is to establish a public entity separate from the County and each of the Cities and Towns. This public entity is to be known as the County of Marin Hazardous and Solid Waste Joint Powers Authority (hereafter referred to as the "Authority").

3.2 Purpose of Authority

The purpose of the Authority shall be to comply with Sections 40900 to 43000 of the Public Resources Code, Section 66780.8 of the Government Code and Health and Safety Code Sections 25135 through 25135.8.

- a. Prepare, adopt, revise, amend, administer and enforce hazardous waste and solid waste plans.
- b. Plan, finance, implement, manage and/or monitor multi-jurisdictional or county-wide programs and facilities related to the plans.
- c. And other new requirements imposed on the member agencies by future acts of the State or Federal Government as agreed by the member agencies.

3.3 Member Programs

It is recognized that members, such as the City of San Rafael, operate required programs outside the scope of this Agreement, such as administering a hazardous materials and an underground storage tank program and other programs covered by the Certified Unified Program Agency (CUPA).

ARTICLE 4: CREATION OF MARIN COUNTY WASTE MANAGEMENT AUTHORITY

4.1 Creation of Authority

There is hereby created by the County, Cities and Towns of Marin the Marin County Hazardous and Solid Waste Management Authority to exercise in the manner set forth in this Agreement the powers common to each of the Agencies.

4.2 Separate Entity

The Authority shall be a public entity separate from the Agencies. Pursuant to Government Code Section 6503.5, notice of the Agreement shall be filed with the Secretary of State within 30 days of this Agreement's effective date. Pursuant to Government code Section 6508.1 the debts, liabilities and obligations of the Authority shall not constitute the debts, liabilities or obligations of any parties to the Agreement.

ARTICLE 5: POWERS OF THE AUTHORITY

5.1 General Powers

The Authority shall have any and all powers authorized by law to the parties and may:

- a. Prepare, adopt, revise, amend, administer and enforce the provisions of the Plans;
- b. Evaluate and recommend programs designed to achieve compliance with AB 939 in a cost effective manner;
- c. Implement those programs for member agencies that choose to participate under section 6.2 of this Agreement;
- d. Advise the members on issues related to regional hazardous and solid waste facilities and programs;
- e. Advocate the interests of the members related to regional hazardous and solid waste facilities and programs with local, state and federal officials;
- f. Plan for regional hazardous and solid waste facilities and programs;
- g. Develop regional hazardous and solid waste programs;

- h. Develop markets for the reuse of recyclable materials;
- i. Contract for the operation of regional hazardous and solid waste facilities and programs;
- j. Regulate rates of regional hazardous and solid waste facilities and programs;
- k. Advise on matters of hazardous and solid waste rates and charges.

Nothing in this Agreement shall be construed to authorize franchise of solid waste collection.

5.2 Specific Powers

In carrying out its general powers granted pursuant to the statutes noted in Section 5.1, the Authority is hereby authorized to perform all acts necessary for the exercise of said powers which may include but are not limited to the following:

- a. Adopt ordinances and resolutions,
- b. Monitor performance,
- c. Make and enter into contracts,
- d. Apply for and accept grants, advances, and contributions,
- e. Employ or contract for the services of agents, employees, consultants and such other persons or firms as it deems necessary,
- f. Conduct studies,
- g. Acquire, hold or dispose of property,
- h. Sue and be sued in its own name,
- i. Appoint and retain legal counsel as necessary to fulfill its powers, duties and responsibilities under this Agreement
- j. Incur debts, liabilities or obligations subject to limitations herein set forth,
- k. Levy and collect fees and charges, including administrative and operating costs, as provided in this Agreement or by law, against all entities to which the Agreement or law applies,
- l. To adopt, as authorized by law, ordinances or resolutions necessary to carry out the purposes of this Agreement,
- m. Issue bonds, subject to the provisions and limitations of the Government Code of the State of California,
- n. Adopt annually, by July 1 of each fiscal year, an annual workplan and corresponding budget setting forth all administrative, operational and capital expenses for the Authority, and
- o. Implement the programs authorized in Article 6, and
- p. Indemnify the member agencies pursuant to Article 10.

5.3 By-Laws

The Board may adopt from time to time such policies, procedures, by-laws, rules or regulations for the conduct of its affairs as may be required.

ARTICLE 6: PROGRAMS OF THE AUTHORITY

6.1 Basic Programs of the Authority

It is agreed that the following functions will form the basic minimum programs to be undertaken by the Authority on behalf of all of the member agencies.

- a. Administration. Administrative functions of the Authority as related to this section.
- b. Planning. Preparation, amendment, administration and monitoring of the county-wide portions of the AB939 plans. This includes: the Source Reduction and Recycling Element, the Household Hazardous Waste Element, the Solid Waste Facility Siting Element, the Non-Disposal Facility Element and the Countywide Integrated Waste Management Plan.
- c. Monitoring and Reporting. Comply with the requirements of the various identified statutes to maintain and report on efforts to meet the waste diversion goals of State law.
- d. Compliance Review. Develop, evaluate and recommend various programs designed to bring about compliance with AB 939 requirements for member agencies that choose to participate under section 6.2.
- e. Legislation. Track legislation pertaining to hazardous and solid waste issues and recommend position statements to the Board of Directors.

6.2 Agency Election to Participate in Authority Programs

Except for the basic programs listed in Section 6.1 above, member agencies may, by formal action of their governing boards, choose whether or not they wish to participate in and fund programs to be developed by the Authority.

6.3 Contract with County and/or Others

The Authority intends to contract with the County and others to perform the programs as listed in Section 3.2, "Purpose of Authority" and the "Basic Programs" of the Authority listed in Section 6.1. of this Agreement.

ARTICLE 7: ORGANIZATION OF AUTHORITY

7.1 Members

- a. The County, Cities and Towns may enter into this Agreement by July 1, 1996.
- b. The County, and any City or Town may be considered for membership in the Authority after July 1, 1996, by presenting an adopted resolution to the Board which includes a request to become a member of the Authority and Board and upon a majority affirmative vote of a quorum of the Board accepting the County, City or Town and upon payment of any charges and upon satisfaction of any conditions established by the Board as a prerequisite for membership.

7.2 Board

- a. The Authority shall be governed by the "Board" which shall exercise all powers and authority on behalf of the Authority.
- b. The Board shall consist of one member of the governing body or the chief administrative officer of the County and each of the Cities and Towns which are party to this Agreement. Upon execution of this Agreement, the governing body of the County and each of the Cities and Towns shall appoint its member of the Board and another member to serve as an alternate to the Board, to serve in the absence of the regular member. Each member and alternate shall serve at the pleasure of the governing body of the appointing agency. Any change in appointment of a member or alternate shall be by action of the governing body of the appointing agency.
- c. A majority of the members of the Board shall constitute a quorum for the transaction of business. The Authority shall act upon majority vote of those in attendance, each member having one vote, of the members of the Board.
- d. The Board shall elect by majority vote, from its members, a Chair and Vice Chair. The Chair shall represent the Authority and execute any contracts and other documents when required by the Rules of Procedure and/or By-Laws. The Vice-Chair shall serve in the absence of the Chair.

7.3 Executive Committee

- a. The Executive Committee shall be responsible to the Board for the administration and management of Authority affairs, for the provision of assistance and advice to the Board.
- b. The Executive Committee shall be composed of the Chair and Vice-Chair plus three other members of the Governing Board elected by the Board. Three of the

committee members must be from the County, San Rafael, and Novato. One representative shall be selected by the Southern Marin cities of Sausalito, Tiburon, Belvedere and Mill Valley. One representative shall be selected by the Ross Valley cities of Ross, San Anselmo, Fairfax, Larkspur and Corte Madera.

- c. Three members of the Executive Committee shall constitute a quorum for the transaction of business. No action shall be taken by the Executive Committee except upon a majority affirmative vote of the quorum (each member having one vote) of the members of the Executive Committee.
- d. Members shall serve two-year terms and may be reappointed.

7.4 Additional Committees

- a. The member agencies shall establish an AB 939 Local Task Force whose composition, duties and authority are described in Public Resource Code Section 40950. The Task Force so established shall be advisory to the Governing Board established under this Agreement.
- b. The AB 939 Local Task Force shall include at least two representatives of waste haulers, one representative of an environmental organization, two representatives of special districts involved in the regulation and disposal of waste, and five public representatives appointed by the member agencies serving on the Executive Committee established under this Agreement.
- c. In addition to the Executive Committee and an AB 939 Local Task Force, the Board may from time to time establish additional committees to carry out Authority purposes, and appoint committee members from the Board, the legislative bodies or administration of member agencies, Authority staff, and/or staff of the member agencies. The Board may also establish and appoint members to citizen's advisory committees as deemed appropriate.
- d. To the extent practical, the Board shall appoint members to committees in such a manner as to encourage the broadest possible participation of the member agencies.

ARTICLE 8: MEETINGS AND REPORTS

8.1 Board Meetings

- a. The Board shall hold at least one (1) regular meeting each year as determined by the by-laws.
- b. Special meetings of the Board may be called in accordance with the provision of Section 54956 of the California Government Code.

- c. All meetings of the Board shall be held subject to the provisions of the Ralph M. Brown Act (Sections 54950 et. seq. of the California Government Code), and other applicable laws of the State of California requiring notice be given of meetings of public bodies.
- d. Minutes of all Board meetings will be kept and shall, as soon as possible after each meeting, be forwarded to each member and alternate member of the Board.
- e. The Chair of the Board shall cause correspondence to be prepared and delivered as directed by the Board.
- f. The public agency with whom the Authority contracts with to provide services shall be the keeper of the official records of the Authority.

8.2 Executive Committee Meetings

- a. The Executive Committee shall hold at least one (1) meeting each quarter.
- b. Special meetings of the Executive Committee may be called by the Chair, or by a majority of the members of the Executive Committee or at the direction of the Board.
- c. Minutes of all Executive Committee meetings will be kept and shall, as soon as possible after each meeting, be forwarded to members of the committee and to each member and alternate member of the Board.

8.3 Other Committee Meetings

- a. Other Committee's shall hold meetings as may be called by the Committee Chair, or a majority of the members.
- b. Minutes of all meetings will be kept and forwarded to members of the committee and to each member and alternate of the Board.

8.4 Progress Reports

At least annually, a report on the progress toward achieving the diversion goals of state law shall be prepared and distributed to members of the Governing Board.

ARTICLE 9: FUNDING

9.1 Authority Budget

The Board shall adopt an annual budget for the Authority's activities within ninety (90) days of the effective date of this Agreement and by June 1 of each succeeding year. Public funds may not be disbursed by the Authority without adoption of the approved budget and all receipts and disbursements shall be in strict accordance with the approved budget. The budget shall identify

the programs of the Authority and allocate funds by program. The budget and accounting system shall account for direct and overhead costs by program. The Board shall allocate these costs for each program with the adoption of the annual budget.

9.2 Funding of the Authority

The Authority has the need and legal authority to levy fees and charges for programs, services and permits. The Authority is authorized to levy fees for only those programs identified in Section 6.1. Basic Programs of the Authority, and Section 6.2, Agency Election to Participate in Authority Programs. The funding for programs identified in Section 6.1 should be as specified in Section 9.2.B. The Authority is also authorized to levy fees and charges for administrative activities, permits and programs with independent funding.

- a. The Basic Programs of the Authority defined in Section 6.1 shall be funded as follows and adjusted annually as may be needed to fund the Basic Programs.
 - i. A fee shall be charged directly to every franchised solid waste hauler in Marin County. The fee shall be based on a rate per ton of solid waste collected and disposed based on the 1994 disposed tonnages listed on Exhibit A attached to this Agreement. Exhibit A shall be amended within ninety (90) days after a member agency approves a new franchise and a fee shall be established in a manner determined by the Executive Committee. The base year will be adjusted every two years starting in July 1, 1998 based on the most recent state certified tonnages. The fee is to be paid in two equal payments due July 30 and January 30 of each year.
 - ii. A fee shall be charged at all permitted landfills in Marin County to all non-franchised haulers. The fee shall be based on a rate per ton for all tons of waste disposed at the landfill. The landfills shall forward these fees collected on a monthly basis.
- b. The Authority is authorized to establish additional programs as defined in Section 6.2 with the approval of the Board of Directors and the individual Authority members participating in any such additional programs. The funding mechanism for any additional programs shall be developed as a component of every additional program and must have approval by the Board of Directors and each member agency participating in any additional program. All costs including overhead or administration of any additional program shall not be charged to the Basic Programs.
- c. The Authority may charge fees to the extent allowed by law for administrative services rendered to the public or any member agencies such as, but not limited to, copying, processing fees, legal costs, preparation of reports, etc. The Authority

may also charge to the extent allowed below for programs intended to be fully cost covering, such as permit fees, applications, EIRs, educational materials, such as decals and pamphlets, monitoring of any programs, permits or application approvals. All fees under this Section shall be approved by the Board of Directors in conjunction with the annual adoption of this Authority's budget.

9.3 Duties of Treasurer

- a. The Board shall appoint a Treasurer from among the senior management staff of the member agencies. The Treasurer shall be either the County Auditor/Controller, or the Treasurer Tax Collector or the Finance Director of one of the members.
- b. The Treasurer shall serve as the depository and have custody of all Authority funds and establish and maintain such books, records, funds, and accounts as may be required by reasonable accounting practice, Government Code section 6505. The books and records of the Authority shall be open to inspection at all reasonable times to the County, Cities, and Towns and their representatives.
- c. The Treasurer, within ninety (90) days after the close of each fiscal year (which shall be from July 1 to June 30), shall give a complete written report of all financial activities for such fiscal year to the County, Cities, and Towns.
- d. The Treasurer shall prepare such financial reports as may be directed by the Board or Executive Committee.
- e. The Treasurer shall cause an independent annual audit of the accounts and records to be conducted by a certified public accountant in compliance with the requirements of section 6505 of the Government Code and generally accepted auditing standards.

9.4 Debts and Liabilities

No debt, liability, or obligation of the Authority shall constitute a debt, liability, or obligation of any Agency and each party's obligation hereunder is expressly limited only to the appropriation and contribution of such funds as may be levied pursuant to this Agreement or as the parties hereto may agree.

9.5 Disposition of Authority Funds Upon Termination

- a. In the event of termination of the Authority where there is a successor public entity which will carry on the activities of the Authority and assume its obligations, Authority funds, including any interest earned on deposits, remaining upon

termination of the Authority and after payment of all obligations shall be transferred to the successor public entity.

- b. If there is no successor public entity which would carry on any of the activities of the Authority or assume any of its obligations, Authority funds, including any interest earned on deposits, remaining upon termination of the Authority and after payment of all obligations, shall be provided in proportion to the contribution of each agency's ratepayers contributed during the term of this Agreement. Any such Authority funds received in this manner shall be used to defray the Agency's cost of hazardous and solid waste management programs or facilities.
- c. If there is a successor public agency which would undertake some of the functions of the Authority and assume some of its obligations, Authority funds, including any interest earned on deposits, remaining upon termination of the Authority and after payment of all obligations, shall be allocated by the Board between the successor public entity and member agencies.
- d. In the event the Authority is terminated under circumstances falling with (b) or (c) above, all decisions of the Board with regard to determinations of amounts to be transferred to member agencies or any successor shall be final.

9.6 Financial Liability of Member Agencies

In the event of a default by the Authority, the member agencies shall be liable for the Authority's debts in a proportion equal to the contribution of each agency's ratepayers to the funding of the Authority.

ARTICLE 10: INDEMNIFICATION

The Authority shall acquire such insurance protection as is necessary to protect the interest of the Authority, the County, Cities, Towns and the public. The Authority created by this Agreement shall assume the defense of and indemnify and save harmless the County, Cities, Towns and each of their respective officers, agents and employees, from all claims, losses, damages, costs, injury and liability of every kind, nature and description directly or indirectly arising from the performance of any of the activities of the Authority or the activities undertaken pursuant to this Agreement.

ARTICLE 11: EFFECTIVE DATE

This Agreement shall become effective when two-thirds (2/3) of the Cities, Towns and the County execute the Agreement, but not before July 1, 1996.

ARTICLE 12: TERMINATION

This Agreement may be terminated by the Board upon notice of withdrawal being received from a majority of the member agencies. Upon termination, payment of the obligations and division of the property of the Authority shall be conducted pursuant to Section 9.5 of Article 9 of this Agreement.

ARTICLE 13: AMENDMENTS

This Agreement may be amended only upon the two-thirds (2/3) affirmative vote of the Board.

ARTICLE 14: WITHDRAWAL

Any City, Town, or the County may withdraw from this Agreement effective July 1st of any year upon ninety (90) days, prior to the end of the fiscal year, written notice to the Authority. Upon withdrawal, a City, Town, or the County retains its financial obligations for current contracts executed to fulfill this Agreement, assumes responsibility for its obligations under AB 939, and assumes that responsibility at its own expense.

ARTICLE 15: SEVERABILITY

If any provision of this Agreement or its application to any person or circumstances is held invalid, the remainder of this Agreement and the application of the provision to other persons or circumstances shall not be affected.

ARTICLE 16: NOTICES

All notices to Agencies shall be deemed to have been given when mailed to the governing body of each agency.

ARTICLE 17: AGREEMENT COMPLETE

The foregoing constitutes the full and complete Agreement of the parties. There are no oral understandings or agreements not set forth in writing herein.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their proper officers thereunder duly authorized and effective as of the date of execution of all parties hereto.

COUNTY OF MARIN

Date 04-09-96

By

Hansel Brown Jr.
CHAIRMAN

CITY OF BELVEDERE

Date 5.22.96

By

Steven P. Johnson

CITY OF LARKSPUR

Date May 15, 1996

By

Samuel Sawatzky

CITY OF MILL VALLEY

Date May 22, 1996

By

John C. ...

CITY OF NOVATO

Date 4/23/96

By

Pat Eklund, Mayor Pro Tem

CITY OF SAN RAFAEL

Date 5/22/96

By

David D. ...

CITY OF SAUSALITO

Date 6/6/96

By

William ...

TOWN OF CORTE MADERA

Date 5/7/96

By

Norman M. Richardson

TOWN OF FAIRFAX

Date 5/22/96

By

Angela ...

TOWN OF ROSS

Date 6/13/96

By

Kelley ...

TOWN OF SAN ANSELMO

Date 5-23-96

By

Seth ...

TOWN OF TIBURON

Date 4/8/96

By

Nancy ...

APPENDIX C

Name of Facility: Redwood Landfill – Biosolids Co-Composting Facility
(SWFP # 21-AA-0001)

Type of Facility: Composting

Facility Capacity: Current: 170 tons per day of feedstock
Planned: potentially up to 514 tons per day of feedstock.

Anticipated Diversion Rate: Greater than 95% Diversion

Type of Material: Green/yard/wood waste, food waste, Class B ☐ Biosolids, and
active and finished compost

Participating Jurisdictions: The Marin County Hazardous and Solid Waste Management
Joint Powers Authority

Location of Facility: 8950 Redwood Highway, Novato, CA 94945

Name of Facility: Redwood Landfill – Material Recovery Facility
(Planned Facility*)

Type of Facility: Material Recovery Facility

Facility Capacity: 400 tons per day of feedstock

Anticipated Diversion Rate: Approximately 70% Diversion

Type of Material: Construction/demolition, wood waste, and other debris related materials.

Participating Jurisdictions: The Marin County Hazardous and Solid Waste Management Joint Powers Authority

Location of Facility: 8950 Redwood Highway, Novato, CA 94945

* Currently permitted to accept up to 400 tons per day of non-hazardous separated or commingled materials for recycling until Material Recovery Facility is permitted and operational. (See JTD, Table 5-6, dated November 17, 2008.)

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:
George Rodericks

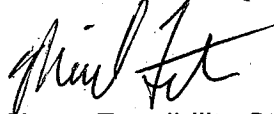
October 21, 2009

Corte Madera:
David Bracken

To: Executive Committee Members

County of Marin:
Matthew Hymel

From: Michael Frost



Re: Final Draft Zero Waste Feasibility Study

Fairfax:
Michael Rock

Larkspur:
Jean Bonander

Mill Valley:
Ann Montgomery

Novato:
Michael Frank

Ross:
Gary Broad

San Anselmo:
Debbie Stutsman

San Rafael:
Ken Nordhoff

Sausalito:
Adam Politzer

Tiburon:
Margaret Curran

Attached for your Committee's review, comment and acceptance is the final draft of the Zero Waste Feasibility Study (Attachment A) your Committee commissioned with R3 Consulting Group. Also attached is R3's response to comments received (Attachment B). During the past year, R3 with the cooperation and assistance of your staff, met and solicited comments regarding zero waste from the known stakeholders in Marin. Counting today's second presentation to your Committee, R3 and your staff have conducted eight public meetings on this study. With cooperation and assistance from local cities in Marin, haulers, Local Task Force (LTF), special districts, and concerned citizens, R3 was able to complete the study on schedule that outlines Marin's strengths and weaknesses in waste reduction. The attached study and executive summary outline R3's conclusions and recommendations. R3 concludes that it is possible for Marin County to reach zero waste goals.

Aside from the financial issues, clearly three of the major challenges for Marin in addressing zero waste goals are:

- A. The multiple and diverse municipalities, special districts, haulers and 25 franchising agencies that need to coordinate to present a consistent approach to reducing waste. For example, the City and County of San Francisco has already adopted a composting program that includes food and green waste. However, the City and County of San Francisco is one agency, with one hauler.
- B. Marin lacks local facilities for composting food and/or green waste. This is not unique to Marin, but trucking Marin waste long distance limits the environmental benefits.
- C. Creating consumer behavior changes that will reduce their environmental impact.

Topic "A" above is probably the most unique and administratively complex. In their study, R3 recommends the JPA be given more authority to implement many of the steps R3 recommends as necessary to achieve Marin's Zero Waste goals.

It is recommended that your Committee take the first steps to begin Phase Two of the zero waste study and undertake the following recommendations:

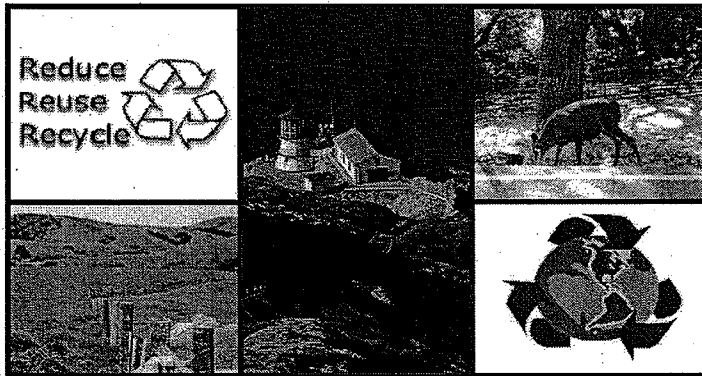
1. Accept the study and recommend the full JPA Board accept the study.
2. Direct staff and your Budget Sub-committee to include in next year's Budget Request additional staffing and resources to increase coordination in Marin on zero waste, and to include in next years budget funding to be granted to local municipalities to implement programs outlined in this study.
3. Consider more frequent meetings of the JPA Board and Executive Committee as recommended in the study to increase local coordination on Zero Waste. R3 is recommending certain items can be most efficiently be completed at a JPA or countywide level, other items may be better accomplished at the franchise or city level. These are management decisions that will require JPA Board Members input and direction. For example, a grant-funding program would provide funding to municipalities, but it would also place responsibilities on each municipality.
4. Direct staff to develop a public education contract to encourage reduced consumer consumption with available funds in this year's budget.

Attachments

ATTACHMENT A

Marin County Hazardous and Solid Waste Management JPA

Final Draft Zero Waste Feasibility Study



Presented by
R3 Consulting Group

October 2009

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Executive Summary

Overview

The Marin Hazardous and Solid Waste Management Joint Powers Authority (JPA¹) has established a Zero Waste Goal of achieving 80 percent waste reduction in the next five years and zero disposal by 2025. To address how best to meet this Zero Waste Goal, the JPA has initiated a two-phase process. Phase I, the "Zero Waste Feasibility Study", focuses on **establishing** programs and policies to strengthen the regional framework for meeting the Goal. Phase II will focus on **implementation** of specific programs and policies by the Member agencies and the JPA to meet the Goal.

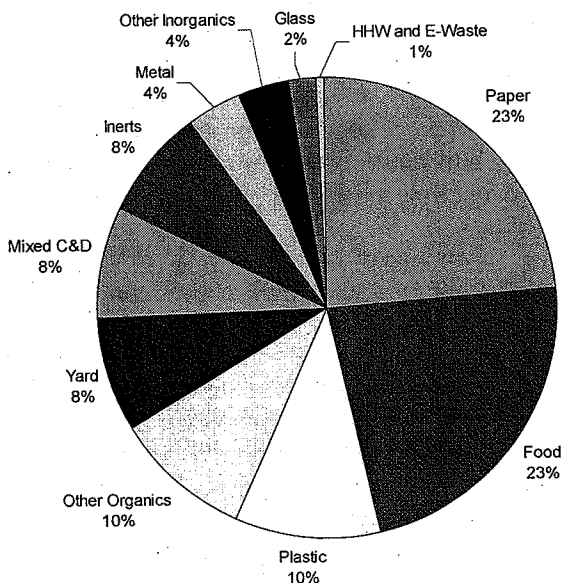
On a countywide basis, the Member Agencies and the JPA have successfully implemented programs to comply with the Integrated Waste Management Act's (AB 939) requirements of diverting from landfill 50 percent of waste generation. As a regional agency, comprising of all the communities in Marin County, the JPA reports diversion progress to the California Integrated Waste Management Board (CIWMB) on a regional basis.

The most recent calculated diversion rate by the CIWMB was for 2006, and the JPA had a diversion rate of 72 percent. Although the diversion rate is high, the amount of material disposed over the past 13 years has remained fairly level at about 229,000 tons. As

¹ The JPA is comprised of 12 Member Agencies: Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato, Ross, San Anselmo, San Rafael, Sausalito, Tiburon and unincorporated Marin County. Within these areas, six haulers operate 26 franchise service areas with varying programs and requirements.

seen in Figure 1, the major categories of disposed materials are: Food Waste, Organics and Yard Waste -- 41%, Paper -- 23%, Inerts and Mixed C&D -- 16% and Plastics -- 10%. The recommendations developed as part of this Zero Waste Feasibility Study specifically target reduction and diversion of these disposed materials.

**Figure ES - 1
Materials Disposed**



Key Findings

- **JPA Resources.** Currently, the JPA does not have the direction or staffing needed to effectively work on a regional level and achieve the recommendations. Unless there is a strengthening of the JPA's role to assist Member Agencies in implementing the recommendations, it is unlikely that the Zero Waste Goal will be met, and the status quo will continue.
- **Program Consistency.** It will also be necessary for the JPA, Member Agencies, and haulers to implement programs and policies that are

consistent countywide. The Member Agencies will need to adopt or revise ordinances, and modify their franchise agreements to establish the framework and standards for their diversion programs to meet the Zero Waste Goal.

- **Economies of Scale.** Some programs, such as ordinance enforcement and public education of programs, would be more efficiently and cost-effectively managed at the JPA regional level than independently by each Member Agency. In addition, many of the policy related programs can be better and cheaper if administered at a countywide level.

- **Short and Long-Term Programs.** A balance will have to be drawn for short-term and long-term programs and policies that address eliminating the creation of waste (up-stream, but long-term implementation) and the disposal and diversion of waste (down-stream, but short-term implementation). Up-stream programs include public education efforts that promote reduced consumption, Extended Producer Responsibility (EPR) policies that promote product redesign for hazardous materials, product bans, etc. Down-stream programs include increasing the types of materials collected by haulers (e.g., food), revising franchise agreements and ordinances to reflect industry standards and establish diversion requirements, implement food waste

digestion and composting, etc.

- **Diversion Facilities.** Approximately 56 percent, or 128,000 tons of food, yard, organic waste, inerts, and mixed C&D were disposed at landfill. In order to meet the Zero Waste Goal, reduction and processing of these targeted materials is critical. However, currently there is insufficient capacity for the facilities located within the County to process these materials and it may be necessary to transport these materials to out-of-county facilities.
- **Public Education.** Finally, and most importantly, for both Phase I and Phase II programs to be successful, public education must be strong and consistent among Member Agencies, and be continuous.

Recommendations

There are 18 recommendations that will help the JPA achieve the Zero Waste Goal. Phase I recommendations are intended to provide the JPA with clear direction and support to provide assistance to Member Agencies, and for the Member Agencies to begin taking the additional steps to meet the Zero Waste Goal. Phase II recommendations address the implementation of up-stream and down-stream waste prevention and diversion programs.

Table ES-1 identifies the recommendations to be implemented by the responsible party. Recommendations are briefly explained

Table ES-1
Summary of Recommendations By Responsible Party
(Descriptions are after the table)

	JPA	Member Agencies	Haulers (Via Member Agencies)
Phase I	Recommendations #1-5	Recommendations #6-10	None
Phase II	Recommendations #11	Recommendation #18	Recommendations #12-17

following the table.

PHASE I

1. Increase the Communication/ Assistance of the JPA with Other County Departments

The County Departments that manage the used oil block grant, sharps collection and sustainability teams operate separately from the JPA and do not consistently share information with the JPA. Because meeting the Zero Waste Goal involves materials targeted in such programs, it is important for the JPA to be informed of collection results for programs such as used oil, sharps, etc., and be able to assist in public outreach on a countywide basis, as needed, to prevent waste generation and promote proper disposal of such material.

2. Increase JPA Staffing and Their Role in Assisting Administration of Member Agency and Countywide Programs

The Member Agencies currently do not have the resources to monitor all hauler and ordinance program performance or implement new programs. If adequately staffed, the JPA could cost-effectively assist the Member Agencies in program support such as compliance with the C&D ordinance, monitoring hauler contracts, public education, etc.

3. Increase the Frequency of Board of Directors Meetings

Increasing the number of meetings held will enable the JPA Directors and Member Agencies to be more involved in addressing Zero Waste issues and provide the JPA with more constant contact with the administrators of policies throughout the County. Currently, the Board of Directors is the main contact that the JPA staff have with the Member Agencies and as

recommendations are implemented and JPA seeks direction for the County, having increased communication and interaction will be essential. The increased communication could lead to improved partnership with Member Agencies and more effective implementation of programs.

4. Help with Siting/Permitting Processes of a) Solid Waste Facilities and b) Non-Solid Waste Facilities

A. The haulers operating in the County have the opportunity to transport material such as green waste and food waste out of the County for composting or other diversion. However, because the franchise agreements do not require specific diversion of these materials and the cost impacts of transporting the material, the material is not being diverted in the amount it could. The lack of the necessary infrastructure in the County is a constraint for the JPA to achieve high diversion programs unless franchise agreements require transporting the material to diversion facilities. The JPA could assist prospective facilities with the siting process, but it should be noted that such a facility would be hard to site in the County due to land use and environmental issues.

B. Non-solid waste facilities for materials, such as salvaged construction and demolition material, should be helped by JPA staff to identify potential sites and work with Member Agencies. This type of facility includes retail-focused businesses that promote reuse that do not require processing of materials. The JPA should

continue to play an active role in helping site new facilities that provide diversion and reuse opportunities to the region. These facilities will also help create "green jobs" in Marin County.

5. Support Extended Producer Responsibility (EPR) and Waste Reduction Policies at State and National Level

The JPA has been active in supporting legislation that helps eliminate hazardous materials from the disposal waste stream. The JPA should continue this activity and also support any national legislation that might positively affect the JPA's Zero Waste Goals. In addition, individual Member Agencies should support these efforts as well through Extended Producer Responsibility resolutions and letter campaigns for products, such as fluorescent lighting and paint.

6. Revise Solid Waste Ordinances

The solid waste industry and regulations have changed considerably since 1990. However, the ordinances that regulate the hauler franchise agreements in some cases have not been updated for 45 years. Extensive revisions will likely be necessary for the ordinances so that they address construction and demolition, mandatory recycling, diversion requirements, etc. Addressing these issues in the ordinance will set the framework for implementing new diversion programs and revising franchise agreements. Another method to consider including is the requirement that commercial and multi-family dwelling material all is sorted before disposal to reclaim recyclable material. These sectors dispose of highly recyclable material, such as paper, that could be diverted through the sorting process.

7. Revise Franchise Agreement Language

Franchise agreements can be designed to encourage "green" operations and encourage maximum diversion. Many of the franchise agreements are lacking provisions that address collection hours, type of fuel vehicles use, vehicle noise and weight, explicit list of recyclable materials, diversion standards, required diversion programs, public education requirements, solid waste hierarchy, customer or hauler incentives to promote diversion, etc. Another method to consider including is the requirement that commercial and multi-family dwelling material all is sorted before disposal to reclaim recyclable material. These sectors dispose of highly recyclable material, such as paper, that could be diverted through the sorting process.

8. Adopt, Enforce, and Homogenize the Construction and Demolition Ordinance

The diversion of construction and demolition materials may not occur unless all Member Agencies adopt and enforce C&D ordinances. With only five Member Agencies adopting the ordinance and having varying requirements, diversion of construction and demolition material is not maximized and contractors and haulers could be confused with the various requirements. Construction and demolition material has local facilities to be processed at and the absence of countywide ordinances requiring diversion misses an opportunity for immediate and effective diversion. Public education and enforcement of the haulers and permittees is an essential component to the success of the diversion.

9. Adopt and Enforce Multi-Family Dwelling and Business Recycling Ordinance

With single-family residential customers currently serviced with comprehensive diversion opportunities, multi-family dwellings and businesses are the next sectors that can achieve high diversion. Currently multi-family dwellings and businesses dispose significant amounts of recoverable paper and food. Until mandatory recycling requirements are established for these sectors, in conjunction with public education, there is little incentive for increasing diversion by the customers or haulers. In addition, each Member Agency will be required to adopt such an ordinance in the next few years to comply with the climate change bill, AB 32.

10. Encourage Consumption and Disposal Changes

Promoting reduced consumption by making better choices when shopping is a necessary element to ultimately eliminate waste generation. Efforts should be made to increase customer awareness of online and local resources that encourage material exchange, repair and reuse. Public education must be a significant and on-going element to promote the consumption and disposal changes.

PHASE II

11. Promote Regional Sale and/or Disposal Bans

Undertaking product sale and/or disposal bans are most effective when all Member Agencies simultaneously adopt them rather than each jurisdiction implementing different bans. The Town of Fairfax has already implemented a plastic bag ban and the state is also considering charging fees. Such bans will be most effective on a countywide level and the JPA can assist Member

Agencies with the public education and creating a homogeneous approach for expanding or implementing new bans.

12. Implement Wet/Dry Collection Routes

A way to potentially increase recovery of material from commercial businesses is to re-route trucks to collect similar types of material (selective routing). For example, one truck should service locations that generate mostly paper goods (dry goods) and other service businesses that generate mostly food waste (wet goods). By designing such routes, contamination of loads is minimized and more materials can potentially be diverted.

13. Offer Residential Unlimited Services of Recycling and Green Waste Containers

These programs are dependent on services offered by the haulers. There is an opportunity to improve collection because some haulers do not currently provide a sufficient number of containers to all residents or charge a fee for extra containers. Rate structures for this service should also be reviewed as part of the franchise agreement revision to determine if there are incentives for customers to divert material and haulers to meet diversion standards.

14. Add Materials Collected to Recycling Stream

All recyclables should be collected by haulers if there is a market for them. While the economy is slow, this may not be possible, but increasing collected materials, even if not generating profit, should be considered as a way to reduce disposal.

15. Add Food Waste Diversion to Collection Services (Residential and Commercial)

After green waste, food waste collection and composting is the big next step to reducing waste disposal. As with green waste, the availability of processing facilities is the limiting factor, but digestion and composting facilities are beginning to be established in Marin County (e.g., Redwood Landfill, Marin Sanitary Service energy projects, Pacific Biogas Energy).

16. Implement Food Waste Digestion

Marin Sanitary Service is undertaking food waste digestion with the Central Marin Sanitation Agency (CMSA). The CMSA only services a portion of Marin County and other sanitation districts serving the region should also explore combining food waste with current digestion operations.

17. Promote Backyard Composting

Getting residents engaged will help promote sustainability and waste awareness. In addition, developing a community garden where residents can bring food waste should be explored. The JPA should also assist with this recommendation.

18. Require Deconstruction/ Salvage/Resale of Construction and Demolition Materials

Salvaging materials prior to deconstruction will allow materials to be reused and diverted from the landfill. This practice has already begun in parts of the County, but support from Member Agencies in the form of ordinances and promotion will help keep useful materials from being unnecessarily disposed.

Funding Options

To fund the recommendations, the JPA and Member Agencies have a variety of options, but the Member Agencies have authority over most methods (see Table ES-2). Other than the AB 939 fees that are charged by the JPA, the authority to implement or adjust funding mechanisms are held by each Member Agency. In essence, these fees will ultimately be paid by the customer through service rates with the exception of Extended Producer Responsibility (EPR) which should be paid by consumers of the product. These funding mechanisms include the following:

- Vehicle impact fees;
- Franchise fees;
- General fund;
- Facility host fee;
- Developer fee;
- Ballot initiative fee/tax; and
- EPR policy/fee.

Table ES-2
Funding Options

	Has Authority to Implement	
	JPA	Member Agencies
Customer rates		✓
AB 939 fees	✓	✓
Vehicle impact fees		✓
Franchise fees		✓
General fund		✓
Facility host fees		✓
Developer fee		✓
Ballot initiative fee/tax		✓
EPR policy/fee		✓

With each of these funding mechanisms, the Member Agencies have the opportunity to use the money to support programs and policies to support the Zero Waste Goal. As the Member Agencies evaluate the recommendations, these funding options will need to be further explored to meet their needs.

Table ES-3 identifies the estimated costs and potential funding source for implementing the recommendations. ***It should also be noted, that many***

programs, such as revising an ordinance and franchise agreement, can be more cost effectively done on a regional basis as a "model" to guide each Member Agency's unique ordinance and franchise agreement rather than each Member Agency developing its own ordinance or franchise agreement language.

Therefore, in Table ES-3, the estimated costs can be significantly reduced if programs are implemented on a regional basis.

Table ES-3 Estimated Costs					
Responsible Party		Recommendation	Estimated One-Time Cost	Estimated Ongoing Cost	Potential Funding Source
Phase I					
JPA	1	Increase Communication/ Assistance of the JPA with other County Departments (e.g., used oil programs, sharps)	N/A	\$40,000+ <i>Materials and staffing</i>	Disposal Fee
	2	Increase JPA's Staff and Role in Assisting Administration of Member Agency and Countywide Programs. <i>Could support #6-10 below.</i>	\$200,000 (Fund Phase II)	\$120,000+ <i>Materials and staffing</i>	Disposal Fee
	3	Increase Board of Directors Meeting Frequency	N/A	N/A	Disposal Fee
	4	Help Facilities with Siting and Permitting: a) Solid Waste and b) Non-Solid Waste <i>JPA materials and staffing</i>	N/A	\$120,000 <i>Materials and staffing</i>	Disposal Fee
	5	Support EPR and Waste Reduction Policies at State and National Level <i>Public education</i>	N/A	\$120,000 <i>Materials and staffing</i>	Disposal Fee
Phase I JPA Subtotal			\$200,000	\$400,000	

**Table ES-3
Estimated Costs**

Responsible Party		Recommendation	Estimated One-Time Cost	Estimated Ongoing Cost	Potential Funding Source
<i>Member Agencies (MA)</i>	6	Revise Solid Waste Ordinances <i>Could be done as part of #2 above.</i>	\$5,000-\$10,000 each MA	N/A	Franchise Fee, General Fund
	7	Revise Franchise Agreement Language. <i>Could be done as part of #2 above.</i>	\$25,000-\$75,000 each MA	N/A	Franchise Fee, General Fund
	8	Adopt, Enforce, and Homogenize the Construction and Demolition Ordinance. <i>Could be done as part of #2 above.</i>	\$5,000-\$10,000 each MA	\$5,000 each MA or \$60,000 for region	Franchise Fee, General Fund, Disposal Fee
	9	Adopt and Enforce Multi-Family Dwelling and Business Recycling Ordinance. <i>Could be done as part of #2 above.</i>	\$5,000-\$10,000 each MA	\$5,000 each MA or \$60,000 for region	Franchise Fee, General Fund, Disposal Fee
	10	Encourage Consumption and Disposal Changes. <i>Public education. Could be done as part of #2 above.</i>	\$5,000-\$10,000 each MA	\$5,000 each MA or \$60,000 for region	Franchise Fee, General Fund, Disposal Fee
<i>Phase I Member Agencies Subtotal</i>			<i>\$45,000-\$115,000 each MA</i>	<i>\$15,000 each MA-\$180,000 for region</i>	
Phase II					
<i>JPA</i>	11	Promote Regional Sale and/or Disposal Bans	\$50,000+ for public education	\$30,000+	Disposal Fee
<i>Phase II JPA Subtotal</i>			<i>\$50,000+</i>	<i>\$30,000+</i>	
<i>Haulers (via Member Agencies)</i>	12	Implement Wet/Dry Collection Routes	Franchise Agreement Revision	2%-10% rate increase	Customer Rates
	13	Offer Residential Unlimited Services of Recycling and Green Waste Containers	Franchise Agreement Revision	1%-3% rate increase	Customer Rates

**Table ES-3
Estimated Costs**

Responsible Party		Recommendation	Estimated One-Time Cost	Estimated Ongoing Cost	Potential Funding Source
	14	Add Materials Collected to the Recycling Stream	Franchise Agreement Revision	1%-3% rate increase	Customer Rates
	15	Add Food Waste Diversion to Collection Services (Residential and Commercial)	Franchise Agreement Revision	1%-5% rate increase	Customer Rates
	16	Implement Food Waste Digestion	Franchise Agreement Revision	2%-10% rate increase	Customer Rates
	17	Promote Backyard Composting	\$5,000-\$10,000 each MA	\$5,000 each MA or \$60,000 for region	Customer Rates
Phase II Hauler Subtotal			\$5,000-\$10,000 each MA	\$5,000 each MA or \$60,000 for region	
Member Agencies	18	Require Deconstruction/ Salvage/ Resale of Construction and Demolition Materials	\$5,000-\$10,000 each MA for public education	\$5,000 each MA or \$60,000 for region	C&D deposit system or fee
	Phase II Member Agencies Subtotal		\$5,000-\$10,000 each MA	\$5,000 each MA or \$60,000 for region	
Total			\$910,000-\$1,870,000 for the region	\$730,000+ for the region and 7%-31% rate increase	

Projected Zero Waste Results

Implementing the recommendations could achieve a reduction of over 180,000 tons of disposal and waste generation. This would equate to approximately 94 percent diversion.

Table ES-4 identifies the estimated diversion each for each recommendation. Programs where diversion is dependent on or support recommendations are identified within the table.

**Table ES-4
Diversion Estimates by Recommendation**

Responsible Party		Recommendation	Estimated Diversion Tons
Phase I			
<i>JPA</i>	1	Increase Communication/ Assistance of the JPA with other County Departments (e.g., used oil programs, sharps and pharmaceuticals)	Supports #4-18
	2	Increase JPA's Staff and Role in Assisting Administration of Member Agency and Countywide Programs	Supports #4- 18
	3	Increase Board of Directors Meeting Frequency	Supports #4- 18
	4	Help Facilities with Siting and Permitting: a) Solid Waste and b) Non-Solid Waste	Supports #18
	5	Support Extended Producer Responsibility (EPR) and Waste Reduction Policies at State and National Level	.05 – 5%. Note that current EPR materials are banned from disposal.
<i>Member Agencies</i>	6	Revise Solid Waste Ordinances	Supports #7 ,9, & 18
	7	Revise Franchise Agreement Language	Supports #8, 9, 12, 13, 14, 15 &16
	8	Adopt, Enforce, and Homogenize the Construction and Demolition Ordinance	22,900 and supports #18
	9	Adopt and Enforce Multi-Family Dwelling and Business Recycling Ordinance	29,700
	10	Encourage Consumption and Disposal Changes	2,300
Phase II			
<i>JPA</i>	11	Promote Regional Sale and/or Disposal Bans	1,100
<i>Haulers (via Member Agencies)</i>	12	Implement Wet/Dry Collection Routes (Commercial and Multi-family)	102,000
	13	Offer Residential Unlimited Services of Recycling and Green Waste Containers	7,300
	14	Add Materials Collected to the Recycling Stream	2,300
	15	Add Food Waste Diversion to Collection Services (Residential and Commercial)	4,500 and supports #12 &16
	16	Implement Food Waste Digestion	N/A
	17	Promote Backyard Composting	4,500 as part of food waste diversion (#15)
<i>Member Agencies</i>	18	Require Deconstruction/ Salvage/ Resale of Construction and Demolition Materials	11,500 and supports #8
<i>Total</i>			183,600

Report Organization

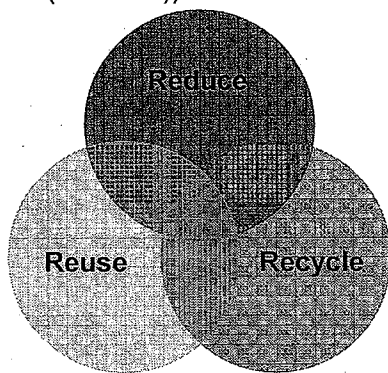
- Section I: Provides an introduction to the study.
- Section II: Identifies the goals of the study.
- Section III: Identifies the methodology used in evaluating the JPA and developing recommendations.
- Section IV: Identifies data sources used to develop the recommendations.
- Section V: Identifies challenges to achieving Zero Waste.
- Section VI: Provides analysis of existing programs and opportunities.
- Section VII: Identifies recommendations for the JPA, Member Agencies and haulers (via Member Agencies) to undertake.
- Section VIII: Identifies funding methods available to execute the recommendations.

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I. Introduction

The Marin Hazardous and Solid Waste Management Joint Powers Authority (JPA) is comprised of 12 Member Agencies: Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato, Ross, San Anselmo, San Rafael, Sausalito, Tiburon and unincorporated Marin County. Through the JPA, the communities have been implementing programs to comply with the Integrated Waste Management Act's (AB 939) requirements of diverting 50 percent of generated waste¹. The most recent calculated diversion rate by the California Integrated Waste Management Board (CIWMB) was for 2006 and the JPA had a diversion rate of 72 percent. It is the JPA's objective to increase the diversion rate to 80 percent by 2012 and Zero Waste by 2025.

Due to the increased diversion goals and a need to address the waste stream and make Marin County (County) more environmentally sustainable, this report analyzes the JPA's current policies and programs regarding non-hazardous and hazardous waste (includes Universal Waste (U-Waste)).



¹ Household hazardous waste is not considered in determining diversion rates, because it is not legal to dispose of the materials in landfills. However, reduction of HHW is consistent with a Zero Waste Goal.

The Zero Waste goal can be described as a community's environmental impact minimized by adopting policies and programs that promote product redesign to reduce toxics and consumption, and local material reuse and recycling.

In order for Zero Waste to be attained, it is necessary for the JPA, Member Agencies, and haulers to implement programs and policies that are consistent countywide.

Structure of Recommendations

To achieve Zero Waste requires a combination of short-term and long-term programs and policies that address eliminating the creation of waste (up-stream) and the disposal and diversion of waste (down-stream).

The tandem of up-stream and down-stream will reduce the waste generated over the long-term when combined with sustained and consistent public education messages. Although up-stream policies and programs will have impact on disposal over the long-term, actions must begin now to create the desired consumer behavior changes.

The down-stream waste management programs are focused on short and long-term programs and policies that divert material for higher and best use. Maximizing diversion can occur through existing and new programs to recover material for resale, compost and energy generation.

In consideration for the impacts of the short-term and long-term impacts of programs and policies, the recommendations presented in this Feasibility Study are organized into two phases: Phase I and Phase II. Phase I recommendations are intended to create a regional (countywide) foundation for recommended programs and policies to work. Phase II recommendations are

those that are to be implemented at a regional and Member Agency level.

Regardless of the recommendation, public education is a fundamental component of enabling the recommendations to achieve consistent and desired diversion outcomes.

II. Goals

The JPA has established the goals of achieving 80 percent diversion and Zero Waste in the next five to 17 years. To determine how Marin County can attain these goals, the JPA engaged the R3 Consulting Group (R3) Team (includes California Waste Associates; Environmental Planning Consultants; and Heidi Sanborn, Product Stewardship Consultant) to evaluate current solid waste and household hazardous waste programs, suggest improvements or new programs, and solicit feedback from stakeholders. This report provides a summary of our findings and presents an analysis of potential diversion rates if suggested program changes were implemented. The analysis also includes a review of current public education material and waste-related ordinances.

III. Methodology

As part of the analysis, the JPA's current diversion and disposal practices and household hazardous waste management was evaluated, with a focus on the sectors that generated the material (e.g., single family and multi-family residential, commercial, construction and demolition, self-haul and "other/unknown"). These categories are used as a foundation to consider improvements to current programs and policies. Data was provided by the franchised haulers,

facility operators, CIWMB, JPA staff and County staff.

In addition, R3 created a model that evaluated what changes to the current waste management program could be undertaken to increase the JPA's diversion rate. The model can be adjusted to reflect anticipated participation and diversion. The diversion rate was calculated with the assumption that the increase in diversion resulted in an identical reduction in disposal.

As a way to also increase the JPA's environmental sustainability, the hauler franchise agreements and policies developed by the JPA and Member Agencies were reviewed. Stakeholder meetings/workshops were conducted with the JPA staff, JPA Board of Directors, JPA Executive Committee, Local Task Force, County of Marin Board of Supervisors, franchised haulers, and general public.

IV. Data Sources

This study provides a "big picture" view of how diversion rates can be changed by improving existing programs or implementing new programs. Information presented in this Feasibility Study is from data provided by JPA staff, Member Agency staff, facility operators, franchise agreements and franchised haulers. All franchise agreement, public education and rates were requested, but not all data was able to be obtained. Below are data sources used to conduct analysis.

- Relevant franchise agreement information from 26 franchise service areas.
- Available tonnage information from the JPA. However, data did not distinguish the tonnage of material collected and recycled from Single

Family Dwellings (SFD), Multi-Family Dwellings (MFD), Commercial, and Construction and Demolition (C&D); this information is valuable for tracking programs and targeting education efforts. Therefore, analysis in this Feasibility Study is provided only for SFD and commercial sectors.

- Waste characterization data used was based off of a study of the Marin Sanitary Service (MSS) Transfer Station conducted in 2007 for residential and light commercial loads. The study did not include the Novato waste stream.
- Disposal tonnage as reported by the Disposal Reporting System (DRS).
- Household data from the U.S. Census.
- Reports provided by franchised haulers.
- Residential food waste diversion program information was obtained from the Alameda County Waste Management Authority.

In addition, attempts were made to obtain additional program diversion information from the CIWMB, but no information was provided.

This study does not reflect the political viability of making the suggested program changes.

V. Challenges to Achieving Zero Waste

The Member Agencies in the JPA have a wide variety of programs that are intended to promote waste reduction the recycling of products and result in reducing the amount of material disposed. As a result, the JPA has consistently been recognized for exceeding the state's 50 percent

diversion requirement and business waste reduction efforts.

Although the JPA has a strong record of high diversion rates, in 2007 the reported disposal was 229,271 tons (70 percent reported diversion). This compares to approximately 250,000 tons of disposal as reported in 1995 (32 percent reported diversion). Accordingly, over the past 14 years, while reported diversion has increased dramatically, actual disposal has remained relatively flat. This is due to consumption rates not changing. Additional policies and programs will need to be developed and implemented to meet the JPA's Zero Waste Goals.

In order to meet the Zero Waste Goals, several major challenges that affect program development and implementation will have to be mitigated. These are as follows:

- The JPA has a minimal role in solid waste program implementation at the Member Agency level and does not have any direct authority or resources to implement new programs and effectively increase diversion.
- Each Member Agency administers its own franchise agreement, and the agreements are not diversion-based agreements.
- Member Agencies operating individually may not have adequate resources to develop, implement and enforce the necessary program to support the Zero Waste Goals.
- There is insufficient capacity for facilities located within the County to process the amount of organic waste materials to meet the Zero Waste Goals.
- There is one C&D processing facility located within the County (Marin Resource Recovery Center-MRRC)

that may have adequate **capacity** to process all C&D materials. However, this facility is privately owned and operated and not all Member Agencies direct their C&D materials to the MRRC. For Member agencies not serviced by MSS, directing C&D materials this facility (or any specific facility) should be accompanied with some form of public oversight (rate review) of the tipping fees charged to process C&D materials.

The recommendations based on the analysis in Section VI are specifically designed to mitigate the impediments listed above.

VI. Analysis

The JPA and its Member Agencies have a wide array of programs that help reduce the amount of materials disposed and properly manage household hazardous waste materials. This section discusses accomplishments of Marin County, current programs and provides recommendations that will help the JPA become a Zero Waste community.

Marin County Leadership in Waste Reduction and Recycling

The JPA has consistently been recognized for exceeding the state's 50 percent diversion requirement and business waste reduction efforts.

CIWMB Award-Winning Waste Reduction Practices

In 2001, JPA won a CIWMB Trash-Cutters Award for its collaborative effort between Member Agencies and businesses to promote and support diversion programs and activities. In addition, the County of Marin created a market incentive for recycled products

by instituting a 15 percent price preference for purchases.

Along with the JPA's activities, businesses have been regularly recognized over the years for their contribution to reducing the waste stream and being environmentally responsible. The CIWMB has awarded the Waste Reduction Awards Program (WRAP) Award to 213 businesses in Marin County since 1993 and seven businesses have been awarded the WRAP Winner of the Year since this honor was initiated in 1996.

Marin County Sustainability Team

The Community Development Agency (Agency) has a Sustainability Team that has the following countywide programs: C&D ordinance, green building, climate protection, waste tire collection (in partnership with the JPA), energy conservation, and promoting green living. In addition to these programs, the Agency has a reuse grant to encourage deconstruction contractors to provide services in Marin and to site a reuse facility for construction and demolition materials. The grants may not be offered depending on economic conditions.

Its website is a resource for people to learn how to take action to reduce their ecological footprint. On the main website page of the Sustainability Team, there is no link to the JPA or information related to waste reduction beyond commercial businesses. There is an opportunity to expand the website's content to increase its relevance to individual consumers and JPA efforts and resources such as the California Product Stewardship Council.

Within the website is an interactive tool that assesses the progress in making Marin County more sustainable in relation to the following categories: economy; agricultural systems; health,

arts and culture, education and preparation, infrastructure; planning, energy and buildings; and natural and biological systems.

One key element buried within the infrastructure category is solid waste reduction and recycling. The application as currently designed does not highlight waste reduction as a crucial issue and also does not reflect current disposal data or JPA Zero Waste goals. Measuring waste reduction is essential to reaching the Zero Waste goals and identifying the disposal in per capita terms will allow residents and businesses to assess the role each individual has in the system.

Green Business Program

Administered by the Marin County Community Development Department, the Green Business program is a part of the Bay Area Green Business Program which is designed to encourage voluntary participation of businesses to reduce their environmental impacts and be recognized as an official "green business". The program recognizes businesses that are in compliance with environmental laws and conserve energy, water, and other resources, and implement sound environmental practices that prevent pollution and waste generation. To become a "green business" the company submits an application identifying the conservation and sustainable actions they have implemented. The County then verifies the information. Assistance to achieve threshold standards is also available through the Agency. As part of the program, businesses receive the following:

- Recognition certificate;
- Green Business window decal;
- Promotional items for customers;
- Camera ready art work; and

- Ongoing promotions through local advertising and public events.

The types of businesses in Marin County that are certified as being "green" range from auto-related services to professional services such as dentists and photography. The program is available for any business or public agency. As noted on their website, the County has over 300 certified green businesses which include local solid waste and recycling haulers, Marin Sanitary Service, and Tamalpais Community Service District. Marin Sanitary Service reports that they have assisted over 100 businesses qualify for the program through their waste management services.

Green Building Program

The County, through the Agency, is promoting the "green" design of buildings to reduce energy and water use. It is through this program's website that the Construction and Demolition ordinance for the unincorporated County areas and Single Dwelling Energy Efficiency ordinance are accessible. Another resource available is the Residential Green Building Guidelines and Rating System that identifies the criteria to become certified as green building.

The Agency website also details the benefits of undergoing green building, which beside the environmental benefits, also allows the contractor/homeowner the opportunity for County assistance throughout the process, and receive fast-track permitting and a waiver for the energy review fee. The Agency also has rebate, tax credit, and financing opportunities for the replacement of wood-burning stoves and installation of solar panels.

JPA Role

The purpose of the Marin Hazardous and Solid Waste JPA is to provide household hazardous waste collection, recycling and disposal information, ensure Marin's compliance with State recycling mandates, and provide education for the citizens and businesses of Marin. The JPA has an annual budget of approximately \$2 million (includes HHW facility staffing) and three full-time equivalent staff members.

The JPA is administrated by the Marin County Department of Public Works/Waste Management. The role of the JPA is determined by the policies that are adopted by the JPA Board and the JPA Executive Committee. Based on the JPA agreement, and the policies and direction from the Board and Executive Committee, the JPA has the following responsibilities:

- Collecting disposal and diversion tonnage information from the solid waste service providers;
- Reporting to the CIWMB the County's disposal tonnage, diversion rate and providing an update on the 39 adopted Source Reduction and Recycling and Household Hazardous Waste programs;
- Collecting tipping fees from material disposed at Redwood Landfill and Recycling Center (Redwood Landfill) or processed through the Marin Sanitary Service Transfer Station;
- Conducting public outreach for programs that affect all Member Agencies:
 - Websites:
www.MarinRecycles.org and
www.MarinMax.org
 - Stop junk mail kits

- Tire Amnesty events (administered by the Department of Public Works)
- Marin County Public Works Builders Guide
- Christmas tree recycling
- HHW education
- Phone book recycling guide
- West Marin consulting and outreach (administered by the Department of Public Works)
- Applying for grants (availability will depend on economic conditions);
- Administering grants (e.g., CIWMB HHW grant for increasing store take-back of materials);
- Developing model ordinances for Member Agencies to adopt and enforce (e.g., construction and demolition ordinance); and
- Collecting batteries from County offices.

In addition to these activities, the JPA also has partnerships with the Bay Area Recycling Outreach Coalition (BayROC) and has passed a resolution supporting the California Product Stewardship Council (CPSC).

The JPA mostly interacts with the solid waste service providers in gathering tonnage information from the haulers. However, the JPA does not receive data from all haulers on HHW materials that may also be picked through curbside operations like those provided by Mill Valley Refuse. Other solid waste related activities that the JPA does not manage for the Member Agencies are the following:

- Used oil block grant collection (program is managed by the Marin County Stormwater Pollution Prevention program (MCSTOPP)), and the Novato Sanitary District;

- Marin County Solid and Hazardous Waste Permanent Facility (program is managed by the City of San Rafael and is funded by JPA fees);
- Household Hazardous Waste collection at the Novato Household Hazardous Waste Permanent Facility for the Novato Sanitary District (NSD) (program is operated by the NSD and funded by AB 939 fees);
- Pharmaceutical and sharps collection (program is managed by the County Environmental Health Department and is partially funded by the NSD and others); and
- Battery collection (program is managed by the San Rafael Fire Departments and in Novato by the NSD).

Because a variety of entities manage these programs, the JPA may or may not be receiving information on collection or be aware of opportunities to help improve or expand programs. For the permanent facility, sharps, and battery collection, the JPA does fund the program and has eventual oversight of the programs.

Tonnage Reports to the JPA

The JPA does not receive reports from all haulers that identify the service sectors that generated the diversion and disposal tonnages (e.g., residential, multi-family, commercial). While the JPA does receive aggregate tonnage numbers, having the tonnage identified by service sector would better enable the JPA to focus programs and public education to improve diversion. In addition, the haulers provide reports to the JPA in non-standardized format, which may result in the JPA not receiving as much information as necessary to make informed program decisions.

In addition to the hauler reports, Redwood Landfill also provides reports to the JPA which identify the amount of inerts, construction and demolition debris, green waste and ADC material is delivered to the landfill.

Marin JPA Role Compared to Other JPAs

The scope of responsibilities the Marin JPA has is limited in comparison to other JPAs in California. Two JPAs that were reviewed were the Alameda County Waste Management Authority (ACWMA), and the South Bay Waste Management Authority (SBWMA). This section highlights the main elements of the JPAs' operation. Additional information on JPAs in the state is presented in Appendix A.

Population Served

- ACWMA: 1.5 million
- SBWMA: 449,628
- JPA: 259,000

Budget

- ACWMA: \$18.5 million
- SBWMA: \$39.9 million
- JPA: \$2 million

Member Agencies

- ACWMA: 14 cities, County of Alameda and two sanitary districts
- SBWMA: 11 cities, County of Mateo and a sanitary district
- RWMA: four cities and Yuba and Sutter Counties
- JPA: 11 cities and Marin County

Dedicated Administrative Staff

- ACWMA: 26
- SBWMA: 6
- JPA: 3 full-time equivalents

Funding Sources

- ACWMA: facility fee, Measure D landfill surcharge, and Import Mitigation Fee.
- SBWMA: Shoreway Recycling and Disposal Facility tip fee, Shoreway commodity sales, and investment income.
- JPA: disposal fee (in or out of County)
- *Responsibilities*
- ACWMA: technical assistance to public, businesses and local government; initiate programs; public policy advocate; and reports to state agencies.
 - Programs include: business outreach, long-range planning and property management; media and outreach; Member Agency services; green building/bay-friendly landscaping and gardening; school programs; organics processing development; and administrative services.
- SBWMA: own and manage the Shoreway Recycling and Disposal Facility; support SBWMA programs; community outreach; education and focused communication; reports to state agencies.
- JPA: supports operation of the Marin County HHW facility and staffing; develops public outreach and planning documents; and reports to state agencies.

Member Agency Role

There are 12 Member Agencies in the JPA and each has a representative on the JPA's Board. The Executive Committee meets quarterly and the Board meets twice a year. At the Board meetings, the JPA staff informs the

representatives of the current activities. Specific Member Agency roles include the following:

- Have a representative on the JPA Board of Directors and approves contracts;
- Administer their Franchise Agreements with solid waste collection companies and approve rate adjustments. Note that the City of Novato's franchise agreement is administered through the NSD;
- Adopt and enforce ordinances (e.g., construction and demolition);
- Approve JPA letters of support for legislation; and
- Implement programs, unless the Member Agency seeks the JPA's assistance.

JPA Solid Waste and Recyclables Collection

The JPA Member Agencies independently contract their collection and disposal services for residential, multi-family and commercial services. Construction and demolition materials can be collected either by the franchised hauler or the contractor conducting the C&D activity. Unincorporated areas of the County are serviced by five franchised haulers and a municipal hauler. Not all areas of the County, such as West Marin, have mandatory collection which enables people to choose to take their material directly to the Marin Sanitary Transfer Station or Redwood Landfill. The six haulers operating in Marin County and the material they divert are noted in Tables 1 and 2 below.

Hauler Services

This section provides an overview of the residential and commercial collection services provided by each hauler

including public education and diversion rate for calendar year 2006 (most recent data available from JPA). It also notes any additional services that the hauler might consider. *It is important to note that diversion rates stated in this section are only for the materials collected by the haulers. These diversion rates account for 30 percent of the JPA's AB 939 reported diversion, which also includes material from store back-haul recycling activities and self-haul operations that never enter the possession of the hauler.* JPA haulers diverted 129,400 tons in 2007, but this is a fraction of the total waste diverted. In the 2006, waste generation study approved by the state, 432,573 tons were documented as diverted in the County. This means the haulers are diverting approximately 30 percent of all diverted material countywide.

Overall, each hauler provides "bundled" rates in which the solid waste container size determines the rate charged and recycling and green waste containers are provided for no extra fee. Having the rate dependent on solid waste capacity is intended to be a financial incentive for customers to minimize disposal and maximize recycling of post-consumer materials and green waste. Most haulers provide co-mingled recycling services where residents do not have to sort materials. The exception to this is Marin Sanitary Service which has split-carts intended to keep paper and other materials from being contaminated.

Each hauler is responsible for promoting their solid waste and recycling services. The franchise agreement requirements vary in specificity between jurisdictions, but all have a public education component. Public education pieces described in this section were provided as part of this Feasibility Study.

As highlighted in Tables 3-8, all haulers were achieving at least 30 percent (Mill Valley Refuse Service in the unincorporated County) and a maximum of nearly 65 percent (Marin Sanitary Service in Ross). Overall, the haulers diverted approximately 42 percent of the waste collected through their services. The JPA's data, as reported by the haulers, does not provide for detailed analysis of residential and commercial sector diversion.

The difference in level of public education and diversion performance is related to often vague or non-existent requirements in the franchise agreements. In some cases, franchise agreements are automatically renewing and have not been amended except for rate adjustments. Discussion of franchise agreement language is later in this document.

Table 1 Franchised Haulers			
Franchised Hauler	Service Areas*		
Bay Cities Refuse	Sausalito, <i>Marin City CSD</i> , and <i>County</i>		
Marin Sanitary Service	<i>County</i>	Larkspur	San Anselmo
	Fairfax	<i>Ross Valley SD</i>	San Rafael
	<i>Las Gallinas Valley Sanitary District</i>		
Mill Valley Refuse	<i>Almonte</i>	Corte Madera	<i>Strawberry</i>
	<i>Alto SD</i>	<i>County</i>	Tiburon
	Belvedere	<i>Homestead</i>	Mill Valley
Novato Disposal**	Novato Sanitary District (Novato and <i>County</i>)		
Redwood Empire Disposal **	<i>County (West Marin)</i> , <i>Bolinas Community Public Utility District</i> , and <i>Stinson Beach County Water District</i>		
Tamalpais Community Services District	<i>Tamalpais Community Services District</i>		

**Italics note parts of Unincorporated Marin County*

***Has same parent company*

Table 2 Recyclable Materials Collected by Haulers						
Franchised Hauler	Recyclable Materials collected					Not Collected
	Paper and Cardboard	Milk cartons*	Glass Bottles/Jars	Plastic Containers (1-7)	Metal Cans	
Bay Cities Refuse	✓		✓	✓	✓	Paper towels, waxed or coated paper**, plastic bags**, photographs, Styrofoam, ceramics or mirrors
Marin Sanitary Service	✓		✓	✓	✓	
Mill Valley Refuse	✓	✓	✓	✓	✓	
Redwood Empire Disposal	✓	✓	✓	✓	✓	
Novato Disposal	✓	✓	✓	✓	✓	
Tamalpais CSD	✓		✓	✓	✓	

**Includes juice, rice, and soy boxes*

***MSS does collect these materials*

Bay Cities Refuse

Services

Bay Cities Refuse provides manual backyard collection to residents and recyclables are placed at the curb. The hauler is willing to add food waste collection if there is a facility to take it to.

Public Education

Bay Cities Refuse provided a recycling notice provided to new customers and their recycling newsletter. Both publications identified the types of material accepted and not accepted in the recycling container.

Diversion

Table 3 Bay Cities Refuse (2006)	
Service Area	Total
Sausalito	47.88%
County	30.01%
Hauler Total Diversion	42.01%

Marin Sanitary Service

Services

Marin Sanitary Service offers weekly automated and semi-automated cart collection of solid waste, recyclable and green waste. The size of solid waste containers offered range from 20 to 96 gallons, recycling is offered in 32 gallon carts, and green waste is offered in 64 gallon carts. Where space is a problem, 5 gallon buckets are also provided.

Recycling is placed in dual sort carts serviced by split-body trucks. The dual sort containers are intended to prevent paper contamination by having one side for paper and the other for plastic, glass and aluminum. Recycling services are unlimited and green waste is generally limited to 128 gallons with the exception of San Anselmo that has unlimited green waste service. MSS also has a couple food waste digestion pilot programs underway that are described

later in this study. They are also exploring the option of taking food waste to either their composting facility in Zamora or the residential food waste facility at Redwood Landfill for composting once the compost operations receive proper permits.

Bulky item collection can be provided to customers for additional cost in Ross Valley South. However, in Ross Valley North, single-family and multi-family dwelling customers can receive free semi-annual collection of up to two cubic yards of solid waste, recyclables, or green waste on their regularly scheduled collection day. This collection is separate from the Christmas tree collection that occurs for two weeks in January.

In addition to these services, MSS has a Construction and Demolition facility that accepts dirt, rock, concrete, wood, cardboard and metal. Inerts are ground and diverted. It is estimated that the facility operates at 40 percent of its capacity during a strong economy. Material is accepted from contractors and individuals. If the Member Agencies and franchise agencies direct all materials to MSS, it should only be done if some type of tipping fee oversight by the participating agencies.

Public Education

Marin Sanitary Service provided multiple newsletters which contain information on clean-up days, services, holiday schedules, recycling guides, and industry news. The company also provided HHW and Conditionally Exempt Small Quantity Generator (CESQG) pamphlets, zero waste school lunch materials, a full recycling guide, a "Did You Know?" sheet, a cotton bag as an example of plastic bag alternatives, and informational sheets on plastic bags and bottled water.

MSS also produces a "Waste Not" pamphlet that provides customers with information on actions that can reduce waste. Multiple jurisdictions required public education in their respective franchise agreements.

Beyond published materials, MSS provides school outreach to promote waste reduction. In 2009, MSS was named the Partner of the Year with the California Product Stewardship Council. MSS has linked its website to CPSC and has handed out CPSC's consumer brochure at events.

Additional Notes

MSS is striving to achieve Zero Waste through multiple methods, which includes their partnership that was established in 2007 with iReuse. The purpose of the partnership is to reduce business waste through reuse and donation. The partnership will enable the facilitation of donation and sales of reusable materials and provide clients with tax-deductible receipts.

Beyond the collection services the company provides, MSS also promotes Zero Waste and strives to become a Zero Waste business. In 2008, MSS underwent a waste characterization study of its residential and light commercial loads to determine what materials were not being recycled by customers at the curb. They are using this data to re-target education efforts. The latest step undertaken by Marin Sanitary Service is the development of a Zero Waste plan for their facility and operations, and food digestion pilot programs.

Diversion

Table 4 Marin Sanitary Service (2006)	
Service Area	Total
San Rafael	48.70%
Larkspur	49.03%
San Anselmo	62.52%
Ross	64.94%
Fairfax	57.77%
County	45.96%
Hauler Total Diversion	50.93%

Mill Valley Refuse

Services

Mill Valley Refuse provides weekly single-stream, and semi-automated recycling service and bi-weekly collection of green waste cans. All of the areas it services have mandatory collection. In addition, residents have the option of scheduling curbside collection of used motor oil and filters. Waste material is under contract to be delivered to Redwood Landfill. Recyclable materials are transported to the City of Santa Rosa and are processed there. Any household hazardous waste collected is taken to the Marin County Household Hazardous Waste Permanent Facility.

Free services offered to customers include quarterly free pick-up of up to 3 cubic yards of garden cuttings, trimmings, or debris. They also provide free collection of "reasonable amounts" (from franchise agreement) from public areas owned by the County.

Depending on whether construction and demolition materials are required to be recycled by jurisdiction ordinance, the material is either disposed or taken to a recycling facility. The recycling facilities that are used are in the City of Santa Rosa or the Marin Sanitary Service's facility.

Public Education

Mill Valley Refuse provided a copy of their most recent Let's Talk Trash newsletter, which advertised Holiday tree and material recycling options. A Mixed Recycling Guide for new blue carts being delivered to residents was also provided. Of the jurisdictions Mill Valley Refuse services, Almonte required the most for public education.

Diversion

Table 5 Mill Valley Refuse (2006)	
Service Area	Total
Mill Valley	35.62%
Belvedere	34.99%
Corte Madera	37.31%
Tiburon	38.17%
Alto	33.79%
County	35.63%
Homestead	34.44%
Strawberry	41.65%
Almonte	33.81%
Subtotal County	36.68%
Hauler Total Diversion	36.67%

Novato Disposal

Services

Novato Disposal provides automated weekly collection of solid waste, recyclables and green waste. Solid waste and green waste are collected using split-body trucks. Solid waste containers offered range in size from 20 to 95 gallons. Commingled recyclables and green waste containers are offered in 68 and 95 gallon capacity and residential customers can receive extra carts at no additional cost.

Another free service residents receive is excess waste clean up during two predetermined weeks a year. The service is limited to a 14 bags, boxes, or cans of material per household; E-Waste is not collected as part of the event. Multi-family complexes receive

bins for accumulation of material. Household Hazardous Waste and E-Waste disposal is handled at the Novato Recycling Center, which also collects TVs and CRTs. Novato Sanitary and Novato Disposal also operate 2 E-Waste events a year, 4 days each, where any Novato residents can bring any electronics for recycling.

For schools and commercial accounts, customer service representatives perform site walk-throughs to assess the waste stream and help divert material from disposal.

Public Education

As part of the franchise agreement with Novato Sanitary District, Novato Disposal advertises cleanup events, the Christmas tree program, recycling and HHW programs, and also requires a Novato Solid Waste Management Work Plan and a bi-annual newsletter. In addition, to the efforts of Novato Disposal, the Novato Sanitary District produces a comprehensive recycling guide that identifies reuse and recycling locations by material type and hauler service information. Novato Disposal also distributes backyard composters to Novato residents at a reduced cost.

Diversion

Table 6 Novato Disposal (2006)	
Service Area	Total
Novato	40.15%

Redwood Empire Disposal

Services

Redwood Empire Disposal provides semi-automated cans for solid waste and automated carts for commingled recyclables (includes rigid plastics) and green waste. Solid waste and recyclables collection is weekly with green waste service occurring bi-weekly. Customers are allowed

unlimited recycling and up to 10 containers for green waste. Residential customers also receive two free pick-ups of bulky waste on pre-determined weekends. All collections are by appointment and can be up to three cubic yards in volume. Disposed items are taken to Redwood Landfill, recyclables are taken to Petaluma and green waste is taken to Redwood Landfill or Bolinas.

Public Education

Redwood Empire Disposal produces a newsletter advertising curbside cleanup of bulky items, Household Hazardous Waste disposal options, and reminding customers of acceptable recycling materials. In addition, a separate recycling guide brochure is distributed. Redwood Empire Disposal also provides businesses with a Recycling Packet to provide resources and tips for businesses to start a recycling program. As part of the Packet, businesses are encouraged to sign a "Go Green" pledge that identifies at least three actions they will take. The signed pledge is mailed to Redwood Empire Disposal.

Diversion

Table 7 Redwood Empire Disposal (2006)	
Service Area	Total
County	36.85%

Tamalpais Community Services District

Services

Tamalpais Community Service District (CSD) provides weekly cart collection of solid waste, recyclables and green waste. The CSD also provides residents with backyard composting workshops and worms for compost bins. The CSD also offers free curbside pick-up of E-Waste and participates in community events such as Debris Day, Green Waste Day and shredding and pharmaceutical drop-offs. Residents

can also pick-up free compost and wood chips at the CSD yard and drop-off batteries and fluorescent tubes.

Public Education

Public education provided for the CSD consisted of a four-fold Service Guide for garbage, recycling and yard waste pickup that described the acceptable materials per cart, what materials are considered toxic, and other customer service information. They also distribute PG&E Climate Change materials, newsletters promoting services.

Diversion

Table 8 Tamalpais Community Services District (2006)	
Service Area	Total
County	46.91%

Waste Disposal

In 2007, the JPA disposed 229,271 tons which was an increase of over 40,000 tons from the previous year². The chart below shows the trend in disposal over 13 years. This chart illustrates that although the JPA has been able to document diversion levels that exceed 70 percent since 2000, the disposal tonnage has remained relatively constant. This means that people are generating more waste.

The County has the highest generation (disposal + diversion) and diversion rate in the state because residents and businesses consume a lot of products and sends the material for recycling or disposal. Because the generation is based on weight, construction materials could be dominating the waste stream

² As economic conditions declined, so has disposal tonnage. In 2008, JPA disposal decreased to 211,000 tons. It is anticipated that disposal will increase as the economy rebounds (e.g., construction/remodeling activities, individual consumption).

(disposal, diversion or both sides of the waste stream). The high diversion rate is due to the recycling and reuse programs undertaken in the County and ability of the JPA to provide documentation to the state that proves an array of diversion activities and their associated tons. However, the high diversion rate does not change the need to focus on the disposal stream (in the short-term) to achieve Zero Waste.

The average disposal since 1995 was 197,450 tons and the five-year average since 2000 is slightly lower at 183,410. Of note, is that the disposal tonnage has been increasing since 2005, but the economic downturn may influence disposal patterns. Figure 1 illustrates the MSS waste characterization findings³ of the type of material disposed and Figure 2 depicts the disposal trends. Paper mostly comes from multi-family units and small businesses.

For the JPA to reach the Zero Waste goals by 2013 and 2025, the focus must be on reducing the materials disposed. This is especially true with the changes to AB 939 reporting as a result of SB 1016.

**Figure 1
Materials Disposed**

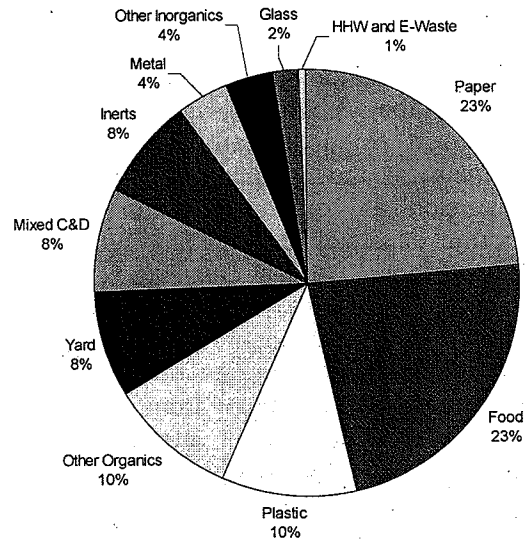
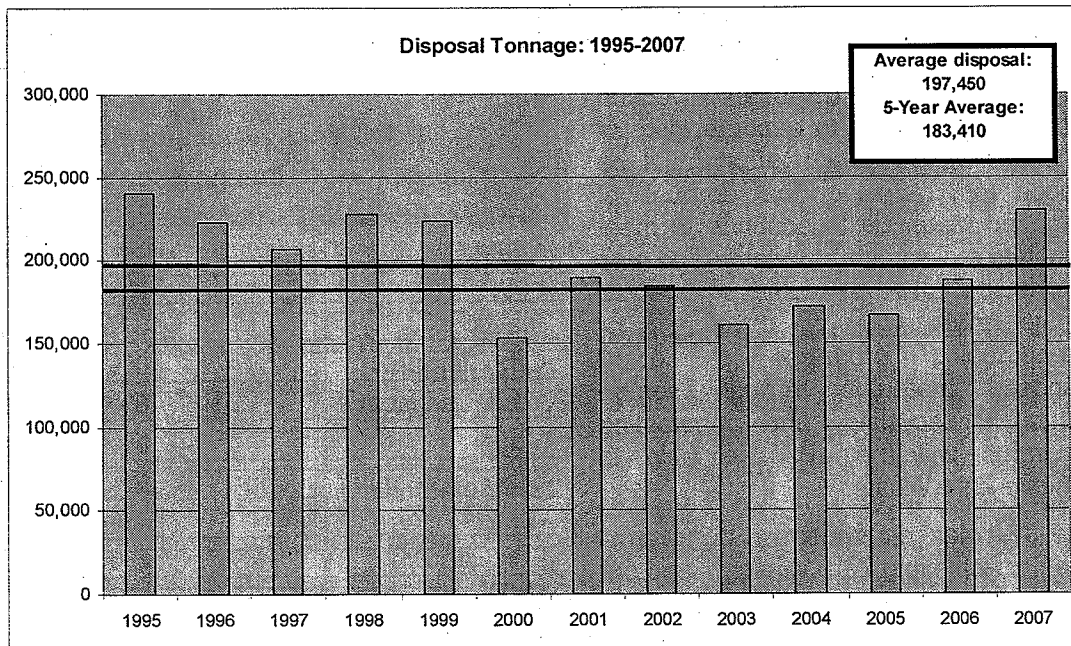


Figure 2



³ The study did not include the Novato waste stream.

SB 1016

SB 1016 measures compliance with AB 939 by the per capita disposal rate (50 percent of generation is the goal). For 2007, the JPA had a disposal target of 7.6 pounds per person per day and the actual disposal was below this threshold at 4.9 pounds. This is equivalent to 68 percent diversion. While the JPA has grown accustomed to having diversion rates in the 70 percentile, the change in diversion measurement to disposal eliminates the addition of biomass diversion as "extra credit" on top of normal diversion activities. Therefore, the disposal target calculated is an average of 2003-2006 documented diversion and disposal. This does not mean that biomass does not count as diversion; its absence from disposal tonnage is by default measured as diversion just like every other activity (e.g., curbside recyclables). In addition, the 2007 diversion rate is lower than previous years because of the increase in disposal tonnage.

The CIWMB stated that rather than basing compliance on AB 939 on the target per capita disposal, diversion programs are going to become more of a focus. Consequently, effort must be placed on reducing the amount of disposed materials to continue to meet the state's diversion standards and also enable the JPA to achieve its Zero Waste goals. Only by developing or strengthening programs to divert disposed materials through source reduction, recycling, and composting programs will the JPA be able to achieve Zero Waste.

The JPA has embraced an aggressive goal for achieving Zero Waste based on:

- Realizing 80 percent diversion of waste from disposal by 2012; and
- Achieving Zero Waste by 2025.

In achieving these goals, there may still be residual waste after diversion processing.

Materials Disposed

The August 2008 "Audit of Residential/Light Commercial Disposed Waste" report prepared for Marin Sanitary Service by CalRecovery, Inc. was reviewed and analyzed. The study described a quantitative waste characterization of waste disposed at the MSS Transfer Station in San Rafael. The residential and light commercial waste sampled and sorted was delivered to the transfer station by MSS in its rear loader collection fleet.

The results of the waste characterization study are presented in Table 9. The percentage allocation of the material categories and types in the residential/light commercial waste sector were assumed to apply to the entire waste stream. This table identifies that there are many common material types that can have diversion programs enhanced or initiated to significantly reduce the disposal stream.

Table 9
JPA Disposal Composition

Material Category	Composition (%)	Quantity (Tons)
Paper	23%	53,833
Food	23%	52,382
Plastic	10%	24,014
Other Organic*	10%	21,943
Yard/ Landscape	8%	18,286
Metal	8%	17,883
Other Inorganic**	8%	17,883
Glass	4%	9,327
E-Waste	4%	8,185
HHW and Special Waste	2%	4,335
Total	100.00%	229,271

*Wood, textiles, etc.

**Rocks, dirt, etc.

Franchised and municipal haulers serving the Member Agencies disposed of 175,227 tons which is equivalent to 76 percent of the 2007 tonnage. This means that 24 percent of the waste is being disposed through self-haul operations (e.g., individuals, construction/roofing companies) or debris box companies (haulers not identified in this report).

Although the percentage allocations presented in the table are based on overall disposal, it is important to note that at least 6,500 tons of C&D material was also disposed (based on 2006 data). This is equivalent to nearly three percent of the 2007 disposed material, but likely higher due to the limited recycling facilities in the region, the varying existence of construction and demolition ordinances in the County, and subsequent enforcement. Because these materials are collected in roll-off containers, their composition was not analyzed through the CalRecovery study.

Solid Waste Facilities

The County has limited facility options for local diversion and disposal of materials. Tables 10 and 11 identify the current facilities used and their location. Marin Sanitary Service notes that their facilities are at 40 percent of capacity. With the downturn in the economy, capacity has increased, but it is uncertain what the capacity will be and if additional facilities are warranted once the economy rebounds. In addition, if the Member Agencies or franchise agencies require that the franchised hauler use a specific facility, there should be some form of tip fee rate oversight by a public agency.

There were 12 landfills that reported receiving JPA waste in 2007, but over 98 percent of the disposal occurred at three sites: Redwood Sanitary Landfill

(59.3%), Keller Canyon Landfill (24.7%), and Potrero Hills Landfill (14.2%).

Table 10
Disposal Destination

Facility	County Location
Altamont	Alameda
Vasco Road	Alameda
Keller Canyon	Contra Costa
Bakersfield*	Kern
Azusa Land Reclamation Co.	Los Angeles
Redwood	Marin
Foothill*	San Joaquin
Forward	Manteca
Ox Mountain	San Mateo
Guadalupe*	Santa Clara
B-J Drop Box	Solano
Potrero Hills	Solano

*Received 5 tons or less

As shown in Table 11, there are few local facilities that can handle diversion of food waste and Construction & Demolition materials. While green waste also appears to have facility options available, a significant portion of the material is being used as erosion control at Redwood Landfill that could be composted if facilities existed in the region. The option of local facilities may not be a limiting factor, but the facilities available for consolidating the material and transporting it is another aspect that must be addressed.

Currently, Marin Sanitary Service Transfer Station is the only transfer station in the County that has the facility and potential to accept material from the region to transport it to recycling/diversion facilities. The feasibility for expanding the role of the Transfer Station to accept the regions materials and potential siting of new facilities for both transfer and processing are discussed later in this report. The ability to increase diversion by material type and facility needs will also be discussed. Because Redwood Landfill

receives the majority of the JPA's waste, a description of its operations is below.

This vehicle count does not include potential construction and demolition material traffic. Redwood Landfill also

Table 11
Current Residential and Commercial Diversion Destination

Material	Facility Name	City Location	Permit (TPD)
Curbside Recyclables	Smurfit Stone	Oakland	N/A
	Strategic Material	San Leandro	N/A
	Timber Cove Recycling	Santa Rosa	N/A
	Marin Recycling Center	San Rafael	N/A
Green Waste (Compost)	Redwood LF	Novato	170
	Bolinas Stinson Resource Recovery	Bolinas	N/A
	West Contra Costa SLF Compost Facility	Richmond	200
	Northern Recycling Compost	Zamora	N/A
Food Waste	Central Marin Sanitary Agency*	San Rafael	N/A
C&D	Marin Resource Recovery**	Marin	750
	Redwood LF	Novato	400

*Partnered with MSS. Currently is a pilot program that is expected to be fully operational in 2010.

**Sorts loads.

Redwood Landfill and Recycling Center

Redwood Landfill and Recycling Center is located near Novato, CA. It is the only disposal facility in Marin County and is the main recipient of green waste for diversion. The facility accepts material from self-haul and commercial haulers. For 2009, it estimated that it receives 15-30 trucks per day of residential and commercial franchise hauler loads from West Marin, Mill Valley, and Novato. The direct-haul from the franchised haulers is a result of contracts that range between one and five year terms. With its permit approved in December 2008, the facility can now handle 415-615 personal vehicles delivering material per day.

has been diverting green waste, wood, metal, biosolids and inerts. Alternative Daily Cover predominantly consists of wood waste.

Composting (Green Waste and Biosolids)

The site has a composting area with space for a grinder and turning windrows. The composting operation is limited to a maximum of 170 tons per day. Of that amount, biosolids can be a maximum of 80 tons and with the new permit, a maximum of 30 tons of food waste can be mixed in. Food waste is considered part of this tonnage if it contains meat scraps. Otherwise, unlimited vegetative food waste can be

mixed into green waste. The amount of food waste that can be included in the compost restricted in order to minimize to air emissions.

Green waste material that is not used for composting is used as erosion control on the slopes of the landfill.

Inerts

Inerts that go to the facility are used as ADC or road base. Waste Management, Inc. (WMI) is in the planning stages to construct and operate a C&D facility to process and sell material. WMI intends to operate this facility on a regional basis, but as it is owned by Waste Management, Inc., it may take its own material first.

There is also the concept of a "reuse center" that would be a buyback center for construction material. Permitting issues would need to be overcome before retail operations could begin. Regardless, salvaging material is intended to be part of the C&D facility operations.

Food Waste Digestion

Redwood Landfill reported that they are planning a digestion pilot project in 2010. Approximately 100 tons per day would be processed consisting of residential and commercial food waste, woody waste and soiled cardboard. The project is expected to generate five to six megawatts. This is enough energy to power approximately two percent of Marin County households.

Household Hazardous Waste Collection

The County has several ways of properly disposing of hazardous waste. There is the permanent collection facility located in San Rafael that collects all HHW material from residents and small

businesses. The facility also hosts three, one-day events in Bolinas, Woodacre, and Point Reyes which are funded through the JPA. Other collection points in the County include the permanent collection facility operated by the Novato Sanitary District, curbside collection of motor oil and filters through Mill Valley Refuse, and various local collection points for batteries and fluorescent light bulbs.

Used Oil Block Grants

Used Oil Block Grants are non-competitive grants offered by the California Integrated Waste Management Board. Funding provided to a jurisdiction is based on the population. Jurisdictions also can apply for competitive grants if there are specific projects that needed funding such as market studies and expansion of permanent HHW facilities.

The County of Marin Stormwater Pollution Prevention Program handles all aspects of the Used Oil Block Grants for the County except for the City of Novato which applies for and administers the grant on their own through the NSD. For the 14th Cycle Used Oil Block Grant (FY 2008/09), the County (including Novato) received \$81,158 to maintain and increase collection of used motor oil and filters. The grant can be used for a variety of program-related expenses including purchasing equipment for certified collection centers, recruiting new centers into the program, stenciling storm drains, recycling costs for the used oil and filters, and administration of the grant.

The County of Marin has 13 certified collection centers, with six in San Rafael, four in Novato (plus the Novato Recycling Center) and one each in Greenbrae and Pt. Reyes. These centers are concentrated in the two

largest cities in the County and may not adequately serve the residents at further points in the County, such as Sausalito and Mill Valley or other agriculture areas. As recorded by the CIWMB, these centers collected 36,183 gallons of oil and 4,002 filters in 2007. This was an increase over the previous year of 13.7 percent for oil and 32.9 percent for filters.

While there has been an increase in diversion of oil and filters, it is important to note that the quantity diverted is dependent on the certified collection centers submitting reimbursement claims to the CIWMB. By determining the actual collection from all certified centers, the County of Marin and City of Novato will be able to better assess where their energy should be focused and determine if more centers must be recruited in underserved areas. In addition, curbside collection that is conducted by Mill Valley Refuse goes to the permanent HHW facility and does not get recorded separately. This becomes a record keeping issue and while reports from MVR could be submitted directly to the County, the main issue is that the County should have the information available to it to identify program progress and opportunities for improvement.

Beyond the reporting issue, because used motor oil is a component of the waste stream and part of some curbside collection programs, it is important that the JPA at least be aware of the amount of oil and filter collection occurring in the County and may be able to assist the ESD with recruitment of centers and outreach.

Universal Waste

In 2001, the Department of Toxic Substances Control (DTSC) formally adopted the regulatory exemptions which allowed households and

conditionally exempt small quantity generators (i.e. many small businesses) to temporarily dispose of certain U-Wastes in municipal landfills until February 9, 2006.

The intent behind the exemption was to allow time for the collection and recycling infrastructure and recycling capacity to develop without placing an undue burden on the hazardous waste management system. DTSC determined that the infrastructure was not being developed and on January 10, 2006, DTSC released an official notice stating that this landfill ban exemption would not be extended beyond February 8, 2006. The intent of this action was to force a public discussion about how to collect and manage universal wastes.

Sharps

In 2006, SB 1305 (Figueroa), Statutes of 2006, Chapter 64 (SB 1305), updated the Medical Waste Management Act by making it against the law for persons to knowingly place home generated sharps in the trash as of September 1, 2008. Sharps include disposable hypodermic needles, syringes, lancets, and other medical devices used for self-injection or blood testing, which may have a sharp tip or end. It also enumerated the following allowable disposal options:

1. A household hazardous waste (HHW) facility;
2. A "home-generated sharps consolidation point" ;
3. A medical waste generator's facility; and
4. A facility through the use of a medical waste mail-back container approved by the California Department of Health Services.

The legislative intent of SB 1305, as outlined in the "findings" section of the bill, is as follows:

-
- (a) The development of a safe, convenient, and cost-effective infrastructure for the collection of millions of home-generated sharps, and the public education programs to promote safe disposal of these sharps, will require a cooperative effort by the State Department of Health Services, the California Integrated Waste Management Board, local governments, large employers, dispensing pharmacies, as well as health care, solid waste, pharmaceutical industries, and manufacturers of sharps.
 - (b) Since mail-back programs utilizing containers that have been approved by the United States Postal Service offer one of the most convenient alternatives for the collection and destruction of home-generated sharps, local government and private sector stakeholders are encouraged to implement mail-back programs and to promote their use prior to September 1, 2008.
 - (c) Local governments, the California Integrated Waste Management Board, the State Department of Health Services, solid waste service providers, and manufacturers and dispensers of sharps are further encouraged to include information on their Web sites, and other public materials, that identify locations that accept home-generated sharps and provide information about available mail-back programs.
 - (d) It is the intent of the Legislature that the California Integrated Waste Management Board and the State Department of Health Services, to the extent resources are available, continue to monitor the state's progress in developing the infrastructure for the collection of home-generated sharps and inform the appropriate policy committees of any need for subsequent legislation to achieve the purposes of this act.

It is important to note that SB 1305 does not mandate that local government fund or manage a sharps collection program, but instead Section 1 (a) of the bill states clearly that development of the sharps collection infrastructure will require "a cooperative effort" by the state, local governments, pharmacies, manufacturers, and others to accomplish the goal. It then goes on to state in Section 1 (d) that it is the intent of the Legislature to have the state agencies continue to monitor progress on the development of infrastructure to collect sharps and of any need for subsequent legislation to achieve the purposes of SB 1305. In short, local governments cannot be held solely responsible for funding and operating sharps management programs. All stakeholders must work together to develop the required infrastructure.

Rechargeable Batteries

Rechargeable batteries have been addressed by legislation in California by AB 1125, which became effective July 1, 2006. The bill requires a person who makes a retail sale of a rechargeable battery to a consumer in the state, except for supermarkets, to take back rechargeable batteries from the consumers.

Existing Local Take-Back Disposal Options

When sharps or U-Waste are improperly disposed of, they pose serious health risks to generators, garbage haulers, landfill personnel, and the public, and create a threat to the environment. Injuries or illnesses can result from handling these wastes. Furthermore,

these wastes can enter and pollute the creeks, rivers, and water supplies.

Universal Wastes are accepted at the Marin County Solid and Hazardous Waste Permanent Facility and the Novato Recycling Center. In addition, sharps and pharmaceutical take-back programs are prominent in the County and are described below. The collection programs target human uses of the materials, but veterinarian offices may be an opportunity to expand programs because pets are a growing demographic receiving medication.

Sharps

As mentioned earlier, the County Department of Environmental Health manages the outreach in the County for the collection of home-generated sharps. This program is the result of the public/private partnership started in 1994 with the San Rafael Fire Department and the Marin Recycling Center.

Through its efforts, 27 facilities collect sharps. Tables 12 and 13 give a breakdown of the collection locations and identify the amount of sharps that have been collected. The numbers do not include any sharps that may have been generated through regular business operations (e.g., hospitals) or disposed through mail-back programs.

Table 12 Sharps Collection Locations in the County	
Jurisdiction	Number of Sites
Greenbrae	1
Larkspur	2
Marin	1
Mill Valley	4
Novato	6
Pt. Reyes	1

Table 12 Sharps Collection Locations in the County	
Jurisdiction	Number of Sites
San Anselmo	3
San Rafael	9
Total	27

Table 13 Sharps Collection in County from FY 05-06 to FY 07-08	
Time Period ⁴	Pounds
FY 05-06	8,330
FY 06-07	7,642
FY 07-08	6,745
Total	22,717

Tables 12 and 13 show that there is an established network of facilities and businesses that residents have access to. Due to the recent nature of sharps being banned from disposal, it is unique that the County has been tracking the collection for so long and has such a large partnership with businesses as compared to other Counties. However, there has been a steady decrease in the amount of sharps delivered to these locations for disposal and efforts should be made to reverse the trend.

Pharmaceutical Waste Collection

Pharmaceutical materials in the waste stream are an area of growing concern and the County already has a network of 13 businesses that accept the material back from the public. Like the sharps collection, the participating businesses are pharmacies and hospitals. Tables

⁴ FY 05-06 and FY 06-07 does not include the Novato permanent HHW facility collection.

14 and 15 identify the concentration of collection points and the amount of material residents disposed through them from FY 05-06 to FY 07-08.

Table 14
Pharmaceutical Waste Collection
Locations in the County

Jurisdiction	Number of Sites
Larkspur	1
Mill Valley	2
Novato	3
San Anselmo	3
San Rafael	4
Total	13

Table 15
Pharmaceutical Waste Collection
in County from FY 05-06 to
FY 07-08

Time Period	Pounds
FY 05-06	633
FY 06-07	1,186
FY 07-08	1,462
Total	3,281

Pharmaceutical waste collection has disposal locations throughout the County. The spread out locations of the collection sites provide opportunity for residents to safely dispose of their unused medication. Because it is difficult to quantify the amount of material that is generated, there is no way to determine what percent the County's efforts are collecting.

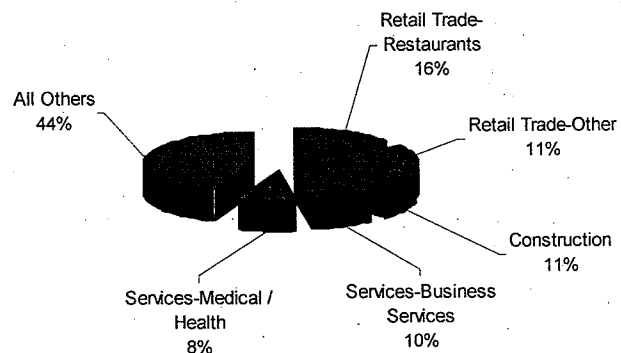
Opportunities for Increasing Diversion

Of the materials currently disposed, the franchised haulers already have curbside programs in place for the collection of the paper, yard waste and glass. Based on feedback from the haulers, the residential green waste set-out rate is 70-80 percent and the residential recycling set-out rate is over 90 percent⁵. This section identifies opportunities for increased diversion.

Paper

In addition to green waste, paper is another significant commodity that is not being collected. Because the set-out rate for recycling at residences are over 90 percent, the greatest increase in diversion will be achieved by focusing on the commercial sector. Figure 3 identifies the main business types located in the County. There are a couple methods/programs that can be implemented to increase the diversion of this and other materials generated by the commercial sector.

Figure 3
Top 5 Commercial Business Types
by Waste Disposed



⁵ The MSS rate is 90-95% as per a JPA commissioned study by California Waste Associates.

Wet and Dry Collection

One way of increasing diversion is to have the franchised haulers develop a wet and dry material collection route. This means that the routes are designed to pick up mostly dry loads (e.g., paper, glass) in one truck to avoid contamination that could occur if a restaurant's material was also placed in the same truck. Conversely, the businesses that generate wet loads (e.g., food, grass) would have their contents emptied into the same truck. This collection process and its benefits are described later in this Feasibility Study.

Commercial Recycling Ordinance

Another way of increasing diversion could be having each jurisdiction in the County adopt a mandatory commercial recycling ordinance. This ordinance could also work in tandem with a wet/dry collection method. The details of the ordinance and its diversion benefits are described below. Regardless, mandatory commercial recycling ordinance will need to be adopted in year 2012 as part of compliance with AB 32. The CIWMB is currently developing the regulations.

Construction and Demolition Ordinance

The JPA has 12 jurisdictions (including the County) that it recommends adopt construction and demolition (C&D) debris recycling programs. A 2004 waste characterization study by the CIWMB identified that C&D materials account for nearly 22 percent of the waste stream. Many of these materials can be salvaged or recycled. The C&D waste stream represents a potential long-term diversion opportunity for the

County. The JPA has developed a model ordinance as a guide for Marin County jurisdictions to follow to help reach this goal. The status of the 12 jurisdictions adopting the ordinance is as follows:

- Five have adopted a C&D ordinance (the County, Mill Valley, Novato, Sausalito, and Tiburon);
- Five have no provisions for C&D recycling currently (Belvedere, Bolinas, Fairfax, Ross, San Rafael).
- One is planning to adopt an ordinance in the near future (San Anselmo); and
- One requires "Build it Green" standards for permitted construction projects (Larkspur). Novato enforces "Build it Green" requirements as well in addition to their C&D ordinance.

The JPA recommends a goal of 50 percent diversion which has been universally adopted by jurisdictions with a C&D ordinance, as well as Larkspur where the "Build it Green" program requires 50 percent recycling as well.

Waste Management Feasibility Studies

Of the five jurisdictions requiring C&D ordinances, all of them require some kind of Waste Management Feasibility Study (WMFS) to assist in documenting and verifying 50 percent diversion. Construction or demolition may not commence until the plan is accepted. The JPA model ordinance also calls for a WMFS but also suggests a deposit system based on project size be implemented. However, none of the WMFS compliance enforcement measures of the five jurisdictions follow this suggestion. The WMFS plans are meant to estimate waste generation and formulate a plan for recycling 50 percent of the materials. Upon completion of the project, receipts demonstrating the

destination of the C&D loads are required by the jurisdiction.

Project Thresholds

The JPA model recommends that the project threshold for projects covered by the ordinance be 1,000 square feet. The Cities of Mill Valley and Sausalito's thresholds include all projects with the exemption of re-roofing, window replacement and drywall projects. However, Mill Valley uses its discretion which tends to include projects about 500+ square feet. Novato has the threshold at all projects over 500 square feet and the County areas include all projects without exception. The Town of Tiburon does not have a threshold but uses its discretion during permitting for which projects must comply.

Enforcement

The JPA model suggests a security deposit of three percent of project value be submitted by contractors for each project. The deposit is to be returned based on compliance. The model also suggests possible additional fines for non-compliance. None of the jurisdictions use a deposit system.

Enforcement for all Member Agencies, except Tiburon, lies in the right to withhold occupancy permits pending adequate recycling; Tiburon has a \$500 fine for non-compliance. The other four jurisdictions may also assess fines in addition to withholding permits. Fines range from \$500 to \$2,500. The City of Mill Valley has expressed that the threat alone of withholding a certificate of occupancy has caused there to be no instances of non-compliance. All the other jurisdictions with ordinances also expressed that they have had no issues with non-compliance up to this point; however, the County expressed that some contractors would lose receipts in which case the County would require a

document with an explanation of destinations for loads.

Use of Fines

None of the five jurisdictions mandate how to use funds collected from fines for non-compliance. The JPA model suggests that they be used solely for recycling purposes.

Limited Facility Options

A construction and demolition program is dependent on the facility quality that C&D materials are delivered to. No matter how closely contractors follow recycling plans, it is ultimately the facilities that determine how much material is diverted. Redwood Landfill and Marin Resource Recovery Center are the two main facilities contractors are reported to be using. MSS states that they have capacity to handle the County's C&D waste stream. If the Member Agencies or franchise agencies require the material to be taken to a specific facility, there should be some form of tip fee oversight by a public agency.

Jurisdictions also depend almost entirely upon the accuracy of weight receipts distributed by facilities that contractors attach to waste management reports as proof of diversion. Mill Valley, Sausalito, Tiburon and the County all cited the ability to verify the accuracy of receipts and assess compliance as the biggest challenge facing the success of the C&D recycling program. Since jurisdictional staff are going to be reviewing weight receipts to verify compliance regularly for C&D recycling programs, it is critical that staff be familiar with facilities or at the very least the facilities' reporting. There is also little a jurisdiction can do to verify that the attached weight receipts actually correspond to the project under consideration. The Marin County Department of Public Works'

report in June of 2007 stated that gate receipts are not proof of recycling, but that city staff must be trained to recognize proper proof.

An agreement with facilities to standardize clear and concise distinctions on weight receipts would be beneficial; MSS reports that they are already doing this. Distinctions could include origin of C&D waste and potentially a note acknowledging the material has been accepted as C&D and will be recycled accordingly. The City of Novato could offer leadership in this respect, as they were the only jurisdiction to report being satisfied with their ability to verify receipts. Novato reported that Redwood Landfill will guarantee materials are recycled for an additional charge. This guarantee is then communicated through a special stamp on the receipt that Novato staff can easily identify. For loads delivered elsewhere, staff accepts that loads that are delivered to MRFs are diverted.

Suggestions

For the full benefits of C&D debris recycling efforts to be realized, universal adoption of ordinances is essential. Six jurisdictions with no provisions for C&D recycling is a missed opportunity, for example, San Rafael (comprising about 23 percent of the County's total population) is included among those lacking an ordinance.

Thresholds for projects covered by the ordinance requirements are important to align with the goals of C&D recycling. For example, the Town of Tiburon defines the threshold as projects, "likely to generate substantial construction or demolition debris". This threshold creates opportunity for projects potentially choosing not to adhere to the ordinance despite the amount of generated debris. Alternatively, a defined threshold that is low such as

500+ square feet creates the potential for minor increases in diversion for high administrative costs. A high volume of projects being covered by the ordinance is less effective in achieving diversion goals than focused attention on high generation projects. For example, the City of Mill Valley exempts re-roofing projects from the requirements of the ordinance. Similarly, the City of San José transitioned from requiring re-roofing projects to comply to instead exempt them. This is due to the administrative burden it places on a jurisdiction's staff because of the large number of re-roofing projects that occur and the limited amount of C&D debris they generate. Other jurisdictions have found that the administrative burden of handling re-roofing projects is not worth the resources for the limited increase in C&D material diversion.

Along those same lines, non-compliance enforcement should better align with the actual goals of the ordinance. For example, in the City of Sausalito an administrative fine of \$500 is assessed for non-compliance. For smaller demolition projects, a \$500 fine might be a disincentive to recycle debris if the cost to recycle is more. The larger projects should actually be the focus of the C&D ordinance since they represent the largest tonnage generations and reasonable efforts should be made to provide compelling incentives for contractors to recycle as much material as possible. A retroactive fine of \$500 may, in some cases, not be enough incentive. The City of Mill Valley, however, has no financial incentive of enforcement, but rather solely depends on the threat of withholding certificates of occupancy and final approval. Per Mill Valley staff, the threat alone has been enough of an incentive as they have never had to exercise punishment for non-compliance.

Deconstruction/Salvage of Buildings

In addition to the C&D Ordinance, the County Community Development Agency is promoting the deconstruction and salvage of materials prior to demolition tear-out of buildings. The Agency has a reuse grant to encourage deconstruction contractors to provide services in Marin County and to site a reuse facility for construction and demolition materials. Through the grant, Marin Sonoma Deconstruction and Demolition Services, Inc., a local deconstruction/salvage company, has begun operating.

Marin-Sonoma Deconstruction and Demolition Services, Inc.

This company contacts homeowners that have pulled a permit to inform them of the option to donate to charity their soon-to-be demolished or removed fixtures. The company partners with the Reuse People and Reuse Network, amongst others, to take salvaged items for the purpose of reuse and resale.

The scope of deconstruction and salvage in the County can increase as ordinances are established that require a walk-through prior to demolition or other requirements to maximize recovery and reuse of materials and appliances. The County of Marin and the City of Mill Valley are both currently exploring such an ordinance.

Food Waste

Food waste is a significant portion of the waste stream that is generated by residential and commercial units, but does not currently have a large-scale method of recycling to eliminate it from the disposal stream. While the generation of these materials may be more concentrated with the residential sector, restaurants contribute up to 15.9

percent of the business waste stream (based on CIWMB 1990 generation tonnages). This does not account for other businesses that may have cafeterias in their facilities. Consequently, by implementing a food waste program, the amount of material disposed can be significantly reduced.

Although the concept of adding food waste recycling in the County is ideal, there are limitations with facilities can accept it. In addition, if food waste collection is to be added as a residential recycling service, the material will most likely be mixed with green waste which will require weekly collection. If a resident does not have green waste service, they will need it to participate in the program. In addition, franchised haulers will need to develop public education materials, and distribute kitchen pails to inform and encourage residents to participate. Based on findings by the Alameda County Waste Management Authority, a new food waste program can divert approximately 8 pounds per household per week and for a mature program up to 10 pounds per household per week.

While establishing the collection of food waste is one element, there also must be a facility that the material can be taken to. In the County, the only place that is currently handling some food waste is Marin Sanitary Service and it's a pilot program. The other possibility is Redwood Landfill's compost facility now that their permit has been approved. However, due to the air emission concerns, the landfill is limited to receiving a maximum of 30 tons per day of food waste. Whether the food can be mixed with the green waste or must be separate, remains to be determined. Currently, lawsuits are preventing the composting operation from beginning.

When the necessary permits are in place, which is anticipated to be in 2010,

MSS will begin co-collecting residential, kitchen food waste in the curbside green waste can for composting.

Additionally, a feasibility study has been completed, sponsored by PG&E, CMSA, the City of San Rafael, the City of Larkspur and MSS. It will allow for the development of a commercial food waste-to-energy, public/private partnership and eventual composting. This partnership will likely begin in mid-2010 from the restaurants and other points of food waste currently collected by MSS.

Other facilities that may be able to accept the mixed food waste and green waste material are presented in Table 16. The facilities are listed in order of least distance from the City of San Rafael.

A future potential facility for consideration is Zamora. The facility is partly owned by Marin Sanitary Service and they are interested in having the facility permit changed to accept food

waste. If this change occurs, the County will have another potential site to deliver the food waste to be composted.

Facilities accept food waste were researched to determine if there are any limitations to the type of food waste accepted and if the food waste can be combined with green waste upon delivery to the facility. All of the composting facilities that accepted the material stated that there is a problem with receiving glass and plastic in the deliveries. If food waste were to be added to the City's collection services, public education will be a crucial element to minimize "contamination".

Digestion of the material for energy and compost production is another option that is discussed later in this report. An alternative method of diverting food waste is also being pioneered by Waste to Water, LLC using a vessel that can digest 1,000 pounds of food waste per day with water as the discharge.

Table 16
Summary of Compost Facilities That Accept Food Waste

Facility Name	Location (County)	Miles From San Rafael	Type of Food Waste Accepted	Can Be Mixed with Green Waste?
Jepson Prairie Composting*	Vacaville (Solano)	57.6	Accepts all food waste	Yes
Grover Landscape Services, Inc. **	Modesto (Stanislaus)	80	Accepts all food waste	Yes
South Valley Organic Composting Facility	(Santa Clara)	100	Accepts all food waste	Yes
Z-Best Products	Gilroy (Santa Clara)	100	Accepts all food waste	No
Kochergen Farms Composting	Avenal (Kings)	214	Accepts all food waste	Yes

* Currently does San Francisco's food waste

**Livermore is transferring material to the facility using Davis Street TS

Green Waste

The CIWMB is currently considering several options to encourage more composting and discourage green material use as ADC. Options to change material use include the following:

- Assessing additional fees to green materials being used as ADC at a landfill.
- Phasing in of increased fees assessed to green materials being used as ADC.
- Defining green material ADC usage as disposal rather than diversion.
- Phasing in a definition of green material ADC as disposal rather than diversion.

In any case, the forecast of green material regulation in the State of California warrants the case for jurisdictions to seek alternatives to ADC usage of green materials and increase composting. Marin County may face the need to find a solution for green materials other than Alternative Daily Cover at Redwood Landfill in the near future.

Marin County jurisdictions already provide residential curbside collection of yard waste. Redwood Landfill uses the material for use as ADC, erosion control and compost. Novato Disposal notes that green waste sent to Redwood Landfill from them is not being used for ADC. Seventeen composting facilities have been identified within 100 miles of the City of San Rafael. Table 17 below lists these facilities by distance.

Table 17
Green Waste Compost Facilities Within 100 Miles of the City of San Rafael

Location	Facility Name	Facility Type	Miles from San Rafael	Capacity/ Day	Capacity Available (Tons)
Sonoma	Central Compost Site/Sonoma Compost	Composting	28.6	300	None
Napa	Napa Garbage Service Mat. Diversion Facility	Transfer/ Processing	31.2	360 tons	N/A
Alameda	Fremont Recycling & TS	Transfer/ Processing	51.1	2,400 tons	N/A
Vacaville	Jepson Prairie Composting*	Composting	57.6	750	300/day
Santa Clara	Greenwaste Recovery Facility	Transfer/ Processing	63	934 tons	N/A
Modesto	Grover Landscape Services, Inc.	Composting	80	2,000	1000
Zamora	Northern Recycling Compost- Zamora	Composting	82.7	N/A	N/A
Gilroy	South Valley Organic Composting Facility	Composting	100	750	70-90/day
Gilroy	Z-Best Products	Composting	100	1,500	300/day
Avenal (Kings)	Kochergen Farms Composting	Composting	214	1,000	500/day

Other than Redwood Landfill, hauling distance remains a difficulty as the next nearest composting facility is 28 miles away in Sonoma County. Capacity also poses a concern as many of the facilities listed are near heavily populated and high waste generating areas.

Since there are no composting facilities within the County, the option exists to haul green materials to a transfer station. MSS reports that they are currently composting all green waste they collect. Table 18 below lists transfer stations accepting green materials within 100 miles of the City of San Rafael.

Table 18
Transfer Stations that Accept Green Waste

County	Facility Type	Facility Name	Capacity/ Day	Miles from San Rafael
Marin	Transfer / Processing	Marin Sanitary Service TS	2,640 tons	0
Alameda	Transfer / Processing	Berkeley Solid Waste TS	560 tons	17.8
Sonoma	Transfer / Processing	Sonoma TS	760 tons	22.8
Sonoma	Transfer / Processing	Central Disposal Site/ Sonoma Compost	2,500 tons	28.7
Napa	Transfer / Processing	Devlin Road TS	1,440 tons	30.9
Napa	Transfer / Processing	Napa Garbage Service Mat. Diversion Facility	360 tons	31.2
Alameda	Transfer / Processing	Davis St TS / Recovery Complex	9,600 tons	33.5
San Francisco	Transfer / Processing	SF SW Trans & Recycling Center	3,000 tons	33.9
Sonoma	Transfer / Processing	West College TS	99 tons	37.7
Alameda	Transfer / Processing	Fremont Recycling & TS	2,400 tons	51.1
Sonoma	Transfer / Processing	Healdsburg TS	720 tons	54.8
Santa Clara	Transfer / Processing	BFI's Recyclery (Newby Island)	1,600 tons	56.3
Napa	Transfer / Processing	Pacific Union College Trans Facility	90 tons	58.1
Santa Clara	Transfer / Processing	Zanker Road Landfill	1,300 tons	60.7
Santa Clara	Transfer / Processing	Greenwaste Recovery Facility	934 tons	63
Santa Clara	Transfer / Processing	Mission Trail TS	375 tons	67

Table 18
Transfer Stations that Accept Green Waste

County	Facility Type	Facility Name	Capacity/ Day	Miles from San Rafael
Santa Clara	Transfer / Processing	Guadalupe San Landfill	3,650 tons	77.5
Santa Clara	Transfer / Processing	San Martin Transfer & Recycling	100 tons	90
Santa Clara	Transfer / Processing	Pacific Coast recycling	480 tons	97.7
Sonoma	Transfer / Processing	Annapolis TS	99 tons	100

Jurisdictions being served by Bay Cities Refuse, Inc. could use the Berkeley Solid Waste Transfer Station and the remainder might be able to use Marin Sanitary Service Transfer Station (the facility has approximately 1,320 tons per day available for transferring material).

Other Strategies for Increasing Diversion

Other jurisdictions across California have come up with a wide variety of unique strategies for increasing diversion of green materials.

Replicating these programs may be difficult with the limited-to-no facility siting options in the County due to land use restrictions (e.g., wetlands).

The City of Modesto operates its own composting facility. The benefits of doing so have been to save on landfilling costs and to realize the revenues generated from selling composts products produced at the facility. The compost products are also used at parks, on median strips and beautification projects. Modesto diverted 31,000 tons of green waste in 2001.

The City of Burbank has gone another route by partnering with its hauler and an orange grove in the nearby area. Green materials collected from within

the city are hauled to the 1,300-acre orange grove where the materials are composted and then used on-site as compost products. Over 19,000 tons of green material is diverted annually. The City also hosts 4 to 5 compost workshops each year which has helped lead to an annual total of 750 tons of green waste diverted through backyard composting.

The City of Los Angeles operates a compost facility in a large park where green material and zoo manure are composted. Finished compost product is used then to improve parkland landscapes or is sold to some private vendors. Some is donated to nonprofit organizations and schools for gardening or community improvement projects.

The facility's central location allows it to double as a convenient education center where citizens may learn how to compost in their own backyard and buy the necessary equipment to do so. Citizens may also buy compost products for their own landscapes and gardens. The key benefits have been to help Los Angeles reach diversion goals and save over \$170,000 annually from collection and disposal costs.

The benefits from the three models above of siting a facility are multi-

faceted. The following are examples of benefits:

- Extended landfill life expectancy;
- Avoided disposal costs;
- Revenues from sale of compost products;
- Convenient location allows for public education; and
- Highest and best use of green materials.

Another method of increasing diversion is to encourage backyard composting either through individual household or community efforts. The County of Marin has a Master Gardeners program that can be a resource to educating the public on best practices. In addition for people who do not want to compost in their backyards, or do not have space, a community garden could be an activity undertaken where residents can bring their food scraps, raise crops/vegetation and potentially receive compost for home use. Having a local and tangible method for people to divert resources and observe the benefits of the diversion can be positive reinforcement for sustaining diversion activities.

Maximizing Diversion

Wet vs. Dry Material Collection Routes

Waste Diversion Projections

Based on waste characterization data available on the California Integrated Waste Management Board's website, and shown in Figure 4, the four largest components of the residential waste stream disposed (in 1999) in Marin County are food, leaves and grass, other organics, and other paper. These four categories total to almost half of the total residential waste disposed.

Of the non-residential materials disposed, the four primary components

are food, other paper. Corrugated cardboard, and leaves and grass (see Figure 5). These four categories total to about 40 percent of the total non-residential waste disposed.

Figure 4
Top Four Residential Materials Disposed

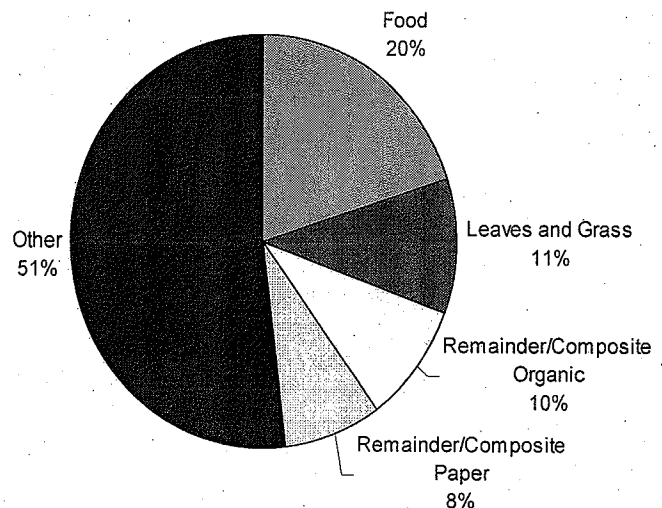
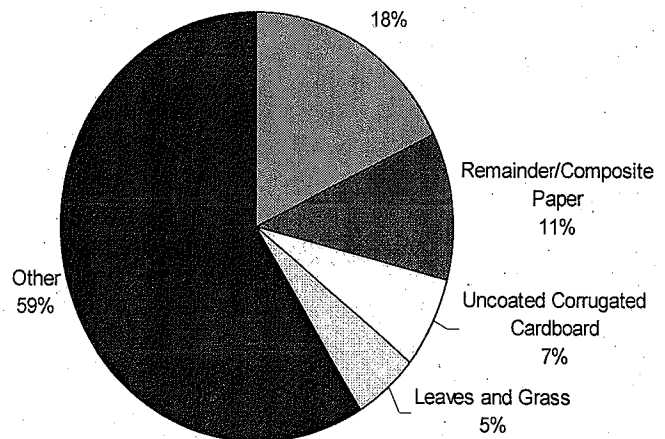


Figure 5
Top Four Commercial Materials Disposed



Some (unknown) amount of the paper and cardboard are recoverable as fiber for recycling, but much of it is soiled and not suitable for recycling. However, all of the materials previously identified make

good feedstock materials for composting.

Residential Collection Services

The dual-stream collection of recyclables would continue to collect paper fiber and other recyclables. Recyclables would include all materials for which there is an existing market, plus a few material types collected to make recycling easier for the residents. For example, the plastics industry has found that when all plastic containers are collected, more PET and HDPE containers are recovered than when only PET and HDPE containers are collected.

But instead of collecting yard waste and garbage as the other two components of the waste stream, haulers would collect all compostables and rubbish.

Compostables would include all plant trimmings, food scraps, and food soiled paper. Compostables would need to be collected weekly, but none of the other category groupings would need to be collected weekly; although for convenience of the residents, it is recommended that all four categories should be collected weekly.

Collected rubbish would include all materials not included in the other three categories (recyclable paper, other recyclable materials, and compostable materials). More specifically, rubbish would include mixed material products (such as toys), aseptic packaging, and film plastics. Rubbish would be classified as those materials for which there is no viable market. Ultimately, these are the materials that will be addressed by Extended Producer Responsibility mandates.

These two pairs of materials would each be collected in a two compartment truck. The compostables and rubbish in one

truck, and the paper fiber and other recyclables in the other truck.

Changing the categories of materials collected provides a major opportunity to increase diversion. With the proposed four categories, most of the organics and more of the recyclable materials will be recovered than in the current system. Letting the residents and businesses know that if they keep the organics stream 'clean' [no glass and no chemicals], it does not have to go to the landfill, and will not produce methane, a very potent greenhouse gas. This will allow them to change the mindset from 'I don't want to bother recycling so I just throw everything I'm not sure what to do with in the garbage' attitude, into 'the only stuff that goes in the rubbish bin is stuff that is not recyclable or compostable.'

Based on a similar system implemented in the Town of Los Altos Hills in October 2008, it is possible to achieve a diversion rate of over 85 percent of the franchise collected residential waste materials with this type of program.

Costs of Services

It is clear that there are both added costs and savings to reorganizing the collection system.

Some of the features are:

1. New collection vehicles

To collect the four streams of materials, two split-bodied trucks would be used; instead of the three trucks currently collecting garbage, green waste and recyclables. This would mean retiring the single compartment garbage and green waste collection vehicles and buying additional split bodied trucks.

2. Lower collection costs

This could reduce the total number of trucks on the street by as much as 40 percent, and would also reduce the

number of drivers needed to collect from all households.

3. Smaller carbon footprint

Fewer trucks on the street burning less fuel means that less air pollution is produced.

4. Organics processing at higher cost than landfill

The cost of processing mixed organics, as compared to the costs of processing clean green plant trimmings, is considerably higher (possibly three times as much). This added cost is offset by the reduction in tons hauled to landfill and the reduced landfill tipping fees. Since there is no mixed organics processing facility in the County currently, one would need to be opened, or the organic materials would need to be hauled greater distances.

5. Much smaller carbon footprint

Removing all of the organic materials from disposal at landfill will greatly reduce the methane generated at the Redwood Landfill. Even though there is a methane recovery system in place at the landfill, much of the methane is still released into the atmosphere. The nitrogen rich food scraps landfilled are a significant part of the methane generation problem.

6. Higher diversion rate

Collecting organic wastes separately from other wastes so that they can be composted, allow the jurisdictions to reduce the number of tons landfilled, thus increasing the diversion rate.

Commercial Collection Services

To accomplish a similar recovery rate in the commercial sector, it will be necessary to implement or expand 'selective routing' services.

Routes will be designed to bring high percentage materials in for processing.

Dry recyclables in a dual stream collection system (fiber as one component and metals, glass and marketable plastics as the other component) can be collected in a split body front loader, or on separate routes.

Office buildings and retail stores would be provided with a bin for paper fiber, and a small bin for other dry recyclables, and a bin for organics from breakrooms and bathrooms.

Organic wastes from restaurants, bars, florists, grocery stores, and other food service accounts (and any accounts disposing of landscape wastes) will be collected in a separate route.

Other types of commercial accounts would receive the appropriate services to maximize recovery of materials.

Education and Promotion of the New Four-Sort Program

One important key to the success of both the residential and commercial four-stream programs will be to inform the public of how these new programs operate, and the results that can be achieved if individuals participate fully.

A multi-dimensional promotion and education program should be used to reach as much of the community as possible. Printed materials with lots of clear graphics are a key to the success of the new program. It might be beneficial to provide each house with a food scrap container so that they can easily store materials in their kitchen for deposit into the organics cart, or into their backyard compost bin. The food scrap containers should be sized to conveniently fit into a dishwasher; and have a detachable lid (e.g., ½-gallon juice pitcher). Containers can be purchased through grants. The distribution of containers would be most efficiently conducted by the haulers.

Commercial Recycling Ordinance

Jurisdictions in California are beginning to focus on the commercial sector to achieve increased diversion rates and AB 32 requires the adoption mandatory recycling ordinance. While the regulations are being developed, the Sacramento Regional Solid Waste Authority's (SWA) ordinance provides an example of what the JPA can model.

In 2007, the SWA, which includes the City of Sacramento and the County of Sacramento, was the first to implement a mandatory recycling ordinance that required any business that generated more than four cubic yards of disposal in a week must recycle. As required by the ordinance, franchised haulers must have recycling containers at all of the businesses they service and each business must have a recycling plan on file with their hauler. It is then the responsibility of the business to ensure that all recyclable materials are placed in the proper container. If the ordinance is not followed, they can be subject to fines.

While the SWA established the ordinance and developed and distributed public education materials, they have contracted with the County of Sacramento Environmental Management Department (EMD) to enforce the ordinance. Enforcement is conducted by visiting the businesses to determine if a business recycling plan has been developed and checking to ensure that recyclable materials are not being disposed. It is anticipated that the EMD will inspect one-third of the businesses every two years.

After six months of being enforced, the ordinance had resulted in increasing business diversion tonnage by 21 percent. As the program continues, the diversion tonnage is expected to

increase. The success of the ordinance in the SWA can be duplicated in the County of Marin if administration partnerships are developed between the Member Agencies and the JPA.

Conversion Technologies

Conversion technologies are the processes that transform municipal solid waste into heat, steam, electricity, natural gas, and liquid fuels. The main types of conversion include thermal, digestion and hydrolysis. Below is a summary of the technologies.

Pursuing any of these technologies locally (within the County of Marin) will require the siting and development of infrastructure to pre-process material to recover recyclable materials and perform the conversion. As noted previously, lack of siting options in the County will likely prevent such infrastructure from being developed.

Thermal

Under controlled conditions, the thermal process uses or produces heat to change the composition of the material into a gas form to generate electricity. Products of the process include synthesis gas or fuel gases, fuels, vitrified residue or char, and recovered metals. Most waste-to-energy (WTE) technologies are this form of conversion. WTE of municipal solid waste can produce steam that can be used for generating electricity.

Plasma Arc

This technology is an alternative of thermal conversion technology and uses combustion temperatures inside a pressured chamber with little to no oxygen. This environment enables the materials to be made into gas, liquid, and solids. The gas can be used to make a gas similar to methane, liquids

can be cooled into a variety of metals, and solids are a waste to be disposed.

Because this conversion process requires uniform material size, pre-processing of material is required.

Digestion (Aerobic and Anaerobic)

The digestion process decomposes organic material using microbes. The aerobic process generates compost as the end product and anaerobic digestion produces biogas (can be captured to produce electricity) and compost. This method of conversion is combined with a presorting of material to eliminate recyclable materials from the digestion process.

Biomass

Biomass is energy produced through the burning of wood chips and other similar materials. The material must be clean of other materials before this technology can be used. A byproduct of the process is also fly ash which is commonly used as a soil amendment. Haulers currently send some wood material to biomass facilities located outside of Marin County. MSS reports that they are currently using biomass technology in the development of on-site fuel for MRRC.

Hydrolysis

Hydrolysis is the chemical reaction where water reacts with another substance (usually acid) to form new substances. The cellulose is removed from the waste to create sugar which is then fermented to ethanol or other acids.

These types of conversion technologies would be used for material destined for the landfill after all recyclables and green waste is removed for higher and best use. The main benefits of using such technologies is that the material is used to generate electricity, possible greenhouse gas emissions from

disposal are avoided, and the resulting product is significantly less in weight and volume to be disposed or it is reusable in the form of compost. The thermal process of gasification, pyrolysis and plasma arc can divert between 72-100 percent of the disposal weight. In contrast, anaerobic digestion can divert 68-85 percent of the material.

As of May 2008, countries that had employed diversion technologies for the waste included Israel and Spain for Anaerobic digestion, Japan and Malaysia for gasification, United Kingdom for pyrolysis, and Mexico, Japan, and Canada for plasma arc. The only technology that has been undertaken in the United States so far has been pyrolysis in Romoland, California that is permitted for 18,250 tons per year.

As noted above, demonstration of these projects in the United States is lacking partly due to access to feedstock and regulatory restrictions. For example, thermal technology is not eligible for renewable energy credit and there may be limitations to using the conversion technologies.

Marin County Food Waste Anaerobic Digestion and Composting Pilot Projects

There are several food digestion projects that are in the early stages of development (planning or test pilots) and intend on being fully operational within the next five years. The three projects include a partnership between MSS and the Central Marin Sanitation Agency (CMSA) for commercial food waste, MSS and Redwood Landfill for residential food waste, and Pacific Biomass for residential and commercial food waste. The overview of the pending facilities and ability to handle

the JPA's waste stream is discussed below.

Marin Sanitary Service

Anaerobic digestion is currently being performed at Waste Water Treatment Plants (WWTP), but the addition of food waste to the feedstock enhances the amount of biogas produced therefore increasing electricity generation. In October 2008, Marin Sanitary Service initiated a bio-cell/bio-filter program for commercial food waste composting. In December 2008, Marin Sanitary Service began a commercial food waste-to-energy feasibility study. It is anticipated that the food waste digestion will be fully implemented in early 2010. The pilot program is discussed below.

Based on the waste composition survey conducted by CalRecovery in 2008, it is estimated that the MSS service area collects 15 tons per day of commercial food waste (equivalent to a transfer trailer). In addition to the anaerobic digestion program, MSS is also conducting a pilot in-vessel composting project where food waste is mixed with green waste.

For the purpose of the digestion study, food waste had to be separated into the appropriate components before the material could be mixed with the biosolids at the Central Marin Sanitation Agency Waste Water Treatment Plant (WWTP). As with other diversion methods, having a facility capable of handling the material is a limiting factor. A variety of locations were explored for the processing including NorCal Jepson Prairie Facility in Vacaville, CMSA WWTP, or retrofitting the MSS transfer station where the truck parking currently is located.

The benefits of adding food waste to the digestion process as summarized by the Methane Capture Feasibility Study conducted by Kennedy/Jenkins

Consultants in December 2008, were the following:

- Extend landfill life by diverting commercial food waste from Redwood Landfill;
- Reduce truck traffic from solid waste transport to Redwood Landfill;
- Increased financial benefits and reduced tip fee;
- Capture the energy content of food waste for beneficial use;
- Reduce greenhouse gas emissions and reduce carbon footprint;
- Provide 230kW of renewable energy;
- Minimize use of natural gas purchased by CMSA;
- Produce minimal residual from digestion process;
- Conform with the City's and County's green initiatives; and
- Accommodate the future processing of other food wastes.

Potential Drawbacks

As mentioned previously, there is a lack of infrastructure currently available to handle the potential 15 tons per day of commercial food waste from MSS. In order for the project to be viable, transportation and processing of the material must be determined and executed; the Kennedy/Jenkins Consultants investigated the options. However, the facility recommended to process the food waste is projected to handle around 40 tons per day. While this would serve the MSS collection and potentially the addition of residential food waste, the other areas of the JPA would not have the option having the over 200 tons per day of material use the food processing facility, potential transfer station or having the material be used by CMSA.

Pacific Biogas Energy, LLC: Digestion

Another biogas digestion project that is currently in the planning stages is being undertaken by Pacific Biogas. The proposed organics (green waste only) digester is planned to be sited in Marin County and will accept residential and commercial food waste and yard waste. The digestion process will also accept soiled paper products, waxy old corrugated cardboard, etc., and no presorting/screening of the material is needed. It is anticipated that the facility will accept material six days a week and between 15,000-30,000 tons per year.

Once the permitting process is completed, it will take one year to develop and build. The project and digestion will occur in two phases: Phase I-aerobic and Phase II-anaerobic. Phase I is anticipated to begin in 2009 and Phase II will begin in the second or third quarter of 2010. Once the facility is operating at capacity, it is anticipated that up to 1 Mega Watt will be generated and sold to the Marin Energy Authority; this equates to powering approximately 1,000 homes. Compost that is created as a byproduct will be sold for commercial use.

Extended Producer Responsibility

The JPA has been supportive of California legislation that promotes more producers responsibility for the handling and disposal of products at the end of their useful life and the non-profit California Product Stewardship Council. This section identifies current options for products.

Rechargeable batteries

Options for collection and proper disposal of rechargeable batteries exist. A stewardship program was founded by the rechargeable battery industry in

1994 called the Rechargeable Battery Recycling Corporation (RBRC). RBRC is a national non-profit, public service organization comprised of environmentally-aware rechargeable battery manufacturers, retailers, businesses, communities and public agencies that are committed to the responsible recycling of rechargeable batteries and cell phones in the United States and Canada.

RBRC's easy and free recycling program, Call2Recycle™, collects and recycles cell phones and Nickel Cadmium (Ni-Cd), Nickel Metal Hydride (Ni-MH), Lithium Ion (Li-ion), and Small Sealed Lead (Pb)* rechargeable batteries – the types of batteries that power a variety of popular cordless products, such as power tools, cellular and cordless phones, laptop computers, camcorders, two-way radios, and digital cameras. While there are options for rechargeable batteries, they collect about 10 percent of total batteries generated by the public, the rest being alkaline batteries, which have no stewardship program. However, RBRC submitted a plan to the provincial government of Ontario in July 2009 to also accept alkaline batteries and the plan is to do it in Canada first, and then the US.

Mercury Thermostats

Mercury thermostats use mercury switches to sense and control temperature, with each thermostat containing about three grams of mercury. As such, if they are discarded as solid waste the mercury can be emitted to the environment. There are no collection options for thermostats outside of the public HHW facilities and events and the EPR program discussed below.

Extended Producer Responsibility –The Thermostat Recycling Corporation

(TRC), funded by Honeywell, GE and White-Rogers, offers HVAC contractors, builders and homeowners a safe, easy way to properly dispose of thermostats. The program collects used thermostats free of charge through participating wholesalers. Shipping the containers to TRC is free and they return the container for unlimited subsequent uses.

Progressive Container Rates

Progressive container rates means that there is a distinction in the solid waste collection rates that encourage people to reduce waste disposal and increase recycling. All of the franchised haulers provided their collection rates and noted that the recycling and green waste collection services are provided at no additional cost to customers. Upon reviewing the service area rates, all areas have progressive rate structures.

There is no established or recommended rate difference between container sizes. While the rates seem

like they can be compared to other service areas in the County, each service provider offers variations of services which prevents equal comparison (e.g., curbside oil collection or not), limitations on recyclables and green waste collection, transportation and disposal costs depending on the end destination of the material, and the way the franchise agreement is structured (e.g., rates based on cost or have cushion to sustain variance in economic conditions).

Tables 19 and 20 below are informational and present the highest and lowest rates charged by haulers. Stinson Beach has most of the lowest rates for flat areas and Mill Valley has most of the highest rates. For the hill areas, the Unincorporated Franchise Areas 1-6 have the lowest rates for the smaller capacity containers and Christmas Tree Hill in Corte Madera has the highest rates.

Table 19 Flat Areas			
Container Capacity (Gallons)	Lowest Rate/ Jurisdiction	Highest Rate/ Jurisdiction	Difference Between Rates
20	\$10.76/ Novato	\$26.86/ Mill Valley (unincorporated)	\$16.10
32	\$14.73/ Stinson Beach	\$29.52/ Mill Valley (unincorporated)	\$14.79
45	\$28.75/ Fairfax	\$43.04/ Mill Valley (unincorporated)	\$14.29
64	\$29.44/ Stinson Beach	\$48.88/ Larkspur	\$20.29
96	\$44.17/ Stinson Beach	\$75.43/ Shoreline and Gibson (unincorporated)	\$31.26

Table 20 Hill Areas			
Container Capacity (Gallons)	Lowest Rate/ Jurisdiction	Highest Rate/ Jurisdiction	Difference Between Rates
20	\$21.48/ Unincorporated Franchise Areas 1-6	\$30.78/ Christmas Tree Hill (Corte Madera)	\$9.30
32	\$25.27/ Unincorporated Franchise Areas 1-6	\$34.74/ Belvedere	\$9.47
45	\$32.40/ Fairfax	\$51.15/ Christmas Tree Hill (Corte Madera)	\$18.75
64	\$48.71/ Tiburon	\$67.78/ Christmas Tree Hill (Corte Madera)	\$19.07
96	\$70.29/ Tiburon	\$102.39/ Christmas Tree Hill (Corte Madera)	\$32.10

As noted in the tables, there is a large contrast between rates charged. Although there may be interest in making the rates more encouraging of recycling, each jurisdiction will have to look at its rate structure to determine if diversion is maximized. Another consideration is that if the rate structure is too distinct between container capacities, customers may downsize their containers, but place garbage in the recycling containers. This problem was experienced in the City of San José.

Consumption and Disposal Changes

Achieving Zero Waste requires that consumers change their purchasing and disposal habits in addition to more diversion programs being implemented. One method is to encourage people to use GoodGuide.com to make purchasing decisions based on ecological footprints and promote repair and reuse options in the County. Product bans is another method and is discussed below.

Product Sale and Disposal Bans

In late 2008, the JPA began exploring product sales bans which include, but are not limited to, plastic shopping bags and Styrofoam containers. These materials do not biodegrade and often end up in the ocean which poses hazards to aquatic life.

Unless all the jurisdictions in the County adopt the ordinance on consistent terms, bans could result in unintended economic impacts to the businesses that are required to provide the reusable or paper bags. If the JPA or its Member Agencies decide to postpone ordinances on banning materials, the JPA should increase public education and points of collection and could promote reusable bags and require hotels and restaurants to use biodegradable to-go containers.

Plastic Bags

While the JPA is currently investigating options, the Town of Fairfax had a ballot initiative Measure "C" on the November 4, 2008 election which bans plastic shopping bags from being distributed by

stores. The Town of Fairfax residents passed the measure which became effective on May 4, 2009.

The Town of Fairfax's ordinance requires all retail establishments, except dry cleaners, to provide bags that are either cloth reusable bags or paper bags. If a retailer is found to be distributing a plastic bag, the fines of \$100, \$200 and \$500 for subsequent violations. The ordinance that the Town has adopted will have a significant scope of influence because it affects all stores, and food venues (restaurants, vendors and retail food outlets).

Polystyrene (Styrofoam)⁶

An ordinance banning this material from being distributed at businesses is also an option of the JPA and its member jurisdictions. Specifically, restaurants are required to only provide take-out food in recyclable or biodegradable containers. As of the end of 2008, eight cities in the Bay Area have banned Styrofoam including San Francisco, Berkeley, Oakland and Emeryville. In addition, the beginning of 2009 has seen an increase in attention of banning this material at the statewide level by proposals from the California Oceanic Protection Council and public support from the Lt. Governor John Garamendi. In the past few years, cities throughout California have begun collecting Styrofoam, condensing it and selling it to recyclers. Multiple cities in California have collection sites and retailers, such as Best Buy, are also accepting the material for recycling.

⁶ BPI certification is needed for material to be recycled.

VII. Findings and Recommendations

Key Findings

- **JPA Resources.** Currently, the JPA does not have the direction or staffing needed to effectively work on a regional level and achieve the recommendations. Unless there is a strengthening of the JPA's role to assist Member Agencies in implementing the recommendations, it is unlikely that the Zero Waste Goal will be met, and the status quo will continue.
- **Program Consistency.** It will also be necessary for the JPA, Member Agencies, and haulers to implement programs and policies that are consistent countywide. The Member Agencies will need to adopt or revise ordinances, and modify their franchise agreements to establish the framework and standards for their diversion programs to meet the Zero Waste Goal.
- **Economies of Scale.** Some programs, such as ordinance enforcement and public education of programs, would be more efficiently and cost-effectively managed at the JPA regional level than independently by each Member Agency. In addition, many of the policy related programs can be better and cheaper if administered at a countywide level.
- **Short and Long-Term Programs.** A balance will have to be drawn for short-term and long-term programs and policies that address eliminating the creation of waste (up-stream, but long-term implementation) and the disposal and diversion of waste (down-stream, but short-term implementation). Up-stream

programs include public education efforts that promote reduced consumption, Extended Producer Responsibility (EPR) policies that promote product redesign for hazardous materials, product bans, etc. Down-stream programs include increasing the types of materials collected by haulers (e.g., food), revising franchise agreements and ordinances to reflect industry standards and establish diversion requirements, implement food waste digestion and composting, etc.

- **Diversion Facilities.** Approximately 56 percent, or 128,000 tons of food, yard, organic waste, inerts, and mixed C&D, were disposed at landfill. In order to meet the Zero Waste Goal, reduction and processing of these targeted materials is critical. However, currently there is insufficient capacity for the facilities located within the County to process these materials and it may be necessary to transport these materials to out-of-county facilities.
- **Public Education.** Finally, and most importantly, for both Phase I and Phase II programs to be successful, public education must be strong and consistent among Member Agencies, and be continuous.

Recommendations

This section identifies recommendations for Marin County to achieve 80 percent diversion by 2012 and Zero Waste by 2025. This equates to diverting over 229,000 tons.

The recommendations were developed after evaluating the current conditions in the JPA as described and analyzed in Section VI.

Implementing these recommendations will maximize diversion of the currently

disposed 229,271 tons of material. The recommendations presented below provides a summary of the recommendation including, estimated diversion, steps to achieving the recommendation, responsible parties and implementation cost. Appendix B provides additional detail about the recommendations relating to the following:

- Estimated one-time and ongoing cost;
- Potential funding sources;
- Projected additional JPA and Member Agency staff needed for program implementation;
- Advantages and disadvantages of recommendations;
- Facility infrastructure availability in the County; and
- Timeline for implementation.

The recommendations are divided into two phases. Phase I recommendations lay the foundation for Phase II. In some cases, aspects of Phase II may already be occurring in some capacity (e.g., food waste), but larger scale operations may need developing. Therefore, some Phase II recommendations can be implemented simultaneously with Phase I if programs are currently underway.

Estimated diversion of the most disposed materials are the following:

- Paper: 35,000 tons
- Food: 4,500 tons
- Organics (e.g., green waste, wood): 6,000 tons
- C&D: 40,000 tons

While each material individually, may not seem to reach the Zero Waste goals, implementation of the recommendations will collectively reduce disposal by increasing diversion or preventing waste generation.

Diversion calculations are based on the assumption that an equal amount of material is eliminated from the disposal tonnage resulting in a no net change to overall generation.

Potential financial impacts are estimated based on industry knowledge, staff, and hauler time impacts. Haulers were contacted to identify potential costs and Marin Sanitary Service, Mill Valley Refuse, Redwood Empire Disposal/Novato Disposal, and Tamalpais Community Services District responded; Tamalpais was unable to estimate any costs.

PHASE I

The purpose of Phase I is to establish the foundation of roles and responsibilities to enable regional coordination and leadership of programs that will attain Zero Waste.

To date, the JPA and Member Agencies have had limited interaction and coordination when designing and implementing programs, franchise agreements, and ordinances. This structure has enabled the JPA to meet the diversion and reporting requirements of AB 939, but greater coordination and potentially responsibilities will be necessary to achieve the Zero Waste goals. Without regional coordination and leadership, the Zero Waste goals will be difficult to achieve.

The recommendations for Phase I are categorized into actions that affect the JPA and Member Agencies. Some recommendations, such as ordinance enforcement and public education of programs would be more efficiently managed at the JPA regional level than independently by each Member Agency.

JPA

Recommendations for the JPA focus on shifting the role of the organization to

give it more authority in developing policies, countywide program implementation, and provide greater assistance to Member Agency staff.

1. Increase the Communication/ Assistance of the JPA with Other County Departments

The County Departments that manage the used oil block grant, sharps collection and sustainability teams are some County programs that operate separately from the JPA and do not consistently share information. Because integrated waste management involves materials targeted in such programs, it is important for the JPA to be informed of collection results and be able to assist in outreach, etc. as needed to prevent waste generation and promote proper disposal of such material.

Estimated Diversion: Supports #4-18

Steps to Achieve:

- *JPA meet with County departments to determine reporting frequency (e.g., monthly, quarterly).*
- *Determine the detail of information wanted (e.g., collection amounts, number of participating locations, compliance with ordinances (C&D, etc.)).*
- *Coordinate with County ways for the JPA to assist programs (e.g., outreach, enforcement).*
- *Update the County's Sustainability Team's website to more prominently present solid waste reduction and management on main page and interactive application to reflect Zero Waste goals.*

Responsible Parties: JPA (coordinate with County departments)

Implementation Cost: \$40,000 (1/3 Full Time Equivalent Employee (FTE)). The level of assistance will determine if

current JPA staff is sufficient or if additional staff is needed.

2. Increase JPA Staffing and Their Role in Assisting Administration of Member Agency and Countywide Programs

The Member Agencies currently do not have the resources to monitor all programs and implementation. There is opportunity for the JPA staff to assist the Member Agencies in roles as needed such as compliance with the C&D ordinance, monitoring hauler contracts, public education, etc. Having a greater assistance role will help insure that the programs are consistent and potentially lead to higher diversion and impact on waste reduction.

In addition, The JPA is beginning outreach for the unincorporated County while Member Agencies run their own program. Given the universal nature of this issue in the County, it is recommended that the JPA administer the education and outreach on behalf of the Member Agencies.

Estimated Diversion: Supports #4-18

Steps to Achieve: JPA meet with Member Agencies to determine how much assistance they would like the JPA to provide.

Responsible Parties: JPA and each Member Agency.

Implementation Cost: \$120,000 (1 FTE). The level of assistance will determine if current JPA staff is sufficient or if additional staff is needed. \$200,000 has already been funded for Phase II.

3. Increase the Frequency of Board of Directors Meetings

Increasing the number of meetings held will enable the Directors and Member Agencies to be more involved in addressing waste issues and provide the JPA with more constant contact with

the administrators of policies throughout the County. The increased communication could lead to improved partnership with Member Agencies and more effective implementation of programs.

Estimated Diversion: Supports #4-18

Steps to Achieve: Increase meeting schedule

Responsible Parties: JPA and Board of Directors

Implementation Cost: \$0. No change to current staff levels.

4. Help Solid Waste and Non-Solid Waste Facilities with Siting/ Permitting Processes

The lack of the necessary infrastructure is the biggest constraint for the County to achieve high diversion programs that include green waste, food waste, and construction and demolition materials. Facilities should include retail-focused businesses that promote reuse that do not require processing of materials. The JPA should continue to play an active role in helping site new facilities that provide diversion and reuse opportunities to the region. These facilities will also help create "green jobs" in the County.

Estimated Diversion: 92,000+ tons per year if facilities become operational in County and in conjunction with C&D and salvage ordinances. Also supports #18.

Steps to Achieve:

- *Work with the County and City Planning Departments to site and permit the appropriate facilities.*
- *Work with companies or individuals that offer services that could benefit the reduction of the County's waste stream.*

- Assist companies/ individuals through the siting and permit process as possible.

Responsible Parties: JPA

Implementation Cost: \$120,000 (1 FTE).
The level of assistance will determine if current JPA staff is sufficient or if additional staff is needed.

5. Support Extended Producer Responsibility (EPR) and Waste Reduction Policies at State and National Level

The JPA has been active in issuing letters of support for legislation that helps eliminate materials from the waste stream. The JPA should continue this activity and also support any national legislation that might positively affect the County's Zero Waste goals.

In addition, individual Member Agencies should support these efforts as well through Extended Producer Responsibility resolutions and letter campaigns.

Estimated Diversion: 0.05-5%. Note that current EPR materials are banned from disposal.

Steps to Achieve:

- Issue letters of support for state or national legislation that promotes waste reduction.

Responsible Parties: JPA, Member Agencies

Implementation Cost: \$120,000 (1 FTE).

Member Agencies

6. Revise Solid Waste Ordinances

The solid waste industry and regulations have changed considerably since 1990. However, the ordinances that regulate the hauler franchise agreements in some cases have not been updated for 45 years. Extensive revisions will likely be necessary for the ordinances.

Estimated Diversion: Supports #7, 9, &18

Steps to Achieve:

- All Member Agencies review their solid waste ordinance.
- Update ordinances to reflect current solid waste practices.

Responsible Parties: Member Agencies

Implementation Cost: \$5,000-\$10,000 each Member Agency

7. Revise Franchise Agreement Language

Franchise Agreements can be designed to encourage "green" operations and encourage maximum diversion. Most of the franchise agreements are lacking provisions that address collection hours, type of fuel vehicles use, explicit definitions of recyclable materials, etc. Below is a list of elements that should be included in franchise agreements to obtain maximum diversion and minimal environmental impact. Becoming more "green" could result in less disposal, lower customer rates, and more profit for haulers.

- Specific diversion requirements
 - Based on actual tons collected by hauler.
- Overall tonnage collected
 - By service area/type (e.g., residential, commercial, bulky item, special event, etc.).
- Financial incentives for the customer
 - Bundled service rates
- Cost for recycling, green waste, food waste and bulky waste are included in the basic garbage bill
 - Variable rates
- Based on the amount of garbage generated

- Provide unlimited/free recyclables and green/organic waste collection
- Financial incentives for the hauler
 - Rate increases for exceeding diversion requirements
 - Term extension for meeting/exceeding diversion requirements
 - Allow hauler to keep revenue for recyclable materials sales
 - Set a disposal tonnage cap (limit the tonnage that can be landfilled; or charge a penalty if more than the tonnage limit is landfilled)
 - Liquidated damages for not meeting diversion requirements or other service standards
 - Require program expansion for not meeting diversion requirements
- Air quality
 - Require specific fuel and fuel management requirements
- CNG/LNG
- Bio-diesel
- Idle shut-off
- Idle speed packing
- Hybrid electric support trucks
 - Reduce collection vehicle traffic
- Frequency of collection
- Efficient routing
- Co-collection (use split-body trucks)
- Wet/dry collection
- Mixed waste collection
 - Include all collection sectors
- Single family dwelling residential
- Multi-family dwelling residential
- Commercial
- Construction and demolition (if part of agreement)

- Public facilities (if part of agreement)
 - Collection Days and Hours
- Residential versus commercial service days and time restrictions
- Alternative hours for commercial properties near residential units
 - Material definitions
- Identify specific materials that can be collected through residential, multi-family, commercial, bulky item and special event service

In addition to these provisions, the Member Agencies may want to consider making the rate structure more stable for both the haulers and customers by using an indexed calculation to determine rate adjustments.

Estimated Diversion: Supports #8, 9, 12, 13, 14, 15, & 16

Steps to Achieve:

- Meet with hauler to determine options of revising the current contract.
- Possibly issue a Request for Proposals two years before the contract expires.
 - Identify in the RFP the service types and requirements desired by the hauler
 - Bids submitted by haulers will reflect the level of services and requirements desired.

Responsible Parties: Member Agencies

Implementation Cost: \$25,000-\$75,000 each Member Agency

8. Adopt, Enforce, and Homogenize the Construction and Demolition Ordinance

The diversion of construction and demolition materials will not occur unless all Member Agencies adopt and enforce C&D ordinances. While five

jurisdictions have adopted the ordinance, none have maintained the same provisions as the JPA's model C&D ordinance which does not help the haulers easily comply.

It is recommended that the JPA administer the program on behalf of the Member Agencies to maximize efficiencies.

Estimated Diversion: 22,900+ tons per year and supports #18

Steps to Achieve:

- *These seven Member Agencies should adopt the C&D ordinance.*
 - *Belvedere*
 - *Corte Madera*
 - *Fairfax*
 - *Larkspur*
 - *Ross*
 - *San Anselmo*
 - *San Rafael*
- *Ordinances should be consistent throughout the County. The ordinance should require that no C&D material is landfilled, except residue from processing.*
- *Enforce the ordinance (recommend the City of Los Angeles system).*
- *Lower the project threshold to 500 sq. ft.*
- *JPA should verify compliance (review paperwork, etc.).*
- *Consider an ordinance administration fee that is rebated if diversion facilities are used (e.g., City of Los Angeles system).*
- *Educate haulers of C&D recycling facilities.*

Responsible Parties: Member Agencies for adoption/modification of ordinance, enforcement and educating haulers. JPA might be able to assist in

determining ordinance compliance. JPA should work with Member Agencies to have consistent ordinances.

Implementation Cost: \$5,000-\$10,000 each Member Agency. Ongoing: \$5,000 for each Member Agency or \$60,000 for the region.

9. Adopt and Enforce Multi-Family Dwelling and Business Recycling Ordinance

This ordinance will be required to be adopted by 2012 as a result of AB 32. The JPA should consider implementing a regional ordinance to require recycling of all recyclable materials generated at businesses and multi-family dwellings similar to Sacramento County. With residential customers currently with full diversion options, Multi-family dwellings and businesses are the next sectors that can achieve high diversion.

Estimated Diversion: ~29,700 tons

Steps to Achieve:

- *Meet with associations and business chambers to inform them of changes.*
- *Meet with Member Agencies to determine how the ordinance will be enforced (e.g., local staff, JPA, County Environmental Management Department).*
- *Train enforcement staff.*
- *Haulers provide account information for database creation (enforcement agency will maintain database).*
- *Submit reports to JPA to keep informed.*

Responsible Parties: JPA, Member Agencies, and haulers. Enforcement entity to be determined by the parties.

Implementation Cost: \$5,000-\$10,000 each Member Agency. Ongoing: \$5,000 for each Member Agency or \$60,000 for the region.

10. Encourage Consumption and Disposal Changes

Promoting reduced consumption by making better choices when shopping is a necessary element to ultimately eliminate waste generation. Efforts should be made to increase customer awareness of online and local resources that encourage material exchange, repair and reuse. All sectors should be targeted to maximize awareness of opportunities. Public education on better consumption habits is a crucial element of this recommendation. Programs such as Alameda County Waste Management Authority's Business Partnership Program should be considered.

Estimated Diversion: 2,300 tons

Steps to Achieve:

- JPA work with the public and environmental groups to identify campaigns.
 - Choose a few topics a year to promote and educate the public on (e.g., reusable bags, purchase in bulk, encourage reuse through thrift stores and garage sales).
- Develop education campaigns with haulers and Member Agencies.
 - Advertise businesses that encourage reusable bags, mugs, etc. and identify how it is encouraged (e.g., discount, donation to charity).
 - Promote GoodGuide.com and MarinMax.org through haulers and Member Agencies.
 - Haulers include information in their newsletters.
- Attend community events to promote the consumption changes and perhaps distribute reusable items.

Responsible Parties:

- JPA to coordinate the identification of campaign topics with public input.
- Member Agencies to work with haulers to include information in outreach materials; and
- All parties to share in promoting the campaign to the public.

Implementation Cost: \$5,000-\$10,000 each Member Agency. Ongoing: \$5,000 for each Member Agency or \$60,000 for the region.

PHASE II

This phase is when programs are developed and implemented. The recommendations consist of policies, haulers changing/restructuring services, and enhancing current programs.

JPA

11. Promote Regional Sale and/or Disposal Bans

Undertaking product sale and/or disposal bans are most effective when all Member Agencies simultaneously adopt them rather than each jurisdiction implementing different bans.

Estimated Diversion: 1,100 tons

Steps to Achieve:

- JPA use Local Task Force, Executive Committee and Board of Directors meetings to determine what bans are needed.
 - Advertise meetings to public to solicit feedback
- JPA to develop model ordinance language.
 - Language should be consistent with previously adopted ordinances (e.g., Town of Fairfax plastic bag ban).

- JPA to attend council meetings as needed to speak on the ban.
- JPA and Member Agencies educate public and businesses.
- Member Agencies to enforce the bans.

Responsible Parties: JPA, JPA Executive Committee and Board of Directors and Member Agencies.

Implementation Cost: \$50,000 for public education. *Ongoing:* \$30,000.

Haulers (via Member Agencies)

12. Implement Wet/Dry Collection Routes

A way to potentially increase recovery of material from commercial businesses is to re-route trucks to collect similar types of material (selective routing). For example, one truck should service locations that generate mostly paper goods (dry goods) and other service businesses that generate mostly food waste (wet goods). By designing such routes, contamination of loads is minimized and more materials can potentially be diverted.

Estimated Diversion: ~102,000 tons per year

Steps to Achieve:

- Review current routes and material types generated.
- Restructure routes if necessary.
- Educate customers on any changes to how they dispose of material.
- Deliver material to facilities that can divert them (e.g., food waste/organics).

Responsible Parties: Haulers

Implementation Cost: Franchise agreement revision; 2%-10% rate increase.

13. Offer Residential Unlimited Services of Recycling and Green Waste Containers

These programs are dependent on services offered by the haulers. There is an opportunity to improve collection because they do not currently provide a sufficient number of containers to all residents.

In the MSS service areas, only one recycling cart is provided and unlimited green waste collection is available. Although residents can provide their own containers for recycling, the reduced convenience of having only one cart provided can minimize willingness to recycle material that exceeds the capacity of the cart.

Novato Disposal and Redwood Empire Disposal each provides up to 2, 95 gallon carts each for recyclables and green wastes. This capacity may be enough, but the option for an extra container may increase diversion during the fall or other high debris landscape seasons.

Mill Valley Refuse customers in the Homestead area have the option to decline green waste service because they compost in their backyard. It is unclear how much green waste is being disposed by Homestead residents, but regardless, those with services are limited to 68 gallons and are charged \$3 for each extra can. This smaller container size and fee for extra service is a disincentive to diverting green waste material.

Estimated Diversion: 7,300+ tons per year in combination with other programs

Steps to Achieve:

- Haulers should provide option of extra free containers for recyclables and green waste.

- Jurisdictions could require hauler to provide unlimited collection of green waste.
- Mill Valley Refuse should consider increasing green waste collection to at least 96 gallons and eliminating the extra container charge.

Responsible Parties: Haulers

Implementation Cost: Franchise agreement revision; 1%-3% rate increase.

14. Add Materials Collected to Recycling Stream

All recyclables should be collected by haulers if there is a market for them. While the economy is slow, this may not be possible, but increasing collected materials, even if not generating profit, should be considered as a way to reduce disposal.

Estimated Diversion: ~2,300 tons per year

Steps to Achieve:

- Meet with associations and business chambers to inform them of changes.
- Meet with Member Agencies to determine how the ordinance will be enforced (e.g., local staff, JPA, County Environmental Management Department).
- Train enforcement staff (hire new staff if needed).
- Haulers provide account information for database creation (enforcement agency will maintain database).
- Submit reports to JPA to keep informed.

Responsible Parties: Haulers

Implementation Cost: Franchise agreement revision; 1%-3% rate increase.

15. Add Food Waste Diversion to Collection Services (Residential and Commercial)

After green waste, food waste collection and composting is the big next step to reducing waste disposal. As with green waste, the availability of processing facilities is the limiting factor, but digestion and composting facilities are beginning to be established in Marin County (e.g., Redwood Landfill, MSS energy projects, Pacific Biogas Energy).

Estimated Diversion: 4,500+ tons per year and supports #12 & 16

Steps to Achieve:

- Haulers and Member Agencies amend franchise agreements.
- Haulers identify facilities and determine ability to deliver material to it.
 - Determine if transfer facilities are needed for long-haul delivery.
- Haulers build into the contract compost give-aways.
- Haulers provide customers backyard compost bins, kitchen pails, and education materials.

Responsible Parties: Haulers for program implementation and education.

Implementation Cost: Franchise agreement revision; 1%-5% rate increase.

16. Implement Food Waste Digestion

Marin Sanitary Service is undertaking food waste digestion with the CMSA. The CMSA only services a portion of the County and other sanitation districts serving the region should also explore combining food waste with current digestion operations.

Estimated Diversion: N/A; 4,500+ tons per year in conjunction with the food waste diversion (Recommendation 16).

Steps to Achieve:

- *Haulers and sanitation districts develop pilot programs and determine facility needs.*
- *Develop or arrange infrastructure needs to make food waste suitable for digestion.*
- *Haulers and sanitation districts develop agreements for material.*

Responsible Parties: Haulers and sanitation districts.

Implementation Cost: Franchise agreement revision; 2%-10% rate increase.

17. Promote Backyard Composting

Getting residents engaged will help promote sustainability and waste awareness. In addition, developing a community garden where residents can bring food waste should be explored.

Estimated Diversion: 4,500+ tons per year in combination with other food waste programs (#15)

Steps to Achieve:

- *Haulers and Member Agencies amend franchise agreements.*
- *Haulers provide customers backyard compost bins, kitchen pails, and education materials.*

Responsible Parties: Haulers for program implementation and education.

Implementation Cost: \$5,000-\$10,000 each Member Agency. Ongoing: \$5,000 for each Member Agency or \$60,000 for the region.

Member Agencies

**18. Require Deconstruction/
Salvage/Resale of Construction
and Demolition Materials**

Salvaging materials prior to deconstruction will allow materials to be reused and be diverted from the landfill.

This practice has already begun in parts of the County, but support from Member Agencies in the form of ordinances and promotion will help keep useful materials from being unnecessarily disposed.

The JPA can administer the program to promote efficiencies rather than implementation individually by Member Agencies.

Estimated Diversion: ~11,500 in conjunction with C&D ordinance and resale facilities. Supports #8.

Steps to Achieve:

- *Each Member Agency adopt a deconstruction and salvage ordinance.*
- *Require salvage be conducted before demolition.*
- *Educate contractors on the requirements through trade groups and permits.*
- *Include deconstruction and salvage companies more prominently in the County's Public Works Builders Guide and increase the prominence of the guide through community outreach.*
- *Educate residents of facilities that have salvaged materials or perform deconstruction (e.g., non-profits, Marin-Sonoma Deconstruction and Demolition).*

Responsible Parties: Member Agencies adopt and enforce ordinance, Public Works department to modify the Builder's Guide, and the JPA might be able to assist with outreach and public education.

Implementation Cost: \$5,000-\$10,000 each Member Agency for public education. Ongoing: \$5,000 for each Member Agency or \$60,000 for the region.

VIII. Costs and Funding Options

Estimated Solid Waste System Cost

The Marin County solid waste collection system is complex and involves multiple entities that extend beyond the haulers identified in this study. To determine the cost to run the current system as a basis for incremental cost is difficult to determine. As noted previously, haulers accounted for **diverting** 30 percent of the diversion tonnage identified in 2006 (129,400 tons out of 432,600 tons diverted countywide) and collecting 31 percent of the reported total AB 939 reported (193,700 tons out of 620,400 tons) generation. Identifying the cost of the waste management system, would therefore include the gathering of data from the companies and facilities handling the other 70 percent of material which includes regulated and non-regulated entities. The range of entities to acquire costs from include:

- Franchised and municipal residential and commercial haulers;
- Permitted debris box haulers;
- Non-franchised/permited recycling companies collecting source separated materials, such a glass recyclers, rendering companies, paper recyclers, etc.;
- Facilities regulated or not regulated such as transfer stations; landfills; C&D processing facilities (in county and out of county); reuse/ donation stores, such as Goodwill; store back-haul and take-back operations, etc.;
- Buy-back and drop off centers; and
- State and federal operations, such as Fire Safe Marin and CalTrans.

Table 21
Estimated Countywide Costs

Total Waste Generation (2006)	620,400
Total Franchised Tonnage (2006)	193,700
Percent Franchised Tonnage	31%
Franchised Hauler Cost	\$54,700,000
Per Capita Cost	\$213
Total Per Capita Cost	\$687
County Wide Population (2008)	256,500
Estimated County Wide Cost	\$176,215,500

With the above limitations notes, a general estimated cost for the current

solid waste management system is approximately \$176,200,000/ year.

This estimate is based on applying the estimated average per capita cost for hauler provided services of \$213/year, to the tonnage collected by the haulers as a percentage of total countywide waste generation.

Developing a more specific and detailed cost estimate for the current system would entail conducted a detailed economic study.

The cost estimates to implement the recommendations in Section IIV are as follows:

Table 22
Estimated Costs

Responsible Party		Recommendation	Estimated One-Time Cost	Estimated Ongoing Cost	Potential Funding Source
Phase I					
JPA	1	Increase Communication/ Assistance of the JPA with other County Departments (e.g., used oil programs, sharps)	N/A	\$40,000+ <i>Materials and staffing</i>	Disposal Fee
	2	Increase JPA's Staff and Role in Assisting Administration of Member Agency and Countywide Programs. <i>Could support #6-10 below.</i>	\$200,000 (Fund Phase II)	\$120,000+ <i>Materials and staffing</i>	Disposal Fee
	3	Increase Board of Directors Meeting Frequency	N/A	N/A	Disposal Fee
	4	Help Facilities with Siting and Permitting: a) Solid Waste and b) Non-Solid Waste <i>JPA materials and staffing</i>	N/A	\$120,000 <i>Materials and staffing</i>	Disposal Fee
	5	Support EPR and Waste Reduction Policies at State and National Level <i>Public education</i>	N/A	\$120,000 <i>Materials and staffing</i>	Disposal Fee
<i>Phase I JPA Subtotal</i>			\$200,000	\$400,000	
Member Agencies (MA)	6	Revise Solid Waste Ordinances <i>Could be done as part of #2 above.</i>	\$5,000- \$10,000 each MA	N/A	Franchise Fee, General Fund
	7	Revise Franchise Agreement Language. <i>Could be done as part of #2 above.</i>	\$25,000- \$75,000 each MA	N/A	Franchise Fee, General Fund
	8	Adopt, Enforce, and Homogenize the Construction and Demolition Ordinance. <i>Could be done as part of #2 above.</i>	\$5,000- \$10,000 each MA	\$5,000 each MA or \$60,000 for region	Franchise Fee, General Fund, Disposal Fee

Table 22 Estimated Costs					
Responsible Party		Recommendation	Estimated One-Time Cost	Estimated Ongoing Cost	Potential Funding Source
	9	Adopt and Enforce Multi-Family Dwelling and Business Recycling Ordinance. <i>Could be done as part of #2 above.</i>	\$5,000-\$10,000 each MA	\$5,000 each MA or \$60,000 for region	Franchise Fee, General Fund, Disposal Fee
	10	Encourage Consumption and Disposal Changes. <i>Public education. Could be done as part of #2 above.</i>	\$5,000-\$10,000 each MA	\$5,000 each MA or \$60,000 for region	Franchise Fee, General Fund, Disposal Fee
<i>Phase I Member Agencies Subtotal</i>			<i>\$45,000-\$115,000 each MA</i>	<i>\$150,000 each MA-\$180,000 for region</i>	
Phase II					
JPA	11	Promote Regional Sale and/or Disposal Bans	\$50,000+ for public education	\$30,000+	Disposal Fee
<i>Phase II JPA Subtotal</i>			<i>\$50,000+</i>	<i>\$30,000+</i>	
<i>Haulers (via Member Agencies)</i>	12	Implement Wet/Dry Collection Routes	Franchise Agreement Revision	2%-10% rate increase	Customer Rates
	13	Offer Residential Unlimited Services of Recycling and Green Waste Containers	Franchise Agreement Revision	1%-3% rate increase	Customer Rates
	14	Add Materials Collected to the Recycling Stream	Franchise Agreement Revision	1%-3% rate increase	Customer Rates
	15	Add Food Waste Diversion to Collection Services (Residential and Commercial)	Franchise Agreement Revision	1%-5% rate increase	Customer Rates
	16	Implement Food Waste Digestion	Franchise Agreement Revision	2%-10% rate increase	Customer Rates
	17	Promote Backyard Composting	\$5,000-\$10,000 each MA	\$5,000 each MA or \$60,000 for region	Customer Rates

Table 22 Estimated Costs					
Responsible Party		Recommendation	Estimated One-Time Cost	Estimated Ongoing Cost	Potential Funding Source
		<i>Phase II Hauler Subtotal</i>	\$5,000- \$10,000 each MA	\$5,000 each MA or \$60,000 for region	
<i>Member Agencies</i>	18	Require Deconstruction/ Salvage/ Resale of Construction and Demolition Materials	\$5,000- \$10,000 each MA for public education	\$5,000 each MA or \$60,000 for region	C&D deposit system or fee
		<i>Phase II Member Agencies Subtotal</i>	\$5,000- \$10,000 each MA	\$5,000 each MA or \$60,000 for region	
		<i>Total</i>	\$910,000- \$1,870,000 for the region	\$730,000+ for the region and 7%-31% rate increase	

As shown above, the one-time costs for implementing the recommendations is estimated to range from at \$910,000 – \$1,870,000. This represents less than 1 percent of the total countywide costs. On an ongoing basis, using the estimated hauler costs of \$54.7 million (\$213.25 per capita) and the estimated rate increases ranging between 7 – 31 percent, the hauler costs would increase to \$58.5 – \$71.7 million. This represents a total estimated hauler cost increase of between 2.2 and 9.7 percent. Because the JPA is funded through AB 939 fees (from disposal tip fees) that are incorporated into current customer rates, unless the JPA's budget is increased, there is no additional cost impact. However, if the JPA's budget is increased to pay for recommended programs to be supported by the JPA (estimated to be approximately \$730,000/year) the current JPA AB 939

fee will need to be increased, with this cost passed on to users of Redwood Landfill through higher tip fees. Likewise, the Member Agencies may opt to fund recommendations through increased franchise fees or AB 939 fees, with the cost to be paid for by customers through the franchised hauler rates. The following section describes various methods that can be used to pay for implementing the recommendations.

Funding Options

As noted in Section VII, implementing the recommendations will require one or more methods to pay for expanded or new programs. As shown in Table 21 below, there is a variety of ways to collect money to fund the programs and policies, but the main funding source remains the same: customer rates.

Under the category of customer rates, are AB 939 fees which the JPA currently uses and Member Agencies can also include in their franchise agreements.

In addition to the AB 939 fees that are charged by the JPA, each Member Agency has the authority to implement or adjust funding mechanisms. These funding mechanisms include the following:

- **Vehicle impact fee.** This fee is based on the wear-and-tear the collection vehicles make on roadways. It can be a flat fee every contract year or one-time.
- **Franchise fee.** This fee is charged by the Member Agency and is used to fund programs and staff.
- **General fund.** This is the main fund source for Member Agency programs and staff.
- **Facility host fee.** This fee can be charged to solid waste facilities that are located within Member Agency boundaries. The amount can be determined by the jurisdiction.
- **Developer fee.** This fee can cover partial or all costs associated with providing new trucks and carts to new developments rather than sharing the costs over all customers.
- **Ballot initiative fee/tax.** The County or Member Agencies can propose a fee or tax related to solid waste that would be used to support the implementation of programs and policies. An example would be Measure D that was passed in Alameda County.
- **EPR policy/fee.** This fee could be charged to products that an EPR solution is desired and would pay for the proper handling and disposal of materials. An example of this on the statewide level is Electronic Waste Recycling Act of 2003 (SB 20).

With each of these funding mechanisms, the Member Agencies have the opportunity to use the money to support programs and policies to support the Zero Waste goal.

It should be noted that any fee structure based on tons disposed will need to be changed because as tons disposed decrease the per ton fee would need to increase significantly to generate the same amount of revenue. Ultimately, in a Zero Waste system, paying for programs on a disposal fee basis is not sustainable. Other communities that fund programs on disposal fees are actively exploring other funding options that may prove to be more sustainable as disposal tonnage decreases. Specifically, Sonoma County is looking

at establishing AB 939 fees more on a total generation basis by assigning a flat fee based on historical tons disposed to be paid by franchised haulers, adding new fees on diversion facilities (MRFs; C&D facilities, organic processing), and in increasing disposal fees on self-haulers.

Table 23
Funding Options

	Has Authority to Implement	
	JPA	Member Agencies
Customer rates		✓
AB 939 fees	✓	✓
Vehicle impact fees		✓
Franchise fees		✓
General fund		✓
Facility host fees		✓
Developer fee		✓
Ballot initiative fee/tax		✓
EPR policy/fee		✓

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Appendix A

Northern California Solid Waste Management Authorities

Appendix A
Northern California
Solid Waste Management Authorities

Item	Name of Authority									
	Marin Hazardous and Solid Waste JPA	Western Placer County Waste Management Authority	Sonoma County Waste Management Agency	Salinas Valley Solid Waste Authority	Humboldt Waste Management Authority	Del Norte Solid Waste Management Authority	Monterey Regional Waste Management Authority	Central Contra Costa Solid Waste Authority	South Bay Side Waste Management Authority	West Contra Costa Solid Waste Authority
Member Agencies	City of Belvedere Town of Corte Madera Town of Fairfax City of Larkspur City of Mill Valley City of Novato Town of Ross Town of San Anselmo City of San Rafael Town of Tiburon County of Marin	Lincoln Rocklin Roseville County of Placer Auburn Loomis	Cloverdale Cotati Healdsburg Petaluma Rohnert Park Santa Rosa Sebastopol City of Sonoma Windsor County of Sonoma	City of Salinas City of Gonzales City of Greenfield City of King City of Soledad County of Monterey (South)	City of Eureka City of Arcata City of Blue Lake City of Rio Del City of Ferndale County of Humboldt	Crescent City County of Del Norte	Carmel-by-the-Sea Del Rey Oaks Marina Monterey Pacific Grove Sand City Seaside County of Monterey (North)	Town of Danville City of Lafayette Town of Moraga City of Orinda City of Walnut Creek Contra Costa County (east)	Atherton Belmont Burlingame East Palo Alto Foster City Hillsborough Menlo Park Redwood City San Carlos City of San Mateo County of San Mateo West Bay Sanitary District	El Cerrito Hercules Pinole Richmond San Pablo Contra Costa County (west)
Board Members	One member per jurisdiction – Either an elected official or Member Agency staff.	2 – County of Placer 1 – Lincoln 1 – Rocklin 1 – Roseville Auburn & Loomis – non voting members	One member per jurisdiction – an elected official or appointee	3 – City of Salinas 2 – County of Monterey 1 – each City of Gonzales City of Greenfield City of King City of Soledad	One member per jurisdiction – an elected official or appointee Executive Committee consists of City & County Managers from each jurisdiction.	2 – Board of Supervisors 2 – City Council 1 – Public member	One member per jurisdiction – an elected official or appointee	12 Total 2 per jurisdiction – an elected official or appointee	One member per jurisdiction. Position is filled by: City Manager, Asst. City Manager, Finance Director, or Public Works Director. No elected officials.	3 – Richmond 1 – member per jurisdiction – 1 – County of Contra Costa (non-voting) Members are an elected official or appointee
Voting Process	One vote per member	One vote per member	One vote per member	One vote per member	One vote per member	One vote per member	One vote per member	One vote per member	One vote per member	One vote per member except County seat
Residential / Commercial Accounts (approx)	70,400 / 5,800	86,000 / 20,000	34,000 / 2,300	48,000 / 5,000	40,000 / 5,000	10,000 / 1,100	47,000 / 6,200	62,000 / 3,000	86,000 / 10,000	25,000 / 5,000
Annual Disposal Tons	229,000	230,000	532,000	193,000	85,000	22,000	220,000	100,000	200,000	145,000
GIWMB Diversion Rate (Year)	72% (2006)	59% - 65% (2004)	59% (2005)	47% - 74% (2004)	30% - 74% (2004)	48% (2004)	47% - 71% (2006)	42% - 52% (2005)	42% - 83% (2005)	38% (2005)
AB 939 Reporting	Regional Authority	No	Regional Authority	Individual Jurisdictions	Individual Jurisdictions	Regional Authority	Individual Jurisdictions	Individual Jurisdictions	Individual Jurisdictions	Individual Jurisdictions

<p style="text-align: center;">Appendix A Northern California Solid Waste Management Authorities</p>										
Name of Authority										
Item	Marin Hazardous and Solid Waste JPA	Western Placer County Waste Management Authority	Sonoma County Waste Management Agency	Salinas Valley Solid Waste Authority	Humboldt Waste Management Authority	Del Norte Solid Waste Management Authority	Monterey Regional Waste Management Authority	Central Contra Costa Solid Waste Authority	South Bay Area Waste Management Authority	West Contra Costa Solid Waste Authority
Annual Budget	\$1.7 Million	\$25 - \$30 Million	Not Available	\$21 Million	\$10 Million	\$2.5 Million	\$16 Million	\$2 - \$3 Million	\$35 Million	\$14 Million
Source of Revenue ¹	Tipping Fees and grants	Tipping Fees	Tipping Fees	Tipping Fees	Tipping Fees	Franchise Fees	Tipping Fees	Franchise Fees & Recycling Revenue	Tipping Fees	Tipping Fees
Agency Staff (# of full time staff)	Program Manager and staff (5)	Assigned from County Solid Waste Department (7)	Assigned from County Solid Waste Department (5)	Director and Staff (22)	Director and Staff (27)	Director and Staff (8)	General Manager and Staff (over 100)	Director and Staff (4)	Director and Staff (6)	Director and Staff (6)
Staff Employer	Contracted from County	Waste Authority	Contracted from County	Waste Authority	Waste Authority	Waste Authority	Waste Authority	Waste Authority	Waste Authority	Waste Authority
Publicly Owned Facilities	None	None	1 - Landfill 4 - Transfer Stations	None	None	None	None	None	None	None
Issue Revenue Bonds	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Facilities Owned by Waste Authority	None	1 - Landfill 1 - MRF 1 - HHW Facility 1 - Composting (all on same site)	None	3 - Landfills 3 - Transfer Stations 1 - HHW	1 - Landfill 2 - Transfer Stations 1 - HHW 1 - Composting	1 - Transfer Station 1 - HHW Facility (all on same site)	1 - Landfill 1 - MRF 1 - HHW Facility 1 - Composting (all on same site)	1 - Buy Back & Drop off Center 1 - Green Waste Drop off 1 - HHW Facility	1 - Transfer Station 1 - MRF 1 - HHW facility (all on same site)	1 - Landfill (closed)
Public & Agency Owned Facility Operations	None	Contracted	By County and Private operators	Contracted	Waste Authority staff	Waste Authority staff	Operated by Waste Authority staff	Private	Contracted	Contracted
Privately Owned Facilities	None	None	MRF's	Transfer Station, MRF & Composting	1 - MRF 1 - C&D	1 - MRF	2 - Transfer Station, 1 - MRF & 1 - Composting	2 - Landfills 5 - Transfer Stations/MRF 2 - Composting	1 - Landfill	2 - Transfer Stations 1 - MRF 1 - HHW Facility 1 - Composting (all on same site)
Facility Designation (Flow Control)	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rate Setting/Approval	No, Approved by Member Agencies	Review & Recommend Rates, approved by member agencies	No	Yes	Yes	Yes	Yes	Yes	Review & Recommend Rates, approved by member agencies	Yes

¹ These include dedicated sources of revenue. Revenue received through various grant programs is not listed, however most JPA's receive some funding through grants.

Appendix A Northern California Solid Waste Management Authorities										
Item	Name of Authority									
	Marin Hazardous and Solid Waste JPA	Western Placer County Waste Management Authority	Sonoma County Waste Management Agency	Salinas Valley Solid Waste Authority	Humboldt Waste Management Authority	Del Norte Solid Waste Management Authority	Monterey Regional Waste Management Authority	Central Contra Costa Solid Waste Authority	South Bayside Waste Management Authority	West Contra Costa Solid Waste Authority
Rates for Member Agencies	Vary based on service requirements of member agencies	Same	Vary based on service requirements of member agencies	Equalized	Equalized	Same	Same	Same	Vary based on service requirements of member agencies	Same
Closure & Post Closure Monitoring & Maintenance	No	Yes	County	Yes	Yes	Yes	Yes	Yes	No	Yes
Solid Waste Planning	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Public Education & Outreach	Some, most done by Member Agency haulers	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enter into Collection Franchise Agreements	No	Yes	No	No	No	No	No	Yes	Negotiate - Approved by member agencies	No
Enter into Facility Operating Agreements	No	Yes	No	Yes	Operated by Authority	Yes	Operated by Authority	Yes	Yes	Yes
Enter into Disposal Agreements	No	Yes	No	Yes	Yes	Yes	Operated by Authority	Yes	Yes	Yes
Enter into Processing Agreements	No	Yes	No	No	No	Yes	Operated by Authority	Yes	Yes	Yes
Permanent HHW Facility in region	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HHW Program Management	Yes	Yes	Yes	Yes	Operated by Authority	Yes	Operated by Authority	Yes	Yes	Yes
Enter into HHW Operating Agreements	Yes	Yes	Yes	Yes	Operated by Authority	Yes	Operated by Authority	Yes	Yes	Yes

Appendix B

Summary of Recommendations

Appendix B
Summary of Recommendations

Responsible Party	Item	Recommendation	Estimated One-Time Cost	Estimated Ongoing Cost	Potential Funding Source	JPA or Member Agency (MA) Staff Required	Diversion Percent	Diversion Tons	Advantages	Disadvantages	Facility Infrastructure Exists in County?	Time Needed for Implementation
JPA	1	Increase Communication/ Assistance of the JPA with other County Departments (e.g., used oil programs, sharps and pharmaceuticals)	N/A	\$40,000 + Materials and staffing	Disposal Fee	1/3 Full-Time Equivalent (FTE)	N/A	Supports #4-18	Enables JPA/County to identify programs that joint efforts can be of benefit. Most benefit could be related to countywide programs such as grants and EPA publicity to businesses and residents.	Coordination may be hindered by authority restrictions on the JPA.	N/A	A couple months to discuss programs, JPA/County roles/authority and determine protocol.
	2	Increase JPA's Role in Assisting Administration of Member Agency and Countywide Programs Could support #6-10 below.	\$200,000 (Fund Phase II)	\$120,000 + Materials and staffing	Disposal Fee	1 FTE	N/A	Supports #4-18	JPA's technical knowledge can be a resource and help increase diversion potential.	JPA role would have to be defined to ensure communication and prevent overlapping of efforts.	N/A	Approximately six months-1 year. Will require increased authority to the JPA and parameters for level of assistance to provide.
	3	Increase Board of Directors Meeting Frequency	N/A	N/A	Disposal Fee	No change to current staff levels.	N/A	Supports #4-18	Increases communication with Member Agencies. Opportunity to get more feedback on programs and areas for the JPA to assist with.	Depending on frequency, there may not be enough time in between meetings to warrant updates. Requires Board of Directors to increase JPA efforts.	N/A	A couple months to get consensus on meeting schedule.
	4	Help Facilities with Siting and Permitting and a) Solid Waste and b) Non-Solid Waste JPA materials and staffing	N/A	\$120,000 + Materials and staffing	Disposal Fee	1 FTE	40%	Supports #18	Opportunity to create "green jobs" and divert reusable material from disposal.	Siting options are very limited for non-processing facilities (resale) and siting solid waste processing facilities is not foreseen.	No. Land use restrictions and permitting make new solid waste facilities improbable.	Ongoing.
	5	Support Extended Producer Responsibility (EPR) and Waste Reduction Policies at State and National Level Public education	N/A	\$120,000 + Materials and staffing	Disposal Fee	1 FTE	N/A	0.05 - 5% Note that JPA to promote EPR responsibilities to current EPA businesses and disposal options to materials are residents. Education on the countywide banned from level will be the most efficient way of disposal, business outreach and promotion.	Requires JPA staff time to develop education materials and meet with businesses. Tonnage diverted may not be quantifiable.	Requires JPA staff time to develop education materials and meet with businesses. Tonnage diverted may not be quantifiable.	Yes.	A couple months to develop the materials and identify businesses that should be complying. Outreach should be continued on an annual basis.
Member Agencies	6	Phase I JPA Subtotal Revise Solid Waste Ordinances Could be done as part of #2 above.	\$200,000 \$5,000- \$10,000 each MA	\$400,000 N/A	Franchise Fee, General Fund	1/4 FTE	N/A	Supports #7, 9 & 18 waste practices and issues.	Will update standards to reflect current solid waste practices and issues.	Will require staff time to revise ordinances.	N/A	Three months to 1 year.
	7	Revise Franchise Agreement Language Could be done as part of #2 above.	\$25,000- \$75,000 each MA	N/A	Franchise Fee, General Fund	Contract staff/ consultants	10%	Supports #9, 12, 13, 14, 15, & 18 50% in 2006.	Explicitly requiring 50% diversion in contracts would increase the diversion rate. Only one hauler achieved at least 50% in 2006.	Haulers that dispose of material may have to change operations and use new facilities. Could result in rate increases or decreases depending on processing versus disposal tip fees.	Yes.	Three to six months for franchise agreement revisions.
	8	Adopt, Enforce, and Homogenize the Construction and Demolition Ordinance Could be done as part of #2 above	\$5,000- \$10,000 each MA	\$5,000 each MA or \$60,000 for region	Franchise Fee, General Fund, Disposal Fee	1/2 FTE (MA and JPA)	10%	22,900 and supports #18	Improves operations of haulers if multiple Member Agencies have the same requirements. Also creates opportunity for JPA to help education regionally.	Coordination of Member Agency needs and negotiation to develop requirements.	Yes.	Three months to 1 year (time to develop the ordinance and adopt it).

Appendix B
Summary of Recommendations

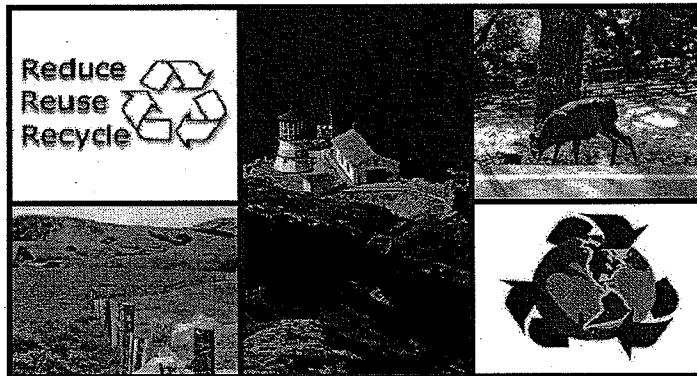
Responsible Party	Item	Recommendation	Estimated One-Time Cost	Estimated Ongoing Cost	Potential Funding Source	JPA or Member Agency (MA) Staff Required	Diversion Percent	Diversion Tons	Advantages	Disadvantages	Facility Infrastructure Exists in County?	Time Needed for Implementation
	9	Adopt and Enforce Multi-Family Dwelling and Business Recycling Ordinance. <i>Could be done as part of #2 above.</i>	\$5,000- \$10,000 each MA	\$5,000 each MA or \$60,000 for region	Franchise Fee, General Fund, Disposal Fee	1/2 FTE	10% (as part of wet/dry collection)	29,700	Would increase efforts to the sectors and help make higher grade recycling loads. Recommended that ordinance remain consistent for all Member Agencies. Ordinance will help make diversion goals as part of franchise agreement more attainable.	Education efforts are needed to implement. Can be require significant staff time to visit premises and promote ordinance.	Yes.	Three months to 1 year (time to develop the ordinance and adopt it).
	10	Encourage Consumption and Disposal Changes. <i>Public education. Could be done as part of #2 above.</i>	\$5,000- \$10,000 each MA	\$5,000 each MA or \$60,000 for region	Franchise Fee, General Fund, Disposal Fee	1/2 FTE	1%	2,300	Reduces the waste generated upstream and promotes reuse and repair of material.	Can be a long process to change consumption and have impact in reducing disposal.	Yes.	Immediately; ongoing process
	Phase I Member Agencies Subtotal		\$45,000- \$115,000 each MA	\$15,000 each MA- \$180,000 for region								
Phase II												
JPA	11	Promote Regional Sale and/or Disposal Bans	\$50,000 + for public education	\$30,000+	Disposal Fee	1/4 FTE	0.50%	1,100	Encourages recyclable products to be sold and therefore remove disposable items from the waste stream.	Requires ordinances to be passed. Will only be effective if all Member Agencies have similar ordinances. Will require compliance oversight.	N/A	Immediately; ongoing process
	Phase II JPA Subtotal		\$50,000+	\$30,000+								
Haulers (via Member Agencies)	12	Implement Wet/Dry Collection Routes	Franchise Agreement Revision	2%-10% rate increase	Customer Rates	N/A	44%	102,000	Based on re-routing of trucks rather than new equipment purchases. Enables homogenous, high grade recyclable materials to be collected with little contamination as compared to non-wet/dry routes.	Time and effort in developing new route and retaining drivers.	N/A	Approximately six months-1 year. Will require recruiting of trucks and potentially changing collection days.
	13	Offer Residential Unlimited Services of Recycling and Green Waste Containers	Franchise Agreement Revision	1%-3% rate increase	Customer Rates	N/A	1%	7,300	Free service could have people that dispose of green waste rather than pay for an extra container.	Haulers may have more containers to service and may lose current revenue.	Yes.	Up to 1 year; franchise agreement would need to be amended.
	14	Add Materials Collected to the Recycling Stream	Franchise Agreement Revision	1%-3% rate increase	Customer Rates	N/A	1%	2,300	Increased diversion of currently disposed materials.	Recycling markets will be needed to effectively divert material and minimize potential rate increases due to larger material stream.	Yes for sorting, but recycling markets need to exist.	One year to get program underway (determine facilities to accept the material for diversion, public education, etc.)
	15	Add Food Waste Diversion to Collection Services (Residential and Commercial)	Franchise Agreement Revision	1%-5% rate increase	Customer Rates	N/A	#VALUE!	4,500 and supports residential stream that can result in #12 & 16 significant diversion.	Food waste is the next material in the supports/residential stream that can result in #12 & 16 significant diversion.	Lack of facilities exist locally to process the material. Transport and tip fees may result in a rate increase.	Not locally. Material would need to be transferred.	Two to five years to identify potential facilities and amend franchise agreements.
	16	Implement Food Waste Digestion	Franchise Agreement Revision	2%-10% rate increase	Customer Rates	N/A	N/A; tonnage accounted for with collecting food waste	N/A	Method of diversion that can provide energy benefits and reduce carbon emissions.	Does not increase diversion. Need facilities to process material.	Limited infrastructure is being developed and siting is difficult in the County.	Between 1-5 years. There are a variety of pilot to small scale projects planned/underway. Infrastructure to handle material for the whole region would need to be developed, permitted and built.
	17	Promote Backyard Composting	\$5,000- \$10,000 each MA	\$5,000 each MA or \$60,000 for region	Customer Rates	N/A	#VALUE!	4,500 as part of food waste material. May help promote overall diversion(#15)	Direct benefit for the homeowner to divert food waste material. May help promote overall improvements in waste generation.	Education programs and workshops are needed to begin and sustain efforts.	N/A	Two to five years to develop programs and actively promote it.

Appendix B
Summary of Recommendations

Responsible Party	Item	Recommendation	Estimated One-Time Cost	Estimated Ongoing Cost	Potential Funding Source	JPA or Member Agency (MA) Staff Required	Diversion Percent	Diversion Tons	Advantages	Disadvantages	Facility Infrastructure Exists in County?	Time Needed for Implementation
Member Agencies		Phase II Hauler Subtotal	\$5,000- \$10,000 each MA	\$5,000 each MA or \$60,000 for region								
	18	Require Deconstruction/ Salvage/ Resale of Construction and Demolition Materials	\$5,000- \$10,000 each MA for public education	\$5,000 each MA or \$60,000 for region	C&D deposit system or fee	N/A	5% in conjunction with C&D ordinance and resale facilities	11,500 and supports #8	Opportunity to create "green jobs" and divert reusable material from disposal. Material is generally heavy and can have a significant impact on disposal tonnage.	Assistance is needed to educate homeowners of possibilities. Will require staff time to conduct outreach and provide incentives for these types of enterprises to come to the County (ReStore, etc.)	Small operations exist. More operations are needed to promote deconstruction and create "green jobs".	Two to five years to identify potential deconstruction groups and solicit interest and barriers to operating in County. Allows time to identify non- profits, and if needed, help with the siting of non-processing facilities (resale only).
		Phase II Member Agencies Subtotal	\$5,000- \$10,000 each MA	\$5,000 each MA or \$60,000 for region								
		Total	\$910,000- \$1,870,000 for the region	\$730,000* for the region and 7%-31% rate increase								
Estimated Total Division												
183,600												

Comments on Marin County Hazardous and Solid Waste Management JPA

Final Draft Zero Waste Feasibility Study



**Comments have responses if they were
received by October 9, 2009**

Comments Received by 10/9/09

Matt McCarron, Local Task Force, Novato Representative
Dee Johnson, Novato Sanitary District
Jon Elam, Tamalpais Community Services District
Roger Roberts, Marin Conservation League
Marin Sanitary Service

Comments Received after 10/9/09

Loretta Figueroa, Almonte Sanitary District, Local Task Force Special
District Representative
David Haskell, Member JPA Local Task Force on Solid Waste
Judy Schriebman

Matt McCarron

Local Task Force, Novato Representative

Comments on Draft Zero Waste Strategic Development Plan 10/8/09

By Matt McCarron, Local Task Force, Novato representative

The plan is being prepared for the Marin County Hazardous and Solid Waste Management JPA. This JPA is responsible for Solid Waste planning and reporting for the county of Marin and to the State Integrated Waste Management Board to meet AB 939 requirements.

General Comments:

1. Overall impression, the document does capture all the Solid waste structure, basic activity, shortcomings per district and offers a fairly comprehensive set of recommendations to try to head toward Zero Waste.

Response: Comment noted.

2. No timeline is associated with recommendations to achieve the JPA adopted goal of 2025. The date coincides with the closing of Redwood Landfill as it reaches it's expected capacity based on the county's current projections.

Response: Comment noted.

3. Author admits that there are limitations in the data used to do the analysis due to access from haulers and franchise agencies. Some reliable data from Marin Sanitary Service's (MSS) own waste characterization study is helpful in predicting basic trends, but not targeted efforts is specific service area out side of MSS service areas or comparable collection methods in those areas. But this does demonstrate a weakness in the county waste assessment that should be reflected in the recommendations, but is not. We will need better data all along the time line to zero waste, so that proper feedback will facilitate design of programs to address progress toward the goal.

Response: Comment noted. Acquiring better data for collection is part of Recommendation 7 where franchise agreements would provide more detailed collection information based on service sectors.

4. Diversion and disposal info on pages 11-16 is helpful but only represents hauler info from residential activity in general. The aggregated data only represents about 40-45 of the county's diversion. The county's actual diversion is approximately 71%, we need more clarity in this data gap so we can see if the recommendations will actually apply to on-going activities not one time diversions. More data needed.

Response: In the "Hauler Services" subsection, it is stated:

"It is important to note that diversion rates stated in this section are only for the materials collected by the haulers. These diversion rates account for 30 percent of the JPA's AB 939 reported diversion, which also includes material from store back-haul recycling activities and self-haul operations that never enter the possession of the hauler."

In addition, the Feasibility Study is focused on up-stream and down-stream waste generation reduction. Because the AB 939 diversion rate represents material that is backhauled by

businesses, grasscycled through park operations, etc., the recommendations presented in this report are focused on programs that either are not optimized or do not exist. All recommendations are intended to provide on-going diversion of disposed streams/waste prevention rather than being one-time activities. The JPA may be able to provide more detail on the activities contributing to the AB 939 diversion if that information is still desired, but it does not affect the recommendation design because disposed materials are a main focus of determining the feasibility of achieving Zero Waste.

5. Something conspicuously absent in the recommendation is the JPA fee structure and it's sustainability. The cost of programs notwithstanding, the JPA receives its funding on disposal fees at the landfills. If the waste disposal goes down as anticipated by the program's plan, the JPA will be continually raising fees on disposal to stay even. Alternate methods of funding the JPA need to be identified.

Response: See Section VIII of the report.

Specific Comments:

Page 5 column 2 Green Business program. The consultant identified the Marin County Green Business as administer by the agency, it is administer by the Marin County Community Development Department. Point of history: the Green Business program was originally proposed to the JPA as a tool, but staff recommended against it since they could not understand the cost of implementation. The Marin program is fastest growing program in the CA Green Business Network since it's inception.

Response: Correction made.

Page 8 Column 2 Member Agency Roles. This exposes a fundamental flaw in the possible execution of a Zero Waste plan for Marin County. Special districts that issue franchise service agreements are not part of the JPA and therefore not bound to the Zero Waste policy adopted by the JPA. Since a the bulk of recommendations are tied to diversion and recycling activity, the hauling contracts are not required to be revise to assist in this process making it impossible to implement the suggested remedies. The current city manager-county administrator structure also has accountability to the public issues. These managers are not elected officials, and therefore do not posses authority on spending or approval of model ordinances suggested as remedies to some of the diversion recommendations. Elected official on the Board of Supervisors, city councils and special district boards do have this authority.

Response: Comment noted. This is why Phase II, implementation, is predicated on participation of the Member Agencies. The involvement of the elected officials of the Member Agencies and staff execution is necessary for working towards the Zero Waste Goal.

Page 44 column 1 Steps to achieve first bullet.

Should be "Work with The county and **City** planning Departments"

Response: Correction made.

Dee Johnson

Novato Sanitary District

Comments – Zero Waste Plan inaccuracies

Page 2 – Clarify that hazardous waste DOES NOT count towards diversion goals – although it's a great ZERO Waste goal

Response: Footnote has been added: "Household hazardous waste is not considered in determining diversion rates, because it is not legal to dispose of the materials in landfills. However, reduction of HHW is consistent with a Zero Waste Goal."

Page 3 – Clarify that the MMS waste characterization study conducted in 2007 did not include Novato waste stream

Response: "The study did not include Novato waste stream. " was added as the last sentence on the waste characterization bullet (3rd bullet in "Data Sources" subsection).

- Waste characterization data used was based off of a study of the Marin Sanitary Service (MSS) Transfer Station conducted in 2007 for residential and light commercial loads. *The study did not include the Novato waste stream.*

Page 6 – Clarify "purpose" of the JPA - refer to Scope of JPA agreement – planning for AB939 mandates, hazwaste plans, promoting programs, public involvement. Section 6.1 of the agreement are required programs by all member agencies. Section 6.2 – which includes programs such as household hazardous waste, public outreach, etc are member agency elective programs - not required.

Response: The second paragraph of "JPA Role" section has been amended to read: "The JPA is administrated by the Marin County Department of Public Works/ Waste Management. The role of the JPA is determined by the policies that are adopted by the JPA Board and the JPA Executive Committee. Based on *the JPA agreement, and the policies and direction from the Board and Executive Committee*, the JPA has the following responsibilities:

Page 6 – List of JPA responsibilities:

Christmas Tree Recycling – member agencies and haulers do this, not JPA

HHW education – NOT for Novato (I don't think the JPA does any for San Rafael either)

Collecting batteries – again, not for Novato

Response: The responsibilities noted are related to public outreach that affects all Member Agencies rather than being specific. Collecting batteries bullet has been modified to: "Collecting batteries from County offices."

Page 7 - Novato submits an annual HHW report to the JPA staff which includes detailed information about what is collected at the HHW facility, tonnage, programs operated, costs, etc. Don't know what San Rafael does

Response: Will check with the JPA.

Page 7 – Programs NOT managed by JPA:

Used Oil Block Grant – received by City of Novato and managed by Novato Sanitary District

Response:

- “Used oil block grant collection (program is managed by the Marin County Stormwater Pollution Prevention program (MCSTOPP)) , and the ~~City of Novato~~ *Novato Sanitary District;*”

“Marin County Solid and Hazardous waste Permanent Facility” - I don’t think this is the correct name for this facility – it’s the Household Hazardous Waste Facility operated by the City of San Rafael and MSS

Response: Comment noted.

Household Hazardous Waste collection – Again, this is the Novato Household Hazardous Waste Permanent Facility operated by the Novato Sanitary District and funded by AB939 fees.

Response: Edited to read:

- Household Hazardous Waste collection *at the Novato Household Hazardous Waste Permanent Facility for the Novato Sanitary District (NSD) (program is operated by the NSD and funded by AB 939 fees);*

Pharmaceutical and sharps collection – managed by Environmental Health and partially funded by Novato Sanitary District and others

Response: Bullet edited to read: “Pharmaceutical and sharps collection (program is managed by the County Environmental Health Department *and is partially funded by the NSD and others;*”

Battery collection program in Novato is managed by Novato Sanitary District

Response: Bullet edited to read: “Battery collection (program is managed by the San Rafael Fire Departments *and in Novato by the NSD).*”

Also, Novato has a fluorescent tube collection program at Pini’s Hardware and the Recycling Center

Response: Comment noted.

Page 8 – JPA supports operation of San Rafael HHW facility

Response: Bullet edited to read: “JPA: supports operation of the *Marin County* HHW facility and staffing; develops public outreach and planning documents; and reports to state agencies.”

Page 8 Under Member Agency – Might want to clarify that City of Novato – unlike all the other member agencies - does not administer waste franchise agreement; also, the Member Agencies don't adopt the JPA budget – the JPA Board does this; also, under Used Oil Block Grants – City of Novato applies on own, but JPA, thru County DPW, applies for the remainder of County.

Response: Bullet edited to read: "Administer their Franchise Agreements with solid waste collection companies and approve rate adjustments. *Note that the City of Novato's franchise agreement is administered through the NSD;*"

"Approve JPA Budget" bullet has been removed.

Used Oil Block Grants section, 2nd paragraph, page ____ amended to: "The County of Marin Stormwater Pollution Prevention Program handles all aspects of the Used Oil Block Grants for the County except for the City of Novato *which applies for and administers the grant on their own through the NSD....*"

Page 10 – Although the service areas are technically unincorporated county, it might be good to add franchising agencies: these also include: Bolinas and Stinson Beach under Redwood Empire; also, Ross Valley Sanitary District and Las Gallinas under MSS; and I think Marin City CSD still has an agreement under Bay Cities

Response: Franchising agencies have been added to Table 1.

Page 11 – you indicate that MSS facility operates at only 40% of capacity during a STRONG economy; however, elsewhere in report you indicate that MSS does not have capacity to serve entire county – sounds contradictory

Response: Comment noted. Ability to handle the waste stream once C&D ordinances are adopted and enforced throughout the County is unclear. If the Member Agencies and franchise agencies direct all materials to MSS, it should only be done if some type of tipping fee oversight by the participating agencies.

Page 13 – Novato Disposal. Household Hazardous Waste is handled at the Novato Household Hazardous Waste facility, which also collects TV's and CRT's. Novato Sanitary and Novato Disposal also operate 2 E-Waste events a year, 4 days each, where any Novato residents can bring any electronics for recycling. Under public education, Novato Disposal also distributes backyard composters to Novato residents at a reduced cost.

Response: Information added to Novato Disposal's service description.

"Household Hazardous Waste and E-Waste disposal is handled ~~by~~ at the Novato Recycling Center, *which also collects TVs and CRTs. Novato Sanitary and Novato Disposal also operate 2 E-Waste events a year, 4 days each, where any Novato residents can bring any electronics for recycling.*"

"Public Education

As part of the franchise agreement with Novato Sanitary District, Novato Disposal advertises cleanup events, the Christmas tree program, recycling and HHW programs, and also requires a Novato Solid Waste Management Work Plan and a bi-annual newsletter. In addition, to the efforts of Novato Disposal, the Novato Sanitary District produces a comprehensive recycling guide that identifies reuse and recycling locations by material type and hauler service information. *Novato Disposal also distributes backyard composters to Novato residents at a reduced cost.*"

Page 14 – To clarify, the MSS waste characterization study did not take into account Novato.

Response: Footnote was added: *"The study did not include the Novato waste stream."*

Page 18 - Marin Resource Recovery City - Location is San Rafael, not Marin

Response: Correction made in Table 11.

Page 20 – Used Oil Block Grants – I don't know what the County received, but Novato was awarded \$13,424. Novato has 4 certified oil collection centers **and** the Novato Recycling Center, which collects oil, but is not certified, for a total of 5. I don't know where you got these numbers for oil collection– I have Novato's data if you want it. We send this data to the JPA as part of our annual HHW report which I mentioned earlier, and of course to the State as part of our UOBG Annual report. However, I really don't know what this has to do with Zero Waste – it's not diversion; we do work with the County on some county-wide used oil campaigns. Our data is collected and reported separately as required by the grant.

Response: Comments noted. Data was reported by the Centers to the state for reimbursement. Text has been revised to read:

"The County of Marin has 13 certified collection centers, with six in San Rafael, ~~five~~ four in Novato (plus the Novato Recycling Center) and one each in Greenbrae and Pt. Reyes."

Page 22 – Data not provided from sharps collected at Novato permanent HHW facility?? I'd be happy to provide it – 130 pounds were collected in FY 07/08. Our stats show this increasing for FY 09/10

Response: Comments noted. Revisions to text are below.

"Tables 12 and 13 give a breakdown of the collection locations and identify the amount of sharps that have been collected. ~~Data of sharps collection that were disposed at the Novato Sanitary District's permanent HHW facility were not provided and~~ The numbers do not include any sharps that may have been generated through regular business operations (e.g., hospitals) or disposed through mail-back programs."

Footnote is also added to Table 13 to clarify data from Novato not included for two of the fiscal years. *"FY 05-06 and FY 06-07 does not include the Novato permanent HHW facility collection."*

Page 24 – Commercial recycling ordinance – Will be required a/o 2012 due to AB32

Response: Comment noted. Second to last sentence in the Commercial Recycling subsection revised to: "Regardless, mandatory commercial recycling ordinance will need to be adopted *in 2012* as part of *compliance with AB 32.*"

Page 28 – Do you have an estimate of tons per day of food waste DISPOSED? (Might be an interesting number)

Response: Estimation based on the MSS waste characterization study has food waste disposal at over 53,000 tons. This is provided in Table 9 of the report.

Page 29 – Currently all Novato Disposal green waste sent to Redwood is not being used for ADC. Please clarify

Response: Text added to last paragraph of Green Waste section.

"Marin County jurisdictions already provide residential curbside collection of yard waste. Redwood Landfill uses the material for use as ADC, erosion control and compost. *Novato Disposal notes that green waste sent to Redwood Landfill from them is not being used for ADC.* Seventeen composting facilities have been identified within 100 miles of the City of San Rafael. Table 17 below lists these facilities by distance."

Page 33 – Small appliances would not be considered rubbish – they're probably E-Waste and must be handled as a universal waste or a hazardous waste.

Response: Sentence has been edited to read as follows:

"More specifically, rubbish would include mixed material products (such as ~~small appliances and toys~~), aseptic packaging, and film plastics. Rubbish would be classified as those materials for which there is no viable market."

Page 39 – Alkaline batteries ARE covered by a law in the State of CA (Universal Waste regulation) that bans them from the trash as of February, 2006. They must either be sent for recycling or handled as a hazardous waste.

Response: Text revised as follows.

"While there are options for rechargeable batteries, they collect about 10 percent of total batteries generated by the public, the rest being alkaline batteries, which ~~are not covered by any law~~ and have no stewardship program."

Page 46 Item 8. Novato HAS a C&D ordinance – remove from should adopt list.

Response: Correction made.

Page 47 – Item 9. Indicate that a commercial recycling ordinance will be required to be adopted by 2012 as a result of AB32.

Response: Text edited as follows:

"This ordinance will be required to be adopted by 2012 as a result of AB 32. The JPA should consider implementing a regional ordinance to require recycling of all recyclable materials generated at businesses and multi-family dwellings similar to Sacramento County. With residential customers currently with full diversion options, Multi-family dwellings and businesses are the next sectors that can achieve high diversion."

Appendix A Chart – Clarify that all these JPA's have different responsibilities – might be good to add service area population, too. But we're really comparing apples to oranges here. Also, under Board members for JPA it's either an elected official or agency staff – not an appointee.

Response: Comments noted. Change made to Board members.

These are just the inaccuracies I uncovered. We will also submit some general comments to JPA staff to be included with the JPA Executive Committee packet.

Jon Elam

Tamalpais Community Services District

REVIEW AND ANALYSIS OF DRAFT ZERO WASTE STRATEGIC PLAN

As a member of the Marin JPA Advisory Committee, we are responsible for providing thoughts and insight to the County JPA Board on issues relating to solid waste policy in Marin County.

As a step in that process, they recommended and the JPA Board agreed to provide the funding to undertake a county-wide strategic plan for solid waste management that could lead to a program of zero waste by 2025 in Marin County.

This is a summary of that report with recommendations by its author.

The theme of the report is that landfill diversion needs to increase from current rate of 72% to 80% by 2012 and to zero waste by 2025. The report though mostly covers a range of things that are more information based than strategic, and perhaps interesting to the reader, but not clear as to how they lead to achieving the plan's goals.

Response: Comment noted. Section VII, Recommendations, outlines the programs and policies to obtain the Zero Waste Goal.

This was a useful reminder, as after nearly four years of service, that the work of the JPA Advisory Committee itself remains unfocused, undefined and basically bounces from meeting to meeting without clear purpose. This is reflected in the lack of quorums at many meetings and other times meeting have been cancelled. If the goals this proposed plan recommends are to be successful, having a broad coalition such as the Advisory Committee will need to be in place and very focused.

Response: Comment noted.

The report is confusing in separating out various components of the study. For instance, even the introduction itself spends much of its time discussing who the JPA is and little on why the study is being done.

Response: Comment noted.

Similarly, the goals section confuses the goals of the study versus the JPA, and does more to introduce the study's actors than did the introduction section where they should have been. It seems difficult to grasp, if I was a first time reader, on what and who is doing this and why.

Response: Comment noted.

The methodology section probably should have been an appendix versus a section. Obviously, to do a study requires the collection of a base of data. It suggests, but does not explain that the consultants used a model "that can be adjusted to reflect anticipated participation and diversion".

That suggests the study could change the results to any goal wanted without any definition of the assumptions. How can a reader trust the plan's outcomes?

Response: Comment noted.

The report gives a list of all data sources they collected and evaluated, but again suggests that all data they wanted or needed was not able to be obtained. The reader is left without any details as to the importance of the missing data or why they could not obtain it.

Response: Comment noted.

The author lists several impediments to achieving the zero waste goal, but does not explain exactly how.

Response: Section VII, Recommendations, outlines the programs and policies to obtain the Zero Waste Goal.

Solid waste collection efforts are carried out in a decentralized manner by several separate haulers. Marin's decentralized collection system is often confusing to the residents and the range of services each provides is even slightly different. Marin County is unusual in the state with the numbers of service providers in a range of areas such as sewer collection and treatment, fire, park and recreation, and solid waste. In the case of solid waste, each city and many of the unincorporated areas have separate franchise (or service) agreements that vary in length and services provided. In most cases, the actual contract entity has little day-to-day role in the services provided, but receives a franchise fee now up to nearly 15% of the income collected by the haulers for the general funds of the cities or County.

Response: Comment noted.

These haulers have carried out a strong program of collection and in 2007 the JPA reports they deposited 229,271 tons in landfills. This is only a slight decrease from the 250,000 tons deposited in 1995.

Response: Comment noted. Also see Figure 2.

The study does not lay out the picture of how the collection system works and how little communication goes on between all these franchises and the JPA in terms of the study and its goals. It is great that the study team holds public meetings, but the real actors in garbage collection are not attending for the most part and have exhibited little interest in remodeling how the system works. This runs the risk that the study's goals create a heightened sense of expectations on the part of the environmental community and zero waste advocates, but may result in little change in how the system works since the franchises are not much involved.

The study does acknowledge these issues though. It states on pg 4, the JPA has a minimal role in program implementation and does not have any direct authority or resources to implement any new programs that might increase diversion.

Response: The intent of strengthening the JPA in policy and program involvement is to create a Marin County resource that is more able to lead the changes needed. This includes better communication and assistance between Member Agencies and the waste hauling community.

It acknowledges that each agency administers its own agreements and that they do not have any diversion goals or standards in them. It does not mention that many of the agreements have a long life and can be out for ten or more years into the future before coming up for renewal.

Response: Comment noted.

Given this decentralized system, each hauler is responsible for managing the disposal of their collected waste streams. This has taken the pressure off the system and worse, the report suggests that the County has insufficient capacity with in itself to process the amount of organic waste and construction and demolition materials that will be needed to achieve the diversion goals the study espouses.

Response: The report is not intended to suggest that the decentralized collection system has caused insufficient capacity. The intent was to show the lack of local facilities for processing of certain materials and that unless franchise agreements have diversion requirements, disposal can be a cheaper option than transporting material to out-of-county facilities.

One of the impediments not listed is that while the system has many haulers, there remains little competition between them. This may limit a franchise's options and requires, before any of the goals of a study like this, that the haulers get on board with the proposed changes.

Response: Comment noted.

Due to this complex system of franchises (a total of 25), the cities and the County agreed that instead of each one doing the required AB 939 reporting and data collection, that they come together and create a Joint Powers Authority (JPA) to do that work for them. That cost is supported by a regional tip fee collected on waste tonnage at the Redwood Landfill in Novato that many of the haulers use. The JPA is housed within the County of Marin Public Works Department and has been recognized for many of their efforts over the years.

Several other Bay Area counties have similar program management efforts, but have contracted out to non-governmental agencies the implementation of diversion efforts with tipping fee revenues. Alameda County's StopWaste.org is among the most successful and one often mentioned as a model that perhaps Marin County could emulate.

Response: Comment noted. The "Marin JPA Role Compared to Other JPAs" subsection on page 8 identifies the differences in JPA responsibilities, funding and staffing as a starting point to formulating how big of a role the Member Agencies want the Marin JPA to have.

The report lists a number of tasks the JPA carries out. Many are ministerial as mentioned, including the collection of haulers data, they also have a small public outreach effort, including a page of recycling resources in the yellow pages, full page ads in the papers outlining Christmas tree collection efforts, and develop draft model ordinances. Basically, the work is to fill in a county-wide focus on county-wide information efforts dealing with solid waste. The key point though, as mentioned earlier, they do not manage or interact with the many franchise operations and how they do their work.

Response: Comment noted.

The study gives reports on each hauler and the areas they serve and contains outdated collection data for those areas. This is useful and should be in the form of an appendix in the study and not in the body of the report.

Response: Comment noted. This information is provided in the body to provide context to the collection efforts undertaken.

Similarly, the report gives details on various disposal sites and locations that county haulers seem to use. Again, this is useful background information and should be an appendix as the listing itself does not help address the study's goals.

Response: Comment noted. This information is provided in the body to provide context to the collection efforts undertaken.

Finally, after sorting through 41 pages, the reader gets to the recommendations section. They are broken down into two phases – The first looks at the JPA itself, its roles and responsibilities, and the second relates to creating regional coordination and leadership that would be required to achieve the zero waste goal.

GOALS – PHASE I

Goal 1: Increase the Communication Assistance of the JPA with other County Departments .

This should be an internal recommendation goal and has little effect on various JPA agencies such as cities. To have it as the lead goal sends a very confusing message about the study's larger goals and is hardly the top goal of the study.

Response: JPA staffing would likely need to be increased if there is additional coordination between departments. Therefore the funding implications for the JPA and role that the Member Agencies desire for the JPA makes this a consideration for the Member Agencies rather than an internal issue.

Goal 2: Increase the JPA's Role in Assisting in the Administration of Member Agencies and County-wide Programs

The study suggests that member agencies do not have the resources to monitor all the available programs and implementation (i.e., what happens to the 15% franchise fee collected from each customer?). It remains unclear what the franchise holders would request or that the customers who will pay for this through higher rates want or need it. Why are the haulers themselves not providing this service as a part of doing business with each entity they serve or are they?

Response: JPA staffing would likely need to be increased if there is additional coordination between departments. Therefore the funding implications for the JPA and role that the Member Agencies desire for the JPA makes this a consideration for the Member Agencies rather than an internal issue. In addition, regional franchise agreements would need to be modified (Recommendation #7).

Goal 3: Increase the Frequency of JPA Board Meetings

One of the real challenges in the Marin JPA model is that the representative for each city on the JPA is the City Manager. In few cases have any of them operated or are familiar with solid waste collection or solid waste policy. This is one reason most cities have turned to franchise haulers to carry out their services, thus leaving the City Manager time to manage a range of higher priority activities in each city or in the County. Given that reality, the idea of holding more meetings will do little to help raise the bar on collection. What needs to happen is to create a separate organization that operates in this area with each of the haulers and that brings technical expertise to the work (they of course might not necessarily support this). This would leave the City Managers to do what they do best and that is to manage agreements and work. Now an alternative argument is that Marin often is of the "no government is the best government"

approach and so unless it can be shown that the present system of benign neglect is not working, then there may not be support for any of this.

Response: Comment noted. Increasing the JPA role and authority would derive from the Board. In addition, because these meetings are the main contact with Member Agencies and Member Agency action is necessary for obtaining Zero Waste, increasing meeting frequency is a method to increase coordination.

Goal 4: Help Solid Waste and Non-solid Waste Facilities with Siting and Permitting Process

This recommendation is one of the most important in the whole study. In county after county, it has been found that unless a county is willing to provide the leadership to site key facilities, they just don't happen. Marin has been very passive in this area and played minimal roles in directing where facilities need to be. A Phase II piece of work needs to include a study of what others have done and how they did them. Monterey County is one great example. Many facilities are sited by counties and operated by private operators and that could easily work in Marin.

Response: Comment noted.

Goal 5: Support Extended Producer Responsibility (EPR) and Waste Reduction Policies at the State and National Levels

The JPA has been an active participant in the EPR area, as have several haulers. This is important, but should be a basic part of the work of the JPA, not a key goal of the study.

Response: Comment noted. It is part of achieving Zero Waste in the long-term and if not identified in the report as a recommendation, may lose prominence in activities undertaken by the JPA as their role evolves.

Goal 6: Revise Solid Waste Ordinances

The idea of working with each of the franchise agreements to modernize them and build in the language that reflects new collection goals is important, but it is a two-way street and the haulers themselves who benefit from these agreements financially should be the lead on this work. A workshop for various JPA member agencies is critical. In the case of a number of the cities, there exist solid waste subcommittees of the City Council that would welcome the information and education. The JPA needs to make sure before they incur the costs of doing this work, that there is an audience for it. The County developed a model C&D ordinance a while back and only a couple of cities have adopted it. Be careful not to get ahead of the issue on this. This is a Phase II strategy that is an implementation goal of adopted policies, not something that would have to stand on its own.

Response: Comment noted.

Goal 7: Revise Franchise Agreement Language

This is similar to Goal 6 and does little by itself to achieve the plan goals. Once again, a Phase II effort built around a set of specifics for each service area.

Response: Comment noted.

Goal 8: Adopt, Enforce and Homogenize the Construction and Demolition Ordinance

The goal of having a C&D ordinance is generally not in dispute. In each case though, who is responsible for administering it is the challenge. One of the ways to deal with it would be for the JPA to fund the local management and inspection by providing tipping revenues back to each city for carrying out this service. Marin County itself has had staff problems doing this on-site inspection work. Many building officials do not see this as a part of their work as a building official (many are contract employees), so once again this will be a challenge to carry out on our small scale system. The management of getting permits by the haulers and for them to keep records of each load and making reports back to each city is not cheap or easy. Some simplification of how a county-wide system would work is going to be required.

Response: Comment noted.

Goal 9: Encourage Consumption and Disposal Changes

This is an education program goal, a goal that most systems already carry out to some degree. The disposal levels are reflecting a new sense about waste and most haulers are seeing reductions in tonnage in 2009 over past years. Developing model materials for use by local newsletters is important, but in the end, the key is to link this back into policy foundation that includes recycling education and reuse.

Response: Comment noted.

SUMMARY

This list of Phase I activities seems quite light and of little value in leading to real change that achieves our zero waste goal. It should be completely redone and refocused around the larger goals and get away from just making work.

Response: Unless the foundation is developed/strengthened and the JPA has increased capability to assist and execute programs and policies with the Member Agencies, the recommendation that are in Phase II (implementation) will likely not occur.

GOALS – PHASE II

Goal 11: Promote Regional Sale or Disposal Bans

This comes with a lot of publicity, but the challenge with bans is that you have to have a monitoring process to make sure they are working, and that costs money. About the only effort undertaken so far revolves around plastic bags. There are other efforts on Styrofoam and plastic food dispensers are in the works though.

Opposition to this suggests that many of these products are recyclable and these bans raise costs for local businesses. Clearly a challenge in Marin will be how these efforts are coordinated since most service areas are quite small and so if one city does something, then the city adjacent to it needs to do it as well. The study suggests a ban would gain 1,100 tons of annual reductions. This against a deposit total of 229,000 tons is not even one third of one percent and will cost \$50,000 to implement. I don't think that has much of a payback or gets us close to the 80% diversion level.

Response: Comment noted.

Goal 12: Implement Wet/Dry Collection Routes

This gains significant tonnage at 92,000 tons diverted, but the basic organization of Marin County collections make this difficult to implement. It is hard to tell how many separate routes there are. It would not be a push to think there might be 100. The idea of creating separate wet and dry collection routes will be expensive and difficult particularly with many of the residential routes spread across steep roads and hillsides. There might be an opportunity to gain some cooperation between haulers on the wet side, by creating a company that works across service areas and focuses on specific product collections and disposal such as food wastes and grease. Many of the existing fleets are not designed to take wet products. Grease dumped into garbage or green waste carts spills when dumped into the trucks and can leak into the roadways. They can also increase cross-contamination of materials greatly, devaluing resale market values. This goal will need significant cross-franchise hauler cooperation and those efforts need to be funded upfront by the JPA if to be seriously considered.

Response: Comment noted.

Goal 13: Off Residential Unlimited Services for Recycling and Green Waste Carts

This is presently provided in a few cases. As recycling markets grew in the past, additional recycling pick-ups were provided. It is unclear how much additional recycling material and green waste could be generated if additional carts were provided. TCSD provides this service now and somewhere around 3-4% of the customers have requested extra recycling and green waste carts even though they are free.

Response: Comment noted.

Goal 14: Add Materials Collected to Recycling Streams

The JPA should have an agreement with a market consultant to help work with haulers to ensure that all marketable materials are collected. This is a very complex issue as the price of materials can vary from month to month. Product streams also may be unpredictable making the costs of capital to expand materials processing risky. TCSD does a range of things that are not profitable, but important to our residents. This includes curbside e-waste collection (anything with an electrical cord), fluorescent and CFL light bulbs, batteries (both regular and rechargeable), printer cartridges, and has small single day collection events for paint, paper shredding, and pharmaceuticals. These events can cost up to \$10,000 each, but have added value to our customers. Probably 4% of our annual collection costs of \$362/household go to fund these events. The public seems to greatly support them and it reinforces our goals of supporting a broad effort at recycling and reuse. Unfortunately, the State does not recognize these tonnages as a part of our diversion numbers and that needs to be changed. As markets expand, the JPA can do the research and help identify the proper resources customers need to utilize.

Response: Comment noted.

Goal 15: Add Food Waste Diversion and Collection Services (Residential and Commercial)

The major issue of the collection season is to broaden collection to add food wastes. San Francisco has led the way by requiring this with the risk of fines if people don't comply. The biggest enemy of food waste collections is the garbage disposal. The ease of washing plates and pans into the sink makes the trials and tribulations of having a separate collection container less appealing and a hassle. Even San Francisco, which has been offering this as an ongoing service, finds that just 25% of all households actually use the food waste collection system.

The issue breaks down into two parts. The first is the individual collection component with households and businesses; the other is the processing sites. Presently, the latter is still in the planning stage in Marin. Redwood Sanitary Landfill has proposed to do it, Marin Sanitary is doing a pilot, and even Central Marin Wastewater Treatment Plant is proposing using one of their digesters to process food wastes to create energy to help run the plant.

Within the next year this option will come online, but as in most cases, the JPA has not been a leader with this and has waited for the hauler community to develop options. This reflects the ongoing lack of leadership that will need to be overcome if the new higher diversion goals are to be reached. When the issue does come up, individual haulers have mentioned to their franchises that additional costs will be added if they want to implement this.

Response: Comment noted.

Goal 16: Implement Food Waste Digestion

This was mentioned under Goal 15, CMSA is working with their area to explore developing a digestion system. This has been successfully done in many parts of the country. Opponents suggest this waste stream ought to be composted and reused that way versus separating it out for

power generation. At this time, the issue is still very much in flux. A position by the JPA on this method needs to be reviewed.

Response: Comment noted.

Goal 17: Require Deconstruction/Salvage/Resale of Construction and Demolition Materials

This is a well known diversion strategy in many places. To implement this though will require a very focused program and investment strategy. The implementation details fall on others to carry out and will be expensive.

Response: Comment noted.

SUMMARY

It was hard to define the cost estimates for each of the goals listed. A preliminary analysis though suggests a cost of \$300,000 to \$500,000 depending on how many of the items are implemented. If they are funded through the JPA, they can be carried out with an additional tipping fee of \$1.50/ton. If the costs are passed through to the haulers, then additional rates may be needed.

Response: Comment noted. Also see Executive Summary Table ES-3 and Section VIII of the report that discusses potential funding options.

The report remains though quite vague and suggests many strategies that may not be viable, with unclear benefits and outcomes. Before Phase II in the work is done, a serious refocusing of the goals is going to be necessary.

Response: Comment noted.

SOME ADDITIONAL THOUGHTS ON OUR FUTURE

Response: Comments in this section are noted.

As we think about the architecture of our county system, we have not delved into that critical component of how the JPA and its many collection systems work together (if possible) to reach our goals.

The "impediments" section of the study suggests that Marin does not have the capacity to support the diversion goals and none of the goals suggest a path to create that capacity. Does this mean we must rely on facilities outside Marin County? What comes first – our expanded facility capability or higher diversion? Do additional tipping fees create the fiscal resources needed? What form should the facilities take? It is often suggested that to be really successful, a full sorting of all the waste flows is required. Could this be done?

A dirty MRF might be required to sort all C&D materials, commercial accounts and single stream collections (Sunnyvale's SMART station is one example already in place). What type of facility would be appropriate? A double sort system or one that is including garbage, recycling, and green waste.

Again, cost is an issue, with a full facility costing perhaps \$50 million – that sounds like a real impediment.

Composting facilities now due to emission levels are being required to move indoors - another hugely expensive deal. If the 80% goal is to be reached by 2012, organics will have to be diverted from any landfill.

What should the role of the JFA be? What could it be? Options might include helping private operators (public funding might be available). As materials are proposed to be eliminated from landfills, perhaps new enterprises and businesses will recognize opportunities and provide need capacity.

Alameda County has sought to integrate more programs together such as the Green Business Certification effort. The study suggests this (Goal 2) but with a much more decentralized system it would be hard to measure impacts on how this has increased diversion.

The 80% goal by itself is vague in terms of actual tonnage. Should tonnage capacities be allocated to individual cities or franchises? TCSD has seen its garbage tonnage go down from 2,300 tons in 2005, to just over 1,700 tons in 2009. Unfortunately waste tonnage reductions don't equate ton for ton to recycling.

At what point will customers start to see they are generating reduced quantities of garbage and may expect reduced fees? Will the mandate approach San Francisco has proposed work in Marin? The cost of enforcement would seem high and the JPA or local communities have few resources for that.

There has been support for the concept of "waste audits". There are programs in the County that perform energy and water use audits. Waste audits might fit into that – again what might be the cost and who could do it?

Alameda County spends \$1.8 million to support StopWaste.org and funds individual city programs to the tune of an additional \$700,000. StopWaste.org staff are looking at alternative strategies, for instance to use those resources to fund an incentive program for haulers who reduce tonnage.

The JPA depends on funds generated from tipping fees. Many of the green coalition want those fees increased to support county-wide diversion strategies like StopWaste.org has done. Before this is set, it needs to be looked at carefully as the very goal of our study is to reduce waste

tonnage. That translates into reduced income to undertake new expensive strategies on a shaky future income stream.

Our tipping fees are under \$5.00/ton. Alameda is \$18.95/ton, San Jose \$19.38/ton, European rates all exceed \$50.00/ton. A new architecture requires a thorough review of future tipping fees.

- One option is to raise fees for a 5-year period and target those revenues for capacity expansions.
- Approach II might be to set up a county fee via franchise agreements to support programs. This might be based on customers versus tonnage.
- With our relative small population, a fee of \$5-\$10 per customer is a lot
- A solid waste sales tax of 0.5% might be justified as a fair cost to keep down or cover the disposal costs of things that are bought. These funds might go back to the cities and county to support diversion goals.

If one was to do a real economic analysis of what it costs to divert a ton of garbage using the best facilities available, a number of \$100-\$150/ton is not unreasonable.

The goal of our study requires a high level of communication to get the behavior changes we need from residents, multi-family complexes, and commercial entities. Designing this effort will also be expensive.

What is the goal a communications program seeks to achieve? TCSD has developed a cute brochure that has been supported and used by our residents. What is the county-wide message that we are trying to get out?

It is unclear that this type of messaging can impact and create change. The County spent a lot of money on the "Get.Ready.Marin" program and it fell far short of its goals – that message was built around getting prepared for an emergency. Should our now "low-key" efforts be replaced with a more integrated county-wide effort with a common message across the entire county?

These are many of the strategic questions and issues needing to be addressed before a long-term zero waste strategy can be put in place.

Roger Roberts

Marin Conservation League

Marin Conservation League Comments before the Joint Powers Authority (JPA)
9/17/09
with regard to the Draft Zero waste Strategic Plan Development prepared by R3
Consulting Grp.

1) A successful model of what a Zero Waste Program can deliver is already being done by the Seattle Public Utilities which serves approximately 150,000 residential households with curbside collection and recycling services through independent haulers at an average cost of about \$240 per household per year. (Provide the JPA with copies of the Seattle Public Utilities brochures provided to Seattle households.)

I share this with you because it is the sort of program result that we need to achieve in Marin.

Response: Comment noted.

2) In this connection, we agree with the conclusions listed on Page 4 of the Draft Report by R3 Consulting that points out that there are four significant organizational and structural impediments and barriers to achieving an effective Zero Waste program in Marin. As long as the JPA is under-funded, under-staffed, has no real authority, and only a minimal role to play, it will be very difficult to make a coordinated and effective Zero Waste Program a reality for Marin.

Response: Comment noted.

3) The present system of handling solid waste in Marin is fragmented, franchise agreements are not standardized and designed to promote waste diversion, and member agencies lack funding capacity to implement Zero Waste programs.

Response: Comment noted.

4) We support the goals of achieving targets reductions in solid waste disposal through Zero Waste programs,

Response: Comment noted.

5) We believe that this can best be accomplished through a strengthened JPA fully funded through dedicated facility and disposal fees as is done by other JPAs in California

Response: Comment noted.

6) With respect to the Draft Report from R3 Consulting Group we believe that it would be helpful if the report could be more specific and detailed as to the content of the recommended action steps laid out for Phase I and Phase II in Appendix B. For instance, perhaps samples of a standard Franchise Agreement can be provided along with examples of fee structures to be sued to fund the JPA and its Zero Waste Programs. The report should also address how the Conversion Facility or Facilities necessary to achieve the 80% Diversion rate can best be organized and established in the County

Response: Specific steps to be undertaken in Phase II will be determined by each Member Agency. However, general implementation steps have been identified for each

recommendation presented in the Recommendations, Section VII, as "Steps to Achieve". Examples of franchise agreement requirements/ issues to be considered by the Member Agencies are outlined in Recommendation #7. Conversion technologies are only being considered as part of digestion projects as a way to divert food waste, although composting is another option. Facilities in the County will need to be addressed by the JPA and Member Agencies and is directly related to Recommendation 4.

7) The Marin Conservation League looks forward to working with the JPA, the JPA's Local Task Force, local haulers and the Redwood Landfill on developing an effective Zero Waste Program delivery system for Marin.

Response: Comment noted.

Roger Roberts

Local Task Force

October 7, 2009 Meeting

LTF comments include:

1. Need to include estimated county wide costs to show what current conditions are costing.

Response: Estimated costs for new/expanded programs are identified in the Executive Summary Table ES-3 and Appendix B of the report. Developing a detailed cost estimate of current County waste management costs was not the focus of the Zero Waste Feasibility Study.

2. How can better data be obtained, and what should be asked for?

Response: Tonnage data by service sector is the most crucial. Recommendation 7 addresses revising the franchise agreements to require the following tonnage information.

- *"Overall tonnage collected*
 - By service area/type (e.g., residential, commercial, bulky item, special event, etc.)."

This information should be provided to the Member Agency and the JPA.

3. Should clearly indicate that education on better consumption habits is important.

Response: Recommendation 10 has been edited to include the following sentence. *"Public education on better consumption habits is a crucial element of this recommendation."*

4. Show what other JPL's/agencies are collected in a per ton/per unit basis (i.e., StopWaste. Org, San Jose, Sonoma County.

Response:

- Sonoma County: \$5.40/ton
- San Jose: \$13.00
- ACWMA:
 - AB 939 fees
 - Facility fee: \$2.00
 - HHW: \$2.15
 - Measure D: \$8.17
 - Waste import mitigation (from SF): \$5.68
 - Import mitigation (from all other out of county): \$4.53

5. Show different diversion data for recyclables and compostables.

Response: Information for the most recent waste generation study (2006) is available through the JPA.

6. Three Phase Approach: 1) adopt uniform policies, procedures, ordinance, and programs, 2) undertake a financial plan, and 3) implement the necessary uniform policies, procedures, ordinance, and programs

Response: The study does just that--Phase 1 is a policies procedures, etc., and cost estimate Phase II is the implementation of the program and policy recommendations at the Member Agency level.

7. Explain why Marin has the highest generation rate and highest diversion rate.

Response: A second paragraph has been added to the "Waste Disposal" section explaining these rates.

"The County has the highest generation (disposal + diversion) and diversion rate in the state because residents and businesses consume a lot of products and send the material for recycling or disposal. Because the generation is based on weight, construction materials could be dominating the waste stream (disposal, diversion or both sides of the waste stream). The high diversion rate is due to the recycling and reuse programs undertaken in the County and ability of the JPA to provide documentation to the state that proves a variety of diversion activities and their associated tons. However, the high diversion rate does not change the need to focus on the disposal stream (in the short-term) to achieve Zero Waste."

8. Clarify that "regional" is the JPA Countywide region—not the greater SF Bay area region. I.e., the Alameda-Santa Clara-Marin-Sonoma region.

Response: This clarification has been made in the Structure of Recommendations section on page 2, paragraph 4.

"In consideration for the impacts of the short-term and long-term impacts of programs and policies, the recommendations presented in this Feasibility Study are organized into two phases: Phase I and Phase II. Phase I recommendations are intended to **create a regional (countywide) foundation** for recommended programs and policies to work. Phase II recommendations are..."

9. Explain how the economy has affected the data that we have (or that it has not)

Response: Footnote has been added to the "Waste Disposal" section:

"As economic conditions declined, so has disposal tonnage. In 2008, JPA disposal decreased to 211,000 tons. It is anticipated that disposal will increase as the economy rebounds (e.g., construction/remodeling activities, individual consumption)." Please note, as seen in Figure 2, over the past 12 years, disposal has ranged from 153,500 tons to 240,600 tons.

10. Show/compare data to 2000.

Response: Comment noted, but if the 2000 tonnage disposed does not change analysis in the report. Would also need waste characterization data from 2000 to make comparisons to 2007's waste stream. Also see Number 9, above.

11. Why not promote StopWaste's "business Partnership Program—should include similar program as an option.

Response: Comment noted, this can be part of Phase II (Recommendation 10).

12. Need detailed education plan.

Response: Comment noted. This would be undertaken as part of Phase II in conjunction with the JPA, Member Agencies and haulers.

13. Explain the residential diversion rate and why we don't have show similar info for commercial (or show the data)

Response: The diversion rates shown for the haulers is for all of the collection services they provide Member Agencies—not just residential. Data we were provided did not include a break-out of the sectors that generated the waste. As noted in new text of the "Hauler Services" section,

First paragraph: "It is important to note that diversion rates stated in this section are only for the materials collected by the haulers. These diversion rates account for a portion of the JPA's state reported diversion which also includes material from store back-haul recycling activities, recycling companies that collect source-separated material, and self-haul operations that never enter the possession of the hauler."

And later, the 4h paragraph:

"As highlighted in Tables 3-8, all haulers were achieving at least 30 percent (Mill Valley Refuse Service in the unincorporated County) and a maximum of nearly 65 percent (Marin Sanitary Service in Ross). Overall, the haulers diverted approximately 41 percent of the waste collected through their services. The JPA's data, as reported by the haulers, does not provide for detailed analysis of residential and commercial sector diversion. "

14. Where is diversion gap? SFD, MFD, commercial, C&D?

Response: Unclear about what the question is referring to; if related to why AB 939 diversion rate versus the hauler diversion rates, then here is an explanation. Only a portion of the diversion rate for the JPA area is derived from hauler collection operations. It also includes material back-hauled by stores for recycling, self-haul material diversion at landfills (e.g., beneficial use), recycling centers (source-separated collection by companies rather than haulers or self-haul), grasscycling, and other source reduction activities. In addition, construction material reuse and inerts were documented in the state-approved diversion rate.

This text has been added to the report in the first paragraph of "Hauler Services":

"It is important to note that diversion rates stated in this section are only for the materials collected by the haulers. These diversion rates account for a portion of the JPA's AB 939 reported diversion which also includes material from store back-haul recycling activities, recycling companies that collect source-separated material, and self-haul operations that never enter the possession of the hauler."

15. Study provokes more questions than answers.

Response: Comment noted.

16. Structure of JPA does not necessarily lead to Zero Waste.

Response: The recommendations 1-5 are intended to improve the structure of the JPA and promote policies and programs to achieve Zero Waste.

17. Include reference to Bolinas and Stenson beach on Table 7 (show all franchise agencies).

Response: Changes made.

18. What about GHG reduction-what is the estimated result on the new diversion programs, and if the Zero Waste Plan was implemented?

Response: GHG was not part of the analysis of achieving Zero Waste, but it should be noted that the commercial/MFD ordinance (Recommendation 9) that will be required by AB 32, is intended to reduce GHG. Estimated diversion is noted for each recommendation throughout Section VII and also is presented in Appendix B.

19. Must engage cities/franchising agencies and haulers on the same room to resolve/modify franchise agreements.

Response: Comment noted and language added to note the changes in the franchise agreement will require the cooperation of the haulers.

20. JPA does not have enough authority.

Response: Comment noted. This is addressed in Section V. Challenges to Achieving Zero Waste and strengthening the JPA's authority is the focus of Recommendations 1-5.

21. Need more info on the economic aspects of the plan.

Response: See response to comment #1.

22. What are data gaps, and why is this happening, and why is it important.

Response: Data gaps of greatest significance is the identification of tonnage collected and diverted and disposed by generator sector. This will enable identification of trends and areas to focus additional efforts.

Bullet 3 of Section IV. Data Sources has been edited to read:

- "Available tonnage information from the JPA. However, data did not distinguish the tonnage of material collected and recycled from Single Family Dwellings (SFD), Multi-Family Dwellings (MFD), Commercial, and Construction and Demolition (C&D); *this information is valuable for tracking programs and targeting education efforts.* Therefore, analysis in this Feasibility Study is provided only for SFD and commercial sectors. "

23. What is status of the siting of the re-use center?

Response: The County planning department has the most recent updates on the status of the reuse center.

24. How could JPA be structured to "pull in" all FAs?

Response: We are not suggesting that the JPA "pull in" all franchise agreements. Rather., the JPA develop "model" franchise agreement language for reporting, diversion standards, and program features.

25. BOS needs to be involved in JPA, and the JPA oversight needs to be elevated.

Response: Comment noted.

Marin Sanitary Service

To: Marin County Hazardous and Solid Waste Management JPA
Fr: Marin Sanitary Service
Re: Draft Zero Waste Strategic Plan Development
Date: October 9, 2009

Marin Sanitary Service (MSS) is pleased to be able to provide comments, corrections and suggestions to the *Draft Zero Waste Strategic Plan* in an effort to support an accurate and workable plan for the Marin County Hazardous and Solid Waste Management Joint Powers Authority (JPA).

Of crucial importance to achieving “zero waste” will be enhanced efforts to educate the public about recycling, reuse and reducing consumption. Interestingly, as a result of the downturn in the economy, we have already experienced a reduction in waste reflecting a reduction in consumer consumption. Given this reduction, timing may be perfect for a strong outreach program designed to build on the current trend and transform it from one that is economically driven, to one that is systemic in nature.

For convenience, our comments, corrections and suggestions are listed by page number, topic and direct quote where appropriate. **Those marked with an asterisk are essential corrections that should be incorporated into the document prior to presentation to the JPA Board of Directors.** If you should have any questions, please do not hesitate to contact us.

Page 3, IV. Data Sources:

“...data did not distinguish the tonnage of material collected and recycled from ...Multi-family Dwellings, Commercial and Construction and Demolition.”

The *Waste Characterization Study* done for MSS, by CalRecovery provided this data. Response: The quotation noted is in regard to the tonnage data collected by the JPA from the haulers. While the MSS data provided some sector breakdown, it does not supply all sectors of the waste stream that would be necessary and provide additional insight to the waste stream in for the purpose of developing recommendations. The MSS study was very valuable in providing a general analysis to be used for determining the County’s waste composition.

Page 4, V. Impediments to Achieving Zero Waste:

MSS agrees that the JPA has high diversion rates and those rates have increased dramatically over the past 14 years yet disposal has remained relatively flat, we suggest

further explanation as to the possible cause—an affluent county in which there are high rates of consumption.

Response: Comment noted. The additional sentence has been added in the same paragraph: “This is due to consumption rates not changing.” This provides further clarification without attempting to classify “high” and “affluent”.

“The JPA has a minimal role in solid waste program implementation at the Member Agency level and does not have any direct authority or resources to implement new programs and effectively increase diversion.

Each Member Agency administers its own franchise agreement and the agreements are not diversion-based agreements”

There is regional oversight by the Franchisor’s Group comprised of all the city managers of the cities served by MSS.

Response: Comment noted. No change is made to the text since our point is that the JPA must have a larger role. While the Franchisor’s Group exists, the identification of the JPA’s role is a crucial element to achieving the Zero Waste Goal.

“There is insufficient capacity for facilities located within the County to process the amount of organic waste, and C&D materials to meet the Zero Waste Goals.”

*Marin Resource Recovery Center (MRRC) does have C&D capacity and is currently developing a public/private partnership with Central Marin Sanitary Agency (CMSA) for waste-to-energy and ultimate composting of commercial food waste.

Response: These comments have been added to sections of the report that deal specifically with these waste streams. The “Marin County Food Waste Anaerobic Digestion and Composting Pilot Projects” section of the report includes details the CSMA project.

*In 2010 it is anticipated that residential green waste and food waste composting will be part of services provided by MRRC.

Response: This paragraph is in the Food waste section of the report. “When the necessary permits are in place, which is anticipated to be in 2010, MSS will begin co-collecting residential, kitchen food waste in the curbside green waste can *for composting.*”

Page 5, VI. Analysis, Marin County Leadership in Waste Reduction and Recycling, Green Business Program;

MSS is a member of County of Marin’s Green Business Program and, with its waste management services, has assisted over 100 businesses in qualifying as well.

Response: This information has been added to the “Green Business Program” section of the report.

Page 7, VI, Analysis, Marin County Leadership in Waste Reduction and Recycling, JPA Role:

“...the JPA does not receive data on HHW materials that may also be picked by through [sic] curbside operation like those provided by Mill Valley Refuse.”

*This is an inaccurate statement. This data is available through MSS HHW tonnage.
R3 Comment: This is our understanding from the JPA. Text has been revised to state
“However, the JPA does not receive data *from all haulers* on HHW materials that may also be picked through curbside operations like those provided by Mill Valley Refuse.”

Page 7, VI, Analysis, Marin County Leadership in Waste Reduction and Recycling, JPA Role:

“Other solid waste related activities that the JPA does not manage for the Member Agencies are....

- Marin County Solid and Hazardous Waste Permanent Facility...;
- Pharmaceutical and sharps...;
- Battery collection....

Because a variety of entities manage these programs, the JPA may or may not be receiving information on collection or be aware of opportunities to help improve or expand programs.”

*This statement is misleading. The JPA funds the program and has eventual oversight with the exception of pharmaceuticals.

Response: Text has been edited to read:

“Because a variety of entities manage these programs, the JPA may or may not be receiving information on collection or be aware of opportunities to help improve or expand programs. *For the permanent facility, sharps, and battery collection, the JPA does fund the program and has eventual oversight of the programs.*”

Page 7, VI. Analysis, Marin County Leadership in Waste Reduction and Recycling, JPA Role, Tonnage Reports to the JPA:

“The JPA does not receive reports from *all* the haulers that identify the service sectors that generated the diversion and disposal tonnages....”

*This is an inaccurate statement. The JPA does receive this information from MSS through its *Waste Characterization Study*.

Response: Change made as noted above. The MSS *Waste Characterization Study* is a different subject from the tonnage reports that are submitted to the JPA on a quarterly or annual basis. While the *Waste Characterization Study* provides valuable information, all haulers operating in the County should be providing tonnage information to the JPA identified by the sector that generated it. Without all haulers providing this information consistently, the JPA will be less able to identify trends and develop effective and targeted programs.

Page 7&8, VI. Analysis, Marin County Leadership in Waste Reduction and Recycling, JPA Role, Marin JPA Role Compared to Other JPAs:

*Note should be made that while the budget for the JPA is significantly less than that of ACWMA and SBWMA, and that the JPA has significantly fewer staff, the JPA has won numerous awards and has the highest diversion rate in the state, all at a cost savings to the rate payer.

Additionally, given the current, serious budgetary limitations facing local agencies, the likelihood of additional publicly funded programs is highly unlikely. Past experience suggests that public "ownership" of such programs is more expensive.

Response: Comments noted. Mentions of the County's high diversion rate and awards are made in the subsection "Marin County Leadership in Waste Reduction and Recycling".

Page 9, VI. Analysis, Hauler Services:

"The JPA's data, as reported by the haulers, does not *provide adequate permit* analysis of residential and commercial sector diversion."

*The MSS *Waste Characterization Study* does provide this data.

Response: The MSS *Waste Characterization Study* is a different subject from the tonnage reports that are submitted to the JPA on a quarterly or annual basis. While the *Waste Characterization Study* provides valuable information, all haulers operating in the County should be providing tonnage information to the JPA identified by the sector that generated it. Without all haulers providing this information consistently, the JPA will be less able to identify trends and develop effective and targeted programs.

Page 10, Table 1:

*Las Gallinas Valley Sanitary District has not been included in the Service Area for MSS.

Response: This District has been added to Table 1.

Page 10, Table 2:

*Under "Milk Cartons" note should be made that no recycling market exists for this product.

Response: Please note that three other companies (Mill Valley Refuse, Redwood Empire Disposal and Novato Disposal) are collecting milk cartons as part of regular service.

*The "Not Collected" column is inaccurate. MSS does collect waxed or coated paper and plastic bags.

Response: This has been corrected.

Page 11, VI. Analysis, Hauler Services, Marin Sanitary Service, Services:

*MSS provides 5 gallon buckets where space is a problem.

Response: A new last sentence has been added to the first paragraph of the MSS service:

Marin Sanitary Service offers weekly automated and semi-automated cart collection of solid waste, recyclable and green waste. The size of solid waste containers offered range

from 20 to 96 gallons, recycling is offered in 32 gallon carts, and green waste is offered in 64 gallon carts. *Where space is a problem, 5 gallon buckets are also provided.*"

*Green waste is unlimited, not "limited" as stated in this section.

Response: The sentence has been edited as follows: "Recycling and green waste services are unlimited and green waste is generally limited to 128 gallons with the exception of San Anselmo that has unlimited green waste service."

*Paragraph 3 should be edited to say: "They are also exploring the option of taking food waste to *either their composting facility in Zamora or the residential food waste facility at Redwood Landfill* for composting once the compost operations *receive proper permits.*"

Response: This change has been made.

Page 11, VI. Analysis, Hauler Services, Marin Sanitary Service, Public Education:

*The MSS *Waste Characterization Study* and the *MSS Zero Waste Plan* should be included in this section.

R3 Comment: Following the "Public Education" section is "Additional Notes". It is in this section that these efforts have been noted. The text reads as follows:

"Additional Notes

MSS is striving to achieve Zero Waste through multiple methods, which includes their partnership that was established in 2007 with iReuse. The purpose of the partnership is to reduce business waste through reuse and donation. The partnership will enable the facilitation of donation and sales of reusable materials and provide clients with tax-deductible receipts.

Beyond the collection services the company provides, MSS also promotes Zero Waste and strives to become a Zero Waste business. In 2008, MSS underwent a waste characterization study of its residential and light commercial loads to determine what materials were not being recycled by customers at the curb. They are using this data to re-target education efforts. The latest step undertaken by Marin Sanitary Service is the development of a Zero Waste plan for their facility and operations, and food digestion pilot programs."

Page 16, VI. Analysis, Solid Waste Facilities:

*Note should be made that Marin is relatively small and that MSS' facilities are at 40% of capacity. With the economy in a dramatic downturn it is questionable whether or not additional facilities are warranted.

Response: The first paragraph of this section has been revised to the following:

"The County has limited facility options for local diversion and disposal of materials. Tables 10 and 11 identify the current facilities used and their location. Marin Sanitary Service notes that their facilities are at 40 percent of capacity. With the downturn in the economy, capacity has increased, but it is uncertain what the capacity will be and if additional facilities are warranted once the economy rebounds. In addition, if the Member Agencies or franchise agencies require that the franchised hauler use a specific facility, there should be some form of tip fee rate oversight by a public agency."

There were 12 landfills that reported receiving JPA waste in 2007, but over 98 percent of the disposal occurred at three sites: Redwood Sanitary Landfill (59.3%), Keller Canyon Landfill (24.7%), and Potrero Hills Landfill (14.2%)."

Page 17, VI. Analysis, Solid Waste Facilities:

"As shown in Table 11, there are few local facilities that can handle diversion of food waste and Construction & Demolition materials."

*This statement is inaccurate and Table 11 is not inclusive.

Response: See above response to "Page 16, VI. Analysis, Solid Waste Facilities".

Page 17, VI. Analysis, Solid Waste Facilities:

"...a significant portion of the material is being used as erosion control at Redwood Landfill that could be composted if facilities existed in the region. The option of local facilities may not be a limiting factor, but the facilities available for consolidating the material and transporting it is another aspect that must be addressed."

*This statement is inaccurate.

Response: See above response to "Page 16, VI. Analysis, Solid Waste Facilities".

Page 18, Table 11:

*Marin Recycling Center (MRC) should be added to the Curbside Recyclable facility list.

Response: Marin Resource Recovery has been changed to "Marin Recycling Center"

*MSS Zamora Facility should be added to the Green Waste facility list.

*MSS should be added as a partner to the CMSA under Food Waste.

Response: These Zamora is already included in the table under its formal SWIS name: Northern Recycling Compost. MSS has been notated as a CMSA partner.

Page 19, VI. Analysis, Solid Waste Facilities, Inerts:

*It should be noted that the facility cited is a Waste Management, Inc. facility that operates on a regional basis and, as a result, may take in its own material first.

Response: The section has been revised to read:

"Inerts that go to the facility are used as ADC or road base. *Waste Management, Inc. (WMI) is in the planning stages to construct and operate a C&D facility to process and sell material. WMI intends to operate this facility on a regional basis, but as it is owned by Waste Management, Inc., it may take its own material first.* Also see above response to "Page 16, VI. Analysis, Solid Waste Facilities".

There is also the concept of a "reuse center" that would be a buyback center for construction material. Permitting issues would need to be overcome before retail operations could begin. Regardless, salvaging material is intended to be part of the C&D facility operations."

Page 20, VI. Analysis, Household Hazardous Waste Collection, Used Oil Block Grants:

“...curbside collection that is conducted by Mill Valley Refuse goes to the permanent HHW facility and does not get recorded separately....the main issue is that the County should have the information available to it to identify the program progress and opportunities for improvement.”

*This is inaccurate, it does get recorded separately and the information is available to the county.

Response: Our understanding from the JPA is that they do not have data that can be tied directly to Mill Valley or other individual programs. It may be that the “curbside collection” category is separate, but it blends jurisdictions. This comment should be discussed with the JPA.

Page 20, VI. Analysis, Universal Waste:

*Note should be made that MSS currently takes Universal Waste through the HHW facility.

Response: This sentence has been added to the second paragraph of “Existing Local Take-Back Disposal Options”.

“Universal Wastes are accepted at the Marin County Solid and Hazardous Waste Permanent Facility and the Novato Recycling Center.”

Page 23, VI. Analysis, Existing Local Take-Back Disposal Options, Sharps:

Note should be made relative to the county tracking the collection and that this program is a result of the public/private partnership started in 1994 with the San Rafael Fire Department and the MRC.

Response: The first paragraph of this section has been revised to read as follows:

“As mentioned earlier, the County Department of Environmental Health manages the outreach in the County for the collection of home-generated sharps. *This program is the result of the public/private partnership started in 1994 with the San Rafael Fire Department and the Marin Recycling Center.*”

Page 23, VI. Analysis, Opportunities for Increasing Diversion:

“Based on feedback from the haulers, the residential green waste set-out rate is 70-80 percent and the residential recycling set-out rate is over 90 percent.”

*Note should be made that the MSS rate is 90-95% as per a JPA commissioned study by Jim Greco of Sacramento.

Response: A footnote has been added to this sentence: “*The MSS rate is 90-95% as per a JPA commissioned study by California Waste Associates.*”

Page 24, VI. Analysis, Opportunities for Increasing Diversion, Wet and Dry Collection:

“One way of increasing diversion is to have the franchised haulers develop a wet and dry material collection route.”

*This suggestion is problematic. Cost is very high and, based on current programs with high diversion and participation, changing to wet and dry loads would not be fiscally prudent, nor would it generate much increased diversion for MSS customers.

Response: Comment noted and each Member Agency would need to assess this option.

Page 24, VI. Analysis, Opportunities for Increasing Diversion, Construction and Demolition Ordinance:

“Five have no provisions for C&D recycling....”

*Note should be made that this fact is due to the MRRC providing the service.

Response: Communities still need to adopt an ordinance regardless of using MRRC. This may result in more C&D material going to the facility.

Page 26, VI. Analysis, Opportunities for Increasing Diversion, Construction and Demolition Ordinance, Limited Facility Options:

“An agreement with facilities to standardize clear and concise distinctions on weight receipts would be beneficial. Distinctions could include origin of C&D waste and potentially a note acknowledging the material has been accepted as C&D and will be recycled accordingly.”

*Note should be made that MSS is already doing this.

Response: The sentence has been amended to as follows:

“An agreement with facilities to standardize clear and concise distinctions on weight receipts would be beneficial; *MSS reports that they are already doing this.*”

Page 27, VI. Analysis, Opportunities for Increasing Diversion, Food Waste:

When the necessary permits are in place, which is anticipated to be in 2010, MSS will begin co-collecting residential, kitchen food waste in the curbside green waste can.

Additionally, a feasibility study has been completed, sponsored by PG&E, CMSA, the City of San Rafael, the City of Larkspur and MSS. It will allow for the development of a commercial food waste-to-energy, public/private partnership and eventual composting. This partnership will likely begin in mid-2010 from the restaurants and other points of food waste currently collected by MSS.

Response: These paragraphs were added to the end of the Redwood Landfill discussion.

“However, due to the air emission concerns, the landfill is limited to receiving a maximum of 30 tons per day of food waste. Whether the food can be mixed with the green waste or must be

separate, remains to be determined. Currently, lawsuits are preventing the composting operation from beginning.

When the necessary permits are in place, which is anticipated to be in 2010, MSS will begin co-collecting residential, kitchen food waste in the curbside green waste can.

Additionally, a feasibility study has been completed, sponsored by PG&E, CMSA, the City of San Rafael, the City of Larkspur and MSS. It will allow for the development of a commercial food waste-to-energy, public/private partnership and eventual composting. This partnership will likely begin in mid-2010 from the restaurants and other points of food waste currently collected by MSS.

Other facilities that may be able to accept the mixed food waste..."

Page 29, VI, Analysis, Opportunities for Increasing Diversion, Green Waste:

*Note should be made in this section that all MSS green waste is composted.
Response: Text was modified as follows.

"Since there are no composting facilities within the County, the option exists to haul green materials to a transfer station. MSS reports that they are currently composting all green waste they collect. Table 18 below lists transfer stations accepting green materials within 100 miles of the City of San Rafael."

Page 33, VI, Analysis, Opportunities for Increasing Diversion, Maximizing Diversion, Residential Collection Services:

Paragraph 2 does not make sense.

Response: Comment noted. The subsequent paragraphs clarify the compostables v. rubbish.

Page 34, VI, Analysis, Opportunities for Increasing Diversion, Maximizing Diversion, Residential Collection Services:

"Changing the categories of materials collected provides a major opportunity to increase diversion."

Expected percentage increase should be noted.

Response: The percentage is noted in Recommendation #12 and Appendix B.

Page 36, VI, Analysis, Opportunities for Increasing Diversion, Conversion Technologies, Biomass:

*Note should be made that MSS is currently using biomass technology in the development of on-site fuel for MRRC.

Response: This sentence has been added to the section.

Page 37, VI, Analysis, Opportunities for Increasing Diversion, Marin County Food Waste Anaerobic Digestion and Composting Pilot Projects:

Regarding reference to Pacific Biomass, it should be noted that they only want green waste.

Response: Change made. "... undertaken by Pacific Biogas. The proposed organics (*green waste only*) digester is planned to be sited in Marin..."

Page 37&38, VI. Analysis, Opportunities for Increasing Diversion, Marin County Food Waste Anaerobic Digestion and Composting Pilot Projects, Marin Sanitary Service:

*The first paragraph should be edited to read: *"In October 2008 Marin Sanitary Service initiated a bio-cell/bio-filter program for commercial food waste composting. In December 2008, Marin Sanitary Service began a commercial food waste-to-energy feasibility study."*

Response: Change made.

*Additionally, the numbers of restaurants and food markets served are incorrect.

Response: The sentence was removed in the absence of accurate numbers being provided.

~~"This material is estimated to be generated from the 237 restaurants and 12 food markets they service."~~

*Third paragraph, first line "pilot" should be "study."

Response: Change made.

*Third paragraph, last sentence should be edited to read: "...or retrofitting the MSS transfer station."

Response: Change made.

*To the benefits of adding food waste to the digestion process, the financial benefits as well as a reduced tip fee should be added.

Response: Bullet added:

- Increased financial benefits and reduced tip fee;

Page 41, VI. Analysis, Opportunities for Increasing Diversion, Consumption and Disposal Changes, Polystyrene (Styrofoam):

*It should be noted that to be truly recyclable, BPI certification is necessary.

Response: Footnote made.

Page 44, VII. Recommendations, Phase I, JPA, #4. Help Solid Waste and Non-Solid Waste Facilities with Siting/Permitting Processes:

"The lack of the necessary infrastructure is the biggest constraint for the County to achieve high diversion programs that include green waste, food waste, and construction and demolition materials."

*This statement is inaccurate and does not take into consideration the MRRC facility.

Response: Comment noted. Also see above response to "Page 16, VI. Analysis, Solid Waste Facilities".

Page 44, VII. Recommendations, Phase I, Member Agencies, #6. Revise Solid Waste Ordinances:

“However, the ordinances that regulate the hauler franchise agreements in some cases have not been updated for 45 years.”

This statement is highly misleading and should be removed or modified to accurately reflect when agreements have actually, recently been updated.

Response: Comment noted; this recommendation pertains to ordinances not franchise agreements.

Page 45, VII. Recommendations, Phase I. Member Agencies, #7. Revise Franchise Agreement Language:

Under “Specific diversion requirements” and “Overall tonnage collected” note should be made that these can change depending on the state of the overall economy.

Response: The franchise agreement diversion requirements should be based on the tonnage collected and therefore, not dependent on the overall economy.

*It should also be acknowledged that many of the items listed in this section are already in place in MSS franchise agreements. In addition, there are a number of items listed that do not accurately reflect best practice, practices currently in place or the challenges faced by the hauler i.e. consumer responsibility, risk, cost, market considerations. Perhaps the recommendations should be presented in a matrix format identifying what items are in place and by **which haulers**.

Response: Comment noted; please note that the specific franchise agreements and specific language needed are not covered under the Feasibility Study..

Page 48, VII. Recommendations, Phase II, Haulers (via Member Agencies), #12. Implement Wet/Dry Collection Routs:

*This recommendation is already in place at MSS.

Response: Comment noted, please see response to page 24 MSS comment.

Page 48, VII. Recommendations, Phase II, Haulers (via Member Agencies), #13. Offer Residential Unlimited Services of Recycling and Green Waste Containers:

“In the MSS service area, only San Anselmo has unlimited green waste collection, and in all service areas, residents [sic] only one recycling cart is provided.”

*This statement is inaccurate. Unlimited green waste collection is available in all MSS service areas.

Response: Statement is edited.

**Page 50, VII. Recommendations, Phase II, Haulers (via Member Agencies), #15.
Add Food Waste Diversion to Collection Services (Residential and Commercial):**

“Haulers provide customers backyard compost bins, kitchen pails, and education materials.”

This should be edited to eliminate “backyard compost bins” since they are in violation of the current health and safety code and, actually, are found to increase greenhouse gas production in the urban setting.

Response: Comment noted, compost bins are for yard waste only.

**Page 50, VII. Recommendations, Phase II, Member Agencies, #18 Require
Deconstruction/Salvage/Resale of Construction and Demolition Materials:**

Note should be made that the county did a market study on this subject and found no in-county market.

Response: Comment noted; reference of the study name/date is necessary before making notation in the Feasibility Study.

Comments with no Response

Received after October 9, 2009

Loretta Figueroa

Almonte Sanitary District, Local Task Force Special District
Representative

From: Loretta Figueroa, Almonte Sanitary District, Local Task Force Special District Representative

To: The Marin County Hazardous and Solid Waste Management JPA

Date: October 10, 2009

Subject: Comments on the Marin County Hazardous and Solid Waste Management JPA (JPA) Draft Zero Waste Strategic Plan Development (The Draft Plan) dated August 2009 presented by R3 Consulting Group (Consultant) to the Marin County Local Task Force (LTF) on September 2, 2009.

1. On October 7, 2009, the consultant reported to the LTF that The Draft Plan had been revised by the consultant. This revised draft was not available for review by the LTF.
2. After The Draft Plan has been revised by the JPA, before final approval, the LTF should have an opportunity to review The Revised Plan and all comments submitted regarding The Draft Plan. The LTF should have an opportunity to make comments on The Revised Draft.
3. My comments will not include changes that might be suggested by a proof reader.
4. Page 7 - I don't believe that the Novato Household Hazardous Waste Program is funded by an annual JPA Grant.
5. Page 8 - After "Member Agencies" add "Non-member Agencies".
6. Page 38 - Extended Producer Responsibility (EPR): should be expanded to include packaging, and 'cradle to cradle' recycling systems designed, financed, and managed by the producers themselves.
7. The JPA is a regional agency. In some places in The Draft Plan the word Countywide should replace the word regional.
8. Average diversion rates for the haulers ranges from 36.67% to 50.93%. The Diversion rate calculated by the CIWMB for 2006 was 72%. There should be an explanation for the difference between these two reported diversion rates.
9. The Draft Plan should address the fact that Marin County has the highest per capita waste generation in the state. And "Accordingly, over the past 14 years, while diversion has increased dramatically, actual disposal has remained relatively flat."
10. In light of SB 1016 - The Zero Waste Goal should be restated as a "reduction in per capita disposal" goal instead of an "increase in diversion" goal.
11. Page 6 - The www.marinrecycles.org website needs to follow through on the improvements described by Staff.
12. Page 39 - Progressive Can Rates - The Almonte Sanitary District has had progressive can rates since 1992. I'm not aware of any problems with residents putting garbage in the recycling containers. The hauler may have different information.
13. Page 40, Tables 19 and 20 - Are the rates listed for one month? Are the rates listed for garbage only or do they include green waste and recycling? What are the rates for green waste and recycling? Are all haulers included in this table? I can't find the list of "Unincorporated Franchise Areas 1-6".

David Haskell

Member JPA Local Task Force on Solid Waste

To dispel any doubt as to what Zero Waste is

In one sense, it really isn't that difficult. Zero Waste means that there isn't any waste. No garbage! No throwing anything away in a pit in the ground! No burning things just to "get rid of them". Everything is reused. On this level, the concept could hardly be simpler." Dr. Paul Palmer, Author: Getting to Zero Waste

Zero Waste

- *Eliminates rather than just "manages" waste.*
- *Is a whole system approach that aims to completely change the way materials flow through society.*
- *Is a unifying concept or "brand" for a basket of existing and emerging technologies aimed at the elimination of waste.*
- *Resets the compass with new tools and new ways of thinking so that normal, everyday activities contribute to the solution rather than the problem.*
- *Is a way to transform the current cost-plus waste industry - whose existence is dependent on the destruction of more and more resources, into a value-added resource recovery industry.*
- *Redesigns the current, one-way industrial system into a cyclical system modeled on Nature's successful strategies.*
- *Helps communities develop local economies, sustain good jobs, and provide a measure of self sufficiency.*
- *Ensures that products are made to be durable, reusable, repairable and are bio-compatible (Non-toxic).*



ZERO WASTE

Has concrete goals

Is a single call to action

Engages the community psyche

Predicts and helps redesign the future

Creates the climate for continual improvement

Out-competes traditional waste disposal methods

Serves a new sustainable economic model enabling markets to drive the change

Introduction to Submission: I wish to offer a new vision. I am suggesting a new way to look at managing our county's discarded resources with an eye to getting as close as possible to the destination of Zero Waste. It is a journey – a rallying cry – to our citizens to reduce their environmental impact on this planet. The Zero Waste Strategy Document lost in the paradigm of diversion. Sadly recycling has become the new garbage – recycling a single use item is not an environmental virtue.

I am suggesting a new framework for achieving Zero Waste – it has four operational divisions working under the umbrella of a new organization – Let's call it "Waste Free Marin" -- Specific recommendations on the Rawles/Frost /3H Waste Strategy document follow these brief divisional descriptions.

#1 Priority: Zero Waste Professional Services

Objective: To provide program administration, technical assistance, social marketing / public education and effective management of JPA Programs.

- To provide on-site *resource assessment audits* and development of Zero Waste Action (ZAP Plans) Plans with clients - ensuring the provision of the plans are coupled with cost effective finance options for Marin public sector agencies, homeowners and business consumers.
- Ensure the residents and businesses have the knowledge and wherewithal to practice waste reduction and source separation to reduce all volumes of material use.
- "Business Partnership Program" to work with businesses to reduce waste & manage haulers to reduce costs. Working directly with public sector organizations to reduce both waste and costs.
- Develop social marketing campaign – partnering with businesses and local non-government organizations to promote Zero Waste everywhere!

#2 Priority: Zero Waste Infrastructure Services

Objective: Make doing the right thing easy all the time!

The following is a partial list of potential services /facilities that are required to help consumers and businesses "do the right thing". These facilities/services are essential for progress.

Sustainable Packaging Collaboration
Product Service Systems Developers
Resource Recovery Parks
Deconstruction Services
Construction and Demolition Yard
Extended Producer Responsibility /Industry Take Back Programs
Office Cycle Program
Restaurant / Food Discard Program
Organic materials separation, collection / marketing
Mixed & Single Stream Recyclant Collection
Bulk Inorganic Collection
Refill Shops
Repair Mall & Reuse Park
Hazardous and Toxic Mitigation Program
Waste Exchange Data Base for Marin Businesses
Commercial Worm Composting (decentralized by neighborhood)

#3 Priority: Waste Free Research and Development



Objective: To work smart and be the best we can be

- Identification of Community Environmental Investment Priorities & Criteria
- Work with Industry and Commerce to design and foster introduction of waste free products, packaging and processes.
- Ensure regional business have access to state-of-the-art reuse and repair information and technologies
- Work in collaboration with public policy agencies to foster the effective operation of the market and ensure public policy supports the rapid uptake of cost effective zero waste practices and technologies consistent with technological and industrial capacity to integrate new practices.
- To monitor programs and investment projects of Waste Free Marin to ensure effective and efficient operation.

#4 Priority: Waste Free Economic Development & Finance

Objective: Financial investment in resource efficiency & infrastructure

- * To administer a revolving loan fund/program to qualifying zero waste projects identified by the Waste Free Professional Services and or other professional organizations
Contestable fund to also help set-up infrastructure services.
- * In collaboration with federal, state and regional organization to ensure that a plan is developed to ensure that there is adequate capital made available to homeowners, businesses, public sector agencies to foster rapid market adoption of resource efficient practices and technologies.
- * To work with Marin Economic Development Agencies to foster development of new waste free enterprises and to create new sustainable employment opportunities.

Our Wasteburg Problem



For every can of garbage placed at the curb an equivalent of 71 garbage cans of wasted resources were indirectly "thrown away" in its creation.*

*CO₂ emission not included

3

Zero Waste Keys for Marin Businesses & Residents

Collaborative Programs to make a Difference

Promote Economic - Environmental Prosperity

- ❖ Research and Development
- ❖ Economic Development
- ❖ Create New Green Jobs

STOP WASTING MONEY AND RESOURCES

Recommendations for Marin County JPA – Comments of Zero Waste Strategy 2009

Background for Recommendation #1.

The Zero Waste Strategy document produced by JPA County Public Works Department staff reflects a mind-set mired in the past for the following reasons:

1. The Rawles/Frost/3H strategy makes scant attempt to reduce the "ecological footprint" of Marin County. They do not address mitigation of environmental impacts of waste generation and handling. (The prime reason for a Zero Waste Strategy)
2. Strategy's failure to recognize the economic realities of our time to re-vitalize our country's economy with new vision – new green collar jobs leading to economic viability and environmental sustainability.
3. Failure to recognize that the old paradigm of Garbage Trucks, Transfer Stations, Diversion and Landfills will never be a part of a Zero Waste solution -- It is the source of the problem rather than the solution.

Recommendation #1> JPA to phase-out and replace Marin County DPW's role in planning and managing Marin County's Zero Waste Policies. The existing set of skills related to sanitary/civil engineering are no longer relevant to the social marketing / public education / economic mandates required to secure an environmentally sustainable economy in Marin County.

Background for Recommendation #2 > New Vision New Players Required:

Attached to this submission is an abbreviated new "resource management" vision for our county's residents and businesses to efficiently and effectively manage the resources it purchases and consumes.

This new vision does not rely on antiquated concepts of waste generation, collection and hauling. Instead, it recognizes that the challenges for a “Green Energy Future” are the same set of challenges for a “Green Resource Future”. Solutions in the future will never again be from the old toolkit of big old garbage/recycling trucks making things sanitary (e.g. sanitary landfills – sanitary services) so as to protect the public health. That is a 1950’s 20th century concept that worked to protect health from disease but has no role in a world caught up in the challenges of Climate Change. Instead, the vision is about creating new economic activity that will make it easy for business and residents (Zero Waste Advisors) to do the right things. (Zero Waste Infrastructure Services) – It recognizes that it is people – businesses and residents working together to reduce their environmental impact that will make Zero Waste real. This challenge will require social marketing professionals to create and lead campaigns focused on behavior change and ensure that people have access to good information. It will require a new set of professional resource managers who can assist companies and households to make wise, cost effective waste free choices.

Recommendation #2:

JPA appoint a Commission to review present Marin County Hazardous Household and Solid Waste Planning Strategy, review best practices in successful agencies, and make recommendations to relocate the responsibilities in a county department and/or contract agency that focuses on community economic development, climate change mitigation and reduction of environmental and social impacts as its primary mission.

Recommendation #3

Support the strategy report’s call for JPA reform – from the bottom up.

Submitted by:

David Haskell

JPA Local Task Force Member

Oct. 9, 2009

Judy Schriebman

Comments on the Draft Zero Waste Strategic Plan Paper
Oct. 13, 2009

1. As a writer, I find an extremely troubling aspect of this report is its initial heavy emphasis on the term *diversion* rather than *waste reduction*, which is what is truly necessary to get us to zero waste. "Diversion" implies moving things from one pile to another, as one would divert a river or a child. It does *not* mean reducing or actually stopping the flow. So diversion, like recycling, while a part of getting to zero waste, is *not* the overarching concept/method/way of thinking that is necessary to move Marin County from a state of affluent unconsciousness to one of true sustainability. We need a radical restructuring of almost everything we do, not a diversion.

We need to convey this critical new way of thinking from the very beginning of the document and not skirt the issue. The planetary situation is dire. We are producing more, and throwing away more, of a variety of plastics, toxic chemicals and pharmaceuticals that have an infinite shelf life as they accumulate in the environment, in the bodies of dead sea birds, water supplies, and breast milk. We are killing ourselves with our trash.

If we have learned nothing else from the radical right, we have learned that framing an issue is at least as important as the data and this document at the outset is framed very, very badly. While it may be technically accurate, "diversion" is a poor word choice for communicating the important concept of zero waste to others outside of the field. In addition, the sheer number of repetitions of the word "diversion" in the first five pages produces a state of mental numbness near to catatonia. This is too bad, because the data, charts and the recommendations that come afterward in this report are very good.

By p14, the report clearly states that for the JPA to reach the Zero Waste goals, the focus must be on *reducing the materials disposed*. I would suggest that we substitute the words Waste Reduction, Waste elimination, Zero Waste goals and/or Sustainability for most of the diversion word choices, except where the context is actually talking about diversion, as in bullet point 7 on page 3.

2. Introduction (p2): add in the fact that we are still producing more waste per capita now than ever and than most places in the world.

3. Zero Waste (p2) can be described in much better terms. It's actually a fairly straightforward term than most anyone can understand as is. It means no more garbage; no more throw aways because we have come to recognize that there is no "away" any more. The goal of zero waste is also fairly straightforward. It means nothing that cannot be reused, recycled, composted, reformed, or remade into something useful will be allowed to be made, sold, produced or brought into this county, because it's not going to be landfilled, shipped to the third world to be dumped, or "outsourced" to the environment. This is a fairly radical proposal.

Getting to zero waste means developing and implementing policies and programs that promote product redesign to *eliminate* toxics, excess wasteful packaging, and implementing a cradle-to-cradle lifecycle for everything bought, sold, brought into or produced in the county. It means limiting our choices to things that sustain life and don't destroy it.

4. Impediments (p3) first line has a typo or missing word or something.

5. First paragraph (p4) is another place we could insert the nasty fact that we in Marin are still throwing away more stuff per capita than ever before, than most places on earth. Actual disposal, in other words, has remained both flat and very high on a per capita basis.

6. Second paragraph (p4): The word "mitigated" has the connotation of being smoothed over, pushed under the rug, lessened, toned down or diminished. I think these obstacles or impediments will have to be fixed, eliminated, or changed so that they no longer exist as impediments. Anywhere the word "mitigate" is used to mean "lessen," when our stated goal is zero, needs to be changed to reflect our intention.

7. Bullet points 1 and 2 (p4): Change "increase diversion" and "diversion-based agreements" to "reduce waste" and "waste reduction-based" agreements.

8. The JPA, with its limited ability to implement change (p4, bullet point 1), has been under the auspices of the Dept of Public Works for many years but this may not be the best fit any more. Based on the information presented on p 5, it would seem that the Community Development Agency is now a more appropriate agency to take on this task of driving the county and its member agencies to Zero Waste. They have a sustainability team, which is directly linked into those programs that are already being implemented to get us there.

9. Progressive Container Rates (p39). It is stated that all areas have progressive rate structures. This is not accurate in the area of LGVSD served by MSS where the 20 gallon can rate is still higher than the 32 gallon on a per gallon basis. I believe this is the same in other areas as well. We are hoping to move to a real progressive can rate where larger trash cans are charged on a percentage basis more than the smaller ones, to reward those individuals and families who do not produce as much trash.

There was a lot of work and data gathering and thought that has gone into this report. The above changes I think will make it a stronger document and give a better structure to that work. I look forward to reading the next draft.

Sincerely,

Judy Schriebman
415-472-3345

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:
George Rodericks

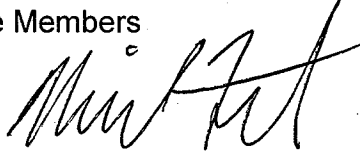
October 21, 2009

Corte Madera:
David Bracken

To: Executive Committee Members

County of Marin:
Matthew Hymel

From: Michael Frost



Re: Legislation Support Letters and Platform

Fairfax:
Michael Rock

JPA staff and several waste management and resource conservation groups the JPA belongs to track proposed legislation and recommend support for bills. The number of waste reduction, Extended Producer Responsibility (EPR), conservation and product ban bills has greatly increased in the past few years. The JPA needs a platform to address multiple pieces of legislation and plan for a way to more quickly show support or opposition to proposed bills.

Larkspur:
Jean Bonander

Mill Valley:
Ann Montgomery

Staff has sent a support letter (Attached) from the JPA for the following bill which has Extended Producer Responsibility Language:

Novato:
Michael Frank

Ross:
Gary Broad

AB 1173 - Creates a free and convenient program for consumers to properly dispose of fluorescent lights.

San Anselmo:
Debbie Stutsman

Additionally, staff has prepared support letters (Attached) for two bills, which both are supported by Californians Against Waste. Staff requests your Executive Committee consider supporting the two following bills:

San Rafael:
Ken Nordhoff

SB 402 - Balances the Bottle Bill Fund. Decreases the 10 cent CRV threshold to 20 ounces from 24 ounces and regulates non-bottle-and-can beverage containers.

Sausalito:
Adam Politzer

Tiburon:
Margaret Curran

AB 473 - Provides a residential recycling opportunity for more than 7.1 million Californians residing in more than 2.4 million multifamily dwelling units.

The Extended Producer Responsibility Resolution passed by the JPA in November 2006 allows staff to submit support letters for bills with specific producer responsibility language. Developing a legislative platform for the JPA would allow staff to send support letters for the majority of proposed bills that support the JPA's goals in a timely manner. The Local Task Force would be the appropriate body to advise the JPA and develop a platform for your Board's Approval.

It is requested that your Committee direct your Chair to sign the two attached legislative support letters and request the Local Task Force develop a legislative platform that may be adopted by the JPA at a future meeting.

Attachments

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MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:

George Rodericks

October 14, 2009

Corte Madera:

David Bracken

The Honorable Governor Arnold Schwarzenegger
State Capitol Building
Sacramento, CA 95814

County of Marin:

Matthew Hymel

Fairfax:

Michael Rock

Re: AB 1173 (Huffman) Fluorescent Lamp Toxics Reduction and
Recycling Act – Request for Signature

Larkspur:

Jean Bonander

Mill Valley:

Ann Montgomery

Novato:

Michael Frank

The Marin County Hazardous and Solid Waste Management Joint Powers Authority urges your signature on AB 1173 by Assembly Member Jared Huffman, a measure that is aimed at substantially reducing mercury emissions from residential fluorescent lighting through market-based source reduction and recycling incentives. Additionally, the JPA passed a resolution (attached), which endorses Extended Producer Responsibility policies, initiatives and statewide legislation.

Ross:

Gary Broad

AB 1173 would restrict payment of ratepayer derived Energy Efficiency Investment Funds (EE Funds) for fluorescent lamp 'prebates' to only those entities that demonstrate the following conditions are met:

San Anselmo:

Debbie Stutsman

San Rafael:

Ken Nordhoff

- 1) Lamps meet the latest Energy Star Standards for lamp life criteria;
- 2) Lamps that have 4mg of mercury or less;
- 3) Labeling on CFL subsidized packaging about proper disposal and recycling; and
- 4) Implementation of residential fluorescent lamp recycling program.

Sausalito:

Adam Politzer

Tiburon:

Margaret Curran

Since 1999, Investor Owned Utilities and Municipal Owned Utilities have been utilizing ratepayer derived EE Funds to provide 'pre-bates' to fluorescent lamp manufacturers and distributors in order to buy down the purchase price of CFLs sold at retail. Last year, the Utilities spent approximately \$60 million collectively to buy down the price of an estimated 48 million lamps as part of this Upstream Lighting Program. The Utilities have proposed spending about \$50 million annually to subsidize fluorescent lamp purchases for the next 3 years.

Fluorescent lights, recognized for their substantial energy savings and GHG reduction potential compared to incandescent lighting, contain small amounts of toxic mercury and the public is prohibited from disposing of them in the solid waste stream.

However, due to a lack of incentives and opportunities, efforts to increase the safe management and recycling of fluorescent lamps are failing. More than 90% of lamps continue to be improperly and illegally disposed by consumers who lack awareness and opportunity to recycle. Over the next 3 years alone, residential consumers will have to discard an estimated 60 million used fluorescent lamps. It is essential to support a convenient recycling system.

The Upstream Lighting Incentive program has a tremendous opportunity to influence the lighting market in California to reduce the hazardous wastes associated with these products. To the extent that ratepayers are asked to continue to subsidize CFLs, the privilege of ratepayer funding should be leveraged to promote bulbs with better than average mercury content, long lasting lamp life and address end-of-life management of these bulbs.

We strongly urge your signature on this important piece of legislation.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Michael Frost", written over a horizontal line.

Michael Frost
Executive Director

Attachment

Cc: Assembly Member Jared Huffman

RESOLUTION NO. 07-02
MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT
POWERS AUTHORITY

RESOLUTION SUPPORTING STATEWIDE, LOCAL AND REGIONAL
EFFORTS TO HOLD PRODUCERS RESPONSIBLE FOR PRODUCT WASTE
STARTING WITH TOXIC PRODUCTS DEFINED AS UNIVERSAL WASTE

WHEREAS, On February 8, 2006, a state law took effect that made it illegal to dispose of items defined as "universal waste," in the garbage. Universal waste includes household batteries, fluorescent bulbs or tubes, thermostats, other items that contain mercury, as well as electronic devices including VCRs, microwaves, cellular phones, cordless phones, printers, and radios; and

WHEREAS, collecting and disposing of these products, and implementing a public awareness campaign to prevent these banned items from going into the trash will cost Marin County ever increasing amounts of money; and

WHEREAS, When additional products are declared as hazardous by the State the burden to manage these items will fall to local jurisdictions; and

WHEREAS, There are significant environmental and human health impacts associated with household products that contain toxic ingredients, including mercury, lead, cadmium and other toxic chemicals that when disposed of improperly can contaminate water supplies; and

WHEREAS, By covering the costs of collection and disposal, local governments are subsidizing the production of waste because manufacturers know that whatever they produce the local governments will foot the bill for recycling or disposal; and

WHEREAS, Extended Producer Responsibility is an environmental policy approach in which producers assume responsibility—financial and/or physical—for the management of post-consumer products, so that those who produce and use products bear the costs of recycling and proper disposal; and

WHEREAS, When brand owners are responsible for ensuring their products are recycled responsibly, and when health and environmental costs are included in the product price, there is a strong incentive to design and purchase goods that are more durable, easier to recycle, and less toxic; and

WHEREAS, It is timely to develop and support extended producer responsibility legislation to address the universal waste sector of the waste stream first in response to the state ban on universal waste from household disposal; and

WHEREAS, on April 26, 2006 the Marin County Hazardous and Solid Waste Management Joint Powers Authority Executive Committee approved a motion to add to staff's work plan; participation in a regional group to lobby the State for product take back and EPR legislation; now, therefore be it

RESOLVED, That the Marin County Hazardous and Solid Waste Management Joint Powers Authority urges representatives in Sacramento to pursue statewide extended producer responsibility legislation targeted at universal waste that will give incentives for the redesign of products to make them less toxic, and shift the cost for recycling and proper disposal of products from the local government to the producer and distributor of the product; and, be it

FURTHER RESOLVED, That the Joint Powers Authority and its member agencies develop producer responsibility policies such as leasing products rather than purchasing them, and requiring the manufacturers of products to offer less toxic alternatives, and to take responsibility for collecting and recycling their products at the end of their useful life; and, be it

FURTHER RESOLVED, that the Marin County Hazardous and Solid Waste Management Joint Powers Authority will continue to support extended producer responsibility initiatives and statewide legislation beyond universal waste to cover areas including other hazardous products, bulky packaging, and items like plastics and multi-material products that are difficult to recycle.

AYES: Nordhoff, Bonander, Broad, Keen, Rodericks, Montgomery, Hymel, Stutsman, Whitson

NOES: None

ABSENT: Kelly, Bracken

Debra Stutsman
Debbie Stutsman, Chair

Date: 11-14-06

ATTEST:

[Signature]

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:
George Rodericks

October 21, 2009

Corte Madera:
David Bracken

The Honorable Governor Arnold Schwarzenegger
State Capitol Building
Sacramento, CA 95814

County of Marin:
Matthew Hymel

Re: SB 402 (Wolk/Skinner) – Beverage Container Recycling Fund –
Request for Signature

Fairfax:
Michael Rock

Dear Governor Schwarzenegger:

Larkspur:
Jean Bonander

On behalf of the Marin County Hazardous and Solid Waste Management Joint Powers Authority, I write to express our support of SB 402, the proposed legislation that would maintain essential funding within the Beverages Container Recycling Fund.

Mill Valley:
Ann Montgomery

Novato:
Michael Frank

Throughout California, many local governments operate or contract out for garbage collection services, recycling centers, municipal waste landfills, and household hazardous waste collection programs. What's more, cities and counties work closely with state officials to ensure that state-mandated solid waste diversion rates are achieved. In sparsely populated areas, private recyclers are eligible for state subsidies via the Beverage Container Recycling program.

Ross:
Gary Broad

San Anselmo:
Debbie Stutsman

San Rafael:
Ken Nordhoff

Sausalito:
Adam Politzer

Tiburon:
Margaret Curran

Unfortunately, there now remain insufficient funds available in the Beverage Container Recycling Fund to pay the necessary on-going costs of our recycling infrastructure. As a result, the Department of Conservation has been forced to proportionately reduce funding to various programs, many of which are vital to maintaining the success of the high beverage container recycling rate. Many local Conservation Corps have been negatively impacted by this funding shortfall, including Conservation Corps North Bay, located in Marin County. This organization employs Marin's most vulnerable youth in recycling collection, sorting, outreach, and education. Their programs have also served to reduce litter, increase recycling rates, and increase employment rates. If action is not taken to maintain these essential funds, staffing for such programs will be in jeopardy.

SB 402 would provide a comprehensive solution that preserves funding for core recycling programs, including handling fees to convenience zone recyclers, payments to cities and counties, curbside recycling, and conservation corps. Furthermore, SB 402 would reduce, suspend, and

Marin County Department of Public Works, P.O. Box 4186, San Rafael, CA 94913
Phone: 415/499-6647 - FAX 415/446-7373

eliminate non-core program expenditures in order to balance program funding and expenditures.

The Marin County Hazardous and Solid Waste Management Joint Powers Authority supports SB 402, and we respectfully request your signature on this important bill.

Respectfully Submitted,

Debra Stutsman
JPA Chair

Cc: Assembly Member Jared Huffman

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MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:
George Rodericks

October 21, 2009

Corte Madera:
David Bracken

The Honorable Governor Arnold Schwarzenegger
State Capitol Building
Sacramento, CA 95814

County of Marin:
Matthew Hymel

Fairfax:
Michael Rock

Re: AB 473 (Blumenfield) – Multifamily Recycling – Request for
Signature

Larkspur:
Jean Bonander

Dear Governor Schwarzenegger:

Mill Valley:
Ann Montgomery

The Marin County Hazardous and Solid Waste Management Joint
Powers Authority urges your signature on Assembly Bill 473
(Blumenfield), which will expand recycling opportunities at multifamily
dwellings.

Novato:
Michael Frank

Ross:
Gary Broad

Californians living in apartments and other multifamily dwellings have
substantially fewer recycling opportunities than residents of single family
homes. Less than 40% of those living in multifamily residences have
access to convenient recycling and, as a result, more than 85% of the
waste generated at multifamily residences goes to landfills. If residents
of multifamily dwellings recycled at the same rate as those in single
family households, the state could divert an additional 329,000 tons of
recyclable materials, reducing greenhouse gases by a million tons a
year.

San Anselmo:
Debbie Stutsman

San Rafael:
Ken Nordhoff

Sausalito:
Adam Politzer

All Californian's deserve the opportunity to recycle, regardless of
whether they live in a single family home or a multifamily dwelling, and I
strongly urge your signature on AB 473.

Tiburon:
Margaret Curran

Respectfully Submitted,

Debra Stutsman
JPA Chair

Cc: Assembly Member Jared Huffman

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MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:

George Rodericks

October 21, 2009

Corte Madera:

David Bracken

To: Executive Committee Members

County of Marin:

Matthew Hymel

From: Michael Frost

Fairfax:

Michael Rock

Re: MarinRecycles.org Website Update

Larkspur:

Jean Bonander

Mill Valley:

Ann Montgomery

Several Local Task Force members showed interest in having the JPA update its website, which has not been significantly updated since its inception over 8 years ago. Following review of the site it became clear that the site required several revisions to become user friendly and provide a greater variety of green services and resources to the community.

Novato:

Michael Frank

Staff has met with the website contractor, Marinfo LLC, to discuss updates and modifications to the site. The result of these conversations is a proposed tow phased approach to remodeling the site. The first phase, which is estimated to cost \$8,500 will change the look and feel of the site and provide a much broader source of information available to site users. Much of the same information will remain from the current site, but it will be enhanced additional sections such as an "At your Home" and "At the Workplace" that will cover recycling, energy, and composting tips to provide a room by room guide of ways to reduce waste. There will also be a section with green tips and a children's section that will provide educational materials.

Ross:

Gary Broad

San Anselmo:

Debbie Stutsman

San Rafael:

Ken Nordhoff

Sausalito:

Adam Politzer

Tiburon:

Margaret Curran

A second phase would make the Recycling Guide more interactive, letting users specify their location and providing a map of local facilities and drop off location for each material type. Each location would be clickable to let you know the facility information and designate whether they are disposal, reuse, recycling or compost related. Staff has not yet received estimates for what this addition would cost due to variable related to GIS mapping integration and the overall scope of work.

It is requested that your Committee direct staff to proceed with Phase 1 of the update out of budget reserves, by soliciting at least three bids and selecting a website contractors, and include Phase 2 in the FY 10/11 Budget.

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MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:
George Rodericks

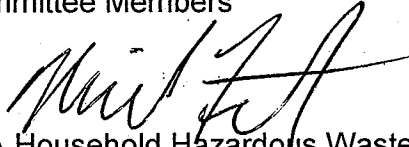
October 21, 2009

Corte Madera:
David Bracken

To: Executive Committee Members

County of Marin:
Matthew Hymel

From: Michael Frost



Re: Report on JPA Household Hazardous Waste Facility and CIWMB Grant

Fairfax:
Michael Rock

The JPA has funded a Household Hazardous Waste Facility (HHWF) in San Rafael for the past 15 years. Marin's citizens can take their household hazardous waste to the facility, except Novato who operate their own facility. To encourage community use of the HHWF facility and keep hazardous material out of the landfill, the JPA has purposefully not charged people for dropping off their hazardous waste. The facility has been very successful and usage has remained high. Landfill tipping fees have been established to pay for HHW program operations and administrative oversight.

Larkspur:
Jean Bonander

Mill Valley:
Ann Montgomery

Novato:
Michael Frank

Ross:
Gary Broad

Recent issues prompted by a CIWMB grant have highlighted the need to update the facility operating agreement, and this report is to bring the Board up to date, and obtain direction.

San Anselmo:
Debbie Stutsman

San Rafael:
Ken Nordhoff

History

Sausalito:
Adam Politzer

- In October of 1993, the City of San Rafael sought and received authorization from the California Department of Toxic Substance Control a permit to establish a Household Hazardous Waste facility at 565 Jacoby Street in San Rafael to be operated by Marin Recycling and Resource Recovery Association (MRRRA).

Tiburon:
Margaret Curran

- On September 19, 1995, the City of San Rafael, and MRRRA entered into an operating agreement to operate the HHWF.

- In July 1, 1996, the City of San Rafael and the JPA (with the exception of the City of Novato) entered into an agreement to allow all the citizens of Marin (except Novato) to bring their hazardous waste to the permitted facility in consideration for the JPA's assumption of liabilities, closure and operational costs. The City's has served as the permit holder agency on behalf of the JPA, and assigned the daily program oversight to the San Rafael Fire Department.

- In April 2007, the JPA approved application of a \$300,000 CIWMB HHW facility Improvement grant.

- In October 2007, the CIWMB awarded the JPA \$300,000 to improve the HHW facility, with all work and payment to be completed by March 31, 2010. No time extensions would be granted. At that time, the purpose of the grant was to expand the footprint of the HHW, paint and stripe the floors, reconfigure the existing collection area, add a receiving kiosk, bathroom, break room and related office improvements for HHW staff. All improvements in the work plan were clearly to be constructed at the existing facility.
- On June 25, 2009, the CIWMB approved the JPA's progress report, as the project had experienced delays and in kind, work at the facility had been modified. The list of specific HHW facility improvements is attached (labeled Attachment A).

Current Issues

In the process of putting together an agreement with the City of San Rafael, MRRRA and the JPA (as required by the CIWMB as part of the grant), problems arose with the grant language that states the JPA must own title to real and personal property funded by the grant. This issue has become significant because the grant work plan approved by the CIWMB always stated the improvements would be made on private property at the existing facility.

In subsequent negotiation and correspondence with all included, the CIWMB has recently agreed in principal to waive this ownership requirement if the JPA is willing to commit to keep the HHWF open for 10 years. If the HHWF closes before 10 years, the JPA would refund to the CIWMB a pro rata amount based on number of years. The JPA would then need side-deal agreements with the City of San Rafael (as permit holder) and MRRRA to indemnify the JPA in the event of early closure through no fault of the JPA.

Getting to this point has pushed the grant deadline of March 31, 2010 to the edge. It is requested you provide staff with direction if you wish to pursue the commitments as outlined above to complete this grant. Current known issues are:

- Does the JPA wish to commit to the existing HHWF for 10 years?
- If the answer to the first question is yes, then the JPA is also (de facto) making a ten year contractual commitment to operate the JPA. If this is so, does the JPA wish to update the September 19, 1995 operating agreement between the City of San Rafael and MRRRA to operate the HHWF? (An updated agreement should provide better service definition, oversight, administrative controls, reporting and cost projections). Concurrently, should an update of the July 1, 1996 Agreement between the City of San Rafael and the JPA be completed. Additionally, could these two agreements tied to three parties be combined into one agreement of the same parties?
- Does the City of San Rafael wish to commit to the existing HHWF for 10 years? If not, how does the JPA wish to assume responsibility as a permit holder?
- Can the necessary legal documents be created, and approved in the next several weeks. Approval would be needed from the JPA Board, City of San Rafael, CIWMB, and MRRRA?
- Can the HHWF obtain the necessary permits, bid the project, and complete the construction by March 31, 2010? Will the HHWF owner be able to satisfy their grant obligations by the deadline of March 31, 2010?

Assuming the answers to the previous question are favorable, should these recommendations be brought to the full Board for approval at a meeting of October 29th?

ATTACHMENT A

MARIN SANITARY SERVICES HOUSEHOLD HAZARDOUS WASTE FACILITY IMPROVEMENT PROJECT BENEFITS

ITEM	BEFORE THE PROJECT	AFTER THE PROJECT
Client Access	Sharing a lane with Marin Resource Recovery Building	Exclusive lane for dropping off HHW with clear striping indicating access routes
Re-Use Area	No adjacent parking for re-use area	Dedicated parking with handicapped facilities adjacent to the re-use area
HHW Facility Area	Existing operations area is about 6,000 square feet	Operations area more than doubled to about 13,000 square feet
Bathroom facilities	Portable toilets	Permanent bathroom facilities
Office space	Make-shift office in a shipping container	Permanently constructed office space with heat and air conditioning
Break area	Make-shift break area: table and chairs in an open area	Permanently constructed break room with sink, locker space, heat and air conditioning
Wash area with sink	Open area against the back wall of the building	Sinks located in both the break room and bathroom
Equipment and supply storage	Shipping containers and open space	Permanent equipment and supply rooms; pallet racks

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:
George Rodericks

October 21, 2009

Corte Madera:
David Bracken

To: Executive Committee Members

County of Marin:
Matthew Hymel

From: Michael Frost

Fairfax:
Michael Rock

Re: 2008 Annual Report Submittal

Larkspur:
Jean Bonander

Mill Valley:
Anne Montgomery

Novato:
Michael Frank

Attached is the summary of the 2008 AB939 Annual Report that was submitted on August 3, 2009 to the California Integrated Waste Management Board. This is the second year the report is in a new format due to regulatory changes that were imposed by SB1016. Although this JPA tracks both diversion and disposal, the reporting system is now solely based on disposal amounts for the reporting year. Disposal is compared with historic data to determine if the 50 % diversion requirement is met.

Ross:
Gary Broad

In 2008 the JPA reported a disposal rate of 4.5 pounds per person per day. This is well below the target rate for 50% diversion is 7.6 pounds per person per day and is down from the 2007 rate of 4.9 pounds per person per day. As long as Marin remains below the 7.6 pound target all jurisdictions remain in compliance with AB939.

San Anselmo:
Debbie Stutsman

San Rafael:
Ken Nordhoff

For basis of comparison, using the "old" reporting method Marin would be at 65 percent diversion for 2008. At 65 percent the rate is the same as 2007. For the past two years there has been a large reduction in the amount of inert material and Biomass diversion that Marin would have gotten credit for in the old system.

Sausalito:
Adam Politzer

Tiburon:
Margaret Curran

The JPA is on target in limiting disposal. However, inert material that was traditionally diverted at the landfill or in local public works projects as road base, slope stabilization, and levee material has been reduced.

Staff is active in working with local municipalities to collect a greater amount of diversion data to accurately characterize waste diversion activities through the traditional diversion rate calculation method for 2009.

Attachments

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Annual Report Summary: Marin County Hazardous and Solid Waste Management Authority (2008)

This Annual Report Summary is an official record of your CIWMB Electronic Annual Report submission, except for your Venue/Event section information, which is contained in a separate report. You may reach that section from the Electronic Annual Report's left navigation bar.

Before submitting your report to the Board, please take the time to review everything on this page to confirm it is complete and correct. If you need to modify some information, close this window to return to the Electronic Annual Report to make your corrections. Then, preview the report again.

Summary Generated On: Tuesday, September 29, 2009 at 3:26 PM

Summary Jurisdiction: Marin County Hazardous and Solid Waste Management Authority Report Year Filed: 2008 Report Status: Submitted	Jurisdiction Contact Jurisdiction Contact: Address: Phone Number: Fax Number: Email Address: Update Contact Info: http://www.ciwmb.ca.gov/LGCentral/Contacts/ContactChg.htm
Submitted Information Date Report Submitted: Monday, August 03, 2009 at 3:59 PM Report Submitted By: Michael Frost (mfrost@co.marin.ca.us)	

Disposal Rate Calculation			
Definition of Terms			Show ▼
Reporting-Year Disposal Amount (tons):		210,850.05	
Disposal Reduction Credits (Reported):			
Disaster Waste (tons):	0.00		
Medical Waste (tons):	0.00		
Regional Diversion Facility Residual Waste (tons):	0.00		
C&D Waste (tons):	0.00		
Class II Waste (tons):	0.00		
Out-of-State Export (Diverted) (tons):	0.00		
Other Disposal Amount (tons):	0.00		
Total Disposal Reduction Credit Amount (tons):		0	
Total Adjusted Reporting-Year Disposal Amount (tons):		210,850.00	
Reporting-Year Transformation Waste (tons):		00.62	
REPORTING ENTITY	QUARTER	DESTINATION FACILITY	TRANSFORMATION TON
Stanislaus	2	Covanta Stanislaus, Inc.	00.62
Page 1 of 1		Export To Excel	Count: 1
Reporting-Year Population:		256,511	
Reporting-Year Employment:		108,120	
Reporting-Year Calculation Results (Per Capita)			
	Population		Employment
	Target	Annual	Target Annual
Disposal Rate without Transformation(pounds/person/day):	4.5		10.7
Transformation Rate (pounds/person/day):	1.5	0.0	3.5 0.0
The Calculated Disposal Rate (pounds/person/day):	7.6	4.5	17.3 10.7

Calculation Factors
<p>If any boxes are checked, please complete, and sign the <u>Reporting Year Disposal Modification Certification Sheet</u> and mail, e-mail or FAX to the CIWMB within 7 business days of submitting your report. If you are only claiming report-year disposal deductions for waste transported to</p>

a board-certified Transformation facility, you do not need to fill out the certification request.

Although you will be able to submit your electronic Annual Report without completing this sheet, your Annual Report will not be deemed complete until this sheet is completed and received by CIWMB. Contact your [LAMD representative](#) for details.

☐ Alternative disposal tonnage

☐ Deductions to DRS disposal tonnage

Questions and Responses

Rural Petition for Reduction in Requirements

Rural Petition For Reduction

1. **Question:** Was your jurisdiction granted a rural Petition for Reduction by the CIWMB?

For more information regarding Rural Petition For Reduction, go to [Rural Solid Waste Diversion Home Page](#).

Response

No.

Newly Incorporated Cities

New City

1. **Question:** Since the date of your last Annual Report, are there any newly incorporated cities within your county/regional agency?

Response

No.

Disposal Rate Accuracy

Disposal Rate Accuracy

1. **Question:** Are there extenuating circumstances pertaining to your jurisdiction's disposal rate that the Board should consider, as authorized by the [Public Resources Code Section 41821\(c\)](#)? If you wish to attach additional information to your annual report, please send those items or electronic files to your LAMD representative; include a brief description of those files below. If so, please use the space below to tell the Board.

Response

No.

Planning Documents Assessment

Source Reduction and Recycling Element (SRRE)

1. **Question:** Does the SRRE need to be revised?

Response

No.

Household Hazardous Waste Element (HHWE)

2. **Question:** Does the HHWE need to be revised?

Response

No.

Non-Disposal Facility Element (NDFE)

3. **Question:** Describe below any changes in the use of [nondisposal facilities](#), both existing and planned (e.g., is the jurisdiction using a different facility within or outside of the jurisdiction, has a facility closed, is a new one being planned).

Response

The Non-Disposal Facility Element is undergoing an amendment due to the changes in Redwood Landfill's permit that includes the composting facility under the same permit. The amended document has been submitted to the Local Task Force for comment and will be reviewed by the Joint Powers Authority Board and submitted to the CIWMB later this year.

Non-Disposal Facility Element (NDFE)

4. **Question:** Are there currently any nondisposal facilities that require a solid waste facility permit located (or planned to be sited) in your jurisdiction that are not identified in your NDFE?

Response

Yes. Redwood Landfill's Composting Facility has been placed under their newly amended permit. The NDFE is in the process of being amended and will be submitted to the CIWMB later this year.

Summary Plan Assessment**Summary Plan**

1. **Question:** Does the Summary Plan need to be revised?

Response

No.

Siting Element Assessment**Total County or Agency Wide Disposal Capacity**

1. **Question:** Based on the best available estimates of current and future disposal, how many years of disposal capacity does your county or regional agency have?

Response

16

Total County or Agency Wide Disposal Capacity

2. **Question:** If you do not currently have 15 years of disposal capacity, describe your strategy for obtaining 15 years of capacity.

Response

No response has been entered

Siting Element Adequacy

3. **Question:** Does the Siting Element need to be revised? The Siting Element will need to be revised if you have less than 15 years disposal capacity and have not described a strategy for obtaining 15 years disposal capacity.

Response

No.

Areas of Concern / Conditional Approvals**Areas of concern**

1. **Question:** Did the Board require your jurisdiction to address any areas of concern when determining the adequacy of your solid waste planning documents, or any of their elements?

Response

No.

Conditional approvals

2. **Question:** Did the Board give conditional approval to any of your solid waste planning documents, or any of their elements?

Response

No.

Additional Information**Additional Information**

1. **Question:** Is there anything else you would like to tell the CIWMB about unique or innovative efforts by your jurisdiction to reduce waste generation and increase diversion, about your jurisdiction's public education efforts, or about specific obstacles to reaching your jurisdiction's diversion goal? If you wish to attach additional information to your annual report, please send those items or electronic files to your LAMD representative and include a brief description of those files below.

Response

Yes. The Marin County Hazardous and Solid Waste Management Joint Powers Authority is developing a Zero Waste Feasibility Study. The first phase of the process will be complete by the end of the year, which will result in a report with several recommendations to reach the JPA's Zero Waste Goals. An optional second phase will start program implementation by working with member agencies and special districts on service changes, franchise agreement edits, and fee restructuring.

SRRE and HHWE Diversion Programs**1000-SR-XGC (Xeriscaping/Grasscycling)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1992

Report Year Diversion Tons: 0.00

Existed before 1990: No

Selected in SRRE: Yes

Owned or Operated: No

Jurisdiction Notes**1010-SR-BCM (Backyard and On-Site Composting/Mulching)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1993

Report Year Diversion Tons: 0.00

Existed before 1990: No

Selected in SRRE: Yes

Owned or Operated: No

Jurisdiction Notes

In 2008 the JPA began a backyard composting program that provided subsidized compost bins to residents when they took a composting class. The JPA partnered with the Marin Art and Garden Center, Marin Sanitary Service and the Marin Municipal Water District to host the classes.

1020-SR-BWR (Business Waste Reduction Program)

Current Status: SO - Selected and Ongoing

Program Start Year: 1990

Report Year Diversion Tons: 0.00

Existed before 1990: Yes

Selected in SRRE: Yes

Owned or Operated: No

Jurisdiction Notes**1030-SR-PMT (Procurement)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1992

Report Year Diversion Tons: 0.00

Existed before 1990: Yes

Selected in SRRE: Yes

Owned or Operated: Yes

Jurisdiction Notes**1040-SR-SCH (School Source Reduction Programs)**

Current Status: AO - Alternative and Ongoing

Program Start Year: 2000

Report Year Diversion Tons: 0.00

Existed before 1990: No

Selected in SRRE: No

Owned or Operated: Yes

Jurisdiction Notes**1050-SR-GOV (Government Source Reduction Programs)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1990

Report Year Diversion Tons: 0.00

Existed before 1990: Yes

Selected in SRRE: Yes

Owned or Operated: Yes

Jurisdiction Notes**1060-SR-MTE (Material Exchange, Thrift Shops)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1990
Report Year Diversion Tons: 0.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****2000-RC-CRB (Residential Curbside)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1982
Report Year Diversion Tons: 49906.70Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****2010-RC-DRP (Residential Drop-Off)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1992
Report Year Diversion Tons: 0.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****2020-RC-BYB (Residential Buy-Back)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1982
Report Year Diversion Tons: 5983.83Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****2030-RC-OSP (Commercial On-Site Pickup)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1992
Report Year Diversion Tons: 0.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****2050-RC-SCH (School Recycling Programs)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1992
Report Year Diversion Tons: 0.00Existed before 1990: No
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****2060-RC-GOV (Government Recycling Programs)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1990
Report Year Diversion Tons: 7275.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes**

2070-RC-SNL (Special Collection Seasonal (regular))

Current Status: AO - Alternative and Ongoing

Program Start Year: 1988

Report Year Diversion Tons: 0.00

Existed before 1990: No

Selected in SRRE: No

Owned or Operated: No

Jurisdiction Notes**2080-RC-SPE (Special Collection Events)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1994

Report Year Diversion Tons: 0.00

Existed before 1990: No

Selected in SRRE: Yes

Owned or Operated: Yes

Jurisdiction Notes**3000-CM-RCG (Residential Curbside Greenwaste Collection)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1993

Report Year Diversion Tons: 32966.32

Existed before 1990: No

Selected in SRRE: Yes

Owned or Operated: No

Jurisdiction Notes

This total includes all residential greenwaste collected by the franchised haulers that was utilized as compost as well as the material used for erosion control purposes at Redwood Landfill.

3010-CM-RSG (Residential Self-haul Greenwaste)

Current Status: SO - Selected and Ongoing

Program Start Year: 1993

Report Year Diversion Tons: 3469.77

Existed before 1990: No

Selected in SRRE: Yes

Owned or Operated: No

Jurisdiction Notes

This program includes all the material that was self hauled to Redwood from Marin sources and used as erosion control or compost and material that was self hauled to MSS and used as Mulch.

3030-CM-CSG (Commercial Self-Haul Greenwaste)

Current Status: SO - Selected and Ongoing

Program Start Year: 1993

Report Year Diversion Tons: 0.00

Existed before 1990: No

Selected in SRRE: Yes

Owned or Operated: No

Jurisdiction Notes**3050-CM-SCH (School Composting Programs)**

Current Status: AO - Alternative and Ongoing

Program Start Year: 2000

Report Year Diversion Tons: 0.00

Existed before 1990: No

Selected in SRRE: No

Owned or Operated: No

Jurisdiction Notes**4010-SP-SLG (Sludge (sewage/industrial))**

Current Status: SO - Selected and Ongoing

Program Start Year: 1995

Report Year Diversion Tons: 6333.63

Existed before 1990: No

Selected in SRRE: Yes

Owned or Operated: No

Jurisdiction Notes**4020-SP-TRS (Tires)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1990
Report Year Diversion Tons: 0.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****4030-SP-WHG (White Goods)**

Current Status: AO - Alternative and Ongoing

Program Start Year: 1996
Report Year Diversion Tons: 33.98Existed before 1990: No
Selected in SRRE: No
Owned or Operated: No**Jurisdiction Notes****4040-SP-SCM (Scrap Metal)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1989
Report Year Diversion Tons: 201.98Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: Yes**Jurisdiction Notes****4050-SP-WDW (Wood Waste)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1993
Report Year Diversion Tons: 952.11Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****4060-SP-CAR (Concrete/Asphalt/Rubble)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1990
Report Year Diversion Tons: 90516.53Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****4090-SP-RND (Rendering)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1990
Report Year Diversion Tons: 0.00Existed before 1990: No
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes**

5000-ED-ELC (Electronic (radio ,TV, web, hotlines))

Current Status: SO - Selected and Ongoing

Program Start Year: 1994
Report Year Diversion Tons: 0.00Existed before 1990: No
Selected in SRRE: Yes
Owned or Operated: Yes**Jurisdiction Notes****5010-ED-PRN (Print (brochures, flyers, guides, news articles))**

Current Status: SO - Selected and Ongoing

Program Start Year: 1992
Report Year Diversion Tons: 0.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****5020-ED-OUT (Outreach (tech assistance, presentations, awards, fairs, field trips))**

Current Status: SO - Selected and Ongoing

Program Start Year: 1994
Report Year Diversion Tons: 0.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: Yes**Jurisdiction Notes****5030-ED-SCH (Schools (education and curriculum))**

Current Status: SO - Selected and Ongoing

Program Start Year: 1993
Report Year Diversion Tons: 0.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****6010-PI-EIN (Economic Incentives)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1993
Report Year Diversion Tons: 0.00Existed before 1990: No
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****6020-PI-ORD (Ordinances)**

Current Status: AO - Alternative and Ongoing

Program Start Year: 2000
Report Year Diversion Tons: 0.00Existed before 1990: No
Selected in SRRE: No
Owned or Operated: Yes**Jurisdiction Notes****7000-FR-MRF (MRF)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1993
Report Year Diversion Tons: 124850.59Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes**

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7010-FR-LAN (Landfill)		
Current Status: AO - Alternative and Ongoing	Program Start Year: 1996 Report Year Diversion Tons: 69546.18	Existed before 1990: No Selected in SRRE: No Owned or Operated: No
Jurisdiction Notes		

7020-FR-TST (Transfer Station)		
Current Status: SO - Selected and Ongoing	Program Start Year: 1990 Report Year Diversion Tons: 0.00	Existed before 1990: Yes Selected in SRRE: Yes Owned or Operated: No
Jurisdiction Notes		

7030-FR-CMF (Composting Facility)		
Current Status: SO - Selected and Ongoing	Program Start Year: 1990 Report Year Diversion Tons: 25874.46	Existed before 1990: Yes Selected in SRRE: Yes Owned or Operated: No
Jurisdiction Notes Redwood Landfill's new permit now includes their composting operation. Marin Sanitary began sending greenwaste to their facility in Zemora for composting midway through 2008. This greatly increased the composted tonnage.		

7040-FR-ADC (Alternative Daily Cover)		
Current Status: AO - Alternative and Ongoing	Program Start Year: 1995 Report Year Diversion Tons: 27400.75	Existed before 1990: No Selected in SRRE: No Owned or Operated: No
Jurisdiction Notes		

8010-TR-BIO (Biomass)		
Current Status: SO - Selected and Ongoing	Program Start Year: 1990 Report Year Diversion Tons: 31131.04	Existed before 1990: Yes Selected in SRRE: Yes Owned or Operated: No
Jurisdiction Notes		

8020-TR-TRS (Tires)		
Current Status: AO - Alternative and Ongoing	Program Start Year: 1999 Report Year Diversion Tons: 0.00	Existed before 1990: No Selected in SRRE: No Owned or Operated: No
Jurisdiction Notes The County received two Waste Tire Amnesty Event Grants from the CIWMB that will fund two separate two week events for free tire recycling.		

9000-HH-PMF (Permanent Facility)

Current Status: SO - Selected and Ongoing

Program Start Year: 1993
Report Year Diversion Tons: 0.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: Yes**Jurisdiction Notes****9010-HH-MPC (Mobile or Periodic Collection)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1986
Report Year Diversion Tons: 0.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: Yes**Jurisdiction Notes****9020-HH-CSC (Curbside Collection)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1992
Report Year Diversion Tons: 0.00Existed before 1990: No
Selected in SRRE: Yes
Owned or Operated: No**Jurisdiction Notes****9040-HH-EDP (Education Programs)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1991
Report Year Diversion Tons: 0.00Existed before 1990: Yes
Selected in SRRE: Yes
Owned or Operated: Yes**Jurisdiction Notes****9045-HH-EWA (Electronic Waste)**

Current Status: SO - Selected and Ongoing

Program Start Year: 1995
Report Year Diversion Tons: 0.00Existed before 1990: No
Selected in SRRE: No
Owned or Operated: No**Jurisdiction Notes**