MARIN COUNTY HAZARDOUS & SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Board of Directors Meeting & Public Hearing May 26, 2016

Central Marin Police Authority 250 Doherty Drive, Larkspur, CA 9:00 – 9:30 AM AGENDA

The public parking lot in front of the CMPA is small, but there is ample parking at Piper Park, which is adjacent to the building.

Call to Order.

Minutes

- 1. JPA Board Meeting Minutes from February 25, 2016. (Action)
- 2. JPA Executive Committee Minutes from April 28, 2016 (Action)

Consent Agenda

- 3. Audit and Financial Statement for Year Ending June 30, 2015 (Action)
- 4. Authorization for CalRecycle Grants and Payment Programs Resolutions (Action)
- 5. File "Statement of Facts" with CA Secretary of State and Marin County Clerk (Action)

Regular Agenda

- Staff Report on Recent and Ongoing Activities (Information)
- 7. FY 16/17 JPA Budget and Assessment Schedule (Action)
- 8. Sixth Cycle Zero Waste Grant Forms (Action)
- 9. Signature Authority for Zero Waste Schools Program (Action)

Agendas & staff reports available at: http://zerowastemarin.org/Agenda

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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.

1 DRAFT

MARIN COUNTY HAZARDOUS & SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Board of Directors Meeting Thursday February 25, 2016 Central Marin Police Authority 250 Doherty Drive, Larkspur 9:00 – 9:30 AM

MINUTES

MEMBERS PRESENT

Jim Schutz, San Rafael
Jim McCann, Mill Valley
Garret Toy, Fairfax
Joe Chin, Ross
Greg Chanis, Tiburon
Mary Neilan, Belvedere
Debra Stutsman, San Anselmo
Adam Politzer, Sausalito
Dan Schwarz, Larkspur
Cathy Capriola, Novato

MEMBERS ABSENT

David Bracken, Corte Madera Matthew Hymel, County of Marin

STAFF PRESENT

Pat Echols, JPA Staff Alex Soulard, JPA Staff Kiel Gillis, JPA Staff Casey Poldino, JPA Staff

OTHERS PRESENT

Dan Eilerman, County of Marin CAO Office Patty Garbarino, Marin Sanitary Svc. Kathy Wall, Marin Sanitary Svc. Courtney Scott, San Rafael Fire Dept.

Call to Order: The JPA Board meeting came to order at 09:06 AM.

Regular Agenda

1. JPA Board Meeting Minutes from October 25, 2015

M/s Politzer, Stutsman to approve the minutes for the October 25, 2015 JPA Board meeting. The motion passed unanimously.

2. <u>Updates from Staff on Ongoing & Activities</u>

Staff provided an update on activities, which included notification of upcoming used oil filter and tire recycling opportunities within Marin County, execution of Novato HHW Grant contract, ramping up activities with the CalRecycle Oil Payment Program contractor C2 Alternative Services for local events such as the Marin County Fair and Home & Garden Show. JPA contractor R3 Consulting has completed their contracted site visits and will be submitting Construction & Demolition (C&D) forms to all municipalities. Staff fielded questions from the Board. No public comments were submitted. No action was necessary.

3. Receive and File City of San Rafael Fy 14/15 Household Hazardous Waste (HHW) Program Annual Report

Staff summarized the HHW Annual Report and HHW programs. This included noting the program was \$70,000 under budget this fiscal year while addressing maintenance and signage issues. The program has collected over 1.7 million pounds of HHW materials in FY 14/15, and saved over \$200,000 from reimbursements from PaintCare. San Rafael Fire Staff fielded questions from the Board. Ms. Garbarino and Ms. Wall submitted comments on the history of the facility, tonnages collected, and ongoing challenges. M/s Stutsman, Schutz to accept the report. The motion passed unanimously.

4. Executive Committee Budget Subcommittee and FY 16/17 Budget Development Schedule

Staff explained the Budget Development process, schedule, and sub-committee formation. No public comments were tendered. M/s McCann/Schutz to approve the budget process and schedule. The motion passed unanimously.

2 DRAFT

MARIN COUNTY HAZARDOUS & SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Executive Committee
Thursday April 28, 2016
Central Marin Police Authority
250 Doherty Drive, Larkspur
9:00 – 9:30 AM

MINUTES

MEMBERS PRESENT

Garret Toy, Fairfax Matthew Hymel, County of Marin Jim Schutz, San Rafael Cathy Capriola, Novato

MEMBERS ABSENT

Adam Politzer, Sausalito

STAFF PRESENT

Michael Frost, JPA Staff Kiel Gillis, JPA Staff

OTHERS PRESENT

Patty Garbarino, Marin Sanitary Svc. Kathy Wall, Marin Sanitary Svc. Courtney Scott, San Rafael Fire Dept.

Call to Order:

Regular Agenda

Minutes

1. <u>Approval of Executive Committee Minutes from April 23, 2015</u>. M/s Hymel, Toy to approve the minutes from the April 23, 2015 JPA Executive Committee meeting. The motion passed unanimously.

2. Proposed FY 16-17 Budget and Fee Schedule

Staff provided a summary of the Budget-Subcommittee's recommended Budget and Fee Schedule to the Executive Committee Members. Staff outlined the function each of the three cost centers, which includes Administration, Household Hazardous Waste, and Zero Waste. Also outlined was the breakdown of 6.1 and optional 6.2 programs, of which Novato does not participate. Staff reported the JPA 2012 interim Zero Waste goal of 80% was not reached, and recommended changes to meet that goal. This included additional funding for the Zero Waste Marin Schools Program, Zero Waste Grant Program, and to address the California State mandated AB 1826 Commercial Organics Recycle implementation. Staff fielded questions from Members. Member Schutz requested clarification regarding the status of the ZeroWaste Grant Program; Staff summarized the function and planned roll-out of Cycle 6 grants pending Budget Authorization.

Ms. Garbarino provided information to the Board on the struggling market of recyclable materials. M/s Hymel, Schutz to recommend approval of the budget to the full JPA Board. The motion passed unanimously.

3. Open Time for Public Comment No public comments were submitted.

- 4. Next Scheduled JPA Board Meeting is May 26, 2016.
- 5. Adjourn

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MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere: Date: May 26, 2016

Mary Neilan

To: JPA Board Members

Corte Madera: David Bracken

From: Steve Devine, Program Manager

County of Marin: Matthew Hymel

Re: Audit and Financial Statements for Year Ending June 30, 2015

Fairfax: Garrett Toy Attached for your review are the JPA's Financial Statement and Auditor's Report for the year ending June 30, 2015. Also attached are two transmittal letters dated February 6, 2015 to the JPA Board from Maher Accountancy.

Larkspur:

Dan Schwarz

Maher Accountancy noted one audit finding. A clerical error was made in depositing a grant reimbursement from CalRecycle into the wrong account. To correct this, JPA management will review all incoming funds for proper deposit

Mill Valley: Jim McCann

classification.

Novato:

Cathy Capriola

A representative from Maher Accounting will be at this meeting if the Board has

any questions.

Ross:

Joe Chinn

RECOMMENDATION

San Anselmo:

Debbie Stutsman

Accept the attached financial statements and auditor's report for the year

ending June 30, 2015.

Attachments.

San Rafael:

Jim Schutz

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Sausalito:

Adam Politzer

Tiburon: Greg Chanis



Board of Directors and Management Marin County Hazardous and Solid Waste Management Authority

In planning and performing our audit of the financial statements of the Marin County Hazardous and Solid Waste Management Authority (the Authority) as of and for the year ended June 30, 2015, in accordance with auditing standards generally accepted in the United States of America, we considered the Authority's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore material weaknesses or significant deficiencies may exist that were not identified. However, as discussed below, we identified certain deficiencies in internal control that we consider to be material weaknesses and significant deficiencies.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. We consider the following deficiency in the Authority's internal control to be a material weakness.

Revenue/Cash Deposit Posting Error

Condition: A deposit of \$58,139.83 intended for the Authority was incorrectly posted to a different entity's fund. There was not an internal procedure in place to identify and correct this error.

Effect:

- 1) Money posted to a fund outside of the Authority is not available to the Authority.
- 2) Monitoring fund balance by management is compromised if revenue is not posted to the proper fund.
- 3) Financial statement reports are misstated when revenue is not recognized.

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Recommendation regarding recording expenditures:

Management should review significant revenue postings by accounting staff to determine if they were properly recorded. Periodic reviews of revenue and outstanding receivables should be performed by management. Management should compare the recorded financial results to expectations, and any significant deviations should be investigated.

Management Response: Management has agreed to implement the procedures recommended above for the 15/16 fiscal year to the extent possible under the confines of the County's current financial management system, SAP.

This communication is intended solely for the information and use of management and the board of directors, and others within the organization, and is not intended to be, and should not be, used by anyone other than these specified parties.

Maher Accountancy

March 22, 2016

Independent Auditors' General Communication to Board

March 22, 2016

To the Board of Directors

Marin County Hazardous & Solid Waste Management Authority

We have audited the financial statements of the Marin County Hazardous & Solid Waste Management Authority for the year ended June 30, 2015, and have issued our report thereon March 22, 2016. Professional standards require that we provide you with the following information related to our audit.

Our Responsibility under U.S. Generally Accepted Auditing Standards

As stated in our engagement letter dated June 9, 2015, our responsibility, as described by professional standards, is to express opinions about whether the financial statements prepared by management with your oversight are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles. Our audit of the financial statements does not relieve you or management of your responsibilities.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by Marin County Hazardous & Solid Waste Management Authority are described in Note 1 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during year. We noted no transactions entered into by the governmental unit during the year for which there is a lack of authoritative guidance or consensus. There are no significant transactions that have been recognized in the financial statements in a different period than when the transaction occurred.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. There are no significant estimates used in preparing the financial statements.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

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Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. Because the Authority's general ledger is maintained for each fund according to the modified accrual basis of accounting, we recommended adjustments to allow for the presentation of the government-wide financial statements on the full accrual basis since generally accepted accounting principles require that both presentations be made in the financial statements. The significant adjustments recommended for fiscal 2014-15 involved (a) recording a prior year adjustments that were not implemented in the financial statements, (b) record grant income which was previously deferred, (c) record current year expenses posted in the subsequent year, (d) several reclassifications between expenditure accounts and, (e) record a receivable from another agency's fund to correct for a misdirected deposit.

Any other misstatements detected as a result of audit procedures and corrected by management were immaterial, either individually or in the aggregate, to the financial statements taken as a whole.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated March 22, 2016.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the governmental unit's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Independent Auditors' General Communication to Board March 22, 2016
Page 3

Other Audit Findings or Issues

We communicated about internal controls related to accurate accounting and timely processing of financial data in a separate letter dated March 22, 2016.

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the governmental unit's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

This information is intended solely for the use of Board of Directors and management of Marin County Hazardous & Solid Waste Management Authority and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

Maker Accountancy



Marin Hazardous and Solid Waste



FINANCIAL STATEMENTS AND AUDITORS' REPORT YEAR ENDED JUNE 30, 2015

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors Marin County Hazardous & Solid Waste Management Authority

We have audited the accompanying financial statements of the Marin County Hazardous & Solid Waste Management Authority (the Authority) as of and for the year ended June 30, 2015, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of June 30, 2015, and the changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and budgetary comparison information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Maher Accountancy

San Rafael, California March 22, 2016

Marin County Hazardous & Solid Waste **Management Authority** P.O. Box 4186

San Rafael, CA 94913

MANAGEMENT'S DISCUSSION AND ANALYSIS

The Management's Discussion and Analysis provides an overview of the Marin County Hazardous & Solid Waste Management Authority (the Authority) financial activities for the fiscal year ended June 30, 2015. Please read it along with the Authority's financial statements, which begin on page 7.

FINANCIAL HIGHLIGHTS

The Authority's net position was \$813,000, a decrease of \$88,000 over the prior year. Total revenues decreased by \$6,000 and total expenses decreased by \$69,000.

Budgetary comparison schedules are found starting on page 18. When comparing actual activity with budgeted, those schedules indicate we had a negative variance of \$2,000 in the Countywide Waste Management (general) fund. The Household Hazardous Waste Management fund showed a positive variance of \$211,000 for the year. The Zero Waste Fund ended its year with a positive variance of \$110,000.

USING THIS ANNUAL REPORT

This annual report consists of financial statements for the Authority as a whole. The statement of net position and the statement of activities provide information about the activities of the Authority as a whole and present a long-term view of the Authority's finances. The fund financial statements present a short-term view of the Authority's activities (they include only current assets expected to be collected in the very near future and liabilities expected to be paid in the very near future). Presently, the Authority does not have any differences between the basic financial statements (statement of net position and statement of activities) and the fund financial statements (balance sheet and statement of revenues, expenditures and changes in fund balance).

THE AUTHORITY AS A WHOLE

One important question asked about the Authority's finances is, "Is the Authority better or worse off as a result of the year's activities?" The information in the government-wide financial statements helps answer this question. These statements include all assets and liabilities using the accrual basis of accounting, which is similar to the basis of accounting used by most privatesector companies. The change in *net position* (the difference between total assets and total liabilities) over time is one indicator of whether the Authority's financial health is improving or deteriorating. However, one must consider other nonfinancial factors in making an assessment of the Authority's health, such as changes in the economy and changes in the Authority's boundaries, etc. to assess the overall health of the Authority.

Changes in the Authority's net position were as follows:

	2015	2014	Increase (decrease)				
Total assets	\$ 1,196,352	\$ 1,262,356	\$ (66,004)				
Total liabilities	383,507	361,802	21,705				
Net position:							
Restricted	731,886	735,098	(3,212)				
Unrestricted	80,959	165,456	(84,497)				
Total net position	\$ 812,845	\$ 900,554	\$ (87,709)				

The Authority's total assets decreased primarily as a result of the ramping up of program expenses, particularly the Zero Waste program. This program's expenditures included the use of resources accumulated in prior periods in anticipation of use during 2014-15.

Changes in the Authority's revenues were as follows:

	2015		2014		Increase (decrease)		
General revenues:							
Investment earnings	\$	741	\$	456	\$	285	
Program revenues:							
Solid waste management fees	2,8	365,470	2,9	940,455		(74,985)	
Operating grant - State of California	1	73,025	1	104,166		68,859	
Miscellaneous		175		525		(350)	
Investment earnings		671		585		86	
Total program revenue	3,0	39,341	3,0)45,731		(6,390)	
Total revenues	\$ 3,0	040,082	\$ 3,0)46,187	\$	(6,105)	

Fees from haulers and facility operators decreased from the prior year primarily in response to lower costs for the Household Hazardous Waste (HHW) program operated by Marin Recycling & Resource Recovery Association. In addition, the HHW fund needed less revenue to reach its contingency fund target in 2014-15 than it had in previous years. During the year, revenue related to the continuing Oil Payment Program Grant (OPP) and the new HD-20 Grant was earned and recognized by the Authority. The OPP grant revenue covers collection and recycling costs for used oil and oil filters and is administered by the California Department of Resources Recycling and Recovery (CalRecycle). The HD-20 Grant is also administered by CalRecycle, and includes reimbursement for various costs related to raising public awareness regarding hazardous waste consumption and disposal.

Changes in the Authority's expenses and net assets were as follows:

			Increase
	2015	2014	(decrease)
Contract staff and support	\$ 658,959	\$ 574,275	\$ 84,684
Services and supplies	2,468,832	2,622,684	(153,852)
Total expenses	3,127,791	3,196,959	(69,168)
Less program revenues	3,039,341	3,045,731	(6,390)
Net revenue (expenses)	(88,450)	(151,228)	62,778
General revenues	741	456	285
Change in net position	\$ (87,709)	\$ (150,772)	\$ 63,063

Services and supplies expenses decreased due to the completion of the Bag Ban initiative in the prior year, as well as a drop in outgoing Zero Waste payments made to members. The payments to members spiked in the prior year as payments were made to distribute accumulated funds. Payments during 2014-15 returned to a normalized level.

FUND FINANCIAL STATEMENTS

The fund financial statements provide detailed information about the Authority's funds - the general fund and special revenue fund.

The fund financial statements provide a short-term view of the Authority's operations. They are reported using an accounting basis called *modified accrual* which measures amounts using only cash and other short-term assets and liabilities (receivables and payables) that will soon be converted to cash or will soon be paid with cash.

CAPITAL ASSET AND DEBT ADMINISTRATION

The Authority does not own any capital assets nor does it have any debt. The Authority shares office space with the Marin County Public Works Department.

THE FUTURE OF THE AUTHORITY

With a growing awareness of our society's environmental impacts, the public has shown an increasing interest in recycling, reuse, waste reduction and hazardous materials programs. The incremental increase in products that are legislatively banned from landfill disposal and public requests for expansion of green programs demonstrates the growing demand for a greater scope of environmental services in the future. The JPA's goal of Zero Waste by 2025 will require substantial coordination of solid waste services, outreach programs, infrastructure, and regulation in the future.

REQUESTS FOR INFORMATION

This financial report is designed to provide our citizens, taxpayers and creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the funds under its stewardship.

Please address any questions about this report or requests for additional financial information to the address on our letterhead.

Respectively submitted,

Steve Devine, Manager

STATEMENT OF NET POSITION AS OF JUNE 30, 2015

ASSETS	
Cash	\$ 1,138,212
Receivables:	
Due from County	58,140
Total assets	1,196,352
LIABILITIES	
Accounts payable and accrued expenses	343,030
Unearned revenue	40,477
Chearned Tevende	10,177
Total liabilities	383,507
NET POSITION	
Restricted for Household Hazardous Waste program	676,227
Restricted for Zero Waste program	55,659
Unrestricted	80,959
Total net position	\$ 812,845

STATEMENT OF ACTIVITIES YEAR ENDED JUNE 30, 2015

	General	Household Hazardous Waste Program	Zero Waste Program		Total
EXPENSES					
Contract staff and support	\$ 347,127	\$ 131,662	\$ 180,170	\$	658,959
Services and supplies	89,367	1,703,551	675,914		2,468,832
Total expenditures/expenses	436,494	1,835,213	856,084		3,127,791
PROGRAM REVENUES					
Waste management fees	351,081	1,914,316	600,073	2	2,865,470
Operating grants - State of California	-	173,025	-		173,025
Miscellaneous income	175	-	-		175
Investment earnings	-	671	-		671
Total program revenue	351,256	2,088,012	600,073		3,039,341
Net program revenue (expense)	\$ (85,238)	\$ 252,799	\$ (256,011)		(88,450)
GENERAL REVENUES					
Investment earnings					741
Change in net position					(87,709)
NET POSITION:					
Net Position at June 30, 2014					900,554
Net Position at June 30, 2015				\$	812,845

BALANCE SHEET YEAR ENDED JUNE 30, 2015

			H	Iousehold				
	Countywide Hazardous Waste Waste				Zero Waste			
	Mai	nagement	(Sp	ecial Revenue	(Speci	al Revenue		
	(Ge	(General Fund)		Fund)		Fund)		Total
ASSETS								
Cash	\$	81,327	\$	970,125	\$	86,760	\$	1,138,212
Receivables:								
Due from County				58,140				58,140
Total assets	\$	81,327	\$	1,028,265	\$	86,760	\$	1,196,352
LIABILITIES								
Accounts payable and								
accrued expenses	\$	368	\$	311,561	\$	31,101	\$	343,030
Unearned Revenue				40,477				40,477
		368		352,038		31,101		383,507
FUND BALANCES								
Fund balances:								
Assigned		-		676,227		55,659		731,886
Unassigned		80,959		-				80,959
Total fund balance		80,959		676,227		55,659		812,845
Total liabilities and	ф	01.225	Φ.	1 000 0 55	Φ.	0.5 7.50	Φ.	1 10 6 0 5 2
fund balances	\$	81,327	\$	1,028,265	\$	86,760	\$	1,196,352

STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES YEAR ENDED JUNE 30, 2015

	Ma	ountywide Waste nnagement neral Fund)	H Wa	Household Hazardous aste (Special venue Fund)	ero Waste (Special venue Fund)	Total
REVENUES						
Solid waste management fees	\$	351,081	\$	1,914,316	\$ 600,073	\$ 2,865,470
Operating grants - State of California		-		173,025	-	173,025
Miscellaneous income		175		-	-	175
Investment earnings		741		671	-	1,412
Total revenues		351,997		2,088,012	600,073	3,040,082
EXPENDITURES						
Contract staff and support		347,127		131,662	180,170	658,959
Services and supplies:						
Accounting and audit fees		11,275		-	_	11,275
Insurance		17,566		-	-	17,566
Rent		16,941		-	-	16,941
Contract services		36,832		1,250,910	-	1,287,742
Miscellaneous services		849		452,641	675,914	1,129,404
County financial service		5,904				5,904
Total services and supplies		89,367		1,703,551	675,914	2,468,832
Total expenditures		436,494		1,835,213	 856,084	3,127,791
Net change in fund balance		(84,497)		252,799	(256,011)	(87,709)
11ct change in fund parance		(04,47/)		434,199	 (230,011)	(67,709)
Fund balance at June 30, 2014		165,456		423,428	311,670	900,554
Fund balance at June 30, 2015	\$	80,959	\$	676,227	\$ 55,659	\$ 812,845

NOTES TO THE FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

REPORTING ENTITY

The Marin County Hazardous & Solid Waste Management Authority was formed under a joint powers agreement between the County of Marin and eleven cities and towns within Marin County. The purpose of Authority is to administer and enforce hazardous waste and solid waste management plans, as mandated by State Law.

The governing board of the Authority consists of one appointed official from each of the member agencies. The Authority has contracted with Marin County Department of Public Works for administrative services and the City of San Rafael for Hazardous Waste management services.

Introduction

The Authority's financial statements are prepared in accordance with generally accepted accounting principles (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations.).

BASIC FINANCIAL STATEMENTS GOVERNMENT-WIDE STATEMENTS

The Authority's basic financial statements include both government-wide (reporting the Authority as a whole) and fund financial statements (reporting the Authority's major funds).

In the government-wide Statement of Net Position, the Authority's activities are reported on a full accrual, economic resource basis, which recognizes all long-term assets and receivables as well as long-term debt and obligations. The Authority's net position is reported in two parts: (1) restricted net position and (2) unrestricted net position. Net position for particular programs are deemed to be restricted.

NOTES TO THE FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

BASIC FINANCIAL STATEMENTS GOVERNMENT-WIDE STATEMENTS (Continued)

The government-wide Statement of Activities reports both the gross and net cost of the Authority's function. The function is supported by general government revenues. The Statement of Activities reduces gross expenses by related program revenues.

The net costs (by function) are normally covered by general revenues.

The government-wide focus is more on the sustainability of the Authority as an entity and the change in the Authority's net position resulting from the current year's activities.

FUND FINANCIAL STATEMENTS

The financial transactions of the Authority are reported in individual funds in the fund balancing accounts that comprise its assets, liabilities, assigned or unassigned resources, fund balance, revenues and expenditures.

All the Authority's funds are government fund types. The focus of the governmental funds' measurement (in the fund statements) is upon determination of financial position and changes in financial positions (sources, uses, and balances of financial resources) rather than upon net income. The following is a description of the governmental funds of the Authority:

General fund - accounts for the Authority's general operations.

Special revenue funds:

Household Hazardous Waste fund - accounts for hazardous waste disposal for households through a contract with the City of San Rafael Fire Department and Novato Sanitary District.

Zero Waste fund - accounts for the program to reduce and eliminate waste and obtains its resources from JPA tipping fees.

BASIS OF ACCOUNTING

Basis of accounting refers to the point at which revenues or expenditures/expenses are recognized in the accounts and reported in the financial statements. It relates to the timing of the measurement made regardless of the measurement focus applied.

NOTES TO THE FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

ACCRUAL:

The governmental activities in the governmental-wide financial statements are presented on the accrual basis of accounting. Revenues are recognized when earned and expenses are recognized when incurred.

MODIFIED ACCRUAL:

The government fund financial statements are presented on the modified accrual basis of accounting. Under the modified accrual basis of accounting, revenues are recorded when susceptible to accrual; i.e., both measurable and available. "Available" means collectible within the current period or within 60 days after yearend. Expenditures are generally recognized when the related liability is incurred. The exception to this general rule is that principal and interest on general obligation long-term debt, if any, is recognized when due.

There were no differences between the two bases of accounting for the year ended June 30, 2015.

FINANCIAL STATEMENT AMOUNTS

CASH AND CASH EQUIVALENTS:

The Authority has defined cash and cash equivalents to include cash on hand, demand deposits, and short-term investments with fiscal agent (County of Marin).

EQUIPMENT AND INFRASTRUCTURE

It is the Authority's policy to record purchases of items of furniture and equipment costing \$1,000 or less as office supplies. Items in excess of \$1,000 are classified as capital outlay or capitalized. As of June 30, 2015, no equipment purchases have met the capitalization criteria.

BUDGET

Both the original budget and the final budget (if changes were adopted) are included in these financial statements as approved by the Board of Directors. The budgetary basis is the modified accrual basis of accounting.

NOTES TO THE FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

FUND BALANCE:

In the fund financial statements, fund balance for governmental funds is reported in classifications that comprise a hierarchy based primarily on the extent to which the Authority is bound to honor constraints on the specific purpose for which amounts in the funds can be spent. Fund balance is reported in five components – nonspendable, restricted, committed, assigned and unassigned. Following is a description of the components applicable to the Authority:

Assigned – This component consists of amounts that are constrained by the District's intent to be used for specific purposes, but are neither restricted nor committed. The authority for assigning fund balance is expressed by the Board of Directors, Manager or their designee.

Unassigned – This classification represents amounts that have not been restricted, committed or assigned to specific purposes within the general fund.

2. CASH

The Authority maintains all of its cash in the County of Marin pooled investment fund for the purpose of increasing interest earnings through pooled investment activities. The Authority's position in the pool is the same as the value of the pool shares. Interest earned on the investment pool is allocated quarterly to the participating funds using the daily cash balance of each fund. This pool, which is available for use by all funds, is displayed in the financial statements as "Cash."

The County Pool includes both voluntary and involuntary participation from external entities. The State of California statutes require certain special districts and other governmental entities to maintain their cash surplus with the County Treasurer.

The County's investment pool is not registered with the Securities and Exchange Commission as an investment company. Investments made by the Treasurer are regulated by the California Government Code and by the County's investment policy. The objectives of the policy are in order of priority, safety, liquidity, yield, and public trust. The County has established a treasury oversight committee to monitor and review the management of public funds maintained in the investment pool in accordance with Article 6 Section 27131 of the California Government Code. The oversight committee and the Board of Supervisors review and approve the investment policy annually. The County Treasurer prepares and submits a comprehensive investment report to the members of the oversight committee and the investment pool participants every month. The report covers the types of investments in the pool, maturity dates, par value, actual costs and fair value.

NOTES TO THE FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

2. CASH (continued)

INTEREST RATE RISK

In accordance with its investment policy, the County manages its exposure to declines in fair values by limiting the weighted average maturity of its investment pool to 540 days, or 1.5 years. At June 30, 2015, the County's investment pool had a weighted average maturity of 176 days.

For purposes of computing weighted average maturity, the maturity date of variable rate notes is the length of time until the next reset date rather than the stated maturity date.

CREDIT RISK

State law and the County's Investment Policy limits investments in commercial paper, corporate bonds, and medium term notes to the rating of "A" or higher as provided by Moody's Investors Service or Standard & Poor's Corporation. The County's Investment Policy limits investments purchased by Financial Institution Investment Accounts, a type of mutual fund, to United States Treasury and Agency obligations with a credit quality rating of "AAA."

CONCENTRATION OF CREDIT RISK

The following is a summary of the concentration of credit risk by investment type as a percentage of each pool's fair value at June 30, 2015.

	Percent of Portfolio
Investments in Investment Pool	
Federal agency - discount	85%
Federal agency - coupon	13%
Money market funds	2%
	100%

NOTES TO THE FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

2. CASH (continued)

CUSTODIAL CREDIT RISK

For investments and deposits held with safekeeping agents, custodial credit risk is the risk that, in the event of the failure of the counterparty, the County will not be able to recover the value of its investments or deposits that are in the possession of an outside party. At year end, the County's investment pool had no securities exposed to custodial credit risk.

LOCAL AGENCY INVESTMENT FUND

The County Treasurer's Pool maintains an investment in the State of California Local Agency Investment Fund (LAIF), managed by the State Treasurer. This fund is not registered with the Securities and Exchange Commission as an investment company, but is required to invest according to California State Code. Participants in the pool include voluntary and involuntary participants, such as special districts and school districts for which there are legal provisions regarding their investments. The Local Investment Advisor Board (Board) has oversight responsibility for LAIF. The Board consists of five members as designated by State statue.

3. RISK MANAGEMENT

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; and errors and omissions. During the year, the Authority purchased liability insurance with limits of \$2,000,000 and a deductible of \$1,000.

NOTES TO THE FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2015

4. RELATED PARTY TRANSACTIONS

The County of Marin is a member to the Authority. The County Public Works Department provided staffing for the Authority for a fee of \$659,000 for the year. Additionally, the Authority paid the County of Marin \$17,000 for rent and \$6,000 for financial services.

The Authority incurred expenditures of \$1,369,000 under a contract with the City of San Rafael (a member government) to operate its household waste program. As of June 30, 2015, accrued expenses to the City of San Rafael amounted to \$243,000.

As part of the various programs managed by the Authority, payments are made to various members. During the year the Authority made payments of \$454,000 to its members.

5. COMMITMENT

In February 2013, the Authority and County of Marin entered into an agreement where the County will provide the Authority staffing. The agreement has an expiration date of June 30, 2020 with provisions to extend the date by mutual agreement, or cancel by either party with 180 days written notice. The cost of the agreement will be based on annual budgets adopted by the Authority. The budgeted cost for fiscal 2015-16 is approximately \$739,000.

BUDGET COMPARISON SCHEDULE COUNTYWIDE WASTE MANAGEMENT PROGRAM GENERAL FUND (CWM) YEAR ENDED JUNE 30, 2015

	Original and Final Budget	Actual	Variance Over (Under)
REVENUES:	.		
Waste management fees	\$ 351,081	\$ 351,081	\$ -
Operating grant - State of California	17,796	-	(17,796)
Miscellaneous income	- 1.700	175	175
Investment earnings	1,500	741	(759)
Total revenues	370,377	351,997	(18,380)
EXPENDITURES:			
Contract staff and support	345,127	347,127	(2,000)
Services and supplies:			
Legal	7,500	-	7,500
Accounting and audit fees	13,500	11,275	2,225
Insurance	18,000	17,566	434
Equipment repairs & maintenance	1,000	-	1,000
Rent	16,941	16,941	_
Training	1,500	512	988
Mileage and routine travel	600	-	600
Outreach	37,250	36,729	521
Supplies and reproduction	5,500	440	5,060
County financial service	5,850	5,904	(54)
Total services and supplies	107,641	89,367	18,274
Total expenditures	452,768	436,494	16,274
EXCESS (DEFICIENCY)			
OF REVENUES OVER			
EXPENDITURES	(82,391)	(84,497)	(\$2,106)
Fund balance as of June 30, 2014		165,456	
Fund balance as of June 30, 2015		\$ 80,959	

BUDGET COMPARISON SCHEDULE HOUSEHOLD HAZARDOUS WASTE PROGRAM SPECIAL REVENUE FUND YEAR ENDED JUNE 30, 2015

	Original and Final Budget	Actual	Variance Over (Under)
REVENUES:			
Solid waste management fees	\$ 1,914,316	\$ 1,914,316	\$ -
State aid - OPP	81,267	114,885	33,618
State aid - HD-20	75,000	58,140	(16,860)
Investment earnings	500	671	171
Total revenues	2,071,083	2,088,012	16,929
EXPENDITURES:			
Contract staff and support	131,662	131,662	-
HHW oversight	145,788	117,641	28,147
Novato HHW grant	30,984	30,984	-
Bulb and battery program	75,000	82,792	(7,792)
Contract services	1,320,255	1,250,910	69,345
Legal	2,500	-	2,500
HD-20 grant expenses	75,000	58,140	16,860
Sharps program	76,000	68,600	7,400
Oil Payment Program	172,534	94,484	78,050
Total expenditures	2,029,723	1,835,213	194,510
EXCESS (DEFICIENCY) OF REVENUES OVER			
EXPENDITURES	\$41,360	252,799	\$211,439
Fund balance June 30, 2014		423,428	
Fund balance June 30, 2015		\$ 676,227	

BUDGET COMPARISON SCHEDULE ZERO WASTE PROGRAM SPECIAL REVENUE FUND YEAR ENDED JUNE 30, 2015

	Original and Final Budget	Actual	Variance Over (Under)
REVENUES:			
Waste management fees	\$ 600,073	\$ 600,073	\$ -
Investment earnings	500	-	(500)
Total revenues	600,573	600,073	(500)
EXPENDITURES:			
Contract staff and support	180,170	180,170	-
Services and supplies:			
Legal	2,000	-	2,000
Zero waste development	55,000	48,519	6,481
Zero waste evaluation	50,000	17,759	32,241
Zero waste outreach	200,000	186,684	13,316
Zero waste implementation	479,057	422,952	56,105
Total services and supplies	786,057	675,914	110,143
Total expenditures	966,227	856,084	110,143
EXCESS (DEFICIENCY) OF REVENUES OVER			
EXPENDITURES	\$ (365,654)	(256,011)	\$ 109,643
Fund balance as of June 30, 2014		311,670	
Fund balance as of June 30, 2015		\$ 55,659	

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere:

Mary Neilan

Date: May 26, 2016

Corte Madera: David Bracken To: JPA Board Members

24,14 2140101

From: Steve Devine, Program Manager

County of Marin:

Matthew Hymel

Re: Authorization for CalRecycle Grant and Payment Programs

Resolutions

Fairfax: Garrett Toy

Larkspur: Dan Schwarz

Mill Valley: Jim McCann

Novato:

Cathy Capriola

Ross: Joe Chinn

San Anselmo: Debbie Stutsman

San Rafael: Jim Schutz

Sausalito: Adam Politzer

Tiburon: Greg Chanis "CalRecycle" is a department of the California Environmental Protection Agency. On an annual basis the JPA applies for and manages an "Oil Payment Program/OPP" grant for Marin County and has applied for and administered a number of other grants over the past years. The Oil Payment Program provides education to residents on used motor oil recycling and provides oil and filter recycling equipment to residents, boaters/marinas, and others. Other grants have funded improvements to the household hazardous waste facility and most recently an education mailer on less-toxic alternatives to all Marin residents.

The JPA monitors the availability of ongoing and new one-time grant opportunities from CalRecycle that may arise. Due to new language requirements from CalRecycle and due to the timing of grant releases and JPA Board Meetings it is necessary for the JPA to have grant/payment program application/execution Resolutions on file. CalRecycle has different requirements related to Resolution term (five years vs. "until rescinded") for different programs – so there are two similar Resolutions attached which address this subtlety.

RECOMMENDATION

Authorize the Board Chair to execute the attached Resolutions authorizing the Executive Director to enter into grant and payment program applications and agreements with CalRecycle according to the terms of the Resolutions No 2016-01 and 2016-02.

Attachments:

- 1. Resolution No. 2016-01.
- 2. Resolution No. 2016-02.

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Marin County Department of Public Works, P.O. Box 4186, San Rafael, CA 94913 Phone: 415/473-6647 - FAX 415/473-2391

RESOLUTION NO. 2016-01

Marin County Hazardous & Solid Waste Management Joint Powers Authority

RESOLUTION AUTHORIZING SUBMITTAL OF APPLICATION FOR OR PARTICIAPTION IN PAYMENT PROGRAMS AND RELATED AUTHORIZATIONS (UNTIL RESCINDED)

WHEREAS, pursuant to Public Resources Code § 48000 et seq., 14581, and 42023.1(g), the Department of Resources Recycling and Recovery (CalRecycle) has established various payment programs to make payments to qualifying jurisdictions for efforts to reduce, recycle and reuse solid waste generated in the state thereby preserving landfill capacity, and reducing hazardous waste and pollution, and protecting public health and safety and the environment; and

WHEREAS, in furtherance of this authority CalRecycle is required to establish procedures governing the administration of payment programs; and

WHEREAS, CalRecycle's procedures for administering payment programs require, among other things, an applicant's governing body to declare by resolution certain authorizations related to the administration of the payment programs; and

WHEREAS, payment programs are offered to city, county, individual, and regional applications; and

NOW, THEREFORE, BE IT RESOLVED that the Marin County Hazardous & Solid Waste Joint Powers Authority is authorized to submit an application, participate in, or act as Regional Lead Participant, or act as Regional Lead Agency, to CalRecycle for any and all payment programs offered; and

BE IT FURTHER RESOLVED that the Executive Director, or his/her designee is hereby authorized as Signature Authority, and empowered to execute in the name of the Marin County Hazardous & Solid Waste Joint Powers Authority, all payment program documents, including but not limited to, applications, agreements, amendments and requests for payment, necessary to secure the payment program funds and implement the approved projects; and

BE IT FURTHER RESOLVED that when applying for, or participating in, or acting as Regional Lead Participant, or Regional Lead Agency in payment programs, the Signature Authority is hereby authorized to revise the list of participating jurisdictions necessary with each application provided that each participating jurisdiction has appropriately provided a Letter of Authorization naming the Lead Agency or Lead Regional Participant; and

BE IT FURTHER RESOLVED that this authorization is effective until rescinded by the Signature Authority or this Governing Body.

	PASSED AN Joint Powers ng vote:					
AYES:						
NOES	:					
ABSE	NT:					
ATTES	ST:			NT, Marin (nagement .		
Execut	tive Director					

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RESOLUTION NO. 2016-02

Marin County Hazardous & Solid Waste Management Joint Powers Authority

AUTHORIZING SUBMITTAL OF APPLICATION FOR OR PARTICIAPTION IN GRANT PROGRAMS AND RELATED AUTHORIZATIONS (5Y)

WHEREAS, pursuant to Public Resources Code § 48000 et seq., the Department of Resources Recycling and Recovery (CalRecycle) has established various grant programs to make payments to qualifying jurisdictions for efforts to reduce, recycle and reuse solid waste generated in the state thereby preserving landfill capacity, and reducing hazardous waste and pollution, and protecting public health and safety and the environment; and

WHEREAS, in furtherance of this authority CalRecycle is required to establish procedures governing the administration of the grant programs; and

WHEREAS, CalRecycle's procedures for administering grant programs require, among other things, an applicant's governing body to declare by resolution certain authorizations related to the administration of the grant programs; and

WHEREAS, grant programs are offered to city, county, individual, and regional applicants; and

NOW, THEREFORE, BE IT RESOLVED that the Marin County Hazardous and Solid Waste Management Joint Powers Authority is authorized to submit an application, participate in, or act as Regional Lead Participant, or act as Regional Lead Agency, to CalRecycle for any and all grant programs offered; and

BE IT FURTHER RESOLVED that the Executive Director, or his/her designee is hereby authorized as Signature Authority, and empowered to execute in the name of the Marin County Hazardous and Solid Waste Management Joint Powers Authority all documents, including but not limited to, applications, agreements, amendments and requests for payment, necessary to secure the grant programs funds and implement the approved projects; and

BE IT FURTHER RESOLVED that when applying for, or participating in, or acting as Regional Lead Participant, or Regional Lead Agency in grant programs, the Signature Authority is hereby authorized to revise the list of participating jurisdictions necessary with each application provided that each participating jurisdiction has appropriately provided a Letter of Authorization naming the Lead Agency or Lead Regional Participant; and

BE IT FURTHER RESOLVED that these authorizations are effective for five (5) years from the date of adoption of this resolution.

				ounty Hazardous & Solid , 2016, by the
AYES:				
NOES	:			
ABSEI	NT:			
				nty Hazardous & Solid It Powers Authority
ATTES	ST:			
Execu	tive Director			
	· · · - · · ·			

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MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere: Date: May 26, 2016

Mary Neilan

To: JPA Board of Directors

Corte Madera: David Bracken

From: Steve Devine, Program Manager

County of Marin: Matthew Hymel

Re: File "Statement of Facts" with CA Secretary of State and Marin County

Clerk

Fairfax: Garrett Toy

Larkspur: Dan Schwarz

Mill Valley: Jim McCann

Novato: Cathy Capriola

Ross: Joe Chinn

San Anselmo: Debbie Stutsman

San Rafael: Jim Schutz

Sausalito: Adam Politzer

Tiburon: Greg Chanis Counsel has advised the JPA that is should tender a "Statement of Facts" to comply with California Government Code Section 53051. The initial filing is attached. JPA staff will update this information with the Secretary of State and County Clerk in accordance with State law.

CA Government Code Section 53051 reads in part: "... the governing body of each public agency shall file with the Secretary of State on a form prescribed by the Secretary of State and also with the county clerk of each county in which the public agency maintains an office, a statement of the following facts:

- 1. The full, legal name of the public agency.
- 2. The official mailing address of the governing body of the public agency.
- 3. The name and residence or business address of each member of the governing body of the public agency.
- 4. The name, title, and residence or business address of the chairman, president, or other presiding officer, and clerk or secretary of the governing body of such public agency.
- (b) Within 10 days after any change in the facts required to be stated pursuant to subdivision (a), an amended statement containing the information required by subdivision (a) shall be filed as provided therein. The information submitted to the Secretary of State shall be on a form prescribed by the Secretary of State . . ."

RECOMMENDATION

Direct to the Executive Director to file the attached Statement of Facts with California Secretary of State and Marin County Clerk.

Attachment.

F:\Waste\JPA\JPA Agenda Items\JPA 160526\Statement of Facts.doc

Marin County Department of Public Works, P.O. Box 4186, San Rafael, CA 94913 Phone: 415/473-6647 - FAX 415/473-2391



STATEMENT OF FACTS **ROSTER OF PUBLIC AGENCIES FILING**

(Government Code section 53051)

•			
	Instri	ICTIO	nc:

- Complete and mail to: Secretary of State, P.O. Box 942870, Sacramento, CA 94277-2870 (916) 653-3984
- A street address must be given as the official mailing address or as 2. the address of the presiding officer.
- 3. Complete addresses as required.

4.	If you need	l additional space,	attach information on	າ an 8½" X 11"	page, one sided ar	ıd legible
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New Filing □	Update \square		
Legal name of Public Age	ncy:		
Nature of Update:			
County:			
Name and Address of each	th member of the governing board:		
Chairman, President or	other Presiding Officer (Indicate	e Title):	
Name:	Address:		
Secretary or Clerk (Indicate	ate Title):		
Name:	Address:		
Members:			
Name:	Address:		
Name:	Address:		
Name:	Address:		
Name:	Address:		
ETURN ACKNOWLEDGMEN	T TO: (Type or Print)		
-	7 21 7	Date	
AME			
DDRESS		Signature	

CITY/STATE/ZIP

Typed Name and Title

(Office Use Only)

Page 1

Marin County Hazardous and Solid Waste Management Joint Powers Authority

JPA Board Mem	bers	
Mary Neilan	Belvedere	450 San Rafael Ave, Belvedere, CA 94920
David Bracken	Corte Madera	300 Tamalpais Drive, Corte Madera, CA 94925
		P.O. Box 159, Corte Madera, CA 94976
Matthew Hymel	County of Marin	3501 Civic Center Drive, Room #325, San Rafael, CA 94903
	"	P.O. Box 4186, San Rafael, Ca 94913
Garret Toy	Fairfax	142 Bolinas Rd., Fairfax, California 94930
Dan Schwarz	Larkspur	400 Magnolia Avenue, Larkspur, California 94939
Jim McCann	Mill Valley	26 Corte Madera Ave, Mill Valley, CA 94941
Cathy Capriola	Novato	75 Rowland Way #200, Novato, California 94945-5054
Joe Chinn	Ross	31 Sir Francis Drake Blvd, Ross, CA 94957
Debbie Stuttsman	San Anselmo	525 San Anselmo Ave., San Anselmo, CA 94960
Jim Schutz	San Rafael	1400 Fifth Ave, San Rafael, CA 94901
	"	P.O. Box 151560, San Rafael, CA 94915
Adam Politzer	Sausalito	420 Litho Street, Sausalito, CA 94965
Greg Chanis	Tiburon	1505 Tiburon Blvd, Tiburon, CA 94920

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere: Date: May 26, 2016 Mary Neilan

To: JPA Board members **Corte Madera:**

David Bracken

From: Steve Devine, Program Manager

County of Marin:

Matthew Hymel FY 16/17 Draft JPA Budget and Assessment Schedule Re:

Fairfax:

Attached are the proposed FY 16/17 budget and hauler/facility fee **Garrett Toy** assessments for the Marin County Hazardous and Solid Waste

Larkspur: Dan Schwarz Management Joint Powers Authority (JPA). Combined expenditures are increased by 10%. The additional expenditures in the JPA Section 6.2 programs primarily are a result of: 1) falling recyclable commodity prices

Mill Valley: Jim McCann which decreases revenue to support the Household Hazardous Waste (HHW) facility, and 2) additional expenditures requested in the Zero Waste

Novato: Cathy Capriola budget to expand zero waste grants to JPA member agencies and community outreach. The increased revenue assessment to fund the budget comes largely from Redwood Landfill, which has taken additional

Ross: Joe Chinn disposal tonnage from Sonoma County haulers. Revenue from Marin County haulers will decrease as their disposal tonnage has decreased. The

San Anselmo: **Debbie Stutsman** JPA has three budget centers to manage its operations (Administration, Zero Waste and HHW).

San Rafael: Jim Schutz Changes in the three JPA fund centers from last year are shown below:

Sausalito: **Adam Politzer**

JPA Expenditures	_	FY15/16 Budget	FY16/17 Proposed	Change
Zero Waste (70073)	\$	768,748	\$ 976,664	\$ 207,916
Administration (70070)	\$	471,935	\$ 476,151	\$ 4,216
HHW (70071)	\$	1,971,042	\$ 2,081,293	\$ 110.251

Tiburon: **Greg Chanis**

> Total 3,211,725 \$ 3,534,107

The following three fund centers are outlined in this budget:

1. ADMINISTRATION

(JPA Section 6.1) All Members Participate

The JPA's planning and administration functions are funded through the 6.1 budget center and administered by contract with the County of Marin.

Marin County Department of Public Works, P.O. Box 4186, San Rafael, CA 94913 Phone: 415/473-6647 - FAX 415/446-7373

2. HOUSEHOLD HAZARDOUS WASTE

(JPA Section 6.2) Optional Member Participation

The Household Hazardous Waste program is funded through the 6.2 budget center. The San Rafael Fire Department provides facility oversight by a contract with Marin Recycling & Resource Recovery Association. Novato does not participate in this program – but operates its own HHW facility and services.

3. ZERO WASTE

(JPA Section 6.2) Optional Member Participation
The Zero Waste program is funded out of a separate 6.2 budget center and administered by contract with the County of Marin. Novato does not participate in this program.

ADMINISTRATION

Budgeted expenditures for FY 16/17 of \$476,151 are \$4,216 more than the FY 15/16 budget and account for 14% of proposed JPA expenditures. The increase reflects a 3% cost-of-living salary increase for County. This fund center provides resources for disposal tracking and reporting required by State law. This fund center also supports addressing the increased demands from CalRecycle for diversion monitoring and AB 341 (Mandatory Commercial Recycling) and AB 1826 (Mandatory Commercial Organics) compliance.

Contingency funds for the Administration Budget Center are set at 20%.

HOUSEHOLD HAZARDOUS WASTE

58% of the total JPA Expenditure Budget is devoted to the household hazardous waste program which collects over 1.6 million pounds of hazardous waste annually. The JPA retains HHW services for the community via a contract with the City of San Rafael Fire Department which in turn contracts with Marin Resource Recovery Association (MRRA). MRRA operates the HHW facility at 565 Jacoby Street in San Rafael. Novato provides and funds a separate service via the Novato Sanitary District.

Proposed budget expenditures for FY 16/17 of \$2,081,293 are \$110,251 higher than the FY 15/16 budget which reflects a 3.2% CPI-U increase and declining recycling/commodities markets. The popular Bulb and Battery Drop-off program budget is proposed to remain the same amount as in FY 15/16 budget (\$100,000). This program has been very successful at coordinating the pickup used fluorescent bulbs and batteries at dropped off at local hardware and convenience stores. The majority of the cost covers waste processing fees.

The City of San Rafael and Marin Resource Recovery Association are proposing a 3.2% increase in the HHWF operating budget. Rising disposal costs over the past several years have been somewhat mitigated by funding from the new "Paint Care" program. Paint Care is a new extended producer responsibility (EPR) program in which users (paint buyers) pay an advanced disposal fee to offset the costs of dealing with leftover paint at the end of its lifecycle. The City of San Rafael is reducing its planned reimbursement for the upcoming fiscal year since PaintCare is reworking the contracts that they hold with local HHW Facilities, mainly to reduce PaintCare's costs. Additionally, the payments have been reduced for recyclable commodities that the facility markets, mostly due to the reduced cost of oil. Additionally \$25,000 that was previously coming from the Oil Payment Program for

recycling oil will be devoted to other outreach efforts. Staff costs have also increased slightly and Toxic Away Days in West Marin will be adding staff to handle the increased use of these events.

Also included in this budget is an estimated \$32,757 for the fourteenth year of a grant to supplement Novato's Household Hazardous Waste Program. The grant is equal to the Novato self-haul fee amount levied on Redwood Landfill for the HHW Fund.

The JPA also took over administration of Marin's Oil Payment Program in FY 13/14 and will continue to operate this successful program with State grant funds.

Lastly, the JPA also helps fund sharps and pharmaceuticals collection programs operated by the County's Environmental Health Division. There are 21 sharps sites in the County and 15 pharmaceutical sites.

Contingency funds for the HHW Budget Center are set at 20% in FY 16/17.

ZERO WASTE

Marin's diversion rate has remained at 75% for the last few years, and while that is well above the State mandated 50% diversion rate, it is not on pace to meet the JPA's Goal of Zero Waste by 2025. The overall budget includes three notable items aimed at increasing the diversion rate:

- Expanded outreach to schools is a significant tool to increase diversion based on the findings from a research project being conducted on behalf of the JPA by Environmental Science Associates (ESA). Studies have shown that by working through schools, the JPA will be reaching nearly 40% of Marin's residents. The amount of the program has been increased from \$50,000 to \$150,000. These funds will pay for outreach materials, education, collection bins, or items/services to develop sustainable waste reduction programs at schools.
- Continued operation and streamlining of the Zero Waste Grant program to a "block grant" style program utilizing a certification style application process. The amount of the grant program has increased from \$250,000 to \$350,000 to help cities fund actions that focus on Zero Waste and discourage activities which generate waste for the landfill.
- The Public Education component of this budget remains stable at \$200,000 to reach Marin citizens through various media sources, to include television, internet, in person "Green Teas" and farmers markets.

BACKGROUND

The JPA's Budget Subcommittee (Toy & Hymel) meet with staff and review the budget and assessments prior to the April 28, 2016 Executive Committee meeting. The Executive Committee reviewed the proposed budget and recommended for the full Board's approval at the April meeting.

RECOMMENDATION

It is requested the Board approve Resolution No. 2016-01 adopting the FY 16/17 Marin County Hazardous and Solid Waste Management Joint Powers Authority budget assessments.

Attachments.

- Proposed FY 16/17 Budget.
 Resolution 2016-03.

F:\Waste\JPA\JPA Agenda Items\JPA 160526\JPA 16-17 Budget Transmittal Agenda Report.doc

JPA Hauler, Landfill & Non-Disposal Facility Assessments FY 2016 - 17

			_			Per Ton Dispo	sal Equivalent	
2015	DISPOSAL (tons)		TOTAL	FY 15/16	Zero Waste	Adminstration	HHW	Total
MSW Haulers	MSW & Debris	Self-Haul	TONS	Assessments	\$4.32	\$1.82	\$8.40	\$14.54
Bay Cities Refuse	6,043	N/A	6,043	\$97,030.67	\$26,105.76	\$10,998.26	\$50,761.20	\$87,865.22
Marin Sanitary Service (MSS)	41,715	N/A	41,715	\$752,749.07	\$180,208.80	\$75,921.30	\$350,406.00	\$606,536.10
Mill Valley Refuse	21,608	N/A	21,608	\$315,438.62	\$93,346.56	\$39,326.56	\$181,507.20	\$314,180.32
Novato (Redwood Empire Disposal)	26,423	N/A	26,423	\$54,439.08	\$0.00	\$48,089.86	\$0.00	\$48,089.86
Shoreline (Redwood Empire Disposal)	4,375	N/A	4,375	\$66,255.87	\$18,900.00	\$7,962.50	\$36,750.00	\$63,612.50
Tam. CSD	1,553	N/A	1,553	\$22,267.08	\$6,708.96	\$2,826.46	\$13,045.20	\$22,580.62
Total Franchised Hauler	101,717	N/A	101,717	\$1,308,180.39	\$325,270.08	\$185,124.94	\$632,469.60	\$1,142,864.62
Landfills								
Redwood	N/A	102,725	102,725	\$1,141,771.86	\$443,772.00	\$186,959.50	\$862,890.00	\$1,493,621.50
Total Landfills	N/A	102,725	102,725	\$1,141,771.86	\$443,772.00	\$186,959.50	\$862,890.00	\$1,493,621.50
Non-Disposal Facilities								
MSS Transfer Station	N/A	3,248	3,248	\$26,788.32	\$14,031.36	\$5,911.36	\$27,283.20	\$47,225.92
Marin Resource Recovery	N/A	46,263	46,263	\$601,304.20	\$199,856.16	\$84,198.66	\$388,609.20	\$672,664.02
Total Non-Disposal Facilities	N/A	49,511	49,511	\$628,092.52	\$213,887.52	\$90,110.02	\$415,892.40	\$719,889.94
TOTALS	101,717	152,236	253,953	\$3,078,044.77	\$982,929.60	\$462,194.46	\$1,911,252.00	\$3,356,376.06

DRAFT BUDGET

JPA ZERO WASTE PROGRAMS 2017 (70073) ZERO WASTE EXPENSE BUDGET BY OBJECT COUNTYWIDE WASTE MANAGEMENT JPA

		_0	(10010) <u></u>	· · · ·		
	15/16	15/16			16/17	
<u>15/16</u>	EXP THRU	TOTAL EST			BUDGET	
<u>BUDGET</u>	3/14/2016	EXPENDITURE	ACCOUNT NAME	OBJECT	<u>REQUEST</u>	<u>NARRATIVE</u>
			Zero Waste Operational			Fund Center 6180012000
\$226,748	\$113,374.00	\$226,748	Salaries and Wages	5110110	\$234,664	Contract staff salaries and wages for Zero Waste Programs
			ĕ		. ,	· · · · · · · · · · · · · · · · · · ·
\$2,000	\$0	\$2,000	Legal Expense	5210100	\$2,000	JPA legal counsel.
\$40,000	\$40,000	\$40,000	Zero Waste Development	5211500	\$40,000	Zero waste development. (\$15K for Zero Waste Elementary School Program and \$20K for Consultant for C and D Facility Certification Municipality Outreach)
\$50,000	\$18,016	\$50,000	School Programs	5211500	\$150,000	School outreach and education: 2 school Pilot program successful.
* ,	* -,-	***,***			*,	Now to expand to multiple schools with help of contractor.
\$200,000	\$200,000	\$200,000	Zero Waste Outreach	5211500	\$200,000	Public education (Media expert to develop and implement PSA)
\$518,748	\$371,390	\$518,748	Operational Budget Subtotal	0211000	\$626,664	r abile cateation (means or port to develop and imponion (or y
			Zero Waste Grant Funding			Multiple Fund Center
			20.0 Maste State Failuring			
\$250,000	\$208,864	\$208,864	Zero Waste Grant FY15/16 (Cycle 5)	5211500	\$0	Fifth Cycle of Zero Waste Grant Program - Fund 618099003
\$0	\$0	\$0	Zero Waste Grant FY16/17 (Cycle 6)	5211500	* -	Sixth Cycle of Zero Waste Grant Program - Fund 6180012000
			() ,	5211500	\$350,000	Sixin Gydle of Zero waste Grant Frogram - Fund 6160012000
\$250,000	\$208,864	\$208,864	Zero Waste Grants Subtotal		\$350,000	
\$768,748	\$580,254	\$727,612	JPA 6.2 Zero Waste Total	Total	\$976,664	

2017 (70073) ZERO WASTE REVENUE BUDGET BY REVENUE SOURCE COUNTYWIDE WASTE MANAGEMENT JPA

<u>15/16</u>	15/16	15/16			16/17	
	EXP THRU	TOTAL EST			BUDGET	
BUDGET	REV THRU	TOTAL EST		REVENUE	REVENUE	
BUDGET	3/14/2016	REVENUE	ACCOUNT NAME	SOURCE	REQUEST	
\$500	\$190	\$250	Interest	4410125	\$500	JPA funds in interest bearing account.
\$0			Other Aid State	4530527	\$0	
\$859,963	\$429,982	\$859,963	Solid Waste Management	4640910	\$982,930	Solid Waste Disposal Assessments
\$0			Misc.	4710642	\$0	
-\$16,061	\$55,659	\$55,659	Carry-Over		\$188,260	
\$844,402	\$485,831	\$915,872	Total Revenue		\$1,171,690	
		4400.000	GENERAL CONTINGENCIES		A 405.000	
		\$188,260	General Contingencies	9000010	\$195,026	
					20%	

DRAFT BUDGET

JPA ADMINISTRATION

2017 (70070) 96X-CWM EXPENSE BUDGET BY OBJECT COUNTYWIDE WASTE MANAGEMENT JPA

\$471,935	\$233,946	\$470,798	JPA 6.1 Program Total	Total	\$476,151	
\$107,641	\$51,799	\$106,504	Services & Supplies Total		\$115,141	
\$5,850	\$4,428	\$5,850	County Financial Service	5210200	\$5,850	Pro-rate County Department of Finance's cost plan.
\$5,500	\$0	\$5,500	Supplies & Reproduction	5220100	\$5,500	Same as previous year.
\$37,250	\$13,062	\$37,250	Outreach	5211500	\$37,250	Compost Bins, Reusable Bags, JPA Group Memberships, Sponsorships, General
\$0	\$0	\$0	New State Reporting	5211500	\$7,500	Mandatory Commercial Organics Recycling (AB 1826) Implementation at large facilities (Grocerie stores, etc) to provide outreach & education materials
\$600	\$305	\$600	Mileage & Routn Trvl Exp	5211400	\$600 \$7.500	Routine travel. Same as previous year.
\$1,500	\$200	\$1,500	Training	5211300	\$1,500	Training, Memberships Same as previous year.
\$16,941	\$16,941	\$16,941	Rent	5211200	\$16,941	Rent for space used.
\$1,000	*	\$1,000	OFC Equip Rep & Maint.	5210900	\$1,000	Same as previous year.
\$18,000	\$16,863	\$16,863	Insurance	5210500	\$18,000	JPA insurance.
\$7,500 \$13,500	\$0 \$0	\$7,500 \$13,500	Legal Expense Outside Acctg & Audit Fees	5210100 5210200	\$7,500 \$13,500	JPA legal counsel. Financial review.
,	,	,	Ç			
\$364,294 \$364,294	\$182,147 \$182,147	\$364,294 \$364,294	Salaries and Wages Salaries and Wages Total	5110110	\$361,010 \$361,010	Contract staff salaries and wages for 6.1 Programs.
<u>15/16</u> <u>BUDGET</u>	EXP THRU 3/14/2016	TOTAL EST EXPENDITURE	ACCOUNT NAME	<u>OBJECT</u>	BUDGET REQUEST	<u>NARRATIVE</u>
	15/16	15/16			16/17	

2017 (70070) 96X-CWM REVENUE BUDGET BY REVENUE SOURCE COUNTYWIDE WASTE MANAGEMENT JPA

15/16 <u>BUDGET</u>	15/16 REV THRU <u>3/14/2016</u>	15/16 TOTAL EST <u>REVENUE</u>	ACCOUNT NAME	REVENUE SOURCE	16/17 REVENUE <u>REQUEST</u>	
\$1,500 \$0 \$498,155 \$0	\$421 \$249,078 \$310	\$800 \$0 \$498,155 \$310	Interest Other Aid State Solid Waste Management Misc.	4410125 4530527 4640910 4710642	\$1,500 \$0 \$462,194 \$0	JPA funds in interest bearing account. Beverage Container Recycling Grant Reimbursement in FY 13/14 Solid Waste Disposal Assessments
\$64,503	\$80,959	\$80,959	Carry-Over		\$109,426	
\$564,158	\$330,767	\$580,224	Total Revenue		\$573,121	
		\$109,426	GENERAL CONTINGENCIES General Contingencies	<u>S</u> 9000010	\$96,970	

20%

DRAFT BUDGET

HOUSEHOLD HAZARDOUS WASTE PROGRAM 2017 (70071) 96Y-NNO EXPENSE BUDGET BY OBJECT COUNTYWIDE WASTE MANAGEMENT JPA

	15/16	15/16	(16/17	
<u>15/16</u> BUDGET	EXP THRU 3/14/2016	TOTAL EST EXPENDITURE	ACCOUNT NAME	OBJECT	BUDGET REQUEST	NARRATIVE
<u>50502.</u>	<u>5/11/2010</u>	2/11 2/10/11 0/12		<u>00000.</u>		
\$148,252	\$74,126	\$148,252	HHW Operational Salaries and Wages	5110110	\$157,412	Fund Center 6180011000 Contract staff salaries and wages for 6.2 Programs.
\$149,724	\$68,529	\$149,724	HHW Oversight	5210100	\$156,515	City of San Rafael HHW Oversight including West Marin HHW events.
\$27,838	\$0	\$27,838	Novato HHW Grant	5210100	\$32,575	Novato HHW Grant fee reimbursement.
\$100,000	\$100,000	\$100,000	Bulb and Battery Program	5210100	\$100,000	Program for Drop-off of Fluorescent Bulbs and Batteries at convenient locations
,	,	, ,,,,,,,	, , ,		,	.,
\$1,355,902	\$774,452	\$1,355,902	Contract Services	5210100	\$1,474,291	MRRRA contract (net cost offset by SQG funds & recovery revenue)
\$2,500	\$0 \$0	\$2,500	JPA legal counsel	5210131	\$2,500	JPA legal counsel work on HHW contracts and HHW Grant Agreements.
\$76,000	\$41,800	\$76,000	Sharps & Pharma Program	5211500	\$76,000	JPA sharps and pharma disposal service, except Novato.
\$1,860,216	\$1,058,907	\$1,860,216	Operational Budget Subtotal	0211000	\$1,999,293	or it charge and pharma disposal correct, oxecupit for allo
			Oil Payment Program			Fund Centers 6180990006-8
\$30,413	\$27,411	\$30,413	Oil Payment Program - Cycle 5	5211500	\$0	CalRecyle Oil Payment Program - Cycle 5 - 6180990006
\$80,413	\$80,413	\$80,413	Oil Payment Program - Cycle 6	5211500	\$0	CalRecyle Oil Payment Program - Cycle 6 - 6180990007
\$0	\$40 7 004	\$0	Oil Payment Program - Cycle 7	5211500	\$82,000	CalRecyle Oil Payment Program - Cycle 7 - 6180990008 Oil, Filter recycling & Exchanges
\$110,826	\$107,824	\$110,826	Oil Payment Program Subtotal		\$82,000	
\$1,971,042	\$1,166,731	\$1,971,042	JPA 6.2 Program Total	Total	\$2,081,293	
\$1,971,042	\$1,166,731		-			DUNTYWIDE WASTE MANAGEMENT JPA
\$1,971,042	\$1,166,731 15/16		-			DUNTYWIDE WASTE MANAGEMENT JPA
\$1,971,042 15/16		2017 (7007	-		UE SOURCE CO	DUNTYWIDE WASTE MANAGEMENT JPA
<u>15/16</u>	15/16 REV THRU	2017 (7007 15/16 TOTAL EST	-	T BY REVEN	UE SOURCE CO	DUNTYWIDE WASTE MANAGEMENT JPA
	15/16	2017 (7007 15/16	71) 96Y-NNO REVENUE BUDGE	T BY REVEN	UE SOURCE CO 16/17 REVENUE	DUNTYWIDE WASTE MANAGEMENT JPA
<u>15/16</u> BUDGET	15/16 REV THRU <u>3/14/2016</u>	2017 (7007 15/16 TOTAL EST <u>REVENUE</u>	71) 96Y-NNO REVENUE BUDGE	REVENUE SOURCE	UE SOURCE CO 16/17 REVENUE REQUEST	
15/16 BUDGET \$500	15/16 REV THRU <u>3/14/2016</u> \$276	2017 (7007 15/16 TOTAL EST <u>REVENUE</u> \$400	71) 96Y-NNO REVENUE BUDGE ACCOUNT NAME Interest	T BY REVENIE REVENUE SOURCE 4410125	UE SOURCE CO 16/17 REVENUE REQUEST \$500	JPA funds in interest bearing account.
15/16 BUDGET \$500 \$80,413	15/16 REV THRU <u>3/14/2016</u> \$276 \$0	2017 (7007 15/16 TOTAL EST REVENUE \$400 \$80,413	ACCOUNT NAME Interest Other Aid State	REVENUE SOURCE 4410125 4530527	UE SOURCE CO 16/17 REVENUE REQUEST \$500 \$0	JPA funds in interest bearing account. CalRecycle Funds for OPP Cycle 6 - 6180990007
15/16 BUDGET \$500	15/16 REV THRU <u>3/14/2016</u> \$276	2017 (7007 15/16 TOTAL EST <u>REVENUE</u> \$400	71) 96Y-NNO REVENUE BUDGE ACCOUNT NAME Interest	T BY REVENIE REVENUE SOURCE 4410125	UE SOURCE CO 16/17 REVENUE REQUEST \$500	JPA funds in interest bearing account.
15/16 BUDGET \$500 \$80,413 \$0 \$1,719,927	15/16 REV THRU 3/14/2016 \$276 \$0 \$0 \$859,964	2017 (7007 15/16 TOTAL EST <u>REVENUE</u> \$400 \$80,413 \$0 \$1,719,927	ACCOUNT NAME Interest Other Aid State Other Aid State Solid Waste Management	REVENUE SOURCE 4410125 4530527 4530527	\$500 \$500 \$500 \$0 \$82,000 \$1,911,252	JPA funds in interest bearing account. CalRecycle Funds for OPP Cycle 6 - 6180990007 CalRecycle Funds for OPP Cycle 7 - 6180990008
15/16 BUDGET \$500 \$80,413 \$0	15/16 REV THRU <u>3/14/2016</u> \$276 \$0 \$0	2017 (7007 15/16 TOTAL EST REVENUE \$400 \$80,413 \$0	ACCOUNT NAME Interest Other Aid State Other Aid State Other Aid State	REVENUE SOURCE 4410125 4530527 4530527	UE SOURCE CO 16/17 REVENUE REQUEST \$500 \$0 \$82,000	JPA funds in interest bearing account. CalRecycle Funds for OPP Cycle 6 - 6180990007 CalRecycle Funds for OPP Cycle 7 - 6180990008
15/16 BUDGET \$500 \$80,413 \$0 \$1,719,927	15/16 REV THRU 3/14/2016 \$276 \$0 \$0 \$859,964	2017 (7007 15/16 TOTAL EST <u>REVENUE</u> \$400 \$80,413 \$0 \$1,719,927	ACCOUNT NAME Interest Other Aid State Other Aid State Solid Waste Management	REVENUE SOURCE 4410125 4530527 4530527	\$500 \$500 \$500 \$0 \$82,000 \$1,911,252	JPA funds in interest bearing account. CalRecycle Funds for OPP Cycle 6 - 6180990007 CalRecycle Funds for OPP Cycle 7 - 6180990008
15/16 BUDGET \$500 \$80,413 \$0 \$1,719,927 \$554,697	15/16 REV THRU 3/14/2016 \$276 \$0 \$0 \$0 \$859,964 \$676,227	2017 (7007 15/16 TOTAL EST REVENUE \$400 \$80,413 \$0 \$1,719,927 \$676,227 \$2,476,967	ACCOUNT NAME Interest Other Aid State Other Aid State Solid Waste Management Carry-Over Total Revenue GENERAL CONTINGENCIES	REVENUE SOURCE 4410125 4530527 4530527	### SOURCE CO ### 16/17 ### REVENUE ### REQUEST ### \$500 ### \$0 ### \$2,000 ### \$1,911,252 ### \$505,925	JPA funds in interest bearing account. CalRecycle Funds for OPP Cycle 6 - 6180990007 CalRecycle Funds for OPP Cycle 7 - 6180990008
15/16 BUDGET \$500 \$80,413 \$0 \$1,719,927 \$554,697	15/16 REV THRU 3/14/2016 \$276 \$0 \$0 \$0 \$859,964 \$676,227	2017 (7007 15/16 TOTAL EST REVENUE \$400 \$80,413 \$0 \$1,719,927 \$676,227	ACCOUNT NAME Interest Other Aid State Other Aid State Solid Waste Management Carry-Over Total Revenue	REVENUE SOURCE 4410125 4530527 4530527	### SOURCE CO ### 16/17 ### REVENUE ### REQUEST ### \$500 ### \$0 ### \$2,000 ### \$1,911,252 ### \$505,925	JPA funds in interest bearing account. CalRecycle Funds for OPP Cycle 6 - 6180990007 CalRecycle Funds for OPP Cycle 7 - 6180990008

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

RESOLUTION NO. 2016-03

A RESOLUTION ESTABLISHING FEES FOR INTERGRATED WASTE MANAGEMENT PLANNING AND IMPLEMENTATION OF PROGRAMS FOR FY 2016-17

WHEREAS, the Marin County Hazardous and Solid Waste Management Joint Powers Authority (Authority) was established to prepare, adopt, and administer hazardous and solid waste plans; and

WHEREAS, the Authority may impose fees based on the types and amounts of solid waste for costs related to the preparation and adoption of a Regional Integrated Waste Management Plan (AB 939); and

WHEREAS, the Authority established the Integrated Waste Management Planning Fees at its regular meeting on May 26, 2016; and

WHEREAS, the following fee amounts include only those costs directly related to preparing, adopting, and administering the Regional Integrated Waste Management Plan; and

WHEREAS, these fees are set and imposed for FY 2016/17 only; and

WHEREAS, the City of Novato is not participating in the Authority's household hazardous waste collection program or zero waste programs; the City, in conjunction with the Novato Sanitary District, will offer its own household hazardous waste collection program and zero waste programs;

NOW, THEREFORE, BE IT RESOLVED that the following assessments are imposed for FY 2016/17 and shall be collected from the organization specified herein;

Redwood Landfill	\$1,493,621.50
Marin Resource Recovery Center	\$672,664.02
Marin Sanitary Transfer Station	\$47,225.92
Bay Cities Refuse	\$87,865.22
Marin Sanitary Service	\$606,536.10
Mill Valley Refuse	\$314,180.32
Novato Disposal	\$48,089.86
Shoreline Disposal	\$63,612.50
Tamalpais Community Service	
District	\$22,580.62
TOTAL	\$3,356,376.06

BE IT FURTHER RESOLVED that collection of fees shall be as follows:

- 1. Annual fees are based upon the tons of material collected and disposed during 2015, which was provided by the haulers, landfills, and recovery center (Attachment A).
- 2. Fee payment shall be made in two installments half amount shall be due and payable on December 1, 2016; the remaining half shall be due and payable on May 1, 2017.
- 3. Fees shall be due and payable to the "Marin County Treasurer Tax Collector", Administration Bldg., Civic Center, P.O. Box 4220, San Rafael, CA 94913-4220.

PASSED AND ADOPTED at a regular meeting of the Marin County Hazardous and Solid Waste Management Joint Powers Authority held this 26th day of May, 2016 by the following vote:

AYES:	
NOES:	
ABSENT:	
	Chair
ATTEST:	

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere: Date: May 26, 2016

Mary Neilan

To: JPA Board Members

Corte Madera: David Bracken

From: Steve Devine, Program Manager

County of Marin: Matthew Hymel

Sixth Cycle Zero Waste Grant Forms Re:

Fairfax: **Garrett Toy** Attached are the proposed forms for the Sixth Cycle of the Zero Waste Grant for your approval. The primary focus of the grant program is to help institute programs that contribute towards reaching the goal of Zero Waste in each of the cities/towns, the County and special districts.

Larkspur: Dan Schwarz

In the FY 16/17 budget the JPA will be offering \$350,000 to member agencies in its sixth cycle of Zero Waste Grant.

Mill Valley: Jim McCann

JPA staff has attached the following grant documents for your approval:

Novato: Cathy Capriola

Grant Guidelines (Exhibit A)

Ross:

Application and Work Plan (Exhibit B)

Joe Chinn

Final Report Form (Exhibit C)

San Anselmo: **Debbie Stutsman** These documents define the purpose, goals, requirements, milestones, and will facilitate the grant process. The grant program encourages adoption of the

San Rafael:

Zero Waste Toolkit Documents as primary programs and provides a list of secondary programs that can help cultivate a Zero Waste atmosphere.

Jim Schutz

RECOMMENDATION It is recommend the Board approve the attached grant document, and authorize the Executive Director to make discretionary modifications to grants

during the grant term.

Sausalito: Adam Politzer

Attachments:

Tiburon: **Greg Chanis**

Zero Waste Grant Forms

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Marin County Department of Public Works, P.O. Box 4186, San Rafael, CA 94913 Phone: 415/473-6647 - FAX 415/473-2391

ZERØWASTEMARIN

Exhibit A

Cycle 6 Zero Waste Grant Guidelines

Introduction

The Marin County Hazardous & Solid Waste Management Joint Powers Authority (JPA) administers the Zero Waste Grant Program. The following procedures and requirements describe project and reporting requirements, report due dates, report contents, grant payment conditions, eligible and ineligible project costs, project completion and closeout procedures, records and audit requirements.

Grant Program

The JPA is offering grants to Member Agencies and Special Districts whose application identifies a program that works towards the Zero Waste Goal. Zero Waste Toolkit Documents have been developed by the JPA to implement waste reduction programs uniformly throughout Marin. Member Agencies are not limited to the type of Zero Waste Projects they wish to implement. Special Districts that administer solid waste franchise agreements do not have the authority to implement ordinances or resolutions; however they are encouraged to develop programs which work toward Zero Waste.

<u>Primary Zero Waste Projects</u>: Are encouraged to be developed first and include:

- Zero Waste Resolution
- Construction and Demolition (C&D) Ordinance
- Commercial and/or Residential Food Scrap Recycling

Secondary Zero Waste Projects: Can include, but are not limited to:

- Construction & Demolition (C&D) Ordinance Enforcement Costs
- Outreach and Training Coordinator to Set Up Recycling and Composting at Schools
- Coordinator for Recycling and Composting at Local Events
- Purchase Easily-Portable Event Recycling Containers and Accessories for Loan for Local Events
- Adding Public Recycling Receptacles
- Waste Audits
- Local Composting Classes
- Support of Food Scrap Composting Programs
- Differential Costs of an Environmental Purchasing Policy
- Commercial and Multifamily Outreach and Support
- Zero Waste Case Studies
- Mini-Grants program to environmental, educational or community groups Zero Waste activities.
- Printing outreach materials using the JPA's to be developed "Do-It-Yourself" templates for Zero Waste outreach

Eligibility & Funding

Grant funding is available only for JPA Member Agencies and Special Districts identified as 'Applicants'.

It is recognized that each applicant will incur various costs while implementing Zero Waste Projects. Therefore, it is intended the grant program funding will help cover a portion of those costs.

<u>Funds</u> will be available on a <u>USE IT OR LOSE IT</u> basis. It is important that you apply for funding each year to ensure your municipality gets its share of grant funds.

The total allowable funds for each jurisdiction would be:

Member Agency	Allocated
Belvedere	\$8541.96
Corte Madera	\$15,303.07
County of Marin	\$67,339.99
Fairfax	\$12,165.85
Larkspur	\$20,338.37
Mill Valley	\$24,388.37
Ross	\$9,139.93
San Anselmo	\$21,079.72
San Rafael	\$99,250.15
Sausalito	\$11,823.45
Tiburon	\$15,568.55
Almonte Sanitary District	\$5,000.00
Alto Sanitary District	\$5,000.00
Bolinas Community Public Utility District	\$5,000.00
Homestead Valley Sanitary District	\$5,000.00
Las Gallinas Sanitary District	\$5,000.00
Marin City Community Services District	\$5,000.00
Stinson Beach County Water District	\$5,000.00
Strawberry Recreational District	\$5,000.00
Tamalpias Community Services District	\$5,000.00
Total	\$350,000

Application Procedures

The application is limited to two pages, including the provided application forms. A sample Grant Application can be found on the JPA website: ZeroWasteMarin.org.

- Determine grant fund eligibility, as described above (use the figure listed under "Cycle 6 Funds Available")
- Determine the Zero Waste Projects your Jurisdiction intends on implementing.
- Complete the Zero Waste Grant Application and Work Plan and submit it by July 1, 2016.

Once the Grant Applications and Work Plans are received they will be reviewed by the JPA which will determine if applications meet the Grant requirements. Jurisdictions will be authorized to commence their proposed programs upon receipt of 'Notice to Proceed' from the JPA. A Final Report (Exhibit C) must be submitted to the JPA by May 1, 2017. These reports will describe the progress made at the time of the report submittal, outcome of the program

Zero Waste Grant Guidelines - Cycle 6

implemented, an account of funds spent, and an estimated tonnage of waste that was diverted through each program. A sample Final Report can be found on the JPA website: ZeroWasteMarin.Org

Milestones

- June 1, 2016 Application Materials Released
- July 1, 2016 Application Deadline
- July 8, 2016 Cycle Awarded / Grant Term Begins
- May 1, 2017 Grant Term Ends
- May 8, 2017 Final Reports Due

Communication

All communication regarding this grant shall be directed to the JPA Grant Manager. Submit Applications/Work Plans and Final Reports and written correspondence to:

JPA Grant Manager C/o Marin Co Waste Mgmt Div. PO Box 4186 San Rafael, CA 94913-4180

Eligible Costs

As identified in the Grant Guidelines, all expenditures must be only for activities, products, and costs included in the approved Application and Work Plan. Services provided and costs must be incurred after receiving a Notice to Proceed and must be spent or encumbered for a Zero Waste purpose before the end of the Grant Term. Costs, including materials, supplies, equipment, facilities, must be directly related to the approved grant project, be reasonable, and focused on local needs as described in the application. Any proposed revision(s) to the Work Plan and/or Budget must be approved by the JPA Executive Director.

Ineligible Costs

Any costs not included in the Application and Work Plan and not directly related to the approved grant project are ineligible for funding use. Questions regarding ineligible costs can be directed to the JPA Staff.

Compliance

Grantees shall comply fully with all terms of the Zero Waste Grant Program. JPA Executive Director, as the administrator of the program, has final say in all matters grant related and has all oversight and administrative authority.

Recycled Content Requirements

All products that are purchased with grant funds must contain post consumer recycled-contend material. All documents submitted to the JPA must be printed on double-sided on 100% recycled content paper. Specific pages containing full-color photographs or other ink intensive graphics may be printed on photographic paper.

Audit / Records Access

The Grantee agrees that the JPA or their designated representative shall have the right to review and to copy any records or supporting documentation pertaining to the performance of this Agreement. Grantee agrees to maintain such records for possible audit for a minimum of 3 years from the date the Grant Term ends.

Copyright Information

Any copyrightable materials produced with Grant Funds become the property of the JPA and the Grantee. Questions regarding copyright materials can be directed towards the JPA Grant Programs Coordinator. Examples of copyrightable material included, but are not limited to:

- * CD's and visual material
- * Brochures, Pamphlets, and reproductions of advertisements designed for distribution
- * The following language must appear on any copyrightable material produced with JPA Grant Program Funds:

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Use of the initials "JPA" in conjunction with "Zero Waste Marin" is sufficient when space is limited.

Grant Payment

Grant funds will be available to Grantees once they are given the Notice to Proceed. All applicants who submit a sufficient Application and Work Plan will be sent payment of the full grant amount as soon as possible once the Notice to Proceed is authorized by the JPA Executive Director.

Reporting

A Final Report is required to be submitted by the Grantee to the JPA at the end of the Grant Term (respectively). The report will identify activity during the term of the grant and summarize all activity conducted in the performance and fund use of the grant. Copies of adopted documents (Ordinances, Resolutions, etc.) will be included in the report. All grantees will calculate and report a diversion tonnage estimate to identify program effectiveness.

If all program criteria have not been met by the end of the grant term, the Grantee may report on the progress toward each grant task and demonstrate they have made all reasonable and feasible efforts to implement those programs. Grantees that have unspent funds at the end of the grant term should provide documentation that any unspent funds have been encumbered for a Zero Waste purpose. A sample Final Report can be found on the JPA website: ZeroWasteMarin.Org

A failure to submit the Final Report by close of the grant term will be reported to the JPA Board of Directors or Executive Committee and may affect the availability of future grant funds.

Attachments:

Application & Work Plan – Exhibit B Final Report – Exhibit C

Zero Waste Grant Guidelines - Cycle 6

ZERØWASTEMARIN

Exhibit B

Cycle 6

Zero Waste Grant Application and Work Plan	Zero	Waste	Grant	Apı	olication	and	Work	Plan
--	------	-------	-------	-----	-----------	-----	------	------

A. Name of Recipient (city, town, or special district):						
	resentative and contact information: (Please					
Name: _						
Title:						
Address:						
City, Zip:						
Phone: _						
C. Requested Grar (See Grant Guidelines -						
D. Recipient's Zero	o Waste Grant Work Plan Exhibit A to find a list of suggested Projects)					
Name of Work or Project:	Brief Description of Project:	Estimated % of Grant Funds Allocated:				

proposed application Programs as describe The undersigned also will be used solely for waste reduction or di In the case that the G determination of who	dicant, given appropriate juris, does give a full faith pledge ed in the Grant Term therein. To affirms; that any funds receive the purpose of implementing eversion programs under the grantee fails to implement the ether the Grantee has or has no ommittee, Board of Directors	ved under the Zero W g and providing reside uidelines described in programs indicated or or made a good faith e	aste Grant Program ential and commercial the Grant Application.
X Signature of Grant R	ecipient Representative	Date	
Print Name		Print Title	

ZERØWASTEMARIN

Exhibit C

Cycle 6
Zero Waste Grant Final Report

ipient's representati	ive and contact in	formation: (Please print all informa	tion)
Name:				
Title:				
Address:				
City, Zip:				
Phone:				
E-mail:				

D. Recipient's Zero Waste Grant Expenditures

Please provide a description of the Zero Waste Projects completed and how funds were spent. Also please estimate the tonnage of materials diverted or not consumed as a result of the project.

If all grant funds have been used the Grant Amount should match the Total in the table on the next page. Grant funds must be spent during the current cycle and will not be available to your Jurisdiction in the next grant cycle. Therefore, it is most beneficial to your Jurisdiction to expend all funds. Grantee shall maintain record of all expenditures.

(SEE NEXT PAGE)

Zero Waste Grant Final Report - Cycle 6

D. Recipient's Zero Waste Grant Expenditures (see Grant Guidelines – Exhibit A to find a list of suggested Projects)

Name of Work or Project:	Work Completed:		Funds Used:	Estimated Tons Diverted/Avoided:			
Totals: \$ Tons							
I declare, under the penalty of perjury under the laws of the State of California, that all information herein submitted to the Marin County Hazardous & Solid Waste Management Joint Powers Authority for the Zero Waste Grand Fund is true and accurate to the best of my knowledge.							
X Signature of Grant F	Recipient Representative	Date					
Print Name		Print Title					
riiit ivaine		Finit Title					

MARIN COUNTY HAZARDOUS AND SOLID WASTE MANAGEMENT JOINT POWERS AUTHORITY

Belvedere: Mary Neilan Date: May 26, 2016

Corte Madera: David Bracken To: JPA Board Members

County of Marin:

Matthew Hymel Re: Signature Authority for Zero Waste Schools Program (ZWSP)

From: Steve Devine, Program Manager

Outreach and Assistance Contractor

Fairfax: Garrett Toy

Larkspur: Dan Schwarz

Mill Valley: Jim McCann

Novato: Cathy Capriola

Ross:
Joe Chinn

San Anselmo: Debbie Stutsman

San Rafael: Jim Schutz

Sausalito: Adam Politzer

Tiburon: Greg Chanis In the FY 15/16 budget the JPA Board authorized \$50,000 to fund the initiation of the Zero Waste Schools Program. The proposed FY 16/17 budget for schools outreach is increased to \$150,000 based on research and pilot projects conducted this past fiscal year.

In FY 15/16 one school zero waste project was to research and collect data from various public and private schools and two pilot studies of school zero waste practices. One elementary school and one middle school were chosen for this pilot. Based on our findings and the findings from the May 2016 ESA *Support for Zero Waste in Marin Schools* report, we believe expanding outreach and education to schools is a significant and critical tool to increase waste diversion.

There are approximately 88 schools in the 14 school districts under the JPA's purview. According to a report from the Marin County Office of Education, there were 33,200 students enrolled in our public schools in the 2014-2015 school year. If we assume each of these students come from a two parent household, we are reaching almost 40% of the population with just public schools.

RECOMMENDATION

Staff recommends the JPA Board authorize the Executive Director to enter into a contract of up to \$60,000 with an implementation, education and training contractor to begin executing the ZWSP to eight to ten schools. The remaining \$90,000 of the \$150,000 budget line item is set aside for interior and exterior infrastructure, trainings and education, signage and stickers, awards and recognition.

Attachments:

- 1. ESA Report
- 2. Laurel Dell Pilot Study Report

f:\waste\jpa\jpa agenda items\jpa 160526\schools program signature authority agenda report.doc

Marin County Department of Public Works, P.O. Box 4186, San Rafael, CA 94913 Phone: 415/473-6647 - FAX 415/473-2391

SUPPORT FOR ZERO WASTE IN MARIN SCHOOLS

Tools for Waste Reduction and Diversion

Prepared for Marin Hazardous and Solid Waste JPA

May 2016



SUPPORT FOR ZERO WASTE IN MARIN SCHOOLS

Tools for Waste Reduction and Diversion

Prepared for Marin Hazardous and Solid Waste JPA

May 2016

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SECTION 1

Introduction

1.1 Background

Zero Waste Marin is the formal name for the Marin Hazardous and Solid Waste Joint Powers Authority (JPA). Its Board consists of the city and town managers of Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Ross, San Anselmo, Novato, San Rafael, Sausalito and Tiburon, and the County of Marin. In response to local priorities, the JPA's mission includes certain aspects of hazardous waste management, and it is placing an increasing emphasis on waste reduction and recycling. Looking to the future, the County has a goal of zero waste by 2025, and the JPA is in a position to both lead efforts and track progress toward that goal. Recycling in schools can create lifelong habits, in school, at home, and in today's students' eventual workplaces. Schools are an important part of the Zero Waste effort. In addition, as stated in the Blueprint for Environmental Literacy published by the California Department of Education in 2015, the goal is to have "Environmental literacy embedded into formal instruction for History – Social Science standards... This is strengthened by meaningful learning experiences that build environmental literacy in nature; on school grounds; in the local community.... Etc. In other words, developing and strengthening material management programs in schools improves resource conservation, may reduce costs, and is aligned with California Next Generation Science Standards and California Common Core State Standards.

1.1.1 Project Approach

This project's primary mission is to prepare an effective plan to provide resources from Zero Waste Marin ("the JPA") to qualifying schools in Marin County, enabling those schools to reduce solid waste and increase waste diversion. In 2014, ESA was contracted to implement this project on behalf of the JPA. Our approach is in two phases:

- 1. Survey and visit schools and interview knowledgeable individuals and haulers to identify programs that are already working well, those that are not, and other needs; and
- 2. Estimate the cost and effort to support implementing the most effective programs in eligible schools throughout the County.

A Blueprint for Environmental Literacy Retrieved February 19, 2016. http://www.cde.ca.gov/pd/ca/sc/environliteracyblueprint.asp

Section One provides background information on the schools, the hauling companies, the JPA's role, and a more detailed review of the scope of work for this project. It concludes with an Executive Summary of this report.

Subsequent sections summarize current diversion efforts at the schools and school districts that were contacted, and provide an outline, rationale, and implementation plan for a "Best Practices Toolkit" that the JPA could make available to qualifying schools.

1.1.2 Schools and School Districts

The Marin County Office of Education has a total of 19 county school districts; the JPA works with 14 of these. The JPA does not work with the three school districts located in Sonoma County, the Novato School District or the schools that the MCOE self-administers. The 14 districts include 52 public schools and 36 private schools, for a total of 88 K-12 schools.

For our survey of existing programs and needs, ESA originally proposed to involve six school districts, 30 schools, and 12 school recycling advocates throughout the County. The effort to involve districts and schools began in February of 2015 and continued through June, with some follow-up in August and September as schools began their fall classes. The level of interest from the school districts and schools varied widely. To date, we have had useful contact with five school districts, 20 schools (including two private schools), and seven school recycling advocates. Although fewer schools and districts responded than intended, there was sufficient response to identify several key issues found in many schools across a wide range of grade levels. After conferring with JPA staff, the decision was made to report on our efforts to date and also to prepare a compilation of our experiences at each school visited. The compilation is attached as **Appendix A**.

We made a diligent effort to cover all parts of the County that are eligible to receive Zero Waste Marin's support for school recycling, and to observe a wide variety of grade levels and local demographics. We also were careful to include schools served by all five of the hauling companies that serve the eligible school districts, and to include a broad range of diversion performance levels.

1.1.3 Knowledgeable Persons / Recycling Advocates

As part of this project, we identified and interviewed several school recycling advocates from environmental organizations and school support organizations in order to gain further perspective on challenges, barriers and opportunities at school Zero Waste programs. Summaries of these interviews are given here, in order to provide additional background on the individuals and the issues that require attention if school recycling is to be improved.

Each advocate brings a unique viewpoint to Zero Waste practices, and each is deeply committed to resource conservation and education. All of them recognize certain impediments to working toward zero waste in a school setting, and they also see the value to our society in cultivating

waste reduction values in young people. Their personal and professional dedication to this effort is impressive. Summaries of the interviews follow.

Jennie Pardi, Senior Education Manager, NatureBridge Golden Gate. Ms. Pardi previously worked at Conservation Corps North Bay (CCNB) and is a Local Task Force Member. Ms. Pardi is concerned about the packaging used by the contract lunch provider Choice Lunch. She was advocating for Choice Lunch to switch to a bamboo spork and to eliminate straws while at CCNB. She was unsuccessful on both counts. She believes that more regulation at the county and state level is required to improve the uniformity of food service provider packaging. Her experience with schools recycling programs is that participation tapers off over time due to teacher, student and parent turnover. Custodians and Principals are the most consistent members of a school staff; they deserve to be supported and trained. The custodians are particularly essential; without their buy in, programs will not persist. She would like to see training and professional development and monetary incentives for custodians.

While she appreciates the Zun Zun assemblies, Ms. Pardi does not believe that assemblies are particularly effective; she thinks smaller group trainings are more meaningful and have a longer lasting impact. Another successful model in her opinion is, in a K-5 or K-8 setting, to pair older students with younger ones for training and to have older students serve as monitors during lunch. For older students she is a fan of a "Trashion Show" which incorporates discarded items into clothing. She underscored the importance of understanding and applying the Common Core Standards and project based learning to recycling concepts – connecting the Science Standards to recycling is key.

Madeline Hope is a passionate zero waste advocate. As a contractor with the County of Marin, she helps schools and school districts in west Marin with Zero Waste policy and implementation. Ms. Hope serves on the Marin Food Policy Council and contracts directly with a number of West Marin schools to manage programs and initiatives. She believes that raising awareness about the County's Zero Waste goal at schools, libraries, youth centers, community centers, places of worship, and at community organizations such as Utility Districts, City Councils and the Fire Department will create a broader platform for educating and implementing Zero Waste countywide. She observed that west Marin, due to its physical distance from the rest of the county, is more self-reliant and community based.

Ms. Hope believes that connecting custodians to professional development is key to achieving effective Zero Waste programs in schools. She suggests that part of the annual teacher and staff professional development should include reminders about how to properly separate materials. She believes that students need to be instructed each year until it becomes second nature. Over the years she has developed the "Recycle Circus", a community reuse and swap meet. She also established a "reuse library" with reusable plates and service ware to reduce the use of disposables at schools and community events.

Strategic Energy Innovations (SEI) is a Marin based non-profit that manages a number of energy and climate change related programs. Their work in the K-12 sector revolves around sustainability-focused project-based curriculum, facilities and retrofit support, district-wide

sustainability campaigns, and student green teams. In addition they coordinate the Marin School of Environmental Leadership (MarinSEL) at Terra Linda High School, where they focus on student skills and leadership development through environmental action projects.

SEI receives funding from the Marin Community Foundation and can therefore offer free curriculum resources to teachers, work on instructional planning and support in the classroom, support student green teams and leadership, and work at the district level on sustainability policy and initiatives including the MarinSEL at Terra Linda High School.

SEI staff observed that individual schools have had some success with zero waste programs but it is fragmented throughout the County and it is not standardized.

Mike Grant, Facilities Director, Marin County Office of Education. Mr. Grant convenes quarterly meetings with the Maintenance and Operations Directors of each district. These meetings offer a regular opportunity to connect with maintenance staff and an opportunity to conduct training and professional development around waste prevention and recycling. These regular meetings also provide a feedback opportunity to learn about barriers and problems at school sites.

Mr. Grant is working with Marin Sanitary Service, the service provider to the Office of Education, to create a model Zero Waste Program at the County Office of Education and Conference Center for teachers, administrators and facility staff to learn from when they visit the facility for meetings and professional development. In addition, he will convene business office staff and custodial staff in the fall of 2015 to strengthen the connections between these stakeholder groups, specifically to connect the potential for cost savings by reducing trash service and increasing recycling and composting services.

Mr. Grant sees the Local Control and Accountability Plan (LCAP) as a possible policy vehicle for zero waste. He understands the importance of leading by example and will help raise awareness about Zero Waste Marin at the County offices and with Board Members. We note that Patty Garbarino of Marin Sanitary Service serves on the County Board of Education as the Area 2 representative.

Jonathan Kaufman, Marin Program Coordinator, Global Student Embassy. Jonathan facilitates student projects at several Marin County high schools (Drake, Redwood, Terra Linda). He collaborates with Marin School of Environmental Leadership and Strategic Energy Innovations to run eco-action clubs that allow students to decide on and pursue environmental projects together. Many of the students come to these clubs after having participated in a Global Student Embassy international development project in Ecuador or Nicaragua. Jonathan believes in the power of students to create change by lobbying principals, school boards, etc. He would like to see more on-line and in-person opportunities to share and access resources to help students lobby effectively (curriculum, language and background (health / labor codes, etc.). Mr. Kaufman also sees improved janitorial contracts as an opportunity to remove some of the barriers his students are encountering around recycling and composting collection within schools.

Judi Schils, Executive Director, Conscious Kitchen / Turning Green. Conscious Kitchen, a Sausalito-based non-profit, helps schools transition from off-site-prepared/packaged lunches to onsite, from-scratch, locally sourced, organic lunches, served on durable service-ware. The program integrates students into menu planning, food preparation and service, and discard-station monitoring. In the fall of 2013, Conscious Kitchen took on Bayside MLK Jr. Academy as a pilot, providing a chef and a garden/nutrition teacher as well. The program has been successful at Bayside MLK Jr. Academy, and thus far at Willow Creek Academy where it was recently adopted in fall 2015. The Conscious Kitchen website provides detailed instructions for schools to transition their food programs, including assessment of existing resources, staffing, and equipment. It also provides steps for securing funding, and for building and maintaining community connections and support. Ms. Schils is currently working on expanding the model to include all Marin County schools. She would like help identifying and convening superintendents to target a school in each district that could implement on-site (or partial on-site) meal preparation for the 2016-17 school year.

Lauren Klein, UC Cooperative Extension Marin County Community Garden Program Coordinator. As coordinator for school and residential garden programs in Marin County, Lauren is a resource to help Zero Waste Marin network with many organizations that can support waste reduction in schools, such as the Marin Food Policy Council, Go Next Generation, and Extra Food. Lauren would welcome Zero Waste Marin's leadership in addressing real or perceived roadblocks to incorporating school kitchen/cafeteria scraps into on-site composting. She endorses the idea of Zero Waste Marin convening school-district board members and the County Board of Education to encourage school-district facilities departments to integrate recycling and composting infrastructure and labor into their responsibilities.

1.1.4 Hauling Companies Serving the Districts

The JPA provided a letter of introduction to the five haulers within the scope of the project, explaining the project and ESA's role. ESA then contacted each of them to learn about their services and technical assistance including waste audits, facility tours, and participation in school specific green teams.

Each hauler provides recycling (either dual or single stream) and most offer food scraps/organics. There is wide variation in the support available to schools depending on the hauler, the size of the service area and the number of schools within the service area. Marin Sanitary Services has a recycling coordinator dedicated full time to schools recycling while the Ratto Group has commercial recycling coordinators who attend to schools (very enthusiastically) as part of their account management. Mill Valley Refuse does not employ any recycling coordinators; requests for trainings and technical assistance are addressed by the company president. The Tamalpais Community Services District is deeply engaged with the one school it serves. Bay Cities Refuse Service offers training and bins to schools upon request, but does not proactively engage with schools. See **Table 1-1** for details.

TABLE 1-1 HAULER CHARACTERISTICS

Hauler	Services	Assistance Offered	Districts Served			
Ratto Group						
Contact: N/A at time of report Company website: http://unicycler.com/outreach School related resources available on the website http://unicycler.com/ go_green/schools include a flyer about starting a green team and how to set up a lunch "deconstruction" station.	 Trash Single stream recycling Food scraps¹ Plant Debris 	Recycling coordinator assigned to schools, Waste audits, training, green team organization, posters, quarterly newsletters, annual contact with school each September, table at school events, if requested.	 Bolinas-Stinson Union School District Lagunitas School District Nicasio School District Shoreline Unified School District 			
Marin Sanitary Service						
Contact: Zoe Pearl Company website: http://marinsanitaryservice.com/ educational-services/ School related resources available on the website.	Trash,Dual stream recyclingFood scrapsPlant Debris	Recycling coordinator assigned to schools; Initial discard station monitoring assistance; Assemblies/ Workshops/ Tours of San Rafael site and Environmental Classroom provided to schools within and outside of Marin Sanitary service area. School specific resources available on the website.	Dixie School District Larkspur-Corte Madera School District (partial) Ross School District Ross Valley School District San Rafael City Schools District Office Tamalpais Union High School District (partial)			
Mill Valley Refuse						
Contact: Jim lavarone Company website: http://www.millvalleyrefuse.com/ No school related resources available on the website.	 Trash Single stream recycling Food scraps Plant Debris Separate cardboard dumpster (if warranted) 	Waste audits, training, flyers.	Larkspur-Corte Madera School District (partial) Tamalpais Union High School District (partial) Mill Valley School District (partial) Reed Union School District			
Tamalpais Community Services Distr	ict					
Contact: Jon Elam District Website: http://www.tcsd.us/ index.aspx?page=4 No school related resources available on the website.	 Trash Single stream recycling Food scraps Plant Debris Separate cardboard dumpster (if warranted) 	Waste audits, training, and "How to add food scraps to yard trimmings" flyer. There is only one school in the TCSD. The school is minutes from the CSD office. The students live in the District. The school offers the same services available to residents.	Mill Valley School District (partial)			
Bay Cities Refuse Services		a valuation to residential				
Contact: Greg Christie Company website: http://baycitiesrefuse.com/ No school related resources available on the website.	TrashCompostablesContainer recyclingPaperCardboard	Training & interior bins to schools upon request, but does not proactively engage elementary, middle & high schools. More involved with pre-schools.	Sausalito Marin City School District			

Acceptance of Ratto's commercial food scraps for composting at Redwood Landfill is problematic per Steve McCaffrey of the Ratto Group. Therefore Ratto is unable to increase the number of schools (or other commercial accounts) that can receive food scrap service. Currently there is no pre-determined rate for commercial food scraps. Also, the Ratto Group does not collect food scraps as part of its residential or commercial organics services in Stinson Beach and the town of Bolinas, because those organics are brought to the Bolinas-Stinson Resource Recovery Project, which is not permitted to accept food scraps.

During each hauler interview, in addition to questions related to service options and technical assistance, ESA also inquired about how Zero Waste Marin could help the hauler succeed in achieving zero waste in schools. Responses included:

- "If the JPA had staff that could help with school outreach and be a point of contact for school information and resources would be helpful. That person could also collect contact names and information and help keep it all in one place."
- "If the JPA could provide interior collection containers for the school sites, that would be helpful. The Conservation Corps used to do that but not anymore."

Hauler representatives provided school specific service level information for trash, recyclables and food scraps/yard trimmings. The details of that information have been kept confidential for this report, to protect the schools' privacy.

1.2 Executive Summary

1.2.1 Key Findings

We have reviewed the current schools-recycling landscape in Marin County by visiting 20 schools and five school district offices, and by speaking with seven exceptionally dedicated school-recycling advocates. We believe that this sampling has been sufficient to indicate what the most widespread issues and limiting factors are with regard to diverting waste from schools. We found that all schools had some level of recycling; many were doing well with basic materials but struggling with food scraps and cafeteria wastes; and most were somewhat isolated in their efforts, supporting unique programs on a school-by-school basis rather than a School District, regional or Countywide basis. On the whole, the situation is consistent with those that we have encountered in other Bay Area school districts and counties

We believe the following efforts by the JPA will have the greatest effectiveness in helping schools reduce solid wastes:

- Provide educational and networking resources through a dedicated portion of the JPA web site.
- Conduct waste audits and observations, education and training, and feedback to interested schools.
- Provide infrastructure improvements: equipment and signage, especially receptacles at schools and school district offices.
- Influence lunch suppliers to reduce wastes by changing packaging.

1.2.2 Recommended Actions

Section 3 of this report lays out eleven Action Items that describe these and related efforts in some detail, with estimated budget-level costs. The Action Items are organized into four topic areas:

- Information and Communications Addresses the question, "Where do we start?" by providing informative web pages that will enable school representatives to learn useful techniques, read examples of successful local school recycling efforts, and connect with peers that are dealing with similar issues. Haulers could also link to these pages from their websites.
- **Feedback to Schools on Performance** Addresses the question, "How are we doing?" by providing in-person, on-site feedback based on observations, waste audits, and discussions with staff. These will identify needed program elements and infrastructure; education and training, and help schools anticipate and circumvent common problems that interfere with recycling and waste reduction.
- School Infrastructure Improvements Addresses the question, "What do we need in order to do better?" by providing the signage, receptacles, and accessories that make recycling obvious, easy, and uniform from school to school. Also lays the groundwork for future waste reduction from a major source, food services.
- Addressing Institutional Barriers Addresses the question, "What's interfering with our performance?" by enabling the JPA to gain a deep understanding of the institutionalized conditions that limit recycling and waste reduction, such as: purchasing requirements, janitorial work rules, downstream constraints that limit services to schools, and cost accounting that fails to recognize recycling savings at the school level.

Recognizing the potential for budgetary constraints and competing priorities, we show several of the larger Action Items with two levels of effort. Both levels assume a full time employee whose primary role is waste reduction in schools in addition to support from senior JPA staff as required, plus contractor assistance and additional funds for school site recycling infrastructure. The Lower Level proposes \$52,200 in contractor assistance and expenses. The Higher Level approach adds resources with a value of approximately \$150,200. The major difference between the two is the number of schools that can be targeted for assistance each year: four for the Lower Level, and ten for the Higher Level, depending on the proximity of the targeted schools and the extent of their needs. **Table 3-1 in Section 3**, summarizes the items and their costs.

SECTION 2

Current Efforts at Selected Schools

2.1 Background

2.1.1 Selection of Schools

Beginning in February 2015, ESA approached school districts, both to learn about zero waste practices at school district offices and to gain permission to approach specific schools. Depending on the size of the school district, ESA contacted Maintenance and Operations staff, or other staff as appropriate. Some school districts declined to meet with ESA; others were very enthusiastic. In West Marin, ESA attended the monthly Wellness Committee Meetings at the Lagunitas and Shoreline Unified School Districts and contacted facility and maintenance staff as well as other district administrators at these meetings. In addition, local haulers as well as school recycling advocate Madeline Hope and SEI's Emily Quinton were instrumental in making connections with schools to set up school visits. See **Table 2-1** below for the districts contacted and their responses.

TABLE 2-1
SCHOOL DISTRICT CONTACTS AND RESPONSES

District	District Contact	Response
Shoreline Unified School District	Wellness Committee Meeting	Meeting + Referrals
Mill Valley School District	Shawn Gatewood - Director of Maintenance and Operations	Meeting + Referrals
Lagunitas School District	Wellness Committee Meeting	Meeting + Referrals
San Rafael City Schools District	Chris Thomas - Chief Business Official	No Response
Dixie School District	Thomas Lohwasser - Superintendent	No Response
Sausalito Marin City School District	Alan Rothkop - Maintenance & Operations	Meeting + Referrals
Reed Union School District	Mike Chitwood - Director of Maintenance and Operations	Declined to meet in person but provided comments via email and permission to approach schools
Larkspur Corte Madera School District	Nichole Urrea - Assistant to Chief Business Official on behalf of Wolf Gutscher, Director, Operations and Sustainability	Declined via email

School selection was based on access, geography and socioeconomic differences. In addition, ESA solicited recommendations from haulers, recycling advocates and school district staff about schools with strong or low performing zero waste programs, so that the full range of performance could be observed. A complete list of the schools is found in **Table 2-2** below, which is organized by hauler. Summaries of information from each selected school are provided in Appendix A. The summaries indicate the number of each size of collection container for each stream, such as two 4-cubic-yard refuse bins, three 64-gallon recycling carts, etc. To preserve confidentiality of the customer's service levels, the summaries do not indicate collection frequency, which may be one or more times per week, differing by stream. The summaries also show an estimated diversion level; this is described in more detail at the beginning of Appendix A.

TABLE 2-2 SELECTED SCHOOL SITES

Grades	School	District	Hauler
K-8	Willow Creek Academy	Sausalito Marin City	BCRS
PreK-8	Bayside MLK Jr. Academy	Sausalito Marin City	BCRS / MSS
K- 8	Brandeis Marin School	(Private) San Rafael	MSS
9-12	San Rafael High School	San Rafael	MSS
K-5	Sun Valley Elementary	San Rafael	MSS
K-5	Dixie Elementary	Dixie	MSS
6-8	Miller Creek Middle School	Dixie	MSS
K-5	Vallecito Elementary	Dixie	MSS
K-8	Venetia Valley School	San Rafael	MSS
K-5	Mary E. Silveira Elementary	Dixie	MSS
K-5	Laurel Dell Elementary	San Rafael	MSS
3-5	Bel Aire Elementary	Reed Unified	MVR
PreK - 8	Greenwood School	(Private) Mill Valley	MVR
K-5	Cove Elementary	Larkspur-Corte Madera	MVR
K-5	Edna Maguire Elementary	Mill Valley School District	MVR
6-8	Mill Valley Middle School	Mill Valley School District	MVR
9-12	Tomales High School	Shoreline Unified	Ratto
K-8	Lagunitas School	Lagunitas School District	Ratto
K-8	West Marin Elementary School	Shoreline Unified	Ratto
K-5	Tamalpais Valley Elementary School	Mill Valley School District	Tam CSD

2.2 School Programs and Needs

This section provides a summary of the schools that were visited and the relevant information that was obtained during those visits. The summary is divided into three sections based on the types of services and support that are available to those schools from their haulers. As it happens, this results in a geographic breakdown, which we are labeling as "West County" (served by the Ratto

Group), "Central County" (served by Marin Sanitary Service) and "South County" (served by Mill Valley Refuse Service, Bay Cities Refuse, and the Tamalpais Community Services District).

Following the three summary sections, we provide a recap of the issues that arose most consistently in the observed schools. As a further summary, Table 2-3 shows the types of programs found at each school, with icons indicating the degree of success associated with each program type in each location.

2.2.1 West County

There are four west County School Districts: Nicasio, Bolinas-Stinson Union, Lagunitas, and Shoreline Unified. ESA visited four schools in this area: West Marin Elementary, San Geronimo Valley Elementary, Lagunitas School and Tomales High School. Most students in west Marin, except those served by Tomales High School, receive their K- 8 grade education in west Marin then travel to central and south Marin for High School.

West County schools face unique challenges. Most particularly, the distance to this secluded part of the county adds time and expense to vendors serving schools in west Marin. In addition, students travel farther from their homes to school. Schools in this area offer a physical place of community connection where social events and social services come together serving not only students but their parents as well.

West County schools use School Wellness Committees as a convening mechanism to discuss issues ranging from Zero Waste programs to garden programs to school lunches. This may be due to their location or due to these committees' multifaceted role in these rural communities. The Lagunitas School District Wellness Committee meeting takes place at the Lagunitas Community Center, located adjacent to the school. The community uses both facilities for sports, education, play and entertainment.

School district staff reported that they are struggling with the cost of food and the impact of the existing food delivery model on their overall operating costs. Schools in west Marin are most likely to have dedicated Food Service staff who prepare breakfast and lunch each day both in order to control the quality of what is served but also because prepared food service vendors levy a premium to cover travel costs. In fact, the Shoreline Unified School District recently conducted a study of its Food Service system to better understand the impact of the program on its operating costs.

This local problem is giving rise to local solutions. At West Marin Elementary (which also prepares and delivers food to Inverness Elementary School each day) they use durable plates and cups which are washed each day. San Geronimo uses compostable service ware. Both schools set aside kitchen scraps for local farmers who feed the scraps to their animals. In short, reduction of waste and food waste in particular, is especially valuable to this part of the County. Our current understanding is that the local service provider (The Ratto Group) and the operators of the closest large-scale food waste diversion facility (composting at Redwood Landfill) have been unable to come to terms that would enable Ratto's west county commercial food scrap diversion program to

expand beyond its current volume and serve local schools. The Ratto Group does provide single-stream service for traditional recyclables (cans, bottles and paper) to all schools in this area.

2.2.2 Central County

Within the Central County, eight schools agreed to participate in this study:

- Brandeis Marin School
- Dixie
- Laurel Dell Elementary
- Miller Creek

- San Rafael High School
- Sun Valley Elementary
- Vallecito Elementary
- Venetia Valley Elementary

Many of these schools had similar issues that impacted the effectiveness of their recycling programs. First, though, it should be noted that they are all being served by a local hauler - Marin Sanitary Service - that provides educational experiences focused on their recycling programs, for student groups from throughout the County. (The Ratto Group companies, which serve West County and Novato, offer similar experiences but are not as conveniently located.)

In general, the discards that are generated by food service are the largest stream produced by a school, and the reduction of those wastes can be a major challenge. Food scraps and other compostables make up the majority of materials in this stream; fortunately, Marin Sanitary can provide organics-composting service. However, **only 4 of these 8 schools are able to divert food scraps and other lunch-related organics** (e.g. food-soiled paper) into organics service. The main impediment appears to be an inability to effectively monitor lunch-time discards, coupled with a high volume of non-compostable packaging at most schools.

A noteworthy exception is Vallecito Elementary, which has a very high level of **attention to lunch discards from parent-monitors**. The number of compost carts at Vallecito is twice that of the next highest service level among the Central County schools that we visited, while the student head count is essentially the same. Also, at Vallecito, an interested parent facilitated coordination between Choice Lunch and Marin Sanitary that resulted in substitution of recyclables for hard-to-process compostable plastics.

Unfortunately, we also heard about **parent lunch monitor burnout** at Vallecito, and about similar lunch discard monitoring concerns at several other Central County schools. We did not encounter a school that had a real solution for this issue.

One aspect of school recycling that seemed to vary widely across the Central County schools was the level of **involvement by janitorial staff**. In some instances, the daytime or end-of-day janitor(s) quite willingly convey all materials to their appropriate service containers. At the other end of the spectrum, at San Rafael High School the janitors will only collect trash. The student Green Team is collecting recyclables and transporting them to the service containers and the students are trying to resolve this issue with the school district.

Another highly variable feature at these schools was the number of **waste prevention measures** being implemented in staff lounge and work areas. Most schools had some measures, such as a recycling bin or a drinking fountain (rather than a cooler that requires paper cups), but very few had a full suite of measures that would include organics collection, a water bottle refill station, reusable plates and cutlery, etc.

Most of these schools have gardens, and many of those gardens have compost systems for garden waste; but none of them has been able to establish an ongoing closed loop that uses lunch scraps as compost feedstock, and grows some lunch ingredients using that compost. This has been attempted in several schools but without lasting success. It might be possible to establish such a compost / garden / food / compost system, as in a few other Marin schools (see next section), but it would likely require a higher level of involvement by staff, parents, and/or the lunch supplier.

2.2.3 South County

ESA visited seven schools in southern Marin County. Willow Creek Academy and Bayside MLK Jr. Academy are within the Sausalito Marin City District; Edna Maguire Elementary, Tamalpais Valley Elementary School and Mill Valley Middle School are within the Mill Valley School District; and Bel Aire Elementary is within the Reed Unified School District. ESA also visited Greenwood Montessori, a private school.

Mill Valley Refuse Service (MVR) serves Greenwood Montessori, Bel Aire Elementary, Edna Maguire Elementary, and Mill Valley Middle School. Bay Cities Refuse Services (BCRS) provides service to Willow Creek Academy. Bayside MLK Jr. Academy reportedly self-hauls its refuse and recyclables. Tamalpais Elementary is served by the Tamalpais Community Services District.

Tamalpais Elementary School benefits from being within the TCSD. The school serves all the residents within the TCSD, and the TCSD offers the same recycling, food scrap/yard trimmings and trash service at the school that it offers to its residents. This aids in reinforcing "what goes where" habits which reduce confusion and contamination. In addition, the school benefits from long term staff who are dedicated members of the school and wider community.

The Mill Valley schools did not express that they had a strong **connection to their hauler**. Many would like more direct service in terms of education and explanation of services and pointers on proper discard management. It was noted by a number of school representatives that the brown (rather than blue) carts used by MVR for recycling cause confusion to the students, especially since the interior recycling containers at the school are all blue. Switching from blue to brown for recycling was a decision promulgated by MVR residents who felt that the brown was more neutral and aesthetic on the streetscape.

Nearly all the schools served by Mill Valley Refuse that we visited, as well as Tam Elementary, use Choice Lunch as their lunch service provider. The only exception is Greenwood Montessori which uses Good Earth. **Most of the schools reported confusion about where to put the many**

different products found in a Choice Lunch and would welcome more clarity and guidance from the hauler, school district, Zero Waste Marin and/ or the lunch service provider. Bay Cities Refuse Service, which collects from Willow Creek Academy and Lycée Français de San Francisco (a large Private Pre-K – 5th grade school in Sausalito), does some direct outreach to nursery schools, and will provide compost and recycling service, signage, and interior containers to elementary, middle, and high schools on request. At the time of our research, Bayside MLK Jr. Academy was receiving composting collection from Marin Sanitary, since they were not receiving compost service from BCRS.

A number of the South County schools we visited have robust **garden education programs** including Edna Maguire and Tamalpais Elementary. However, it is less clear how (or if) these programs connect to the student's experience of lunch or eating on campus. Also, neither of these schools has a full kitchen, even though Edna Maguire was recently rebuilt. This is particularly glaring in light of the Mill Valley School District's "Resolution on Sustainability and the Design and Construction of High Performing Schools" adopted in September 2009 which connects sustainable design principals and waste minimization. Unfortunately, the connection did not extend to the inclusion of a kitchen in the school's redesign and the reduction of lunch waste over time.

The **garden** – **lunch connection** is stronger at Bayside MLK Jr. Academy and Willow Creek Academy, the two public schools in the in the Sausalito Marin City School District. The Sausalito non-profit, Conscious Kitchen, has worked with both schools to transform their food service programs. Now, all meals are prepared on-site from scratch using locally-(including school garden) sourced, seasonal, organic, non-GMO ingredients, and served on durable service-ware which is washed on-site. Students are involved in menu planning, food preparation and service, and discard-station monitoring. Donated flowers that would have been discarded from local flower shops are placed on cafeteria tables each day. Teachers are often join their students in eating the high-quality food, further emphasizing the concept that mealtimes are special times to be enjoyed and not rushed through. The combination of all these factors leads to much less preand-post consumer waste. Often, the only discard from an individual meal is one paper napkin.

2.2.4 Summary of Recurring Issues

From the visits described above, the following recurring issues emerged:

- Garden programs are usually disconnected from food service, even though there is an obvious potential for a meaningful connection (food to garden-compost to food).
- There is a need to strengthen (or start) monitoring lunch discards, to increase recycling, reduce contamination and enable food scrap collection. However, it is easy for parent monitors to "burn out" from too much of this task.
- There is a high volume of packaging, requiring careful monitoring, with most (but not all) lunch suppliers. There is less packaging, but more effort and cost, when meals are prepared by school staff.

- In some instances there is a limited willingness to recycle and/or a limited understanding of local recycling rules by janitors.
- Some haulers provide substantial information and support to schools; others, not so much.
- The completeness of recycling and waste reduction systems in teacher/staff lounges and work areas varies from school to school.

In addition, there are a few general issues that were often noticed or mentioned during school visits:

- There is a **lack of uniformity from school to school in the signage, bin colors, bin styles, symbols, and other communications regarding recycling**. Students and parents move among schools as the students advance through the grade levels, and greater consistency in recycling messaging would help to reinforce recycling behavior.
- At many schools, the waste receptacles in the yard areas have **no companion recycling receptacle**. As a result, recyclables are thrown into the trash.
- There is a need for more **recognition and incentives for schools to recycle**. Zero Waste Marin could cultivate good will among schools through active recognition.
- There is also a limited amount of **feedback to the schools about their recycling volumes and contamination**. Feedback most often occurs when recyclables become so contaminated that the hauler no longer wants them. This problem could be reduced, and some good will created, if the JPA provided "lid-flip" audits as part of its outreach to schools, and recognized the high performers with some positive reinforcement.

2.3 Summary of Observed Program Elements

To assist in summarizing our observations and moving toward recommended actions, Table 2-3, on the following page, provides a matrix that matches schools with observed program elements and uses green, yellow and red icons to indicate the degree of success of those program elements.

Table 2-3 is meant to serve as a resource for planning, not a set of conclusions.

- Colored icons indicate that ESA learned about, or observed, a program element at a
 particular school. It is possible (indeed, likely) that some existing program elements were
 not observed and are not noted.
- Green indicates a program element that is working satisfactorily. Red indicates unsatisfactory performance in the current setting. Such elements might be successful with increased support or a change in approach. Yellow icons denote mixed results.
- Program elements are grouped based on the type of support that we believe the JPA is best suited to provide for those elements. Each element is only listed once, but some elements may be compatible with, and may need, several types of support.

TABLE 2-3 SCHOOLS AND PROGRAM ELEMENTS

										9	Scho	ools	s								
Type of potential support	Programs	Willow Creek Academy	Bayside MLK Jr. Academy	Brandeis Marin School	San Rafael High School	Sun Valley Elementary	Dixie Elementary	Miller Creek Middle School	Vallecito Elementary	Venetia Valley School	Mary E. Silveira Elementary	Laurel Dell Elementary	Bel Aire Elementary	Greenwoood School	Cove Elementary	Edna Maguire Elementary	Mill Valley Middle School	Tomales High School	Lagunitas School	West Marin Elementary	Tamalpais Valley Elementary
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SECTION 3

Action Items: Descriptions and Costs

3.1 Introduction

This section presents a series of Action Items that collectively comprise a "Best Practices Toolkit" that the JPA can use to address issues identified in the preceding sections of this report. The Action Items are grouped into the topics listed below. Their detailed descriptions are followed by **Table 3-1**, which summarizes their costs.

Several of the recommended Action Items are presented at two levels of effort. The Low level (L) applies to certain items which, taken together, assume a Zero Waste Marin employee dedicated to schools recycling plus \$52,200 in contractor assistance and additional funds. The High level (H) approach to those same items assumes a Zero Waste Marin employee plus either \$150,200. The major difference between the two is the number of schools that can be targeted for assistance each year. The L level assumes four schools will be assisted in a school year, while the H level assumes ten schools will be assisted in the same time frame.

Apart from the items with L and H levels of effort, some items carry significant costs and may need to be managed as distinct budget items.

Action Item Topics

- Information and Communications
- Feedback to Schools on Performance
- School Infrastructure Improvements
- Addressing Institutional Barriers

3.2 Action Items

3.2.1 Information and Communications

This topic area largely focuses on enhancements to the JPA's internet presence and resources.

3.2.1.1 Add Resources to JPA Web Site

The JPA can create a Schools Section on its existing web site by inserting a Schools topic heading on the home page and linking it to several schools-specific pages. Providing a "go to"

place for school resources will ease the burden on school site administrators and staff by providing much needed tools in an easily accessible manner. Pages can include:

Requirements – A summary of local goals and local / State requirements related to recycling and waste reduction at Marin schools.

Options for Schools – Brief descriptions of common and uncommon recycling and waste reduction options being used by schools in Marin and beyond.

Links to Resources – Can include information about available waste audit/visit technical assistance from JPA staff, downloadable signs, labels and posters; case studies on specific techniques; and links to third-party resources related to school recycling including, for example, sample sublease language related to requiring use of recycling programs by sports teams or preschools or other tenants of specific school sites as a condition of the lease. Other resources can include links to other Bay Area school zero waste programs with school specific ideas, tips, and resources.

Curriculum – links to existing, age appropriate curriculum tied to Common Core standards for teachers to use. For example, the Education and the Environment Initiative curriculum developed by CalRecycle integrates education about the environment into core subjects already taught in the K–12 school system. Teachers would welcome easy access to curriculum that ties to Next Generation Science Standards and incorporates Science and Technology, Engineering and Mathematics standards. Other project based curriculum that integrates zero waste into classroom activities such as designing sculptures with discarded materials should also be provided.

Web site improvements can be achieved with assistance from O'Rorke and Associates through the JPA's existing contract with this contractor, therefore no specific additional funds are associated with this Action Item in Table 3-1. Additionally we recommend that support include development of a Marin Schools Zero Waste logo that can be launched on the web page and replicated on school site posters and stickers. We would expect this effort to require the equivalent of one-half day per week from the current schools recycling staff person during the upgrade period.

3.2.1.2 Hold Web Site Launch Event

It will be important to bring the web site improvements to the attention of schools and school districts, to assure that they are used as fully as possible. An email "blast" to the JPA's school-related contacts is one way to do this, but we also suggest a postcard-mailing with a simple, vibrant image, the URL for the Schools page, and a QR code² prominently displayed. Tacking this up in the front office or staff lounge will help to spread the word among individual teachers. The mailing should go to both the schools and school districts.

A total of 200 to 300 postcards should suffice. JPA staff may be able to create a suitable graphic design and text for the card; alternately, the existing outreach contract with O'Rorke can be used to develop a graphic design and mailing labels.

The QR code is a type of bar code that can be easily read by smartphone apps. The QR code typically contains a link to a web site, and the app launches the smartphone's browser and makes it display that web site.

3.2.2 Feedback to Schools on Performance

This topic area largely focuses on school visits and waste audits to advise schools on additional waste reduction measures that will work in their situation. Along with the audits, education and training to appropriate staff members and student will be provided. Initially visits and audits should be done in response to schools' requests, to assure that they reach a receptive audience and are likely to be acted upon.

3.2.2.1 Determine the Scope(s) of a Visit/Audit

As a first step, JPA staff should determine what they can effectively offer as a school site visit / waste audit. Determining the general scope of the audits would involve a one-hour meeting of one JPA staff, to produce a description of a typical visit and the report back to the school.

The following description of a visit/audit is provided as a starting point for staff to develop their visit/audit scope. A waste audit consists of manually sorting through a single day's worth of discards to complete a waste characterization study. This study provides data on lunch habits, packaging, and discards generated from other locations including classrooms, offices and sports fields. Findings and recommendations would be communicated to the school via a waste audit report. A total of four hours, plus time to arrange for the visit and travel to and from the site, is likely to be necessary for each audit of this type.

3.2.2.2 Hold Annual School Services Meetings with Haulers

Next, the haulers should be made aware that the JPA is paying special attention to schools and intends to provide site visits and waste audits. In a meeting with the haulers, the roles of the JPA and each hauler can be clarified, for thorough support without duplication of effort or conflicting information. City staff responsible for franchising services and approving rates can be included as well. School districts and cities with haulers that provide less direct support to individual schools may need more attention from the JPA. These meetings would facilitate communication between a particular hauler, city and JPA staff and a schools site representative. At each meeting, the hauler could provide each school with a cost/savings profile. The meetings should require two days' worth of staff time to invite, prepare for and conduct the meetings each year.

3.2.2.3 Provide Direct Support: Visits/Audits

The visits/ audits are a fundamental component of the JPA's ZW Schools Program. They involve a school site visit to observe container locations, teacher and staff awareness and use of recycling options, recycling and organics capture in kitchens and cafeterias, school gardens' relationship to the school's recycling program, janitors' participation, and any unmet needs or problems that the school is having with regard to waste reduction and recycling. They also involve a thorough audit of the materials that have been placed in bins or carts for collection as refuse, recyclables, or organics. Next, they offer staff and student training, lunch time monitoring and Green Team assistance. They conclude with a memo to the school evaluating the current system and

recommending changes if needed, and identifying additional resources (e.g., field trips to recycling facilities).

Schools' involvement in the ZW Schools Program can be initiated in batches during September and January (at the beginning of each semester). With over 88 schools in the JPA's purview, a first-come first-served principle should apply during the first year, with the number of schools per batch limited by the available staff and resources. The schools seeking and receiving assistance the first year can serve as examples to the remaining schools. In order to serve the remaining schools with direct support, a year by year plan should be developed. For this report, two batch sizes are considered; they are designated L for low volume (fewer schools) and H for high volume (more schools). The L level of effort would make use of existing staffing, plus some supplemental resources as described in sections 3.2.2.4 and 3.2.3.1 below.

The H level of effort would augment JPA staff with a support contractor estimated here as equivalent to one 3/4-time person for eight months a year, plus their travel and basic expenses, estimated at \$60,000 per year. Another alternative (not costed out in this report) would be for the JPA and the Marin County Office of Education to share the cost of an employee's salary to implement the H level of effort. This person could be employed through MCOE but 50% of their salary would be funded by the JPA. The JPA would provide guidance and monitor outcomes. This position would create relationships with school district staff and facilitate school site ZW plans. As a contractor or an additional staff person, the extra support would cover many of the basic but time-consuming duties such as waste audits, lunch time monitoring, janitorial and other staff training, infrastructure upgrades (e.g. setting up signage and recycling containers), etc.

For the L level of effort, existing staff at the JPA plus an additional \$15,000 for a limited amount of contracted assistance are capable of handling two new interested schools per semester (four per year), providing site visits, waste audits, and infrastructure such as containers and signage. For the H level of effort, existing JPA staff would be less involved in visit/audits and more involved in coordinating the support contractor or support staff person and attending to other related school activities such as assemblies, service changes, troubleshooting service and contamination issues, in addition to tracking progress and monitoring among the schools. Depending on the proximity among schools, up to ten schools could be taken on each school year at this higher level of effort.

For the purposes of this report, we are assuming that the ZW School's Program would assist 80 out of 88 schools; this takes into consideration that schools may close, may be satisfied with their services or may be too small to merit assistance. Therefore, at the L level, it will take 20 years to provide direct assistance to each of the 80 schools, at the H level, it will require eight. Regardless of the pace of implementation, maintaining relationships and providing follow up assistance and monitoring to previously visited schools will be important; the function of follow up will increase year by year. In order to track performance over time, defined metrics must be applied to gage program success. Using Excel or a similar tool, the metrics should include defining service levels, tracking changes in service level over time and/or the introduction of new services (such as organics service). The JPA's specific measures of success should be based on the number of school audits conducted each year and the number of schools contacted for follow up monitoring

and check in each year. In addition, the JPA should track the time spent at each school. School specific metrics could include: Did the school develop a Green Team? Do students, staff and administrators understand the Program "Do's and Don'ts?" How much contamination is present in the recycling? In the organics? Does the school promote the program to its stakeholders through its website, email blasts to parents and to the greater community?

3.2.2.4 Plan Special Recognition & Awards

This is also a scaleable effort that can be as simple as asking interested schools to document their recycling, organics and waste reduction efforts, and providing recognition on the JPA web site. Or, it can provide tangible rewards for schools that are making special efforts. Or it can take the form of teacher professional development stipends to NatureBridge, a Marin – based non- profit that offers skills development, workshops and resources to create science and educational curricula that teachers can bring back to their classrooms, or other professional development opportunities that the JPA identifies. At this time, based on JPA staff availability, we recommend budgeting for several staff work sessions to develop this idea in more detail, for future use by the JPA.

3.2.2.5 Recognize Janitors Who Recycle

The long term success of a school recycling program requires active involvement from facility staff. Our site visits made us aware of the wide variation from school to school in participation by janitors in recycling. Overtime, the JPA can work to facilitate union-district agreements that clearly include recycling and organics programs as required responsibilities and strive to incorporate recycling and related waste reduction/waste management duties into job descriptions and performance reviews for janitors/custodians.

One simple way to promote greater participation, and to raise awareness of Zero Waste Marin, would be to provide recognition to janitors who promote recycling in their school. The best place to begin is with School District management to determine what recognition is consistent with the district's practices vis-a-vis their janitors' current union contract. In some settings, such recognition can be misconstrued as extra pay for special work, contrary to the janitors' contract. To avoid this pitfall, the award can be something of modest monetary value to the recipient, while still being a source of pride, such as having one's name on a plaque at the District office, adding a recycling-arrows patch to the janitor's safety vest, recognizing the employee at a school district or community meeting, or sponsoring a field trip to a recycling center. Another approach would be to have students write letters, as part of an English-class exercise, to express appreciation to the janitors for their work. The primary cost to the JPA would be in staff time spent making school districts and schools aware of the award, developing a nomination process, reviewing applications and selecting awardees. We estimate that twenty-four hours of staff time will be needed for a single award cycle plus \$500 at the L level and \$1,500 at the H level for expenses.

3.2.3 School Infrastructure Improvements

This section focuses on physical improvements and vendor choices that will make waste reduction, recycling, and resource conservation more efficient and effective at individual schools.

3.2.3.1 Provide Direct Support: Receptacles, Signage, Etc.

Our observations indicate that many schools need receptacle clusters that contain separate bins or cans for recycling, organics, and trash, both indoors and outdoors. For student lunch areas, custom signage with age-appropriate text and images based on specific hauler practices might ease lunch monitors' burden of constant correction and explanation. To address all of these issues, the JPA could manage the distribution of assets it provides to school and school districts by instituting a Zero Waste School Resource Center and providing useful physical resources to schools that are receiving Audit/Visit support. In essence, the ZW Center would be warehouse space, reasonably close to the JPA offices, where a variety of color – coded receptacles, receptacle-tops, signs, and other useful items would be held for distribution.

The ZW Center resources can be publicized as part of the messages to schools about visits/audits and through links on the updated pages of the JPA website.

Examples of what can be offered to participating schools include:

- Outdoor container clusters (trash, organics and recycling) or
- "Brute"- style blue recycling barrels, or
- "Slim Jim"- style recycling or organics containers, or
- various styles for the above containers, or
- Indoor recycling bins, useful in a classroom setting.
- Customizable and/or pre-made signs, stickers and posters that feature the ZW Marin School logo.

Each recipient school would be able to choose from a menu of items, based on the guidance from the visit/audit, to fully equip their school and grounds with receptacles and signage that increase a school's recycling infrastructure. We have allowed \$5,000 at the L level for the production of instructional posters and stickers to be placed on or adjacent to trash, recycling and organics receptacles. At the H level, the production budget is increased to \$11,000.

Additionally, based on experiences in Marin and other communities, we are assuming \$7,000 per school to provide all the containers necessary to fully implement an effective Zero Waste Program. Some schools with developed programs may require less. In Table 3-1, the Low level approach assumes four schools per year and the High level assumes ten schools per year.

Staff time to establish and manage the ZW Center could require 32 hours for the start-up phase (finding space, ordering assets, setting up inventory control, etc.) but then would likely involve about four hours per participating school for inventory control, access and reordering.

3.2.3.2 Reduce Wastes from Food Service

Through the site visits conducted for this project, we have seen the dramatic difference between the discards from traditional school lunch catering and those from the Conscious Kitchen approach where waste to landfill can be reduced by 50% or more. We propose a half-day miniconference to bring together interested food service managers from schools throughout the JPA area. They could compare notes on their vendors, evaluate the wastes generated from their food service discards, and consider waste reduction measures to incorporate into their vendor specifications. It could begin with presentations from several vendors, describe ways to monitor and evaluate waste generation, break into small groups to compare specifications, and finish with "reporting out" about unanswered questions and concerns.

As a first step, a JPA staff member should network with food service staff at several schools to gauge the perceived need for such an event, and the specific topics that would be of interest. We recommend allocating up to 16 hours of staff time to conduct these explorations and, if there is sufficient interest, to identify the best time of year to pursue this subject. The staff member should also finalize the topics, time requirement, costs, and other logistical matters including the possible need for a facilitator to provide structure and pace. The agency could use O'Rorke to provide meeting facilitation and attend to other meeting details. A desired outcome would be template contract provisions for food service agreements that would be available to school districts using various lunch vendors.

An additional 16 hours has been allocated for time to follow up with food service vendors directly to educate them about the about the preferred food service ware/packaging in each hauler's jurisdiction/school district and to implore them to simplify their packaging.

3.2.4 Addressing Organizational Barriers

In our work on this project, we identified a number of systemic improvements that can be considered, these are discussed in Sections 3.2.4.1 and 3.2.4.2 below. In addition, we found two significant barriers that are limiting schools' ability to divert discards from landfill; these two items are further discussed in sections 3.2.4.3 and 3.2.4.4 below. Unfortunately the JPA cannot solve these problems, but it can try to bring the parties to the table better understand barriers and at least determine if a solution is likely. This would help the JPA make better-informed decisions about where to direct its efforts and resources.

3.2.4.1 At the District Level

It is worth noting that principals and other managers at the school level may have no direct incentive to save money by diverting waste, because the cost for these services is not part of their budget; costs of refuse and recycling services are often managed at the school district level. JPA staff should, when appropriate, incorporate this topic into meetings where a JPA representative and district administrators are present, reminding them that reduced disposal costs results in more budget for salaries, text books and other learning resources district-wide such as during the meetings proposed in Section 3.2.2.2 above.

In addition, districts should be encouraged to develop a Waste Management /Zero Waste Policy such as the Dixie School District has done (See Policy 3545 in **Appendix B**). Districts should be encouraged to access Strategic Energy Initiatives' School Sustainability Policy Guide. This tool, available for purchase for \$50/each on the SEI website³, simplifies the task of policy development and implementation by providing examples of existing policies and regulations that address issues in a wide array of sustainability topics, including energy, water, waste, mechanical systems, lighting, building envelop and solar panel systems. In addition to examples, the guide also includes templates to give policy writers the opportunity to create brand new policies tailored to your district and school. We have budgeted funds for the JPA to purchase a copy of the Guide for each of its school districts.

3.2.4.2 County Office of Education

The JPA and the Marin County Office of Education (COE) need to develop a closer working relationship. With encouragement from JPA and other Zero Waste stakeholders, the Superintendent should encourage managers at each District and principals at each school that zero waste is a priority responsibility. The foundation of this relationship has already been established as described in Section 1.1.3. Mike Grant, the COE Facilities Director is in favor of having the COE offices serve as a model zero waste facility. He meets regularly with the Maintenance and Operations Directors of each district, providing a regular opportunity to discuss zero waste and he understands the importance of connecting facility and business office staff. A further step would be for the COE itself to adopt a Zero Waste Policy thereby leading by example. With the JPA and other stakeholder's assistance, the COE can offer further guidance and leadership on zero waste programs at each school district and at school site.

3.2.4.3 Address Janitorial Unions and Work Rules

The situation at San Rafael High School is probably not unique. There, we learned that the janitors will only move trash from receptacles to the trash bins, and if material has been placed in recycling receptacles, the janitors might place that material in the trash bins also. This situation appears to be a product of work rules that are antiquated, together with the janitors' perception that they are already overworked. There may be other causes as well. Although we did not directly encounter this constraint in any of our other 19 site visits, it may be an issue in other Marin County schools; we have seen it in other Bay Area counties.

We suggest that the JPA invest 4 to 8 hours of senior management time in fully understanding the basis for this problem. Dialog with both sides of the issue, and a written summary of the situation, would be the short-term goal. Through that process, a solution may become apparent; or the JPA may conclude that such schools are the wrong place to invest significant resources until the problem is solved. In addition, this process would serve to identify schools that are eligible for the Janitor Recognition Program as described in 3.2.2.5.

³ http://www.seiinc.org/eco-smart-education-k-12-table-layout/school-sustainability-policy-guide

3.2.4.4 Evaluate Recycling and Compost Market Options

In our work in West Marin, we were told by the collection company (Ratto Group) staff that their market for compostable organics, which is the Redwood Landfill composting operation, is not allowing them to increase their daily tonnage, and hence the schools in West Marin cannot add compost service at the present time. It would be in the JPA's interest to understand if this is a short term or long term problem, driven by permit limits, physical limitations, or a business decision. This will be especially important as the County of Marin will need to comply with AB 876, (McCarthy) which requires each county or regional agency to include in its annual report to CalRecycle an estimate on organics recycling capacity needed over a 15-year period. More generally, JPA staff needs to be aware of and support efforts to increase local and cost effective capacity for all materials markets, including organics so that market capacity is not a barrier to diversion at schools and more generally

3.3 Conclusion

Estimated costs associated with the foregoing set of Action Item descriptions are summarized in **Table 3-1** below. In preparing this list of Action Items, we are defining building blocks for a multi-year budget and work flow. The web site improvements (3.2.1.1 and 3.2.1.2) are a logical point of beginning, but after that there is no preferred sequence for these items. They can be taken in whatever order works best for the JPA's overall purposes, which may include a combination of Low Level and High Level actions in a given year.

The estimates are intended to show order-of-magnitude costs, for budget planning purposes. In Table 3-1, "JPA Staff Hours" are provided to indicate an assumed level of effort by budgeted staff; some Action Items will require no new dollars to implement. The term "Contractor" is intended to mean an existing or new agency vendor with specific expertise who can extend the agency's capacity to implement one or more of the Action Items discussed above. Contractor expenses such as mileage, etc. are covered under this heading as well. "Expenses" are the cost of physical assets to enhance school site recycling infrastructure: stickers, in-house containers, postcards, posters, etc.

TABLE 3-1 SUMMARY OF ACTION ITEMS

	Item Name	L	OWER LEV	EL OF EFF	DRT	HIGHER LEVEL OF EFFORT							
Item No.		JPA Staff Hours	Con- tractor	Expenses	Total	JPA Staff Hours	Con- tractor	Expenses	Total				
3.2.1.1 Add Resources to JPA Web Site 50		\$0	\$0	\$0	50	\$0	\$0	\$0					
3.2.1.2	Hold Web Site Launch Event	8	\$0	\$0	\$0	8	\$0	\$0	\$0				
3.2.2.1	Determine the Scope(s) of a Visit/Audit	3	\$0	\$0	\$0	3	\$0	\$0	\$0				
3.2.2.2	Hold Annual School Services Meetings with Haulers	16	\$0	\$0	\$0	16	\$0	\$0	\$0				
3.2.2.3	Provide Direct Support: Visits and audits	144	\$15,000	\$0	\$15,000	120	\$60,000	\$0	\$60,000				
3.2.2.4	Plan Special Recognition and Awards	16	\$ 2,000	\$0	\$ 2,000	32	\$6,000	\$0	\$6,000				
3.2.2.5	Recognize Janitors Who Recycle	24	\$0	\$500	\$500	24	\$0	\$1,500	\$1,500				
3.2.3.1	Infrastructure: Interior and Exterior Receptacles, Signage and Stickers	56	\$0	\$33,000	\$33,000	96	\$0	\$81,000	\$81,000				
3.2.3.2	Strategy to Reduce Waste From Food Services	32	\$1,000	\$0	\$1,000	32	\$1,000	\$0	\$1,000				
3.2.4.	Address Organizational barriers	16	\$0	\$700	\$700	16	\$0	\$700	\$700				
	Totals	365	\$18,000	\$34,200	\$52,200	397	\$67,000	\$83,200	\$150,200				

Appendix A School Site Visit Summaries

Please note: In the following summaries, the diversion percentage for each school was computed using the volumes of weekly cart and bin services provided by the hauler(s), where known. It does not include cardboard that is collected separately, nor does it include other non – hauler managed collection such as diverting food scraps to a local farm. Cardboard is typically diverted at Marin County schools, but in many cases, hauler data does not indicate quantities, which vary.

Very little cardboard is handled by or generated by students, so this material is not a key indicator of the performance of school diversion programs. Cardboard diversion is important, though, because it requires a commitment by school staff to divert materials.

Zero Waste Marin School Site Profile:

Bayside MLK Jr. Academy



As of:	March 10, 2015
Present:	Jonathan "JJ" Foley – Conscious Kitchen, Larry Kass - ESA
# of Students:	157
Grades:	K-8
School District:	Sausalito Marin City
Hauler:	Reportedly self-hauling refuse and recyclables
Service level reported by hauler:	No records reported by haulers.
Trash	
Recycling	
Cardboard	
Compost/Food Scraps	Marin Sanitary
Notes:	Service level info not available from hauler(s), district, or school. History of self-haul
% Diversion	Insufficient data
Lunch Service:	Conscious Kitchen

Questions

1. What gets recycled here?

- Bottles / Paper from classrooms
- · Compostables / Paper / Recyclable containers from Cafeteria
- Cardboard

2. What doesn't get recycled here that could be?

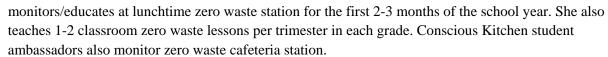
- Recyclables / Compostables from school campus bins (catch-alls)
- Compostables from classrooms

3. What is working well?

Conscious Kitchen lunch program means no single-use products except for napkins. The program is linked to the school garden and garden compost program, and it creates an opportunity for students and community volunteers to monitor cafeteria zero-waste station.

4. How do people here know what can be recycled?

Conscious Kitchen Garden/Nutrition teacher



5. What are the unmet needs?

Training?/Resources?/Fund Hrs? to get zero waste education campaign streamlined and consistent with county standards.

6. What tools or devices are needed?

Earthtub to process food scraps in addition to garden trimmings. This would need additional infrastructure (concrete slab, etc.)

Channels for zero waste educators to communicate with each other.

Programs

Classroom zero waste lessons: Neutral

1-2 per trimester per grade by Garden Nutrition Teacher – Paloma Collier. Needs to be more frequent, but currently this is limited by Paloma's availability

Meals cooked on-site / Durable serviceware: Positive

Breakfast, lunch, and snack are prepared from scratch on-site by Conscious Kitchen. Durable plates, cups & silverware are washed on site. The only disposable is the napkin. Students are involved in menu planning, and emphasis is placed on taking only what you'll eat and vice-versa.



Lunchtime discard station monitoring: Positive

Conscious Kitchen Garden/Nutrition teacher monitors/educates at lunchtime zero waste station for the first 2-3 months of the school year. Community volunteers, and student ambassadors (5-8 grade students nominated by teachers) help prepare and serve food, and sometimes monitor discard station as well. More emphasis is needed on the monitoring role of ambassadors, to reduce contamination.

Garden compost bins: Neutral

For garden plant debris only. Needs more connection to lunchtime zero waste program. Garden funded by Milagro Foundation & SMCSD

Zero Waste Marin School Site Profile: Bel Aire Elementary



As of:	March 3, 2015
Present:	Judith Silver, Casey Poldino, David Sawyer, Vice Principal
# of Students:	650
Grades:	3-5
School District:	Reed Union
Hauler:	Mill Valley Refuse
Service level reported by hauler:	
Trash	1 x 2yd
Recycling	25*- 64 gal carts
Cardboard	1 x 2yd
Compost/Food Scraps	1 x 2yd, 1x1 yard, 10 – 64 gal carts
Notes:	Mill Valley Refuse does not keep track of the number of recycling carts. ESA observed 25 carts.
% Diversion	68%
Lunch Service:	Choice Lunch

Questions

1. What gets recycled here?

- Mixed Recyclables (containers and fibers)
- Food scraps
- Yard trimmings

2. What doesn't get reduced or recycled here that could be?

• Bathroom paper towels

3. What is working well?

The Zero Hero Action Team is the result of applying the "Design Thinking Process," developed at Stanford University, to teaching about achieving Zero Waste at the school. The Zero Hero Action Team consists of students who are particularly passionate about Zero Waste. Teachers choose two students from each class to participate. During their week-long winter intensive class, 5th graders study zero waste, and they tour Marin Sanitary Services and the Redwood Landfill. "Zero Heroes" (3rd, 4th and 5th graders) continue to meet with teacher advisors a few lunch periods per month to plan and implement waste prevention programs including serving as lunch monitors. ESA joined one of their lunch meetings. They asked great questions and were somewhat frustrated by having to explain over and over about "what goes where" to their fellow students.

4. How do people here know what can be recycled?

Mr. Sawyer is not a fan of school assemblies. He feels they are too disconnected to be effective; he prefers 1: 4-5 for effective education. He would like to partner with Reed Elementary, the K-2 feeder school for Bel Aire, to teach them about recycling so when those students get to his school, they would already understand sorting protocols. Zero Hero Group students go class by class and educate their peers. Students use the classroom signage and the different color carts to understand what can be recycled. Students pass by the Zero Waste Bel Aire bulletin board each day.

5. What are the unmet needs?

Lunch is prepared and served by an outside contractor, Choice Lunch. The school has a full kitchen with dishwasher, stoves, ovens, stove top, etc.; it is sitting idle. Mr. Sawyer understood that ignoring the kitchen and the opportunity to prepare food on site was unfortunate. The size of the school makes it difficult to serve students individually from large pans or bowls. The population is 650 students in three grades; Mr. Sawyer pointed out that the student flow into the dining area is not well designed and it would be tricky to move students through the line to get food in a safe and timely manner.

There is still some confusion about what goes where, especially the Choice Lunch paper trays and milk cartons. The staff would appreciate more clarity and guidance from MVR or Choice Lunch. In addition, they would like a closer sense of partnership with MVR in terms of service and investment in the success of their zero waste programs.

Mr. Sawyer would like more students to have the opportunity to see a recycling sorting operation to help demonstrate how materials are managed, why sorting is important how contamination is a problem.

He suggested actual field trips or a "virtual field trip."

6. What tools or devices do you need?

The Custodial staff would like the green carts switched out or cleaned more frequently. Staff would like additional education on sorting and WHY it's important.

Programs

Design Thinking Process for Zero Waste: Positive

The Zero Hero Action Team builds on a winter week long intensive study of waste and recycling. The students are extremely engaged and challenged to problem-solve around barriers to achieving zero waste.

Video Trainings: Positive

The school has the capability to create video segment trainings on how to separate materials by type. This can also be shared with Reed Elementary students and others throughout the County, at least at schools that use Choice Lunch as a lunch provider. Mr. Sawyer suggested that a video of the recycling sorting operation for MVR would be helpful if actual field trips are not feasible.

Conservation Corps North Bay (CCNB) Technical Assistance: Positive

Zero-Waste Bel Aire:

Design Thinking in Action

Using the principles of Design Thinking, students in this year's 5th Grade Seminars began the process of moving our school to as close to zero-waste as possible. Fueled by the fact that Marin will be closing their landfills in 2025, students researched the different aspects of the goal, discovered solutions, and felt a sense of accomplishment. They partnered with Zero-Waste Marin, formed the Zero-Waste Action Team (who's 3rd, 4th, and 5th grade members are called Zero Heroes), and are planning a school-wide campaign for Bel Aire to go zero-waste on April 22nd, Earth Day.

Close up from Design Think Bulletin Board Display

In 2014, CCNB partnered with the school to conduct two waste audits. The result was a graphically rich "pre-training" report card that showed what was being wasted (uneaten food, food scraps and food soiled paper, primarily). After five months of training and education, the "post" audit showed an 87% reduction in waste overall. Specific recommendations from CCNB included continuing education and banning certain items (e.g. single use plastic lunch bags). In 2015 the Zero Hero Action Team is continuing its peer education program and lunch monitoring program.

Three-Stream Sort Stations: Negative

CCNB provided the school with a number of durable three-stream sort stations but, one year later, Mr. Sawyer is asking CCNB to remove them as they are difficult to service and clean, and they are attracting vectors.

Lunch Program: Negative

The school is challenged by its size. The 650 students are divided into two lunch periods as there are too many kids to accommodate in one lunch period. Parents volunteer to supervise the hot lunch program provided by Choice Lunch. Choice Lunch uses a great deal of packaging which results in a lot of packaging and food waste. Because of the crowd size, students pick up and consume their lunches as quickly as they can, and they don't have time to separate uneaten food from plastic wrap and containers; it all goes into the trash. The Zero Waste Heroes monitor and attempt to fix student mistakes by picking misplaced items out of one cart and putting them in the right cart. The custodial staff is very lean; one person manages the entire lunch clean up (conveying carts from the lunch area to the cart pick up area and final clean up after both lunch periods). Good Earth, another lunch provider, uses less packaging. The Conscious Kitchen program might be an option for this school since they have a kitchen.

Zero Waste Marin School Site Profile: Brandeis Marin School



As of:	April 30, 2015
Present:	Judith Silver, Rich Seymour, 7th grade science teacher
# of Students:	175
Grades:	K-8
School District:	Private
Hauler:	Marin Sanitary Service
Service level reported by hauler:	
Trash	2x3 yds
Recycling (containers)	5x64 gal cart
Recycling (fibers)	9x64 gal cart
Cardboard	1x 2yd bin
Compost/Food Scraps	3x64 gal cart
Notes:	Service level is for whole Jewish Community Center; school uses ~1/3 of capacity.
% Diversion	47%
Lunch Service:	School Foodies

Questions

Brandeis Marin School is a tenant of the Jewish Community Center. The school shares the JCC's exterior enclosure area for refuse and recycling carts and bins.

1. What gets recycled here?

Mixed Containers

- Mixed fibers
- Food scraps
- Cardboard

2. What doesn't get reduced or recycled here that could be?

Due to allergies and kosher restrictions, students are not allowed to share food; any uneaten food must be composted. This results in additional food waste. There was no composting or recycling container in the staff lounge.

3. What is working well?

There is ample evidence of recycling and composting infrastructure. Each classroom has three small plastic containers with lids: one for containers, another for mixed paper, and a third for trash. These are emptied daily by the custodian. There are discard stations in the halls with a four stream split: trash, compost, containers and mixed paper. Each internal compartment is lined with a black bag. Clear bags would be more helpful for the recycling processor, and a compostable bag would be ideal for the organics stream.

4. How do people here know what can be recycled?

There are signs on the receptacles. However, there are no accompanying posters on nearby walls. None of the teachers I spoke to had confidence in the janitorial staff. They are tasked with emptying the classroom containers every day, perhaps which is too often. Maybe students could bring the containers to the hall and the custodians could empty from there. The night time custodian may not be getting the paper/containers into the exterior containers.

5. What are the unmet needs?

- Parents have asked for better recycling options at social events. I suggested a one-time purchase of durable plates etc., which they could wash in the adjacent Temple kitchen. The school itself does not have a kitchen.
- Rich expressed concern about the janitorial staff's willingness and understanding of how to properly manage the classroom and sorting station materials. Other teachers expressed this same concern. Additional education and communication between the stakeholders is necessary. If the janitors are objecting to extra effort involved with recycling, students in each classroom could bring full bins to the hallway at the end of the day.

6. What tools or devices are needed?

• The staff lounge does not have a container for compost or recycling.

Programs

Sorting Stations: Positive

The school invested in a number of sorting stations at the entrance to, and in the halls of, the school. While the stations are visually appealing and provide the correct sorting options, each section is lined

with a black bag. Ideally, the compost section would be lined with a green, compostable liner, and the recycling (cans & bottles, and paper) would be lined with clear bags.

Lunch Program: Positive:

The lunch program food is provided by a San Francisco based private school lunch program called School Foodies. Most students bring their own lunches; only ten percent, on average, purchase lunch provided by School Foodies. There are two separate lunch times (K-5 and 6-8). The school is small, so the current practice of having one staging area for organics, recycling and trash is sufficient. The janitor rolls full carts to the enclosure area and swaps them for empty ones.

Classroom Containers: Positive

There is a pair of recycling containers in each classroom, the result of a 7th grade Student Council initiative and their teacher in 2014. Rich thinks his students understand how to use the various containers. Custodians are responsible for emptying the recycling containers and the trash each day. Rich was concerned that the custodial staff was not conveying the recyclables to the proper exterior containers.

Earth Week 2015 Program: Positive

A series of events were planned and executed during Earth Day 2015. For example, seventh grade Student Council members conducted trainings in each of the classes about how to separate materials, a representative from Marin Sanitary Services made a presentation, and the science teacher created an Earth Day project where students planted beans and graphed how they grew.



Classroom Recycling Containers

Shared Enclosure Area: Neutral

There is effective metal exterior signage with detailed lists of acceptable materials. Nonetheless, there is still contamination – film plastic and juice cartons in the recycling instead of the trash, and paper cups in the trash, not the compost. Also, the community center would benefit from a separate bin for yard trimmings; there were tree limbs in the trash bin.

Food Sharing: Negative

Due to concerns about allergies and kosher food restrictions, students are actively discouraged from sharing food except among siblings. All leftover lunch food is composted.

Material Purge: Negative

As is typical at all schools, there are classroom clean out events. On the day of the ESA visit, there were four 64- gallon recycling containers full of books that had been purged from the school library. It was not clear if any effort had been made to make these books available for reuse elsewhere.



Zero Waste Marin School Site Profile:

The Cove Elementary School



As of:	April 9, 2015
Present:	Judith Silver; Grier McCurdy Mathews, O'Rorke, Inc.
# of Students:	350
Grades:	K-5
School District:	Larkspur Corte Madera
Hauler:	Mill Valley Refuse
Service level reported by hauler:	
Trash	2- 2 yard
Recycling	10 - 64 gal
Cardboard	1 – 2 yard
Compost/Food Scraps	6 – 64 gal
Notes:	Service levels are based on ESA observations; hauler did not provide information
% Diversion	39%
Lunch Service:	Choice Lunch

Questions

1. What gets recycled here?

- Mixed Recyclables (containers and fibers)
- Cardboard
- Food scraps
- Yard trimmings

2. What doesn't get reduced or recycled here that could be?

Nothing; this school is using its services fairly well.



3. What is working well?

Each classroom pod is equipped with two sets of black, blue and green 10-gallon Rubbermaid containers. In the 3rd grade classroom, the contents of each container was correct; paper towels and food scraps in the green, school paper and containers in the blue, plastic baggies and a used pen in the trash.

The 3rd grade teacher and Green Team leader, Wendy Meunier, noted that there is a strong relationship with custodial staff, they are willing to do what is needed, no resistance. The main custodian persuaded the school administration to purchase trash grabbers and buckets, as well as some kid-size brooms so students can help keep the campus clean. He appreciates the fact that the garbage is much, much lighter and is very supportive of the kids who are out there helping every few days.

4. How do people here know what can be recycled?

All three 3rd grade classes visited the Marin Sanitary Services' facility in the fall. The Green Team kids volunteer during and are very capable of training others as well. The schools uses signage during lunch to help.

5. What are the unmet needs?

The school is brand new, and it was built with only a warming kitchen, so there is no possibility of preparing food on site. The back door of the warming kitchen opens to the trash enclosure.

Ms. Meunier was interested in learning from other schools and sharing best practices.

6. What tools or devices are needed?

If the outdoor public space recycling containers used at lunch were blue, it would be less confusing.

Programs

Zero Waste Marin Presentation. Positive

Grier from O'Rorke, Inc. did a presentation to the 3rd grade classes, about 60 students. The presentation consisted of a series of images; the kids were encouraged to call out which container to put the item in. The students were VERY clear about the rules of sorting. Grier then asked the kids for suggestions on waste prevention. They suggested using Tupperware instead of single use plastic bags for lunch items. At the end of the presentation, she gave out Zero Waste Marin tote bags to all the students.



Green Team Lunch Monitoring. Positive

The "Green Team" came about in 2014. Ms. Meunier had a desire to provide the 3rd graders with an opportunity to take on a leadership role at their brand-new school that would have an immediate and measurable impact, be visible, provide learning and volunteering opportunities, and provide a hands on science connection. The focus is on lunch monitoring and participation is completely voluntary. Six students per day monitor three discard stations during the lunch period. They also weigh the material and keep a daily tally. The school PTO paid for the green containers, the scale and the Green Team pinnies that the kids wear when on duty. At this point Ms. Meunier is the only faculty member involved.

Hot Lunch Vendor: Negative

The PTO decided to switch from Good Earth to Choice Lunch as the lunch vendor. The main reason is that serving a Good Earth meal requires more parents to volunteer than Choice Lunch does. For example, Grier, who is also a parent in the district, noted that it requires nine parents to serve the Good Earth burrito bar lunch. It may be possible to have older students volunteer to assist with serving lunch to offset the shortage of parent helpers. There are a great number of kids who are willing to do community service at the school per Ms. Meunier. She contacted Choice Lunch in the winter of 2014 to see if there was something to be done about the black non-bio containers they use for some of the hot food. They said they are working on it. Ms. Meunier observed, "The only way we can get close to zero waste would be to eliminate Choice Lunch and return to a company like Good Earth."

Writing Prompt. Positive

According to Ms. Meunier: "For the 3rd grade writing assignment on "opinion", the model essay will be a letter to the PTO about how wasteful the current lunch program is. It's a great way to integrate the curriculum with Zero Waste."

On site Compost Bins: Positive

In fall 2015, the school will partner with a few high school students to build a composting bin on campus.

Zero Waste Curriculum:

The 3rd graders are supposed to learn about the "3R's" (and composting) as part of the science standards. While the Green Team is voluntary, the program is discussed in the science classes and they also did a composting investigation last fall with some of the lunch waste.

Zero Waste Marin School Site Profile: Dixie Elementary



As of:	May 4, 2015
Present:	Natalie Clark - Teacher, Casey Poldino - Zero Waste Marin, Larry Kass - ESA
# of Students:	360
Grades:	K-5
School District:	Dixie
Hauler:	Marin Sanitary
Service level reported by hauler:	
Trash	1-3CY
Recycling	2-64Gal
Paper	4-64Gal
Cardboard	1-1CY
Compost/Food Scraps	1-64Gal
Notes:	Large amounts of CRV self-hauled
% Diversion	27%
Lunch Service:	Dixie Diner (organizes rotating food vendors)

Questions

- · CRV from Classrooms,3rd-5th grade play-yard, Students' families
- Paper from Classrooms, Staff room, 3rd-5th grade play-yard, Plant debris from Garden
- Cardboard
- Used Shoes



2. What doesn't get recycled here that could be?

- Food scraps
- Paper towels (go to recycle cart instead of compost)
- Yard trimmings
- Recyclables/Compostables from K-2 yards

3. What is working well?

Dixie Elementary has an active Green Team that consists of parent volunteers as well as students (Green Goddesses). Dixie's CRV program collects containers from school and home. Proceeds go to support the Home and School Club.

4. How do people here know what can be recycled?

Green team parents and kids perform skits about recycling at school assemblies. Recycling receptacles are well signed in most areas.

5. What are the unmet needs?

Paper towels need to get from classrooms to the green compost cart. Right now, custodians and students are putting them in brown recycling carts.

6. What tools or devices are needed?

- The staff room needs labeled bins for compostables, recyclables, and trash.
- Secure-lidded compost carts / bin would address the risk of animal raiding that is keeping lunch scraps from being collected for composting.
- Recycle-Trash all-in-one stations need more robust wheels so they can be moved around campus to follow activity throughout the day.

Programs

Durable Party-Ware Kits: Positive

Every classroom has a bag containing a complete class set of washable service-ware to use instead of disposables for class parties. Washing of this service-ware is up to each classroom teacher, who can enlist the help of students/parent volunteers if needed.

Promoting No-Waste Lunches: Positive

Students can earn "Green Bucks" for bringing a no-waste lunch. They can be used at the school's donated toy exchange store.



CRV Collection: Positive, Negative, Neutral

Dixie's CRV program collects containers from school and home. Proceeds go to support the Home and School Club. Green Team parents help sort CRV containers into a well-organized and secure on-site storage enclosure.

Garden Composting: Positive

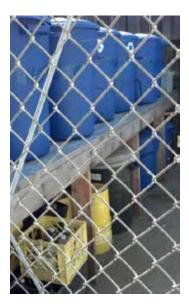
Plant debris generated in the school garden is composted on-site.

Assemblies: Positive

Green team parents and kids perform skits about recycling

Green Team: Positive

Dixie Elementary's Parent Green Team runs CRV program, monitors lunchtime recycling, and performs with student green teams at assemblies. The student green team often collects paper towels from classrooms and puts them in the brown bins (for paper recycling, not composting).

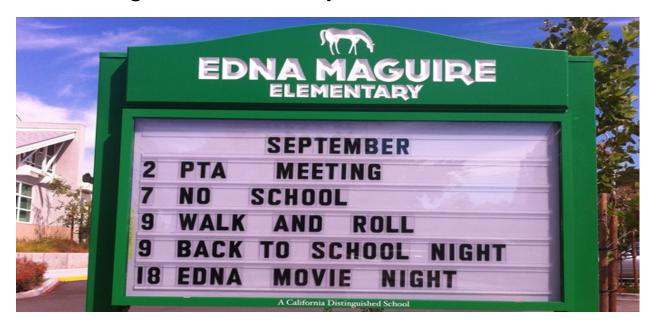


Student monitors: Positive

"Green Godesses" monitor discard stations and give out "green bucks" that can be used at the school's donated toy exchange store.

Zero Waste Marin School Site Profile:

Edna Maguire Elementary



As of:	6/8/15
Present:	Judith Silver; Shawn Gatewood, District Maintenance and Operations Director; Pat, lead custodian
# of Students:	470
Grades:	K-5
School District:	Mill Valley
Hauler:	Mill Valley Refuse (MVR)
Service level reported by hauler:	
Trash	3 – 2 yard
Recycling*	13x 64 gal carts
Cardboard	1 – 2 yard
Compost/Food Scraps	1 – 2 yard
% Diversion	25%
Notes:*	Number of recycling carts is not tracked by MVR. ESA observed 13 carts during visit.
Lunch Service:	Choice Lunch

Questions

- Mixed Recyclables (containers and fibers)
- Yard trimmings
- Cardboard

2. What doesn't get reduced or recycled here that could be?

- · Bathroom paper towels.
- Food Scraps

3. What is working well?

- The school garden is a lovely outdoor classroom with a kitchen, vegetables and fruit trees; it connects the students to food and composting education.
- There is a green team made up of teachers and students. PTA funds were used to purchase classroom and administrative area recycling bins when the school reopened in 2014.

4. How do people here know what can be recycled?

The lunch area containers are not well marked.

However the classrooms, staff work room and administrative offices are all equipped with recycling containers that are blue and /or have signs.



5. What are the unmet needs?

There are no off site tours or school assemblies related to Zero Waste. There is no food scrap program in place. Lunch area containers need better signage.

6. What tools or devices are needed?

Mill Valley Refuse does not use color coded bins or stickers to identify their bins by commodity type (trash, yard debris, cardboard) in the enclosure area; all the bins look the same. It would be helpful to have better coding or stickers on the various bins. Pat would like the kids to be more engaged in monitoring and assisting with the recycling. He says he spends up to two hours per day managing the recycling. In addition, though he has been at the school for 27 years, he has never been on a tour of a recycling facility or landfill.

Programs

School Lunch: Negative

The outside lunch trash and recycling (?) containers are simply there. There is no signage that explains what goes where. Pat, the school custodian, lamented that the students generate "30 bags of trash during lunch each day." Currently there is no attempt to collect food scraps. Although in the past, a more robust and



Lunch Containers – where are the signs?

organized deconstruction lunch program did exist per Pat. The food server, Ahsa, said that Choice Lunch will take back uneaten food.

Facility rental: Neutral

The school facility is used by sports teams, afterschool programs and the Marin Day Preschool. Pat commented that extra trash and recyclables are left behind after soccer and baseball games creating extra work for him. In addition Marin Day Preschool occupies space on the property, though they do manage their recyclables. Sample subtenant language should be provided to schools that require proper use of the school's recycling systems including not creating additional labor for custodial staff.

E-Waste Electronics Fundraiser: Positive

The PTA has run an E-waste recycling fundraiser event. The last one was in 2012. The PTA is currently pursuing other types of fund-raising events.

Zero Waste Marin School Site Profile: Greenwood Montessori



As of:	3/12/15
Present:	Judith Silver, Julie Hanft, 8th Grade teacher
# of Students:	130
Grades:	Pre K – 8 Private
School District:	N/A
Hauler:	Mill Valley Refuse
Service level reported by hauler:	
Trash	2x 32 gal carts + 1 x 2 yard
Recycling *	5x64 gal cart
Compost/Food Scraps	2x64 gal carts
Notes:*	Number of recycling carts is not tracked by MVR. ESA observed 5 carts during visit.
Diversion %	60%
Lunch Service:	Good Earth

Questions

1. What gets recycled here?

- Mixed Recyclables (containers and fibers)
- Food scraps
- Yard trimmings
- Bathroom paper towels

2. What doesn't get recycled here that could be?

Nothing.

3. What is working well?

The Montessori educational approach is focused on developing habits. Therefore students as young as first grade are tasked with discarding the classroom containers each day. The school is relatively small, both in numbers of students and in the distance from the classroom to the exterior cart staging area, which further enables students to manage the recycling. Each 1-8 grade classroom is equipped with a set of 5 gallon color coded buckets (black, blue and green) for the various streams. In the Pre K and K classes, the teachers have a full kitchen set up including durable plates, etc. which they wash. There is a bucket for food scraps which the staff discard daily. Lunch is not consumed in classrooms; the lunch area is a multipurpose room.

4. How do people here know what can be recycled?

Recycling fits into the school's project based learning approach. The Montessori system is designed to engage students early and often, creating habits, including the habit of sorting material types. The 8th grade NEST (Nature and Environmental Studies) students train the other students by visiting each class. NEST students use sorting games to help train their peers. NEST students noticed that even though the buckets were color coded, some specific signage for confusing items such as pencil shavings and seaweed containers would be helpful.

5. What are the unmet needs?

As Ms. Hanft works in a small independent school, she expressed an interest in networking with other teachers on Zero Waste in order to learn best practices and share resources.

6. What tools or devices are needed?

No needs of this type were apparent.

Programs

Color Coded Bucket System: Positive

The school has developed an effective three sort system for landfill, single stream recycling and organics. The 5-gallon color coded buckets are purchased "off the shelf." Outside, the carts have photos of the buckets that the kids have in their hands to facilitate the proper discard process. (However, Mill Valley

Refuse (MVR) has switched from blue recycle carts at the request of residents. Therefore the recycle carts are brown and the 5 gal buckets for recycling are blue.) The buckets have handles, and they are inexpensive, easy to find online, and easy to replace.

Organics Cart Modification: Positive

In order to properly clean the organics buckets, there is a staging area with brushes and a spigot nearby. The green MVR carts have been modified by the NEST students; they cut a small square opening and installed a mesh covering so that the five gallon bucket contents (food + water, after rinsing) can be discarded into the green cart. The water seeps out of the mesh opening but the food stays in. This is done on a paved area with a gentle slope, so ponding does not occur.



Bucket cleaning station



Mesh opening for discarded green bucket water

Tour of Recycling Facility: Positive

All 6th graders take a field trip to Marin Sanitary Services.

Community Engagement Project: Positive

According to Ms. Hanft, NEST kids are working to reduce trash in the town of Mill Valley by getting store owners to sign a pledge to pick up trash around their stores. The students are also engaging with Tamalpais High School Student Council to ask for their assistance and participation. The NEST students believe that the high school students are responsible for a large portion of the litter close to the High School and that they should engage in the solution.

Lunch Program: Positive

The school uses Good Earth for the daily lunch program. Good Earth uses compostable plates and service ware. Parents help serve lunch. Good Earth requires several parent volunteers to assist and serve the lunch as the food delivered in bulk pans and bowls, not in single-portion servings as with other food vendors. The buckets around the lunch area were more contaminated than the ones in the classrooms, indicating that parent volunteers need to be targeted for training.

Zero Waste Marin School Site Profile: Lagunitas School

As of:	3/18/15 and 4/2/15
Present:	Judith Silver, Casey Poldino, Gina (garden coordinator), David Lakes (Community Center) Madeline Hope (Zero Waste Marin), Leonora Denarie (Food Services Director)
# of Students:	143
Grades:	K-8
School District:	Lagunitas
Hauler:	Ratto Group
Service level reported by hauler:	
Trash	1 x 4yard 1 x 3 yard
Recycling	2 x 4 yard
Cardboard	
Compost/Food Scraps	5 x 95 gal
% Diversion	60%
Notes:	
Lunch Service:	District

Questions

1. What gets recycled here?

- · Cardboard, steel cans, large plastic jugs from the kitchen
- Office and school paper from administrative offices and classrooms
- Food scraps

2. What doesn't get recycled here that could be?

Nothing.

3. What is working well?

- Leonora, the Food Services Director, separates pre-consumer food scraps into a five gallon lidded bucket and gives them to a local family to feed their chickens.
- The collected recyclables and the OCC from the kitchen are put to the side and managed by the custodial staff.
- · Food scraps are collected from the outdoor "three-sort stations" and consolidated for collection.

4. How do people here know what can be recycled?

The sort stations are well marked with images of "what goes where."

5. What are your unmet needs?

Lunch was a beautiful plate of pinto beans, cheese, chips, salad, cut fruit and an opportunity to add salsa (homemade) and other toppings on the day of our visit. Leonora talked with us about what she prepares

and when she uses "commodity" foods (food provided inexpensively from the Federal Government) and when she uses locally sourced organics.

Inside the Multi Purpose Room, where lunch is served, the only option for discarding the uneaten food served on paper plates was two large brute trash cans. Leonora will not allow unlined compost containers in her "zone" even if they will be emptied right after lunch and Buck, the PE teacher who handles the food scraps, is against liners of any kind. Therefore, much of the discarded food scraps end up in the trash. The sort stations outside were being used correctly. However, their use was predicated on the students walking outside to them. Most of the students we observed were using the inside trash containers. Therefore compost liners would be advisable.

6. What tools or devices do you need?

While Ratto reported that they collect organics from the school, the school representatives said they were frustrated that Ratto does not collect food scraps from them. School staff were using the neighboring community center's collection containers for the school lunch organic discards. The school would like Zero Waste Marin's assistance to resolve Ratto's ability to expand commercial food scrap service to include area schools.

Also, the school needs a better refrigeration system for storing food. This would enable the food prep staff to do more with unserved leftovers.

Programs

Food Diversion System: Negative

The custodians have not agreed to handle the organics yet. Currently Buck, the school P.E. teacher is managing the food scraps. He removes the food scraps from the compost portion of the three bin sort stations each day. He brings the organics to the community center green carts.

Wellness Committee: Positive

The Wellness Committee offers a venue to resolve the organics program situation. Buck does not want to use compostable bags; he is opposed to any liners at all. That is why there are no compost liners in the Multi Purpose Room trash containers. While Buck is on the Wellness Committee, custodians are not directly represented.

The Committee meets each month and based their wellness policy on that of the City of Berkeley. Section 6 of the policy, entitled "Waste Reduction and Sustainable Agriculture Education," states that the District, will to the greatest extent possible, "ensure that cafeterias are part of the environmental education of students and staff through reducing waste, composting, recycling and purchasing recycled and ecological materials."

Three Sort Stations: Positive

There are ten new three- sort stations around the campus. They were built by a parent with donated wood. The containers are equipped with plastic sturdy liners rather than with film plastic or compostable bag liner.

Zero Waste Grant for Garden Program: Positive

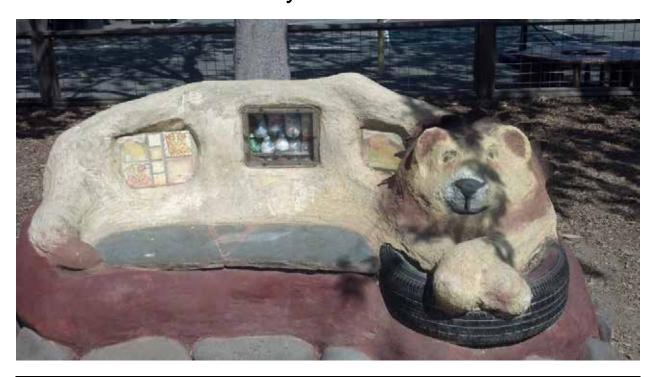
The school district receives \$10,000 from Zero Waste Marin each year to support the garden program. Gina, a parent, sees the students twice per week. She has been working for five years, has learned about curriculum and does cooking with kids on a camping stove, connecting food and the garden.

Lunch Program Food Waste: Negative

Student portion were very large; Leonora explained that it is easier than having kids get back in line for seconds. On the day of our visit, Leonora prepared organic pinto beans from scratch. However, she discard any extra beans into the compost, rather than give them away to staff, because otherwise the staff would not buy the lunch the following day and the program needs the cash flow. She also explained that kids are obliged to take fruit servings that they may not eat. They can't select the food they want because of federal service serving requirements and this creates waste.

The School District used to use Good Earth as its Hot Lunch vendor; Good Earth was starting the service, but now Good Earth's commercial kitchen is in Novato and the distances are too great to justify using them as a lunch service provider.

Zero Waste Marin School Site Profile: Laurel Dell Elementary



As of:	May 29, 2015
Present:	Pepe González – Principal, Larry Kass - ESA
# of Students:	218
Grades:	Preschool - 5
School District:	San Rafael City Schools
Hauler:	Marin Sanitary
Service level reported by hauler:	
Trash	4-96Gal
Recycling	2-64Gal
Paper	5-64Gal
Compost/Food Scraps	1-64Gal
Notes:	Custodians add cardboard to paper bins when there's room. Otherwise, trashed.
% Diversion	21%
Lunch Service:	San Rafael City Schools Central Kitchen

Questions

- Paper from classrooms
- CRV from students & parents
- Cardboard (when there's room in the carts)

2. What doesn't get recycled here that could be?

- Compostables and recyclables from lunch
- · Cardboard that doesn't fit in the carts

3. What is working well?

CRV collection works well at Laurel Dell. Students recycle paper in classroom and reduce paper consumption by re-using back side of paper for scratch work.



4. How do people here know what can be recycled?

Paper recycling is part of classroom procedures. CRV recycling instructions are given to students and families as part of Laurel Dell's "Cash for Trash" program.

5. What are the unmet needs?

Laurel Dell needs staff to monitor lunchtime composting and recycling in order to feel comfortable that they won't contaminate too much. At the point that they implement, they would also like support for school-wide recycling/composting assemblies and to train junior coaches/monitors.

6. What tools or devices are needed?

Laurel Dell would like to obtain curriculum resources that tie lunchtime composting into their garden program. They would also like help addressing collection service logistics. They're collected by residential routes, so custodians have to cram flattened cardboard boxes into carts, which happens only when they have time and the carts have room. Curbside set-out space limits the number of blue carts they can have, so they sometimes put cardboard into the landfill carts.

The principal is in favor of advocacy and strategies for greener purchasing and packaging by SRCS nutrition services.

Programs

CRV Recycling: Positive

Students and families bring CRV containers to Laurel Dell's "Cash for Trash" program, which brings in about \$20 per week.

Reducing School Lunch Program Disposables: Positive

Over the past few years, SRCS central kitchen has been reducing disposables that come with the district lunch. The principal feels that more could be done on purchasing and packaging.

Cool the Earth: Positive

Laurel Dell distributes Cool the Earth action coupon booklets to students to encourage resource-saving behaviors such as using reusable bags, and choosing products with post-consumer recycled content. Students enter completed coupons in a school raffle.

Zero Waste Marin School Site Profile:

Mary E. Silveira Elementary



As of:	May 6, 2015
Present:	Will Anderson – Principal, Casey Poldino – Marin JPA, Larry Kass - ESA
# of Students:	430
Grades:	K-5
School District:	Dixie
Hauler:	Marin Sanitary
Service level reported by hauler:	
Trash	2-3CY
Recycling	2-64Gal
Paper	7-64Gal
Cardboard	2-2CY
Compost/Food Scraps	4-64Gal
Notes:	
% Diversion	26%
Lunch Service:	Choice Lunch

Questions

- · Compostables & Recyclables from Lunch Area
- · Paper from Classrooms
- Garden debris

Cardboard

2. What doesn't get recycled here that could be?

Compostables from Teachers' Room

3. What is working well?

The school's garden is working well, along with composting of garden-generated plant material.

4. How do people here know what can be recycled?

The school principal makes announcements and gives mini-lessons at lunch. Carts have signs on them.

5. What are the unmet needs?

The school needs a train-the-trainer system for student lunchtime discard station monitors. Teachers need encouragement/education so they can participate well in composting and recycling: There is currently only trash in the teachers' room, and an outdoor discard station after a teachers' event showed very high contamination.

6. What tools or devices are needed?

They would like to see a website with various resources, including green purchasing information, best-practices sharing among schools, and curriculum resources (how to incorporate instruction on compost/recycling/waste prevention into the academic standards they're required to meet).

Programs

Principal Announcements at Lunch: Positive

Will Anderson – Principal makes announcements and teaches interactive composting/recycling minilessons at lunch. However, contamination continues to be high in all streams (see next item).

Student Discard Monitoring: Negative

Principal Anderson mentioned that their lunchtime student discard station monitoring program has disappeared since the students whose parents who used to lead it have aged out of the school.

School Garden Composting: Positive

The school's garden is working well, along with composting of garden-generated plant material, thanks to the Garden Team (parent-led).

Waste Prevention in Teachers' Room: Positive

The teacher's room uses washable cups/plates/silverware, and has a water fountain.

Zero Waste Marin School Site Profile:

Miller Creek Middle School



As of:	May 4, 2015
Present:	Kathy Jung – PE Teacher, Casey Poldino – Zero Waste Marin, Larry Kass - ESA
# of Students:	600
Grades:	6-8
School District:	Dixie
Hauler:	Marin Sanitary
Service level reported by hauler:	
Trash	2-3CY
Recycling	2-64Gal + 1-96Gal
Paper	6-64Gal
Cardboard	1-1CY
Compost/Food Scraps	8-64Gal
Notes:	
% Diversion	32%
Lunch Service:	Choice Lunch

Questions

- Compostables & Containers/Foil from Lunch Area
- Paper & Bottles/Cans from Classrooms
- · Paper & Bottles/Cans from Teachers' room

- Plant debris from Garden
- Cardboard

2. What doesn't get recycled here that could be?

- Compostables from Teachers room
- Paper towels from Restrooms
- Yard trimmings from grounds

3. What is working well?

Miller Creek's lunchtime recycling program has extremely low contamination. Landfill service has been reduced to half of its previous level.

4. How do people here know what can be recycled?

Composting and recycling are integrated into the "school culture"



lessons at the beginning of each school year, which includes showings of Annie Leonard's "Story of Stuff". Lunchtime discard station is monitored by one parent and one student per day.

5. What are the unmet needs?

Miller Creek would like support and strategies to get their teachers on board with composting and recycling. At the time of the site visit, they didn't have composting in the staff room, but were planning to purchase a 3-part set-up. They also would like the District Office to direct maintenance on green purchasing and on disposing grass in the compost instead of the trash.

6. What tools or devices are needed?

For their beginning-of-the year school culture lessons, the school would like a video that takes the general "Story of Stuff"-type lessons and relates it specifically to Marin County.

Programs

Teaching Recycling/Composting as part of "School Culture" Orientations: Positive

Composting and recycling are integrated into the "school culture" lessons at the beginning of each school year, which includes showings of Annie Leonard's "Story of Stuff". Teachers proposed showing the "Story of Solutions" as well, but administration felt it was too laden with propaganda.

Lunchtime Discard Station Monitoring: Positive

Lunchtime discard station is monitored by one parent and one student per day. Contamination was very low on the day of the site visit.

Teacher Collects CRV: Positive

CRV containers are separated by kids at classrooms and lunch station. Teacher uses funds to benefit classes.

Assemblies: Positive

Monthly spirit assemblies usually include a recycling-related component, with a chance for homerooms to win points.

Garden Composting: Positive

Terra Linda's Marin School for Environmental Leadership built Miller Creek's garden compost bins, which are used for plant debris from the garden. The parent led Garden Club meets every Wednesday at lunchtime.

Special Event Recycling: Neutral

A parent volunteer sets up monitoring schedules for the public discard stations



at school events that are attended by the public, but it is not effective yet.

Zero Waste Marin School Site Profile:

Mill Valley Middle School



As of:	6/8/15
Present:	Judith Silver, ESA
# of Students:	1000
Grades:	6-8
School District:	Mill Valley
Hauler:	Mill Valley Refuse
Service level reported by hauler:	
Trash	3 – 2 yard
Recycling*	12 -64 gal carts
Cardboard	1 – 2 yd
Compost/Food Scraps	2- 2 yard
Notes*:	Number of recycling carts is not tracked by MVR. ESA observed 12 carts during visit.
% Diversion :	21%
Lunch Service:	Choice Lunch

Questions

- Mixed Recyclables (containers and fibers)
- Yard trimmings
- Batteries

2. What doesn't get recycled here that could be?

- Bathroom paper towels
- Milk Cartons
- Food scraps

3. What is working well?

There are well signed recycling containers in the administrative offices, classrooms, library and staff work/copy room; however, there are no recycling containers paired with the trash containers in the outside spaces of the school. They have received support from the Conservation Corps of the North Bay in the past.

4. How do people here know what can be recycled?

Through the signage. Per the school secretary, the kids understand what goes where and if convenient, they will sort correctly. The school does not conduct any assemblies or field trips related to zero waste.

5. What are the unmet needs?

Per the school secretary, Linda, there have been green teams at this school in the past however, currently, it is not active.

6. What tools or devices are needed?

 The school would benefit from technical assistance to introduce and maintain a food scraps program at lunch.

Programs

Refillable Water Stations: Positive

The school installed three refillable water stations and directed Choice Lunch not to offer single use water bottles in their lunches, only milk is offered.

Printer to Teacher website: Positive

The main school printer allows teachers to scan information to their individual websites where students can access it. This has greatly reduced the amount of paper printed.

Lunch Program: Negative

Students do not have the option of recycling or diverting food scraps at lunch.



Zero Waste Marin School Site Profile: San Rafael High School



As of:	May 4 th , 2015
Present:	Alan Downing – SRCS Production Kitchen Manager, Steve Temple – Physics & Green Team Teacher, Brendan Pipkin – Strategic Energy Innovations, Larry Kass - ESA
# of Students:	1000
Grades:	9-12
School District:	San Rafael City Schools
Hauler:	Marin Sanitary
Service level reported by hauler:	
Trash	1-5CY, 1-3CY Compactor
Glass	1-64Gal
Paper	10-96Gal + 1-64Gal
Cardboard	1-2CY, 1-64Gal + Loose cardboard
Compost/Food Scraps	
Notes:	% Diversion includes district central kitchen
% Diversion	19%
Lunch Service:	SRCS Central Kitchen (on-site, prepares food for all district schools)

Questions

1. What gets recycled here?

- Paper & Bottles/Cans from classrooms
- Cardboard & Pallets from Kitchen

2. What doesn't get recycled here that could be?

- Compostables (including restroom paper towels)
- Recyclable containers from kitchen
- Recyclables from campus discard areas

3. What is working well?

San Rafael High's student green team is working to improve composting and recycling, and other areas of its school's environmental performance, by reaching out to their own student population, as well as to school district and county government.

Containers and paper are recycled from classrooms.

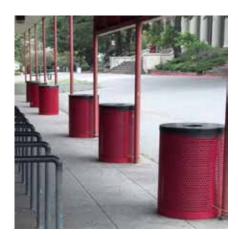
4. How do people here know what can be recycled?

Container and paper recycling is incorporated into classroom procedures.

5. What are the unmet needs?

Many trash bins throughout campus (including within the cafeteria) are not paired with any recycling option.

Outdoor recycle bins (mini-enclosures for bottles & cans) had been serviced by Conservation Corps North Bay, but once CCNB funding ran out, the contents started being collected as trash because no one at the school would take on the task. Production kitchen is not set up or trained in recycling or composting.





6. What tools or devices are needed?

Recycling programs would function more effectively if recyclables and compostables were among the materials custodians were authorized/expected to transport, not just trash.

The school would like help and resources for on-site composting.

Programs

Student Environmental Club: Positive

Student Green Team meets weekly and focuses on campus sustainability initiatives, as well as policy at the district and county level. Facilitated by physics teacher – Steve Temple, and Strategic Energy Innovations fellow – Brendan Pipkin.

Recycling Integrated Into Classroom Procedures: Positive

Advanced leadership class collects paper + bottles/cans and donates money to fund elementary school field trips. Janitorial staff will only collect and transport trash. This is one of the issues the Student Green Team is trying to address with San Rafael City Schools.

Garden Compost Bins: Negative

Green team set up compostables collection bins in school kitchen to bring to garden compost bin. Program only lasted one month because kitchen staff consistently put citrus peels in the bins and they wouldn't break down.

Waste Audit: Positive

Green team conducted campus-wide waste audit.

Meals Prepared On-Site: Negative

Significant use of disposables; kitchen and cafeteria do not have recycling or organics containers.



Zero Waste Marin School Site Profile: Sun Valley Elementary



As of:	May 21 & September 10, 2015
Present:	Land Wilson - Parent, Julie Harris - Principal, Judith Silver - ESA, Larry Kass - ESA
# of Students:	471
Grades:	K-5
School District:	San Rafael City Schools
Hauler:	Marin Sanitary
Service level reported by hauler:	
Trash	1-1CY Compactor
Recycling	1-64Gal
Paper	10-64Gal
Cardboard	1-2CY
Compost/Food Scraps	5-64Gal
Notes:	
% Diversion	72%
Lunch Service:	San Rafael City Schools Central Kitchen

Questions

- Paper, Glue sticks, Markers from Classrooms
- Compostables from Lunch area
- Paper and Recyclables from Teachers' room
- Paper from Administration
- Cardboard

2. What doesn't get recycled here that could be?

Compostables from Teachers' room

3. What is working well?

Sun Valley Elementary has many systems in place to prevent waste as well as divert it. Custodians include moving recyclables and compostables in their responsibilities. Many students bring low/zero waste lunches and refillable water bottles from home. Land Wilson – Parent, Green team leader, author, and leader of national efforts to reduce waste, recycle and reduce carbon impact – leads school-wide environmental awareness assemblies based on the image of Earth from space. Marin Sanitary also runs school-wide assemblies. Sun Valley's green team is in the process of creating a good practices video for initiating marker take-back programs. The school is Green Business certified and has previously participated in the Cool the Earth Program.

4. How do people here know what can be recycled?

Signs on bins and lunch tables, some lunchtime station monitoring, school-wide assemblies, and classroom procedures help people know what can be recycled at Sun Valley Elementary.

5. What are the unmet needs?

It's hard to get and keep lunchtime discard station monitors. Students monitor the stations three days per week. This works well on the one day they are led by a parent volunteer, but without an adult leader to focus them, the students are often ineffective.

6. What tools or devices are needed?

Sun Valley Elementary needs lunchtime discard station monitors. Even one day per week could make a difference. Land Wilson is hoping to develop (with assistance?) a script for an improved "Earth from Space" assembly, perhaps incorporating more humor. Principal Harris suggested that one page flyers and/or short videos about what goes where, available from a website, would be helpful in getting the word out to the school community.

Programs

Crayola Marker Collection / Conversion: Positive

Crayola markers are collected at each classroom, brought by Green Team Kids to a centralized storage container. They are eventually processed into oil. Students were active in the campaign, led by parent – Land Wilson – to get Crayola to take back their markers.

Refillable Whiteboard Markers: Positive

Sun Valley Elementary uses AusPen, one of several brands of refillable whiteboard markers to do their part to reduce the 400 million whiteboard markers that are disposed in the United States each year.



Low/Zero-Waste Lunches: Positive

Many students bring low/zero waste lunches and refillable water bottles from home.

Lunchtime Discard Station Monitoring: Neutral

Students monitor the stations three days per week. This works well on the one day they are led by a parent volunteer, but without an adult leader to focus them, the students are often ineffective.

Junk Mail Prevention Campaign: Positive

Sun Valley Elementary has held a few school-wide Catalog Cancel Challenge competitions

Litter Pick-up Competition: Positive

PUP (Pick Up Plastic) games challenge students to pick up the most plastic in their community.

Assemblies: Positive

Land Wilson leads school-wide environmental awareness assemblies based on the image of Earth from space. Marin Sanitary also runs school-wide recycling/composting assemblies.

Zero Waste Marin School Site Profile:

Tamalpais Valley Elementary



As of:	6/8/15
Present:	Judith Silver, ESA and Juan, Custodian
# of Students:	514
Grades:	K-5
School District:	Mill Valley
Hauler:	Tamalpais Community Services District
Service level reported by hauler:	
Trash	3– 3 yard 1x/week
Recycling	10 x 64 – gal carts 1x/week
Cardboard	1 – 3 yard 1x/week
Compost/Food Scraps	1x64 1x/week
% Diversion:	28%
Notes:	Food scraps are diverted to the school garden, landscaping debris is collected by Tamalpais Community Services District (TCSD).
Lunch Service:	Choice Lunch

Questions

1. What gets recycled here?

- Mixed Recyclables (containers and fibers)
- Food scraps
- Yard trimmings

2. What doesn't get recycled here that could be?

Paper towels from bathroom, if traditional compost service could be provided.

3. What is working well?

The custodian has been with the school for 12 years, and the Principal has been there for 20 years. The students and staff have easy access to the Community Services District headquarters (a short walk away) and can get more recycling containers from there, as needed. Recycling containers are currently in the

office, staff work room, library and classrooms. Cardboard is collected separately. There was little evidence of contamination in the recycling containers that were observed. Food scraps from lunch are collected in a separate container and shuttled each day to the compost area in the school garden across the playing field.

4. How do people here know what can be recycled?

Color coded recycling containers are properly paired with trash containers in each classroom, outside and in the shared spaces of the school (Multi-purpose room, library, front office).

5. What are the unmet needs?

The school is satisfied with their services and the level of diversion they are achieving.

6. What tools or devices are needed?

Students would benefit from more education (assemblies and /or field trips) and curriculum related to Zero Waste.

Programs

Classroom Recycling Containers: Positive

Each classroom is set up with a black container for trash and a blue container for recycling. There is little evidence of contamination in the classroom containers. Students do not typically eat in the classrooms. The custodian is responsible for collecting the trash and recycling each day.

On site Food Scraps Composting: Positive

During lunch, food scraps are collected and brought to the school garden for composting. The custodian is responsible for bringing the food scraps to the garden each day. The garden is managed by a PTA Garden Coordinator. The coordinator works with each teacher to develop an appropriate curriculum to inspire environmental stewardship and awareness during the student's time in the garden.

Zero Waste Marin School Site Profile:

Tomales High School



As of:	4/2/15
Present:	Judith Silver, ESA; Casey Poldino, Zero Waste Marin; Madeline Hope, Zero Waste Marin; Adam Jennings, School Principal; Bernard Gregoris, AP Science Teacher (phone follow up)
# of Students:	185
Grades:	9 -12
School District:	Ratto
Hauler:	Shoreline Unified
Service level reported by hauler:	
Trash	1 - 4y d & 1- 2yd
Recycling*	1 – 4 yd
Compost/Food Scraps	3 x 64 cart
% Diversion:	45%
Notes:	
Lunch Service:	District

Questions

1. What gets recycled here?

- Mixed Recyclables (containers and fibers)
- Food Scraps
- Food Soiled Paper

2. What doesn't get recycled here that could be?

• Bathroom paper towels

Also, currently a noticeable fraction of the recyclables are being disposed with the trash.

3. What is working well?

Under the leadership of science teacher Bernard Gregoris, in partnership with Conservation Corps of the North Bay (CCNB), the school established a Green Team. It created recycling and composting signs and obtained interior recycling containers to pair with the trash containers. Evidence of these efforts, which started in 2013, still remains; however, as seen in the composition of the trash, proper use of the containers is limited.

4. How do people here know what can be recycled?

There is signage but there are no assemblies or class trainings on how to properly sort materials.

5. What are the unmet needs?

Ongoing professional development for staff. For example, after the site visit, ESA sent a follow up message to Adam Jennings, school principal, reminding him what can be recycled and composted and to communicate this to his staff. Simply setting up the kitchen with a recycling container to capture large steel cans & bottles and getting them into the recycling container located right outside the kitchen door, is relatively straight forward and does not involve a large number of people, just the kitchen and custodial staff. ESA also encouraged the school to draw on the Recycling Coordinators at the Ratto Group and ask them to come out again to review the existing program, make recommendations, participate on the Green Team and provide input on types of packaging that can be most easily recycled or composted.

Also, a more uniform set of recycling rules, containers and signs across the County's schools would enable students entering middle or high school to simply continue the practices learned in the lower grades, without having to understand a system that looks different.

6. What tools or devices are needed?

This school needs an impetus to reinvigorate its Green Team or use its Leadership Class to provide awareness and reminders about what can be recycled and composted. It may be helpful to partner with Strategic Energy Innovations (SEI) to develop leadership skills for students around zero waste; providing financial support for SEI or CCNB to work with Tomales High School would be beneficial. Developing systems of education and training that can be replicated each year so that diversion occurs year after year is key.

Programs

Stakeholder Training: Negative

Currently there is no direct education, professional development or coaching of the custodial staff related to handling recyclables and organics. There is no component to the annual staff professional development or onboarding of new kitchen staff and teachers related to how to properly participate in the recycling and compost programs.

Lunch Discard Monitors: Negative

All students eat lunch on campus. Currently there are no students trained and designated to help with "what goes where."

Kitchen Recycling System: Negative

Develop a system to capture the large steel cans, plastic jugs and cardboard from the kitchen and divert to the recycling container outside the kitchen door.

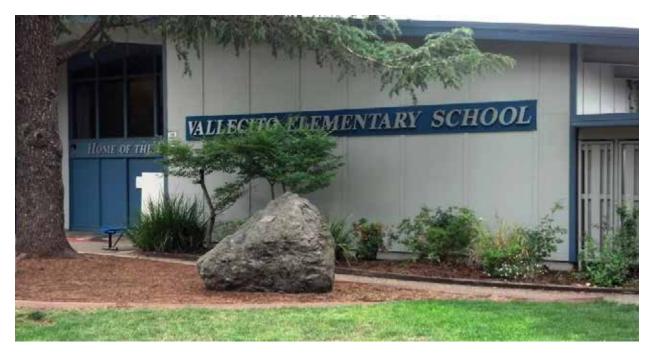
Pairing of campus collection containers: Positive

The school has invested in containers for recycling and trash which are clearly identifiable and paired for ease of use.



Zero Waste Marin School Site Profile:

Vallecito Elementary



As of:	May 4, 2015
Present:	Marla Northcutt – parent volunteer, Barbara Stewart – teacher, Larry Kass - ESA
# of Students:	470
Grades:	K-5
School District:	Dixie
Hauler:	Marin Sanitary
Service level reported by hauler:	
Trash	1-3CY
Recycling – Dual Sort	5-64Gal
Paper	12-64Gal
Cardboard	1-2CY
Compost/Food Scraps	10-64Gal
Notes:	
% Diversion	74%
Lunch Service:	Choice Lunch

Questions

- · Compostables/Paper/Containers/Foil from Lunch Area, Kindergarten, Yard, Teacher Rm
- Garden Trimmings from Garden
- Paper towels from restrooms

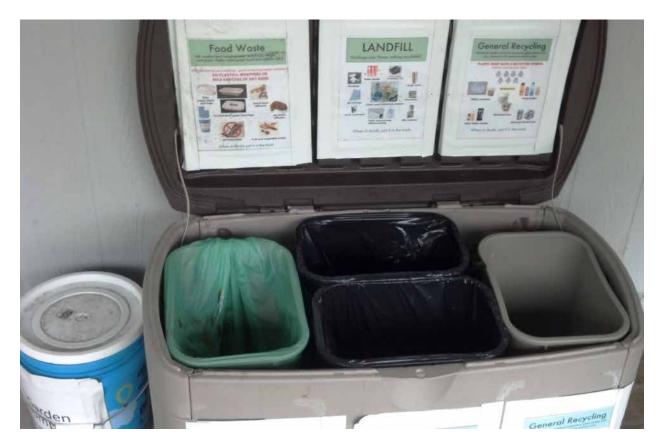
- · CRV plastic from students' homes
- · Cardboard

2. What doesn't get recycled here that could be?

Glass containers, Crayola markers

3. What is working well?

Vallecito Elementary's waste prevention/diversion programs are integrated into their school operation: Outdoor compost/recycle/landfill all-in-one stations are made from readily available containers, are easy to use & empty, support effective signage, and are much cheaper than commercially produced recycling stations.



Student monitoring schedule is well organized and distributes load evenly among classes.

Teachers prevent and divert waste in their staff room by using washables where possible, drinking from a water fountain, and by recycling and composting.

4. How do people here know what can be recycled?

Classroom instructional videos, waste station signage, and student/parent discard station monitors teach people what can be recycled at Vallecito Elementary. The school green team also puts on skits and posts reminders about recycling.

5. What are the unmet needs?

- · Curriculum linking composting/recycling with garden
- Other resources for integrating composting and recycling into curriculum
- Donation locations / other ideas for over-abundance of on-site generated garden compost
- Help on reducing lunch waste promoting zero waste lunches
- · How to re-cycle other school supplies (white board markers? marking pens)

6. What tools or devices are needed??

The garden needs additional compost bins to accommodate the long on-site processing cycle, or a more efficient composter to speed it up. Also need more garden composting tools.

Programs

Lunchtime Discard Station Monitoring: Positive

Rotation system: ½ class per week. Student monitors get "golden eagle" tickets. Led by 3 parent volunteers. Hard to get/keep parent volunteers. One parent is getting burnt out volunteering 3X/Wk on this. The vision is to do this program without parent volunteers.



Waste Prevention/Diversion in Teachers' Room: Positive

Dishwasher and washable cups/plates/silverware, water fountain, Composting/Recycling Station which teachers mostly use correctly.

Lunch Vendor Interfaces with Hauler: Positive

Parent facilitated coordination between Choice Lunch and Marin Sanitary has resulted in substitution of recyclables for hard-to-process compostable plastics.

Special Event Discard Station Monitoring/Sorting: Positive

Terra Linda HS Marin School Environmental Leadership students help sort and monitor for school festivals/field days.

Garden Composting: Neutral

Garden trimmings and fruit/vegetable scraps from special buckets at campus discard stations go to garden compost bins. Parent claims program is no longer active because it goes too slow. They need a more efficient composting system, or more bins to cycle material through. Don't know what to do with excess compost.



All-In-One Campus Sort Stations: Positive

Four 10gal plastic receptacles are assembled inside a 75gal Rubbermaid outdoor storage tub. Signage is applied to the front face and to the inside of the lid to create all-in-one sort stations. These stations are placed in strategic locations throughout the school, and seem to work well to collect compostables, recyclables, and landfill items.

Instructional Recycling/Composting Video: Positive

Produced by collaboration of parents/teachers/students: Teachers show the video at the beginning of the school year.

Promoting Re-usable Containers: Positive

"Bring your own water bottle to walk-a-thon" campaign.

Green Team: Positive

The school green team puts on skits and posts reminders about recycling.

Zero Waste Marin School Site Profile:

Venetia Valley School



As of:	May 6, 2015				
Present:	Tes Lazzarini – Resource teacher, Casey Poldino – Zero Waste Marin, Larry Kass - ESA				
# of Students:	725				
Grades:	K-8				
School District:	San Rafael City Schools				
Hauler:	Marin Sanitary				
Service level reported by hauler:					
Trash	1-3CY Compactor				
Cardboard	1-2CY				
Recycling	2-64Gal				
Paper	8-64Gal				
Compost/Food Scraps	2-64Gal				
Notes:	Compost Carts (2 listed + 1 additional observed) stationed at garden.				
% Diversion	24%				
Lunch Service:	SRCS Central Kitchen				

Questions

1. What gets recycled here?

- Paper from Office / Classrooms
- Bottles/Cans from Some Classrooms
- · Recyclables from Aftercare Program
- · Yard/Garden trimmings from Garden

Cardboard

2. What doesn't get recycled here that could be?

- Compostables/Recyclables from Lunch Area
- Recyclables from Some Classrooms
- Recyclables and compostables from school-wide special events such as the October Carnival

3. What is working well?

One fifth grade class per week (rotating) collects paper from each classroom. Central Kitchen tries to limit packaging where possible, i.e. canned peaches are served in bulk rather than in individual cups. Many students bring low or zero waste lunches from home. Venetia Valley's aftercare program uses washable dishware/utensils. North Bay Conservation Corps lunchtime composting/recycling went fairly well until the program was removed in early 2014 because of funding cuts.

4. How do people here know what can be recycled?

Some teachers instruct students to recycle in their classrooms.

5. What are the unmet needs?

In order to restart lunchtime composting/recycling, they need people to monitor discard stations, and training for student volunteers/lunch supervisors, who would then retrain all students. Parent volunteers are hard to come by at this school.

To reduce waste at school functions, the school needs support for purchasing (of low-waste and durable items), set-up, and outreach. With enough support, the school's Family Center could serve as a demonstration/training model for the parents who prepare food for, and run, the school-wide functions.

Functional recycling and composting programs for the multifamily complexes that house many of Venetia Valley's students would reinforce composting and recycling at school.

6. What tools or devices are needed?

The school needs sufficient carts for their lunchtime composting/recycling program (the previous CCC program did not supply enough capacity to meet their needs). They also need small recycle bins for classrooms.

The school could also use assistance selecting (and perhaps purchasing?) janitorial carts that allow for most efficient collection of multiple materials.

Programs

Students Collect Paper from Classrooms: Positive

One fifth grade class per week (rotating) collects paper from each classroom.

Washable Serviceware/Utensils: Positive

Aftercare program only

Uneaten Food Exchange: Positive

Some teachers put a food exchange bowl for uneaten food in their classroom.

Garden Composting: Positive

School garden compost handles yard/lawn trimmings and plant debris from the garden, while providing education and awareness for students.



Zero Waste Marin School Site Profile:

West Marin Elementary



As of:	March 3, 2015
Present:	Judith Silver, Madeline Hope, Gilberto (Gilo) Skilled Maintenance/custodial manager
# of Students:	142
Grades:	2-8
School District:	Shoreline Unified
Hauler:	Unicycler (Ratto Group)
Service level reported by hauler:	
Trash	1x 6yd
Recycling	1x 4 yd
Compost/Food Scraps	3x95
Diversion %:	47%
Notes:	food scraps to pig farmer
Lunch Service:	School staff

Questions

1. What gets recycled here?

- Mixed Recyclables (containers and fibers)
- Food scraps

- Yard trimmings
- Cardboard
- Terra Cycle Foil

2. What doesn't get reduced or recycled here that could be?

Bathroom paper towels.

3. What is working well?

The school has a strong and committed staff. For example Gilo has been at the school for over 10 years. He is very friendly and connects with the students. Madeline has met with Ratto staff to understand what to purchase in terms of materials. For example, she learned it was not worth spending money on compostable service ware as cutlery is screened out when processed at Redwood Landfill. The kitchen has a dishwasher and students use reusable trays. Grass is mowed and left on grounds.

4. How do people here know what can be recycled?

There is signage around the lunch area on the walls next to the trash, recycling and food scrap container and staff communicate with students verbally.

5. What are the unmet needs?

An annual training at the start of the school year to train all staff and students on what goes where.

6. What tools or devices are needed?

The school does not have recycling containers paired with the outside trash containers that are dotted around the campus. Also, one opportunity would be to switch to bulk dispensers of ketchup, etc. Currently they use small single-use packets. They do buy peanut butter in bulk and then make small "homemade" single containers.

Programs

Terra Cycle foil recovery: neutral

One of the lead teachers manages a Terra Cycle foil collection program as a fundraiser. She will get \$0.10 per wrapper. Once she accumulates seven pounds of material, she will mail the material to Terra Cycle. There is a cardboard box in the cafeteria with a small opening that the kids stuff the foil wrappers into.

While this seems like a great idea, it takes months to accumulate seven pounds of wrappers. However, it is a fundraiser and it engages the kids. This is just one teacher's effort, not a school or district wide activity.



Snack Wrapper Collection Container

Grasscycling: Positive

The mowed areas of the school are grasscycled. Gilo weeds the landscaping in the front, and those weeds go into the Unicycler green waste container.

SF/Marin Food Bank Grant: Positive

Lourdes, the School Family Advocate, obtained a grant to purchase food for afternoon snack. Food is purchased through the Food Bank and also donated by West Marin Organics. If there is extra, it is put by the main entrance at the school (Example: a large box of oranges and organic lettuce, seen during this site visit). The food is available and taken by families during pick up.

School Lunch Signage: Negative

The school lunch set up uses "homemade" signs developed through the San Francisco Department of the Environment Sign Maker Program. The signs are showing signs of age. Metal outdoor signs rather than laminated would be better in the long term. More generally, Ms. Hope expressed a concern that the school does not have a cohesive BRAND that ties Zero Waste Marin to the school's zero waste program through signage or containers.

Lunch Preparation: Positive

School kitchen prepares lunches for West Marin Elementary (2 – 8 grades) + Inverness School (K-1). Gilo drives individual food trays (one per student) from the West Marin Elementary school location in Pt. Reyes Station to Inverness each day. The trays are brought back and washed in the West Marin Elementary Kitchen. They were losing too much metal cutlery so they switched to single use utensils.

Food Scraps to pig farmer: Positive

Currently, food scraps are taken by a local family pig farmer. Lunch scraps, including milk, are collected in an unlined small "brute barrel" on wheels. It is picked up each day. There is no food scrap collection by Ratto at this time, due to constraints at Redwood Landfill.

Green Team: neutral

There have been green teams in the past but not currently.



Stack of reusable lunch trays

Zero Waste Marin School Site Profile:

Willow Creek Academy



As of:	March 10, 2015				
Present:	Royce Connor - Head of School, Terry Lange - Parent Volunteer, Larry Kass - ESA				
# of Students:	360				
Grades:	K-8				
School District:	Sausalito Marin City				
Hauler:	Bay Cities Refuse Service				
Service level reported by hauler:					
Trash	1-2CY				
Recycling	5-65Gal				
Cardboard	1-2CY				
Compost/Food Scraps	6-65Gal				
Notes:	(# of recycle & compost carts set out varies), Trash used to be double current volume				
% Diversion (@ time of visit)	64%				
Lunch Service:	Conscious Kitchen (was Revolution Foods @ time of site visit)				

Questions

1. What gets recycled here?

- · Paper from classrooms & teachers' room
- Compost/Recycling at lunch rooms
- Cardboard

2. What doesn't get recycled here that could be?

- Restroom paper towels
- · Compostables from teachers' room

Compostables/recyclables from school grounds



3. What is working well?

Strong sense of ownership among parents and teachers, who head up many school environmental programs and committees. Head of School encourages and facilitates.

4. How do people here know what can be recycled?

Paper recycling is integrated into classroom procedures. Lunchroom discard station is includes signed, color-coded bins and coaching by main parent volunteer (Terry Lange) & a few other volunteers & student monitors.

5. What are the unmet needs?

Advocacy / facilitation with hauler(s) RE: Who provides what services; current and potential collection procedures/schedules/options

6. What tools or devices are needed?

Stories & descriptions (online?) of best practices at other schools: Places to visit? Who's doing what? Audit resources. Complete discard stations around the grounds (currently, there are a few recycle cart/trash bin combos, but mostly unpaired trash bins, and no composting options).

Programs

Lunchroom Discard Station Monitoring: Positive

Terry Lange (parent volunteer) set up and manages a discard station in student lunchroom with a cart each for compostables, recyclables, & landfill. Terry made signs (some from web). Terry and some student volunteers she's recruited monitor. Sometimes other parent volunteers monitor as well.

Terry brings full carts ¼ mi. down the hill to the BCRS pick-up location, and brings empty carts back. Cafeteria used to produce 6 lg trash bags per day, and now produces ½ of one bag (plus 1.5 64gal organics carts + 0.5 - 0.75 recycle carts). Program works great, but is dependent on 1 highly dedicated

person. Custodian isn't involved, but the Head of School says it's feasible he could do some of the material moving.

BCRS used to pick up carts right outside the cafeteria, but no longer does. Terry says BCRS cites safety issues with turning around at the school when children could be present. Terry could use help communicating/negotiating with the haulers about service options: location, frequency, etc.

Zero Waste Week: Positive

Students run school-wide assemblies and activities/contests (who can pick up most garbage, etc.) Head of School asks teachers to solicit participation from students.

Food Scraps to Chickens: Positive

Five chickens on site eat some food scraps. Small quantity, but works well

Integrate Recycling into Classroom Procedures: Positive

Paper recycling

Paperless Communication Where Possible: Positive

School-wide Friday Newsletter is now electronic, except for 0-5 parents who request a printed copy – Head of School estimates this saves 240K sheets of paper per year, since newsletter is about 20 pages.

Working on getting Conscious Kitchen for next year (2015-16): Positive

Current lunch vendor – Revolution Foods – provides many more disposables.

UPDATE: Conscious Kitchen in operation: Positive

As of September, 2015, breakfast, lunch, and snack are prepared from scratch on-site. Durable plates, cups & silverware are washed on site. According to the Head of School, subscription to school lunch has increased 3-fold from last year, and both pre-and-post-consumer wastes are drastically reduced.

Head of School Picks up Litter Every Morning in Plain Sight of Students: Positive

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Appendix B
Dixie School District Waste
Management Policy

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DIXIE SCHOOL DISTRICT

Business and Non-Instructional Operations

WASTE MANAGEMENT POLICY

The Governing Board has presented a Green Initiative Program that shows the commitment of the school community to be stewards of the environment. Appreciating the understanding of the flow of resources that sustain us and understanding ways in which we can minimize the impact of our activities on resources is the stalwart of that policy program.

As of July 1, 2012 State Law AB 341 (Chesbro) will require the Dixie School District to have an organized recycling service, as a beginning step in achieving the new statewide goal of 75% source reduction, recycling, and composting by 2020. The County of Marin has adopted an 80% diversion rate by 2013 and 94% by 2020 as a goal for waste diversion from landfill. In an effort to be responsive to county and statewide initiatives, the Dixie School District will set goals for attainment to be consistent with these waste reduction objectives, as well as stay current with these policies as they evolve in coming years.

Scope:

- o Minimize waste generation at the source and facilitate reducing, reusing, repairing before replacing and recycling over the disposal of wastes.
- Develop a comprehensive waste reduction program to include recycling, composting, and disposal as the basis of the waste management program.
- o Identify and promote waste management best practices.
- o Provide clearly defined roles and responsibilities to identify and coordinate each activity within the waste management chain.
- o Provide training for staff, students and other stakeholders on waste management issues.
- o Conduct waste audits (professional or informal) to provide valuable information and feedback as to how school sites are meeting specified goals and set new goals.
- o Prepare and institutionalize tailored classroom recycling procedures to each school site's needs.
- o Ensure the safe handling and storage of all wastes on campus.
- Promote environmental awareness in order to increase and encourage waste reduction, reuse and recycling.

Responsibility

This policy applies to all activities undertaken by (or on behalf of) the Dixie School District including its staff, clubs, organizations, and sporting events.

First Reading: April 24, 2012 Second Reading: May 8, 2012

Laurel Dell Elementary School Zero Waste Schools Pilot Program Final Report May, 2016

In Partnership with

Zero Waste Marin &

Marin Sanitary Service





Introduction

Laurel Dell Elementary School is part of the San Rafael City Schools District (SRCSD) and is located near Central San Rafael. It is an elementary school comprised of approximately 235 students, kindergarten through fifth grade. School lunch is provided daily by the SRCSD central kitchen. Approximately 80% of the students receive school-provided lunches. During the initial site visit conducted by Zero Waste Marin (ZWM) and Marin Sanitary Service (MSS), staff noted there was no recycling or compost collected during snack and lunch times, and there was no infrastructure to collect recycling and composting in the classrooms or outside. Based on these observations, ZWM and MSS decided to launch a study on increasing recycling and compost collection on this elementary school campus.

Timeline

ZWM and MSS initially reached out to Laurel Dell to run a zero waste pilot study in August 2015. This school was chosen for a variety of reasons. It is a school serviced by MSS who employs a full-time Education & Outreach Coordinator, is centrally located, and is receiving lunches from inside the district as opposed to an outside lunch service provider. After speaking with the Principal, Pepe Gonzales, who was willing and enthusiastic to involve his school in a pilot study, Laurel Dell was selected as the subject elementary school.

In September 2015, ZWM and MSS planned the course of the project, met with the appropriate stakeholders (principal, custodian, teachers, garden coordinator, food server, Conservation Corps North Bay (CCNB), and others) and set up the outline of the pilot.

In October 2015, ZWM and MSS created a Green Team and had an initial Green Team meeting. An initial waste audit was conducted as a baseline for comparison at the end of the study. ZWM and MSS provided 15-20 minute classroom presentations to educate the students on the program. ZWM and MSS coordinated with CCNB to build and deliver the outdoor waste station for the lunch area. Lunchtime monitoring of the waste station commenced.

In November 2015, ZWM and MSS continued lunch time monitoring, worked with the Green Team on waste diversion lessons, created art for Green Team shirts, presented to parent group (Charla Café), tested outdoor waste station and redesigned for a better system, increased brown and green carts for campus recycling and composting, delivered indoor recycling bins and a triplet pushcart for custodian.

In December 2015, ZWM and MSS continued lunchtime monitoring, Green Team meetings, and conducted the post waste audit. Due to reduction in waste, Laurel Dell was able to remove one 96-gallon landfill cart from service.

In January 2016, ZWM and MSS connected with the Green Team, reviewed proper sorting, turned over the Green Team to a teacher to continue the program, and updated the principal on challenges & successes.

Initial Service Level & Diversion Information

In August 2015, Laurel Dell had five paper recycling carts, two mixed recycling carts, one compost cart, and four landfill carts. According to their service level, 79% of their waste was landfill and 21% was recycling and compost.

Table 1. Initial Service Level at Laurel Dell

	# of containers	Size (gallons)	Service per week	Cubic yards per month	Cost per month (\$)
Paper recycling (blue cart)	5	64	1	6.93	0
Container recycling (brown cart)	2	64	1	2.77	0
Compost (green cart)	1	64	1	1.39	0
Garbage (grey cart)	4	96	5	41.16	\$1911

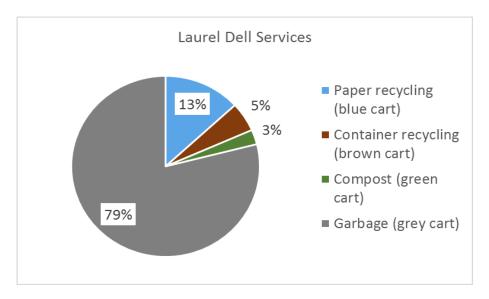
TOTAL COSTS PER MONTH \$1911

Total yards generated per month 52.25

Total yards diverted per month 11.09

TOTAL DIVERSION FROM LANDFILL 0.21 21.2%

Table 2. Initial Diversion Levels at Laurel Dell



Initial Waste Audit

On October 11, 2015, CCNB conducted an initial waste audit (see Appendix A). Two 96-gallon landfill bins were used in the audit. Only 11% of the contents were actually landfill material. The remaining 89% of the material was recyclable, compostable, or uneaten food. Partially eaten food and leftovers was the most common material in the landfill, weighing in at 59.41%. Unopened and uneaten food accounted for 20% of the total material audited, and mixed paper, drink boxes and milk cartons accounted for 12% of the material.

Education & Training

• Green Team

A Green Team was established in collaboration with the after school LEAP program. Third through fifth graders were invited to join the weekly meetings. There are currently approximately 25 members. During Green Team meetings, ZWM and MSS trained students on proper sorting, established a sorting station monitoring schedule, and solved problems with the new system. In order to create a brand and acknowledge the Green Team, ZWM provided reusable water bottles and branded Green Team t-shirts that students could wear while monitoring sorting stations and during Green Team meetings. MSS and ZWM partnered with Charla Café (a parent sub-committee) to determine parents' interest in helping with sorting stations. A teacher was also recruited to manage the Green Team on campus.

Classroom Assemblies

Zero Waste lessons were taught in each classroom. Every lesson reviewed the importance of waste reduction and the new indoor and outdoor recycling and composting program. Students were taught which items go in each bin and the importance of sorting properly. Each student received MSS and ZWM pencils and notepads as part of the branding and marketing effort of the Zero Waste School Program.

• Custodian Training

After providing the new sorting pushcart for the custodian, a short training session was conducted with school's one custodian, Sang, to go over what goes in each recycling cart, how to best utilize the new sorting pushcart, and to troubleshoot any issues that he had with the program.

• Staff & Teacher Training

MSS and ZWM conducted training during a mandatory staff meeting. Staff learned about the Zero Waste Marin initiative and the importance of waste diversion. The new classroom bin system was introduced and education was provided on proper sorting of materials. At the end of the training, there was a Q & A session regarding individual concerns and specifics to the waste stream at Laurel Dell.

Infrastructure Changes

- Created signage for indoor bins and outdoor waste station
- Provided a reference guide for custodian
- Wrote a bilingual reference guide for parent partners
- Built an outdoor waste station for lunch area
- Furnished school with 21 indoor paper recycling bins, 19 indoor mixed recycling bins, and composting bins upon teacher request
- Added Triplet pushcart for custodian to maximize collection and efficiency (including reusable canvas paper recycling bag)
- Distributed pickers for student lunch time monitors to grab material from inside sorting stations
- A milk dispenser was installed to stop of use of non-recyclable milk cartons

Post-Waste Audit

On December 17, 2015, CCNB conducted a post waste audit (see Appendix B). The landfill bin consisted of 52% landfill. This number went up from 11%, which shows students have a better understanding of what should go in the landfill bin, and are recycling and composting more. Compost made up 60% of the landfill bin during the initial waste audit and now makes up only 12% of the landfill bin contents. The largest waste category was drink boxes and milk cartons at 24%. Milk carton waste influenced the school district to purchase a milk dispenser, which will eliminate milk carton waste and further reduce the schools' landfill material. The dispenser was installed in March 2016.

December Service Level & Diversion Information

Table 3. December 2015 Service Levels at Laurel Dell

	# of containers	Size (gallons)	Service per week	Cubic yards per month	Cost per month (\$)
Paper recycling (blue cart)	5	64	1	6.93	0
Container recycling (brown cart)	4	64	1	5.55	0
Compost (green cart)	3	64	1	4.16	0
Compost (green cart)	1	32	1	0.69	0
Garbage (grey cart)	3	96	5	30.86	1515

TOTAL COSTS PER MONTH \$1515

48.19

17.33

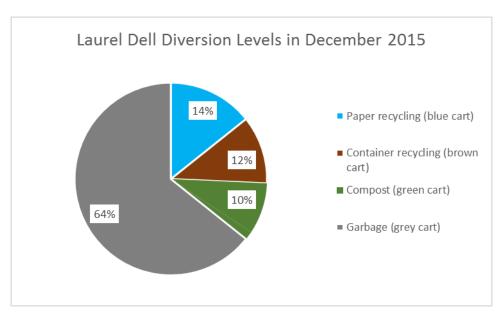
Total yards generated per month

Total yards diverted per month

TOTAL DIVERSION FROM

LANDFILL 0.36 **36.0**%

Table 4. December 2015 Diversion Levels at Laurel Dell



Current Service Level & Diversion Information

Table 5. April 2016 Service Levels at Laurel Dell

	# of containers	size (gallons)	Services per week	Cubic yards per month	Cost per month (\$)
Paper recycling (blue cart)	5	64	1	6.93	0
Paper recycling (blue cart)	2	96	1	4.16	0
Container recycling (brown cart)	4	64	1	5.55	0
Compost (green cart)	3	64	1	4.16	0
Compost (green cart)	1	32	1	0.69	0
Garbage (grey cart)	2	96	5	20.80	1010

TOTAL COSTS PER MONTH \$1010

Total yards generated per month 42.29 Total yards diverted per month 20.80 **TOTAL DIVERSION FROM** LANDFILL

0.49 49.2%

Table 6. April 2016 Diversion Levels at Laurel

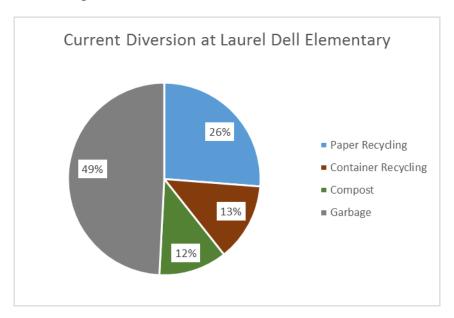


Table 7. Hauling Costs from June 2015- April 2016

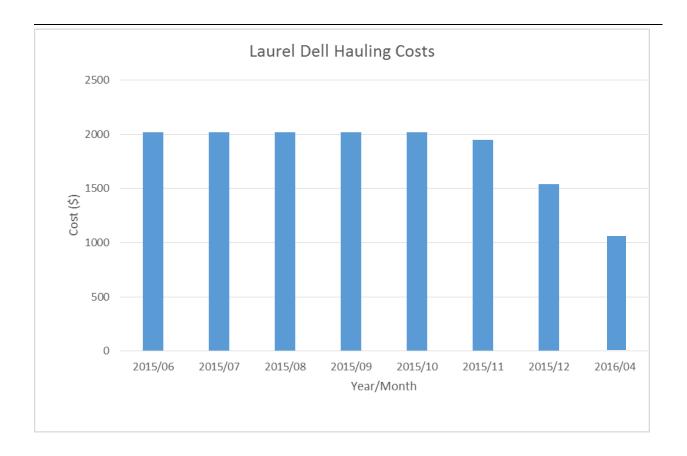


Table 8. Cost Comparison per Student June 2015 to April 2016

	June 2015	December 2015	April 2016
Number of Students	235	235	235
Cost per Month	\$1,911	\$1,515	\$1,122
Cost per Student per Month	\$8.13	\$6.45	\$4.78

Summary

ZWM and MSS designed this program as a one semester program with a turn-over period the following semester. During the initial meeting and site visit, ZWM and MSS assessed the schools' current waste diversion system and infrastructure, and evaluated the needs of the school. The waste audit provided a snapshot of the waste stream and guided the program roll out. Getting buy-in from the principal, custodian, teachers, and students was key to the success of the program. Training and education played a huge part of the program as sorting can be confusing and there are so many different material types entering the school. The outdoor waste station provides clear signage for proper sorting and the lunchtime monitors are involved in helping their classmates understand proper sorting methods.

In just one semester the diversion rate increased by 15% and the monthly bill decreased by approximately 21%. Within four months of the first decrease in service, the school was able to decrease their service level by another 96-gallon cart. Ultimately, this lead to a 50% decrease of service and cost overall.

In March, the SRCS Food Services installed a milk dispenser in order to decrease milk carton waste. The school is currently piloting compostable paper cups versus #1 plastic cups. ZWM is also exploring several models of compostable cutlery dispensers.

The Green Team is made up of 3rd through 5th graders, the upper grades are responsible for training the lower grades and incoming members. The Green Team has grown up to 25 students and each student rotates through the monitoring schedule to ensure proper sorting during lunch. The school celebrated its success with an award ceremony presented by Zero Waste Marin and Marin Sanitary Service.