



California State University  
**MONTEREY BAY**

# Materials Management and Conservation Plan

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Prepared by



**ENVIRONMENTAL  
INNOVATIONS**

California State University  
Monterey Bay  
**SUSTAINABILITY**



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## Introduction

### Description of CSUMB

Cal State Monterey Bay provides more than 7,600 students an extraordinary opportunity to learn on a residential campus just one mile from the shores of the beautiful Monterey Bay. Its diverse student body receives personal attention in small classes while pursuing degrees in 25 undergraduate and seven graduate majors. Founded in 1994 on the former site of Fort Ord by educators and community leaders, Cal State Monterey Bay faculty and staff build on that legacy while exploring innovative ways to meet the needs of a new generation of students and simultaneously powering the Monterey County economy.

While the majority of students are from the State of California, 33 percent of undergraduates come from Monterey, San Benito and Santa Cruz counties. CSUMB prides itself on making higher education accessible to traditionally underserved and low-income populations. Seventy-two percent of students receive some form of financial aid. Fifty-six percent of students are among the first generation of their family to go to college. And 45 percent of students live on campus making CSUMB is one of the most residential universities in the CSU.

There are two entities responsible for overseeing campus operations: California State University, Monterey Bay, and the University Corporation at Monterey Bay. The University Corporation at Monterey Bay (the "Corporation") exists to enhance the educational program of the campus; directly serve students, faculty, and staff; and provide services to the public. Although the Corporation is a legally separate 501(c)(3) nonprofit corporation, it is a fully integrated part of the California State University, Monterey Bay campus. The Corporation administers sponsored programs - better known as Grants & Contracts - as well as fund development, providing accounting and reporting expertise. The Corporation is self-supporting and does not receive additional funding from state sources. The Corporation also manages:

- Student housing located on the Main Campus including North Quad, Main Quad and Promontory as well as Frederick Park in East Campus and the faculty/staff housing located on the East Campus in Schoonover Park.
- Campus dining services, bookstore operations, and conference and event services.
- CSUMB at Ryan Ranch (offsite)
- Salinas City Center (offsite)
- North Salinas (offsite)

### State of California Waste Management Requirements

As a large State organization, CSUMB is required by law to meet several State mandates pertaining to solid waste management. CalRecycle oversees the majority of these mandates. CSUMB must report annually to CalRecycle, the State agency governing solid waste management, regarding its success in achieving the following mandates:

- A 50% diversion rate as of 2016 (50% of solid waste excluding hazardous materials are to be diverted away from the landfill to reuse, donations, recycling, or compost)
- A 75% diversion rate by 2020
- Mandatory recycling
- Mandatory composting programs by 2017
- Adequate receptacles, signage, education, and staffing, including a Recycling Coordinator by 2017
- Tracking the types and disposal of all waste on campus

In addition to CalRecycle, the California State University system also adds policy goals for CSUMB. While CalRecycle sets a 75% diversion rate by 2020, the CSU goal of 80% by 2020 is more stringent. Moreover, the ultimate CSU goal is to move all campuses to zero waste, which is a 90% diversion rate. To achieve such high diversion rates, CSUMB will need to reassess all aspects of materials management on campus. This Materials Management and Conservation Plan (MMCP) starts this process, examining where materials are sourced, the types of purchases that are made, how materials are reused or donated, and ultimately how they are disposed.

**Table 1: Diversion Mandates**

Year	CalRecycle Mandate	CSU Mandate
2016	50% Diversion, mandatory recycling	50%
2017	Mandatory Composting Mandatory receptacles, signage, education Mandatory staffing	--
2020	75%	80%
Beyond	--	90% (Zero Waste)

**Coordination with Existing Campus Plans and Goals**

**Draft 2017 CSUMB Master Plan**

The Draft CSUMB Comprehensive Master Plan identified sustainability as a key factor in defining future campus development. CSUMB defines sustainability as the simultaneous pursuit of human health and happiness, environmental quality, and economic well-being for current and future generations. The university established three core tenets to guide and measure each element of the draft Master Plan: place making (human health and happiness), stewardship (ecosystem respect), and partnership (economic well-being).

The Master Plan expresses a vision for a twenty-first century learning environment that connects the university’s mission and academic plan with the design, development, and sensitive stewardship of the campus. It creates a sustainable framework for building and site improvements, a framework that preserves and enhances the unique qualities of the Monterey Bay setting, while addressing program accommodation, land use, and open space, mobility, and infrastructure systems. It contains special area plans to guide the design of the most prominent campus spaces, and architectural and landscape design themes to ensure a cohesive CSUMB aesthetic.

*At California State University Monterey Bay, we:*

*Understand that education for sustainability is a lifelong learning process that leads to an informed and involved citizenry having the creative problem-solving skills, scientific and social literacy, and commitment to engage in responsible individual and cooperative actions to support strong communities.*

*Strive to achieve excellence in all areas of operational sustainability.*

*Support individuals in their efforts to align their personal behaviors and practices to support campus sustainability goals.*

*Acknowledge the disproportionate impact environmental degradation has on low-income and/or minority populations and communities, negatively impacting their health, happiness and opportunity for economic well-being.*

**- The President’s Sustainability Committee**

**Campus Strategic Plan**

This MMCP strives to align the University’s materials management with Regional Stewardship, a key provision of the 2013 CSUMB Strategic Plan. CSUMB strives to serve as a model and resource for regional sustainability efforts, while continuing to enhance sustainability efforts in line with the Campus Second Nature Climate Commitment.

The 2013 Strategic Plan for CSUMB also language which supports the draft Master Plan goals such as:

- includes increasing institutional capacity, while also ensuring alignment of public and private resources with institutional priorities,
- incorporating planning principles of sustainable design and operations, a strong campus core,
- valuing natural resources,
- efficient transportation and
- social interaction between the University and its environs, among other key planning goals.

This MMCP aligns the University's approach towards sustainability and the procurement, reuse, recycling, and disposal of materials with those key provisions of the Master Plan and the Strategic Plan.

### **Student Success**

Implementing programs that allow students to benefit from reuse initiatives both improve student success and help the University meet its mandate. It is absolutely critical that food donations reach food insecure students and those efforts to promote reuse of items during move-out benefit students in need during move-in.

### **Climate Action Plan**

This Materials Management and Conservation Plan also supports the goals and measures of the CSUMB Climate Action Plan (<https://docs.google.com/file/d/0B4wzEOCjqf0cT0pKeS1ZRHB0UUU/edit>). The Climate Action Plan provides a road map for eliminating greenhouse gas emissions by 2030, and acknowledges other dimensions of sustainability that reflect a "triple bottom line" of people, planet, and prosperity. The plan contains recommendations for steps to reduce CSUMB's carbon footprint and increase sustainability on campus. Additionally, the University maintains AASHE STARS certification. Sustainability Tracking, Assessment & Rating System™ (STARS) is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance. Elements required to obtain this certification are included in this MMCP.

### **Living Community Challenge**

Finally, the MMCP incorporates aspects the Living Community Challenge (LCC), a certification program that provides a framework for CSUMB to create a sustainable, nurturing environment. CSUMB is striving to integrate the imperatives of the LCC. The Living Community Challenge consists of seven performance areas: Place, Water, Energy, Health and Happiness, Materials, Equity, and Beauty. The MMCP primarily addresses the Materials area of the Living Community Challenge.

This plan describes steps by which the campus will achieve the Materials Petal of the Living Community Challenge. However, the requirements of LCC are primarily focused on construction waste and actions to support meeting the construction elements of LCC Materials Petal would need to be addressed through the Building Design and Construction process, as designated by the CSU. This plan does attempt to address operational aspects wherever possible. Specifically, the "Operational" and "End of Life Phase" as well as the "dedicated infrastructure for the collection of recyclables and compostable food scraps throughout the community".

## **Materials Management and Conservation Plan Development Process**

### **Stakeholder Meetings**

Ten stakeholder groups convened during the summer and fall of 2017 to gather input on how to best create and then meet the goals of this Plan. Each group shared their thoughts on how to improve diversion rates and reduce materials in their respective area. For a full list, see attachment A.

### **Administrative Purchasing Survey**

A survey was prepared and issued to all administrative support staff to collect information about their purchasing operations. The survey had a 28% response rate. Questions focused on:

- Items they bought the most
- Practices pertaining to environmentally preferable purchasing
- Whether their department currently has one centralized printer or multiple desktop printers
- Whether they would use a campus website to search for reused items.

Please see Attachment B for a complete listing of questions and responses.

## Materials Management and Conservation Plan Purpose

This Plan is needed to initiate the following:

1. Meet new regulatory mandates.
2. Reach a zero-waste designation, which is 90% diversion of the waste stream from the landfill.
3. Centralize information and knowledge for greater job efficiencies for both CSUMB and the Corporation.

## Materials Management and Sustainability Plan Goals

1. Describe the current flow of the materials system. The plan explains how materials are purchased for the campus; how materials are distributed once they reach campus and finally their end of life.
2. Make recommendations that will support meeting CalRecycle mandates and CSU goals; most notably, striving to become a zero-waste campus.
3. Support key actions that maintain and raise the CSUMB score on the Sustainability Tracking, Assessment & Rating System™ (STARS)
4. Support relevant elements of the Living Community Challenge.
5. Identify resources and action steps for meeting these goals and a cost/benefit analysis of doing so.

Many University and Corporation stakeholders and contractors are responsible for implementing this plan. The Sustainability Office, Facilities Management and Operations, the Janitorial Contractor, the Landscaping Contractor, Business and Support Services, and the Administrative Staff in charge of departmental purchases will play the largest roles. In order to meet the future targets, Dining Services and Residential Life will need to have an increased role in diversion efforts. Many other stakeholder groups also play a role, as outlined in the recommendations at the end of this report. This plan should inform and be executed by these groups.

The graphic below captures the full life-cycle of the materials flow. This model identifies the primary stages of materials management at CSUMB and the stages around which this document is framed: Procurement, Distribution and Use, and Collection and Disposal.

**Figure 1: Full Life Cycle of Material Flow**



## Reporting

There are numerous sources of waste. Identifying these sources, developing systems to track the data and collecting it annually has been a laborious and time-consuming process. Additionally, with each subsequent year, CalRecycle (the state’s regulatory body for waste) has required additional material streams to be reported. Data previous to 2012 was incomplete. The following table demonstrates the decentralized responsibility and tracking of waste streams at CSUMB, and the growing requirements for waste tracking. This may be creating inefficiencies in the tracking and reporting of waste and waste diversion.

**Table 2: Increasing Requirements and Complexity of Waste Stream Tracking**

Waste Stream Tracked and Reported	Prior to 2012	2012	2013	2014	2015	2016	Responsible Department
Landfill	✓	✓	✓	✓	✓	✓	Facilities, Corporation, Waste Hauler
Mixed Recycling	✓	✓	✓	✓	✓	✓	Facilities, Corporation, Waste Hauler
Hazardous Materials	✓	✓	✓	✓	✓	✓	EH&S, Facilities
E-waste		✓	✓	✓	✓	✓	Facilities, Property
Household Batteries		✓	✓	✓	✓	✓	EH&S
Car Batteries			✓	✓	✓	✓	Facilities
Paint			✓	✓	✓	✓	Facilities
Tires			✓	✓	✓	✓	Facilities
Demolition waste			✓	✓	✓	✓	Planning and Development
Move-out (including illegal dumping)				✓	✓	✓	Residence Halls, East Campus, Alliance, Facilities, Planning and Development, GreenWaste, Eagle Hauling
Compost					✓	✓	Corporation, Sodexo
Landscaping Waste						✓	Facilities, Corporation, BrightView
Mattresses						✓	Residence Halls, East Campus, Alliance, Facilities
Food Donations						✓	Corporation, Sodexo

In 2012, relatively few waste categories were monitored. With each successive year, more waste materials categories around the campus were identified and tracked. From 2012 to the present, the university strived to identify and capture all the different waste streams on campus, and to increase the amount of diversion within each stream.

As data collection has become increasingly organized, it has been easier to identify waste streams that have not yet been captured. For example, it became clear that a number of waste categories have not been tracked or reported from Alliance Residential Company, the entity that manages East Campus housing. Paint, metals, vehicle batteries, tires, fluorescent lamps, and furniture are recycled or donated by state run departments on campus, but there are no similar figures yet for East Campus, which falls under corporation management. Carpeting has been recycled and tracked by Alliance in some years; but CSUMB would benefit by having it recycled and tracked across the campus each year. Sodexo has donated food to Dorothy’s kitchen and the Monterey Food Bank most years and

these donations have not been consistently tracked. Non-residential e-waste is collected and recycled on the Main Campus by the University, but not consistently by the Corporation and Alliance. Aside from campus managed fleets, batteries have not been recycled and tracked. Finally, CalRecycle began to require mattress recycling in 2017, and a tracking and reporting process will be required for this new waste stream as well.

It can be extremely difficult to estimate waste and volume of reuse items and to track them for the purpose of reporting diversion. It would require a dedicated staff person to make this possible. However, by the nature of the diversion calculation, reducing the total amount of waste going to the landfill also increases the percentage of diversion, regardless of whether or not the University is able to track the volume of reuse.

## Baseline Information and Materials Data

### Types of Waste

The following list briefly describe the primary waste categories that are reported, more detailed descriptions are available on CalRecycle's webpage. You will notice that some materials comply with more than one category.

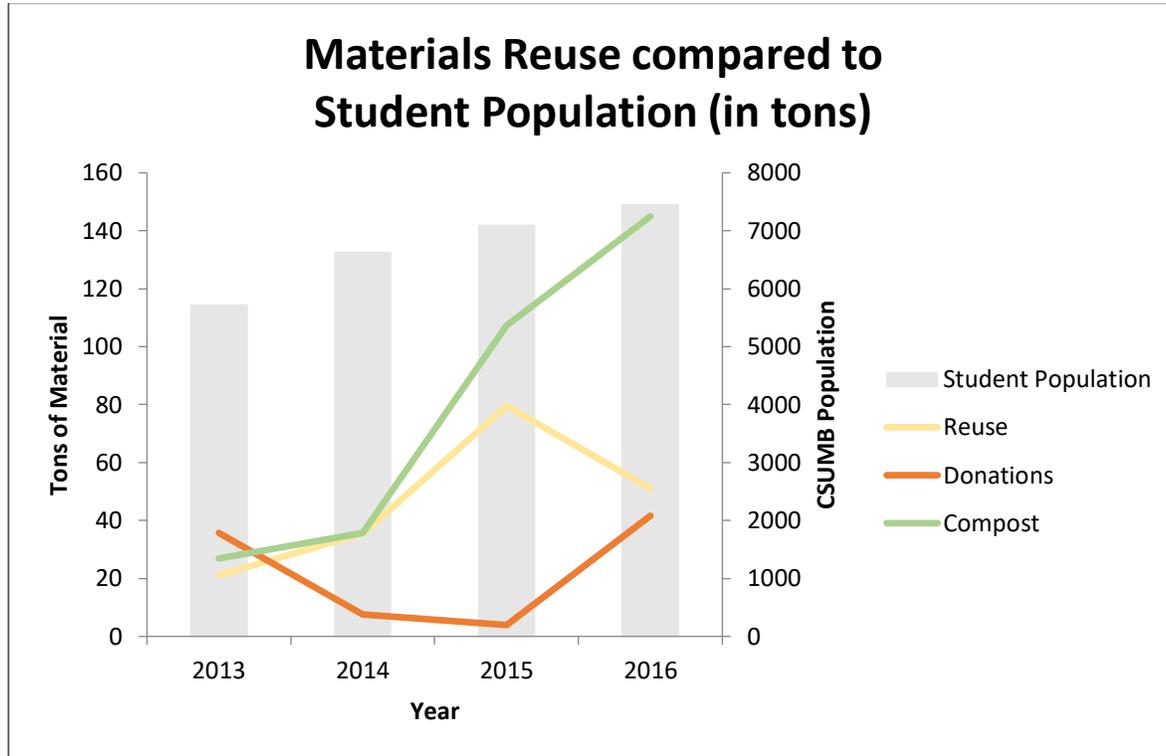
- **Universal Waste** – lighting, batteries, florescent tubes, e-waste
- **Hazardous Waste** – includes universal waste and some bio-medical waste
- **Re-Use** – vegetable oil, chipped wood, some furniture, soil from large construction/demolition projects
- **Recycling** – mixed recycling is collected by GreenWaste, curbside in East Campus and in dumpsters on main campus. In addition, tin, paint, mattresses, much of demolition related waste and most types of universal waste are recycled (if they are properly disposed)
- **Donation** – most donations are collected during Move Out and are comprised of unopened food, clothing, small appliances, cleaning products and some furniture. During the year some furniture is also donated during office moves.
- **Compost** – food compost (pre-and post-consumer)
- **Landscape Materials** – Campus re-uses some landscape materials (i.e. grass-cycling and wood chips); other landscape materials may be sent to Marina Resource Recovery Center, which depending on the materials is integrated with food waste for composting or reused for wood chips.
- **Landfill** – anything not diverted through the streams above is sent to landfill. This includes Styrofoam, small plastics from construction, food packaging (i.e. chip bags, etc.) Unfortunately, as the data below indicates, there is a significant amount of materials that could be diverted still going to landfill.

## Data Collection and Analysis

### Waste Data 2012 - 2016

Waste data from 2012 through 2016 were collected and analyzed to understand how waste materials have been tracked, how they have been disposed, past diversion rates, and trends in the different waste streams. Overall, materials reuse and recycling numbers are on the rise, and landfill quantities have remained flat, despite the increase in campus population (Figures 2 and 3).

**Figure 2: Materials Reuse Compared to Student Population**



*Figure 2: Materials reuse, donation and compost (all diversion tactics) are on the rise, as is student population.*

Figure 3: Waste Data Compared to Student Population

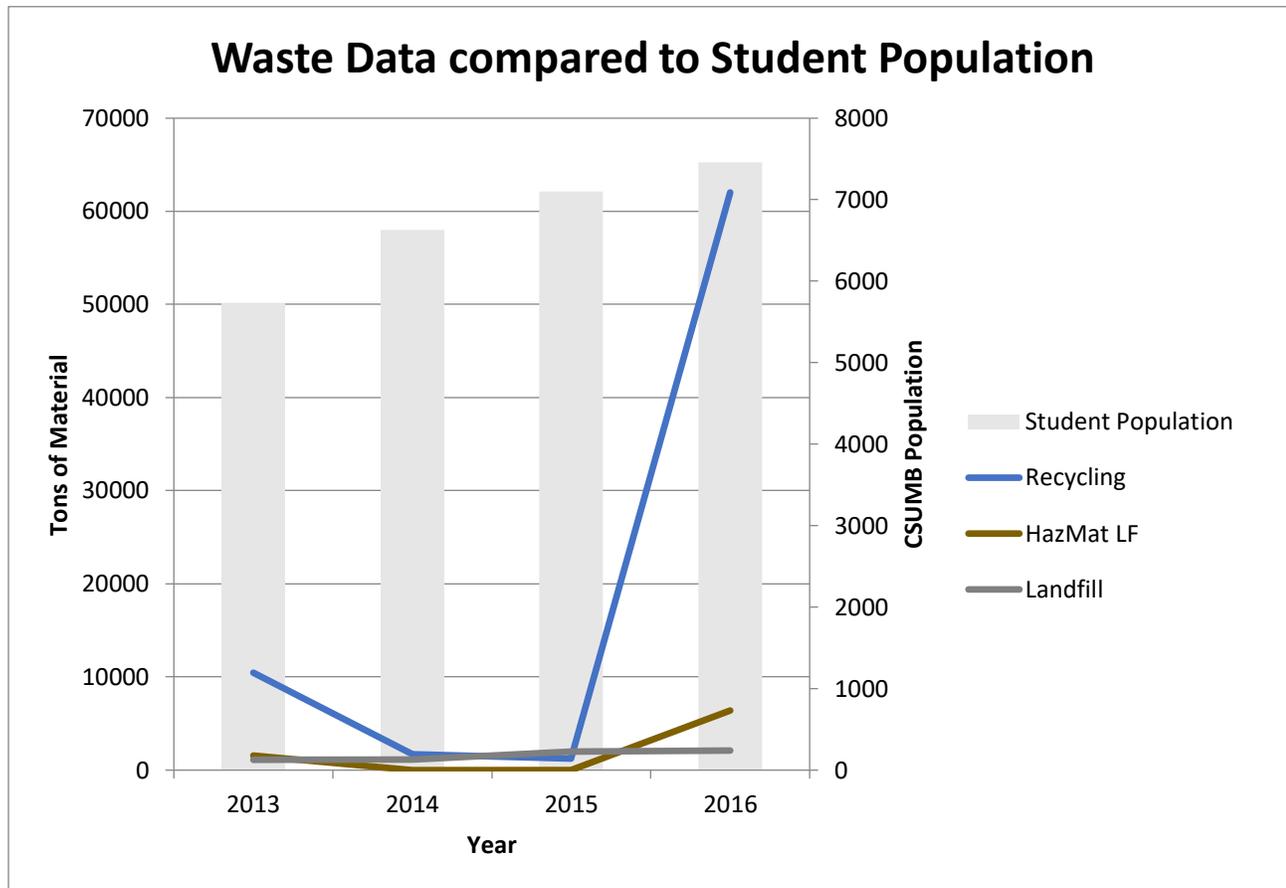
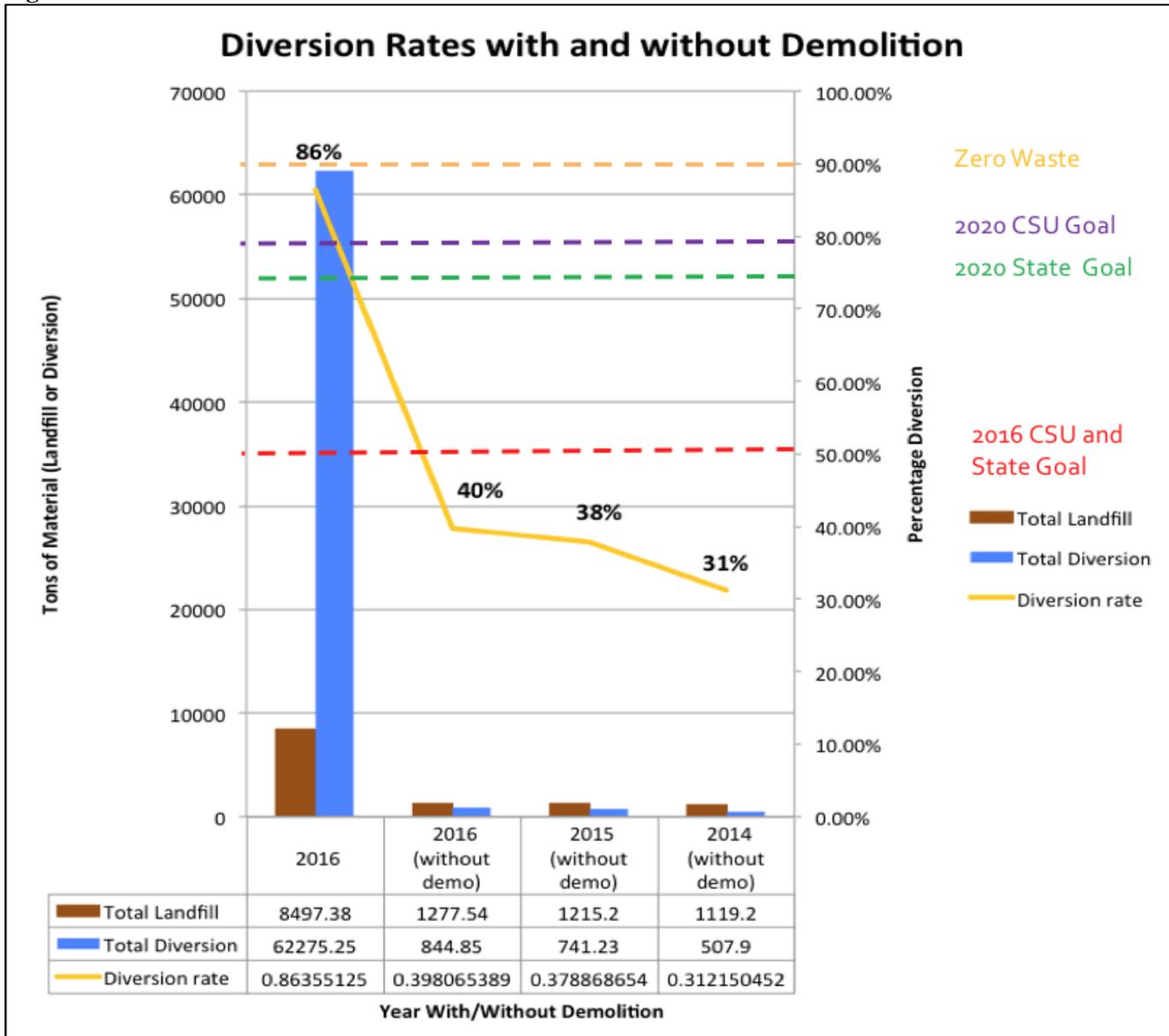


Figure 3: Materials Data Compared to Student Population. Note that 2016 was a demolition year and related recycling data is included, showing a sharp increase in recycling that was unique for this year.

**Figure 4 Diversion Rates Over Time with and without Demolition**



*Figure 4: Diversion rates and volumes for the 2016 demolition year and for the past three years without demolition.*

As illustrated in Figures 3 and 4, Diversion rates from 2013 and 2016 varied significantly since they were large demolition years. With the exception of 2015, the data with construction and demolition showed diversion rates above the 50% required by CalRecycle by 2016. When construction and demolition data were excluded, however, the rates were consistently below 50% (Table 2, following). Recycling was higher in 2013 and 2016, due to the high demolition in those years. Since the majority of abandoned Army buildings will be removed by 2019, CSUMB will not be able to rely on high recycling tonnages for much longer and will need to make more effort to meet State mandates without it.

**Table 3: Diversion Tactics by Percentage 2016**

	Diversion by Category			
	Donated	Recycled	Compost	Reused
Tons	3.952	1236.469	107.36	79.55
Diversion Rate %	0.12%	36.05%	3.13%	2.32%

The primary way that materials have been diverted from the landfill has been through recycling (Table 3). Diversion through Compost (food and yard compost) is next. A smaller amount of materials was diverted to reuse and donations, excluding construction and demolition data. Items reused or donated included furniture, Move Out items, vegetable oil, food and wood chips. Wood chips are being reused on campus and off for mulch but are not always adequately quantified.

Hazardous waste is excluded from the waste diversion rate calculations required by CalRecycle. However, the campus generates hazardous waste from science labs, art programs (paint products), Facilities Operations and Services (light bulbs, fertilizers and pesticides) as well as from old Army building demolition (lead based paint, asbestos and PCB containing materials). Hazardous waste tracking was outside of the scope of this report and more research is needed to understand how and where these items are disposed.

Illegal dumping accounts for about 150 tons of landfill.

## **Procurement Data**

The Procurement Department, under the Office of Business and Support Services, is responsible for the procurement of all commodities and services on campus. Their responsibility primarily includes setting up campus-wide contracts to purchase materials and services for academic and administrative departments. In addition, over 100 administrative support staff or budget analysts make individual purchasing decisions for CSUMB faculty and departments. and this does not include those who purchase for the Corporation and their Contractors (Sodexo and Alliance). These employees use a Procurement Card (procard), which enables them to spend up to \$1,000 per purchase and \$5,000 per month. While the use of a procard offers ease of purchasing, it does limit the campus's ability to report on the sustainability features needed to comply with relevant reporting.

### **State Agency Buy Recycled Campaign (SABRC) Report**

As a state agency CSUMB is mandated by law to follow the State Agency Buy Recycled Campaign (SABRC) requirements. These requirements are written into the "CSU Buy Recycled Handbook". CSU requires university purchases contain a certain percentage of recycled content (as listed below). For instance, 50% of the paper purchased by the University must contain 30% or higher post-consumer waste. Post-consumer waste means a consumer used the material, as opposed to industrial waste, which is re-used as a matter of efficiency.

This program requires the university to purchase and track products with post-consumer recycled content in 11 categories. Currently, 50% of reportable purchases must be recycled content, and starting in 2020, 75% of reportable purchases in these categories must be of the required recycled content.

**Table 5: Buy Recycle Content Requirements**

<b>Product Categories</b>	<b>Content Requirements (Percent)</b>	<b>Procurement Mandates (Percent)</b>	<b>CSUMB 2016 Report*</b>
Antifreeze (AF)	70% Postconsumer	50%	No Data
Paper products (PP)	30% Postconsumer	50%	89%
Printing and writing paper (PW)	30% Postconsumer	50%	51%
Plastic products (PL)	10% Postconsumer	50%	19%
Mulch, Compost and co-compost (CO)	80% Total Recycled Content	50%	100%
Glass products (GL)	10% Postconsumer	50%	No Data
Lubricating oils (LO)	70% Postconsumer	50%	Not Reported
Paint (PT)	50% Postconsumer	50%	Not Reported
Tire-derived products (TD)	50% Postconsumer	No requirement.	Not Reported
Tires (TI)	50% Total Recycled Content	50%	Not Reported
	10% Postconsumer		Not Reported
Metal products (ST)	10% Postconsumer	50%	Not Reported
Reused or Refurbished	No Minimum	No requirement	Not Reported

\*CSUMB Report only includes purchases made through vendor (Palace). Does not include Procard or other purchases.

Reporting has been based primarily on the data in the Staples and Palace reports. Further analysis of purchases is needed in categories that are not being reported to identify if the requirements re being met.

A summary attached to the annual report shows that the university purchased numerous products with recycled content during the year, however recycled content purchases (a requirement of SABRC) of paper are barely meeting the target (50%). Both the Staples and the SABRC reports suggest opportunities for increasing environmentally preferable purchasing choices.

### **Staples Report**

Staples was the primary vendor for CSUMB office products until 2016. Staples offers a significant line of “eco-products”, and with Staples CSUMB had many opportunities for environmentally preferable purchasing. An annual report that included 1,931 items purchased between July 1, 2015 to June 30, 2016 describes the products as well as the environmental values and certifications. In fall 2017, Staples implemented an auto-swap program CSU-wide that automatically substitutes select items with the alternative item that has the same fit, form and function, but has higher sustainability characteristics.

### **Palace Audit**

In 2016, CSUMB selected a new preferred vendor for office supplies, Palace Office Solutions (Palace). The new vendor conducted a sustainability waste audit of purchases during the past year from July 1, 2016 to June 30,

2017. For this audit, a usage report identified the most frequently purchased items. Palace then created a crossover list of greener alternatives for a number of the top items. Customers have a choice in how they might use this list. For example, sustainable alternatives can be suggested when staff look up an item in the catalog, or the sustainable product can automatically be shown in lieu of another one that is less sustainable. While open to CSUMB’s suggestions, Palace usually bases its “Green Favorites” list on the following criteria:

- Post-Consumer Waste (PCW) recycled content
- Recyclability at end of use
- Reduced packaging
- “Refillability”
- Responsibly sources materials
- Pricing threshold

Palace Business Solutions also offers products with a range of third party certifications (Attachment C). The company’s packaging is made of recycled content and is recyclable. In spite of the recycled content packaging, many of the CSUMB stakeholder groups consulted in the development of this plan mentioned a large amount of unnecessary packaging for materials ordered. Purchasing has implemented a reduced/consolidated delivery schedule to use less fuel in delivering items to campus.

The 2016-17 audit indicated the two most purchased items are paper and printer cartridges. Below are the paper pricings Palace provided with the recommendation to make it mandatory for University personnel to order a certain recycled content. There are several instances where non-recycled content paper was purchased. Below are the costs of various post-consumer waste containing paper products from Palace.

**Table 6: Palace Office Solutions Recycled Paper Pricing**

CSUMB RECYCLED PAPER PRICING		
Item #	Recycled Content	Current Sell
HAM105007	0%	\$29.21
HAM86701	30% PCW*	\$36.99
HAM86780	50% PCW	\$40.59
HAM86790	100% PCW	\$44.99

\*PCW is post-consumer waste

### Food Procurement

Food is also a material input on campus. Food purchases should be examined to reduce unnecessary purchases, packaging and single-use materials.

Food on campus is provided through a contract agreement with Sodexo. Sodexo works with the Real Food Challenge (RFC) to track sustainable food purchases. It puts in place a rigorous set of standards for evaluating food in four key areas however, these standards do not include waste minimization as a criterion. The four RFC evaluation metrics include:

- Local and community-based,
- Fair,
- Ecologically sound and
- Humane

Over 200 schools and Universities have used the Real Food calculator to estimate their percentage of food purchases that meets the definition of “Real Food”. Unfortunately, CSUMB’s first calculation performed in 2015-2016 resulted in a very low score – less than 4% of food purchases were items that met the criteria for the Real Food Challenge. Items that met the criteria were primarily teas, locally sourced and organic lettuce and sustainable seafood.

### Cleaning Products Procurement

At the time of this report, programs were in place with the existing Janitorial Contractor to ensure the purchase of recycled products. The CSUMB draft Green Cleaning Policy meets the standards of the LEED EB: O&M Green Cleaning credits, as well as the Association for the Advancement of Sustainability in Higher Education’s Sustainability Tracking, Assessment, and Rating System (STARS) Green Product Purchasing and Sustainable Compensation credits.

Cleaning contractors are responsible for purchasing the most environmentally preferable products available. According to the Scope of Work for the contractor, bathroom paper such as paper towels, toilet paper, and toilet seat covers must have the highest recycled content available, have no less than 80% post-consumer waste, be 100% recycled and chlorine free, while remaining within a 10% cost differential, than paper without these environmental qualities. Cleaning products must be Green Seal certified. For cleaning cloths and mops, contractors are required to use washable, reusable microfiber cloths, sponges, and mops.<sup>1</sup>



### In Focus: Paper and Printers

All stakeholder groups consulted considered paper use and printing to be the highest they’ve ever witnessed in a workplace. Along with using print paper also comes the use of ink and toner cartridges, as well as “paper support products” file cabinets, staples, paper clips, file folders, etc. They are also some of the shortest-lived materials.

In a conservative estimate last fiscal year, the University purchased an estimated 1,036 reams of paper per year at \$35.99/ream (for 30% recycled content from Palace Office Solutions, although currently most departments are NOT purchasing recycled content paper). This is an estimated cost of \$37,285 for paper. It is estimated that paper use could be reduced by over 50% saving the University an estimated \$18,643/year in paper costs. According to the Palace Office Solutions waste audit, the University spent \$88,452 in printer cartridges last year. Cutting this amount in half would save the University \$44,226. That is a total of \$62,869.

However, a similar cost analysis done based on printing details from Information Technology shows 5,447,987 pieces of paper used by 229 devices over 180 days. Extrapolated to 365 days, the figure for annual use of these devices is 11,050,684, or an average of 48,256 sheets of paper per copier or printer. Technology Support Services estimates that there may be approximately 150 more for which there is no data. If these 150 devices, each using an average of 48,256 pieces of paper per year, are added to the original 229 devices, **CSUMB staff and faculty could use as much as 18,289,084 pieces of paper annually.** Clearly, there is room to reduce paper use at CSUMB.

<sup>1</sup> 2017 CSUMB Scope of Work for Janitorial Services

## Purchasing and Procurement

Procurement and Business Services manage the purchase of goods and services at CSUMB in accordance with State of California, CSU – System and local campus policies and regulations.

Relevant sustainability related procurement policies include the SABRC (described above) as well as the Small Business / Disabled Veteran Business Enterprise (SB/ DVBE).

CSU has established a Small Business Advocate within the Chancellor's Office, Contract Services & Procurement department. The Small Business Advocate is the single point of contact for small businesses and shall support campuses to solicit bids from small businesses.

The Disabled Veteran Business Enterprise (DVBE) Participation Program was established to acknowledge disabled veterans for their service and to further DVBE participation in state contracting, promote competition and encourage greater economic opportunity. The state established a DVBE contracting participation goal of at least 3%. The goal applies to the total contract dollars expended each year by all campuses. This includes all contracts, purchase orders, and procurement card orders.

Most products used on campus have limited supply chain source information and impacts. With support from Palace, we examined two of the most commonly purchased items, Paper and printers. Paper purchased from Hammermill is sourced from sustainability managed forests in the United States. Electronic materials and toner purchased through HP, who has been industry leading social and environmental sustainability efforts, have a list of the countries from which the raw materials are supplied. Over 20 countries are listed however nearly 50 percent of raw materials come from China and other countries listed supplied a much smaller percentage.

Industry-wide shifts need to occur to support transparency and identification of sustainable purchasing options. Integrating requirements of the LCC Materials petal would support CSUMB's effort to make sustainable supply chain/ life cycle purchasing decisions. The LCC Materials petal requires purchasing to address the following criteria relevant to this effort and identified in more detail below.

- Red List
- Responsible Industry
- Living Economy Sourcing
- Embodied Carbon Footprint
- Net Positive Waste

### Red List

The development of a Red List would prevent the use and prevalence of toxic materials on campus; both in our buildings and elsewhere. The Living Community Challenges specifies the toxic materials and chemicals to eliminate during construction (see Attachment G for the recommended Red List for construction). Restricting Red List materials from construction projects would require CSU Policy support. Integration of the requirements to disclose Red List items in the General Conditions is necessary step to support the elimination of toxic materials from campus.

Taking a step beyond construction and building, the University may consider adhering to the "Precautionary Principle" where alternatives will be found for any substance containing a known carcinogen, teratogen, or endocrine disrupter. Carcinogens cause cancer. Teratogens can interfere with the proper development of a fetus in pregnant women. Endocrine disruptors can interfere with normal hormonal processes. This step can be done by using Material Safety Data Sheets (MSDs) and using the Chemical Abstract Service Number (CAS#) for each one of the ingredients, search to see if that ingredient is toxic. Determining whether an ingredient is toxic can be done by searching lists such as California's Prop. 65 list of substances known to cause cancer and the European REACH list. Alternatively, this can be done easily by using a service such as ChemADVISOR or the LOLi Database

which searches all such regulatory lists. The University can either subscribe to the service annually or search for each substance one at a time for a fee.

The database can be found here: <https://www.chemadvisor.com/portfolio/loli-database/>

### **Responsible Industry Certifications**

Although many materials may claim sustainable attributes, there is relatively little oversight as to whether those claims are true or the relative of their statements. Hence, purchasing is susceptible to “greenwashing” where advertisers and marketers put an environmental spin on a product that may not be true or grossly exaggerated. As a result, a myriad of third party certifications have cropped up to verify green or sustainable product claims. See Attachment C for a list of recommended third party certifications. The LCC suggests the use of their “Declare” Products to do this. However, “Declare” is not yet in widespread use, although the University could ask that vendors begin using “Declare”. This would also help identify materials containing substances that may be on the Red List.

### **Living Economy Sourcing**

This LCC imperative may prove challenging for the University, given its distance from major economic centers. However, “local” could be defined as within Northern California initially to make this more feasible. The campus is focusing on local sourcing for food products and services (which is defined as within 200 miles); however, this is related to the operations – not construction.

### **Net Positive Waste**

Net positive waste aims to reduce or eliminate waste in all phases of project (design through end of life), meaning that even the deconstruction of the building is a useful resource. Part of the net positive waste imperative requires compost be used onsite as a soil nutrient. However, CSUMB is located within nine miles of one of the State’s most advanced facilities for processing industrial food compost and the compost is utilized in nearby farming applications. Since the processing and reuse of the waste is done within less than a 10-mile radius, it does not make sense to construct the additional facilities at CSUMB. Therefore, CSUMB will request an exemption to the imperative.

Additionally, the net positive waste standard dictates the reuse of existing structures, which CSUMB has already accomplished to a large degree. Sixty-six of the sixty-nine buildings currently in use on campus are re-used military buildings.

### **Material Distribution and (Redistribution)**

After purchasing an item, most materials arrive through a shipment or mail delivery to the mail room, to the project site or directly to an office. The campus has recently reduced the number of direct office delivery days from five to three in an effort to reduce vehicle congestion on campus. The most frequent destinations include Dining Services (buildings 12, 16 and 29) and administrative offices. Large items come onto campus during major construction projects. Once an item arrives, there is little distribution of those materials throughout campus with the following exceptions: paper, food and janitorial supplies. Paper is often sent inter-campus for signatures or distributed for outreach materials. Food is taken back to offices or other locations for consumption. Janitorial supplies are used throughout campus to clean various spaces and stock bathrooms.

For the most part, materials that are brought on to the CSUMB campus are used for the original purpose intended and then disposed. Materials may be purchased by Procurement, by an individual department, or purchased elsewhere and brought on campus. Materials on campus also move from main campus to satellite locations, primarily CSUMB at Ryan Ranch, which is about 12 miles from main campus. Campus Mail Services distributes small packages and external mail as well as intercampus mail.

Residential Life has mail pick up (including packages) for residents on main campus centralized. Resident come to building 12 for pick up after notification of a delivery.

### **Furniture and Office Supplies**

In general office supplies are not reused; they are discarded after use. Furniture if reused if it is in good Whatever furniture items cannot be reused on campus are taken to Last Chance Mercantile. The materials that are reused or donated constitute a very small part of the amount that is ultimately disposed; there are great opportunities for increase diversion through reuse.

Residential Furnishings

Many of the stakeholders consulted in developing this plan indicated that there is no space on main campus to store residential furnishing items for reuse, or personnel to track it. The cost of maintaining such a system may outweigh the benefit. However, a furniture, television, cookware, and linen rental program, run by students, could make a good business case. Additionally, a virtual store online, a "Craig's List" for CSUMB developed by students, could eliminate the need for storage, sorting and staff. Informally, student clubs and Residential Life has offered end of the year and Earth Week centered "swaps" where students can bring and exchange goods instead of throw them away.

### **Move Out Reusable Items**

The greatest opportunity and source of student housing generated reusable items lies in the number of items discarded each spring during Move Out. The same household items which are largely thrown in the trash, are the same items needed by incoming students three months later in the fall. A system to hold even a portion of these items over the summer and make them available for sale or free to fall students would reduce a significant amount of waste. Unfortunately, the costs of space and staff support appear to make this infeasible on a large scale. International Programs continues to collect some household items for its incoming students and Hope Services continues to collect donations from residence hall lobbies during Move Out.

### **Residence Life Household Item Reuse**

However, there are some options for reducing the quantity of reusable items sent to the landfill s were proposed. Increasing educational outreach during Orientation events (for parents and students alike) could educate and focus on reducing single use products and material waste. Reusable water bottles and shopping bags could be distributed to promote a culture of reuse. Ten years of successful residence hall focused Move Out waste diversion events illustrate the amount of waste generated from housing. Move Out could be supported with more staffing and resources and further increase recycling and reusable item donations. Lastly as an alternative to the bus ride to a Target (which occurs some years), students could be given an opportunity to select donated reusable items from the previous year's Move Out event instead of purchasing new items. One idea is to create a on campus shopping day with a festival-type atmosphere on campus, during Otter Days.

## **Inter-Departmental Re-use and Re-distribution**

With over 120 purchasing centers on campus, there are numerous items that are either unwanted to begin with, or used and no longer needed. Many of these items could be used another time by some other department or individual, if there were a way to find them. Currently, there is no system to locate another department's rejected products in order to reuse them. Instead, each department must purchase its own new materials when there is a need.

There are different ways to approach this issue. For example, the university might want to set aside a location to store items, and create a catalog for them. Alternatively, a Facebook page for staff could be set up, similar to the student Facebook "CSUMB buy&sell", or better yet, a google group could be set up. However, perhaps the simplest way to start to reuse department items would be to use the existing list serve among the administrative support staff to post items that other departments may want to use. An incentive could be created for departments to take advantage of reused items; for example, departments might give awards for the most items reused, or the greatest savings from reused items. Several groups reported that space for the storage of goods would be difficult to find. This could be resolved by keeping the items with their original departments and anyone who wished to use that item could obtain it from the department directly or through interoffice mail if the item is small enough.

### **Litter**

Litter is the most undesirable aspect of materials distribution. When materials enter campus and they are not properly disposed of, they migrate throughout the natural environment, affecting storm-water, wildlife (including marine wildlife) as well as campus aesthetics.

The campus has a significant amount of litter. Currently the landscape contractors have one full time staff person dedicated to litter collection. Their service area however, does not cover parking lots and parking lots are a primary source of litter on campus (falling out of cars, high pedestrian traffic, etc.). The primary type of litter is food-related (bags, bottles, straws, coffee lids, single use items, etc.), the second highest from cigarettes and small plastics (pens, broken plastic containers). Switching campus products away from single use packaging would help reduce litter, for example creating drink systems to refill water, coffee or other beverages with reusable containers.

In spring of 2016, in collaboration with the Workplace Walk-off Challenge, participants could volunteer to collect litter while they walked. During the 6-week period of the challenge, over 3,081 pieces of litter were collected by 48 participants.

## Figure 5: Litter on Campus

Litter is found throughout campus. This image was taken on the walkway between the University Center and the Tanimura and Antle Family Library – West of the Parking Lot.



Straws collected on campus from October – November 2017. Green Starbucks straws are prevalent.



Items collected during the workplace walk-off, Spring 2016.



## Main Campus Waste Collection and Disposal

(Not including dumpsters or enclosures)

The majority of waste and recycling bin collection sites are poorly signed and haphazardly located, although a few have been recently updated. Most indoor and outdoor bins do not incorporate all three forms of waste: recycling, composting and landfill. Universal wastes (hazardous wastes that are collected for reuse and recycling), such as batteries, fluorescent tubes, and electronics, lack clear disposal locations and ownership of tracking. There is not currently anyone employed on campus to manage materials. A part-time student intern employed by GreenWaste, the waste hauler, is the only dedicated employee to assist with materials management. Other materials management duties are scattered through numerous campus departments including:

- Facilities Services and Operations
- Campus Planning and Development
- Campus Health and Safety
- The CSUMB Corporation
- Procurement and Business Services

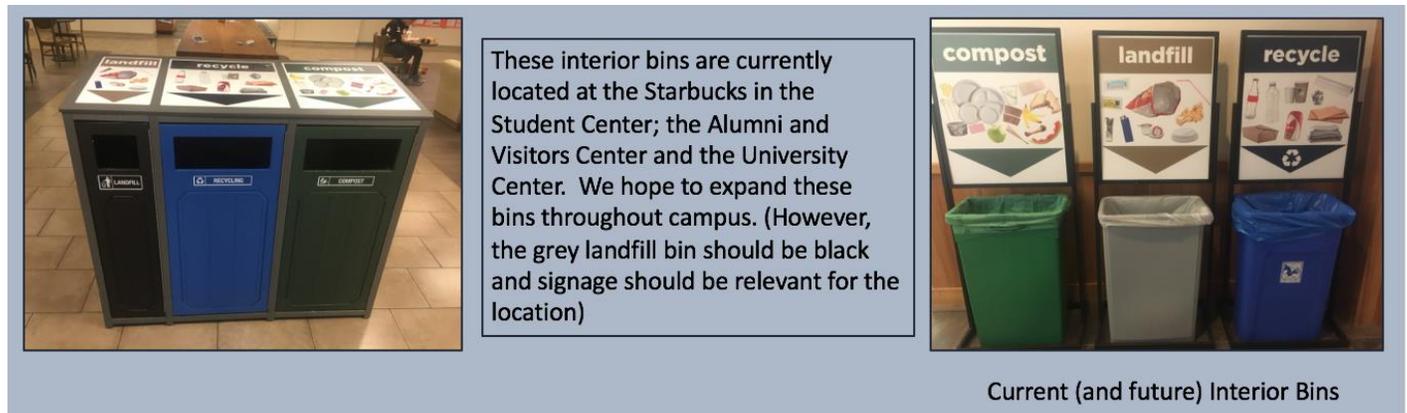
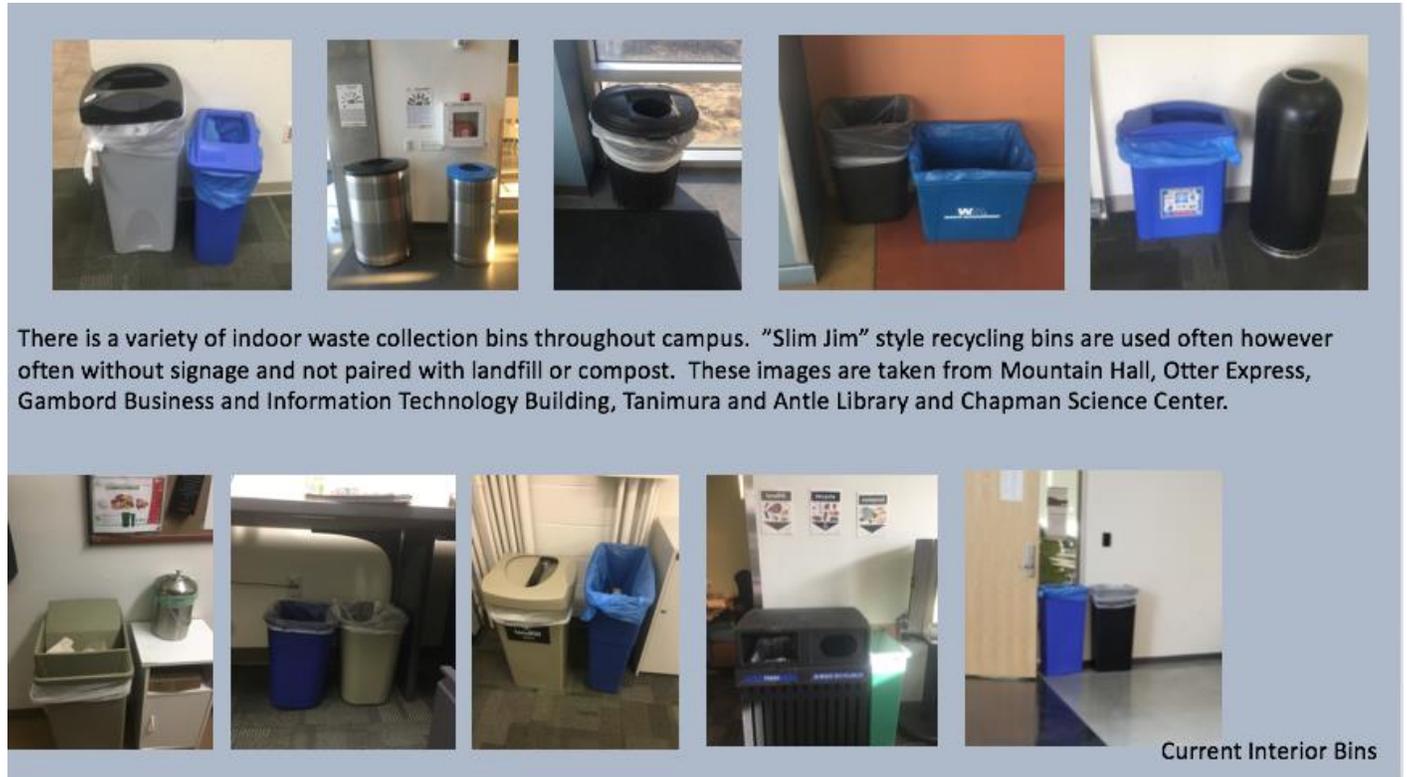
In addition to on-campus departments, multiple campus partners contribute to campus waste collection and disposal, including those listed below:

- **GreenWaste** - Primary waste hauler. Collects materials destined for compost, recycling and landfill. Currently, University waste, recycling and compost is collected by GreenWaste under a waste franchise agreement entered in 2012. See Attachment D for details of the waste franchise agreement.
- **Marina Resource Recovery Facility** - Most GreenWaste items are disposed of at this location. In addition, the Marina Facility is home to Last Chance Mercantile which collects and resells furniture, clothing, home building supplies and landscaping supplies. The landfill now accepts mattresses for recycling for free, as part of extended producer responsibility legislation that requires mattress manufacturers to pay for their end of life. The landfill collects methane gas from its decomposing waste and uses it to supply 100% of the energy required to power its facilities. Additionally, combined compost and landscape waste are processed in an on-site facility that provide power for the nearby Monterey Regional Water Pollution Control Plant that processes wastewater for CSUMB and the larger region.
- **Hope Services** - Hope Services currently works with student Recycling Coordinator to support zero waste Move Out. They collect a significant amount of donated materials (clothing, cleaning supplies, bathroom supplies, etc. There may be additional opportunities to collaborate with Hope Services for donations collection throughout the year.
- **ABM Janitorial** - ABM Janitorial Services collects all waste throughout campus as well as providing cleaning services. They are a critical link in to ensure the campus is following green cleaning policy, properly sorting and disposing of materials in the correct dumpster.
- **Sodexo** - Food Service Operations contribute a large amount of waste and they are currently the campuses primary composter. Food Service employees also empty the waste bins in all of the food service areas (Dining Commons, Otter Express, Monte's, Starbucks, Peet's) and place in the appropriate dumpster.
- **Eagle Hauling** - Contracted to collect all illegal dumping from East Campus Housing and Campus Open Space
- **BrightView** - Landscape Services empties exterior bins, collects litter, and provides some reuse contribution through chipping and mulching of landscape materials.

## Indoor and Outdoor Waste Collection Stations

The current waste infrastructure on campus is lacking in uniformity, is not set up to have a three-stream system, or provide for Universal Waste collection. Bins are not co-located and lack adequate signage. The images below show a comparison of the current situation and the proposed improvements. The images below provide examples of the current bin and signage as well as proposed solutions. Specifications and costs for the recommended bins and their locations are provided in Attachment E. A recommended phased approach to installing new collections sites, is proposed in Attachment F.

**Figure 6: Current Indoor Collection Bins**



**Figure 7: Recommended Indoor Collection Bins**

Interior bin options vary depending on the use of the space. These three types illustrate the primary locations in need of improved collection.

Formal Event Spaces

High traffic locations and food service areas

Hallways, centralized office spaces/ The lower image uses existing bins and would need supplemental signage.

Proposed Interior Bins

The figure displays three distinct indoor bin configurations. The first, 'Formal Event Spaces', shows a row of three grey bins with black, blue, and green tops. The second, 'High traffic locations and food service areas', features a row of three bins (black, blue, green) with illuminated tops and instructional graphics. The third, 'Hallways, centralized office spaces', shows three bins (green, grey, blue) with clear signage for 'compost', 'landfill', and 'recycle'. A second image of this type shows existing blue and green bins with a recycling symbol.

**Figure 8: Current Exterior Collection Bins**

Landfill Collection – 16 total on main quad in 4 different styles

Exterior bins on West Main Quad – facing East from bldg. 210. Bins on the Main Quad vary in style. They are rarely paired and do not have signage. Placement of bins could also be improved.

Recycling Collection – 3 total bins in 2 style

Current Exterior Bins

The figure shows a large photograph of a grassy quad with a paved path and a building in the background. Four yellow arrows point from the 'Landfill Collection' text box to four different styles of grey and black bins. Two blue arrows point from the 'Recycling Collection' text box to two blue recycling bins. The 'Current Exterior Bins' text box is located at the bottom right of the image.

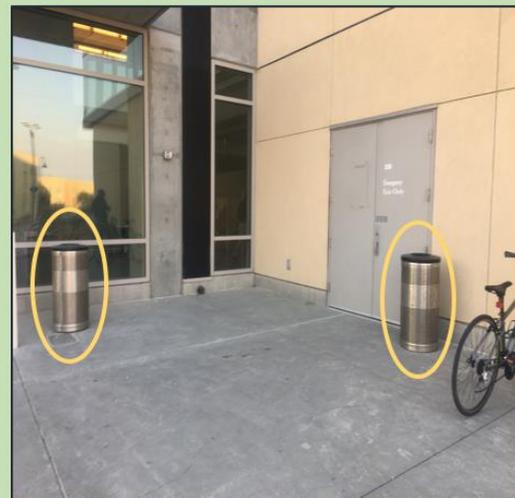
**Figure 8 (continued): Current Exterior Collection Bins**

Exterior bins near the Student Center (bldg 12). Consistent bin type but no recycling or signage

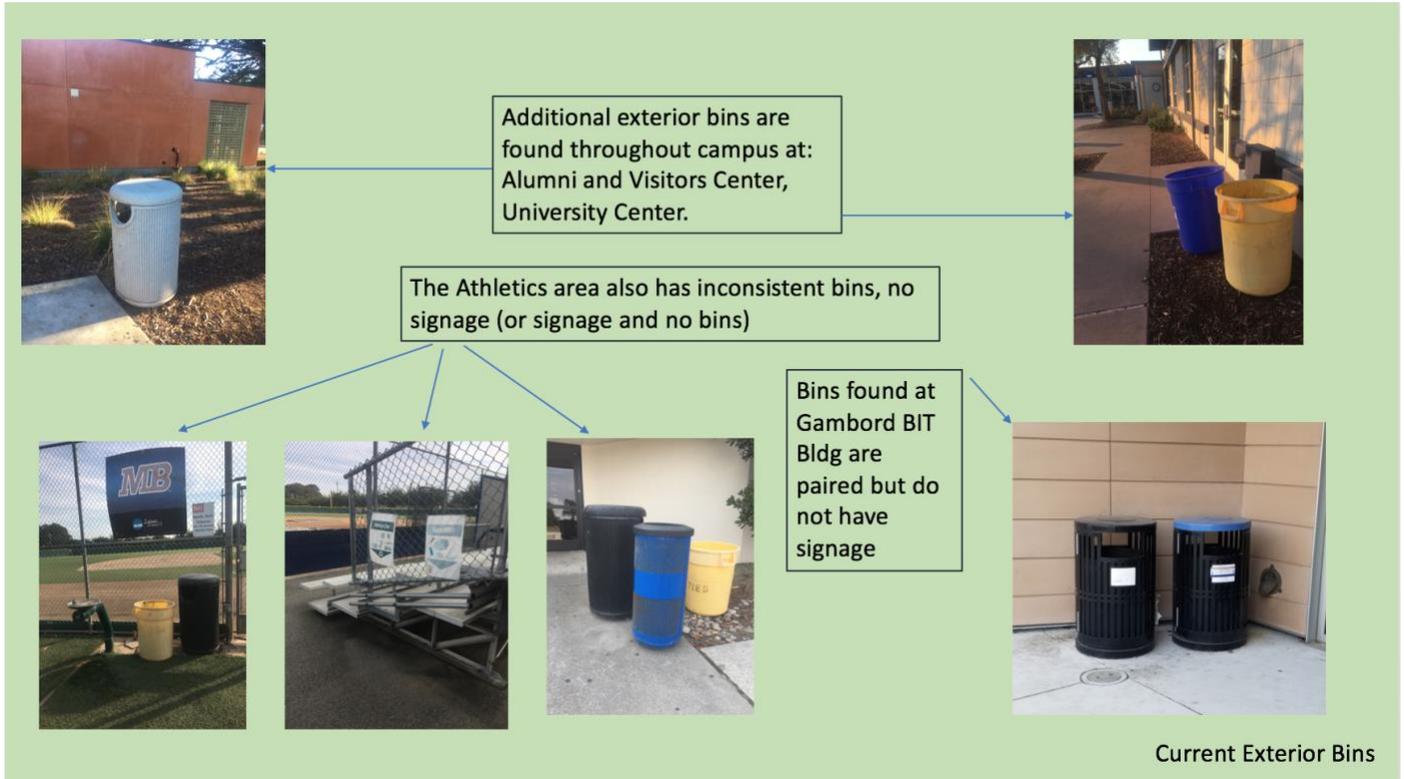


Current Exterior Bins

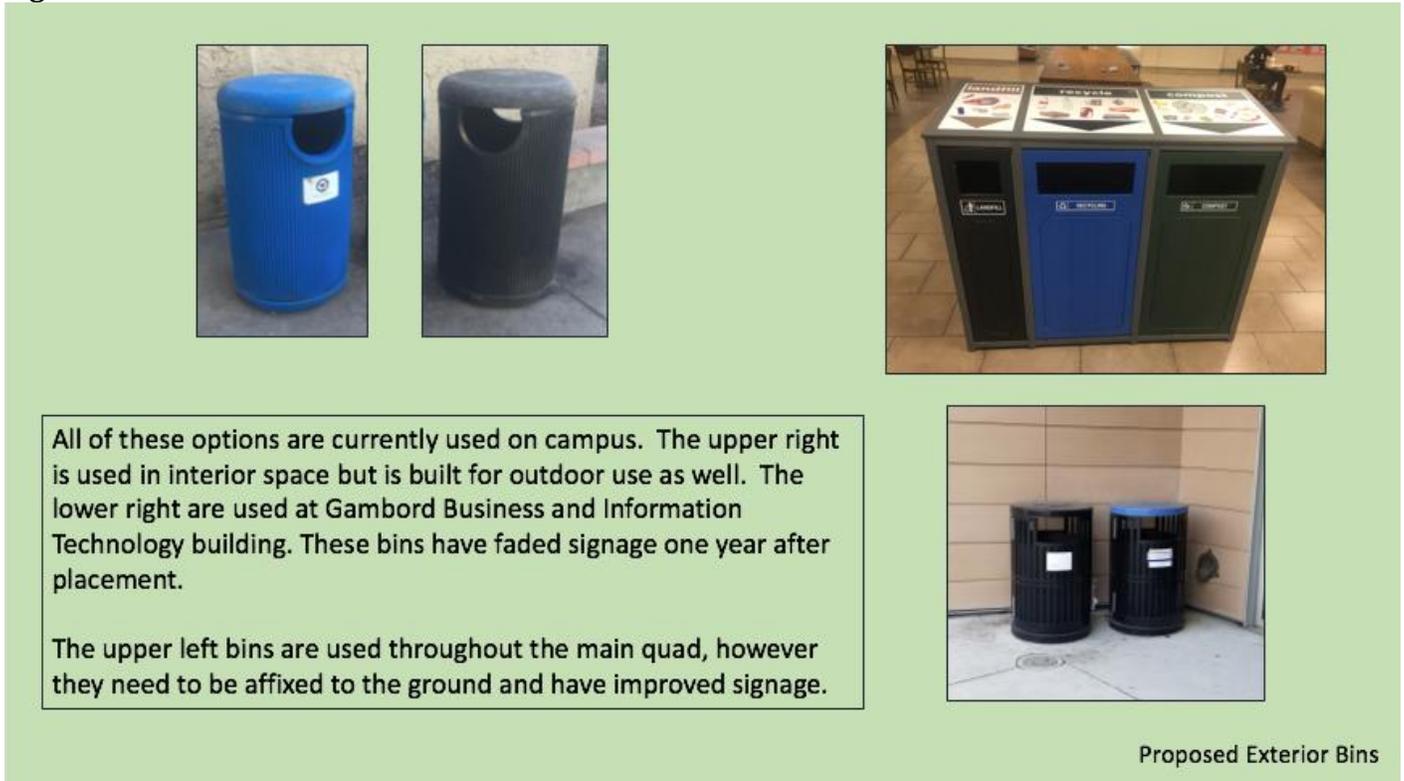
Exterior bins near the Tanimura and Antle Family Library. Bin style is fairly consistent but there is no signage, no pairing and only 1 recycling bin, compared with 5 landfill bins (yellow circles).



Current Exterior Bins



**Figure 9 Recommended Exterior Collection Bins**



**Figure 10: Recommended Event Collection Bins**



### CSUMB Zero Waste Station Best Practices

Through decades of waste diversion and recycling studies and behavior monitoring, the following best practices have been determined ideal within California and specifically, the Monterey region’s current three-stream waste system:

- Waste, compost, and mixed recycling (the three main materials collected in California at this time) must be separated and not contaminated in order to divert compost and recycling from the landfill.
- Observations on behavioral waste separation have determined that having a consistent *co-located* 3-bin system with proper and consistent signage results in the least amount of contamination and the most segregation.
- Signage must be consistent, pictorial and match the types of waste present. It must be easy to update on a regular basis as recycling markets and processes are changing frequently.
- The volume of different streams should match the location, for example, a dining center should have a large amount of compost capacity or a large office area may need more recycling volume. Landfill should always be the smallest capacity.

What doesn’t work:

- Only providing recycle bins, which causes waste to be comingled with recycling.
- Only providing two-stream bins, which means that individuals are not making the same 3-system choice every time, complicating a consistent message.
- Signage that is inconsistent.
- Signage that is a small table “eye-chart”.
- Signage that is hard painted on the bins that doesn’t allow for easy updates.

Best practices indicate 3-stream zero waste stations, including recycling, landfill, and compost, be placed in high-use areas:

- Entryways and exits of academic building
- Breakrooms and common areas of academic and administrative buildings
- Student Union, Otter Express, Dining Commons, Library Cafe
- Main Quad – Near “eateries”
- Event and conference spaces
- Residential hall common areas

The CSUMB standard for three stream waste bins is as follows:

- Color-coded bins will be used: blue for recycling, black for landfill, green for compost. (Grey can also be used for landfill and yellow can be used for yard waste. Although this is only allowed due to existing inventory, no new grey or yellow bins shall be purchased).
- Where possible with current inventory, the waste bins should be smaller than the recycling bins.
- Bins should always be co-located and ideally permanently joined.
- Liners should slowly be phased out – however if liners are used they should be used as follows: clear for recycling and landfill, green compostable liners for compost bins. All bins should be appropriately sized to the container.

In rare instances, collection bins in common areas without food present may be 2-stream (recycling and landfill) for example:

- Mailrooms
- Printing areas
- Parking lots or other outer areas of the campus, where compost bins would be problematic for daily pickup and critter control

For office areas, recommended siting for zero waste stations will be determined based on the type of use, the number of occupants and the square footage of the space. Individual offices will be furnished with recycling bins only upon request, which users will empty into the nearest zero waste station. Custodial would then empty only the central zero waste stations.

Classrooms will not be furnished with individual bins. Instead, a 3-stream zero waste station will be located in the hallway and shared among a few classrooms, convenient to all. For labs and art studios – both landfill and recycling bins will be offered to start. Further consultation will be required to determine the types of waste materials produced and how to best collect it. For instance, the recent waste audit found a large number of gloves destined for the landfill from labs.

Compost bins will not be provided to all individual student rooms due to the risk of pests. Curbside compost is not currently collected in East Campus housing. However, in January 2018 East Campus will be launching a community compost collection site. For students that wish to compost on East Campus, bins should be provided.

### **East Campus Housing Waste Collection**

Individual residential units are serviced by GreenWaste (yard waste, landfill and recycling). Landfill and recycling collection at the student occupied positions of East Campus are managed by Alliance Residential Services, which is a contracted service. Faculty and staff units are also serviced by GreenWaste.

Food composting will be offered in January 2018 in a centralized location at East Campus Housing. Occupants of either the faculty, staff or student housing areas will be able to bring their food waste to a central location to be serviced by GreenWaste.

Some Universal waste items can be collected in East Campus residential areas (i.e. batteries placed in a plastic bag on top of the recycling container)

## Existing Collection Enclosures

**Figure 11: Collection Enclosures**



A known limitation for the University's diversion is also its capacity or lack of waste collection enclosures. It is recommended that the University begin upgrading enclosures to allow for 3-stream enclosures as budget allows. Many municipalities have design criteria for dumpster enclosures that can be used to specify the proper enclosure.

Developing campus standards for waste enclosures would pose challenges because of the multitude of factors that influence the type of enclosure built (cost, construction schedule, current regulations, etc.). However, there are some best practices that should be considered to address litter and storm water management as well as the items listed below.

### Collection Enclosure Best Practices

- Size the enclosure to service 3-stream collection for multiple buildings.
- Appropriately sign and color-code each dumpster
- Discourage animal access and illegal dumping
- Centralize and consolidate location
- Incorporate plantings, art and appropriate signage to visually enhance the exterior of the enclosure space
- Provide easy accessibility to waste haulers and janitorial staff
- In residential areas allow for access that does not require a pedestrian to walk through a parking lot to reach the enclosure
- Maintain compliance with all relevant codes

## Materials Specific Disposal

### Residential Life Materials (Move-out)

Since 2010 Move Out has been an annual CSUMB event on the Main Campus that occurs at the end of the school year. It was instituted to capture waste resulting from students leaving campus and to divert as much as possible from the landfill. Each spring, hundreds of students move off campus at the end of the term, and in a short period of time must dispose of any items that they will not take with them, for example, kitchen supplies, food, furniture, mattresses, clothes, household items or books. The operation requires significant organization and coordination among multiple groups: the GreenWaste paid student intern leading the effort, Campus Planning and Development, GreenWaste, Facilities Services, University Police Department and Alliance Residential and Residential Life as well as the organizations picking up or receiving donations, including Hope Services, International Programs, the Monterey County Food Bank, and Shoes for the Homeless.



In addition to move out waste, Residence Life contributes to the generation of waste through programming and student-directed activities. Over the last year, some progress has been made to re-use various programming materials and to make events zero-waste, including the creation of a Sustainability Committee for Residential Advisors.

### Furniture

Due to the poor condition of most furniture at the end of the year from East Campus Student Housing, most ends up in the landfill, primarily couches. This is mainly because students run out of time to clean their East Campus residences and resort to leaving couches outside for many nights, which renders them unfit for reuse and creates a visible sign that illegal dumping might be acceptable and unenforced in the area. Main campus provided furniture is managed by Residential Life and usually replaced in large quantities.

Office furniture is managed by individual departments, however Campus Planning and Development, Space Planning Unit will track and properly dispose of furniture related to office or department moves.

During the year, campus used furniture is usually taken to Last Chance Mercantile and resold. An increased effort is needed for East Campus housing to ensure the same happens to its furniture.

### Cooking oil

Food Services has worked with Salinas Tallow Company for several years to divert used fryer oil, although there is a new company now. In the past, the company picked up the oil, and 50% of it repurposed and reused as biodiesel.

### Clothing

Occasional one or two-day clothing swaps have occurred on campus. Associated Students primarily sponsors these events.

## Wood chips

Wood chips resulting from pruning by Davey Tree Service are reused either on campus or off campus as mulch. All wood chips are currently reused. Further information is needed to understand the dyeing of wood chips, which are taken off campus and returned.

## Food

Food waste is both a waste management issue and a social justice issue. Members of the campus community feel the effects of food insecurity. The Food Insecurity and Hunger Committee is currently working with the campus food service provider and Associated Students to identify avenues for connecting food insecure students with leftover food from catered events.

Food preparation, consumption and disposal also generates a significant amount of waste. There are several food establishments on campus that are centered around single-use items including Starbucks, Peet's, Otter Express and some catered events. The Student Union (opening in 2019) will also house several fast-food style vendors. There was been significant progress in reducing single use to-go food and beverage containers over the last year. Much of this has been focused on the Dining Commons, where they have replaced all single-use to-go clamshells with reusable alternatives, no straws or single use cutlery are provided at Dining Commons. Starbucks and Peet's will also be transitioning to a compostable straw option in the near future (2018).

A waste audit in these areas would reveal large quantities of these items going to the landfill. Neighboring communities have implemented regulations requiring food service facilities provide only single-use items are either compostable or recyclable. To date, San Francisco, Monterey, Carmel, Seaside, Santa Cruz County, and Alameda County have implemented such laws.

Different entities on campus donate very limited amounts of food, including Food Services, which may donate to Dorothy's Kitchen or the Food Bank; Move Out, which donates to the Monterey County Food Bank; or Catering, Events, and Residential Advisors, which may also donate small amounts.



### Otter Express 2017 Waste Audit

A waste audit of waste from the Otter Express was conducted in March 2016. All of the waste generated at the Otter Express from Tuesday March 8<sup>th</sup> - March 9<sup>th</sup> was held for sorting, this did not include any bins that went to the recycling or compost. This produced approximately 60 full bags of trash destined for the landfill. Twenty of the bags were emptied onto tarps on the main quad and the contents were separated into compost, recycling and landfill. The results are below.

- 16 cubic feet of landfill (7 tubs);
- 20.25 cubic feet of recycling (9 tubs);
- 24.75 cubic feet of compost (11 tubs).

These results indicate there is significant opportunity to increase diversion in the Otter Express, both where customers dispose of their waste and in the prep/kitchen area. Some of the common items found from the prep areas included food waste, latex gloves and plastic wrapping/packaging. From the customer areas, common items included the single use brown "boats" and wrapping, plastic food containers, and food.

### **Universal Waste**

Universal waste includes hazardous wastes that are partly recyclable, meaning the item may have to be disassembled to extract the parts that are able to be recycled, or it may need a separate process due to potentially hazardous materials (such as mercury). It includes batteries, fluorescent light tubes, printer/toner cartridges and e-waste. Some universal waste is being collected at CSUMB, but it requires better systems to ensure that all the waste is both collected and tracked. Currently e-waste from state funded operations on the Main Campus is collected and tracked. There is no real system for collecting batteries. For those that are aware of the option to do so, batteries are sent via intercampus mail to EHS staff or collected in area. University Corporation and their Contractors (Alliance, Residence Life, and Sodexo) may be collecting and disposing universal waste, but it is not tracked. More information still needs to be gathered to suggest a system(s) as well as bins for the collection of universal wastes, including batteries, printer/toner cartridges, E-waste, and fluorescent light tubes.

### **Fluorescent Light Tubes**

The Facilities Department collects spent tubes as they are replaced by maintenance crews on main campus and East Campus Housing. The spent bulbs are brought back to the Facilities warehouse and stored. Facilities notifies the appropriate hauler when they are ready to be collected for disposal.

### **Batteries**

The campus currently does not have a well-known system for collecting batteries. There are collection bins in The Student Union and an unknown number in individual departments. Some batteries are sent via intercampus mail to EH&S. East Campus residents can place batteries in a clear plastic bag and place them on top of the recycling bin for pick up GreenWaste. Car batteries from campus fleet vehicles are returned to the battery company.

### **Toner Cartridges**

Monterey Business Solutions can pick up spent printer cartridges at no additional cost. However, there is no system for cartridge pick-up, individual units handle the waste and it is not accurately tracked.

### **Electronic Waste**

Information Technology and Property Management currently manage e-waste. If it has an electric cord or a battery, it is electric waste.

Electronic waste has a resale value. They are typically either resold or taken apart to reuse parts and/or minerals. Recycling electronic can be a lucrative business. However, some electronics are particularly hard to separate into base forms that can be recycled. These generally have a disposal cost. Therefore, recycling of electronics can tend to be cost neutral. However, recycling electronics is diversion from the landfill, and can help CSUMB meet its diversion mandate. Electronic waste also poses significant health and environmental risks to the communities that collect the waste. Proper disposal of this waste with reduce impacts to marginalized communities.

For electronic items purchased by the Stateside of CSUMB, used items must be removed from CSUMB inventory. The Property Clerk in the Property Department must be given the barcode that is on each piece of equipment owned by the University. He can then properly remove that piece of equipment from the inventory. This would apply to all pieces of equipment from University staff and faculty. Items that are not purchased and coded by CSUMB are not tracked and disposed of via CSUMB's e-waste contractor, thus no e-waste purchased by students or residents are collected or disposed of by the campus. Information on how to properly dispose of e-waste can be found at [csumb.edu/sustainability/e-waste](http://csumb.edu/sustainability/e-waste).

## **Demolition Waste**

Demolition waste, as noted earlier in this document, has been critical to achieving the diversion targets in past years. Campus has stipulated in demolition contracts that 90% of the materials must be diverted or risk a 1% loss in payment. This has allowed the campus to achieve extra-ordinary diversion during years of high demolition.

Materials from demolition are recycled (rebar, metals, concrete, etc.) Some of the concrete taken from the demolished barracks have been used to build campus roads and base for new buildings (including the road in front of the University Center). Wood materials have been refurbished and used in the Alumni and Visitors Center as well as for outdoor seating.

## **Illegal Dumping and East Campus Housing**

Alliance contracts with Eagle Hauling to collect illegally dumped materials near the East Campus Housing area. On average Eagle Hauling fills a truck 2x month. They are also contracted to empty apartments when tenants are evicted or to pick up excess waste during Move Out. They estimate 20% of any load is recyclable, and divert what they can to recycling from their mixed loads. At an extra cost they can sort each load and provide detailed recycling reports to the campus. To date, Alliance has not asked Eagle Hauling to provide any weight or recycling/donation/landfill related data from their loads.

## **Recommendations and Cost/Benefit Analysis**

Recommendations were identified during stakeholder meetings and through the creation of this Plan. Please see the conclusions for a prioritized list of general recommendations and how they help the University meet mandates and/or save cost.

The largest and most important recommendation is actually a mandate from the State. A dedicated recycling coordinator is required to be on staff. Implementing this plan and the key recommendation will not be possible without a full-time coordinator.

### **See Table 7 Prioritized Recommendations**

Through an improved culture of communication and an active community outreach and education program campus-wide, conservation tactics can be incorporated effectively so that the University can increase its diversion of waste from the landfill to be able to meet mandates on non-demolition years.

If coordinated cohesively, the University could meet required State mandates and save money while developing into a modern, living showcase of proper materials management. This could be done in a way that places as much effort on the procurement and purchasing (inputs) as the waste streams (outputs). Listed below are the opportunities and their estimated potential for cost savings, and their priority. Priority 1 recommendations meet both the mandates and could result in cost savings.

### **See Table 8 MMCP Cost and Benefit Analysis**

**Table 7: Projected Cost Savings from Standardized Waste Sorting Stations**

Comparative cost estimate between current solid waste disposal costs and what the costs would be if 80% percent were diverted from the landfill. Currently, 60% of solid waste is being landfilled, so it is necessary to increase diversion to recycling, compost, and reuse by an aggregate of 40%. Diversion and Reuse costs were not obtained. There may be costs associated with these items.

Material	Current Percentage	Current Annual Generation (tons) *	Total Current Costs**	Projected Percentage	Projected Annual Generation (tons)	Projected Annual Cost	Estimated Cost Savings Annually
Landfill	60.19	2,099	186,480	20	1,259	62,243	124,237
Mixed Recycling	28.6	607	44,128	44	698	67,272	-23,144
Compost	6.83	144	4,680	22	166	9,922	-5,242
Hazardous Waste			16,158^				
Diversion & Reuse***	4.38	103	0	14	113	0	
			<b>251,446</b>		<b>Total:</b>	<b>139,437</b>	<b>112,009</b>

\* Annual tons as reported to CalRecycle: <http://www.calrecycle.ca.gov/stateagency/Reporting/>  
 \*\* Based on vendor disposal charges by dumpster and volume from 2016: Invoices provided by CSUMB FSO and Corporation. Late payment charges omitted.  
 \*\*\* Diversion and Reuse costs not obtained. There may be costs associated with these items.  
 ^ Costs received from Environmental Health and Safety only.  
 Note: Tracking and monitoring of Hazardous Waste as well as Diversion and Re-use are not accurately tracked, therefore it is unclear what the cost impact of these might be. The cost is not expected to be greater than \$100,000.

Centralizing and improving collection sites and signage would increase diversion and decrease contamination. With a diversion rate of less than 40%, it is estimated that over 40% of the remaining waste could be diverted from the landfill through proper collection sites, signage and education. Diverting an additional 40% of waste is estimated to save the University \$14,909/year (increase diversion rates by 15% compost, 15% recycling, and 10% reuse).

**Outreach and Education**

Outreach and education of CSUMB staff and students is required to ensure that waste-streams are adequately collected and separated. A good materials management program and waste diversion program requires continual vigilance and coordination. Signage needs to be continually updated and maintained. Collection sites need to be audited regularly to determine what is working and where additional outreach may be needed. Coordination of specific events is crucial for educating a population that is forever overturning. CalRecycle requires this as of 2017.

Many of the CSUMB students come from regions that may not have had awareness surrounding conservation and recycling. Therefore, this process is an ongoing effort that must be done on a regular basis.

**Hire a Materials Management Coordinator**

Hiring a Recycling and Outreach Coordinator is not only required by law as of 2017, it will also undoubtedly increase diversion and decrease contamination of waste streams. It is estimated that the cost savings in waste diversion and reduced purchases from such a position will offset any of the costs. The resources to fund a Materials Manager should be shared by both State and Corporation.

A 2017 Higher Education Sustainability Staffing Survey Report conducted by AASHE revealed national data about Recycling and Waste Coordinators at Universities.<sup>2</sup>

- 76% of respondents are full time, salaried staff.
- 18% are full-time but paid hourly. 6% are part time hourly.
- 86% of the recycling positions are held by people for the first time, meaning their jobs didn't exist before they came along.
- 71% are not within a sustainability office.
- The median salary for recycling and waste staff is \$58,000 and the maximum is \$91,000.
- 44% of the recycling coordinators control a budget for their work, while 56% do not control a budget.

If CSUMB created a position for a Recycling Coordinator, or more aptly named, a Materials Management Coordinator and we assumed that the salary to be somewhere between the national median and the maximum (\$70,000 annually), then a weighted salary (with benefits at 57%) would be \$109,900 in cost to the University. However, our estimated annual savings if the activities outlined in this plan are implemented are estimated to be over \$110,696. This position could pay for itself the first year of implementation and provide additional cost savings thereafter.

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<sup>2</sup> <http://www.aashe.org/wp-content/uploads/2017/09/AASHE-Staffing-Survey-Report-2017.pdf>

**Table 8: Cost/Benefit Analysis of Priority Recommendations**

Priority	Recommendation	Outcome	Estimated Cost or Savings
Priority 1	Hire a Materials Management Coordinator	Meet the California mandate of a dedicated Recycling Coordinator.	(\$109,900)
Priority 1	Purchase and Install New Collection Sites Campus-wide	Visible Reuse and Recycling that acts as the mandated outreach and education.	(\$433,782)
Priority 1	Increase Collection Sites and Outreach and Education to further divert 40% more waste (including increased food waste composting).	Divert 40% more waste (10% reuse, 15% recycling, 15% compost). Meet California and CSU mandate.	\$112,009
Priority 1	Universal Waste Collection Diversion	Significant rise in collection and tracking of diversion through re-use and/or recycling of electronics, batteries, and printer cartridges to meet mandates.	=
Priority 2	Decrease Move-out Waste from East Campus Housing by implementing same process as Residence Halls (Eagle Hauling costs only, Greenwaste costs reflected in line 3)	More diversion/recycling to meet mandate. Cost Savings from reduced hauling and landfill fees.	\$22,918
Priority 2	<b>Purchasing Changes</b>	These programs would be absorbed by the Materials Manager position. Reducing purchasing would lower the cost while increase % recycled content purchased would increase cost.	Cost neutral
	Virtual re-use store		
	Mandated recycled content purchase		
	Incentive for minimizing purchases.		
Priority 2	Paper and printer cartridge reduction	Less waste to meet the mandate, reduced cost. (See discussion on. – page 17)	\$62,869
Priority 3	It is recommended that the University pursue new building designs taking into account the Living Community Challenge Standards as a pilot project. Academic 3 would be a good pilot project.	Less waste during construction and demolition. Less toxins on campus.	Unknown
Total Annual Savings			\$197,796
Total First Year Costs			(\$543,682)
Net First Year			(\$345,886)
Net Third Year			\$49,706

In Conclusion, implementing the above recommendations would not only meet California and CSU mandates for the University; it would also pay for itself within three years with conservative estimates. Additional efficiencies will be gained in having the management of waste be controlled centrally.

Attachment A

	<b>Recommendation</b>	<b>Outcome</b>	<b>Responsible Party</b>
1	Hire a Materials Management Coordinator. Without a centralized point of contact, managing, tracking and reporting on materials management campus-wide is challenging.	Meet State mandate. Increased tracking of diversion such as reuse and recycling of items such as batteries, printer cartridges, electronics, wood chips, grass clippings, mattresses, paint, etc. to meet State and CSU mandates.	<i>Sustainability Office</i>
2	Conduct a waste audit in fall and winter of 2018-19 of key areas, such as the Otter Express, the Library, and a Residence Hall to determine what additional materials could be diverted. The waste audit should allow for participation of students and campus staff.	Identify key items in trash that could be diverted; either recycled, composted or re-used. Use this to inform an Outreach and Education plan.	<i>Sustainability Office</i>
3	Ensure certain values and certifications are specified for employee purchases to meet SABRC and CSUMB mandates for buying recycled are met. Employees will need to be aware of these values, and may need training on how to identify the products.	The CSU Buy Recycled mandate will be tracked and met. Purchases through the online Palace Office Solutions portal will automatically select the right recycled content products, eliminating the guesswork.	<i>Purchasing Department</i>
4	Ensure reports from materials vendors (particularly office supply) demonstrate how much recycled content is in each item and the quantity of that particular item that was ordered.	Measurable and reportable quantities on the SABRC report and increased recycle content purchases.	<i>Purchasing Department, Palace Office Solutions</i>
5	Mandate 50% post-consumer waste paper, with the option to purchase 100% if Departments opt for the extra cost.	Meet a higher percentage of the CSU mandated Buy Recycled requirements.	<i>Purchasing Department, Palace Office Solutions</i>
6	Identify Environmentally Preferable Products via online vendor and prioritize them.	Meet a higher percentage of the CSU mandated Buy Recycled requirements.	<i>Purchasing Department, Palace Office Solutions</i>
7	Training and communication with the appropriate department and departmental administrative staff in charge of purchasing is necessary to ensure that administrative support staff are aware of the requirements for purchasing items with recycled content, and to track and send the data annually to Procurement.	Meet a higher percentage of the CSU mandated Buy Recycled requirements. Less inputs for the waste stream outputs.	<i>Purchasing Department, Sustainability Office</i>
8	Purchase from a limited number of approved vendors that are well tracked and contracted in order to meet the CSU mandate and in order to negotiate discounted pricing.	Discounted pricing, meet the CSU Buy Recycled mandate.	<i>Purchasing Department</i>
9	Perform the Real Food Challenge audit annually and that improvement on the percentage of purchases meeting the criteria be raised. This can be mandated through a contract.	Support the larger community through local, fair-trade and sustainable food purchases. Reduce fuel use by purchasing locally.	<i>Food Service Provider Sustainability Office,</i>

10	Eliminate single-use items sold with food products at dining services and concessioners such as Starbuck's and Pete's replace with reuseable, compostable or recyclable (in order of preference).	Reduced waste to landfill, increased diversion, meeting the CalRecycle mandates.	<i>Food Service Provider Sustainability Office,</i>
11	Ensure that the purchasing requirements for the Janitorial Contractor are being met and reported on a regular basis.	Meet a higher percentage of the CSU mandated Buy Recycled requirements. Less inputs for the waste stream outputs.	<i>Facilities</i>
12	Expand and institute more paperless systems, such as OnBase, ilearn and WorkFlow, and Google drive.	Cost Savings. Paper use reduction by 50%. Reduction in printer cartridges, which prevents pollution as well as reduces waste. Less energy use. Higher efficiency. Less physical storage of paper.	<i>IT, Purchasing, Sustainability Office, Accounting</i>
	Utilize paperless signature processes.		
	Replace desktop printers with centralized department printers.		
13	Expand Move Out efforts on East Campus Housing similar to the one orchestrated at the Residence Halls. Use paid staff. Expand International Programs reuse program.	Cost savings and waste diverted to meet the CSU and State mandates.	<i>Alliance, Sustainability Office</i>
14	Ensure that the new used fryer oil (tallow) company reuses the oil to produce biodiesel.	Maintain diversion of fryer oil.	<i>Food Service Provider Sustainability Office,</i>
15	A. Set up systems to track food donations and increase the donations.	Waste diversion to meet the CSU and State mandate. Support student success and the community at large.	<i>Food Service Provider, Associated Students, Sustainability Office, Housing and Res Life</i>
	B. Support food insecure students with excess food from events (perhaps by a phone app).		<i>Sodexo, Associated Students, Sustainability office, Housing and Res Life</i>
16	Increase the number of material swaps at CSUMB. Track the weight of clothing sold or dispensed at swaps.	Waste diversion measured to meet the CSU and State mandate. Support student success.	<i>Associated Students, Housing and Res life</i>
17	Promote a culture of reuse and recycling at new student orientation events and other events throughout the year. Provide reusable water bottles, shopping bags, and/or travel mugs to incoming students. (Bottle refill water stations should be installed in all new buildings)	Decrease the amount of waste going to the landfill.	<i>Sustainability Office, Housing and Res Life</i>
18	Provide a rental store for student housing that contains durable items that are currently destined for the landfill annually such as televisions, cooking equipment, bed linens, and furniture.	Increase diversion of waste from the landfill, meeting CalRecycle and CSU mandates. Support student success.	<i>Corporation, Alliance, Housing and Res Life, Sustainability Office</i>

19	Create a virtual online store for reuse for students and employees alike.	Increase diversion of waste from the landfill, meeting CalRecycle and CSU mandates. Support student success.	<i>Corporation, Alliance, Residence Life, Sustainability Office</i>
20	Select an E-Steward Certified E-waste Recycler to collect E-waste and spent printer cartridges.	Increase diversion of waste from the landfill, meeting CalRecycle and CSU mandates. Support student success. Ensure proper recycling of Universal waste.	<i>Procurement, Sustainability Office</i>
21	Purchase and install new centralized and standardized 3-stream collection sites campus-wide with pictorial signage and education.	Increased collection and separation of materials to ramp up recycling and compost campus-wide.	<i>Facilities and Sustainability Office</i>
22	Create a glove recycling program in science classrooms, laboratories and food service.	Increase diversion of waste from the landfill, meeting CalRecycle and CSU mandates.	<i>Sustainability Office, Academics, Food Service Provider</i>
23	Develop an Outreach and Education Program be implemented along with the roll out of standardized and centralized collection sites. This is a mandate from CalRecycle for 2017.	Increased awareness toward increased diversion of waste from the landfill, meeting CalRecycle and CSU mandates.	<i>Sustainability Office, Housing and Res Life</i>
24	Establish Universal Waste Collection be set up in key building lobbies such as the residence halls, library, Student Center, Chapman, Ocean Hall, Student Services, VPA, and the Recreation Center. Facilities will collect the Universal wastes, consolidate it in their warehouse and coordinate with haulers twice yearly for collection.	Significant rise in collection and tracking of diversion through re-use and/or recycling of electronics, batteries, fluorescent light tubes and printer cartridges to meet mandates.	<i>Facilities, Sustainability Office</i>
25	Develop a Red List that excludes the use of carcinogens, teratogens and endocrine disruptors in building materials or as operational materials. If there are no other viable alternatives, or it is cost prohibitive, exceptions to the rule could be petitioned from the President's Sustainability Committee.	Reduction in hazardous wastes and toxic materials. Improved student and employee health.	<i>Academics, Sustainability Office, Campus Planning and Development</i>
26	Advocate for CSU policy to incorporate contractors and campus partners disclose red list items as part of project general conditions	Reduction in hazardous wastes and toxic materials. Improved student and employee health.	<i>Academics, Sustainability Office, Campus Planning and Development</i>
27	Measure total carbon impact on an initial pilot new building, in conjunction with an environmental class or student Capstone projects. From the LCC: "The Community must account for the total embodied carbon (tCO 2e) impact from the construction of all Community infrastructure (built or projected) and Community-owned facilities (built or projected) through a one-time carbon offset within the project boundary." Academic 3 would be an ideal pilot project for both the embodied carbon and the red list pilot implementation.	Prepare to meet LCC standards.	<i>Academics, Sustainability Office, Campus Planning and Development</i>

28	It is recommended that the University develop a purchasing policy and building design standards where materials are sourced using trusted third parties (Attachment C).	Prepare to meet LCC standards and reduce inputs that generate waste to meet CSU and State mandates.	<i>Procurement, Sustainability Office, Campus Planning and Development</i>
29	For both building and operations, it is recommended that the University utilize consultants and contractors that are local and source a high percentage of materials locally.	Prepare to meet LCC standards.	<i>Procurement</i>
30	Identify a responsible party to collect litter from parking lots throughout campus	Reduce litter and meet State 2027 Trash Amendment to prohibit trash discharge to storm water	<i>UPD, Facilities</i>
31	Request reports from campus vendors that allow the sustainability feature to be easier distinguished and analyzed. Specifically, the items identified on the buy recycled mandate (metals, lubricating oil etc.)	Meet SABRC requirements	<i>Procurement and Business Services</i>
32	Collect batteries and printer cartridges in the lobbies of specific key building lobbies such as the residence halls, library, Student Center, Chapman, Ocean Hall, Student Services, VPA, and the Recreation Center alongside the 3-stream collection bins. Battery collection bins will be clearly labeled with "Universal Waste: Spent Batteries", with the exception of East Campus housing, where batteries are collected curbside in a clear plastic bags.	Track and achieve diversion targets	<i>Facilities, Procurement and Business Services</i>
33	Collect electronic waste in key building noted above, next to the 3-stream waste receptacles. E-waste can also be collected in a crate clearly labeled Electronic Waste	Track and achieve diversion targets	<i>Facilities, Procurement and Business Services</i>

# Attachment B - Stakeholder Presentation Example—Facilities, June 22, 2017

California State University  
MONTEREY BAY

## Materials Management and Conservation Plan

CSUMB 2017

California State University  
MONTEREY BAY

Campus Goals

INTERNATIONAL LIVING FUTURE INSTITUTE

stars  
a program of aashe

U.S. GREEN BUILDING COUNCIL  
LEED CERTIFIED  
USGBC



California State University  
MONTEREY BAY

## Overview

- Desired outcome of MMCP?
  - Describe the current flow of the materials system, make recommendations for improving efficiency of the materials use in order to meet State mandates and CSU goals.
  - Address relevant elements of the Living Community/Building Challenge
  - Provide a resources and action steps for meeting State mandates and CSU goals
- Desired Outcomes of this meeting?
  - Educate and Inform
  - Receive input for MMCP and discuss possible recommendations for improvement
  - Explore expectations and opportunities for LCC/LBC



California State University  
MONTEREY BAY

## Why are you here?

- This will be your plan.
- It will change the way you make decisions about what materials to purchase
- It will change the way you manage that material when you're done with it
- You know best what changes are feasible at CSUMB. You will have the best ideas.
- This will be an iterative process. We can revisit and build on our successes.

California State University  
MONTEREY BAY

## Let's talk about sourcing materials

California State University  
MONTEREY BAY

## Increasing Regulations

- CSU Sustainability Policy Goals:
  - Reduce solid waste disposal by 50% by 2016 and 80% by 2020.
  - Move to zero waste, 90% diversion from landfill.
- CalRecycle Requirements (State of California)
  - Annual report
  - Mandatory recycling, 75% waste diverted by 2020
  - 2017: mandatory composting
  - 2017: mandatory receptacles, signage, education and staffing

## Third Parties for Sourcing



## Environmentally Preferable Purchasing - Questions



- Local source?
- Reusable?
- Minimizes waste?
- Minimizes exposure to toxins?
- Reduces energy and water use?
- Prevents pollution?
- Made of recycled materials?
- Recyclable?

## Living Community Challenge - Materials



- Red List – bans specific toxic materials, chemicals
- Embodied Carbon Footprint – account for total carbon impact, construction through carbon offset
- Responsible Industry – raw materials certified by third party, use of “Declare Products”
- Living Economy Sourcing – consultants and percentage of materials sourced locally
- Net Positive Waste – reduce or eliminate waste in all phases of project (design through end of life)

## EPP Examples



- LED lighting versus compact fluorescent (hazardous waste avoidance and energy savings)
- Green Seal Certified janitorial products and bathroom papers (safer, higher recycled content)
- Low or no VOC paint (less pollution, safer for workers)
- Reusable to-go ware versus disposables
- Office supplies that are built to last, are recyclable or can be donated
- Furniture that is built to last with low embodied carbon
- Leasing central large printers that are serviced and built to last rather than individual office printers that are engineered for obsolescence



## Let's talk about Strategies to Reduce Waste through Distribution and Procurement

## Reuse and Donations

- Appliance repair
- Move Out
- Clothing swaps
- Food donations



## Sources of Waste at CSUMB

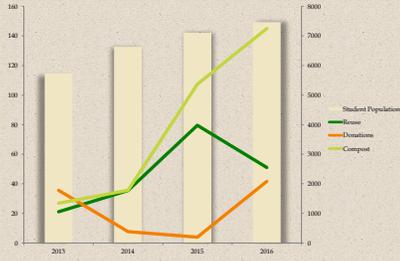


- Offices/residential halls/landscaping
- Facilities
- Hazardous waste
- Universal wastes: batteries/fluorescent lights/e-waste
- Food services
- Illegal dumping
- Construction and demolition waste

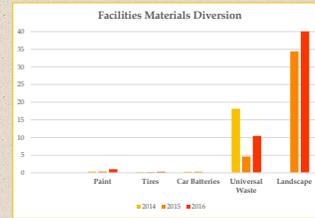
## Let's Talk about our Material End Uses



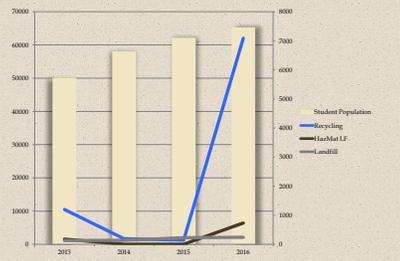
## Materials Reuse compared to Student Population (in tons)



## Recycling, Compost, Reuse



## Waste Data compared to Student Population (in tons)



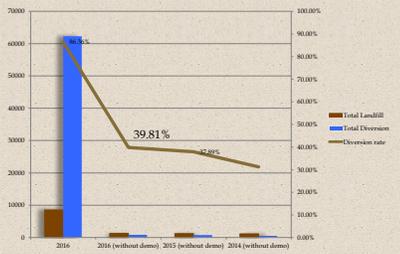
## Also New for 2017...

- Mattress Recycling!



## Waste Data

Diversion Rates with Demolition and Without

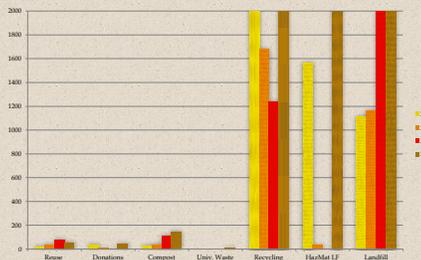


## Indoor Collection



Dress up Bins  
And  
Every-day Bins

## Post Use Destination



## Exterior and Event Bins



## Other Exterior Bins Ideas



UC Santa Barbara

Cal State East Bay



## Feedback Time

- Please give us your feedback on the selected bin types.
- What are your thoughts on the locations and numbers of bins and dumpsters?
- Do you have specific suggestions for bin signs?
- How can we make sure to collect all compostable materials?
- How can we reduce hazardous waste on campus?

*How do you know you're sorting right?*



Flip the Ratio to Recycle Right

## Final Thoughts and Next Steps

- Materials Management and Conservation Plan draft – end of summer
- Review and Comments
- Final MMCP draft
- Install recommendations by priority

## Signage



## Outdoor Bin Installation Considerations

- Determine budget
- Finalize type of bin, locations and numbers
- Choose date of installation; deadline for ordering
- Identify who orders, who installs

Some key themes that were common among stakeholder groups were

1. Paper use was thought to be extremely high. Opportunities for using electronic sharing to replace printing were not being taken. Most groups talked about the paper-heavy process for getting travel approval, for instance.
2. Need for a reuse store where departments could share surplus items. There were discussions about the “end of year frenzy” to spend the last of the budget on supplies. This results in unnecessary purchase and waste. In addition, those responsible for departmental purchases were surveyed. Their responses are available in Attachment B. In that survey, 100% of respondents claimed they would use a reuse store. Many indicated that a range of items could be purchased from vendors and there were currently no mandates for environmentally preferable materials.
3. Housing
  - a. Move Out East Campus Housing and the Residence Halls staff or residents? needed more time for move-out to ensure proper materials sorting. However, this would have an impact on the Facilities Services and Operations (FSO) in getting repair work done over the summer. An extra day or two beyond finals week would ensure that students didn’t put couches on the curb to rot before an organized haul could be arranged to the “Last Change Mercantile” at the landfill or Goodwill. It would also allow for a day where the collection of materials for donation and reuse could be better coordinated, and extra patrolling for illegal dumping arranged during move-out, as it is currently for the residence halls. Additionally, more outreach could be done during move-in to ensure that materials that are simply going to be thrown away quickly are not purchased.
  - b. Signage - Many groups thought that the signage and collection sites for materials could be better,
  - c. Universal Waste collection - was not occurring in most buildings.
  - d. ECH Coordination - A problem that came up often was coordination with the Corporation Housing Office, such as at East Campus housing and Dining Services. There is currently no Corporation liaison with FSO. This would be critical to ensure that waste is reduced campus-wide. From what these groups explained, it seems that less thought has been put toward diversion of waste in Corporation functions such as East Campus Housing and Dining Services.
4. Bin signage - Many groups pointed out that proper bins are not available and that signage and education is lacking around campus with respect to recycling and composting. Some pointed out that the bins are not co-located, making it difficult to decide which bin to use, resulting in contaminated recycling.
5. Contract management and training - Some pointed out that they have seen custodians dumping bags into the wrong bins, negating any sorting that occurred inside the building and contaminating recycling. Training of both custodial and CSUMB staff is needed.

Key stakeholder groups ideas by department:

- Campus Planning and Development (including construction)
  - Small construction projects could be made to follow the same requirements as large projects, and so improve diversion and tracking.
  - A small building could serve as a pilot project to showcase exemplary environmental construction, including the Living Community Challenge standards.
  - Regarding the Living Community Challenge imperatives: most materials are not sourced locally; a review might suggest local purchasing opportunities. The LCC Red List could probably be achieved; difficulties might include lead, mercury and PVC pipe, which are currently on campus.
  - An on-campus “store” for used items could be created.
- Events and Athletics
  - A Green Events Guide is currently being developed and will be useful when finished.
  - The participants in charge of Events needed additional bins for their events.
  - Each group present indicated the number of on-hand bin stations they would like, which could be used for smaller events without impact to facility services.

- Athletics participants requested help sourcing and donating uniforms.
- Facilities (including waste service providers and contractors)
  - The current system to track and dispose of universal waste is insufficient; a department or individual must take responsibility for it.
  - There is a large amount of waste creating during move-out on East Campus. The residence halls have found some solutions to these problems, but not East Campus. The problems of move-out and ensuing illegal dumping at East Campus are brought on by the pressure and lack of time at the end of the term.
  - A system to recycle and track mattresses from all residence halls (including East Campus) must be implemented to meet state mandates.
  - Coordination between different FSO managed contracts is not as effective as it could be, landscapers and custodians should be better trained to support waste reduction goals
  - Vehicle procurement and disposal
  - Parts
  - Used oil recycling
  - Car Batteries
- Faculty
  - Faculty should increase use of paperless electronic portal for assignments. I-learn.
  - Requests for travel and conferences are extremely paper heavy.
  - We may need to eliminate all options for % recycled content paper except the ones that CSUMB/CSU dictates. Perhaps 50% pcw or higher.
  - Palace Office Supply generates a lot of packaging waste.
  - There are opportunities and interest in integrating learning opportunities related to waste into classroom projects and learning opportunities.
- Food Service Providers
  - Sodexo employees would like to eliminate to-go containers, and plan a review of purchases during the summer.
  - Outdoor event bins would benefit from staffing to improve sorting, and need sandbags so they don't tip over.
  - Better waste education is needed for eating areas.
  - Catering should ensure that when compostable items are purchased, compost bins are provided. It should be part of the request form.
  - An additional reusable dishware program would be beneficial to provide reusable dishware for smaller events, such as washable, durable plastic plates, cubs and cutlery that can form a "sustainable catering kit".
  - Safety concerns must be considered for food donations, but they are not insurmountable.
- Health, Wellness, and Social Justice
  - The number of water filling stations could be increased to support the use of reusable water bottles
  - CSUMB could sponsor e-waste collection events.
  - Move Out could be improved with better organization, linking proper sorting to the housing deposit return, and offering buyback of books.
  - Continue program to incorporate litter pick up with the workplace walk-off event held every Spring.
  - This group indicated support of transitioning from single use desk side printers and desk-side waste bins to centralized systems, where possible. There are health benefits with getting up and moving from your desk.
  - Need for increased awareness of the intersection between waste and social justice.
- President's Sustainability Committee
  - A "Green List", or Sustainable Materials Guide, could be developed.

- Administrative systems that encourage waste such as unnecessary forms and “use it or lose it” budgeting should be addressed.
- A system to organize previously used items for reuse should be developed.
- Procurement and Purchasing
  - An analysis of paper use suggested that it was very high compared to other institutions. Recommendations to reduce paper use included eliminating desktop printers, introducing paperless systems and signature processes, and creating a subcommittee to help institute these changes.
  - Palace Business Solutions, the new CSUMB vendor, offers numerous ways to increase sustainable purchasing, including a sustainable purchasing audit, ordering tips, and taking back packaging.
  - There is currently no efficient way to locate items for reuse; a list serve with information on items available may work.
  - Administrative support staff who have purchasing cards (about 100 individuals) could be surveyed to obtain more information about purchasing operations.
  - Training and messaging could be provided throughout the year using twice yearly in-person training, list serve, and/or handbook (all existing).
- Residential Life and Student Affairs
  - For Move Out, allow an additional 1-2 days before students have to vacate their rooms to allow time for proper disposal of belongings.
  - Student outreach could be improved with a multi-tiered approach involving emails, Residential Advisors, and outreach to freshman parents.
  - Outreach should also target ways to get students to care about waste; for example, Resident Advisors could create competitions with incentives such as a pizza party.
  - International students and freshmen would especially benefit from donations or an on-campus thrift store; the Plan should target these groups.
  - An on-campus thrift store would be difficult to manage; issues include finding space, managing the store, rodent/pest issues, and moving items to and from the store.

## Attachment C - Survey of Administrative Staff Responsible for Purchases

Summary: The survey re-affirmed that CSUMB purchases mostly paper and printing cartridges. 100% of respondents said they would be willing to check a campus website or list serve for reusable/surplus materials before purchasing if it were easy to do so. Also, 68% of respondents indicated that signage and education for waste bins were lacking while 68% said they had enough bins. 55% of respondents were amenable to using centralized waste bins. A couple of respondents qualified their survey responses by adding that they save quite a bit of paper by using Google docs and Google spreadsheets.

CSUMB Buyer Survey

SurveyMonkey

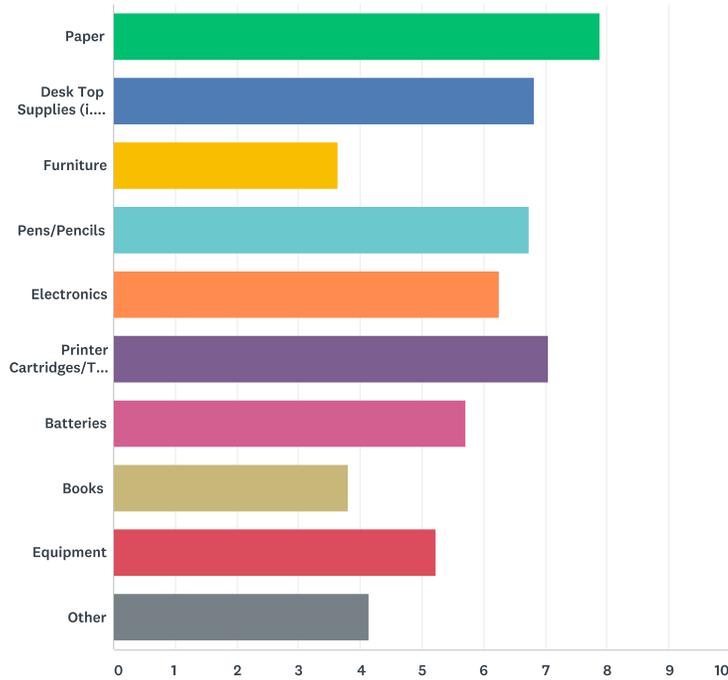
### Q1 My Department is

Answered: 28 Skipped: 0

#	RESPONSES	DATE
1	Student Disability Resources	8/31/2017 7:04 PM
2	University Corporation Business & Admin. Services	8/30/2017 4:43 PM
3	The Office of Inclusive Excellence	8/25/2017 9:46 AM
4	Education and Leadership	8/23/2017 12:03 PM
5	Center for Academic Technologies	8/23/2017 9:06 AM
6	College of Education	8/22/2017 4:36 PM
7	Music and Performing Arts	8/22/2017 3:12 PM
8	Liberal Studies	8/22/2017 3:02 PM
9	First Year Seminar	8/22/2017 2:31 PM
10	science illustration, Extended Education	8/22/2017 2:12 PM
11	IT	8/22/2017 2:01 PM
12	Visual & Public Art Department - Bldgs. 71,72 & 73	8/22/2017 1:52 PM
13	Athletics	8/22/2017 1:37 PM
14	Network Services	8/22/2017 1:15 PM
15	Budget Office	8/22/2017 1:12 PM
16	Academic & Centralized Scheduling	8/22/2017 1:08 PM
17	Dean of Students -1054	8/22/2017 1:04 PM
18	Academic Affairs	8/22/2017 12:52 PM
19	School of World Languages and Cultures	8/22/2017 12:49 PM
20	University Development	8/22/2017 12:35 PM
21	Department of Education and Leadership	8/22/2017 12:27 PM
22	Institute for Innovation & Economic Development	8/22/2017 12:21 PM
23	Parking Services #1081	8/22/2017 11:59 AM
24	College of Extended Education & International Programs (Marketing)	8/22/2017 11:56 AM
25	CSU COAST	8/22/2017 11:56 AM
26	World Theater	8/22/2017 11:54 AM
27	University Personnel	8/22/2017 11:48 AM
28	CPD	8/22/2017 11:45 AM

### Q2 What item does your department buy and spend the most on? (Rate from 1, most purchased to 10, least purchased)

Answered: 28 Skipped: 0



	1	2	3	4	5	6	7	8	9	10	TOTAL	SCO
Paper	41.67% 10	8.33% 2	12.50% 3	8.33% 2	12.50% 3	8.33% 2	4.17% 1	0.00% 0	0.00% 0	4.17% 1	24	7
Desk Top Supplies (i.e., staplers, tape, sticky notes, etc)	4.76% 1	19.05% 4	14.29% 3	28.57% 6	14.29% 3	4.76% 1	4.76% 1	0.00% 0	9.52% 2	0.00% 0	21	6
Furniture	5.26% 1	0.00% 0	10.53% 2	5.26% 1	0.00% 0	0.00% 0	15.79% 3	15.79% 3	31.58% 6	15.79% 3	19	3
Pens/Pencils	9.09% 2	18.18% 4	22.73% 5	4.55% 1	18.18% 4	9.09% 2	4.55% 1	9.09% 2	0.00% 0	4.55% 1	22	6
Electronics	10.53% 2	21.05% 4	5.26% 1	5.26% 1	5.26% 1	21.05% 4	21.05% 4	10.53% 2	0.00% 0	0.00% 0	19	6
Printer Cartridges/Toner	8.70% 2	13.04% 3	21.74% 5	26.09% 6	4.35% 1	13.04% 3	13.04% 3	0.00% 0	0.00% 0	0.00% 0	23	7
Batteries	0.00% 0	16.67% 4	8.33% 2	4.17% 1	41.67% 10	0.00% 0	4.17% 1	12.50% 3	8.33% 2	4.17% 1	24	5
Books	0.00% 0	4.76% 1	9.52% 2	0.00% 0	4.76% 1	14.29% 3	9.52% 2	19.05% 4	28.57% 6	9.52% 2	21	3

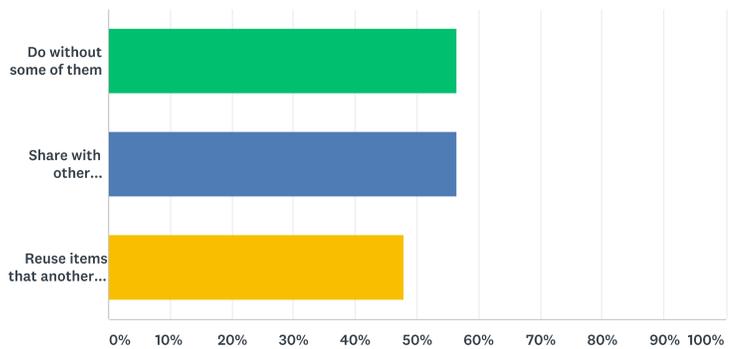
CSUMB Buyer Survey

SurveyMonkey

Equipment	14.29% 3	14.29% 3	4.76% 1	0.00% 0	4.76% 1	9.52% 2	9.52% 2	23.81% 5	9.52% 2	9.52% 2	21	5
Other	14.29% 3	0.00% 0	0.00% 0	9.52% 2	4.76% 1	14.29% 3	9.52% 2	4.76% 1	9.52% 2	33.33% 7	21	4

### Q3 How could the department purchase less of these items? Could you (select all that apply)

Answered: 23 Skipped: 5



ANSWER CHOICES	RESPONSES
Do without some of them	56.52% 13
Share with other departments	56.52% 13
Reuse items that another department no longer needs	47.83% 11
Total Respondents: 23	

#	PLEASE EXPLAIN:	DATE
1	Have campus purchase a percentage of alternate classroom furniture when it buys any classroom's furniture.	8/31/2017 7:04 PM
2	We could probably print less and use less sticky notes	8/30/2017 4:43 PM
3	Most of your supplies are a one time use.	8/22/2017 3:02 PM
4	We are already extremely frugal and do not purchase what we do not ues.	8/22/2017 2:12 PM
5	VPA uses paints & chemical supplies that other departments don't use. We are cutting back on copy paper and do re-use most of our supplies sparingly.	8/22/2017 1:52 PM
6	There are three departments sharing the same suite/office space. However, some of the department manager/directors, are unwilling to "waste" their department's funds on items that may be used by someone from another department. Due to this, each department purchases supplies independently, which means we have large numebrs of pens, post-it notes, paper clips, etc. floating stored in different places around the office when we could rotate purchasing supplies or create a communal supply pool to make purchases from.	8/22/2017 1:12 PM
7	We purchase minimally, but are already trying to reduce spending.	8/22/2017 1:08 PM
8	We could reduce the amount of paper waste if administrative work was managed electronically.	8/22/2017 1:04 PM
9	Share unused items across campus	8/22/2017 12:49 PM
10	We have a lot of desktop supplies and filing accessories that get discarded after an employee leaves the department. We hold only hold on to some items that we know will be reused.	8/22/2017 12:35 PM
11	We are a small department and have to purchase all of the items for the events that we run. We are on same floor with SCD and also part of the COB and could save some by sharing with them.	8/22/2017 12:21 PM
12	We have taken a conservative approach, if we don't have it can we do without it? Before placing any orders.	8/22/2017 11:59 AM
13	I don't believe we can do without the items above (we considered computers and printers to be electronics)	8/22/2017 11:56 AM

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14	Too many individual printers. We could do with less.	8/22/2017 11:54 AM
15	Teaching people to print less is crucial. HR has some need to use a lot of paper, but there are ways we could decrease our numbers. This would impact paper and toner purchases.	8/22/2017 11:48 AM

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### Q4 Which items and/or vendors involve unnecessary waste (excessive packaging, parts that are disposable)?

Answered: 26 Skipped: 2

#	RESPONSES	DATE
1	Amazon and HP.	8/31/2017 7:04 PM
2	n/a	8/30/2017 4:43 PM
3	Toners Cartridges	8/25/2017 9:46 AM
4	Palace	8/23/2017 12:03 PM
5	Equipment and electronics	8/23/2017 9:06 AM
6	NA	8/22/2017 3:12 PM
7	equipment	8/22/2017 3:02 PM
8	n/a	8/22/2017 2:12 PM
9	excessive packaging	8/22/2017 2:01 PM
10	Due to the type of products we order, the packing is necessary and not excessive.	8/22/2017 1:52 PM
11	Amazon	8/22/2017 1:37 PM
12	Occasionally when parts and pieces are ordered, they do come with excessive packaging, but it's hit and miss.	8/22/2017 1:15 PM
13	Electronic devices (computers, printers, monitors, etc.).	8/22/2017 1:12 PM
14	Computer Ink cartridges.	8/22/2017 1:08 PM
15	n/a	8/22/2017 1:04 PM
16	Office supplies deliveries	8/22/2017 12:52 PM
17	None that I am aware of	8/22/2017 12:49 PM
18	Most of our vendors are concious of the packaging waste.	8/22/2017 12:35 PM
19	boxes	8/22/2017 12:27 PM
20	not sure	8/22/2017 12:21 PM
21	Palace	8/22/2017 11:59 AM
22	Desktop supplies often have the most amount of unnecessary packaging	8/22/2017 11:56 AM
23	printer toner	8/22/2017 11:56 AM
24	none	8/22/2017 11:54 AM
25	Amazon is probably the least sustainable since they often ship things in multiple boxes. Palace is great at shipping things together.	8/22/2017 11:48 AM
26	palace	8/22/2017 11:45 AM

### Q5 Which items are short-lived and thrown out quickly?

Answered: 27 Skipped: 1

#	RESPONSES	DATE
1	Disposable batteries because many "rechargeables" are not.	8/31/2017 7:04 PM
2	Paper, sticky notes, pens	8/30/2017 4:43 PM
3	Paper	8/25/2017 9:46 AM
4	Batteries	8/23/2017 9:06 AM
5	batteries	8/22/2017 4:36 PM
6	paper items	8/22/2017 3:12 PM
7	pens	8/22/2017 3:02 PM
8	bateries	8/22/2017 2:31 PM
9	n/a	8/22/2017 2:12 PM
10	NA	8/22/2017 2:01 PM
11	batteries seem to go pretty fast, there's no way of knowing how long they sit on the shelves before purchased.	8/22/2017 1:52 PM
12	Printer Toner	8/22/2017 1:37 PM
13	batteries	8/22/2017 1:15 PM
14	Post-it notes, highlighters, pens, printer paper	8/22/2017 1:12 PM
15	None.	8/22/2017 1:08 PM
16	n/a	8/22/2017 1:04 PM
17	Kleenex. Post its	8/22/2017 12:52 PM
18	None that I am aware of	8/22/2017 12:49 PM
19	desk supplies, especially when we have a high turnover rate among our employees.	8/22/2017 12:35 PM
20	boxes	8/22/2017 12:27 PM
21	paper, refills for name tags, pre-cut labels	8/22/2017 12:21 PM
22	none	8/22/2017 11:59 AM
23	Short-term flyers	8/22/2017 11:56 AM
24	none	8/22/2017 11:56 AM
25	toner, batteries,	8/22/2017 11:54 AM
26	Pens! I can't get my dept to use pens with reusable ink cartridges. Sticky notes are super popular and used up quickly. Also, people don't like reusing hanging folders, file folders, etc.	8/22/2017 11:48 AM
27	paper	8/22/2017 11:45 AM

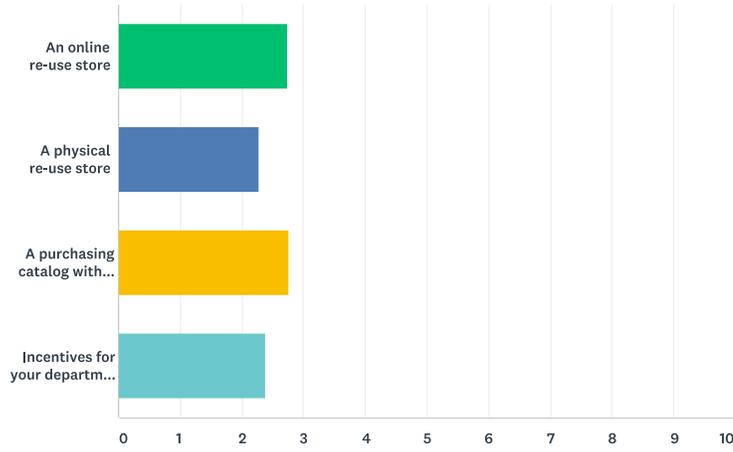
### Q6 Which items include toxins and cannot be disposed in the landfill or recycled?

Answered: 26 Skipped: 2

#	RESPONSES	DATE
1	Batteries, plastic furniture and supplies.	8/31/2017 7:04 PM
2	n/a	8/30/2017 4:43 PM
3	Batteries, Toner Cartridges	8/25/2017 9:46 AM
4	Batteries	8/23/2017 12:03 PM
5	Batteries, some equipment and electronics	8/23/2017 9:06 AM
6	batteries & ink cartridges	8/22/2017 4:36 PM
7	NA	8/22/2017 3:12 PM
8	White Board Markers	8/22/2017 3:02 PM
9	n/a	8/22/2017 2:12 PM
10	NA	8/22/2017 2:01 PM
11	Our paints and chemicals cannot be disposed of in the landfills.	8/22/2017 1:52 PM
12	Printer Toner	8/22/2017 1:37 PM
13	not applicable	8/22/2017 1:15 PM
14	None that I know of. Even electronic devices (e-waste) and printer cartridges can be recycled appropriately.	8/22/2017 1:12 PM
15	batteries	8/22/2017 1:04 PM
16	Batteries, toner cartridges	8/22/2017 12:52 PM
17	toner cartridges	8/22/2017 12:49 PM
18	toner, batteries	8/22/2017 12:35 PM
19	toner	8/22/2017 12:27 PM
20	Printer ink and batteries. We recycle them.	8/22/2017 12:21 PM
21	batteries, we have a receptacle for them	8/22/2017 11:59 AM
22	Printer toner	8/22/2017 11:56 AM
23	toner, printers, laptops,	8/22/2017 11:56 AM
24	electronic	8/22/2017 11:54 AM
25	Toner (easy to recycle), batteries, certain lightbulbs	8/22/2017 11:48 AM
26	ink cartridges	8/22/2017 11:45 AM

**Q7 What would help you make more sustainable purchases or not need to bring materials onto campus and therefore generate less waste? (rate each by effectiveness, 1 most effective, 4 least effective)**

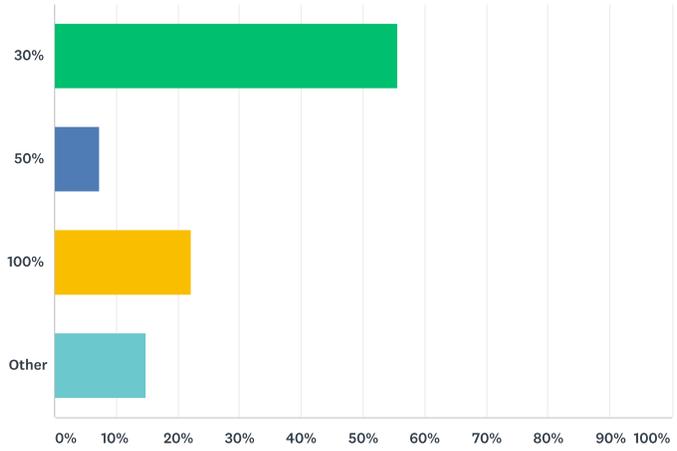
Answered: 26 Skipped: 2



	1	2	3	4	TOTAL	SCORE
An online re-use store	26.09% 6	30.43% 7	34.78% 8	8.70% 2	23	2.74
A physical re-use store	20.83% 5	20.83% 5	25.00% 6	33.33% 8	24	2.29
A purchasing catalog with the most sustainable options highlighted	33.33% 7	28.57% 6	19.05% 4	19.05% 4	21	2.76
Incentives for your department for purchasing less materials	29.17% 7	12.50% 3	25.00% 6	33.33% 8	24	2.38

### Q8 Our department buys copy paper with the following recycled content (select one):

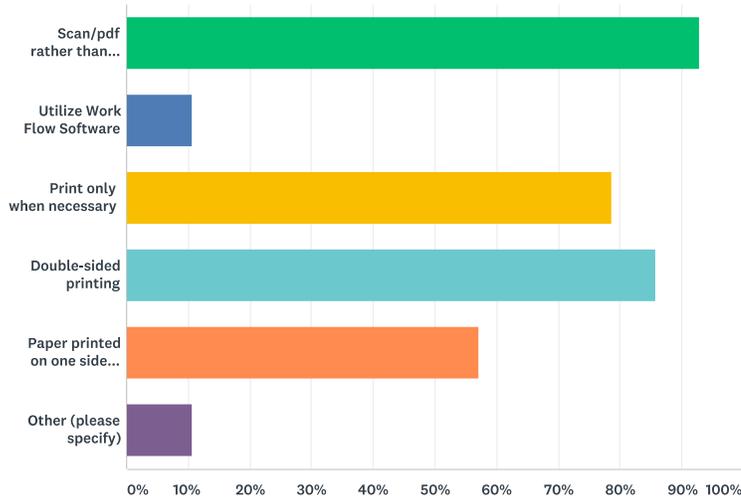
Answered: 27 Skipped: 1



ANSWER CHOICES	RESPONSES	
30%	55.56%	15
50%	7.41%	2
100%	22.22%	6
Other	14.81%	4
TOTAL		27

### Q9 Our department uses the following strategies to consume less paper (select all that apply):

Answered: 28 Skipped: 0

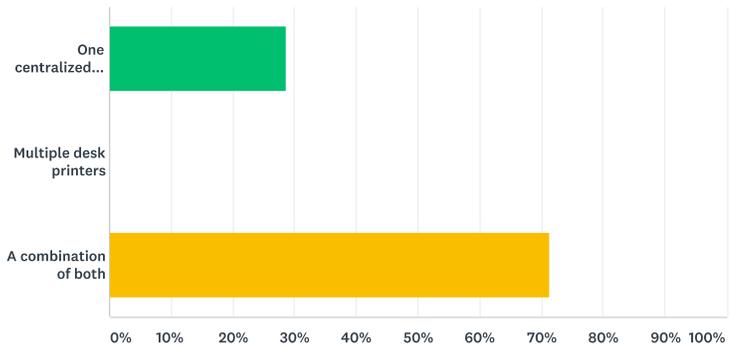


ANSWER CHOICES	RESPONSES
Scan/pdf rather than print	92.86% 26
Utilize Work Flow Software	10.71% 3
Print only when necessary	78.57% 22
Double-sided printing	85.71% 24
Paper printed on one side reused for drafts or scratch paper	57.14% 16
Other (please specify)	10.71% 3
Total Respondents: 28	

#	OTHER (PLEASE SPECIFY)	DATE
1	a bizillion Google worksheets and docs	8/31/2017 7:04 PM
2	Use black ink rather than color wherever possible	8/22/2017 11:56 AM
3	Use Google Drive to share files	8/22/2017 11:56 AM

### Q10 Our department uses (select only one):

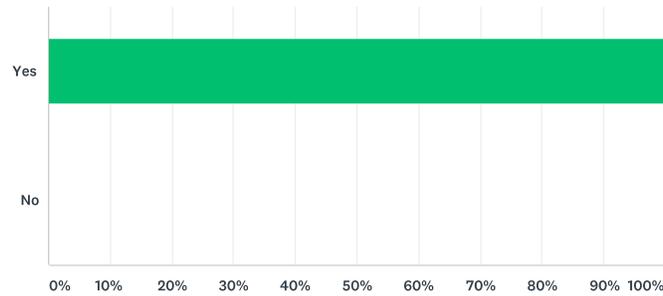
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
One centralized printer	28.57%	8
Multiple desk printers	0.00%	0
A combination of both	71.43%	20
TOTAL		28

Q11 I would be willing to check a campus website or list serve for reusable/surplus CSUMB materials before purchasing if it were easy to do so.

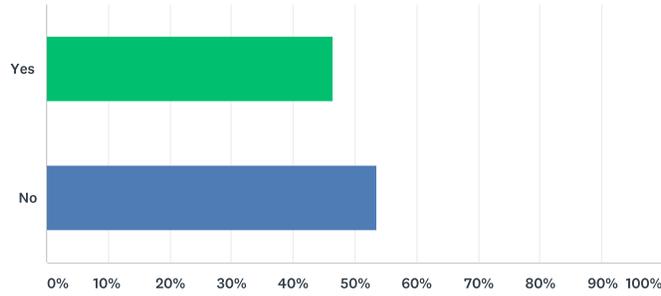
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	100.00%	28
No	0.00%	0
TOTAL		28

### Q12 Does your department have surplus supplies that you no longer need?

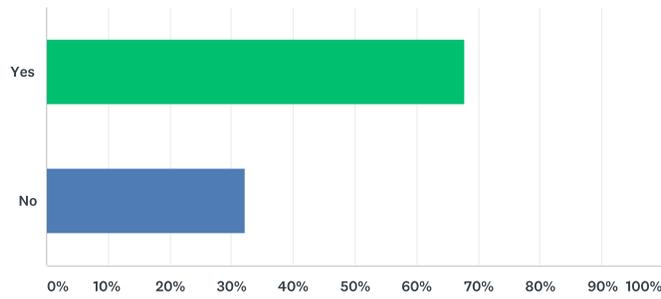
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	46.43%	13
No	53.57%	15
TOTAL		28

### Q13 We have adequate recycling, waste and compost bins in our department.

Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	67.86%	19
No	32.14%	9
TOTAL		28

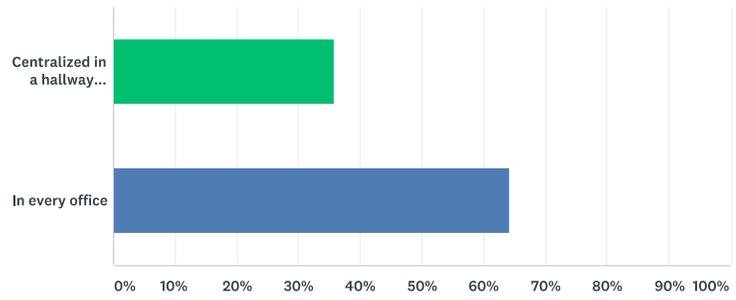
## Q14 We need the following bins:

Answered: 14 Skipped: 14

#	RESPONSES	DATE
1	3 blue recycling bins for paper for under desks	8/31/2017 7:04 PM
2	We could use a larger recycling bin	8/30/2017 4:43 PM
3	Compost	8/23/2017 12:03 PM
4	Compost	8/23/2017 9:06 AM
5	NA	8/22/2017 3:12 PM
6	Larger recycle bins for boxes	8/22/2017 1:37 PM
7	Larger recycle bins for boxes and compostable bins in the kitchen areas.	8/22/2017 1:12 PM
8	Compost bins	8/22/2017 1:04 PM
9	compost	8/22/2017 12:52 PM
10	N/a	8/22/2017 12:49 PM
11	surplus desk accesories-I've been having facilities pick-up from time to time when we run out of storage space.	8/22/2017 12:35 PM
12	compost	8/22/2017 11:56 AM
13	recycling and compost	8/22/2017 11:54 AM
14	Compost	8/22/2017 11:48 AM

### Q15 Our bins are (select one):

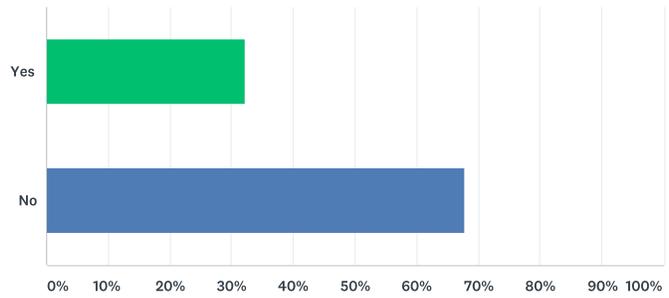
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES
Centralized in a hallway and/or break room	35.71% 10
In every office	64.29% 18
TOTAL	28

### Q16 There is signage with our bins explaining where to place materials.

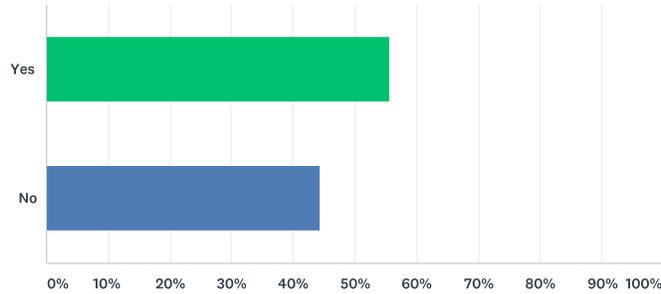
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	32.14%	9
No	67.86%	19
TOTAL		28

Q17 My Department would be amenable to having fewer bins in offices and rooms and have bins located centrally so that we can have better outreach signage and less work for custodial staff.

Answered: 27 Skipped: 1



ANSWER CHOICES	RESPONSES	
Yes	55.56%	15
No	44.44%	12
TOTAL		27

**Q18 Thanks very much for taking the time to take our survey. We look forward to summarizing your feedback into our Materials Management and Conservation Plan. If you have additional feedback for us, please provide it here.**

Answered: 10 Skipped: 18

#	RESPONSES	DATE
1	We already drag our trash and recycling bins to main hallway each week for custodial staff, and drag them back to desks.	8/31/2017 7:04 PM
2	Thanks for doing this survey	8/30/2017 4:43 PM
3	Our building is too small to accommodate centralized bins.	8/23/2017 9:06 AM
4	I think this survey is very vague.	8/22/2017 3:02 PM
5	Concerned that recycled and waste materials are collected in the same refuse bag. We would like to know that recycled materials are actually recycled!	8/22/2017 2:12 PM
6	This survey keeps erasing my entries in some of these questions. Not sure how to fix this. Thanks,	8/22/2017 1:52 PM
7	Improving workflow management for administrative services would dramatically reduce waste across the student affairs division, and likely the whole university. I'd be open to helping lead this change on campus, if the university were to buy-in to leading this change.	8/22/2017 1:04 PM
8	With parking less convenient to office, online purchasing with delivery is essential. We cannot go pick up items.	8/22/2017 12:21 PM
9	NO PLASTIC WATER BOTTLES!!!!	8/22/2017 11:56 AM
10	Improve communications between committees & facilities	8/22/2017 11:54 AM

## Attachment D - Recommended Third Party Certifications

Certification	Description
Biodegradable Products Institute	Certification means that the product will biodegrade completely, quickly, and safely
Fair Trade	Fair Trade certification indicates products that are socially and environmentally sustainable. While best known for coffee, Fair Trade Certified has grown to encompass many products, from tea to chocolate to body care to wine.
Seafood Watch	Fish that are recommended by Seafood Watch are fished or farmed in ways that have less impact on the environment.
U.S.D.A. Organic	Organic products overseen by the US Department of Agriculture, and produced using only allowed substances from the USDA National List of Allowed and Prohibited Substances, and following USDA regulations.
Energy Star	Energy Star certification of products and appliances by the U.S. Environmental Protection Agency (EPA) signifies superior energy efficiency.
EPEAT	EPEAT is a rating system for electronic products that addresses the full product lifecycle, from design and production to energy use and recycling.
WaterSense	WaterSense is a U.S. Environmental Protection Agency (EPA) program designed to encourage water efficiency in the United States through the use of a special label on consumer products.
GreenSeal	Certification rates primarily cleaning products and services by performance, health, and environmental protection criteria.
Forest Stewardship Council	FSC certification indicates products produced from responsibly managed forests.
Sustainable Forestry Initiative	SFI promotes sustainable forest management. Its chain of custody certification tracks percentage of fiber from certified forests, certified sourcing, and post-consumer recycled content.
UL GreenGuard	UL GreenGuard certification identifies interior products and materials that have low chemical emissions.
USDA Certified Biobased Product	This certification identifies products other than food or feed that are composed wholly or primarily of biological products.
e-Steward	The E-Steward program defines and promotes best practices for reuse and recycling of electronic waste; certified e-Steward sites abide by these practices.

## Attachment E – GreenWaste Waste Franchise Agreement

### GENERAL INFORMATION

#### 3.1.1 PURPOSE AND INTENT

This Request for Proposals (RFP) is being issued by the California State University, Monterey Bay (CSUMB) to select a qualified contractor to provide the following mandatory services:

1. Collect refuse and recyclables
2. Provide special increased frequency and/or additional dumpsters for special events
3. Provide green waste service to East Campus Housing (ECH) for sale units
4. Provide education and outreach to increase recycling volumes and increase waste diversion
5. Provide Main Campus and ECH residential areas Household Hazardous Waste collection 4 times per year

The Proposer may choose to provide the following optional services:

1. On call bulky item pick up rates
2. Mattress pickup rates
3. Compost food waste collection from dining areas

The campus is requesting service that will help it meet the following statewide and California State University-wide (CSU) waste diversions goals.

#### California Assembly Bill (AB) 341 (Chapter 476, statutes of 2011)

- California has set an ambitious goal of recycling 75 percent of its solid waste generated be source-reduced, recycled or composted by 2020.

#### CSU-Wide Waste Reduction Goals

1. Campuses shall seek to reduce the solid waste disposal rate by 50 percent (PRC § 42921) by 2016, and move to zero waste by 2025.
2. To achieve zero waste, campus practices should encourage environmentally preferred purchasing to use resources that can be reused/recycled to minimize the volume of trash sent to landfill or incinerations, participate in the Cal Buy Recycled program and increase recycled content purchases.

Currently, CSUMB has a single contract for solid waste and recycling collection. The current Agreement is set to expire on June 30, 2012. Services procured pursuant to this RFP will commence on or before September 1, 2012.

Services provided under this Agreement include cart-based regular service for ECH multi-family and single-family residential units and dumpster-based services for the Main Campus academic, administrative and residence hall facilities.

The new Main Campus dumpster service may be adjusted to correspond to the academic calendar and vary with the fluctuating campus population, with increased service during the academic term and decreased service during the holidays and summer.

ECH services will be mandatory for all residents year round and managed by the Alliance Residential Company. The Main Campus service will be managed by the Facilities Services and Operations Department.

### 3.1.2 SCOPE OF SERVICES

CSUMB intends to begin its service on September 1, 2012. Regular services are divided into two groups, ECH cart-based services and Main Campus dumpster-based services. Cart-based services are utilized by the single and multi-family units in ECH while dumpster-based services are utilized on the Main Campus to serve all campus facilities and student residential housing.

For the purposes of this RFP, the minimum required services have been identified as follows:

1. **ECH Residential Cart-Based Services** (sorted into three categories)
  - a. Co-mingled Recyclables
    - glass, aluminum and steel cans, plastic containers, aseptic containers, small scrap metal, film plastic, newspaper, cardboard, white office paper, magazines, junk mail, cereal boxes, and household batteries
  - b. Yard Debris
    - grass clippings, prunings, plant debris, and clean lumber
  - c. Refuse, trash, waste or garbage, mixed solid waste (used interchangeably)
    - all other waste not targeted for recycling
2. **Main Campus Dumpster-Based Services**
  - a. Co-mingled Recyclables (see above)
  - b. Refuse (see above)
3. **Special Event or Project Dumpsters**
  - a. Deliver roll-off recycling and or trash dumpsters for
    - **May Move Out week, August Move In week and/or**
    - Other special projects or events
    - Emptied within 24 hours of notice Monday through Friday and available for weekend service at the same rate.
4. **Provide Education and Outreach for**
  - a. **Three Move events – May, August and January**
  - b. **Summer and Winter semester orientations**
  - c. **Earth Week in April**
  - d. All receptacles (bins and dumpsters) will be appropriately colored and labeled at all times. The campus will not pay for any mislabeled materials.
  - e. **Outreach materials for staff, faculty, students and residents to decrease waste and promote diversion events.**
5. **Household Hazardous Waste (HHW) Outreach and Pickup**

- For ECH and Main Campus residential areas during 4 Move Out events, **or four times during the year as determined by the campus, provide labeled containers and collect the following items:**
  - i. fluorescent tubes & bulbs
  - ii. paint & stains
  - iii. solvents, degreasers & cleaners
  - iv. flammable liquids
  - v. pesticides & herbicides
  - vi. aerosols
  - vii. art & hobby supplies
  - viii. outdated medicines
  - ix. hypodermic needles and other medical sharps transported in a red sharps container
  - x. photographic chemicals
  - xi. thermometers and other mercury-containing devices
  - xii. road and boat flares
  - xiii. oil and oil filters
  - xiv. batteries

Additional desired but not mandatory services include the following as described below:

**6. Bulky Item Pickup**

- On call to pickup service for items such as furniture

**7. Mattress Pickup**

- On call pickup service for mattresses

**8. Food Waste Composting Education and Pickup**

- a. At up to three Main Campus dining locations:
  - **The Dining Commons,**
  - The Otter Bay Restaurant and
  - The Otter Express
- b. A minimum 1 time/week frequency
- c. Provide appropriate type, color, labels and clean food waste bins
- d. Provide training and appropriate labeling for dining staff and dining areas.  
Students will not be sorting food, it will be handled by individual dining staff members

**3.1.3 CUSTOMER SERVICE**

The contractors will provide customer service and electronic billing separated by:

- 1. ECH neighborhoods
  - a. Fredericks Park I,
  - b. Fredericks Park II,
  - c. Schoonover I and II and
  - d. For-sale homes
- 2. Main Campus

- a. The University Corporation-operated buildings and
- b. State-operated buildings

Customer service includes implementing and maintaining community relations/collection education programs, bin labels and colors, providing reports for state required Assembly Bill (AB) 75 waste reporting one month prior to report deadline (currently May 1), compliance with environmental standards, as well as other activities.

Proposals are solicited from qualified contractors with demonstrated experience and qualifications in providing collection of waste, recyclables, yard waste, food compost, customer service and education and outreach such as those required in this solicitation. Moreover, the contractor will need to be flexible and proactive in order to improve such services to help CSUMB reach its waste reduction goals, whenever feasible, throughout the term of the contract.

The contractor will have the flexibility to define the method of collection for each service. For example, this project prescribes weekly collection of residential waste but does not specify whether the collection method should be semi-automated or automated. The contractor will define the method of collection depending on the contractor's assessment of how to provide the most cost-effective proposal.

Customer service will include immediate responsiveness (within the same business day) to CSUMB staff and the campus community inquiries and service needs. Service changes will be made within 24 hours of request.

CSUMB intends to enter into a five-year agreement for services. The selected contractor will be required to provide services from September 1, 2012 through June 30, 2017, with the option of extending the agreement for three, one-year extensions before rebidding. CSUMB has the option to also extend past the three, one-year extensions, until a decision is made to rebid.

## **SECTION 3.2 BACKGROUND**

This section addresses project considerations such as CSUMB's goals and objectives, demographics, current collection and recycling services, waste quantities and composition, related programs, and available disposal capacity. Please note that data provided are for informational purposes only. The CSUMB does not certify the accuracy of the information provided. Proposers should not rely on this section for developing the cost component of a proposal.

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### **3.2.1 CSUMB'S GOALS AND OBJECTIVES**

CSUMB has developed a set of goals and objectives that focus on reducing the volume of waste generated and diverting the waste from the landfill through recycling, reuse and educational programs.

All proposers should consider these objectives in preparation of their proposals. They should aid the campus to comply with the most up to date AB 75 and AB 341 requirements <http://www.calrecycle.ca.gov/StateAgency/Requirements/LawsRegs.htm> as well as meet campus goals to:

1. Meet waste diversion goal of 50 percent by 2016
2. Reach zero waste by 2025
3. Participate in the Waste Minimization component of the national RecycleMania competition
4. Host Move Out/Move In waste diversion events to reduce waste and educate students on waste reduction, reuse and recycling.

#### **Maximize Recycling/Minimize Garbage**

CSUMB's objective is to reduce the basic volume of household and institution-generated refuse and maximize the amount of materials recycled.

#### **Yard Waste Objectives**

Yard waste will be collected from 66 for-sale homes in the ECH area.

#### **Food Waste Objectives**

CSUMB's first priority is to have food waste picked up from its three dining locations during the academic term and reduced or no services during summer and winter terms. There is also a Peet's Coffee & Tea and a Starbucks Coffee Company that generate some food and coffee waste that could be included.

The Dining Commons is the largest venue serving most on-campus residents. Between 2010 and 2011 the Dining Commons conducted eight Weigh Your Waste events that generated the following food waste volumes for this venue:

- 42,000 pounds of post-consumer waste/year
- 8,200 pounds of pre-consumer waste/year
- 0.15 pounds of post consumer food waste/person/day.

These numbers do not include the compostable potato and corn to-go products that could also be composted but are currently sent to the landfill.

Sodexo, Inc. manages all food and coffee services on campus <http://csumb.org/dining/>. Sodexo campus food managers are committed to waste reduction and eager to explore composting options.

Separate collection of dining services food waste is desired and co-collection of residential yard waste and food waste may be considered in the future

#### **Refuse, Recyclables and Yard Waste Volume**

A redistribution of the solid waste volume is expected to occur during the contract term as a result of increased participation in recycling through education and outreach and the potential food and yard waste collection programs. Therefore, refuse volumes are expected to decrease.

#### **Maximize Resident Participation**

Weekly collection of refuse and recyclables is a long-standing practice at CSUMB that will be continued. Experience indicates that weekly collections encourage public participation, even though individual households may not set out recyclables every week.

#### **Alternative Pick Up Schedules**

Due to CSUMB's fluctuating student population, the campus may modify its pick-up schedules to correspond to the student population for certain areas on the Main Campus, specifically during the summer.

Sample Main Campus academic and holiday schedule 2011-12:

- Fall Academic Term
  - August 19-21 ~ Fall 2011 Otter Days and Student Move-in
  - August 22 ~ Fall 2011 courses begin
  - November 11 ~ Veteran's Day observed ~ Campus closed
  - November 21-23 ~ Fall break ~ Faculty planning days
  - November 24-25 ~ Thanksgiving holiday ~ Campus closed
  - December 12-18 ~ Assessment/ final exam period
  - December 26-29 ~ Holidays observed ~ Campus closed
  - January 2 ~ New Year's Day observed ~ Campus closed
  - January 3 ~ Grades due ~ End of fall 2011 semester
- Winter Academic Term
  - January 3 ~ Winter 2012 courses begin
  - January 16 ~ Martin Luther King Day observed ~ Campus closed
  - January 20 ~ Winter 2012 last day of instruction
  - January 27 ~ Grades due ~ End of winter 2012 semester
- Spring Academic Term
  - January 17-20 ~ Spring 2012 faculty planning days
  - January 20 ~ Spring 2012 New Student Move-in
  - January 23 ~ Spring 2012 courses begin
  - March 19-23 ~ Spring break

- March 30 ~ César Chávez Day observed ~ Campus closed
- May 11 ~ Spring 2012 last day of instruction
- May 14-20 ~ Assessment/ final exam period
- May 17-18 ~ Capstone Festival
- May 19 ~ Commencement
- May 21-24 ~ Spring 2012 faculty planning days
- May 25 ~ Grades due ~ End of spring 2012 semester  
~ End of 2011-2012 Academic Year
- May 28 ~ Memorial Day observed ~ Campus closed
- Summer Academic Term
  - June 6 ~ Summer 2011 courses begin
  - July 1 ~ End of first summer 2011 four-week (June) session
  - July 4 ~ Fourth of July observed ~ Campus closed
  - July 5 ~ Second summer 2011 four-week (July) session begins
  - July 29 ~ Summer 2011 last day of instruction
  - August 5 ~ Grades due ~ End of summer 2011 semester

#### **Highest and Best Use of Recyclables**

CSUMB will encourage the campus community to furnish high quality recyclables, which qualify for the highest reuse, and have the highest market value. To accomplish this, co-mingled recyclables collected from the campus shall be processed into categories that allow for the highest and best market use by the contractor.

#### **3.2.2 DEMOGRAPHICS**

The campus is divided into Main Campus and ECH Areas. The Main Campus includes academic and administrative buildings as well as student residence halls. The ECH area includes rental and for-sale homes for students, staff, faculty and university partners. The tables below profile the campus areas and current service.

##### **East Campus Housing Profile and Current Service**

The 1,219 ECH units each have a 0.5 cubic yard or approximately 87-gallon container for recycling and the same sized container for refuse. Assuming a volume to weight conversion factor of 110 lbs./cubic yard, residents dispose of approximately 1,743.17 tons per year of refuse and 1,743 tons per year of recycling.

The campus would like to encourage more recycling by sizing recycling bins larger than each unit's waste bin where determined possible. When a waste audit is conducted right-sizing bins will be requested at no additional fee within 1 months time.

##### **Main Campus Population**

The current Main Campus population by sector is:



The current weekly residential refuse collection service at CSUMB is mandatory and included in the rent for ECH rentals and paid for by Alliance for the for sale homes. Main Campus dumpster service for recyclables and waste collection is provided once per week and paid for by the campus Facilities Operations and Services Department or the University Corporation at CSUMB.

#### **3.2.4 CAMPUS COLLECTION ZONES**

Collection will be provided to the entire campus. The Main Campus currently serves approximately 66 buildings and 1800 student residents plus use by faculty, staff and additional students. The ECH area includes 1219 residential units with approximately 5100 residents. Figures 3-1, through 3-4 represent the entire campus and two campus collection zones.

#### **3.2.6 PROJECTED CHANGES DUE TO RECYCLING ADDITIONAL MATERIALS**

As markets for recyclables vary, the campus may implement new pilot programs or require the contractors to participate in the increased recycling of a particular commodity (e.g., collecting textiles, residential food waste).

#### **3.2.7 RELATED PROGRAMS**

Other programs provided or sponsored by CSUMB that may have a complementary impact on the quantity of refuse and recyclables available for collection include:

- Source reduction and recycling public education program
- Promotion of backyard and small commercial on-site composting
- Development and implementation of additional programs (i.e., drop-off centers or cardboard collection) that would divert additional residential and institutional material from the waste stream.

**Figure 3-1 Entire Campus Collection Zone (Attached)**

**Figure 3-2 Entire Campus Collection Zone with Building Names (Attached)**

**Figure 3-3 Main Campus Collection Zone** The blue buildings are buildings in use and currently receive waste and recycling service. The arrow indicates the location of dumpsters between the baseball and soccer fields. **(Attached)**

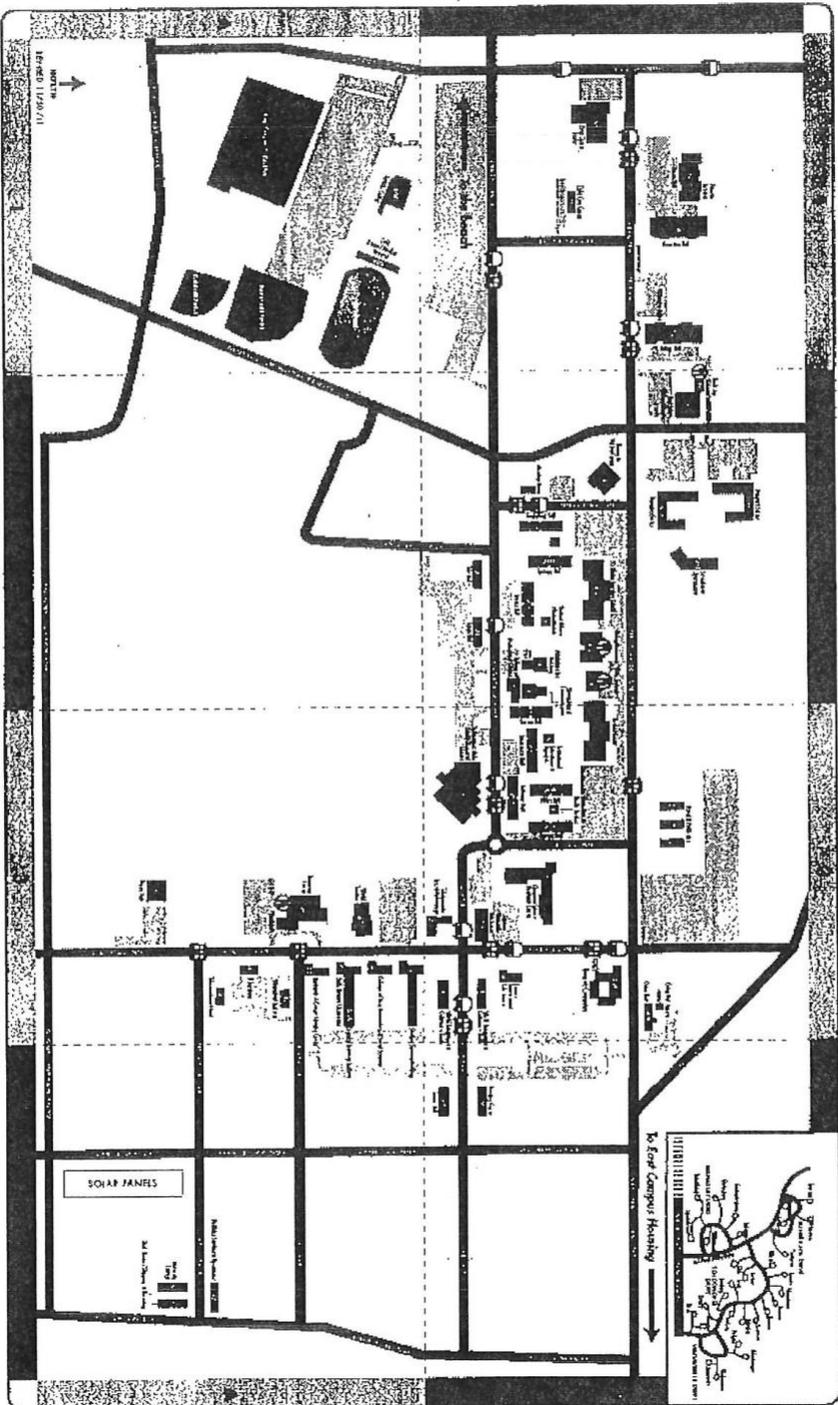
**Figure 3-4 East Campus Housing Collection Zone (Attached)**



CALIFORNIA STATE UNIVERSITY  
Monterey Bay

3-1 Entire Campus Collection Zone

# CAMPUS MAP



-  ADJACENT / INSTRUCTIONAL / SERVICES
-  SPORTS & RECREATION
-  RESURGENCE HALLS
-  OTHER TROLLEY SHUTTLE STOPS
-  BUS STOPS
-  FOOD

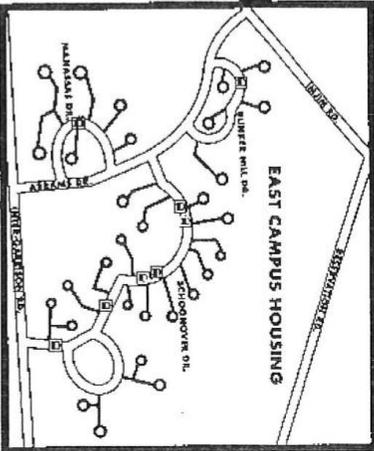
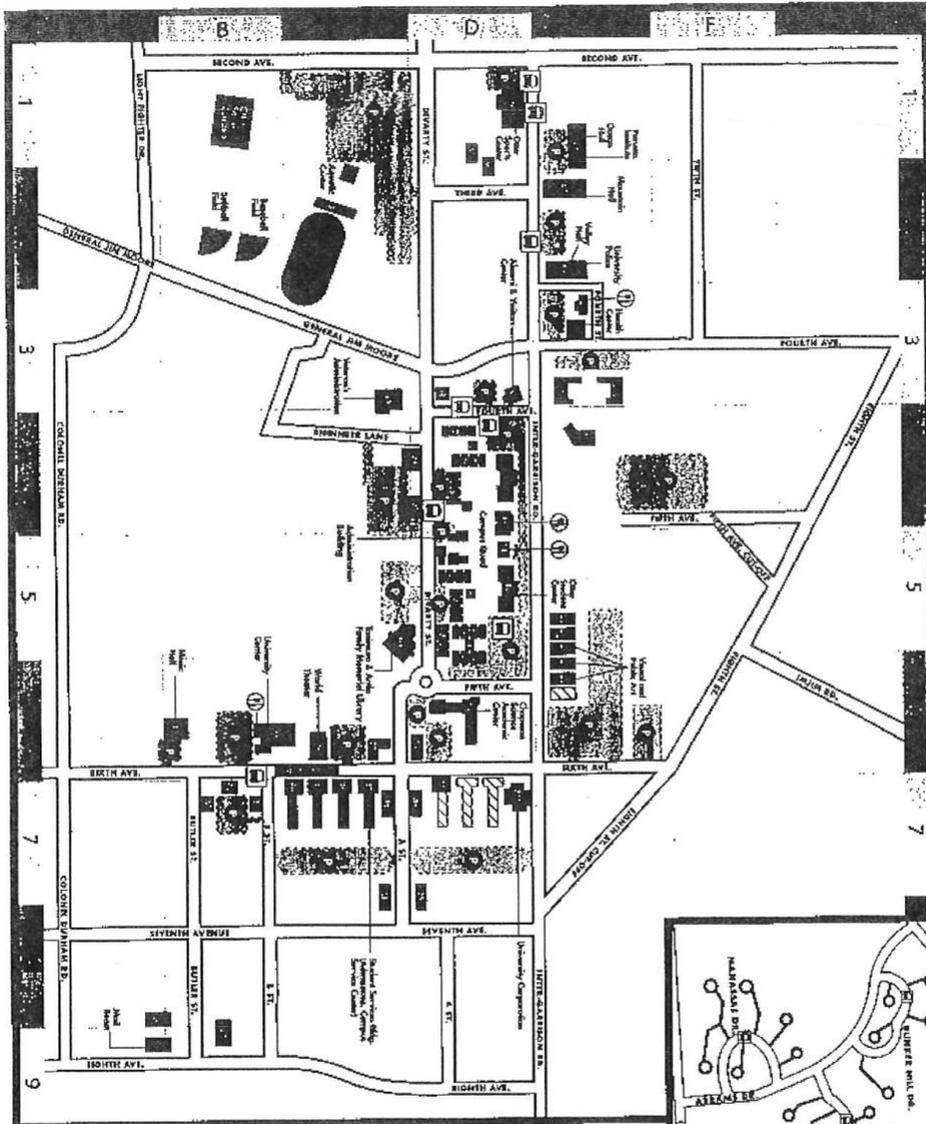
**IMPORTANT NOTE:** We would feel awful if you got a ticket while visiting, so please pay attention to our parking regulations! You must purchase a parking permit for \$0.50 per hour or \$2.00 for the day (excludes charge only).



CALIFORNIA STATE UNIVERSITY  
Monterey Bay

# CAMPUS MAP

3-2 Entire Campus Collection Zone w/Building Names



- CALM SHUTTLE STOPS
- EAST BUS STOPS
- PARKING
- UNUSED BUILDING
- FOOD

**IMPORTANT NOTE**  
 We would feel awful if you got a ticket while visiting, so please pay attention to our parking regulations! You must purchase a parking permit for \$0.50 per hour or \$2.00 for the day (exact change only).

GRID BUILDING	ADMIN/INSTRUCTIONAL/SERVICES	INDEX	STREET
C7	Academic & Career Advising Center	44	Sixth
D5	Administration Bldg.	1	Diversity
D3	Alumni & Visitors Center	97	Fourth
D4	Beach Hall	21	Diversity
E3	Black Box Cabaret	81	Gen Jim Moore
E3	Campus Health & Counseling Centers	80	Gen Jim Moore
E5	Central Plant	74,75	Inter-Garrison
D6	Chapman Science Academic Center	53	Fifth
D2	Child Development Center	91	Third
C7	College of Arts, Humanities, and Social Sciences Bldg.	46	Sixth
D5	College of Professional Studies Bldg.	3	Diversity
D4	Dining Commons	16	Inter-Garrison
B9	Facilities Services and Operations Bldg.	37	Butler
C7	Green Hall	58	A St.
D5	Humanities and Communication Bldg.	2	Diversity
D5	Institutional Assessment and Research Bldg.	6	Diversity
B7	IT Services Bldg.	43	Sixth
D5	Journalism and Media Studies Bldg.	4	Fifth
A9	Mail Room / Shipping & Receiving	35	Butler
D4	Media Learning Center	18	Inter-Garrison
D3	Meeting House	98	Diversity
E2	Mountains Hall	84	Inter-Garrison
B6	Music Hall	30	Sixth
E1	Ocean Hall	86	Inter-Garrison
D5	Other Express	14	Inter-Garrison
D7	Reading Center	59	A St.
D7	Science Instructional Lab Annex	50	Sixth
D6	Science Research Lab Annex	13	Sixth
C7	Service Learning Institute and Sixth Avenue Classrooms	45	Sixth
D4	Student Affairs Administration Bldg.	8	Diversity
D5	Student Center	12	Inter-Garrison
C7	Student Services Bldg.	47	Sixth
C5	Taninara & Antle Family Memorial Library	508	Diversity
D4	Teaching, Learning & Assessment Bldg.	10	Fourth
B7	Telecommunications Bldg.	41	Butler
C6	Teledramatic Arts and Technology Bldg.	27	Sixth
D4	Tide Hall	23	Diversity
B6	University Center	29	Sixth
D7	University Corporation Bldg.	201	Sixth
A8	University Storage	36	Butler
E2	Valley Hall	82	Inter-Garrison
E6	Visual and Public Art (VPA) - Center Bldg.	72	Inter-Garrison
E6	Visual and Public Art (VPA) - East Bldg.	71	Inter-Garrison
E5	Visual and Public Art (VPA) - West Bldg.	73	Inter-Garrison
B7	Watershed Institute	42	B St.
D7	World Languages and Cultures - North Bldg.	49	A St.
C7	World Languages and Cultures - South Bldg.	48	A St.
C6	World Theater	28	Sixth

GRID BUILDING	SPORTS & RECREATION	INDEX	STREET
C2	Aquatic Center	100	Second
B2	Baseball/Softball Fields		Second
C2	Field House / Stadium Complex	902	Second
B1	Other Soccer Complex		Second
D1	Other Sports Center	90	Inter-Garrison
D1	Outdoor Recreation Bldg.	93	Third

GRID BUILDING	RESIDENCE HALLS	INDEX	STREET
D5	Astler Hall	203	Diversity
D4	Avocat Hall	208	Diversity
D6	Cypress Hall	202	Fifth
D5	Manzanita Hall	205	Diversity
E3	Pinnacles Suites	302	Gen Jim Moore
D4	Sonderling Hall	211	Fourth
E4	Strawberry Apartments	301	Gen Jim Moore
D4	Tor-Lugo Hall	210	Fourth
E3	Vineyard Suites	303	Gen Jim Moore
D5	Willet Hall	204	Fifth
D5	Yarrow Hall	206	Diversity

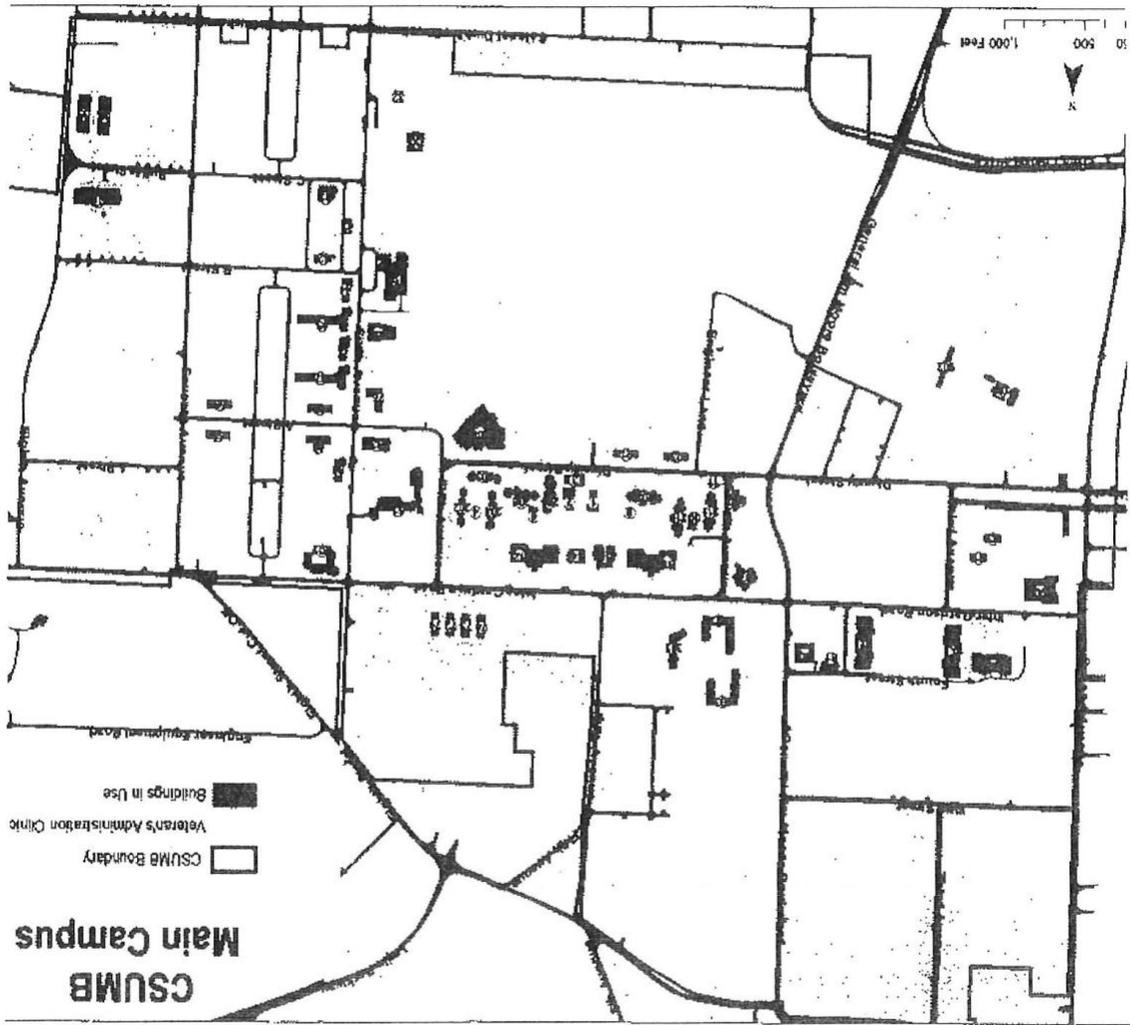


Figure 3-3 Main Campus Collection Zone The blue buildings are buildings in use and currently receive waste and recycling service. The arrow indicates the location of dumpsters between the baseball and soccer fields.

**SECTION 3.3  
PERFORMANCE-BASED  
SCOPE OF SERVICES**

The RFP defines performance standards for each service component. The contractor will select the best strategy for meeting performance standards using whatever method of collection the contractor feels can provide the most cost-effective solution for CSUMB.

This RFP should be carefully reviewed by all proposers as it provides detailed information on the terms, conditions, scope of services, and contractual arrangements intended to be included in a new agreement between CSUMB and the vendor selected through this RFP process. It should be noted that the type of collection system, types and sizes of customer containers, and other program features associated with this RFP are specified in this section. Some program features are strongly preferred by CSUMB such as 1) use of semi- or fully-automated collection vehicles where operationally feasible, 2) use of wheeled carts for residential refuse, recyclables, and yard waste collection, and 3) weekly collection of both residential and institutional recyclables, waste and/or yard waste. Proposers are allowed to identify alternative types of collection vehicles, sizes of residential carts and commercial bins, or other program features if they feel such alternative approaches will meet CSUMB's identified service needs more cost effectively.

**3.3.1 REFUSE COLLECTION**

The contractor will be responsible for collecting refuse and transporting the material to the disposal site(s). The refuse collection services will include the following services:

- ECH Residential refuse collection
- Main Campus refuse collection
- ECH Garbage overages collection
- Special services
  - Sticker based clean-up program provided free to ECH customers. Up to ten free extra refuse set-outs per year with contractor supplied stickers
  - Bulky goods collection provided on an on-call basis for a fee (optional service)
  - Additional dumpster service provided at CSUMB designated special events
- Other services
  - Customer service
  - Community relations/collection education program
  - Electronic data for state mandated and campus sustainability reporting
  - Compliance with environmental standards
- Additional services
  - Electronic billing services

A brief description of the required refuse collection services are as follows:

**Collection of ECH Refuse**

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  - Additional dumpster service provided at CSUMB designated special events
- Other services
  - Customer service
  - Community relations/collection education program
  - Electronic data for state mandated and campus sustainability reporting
  - Compliance with environmental standards
- Additional services
  - Electronic billing services

A brief description of the required refuse collection services are as follows:

**Collection of ECH Refuse**

The contractor will offer weekly collection services to approximately 1,219 residential cart service customers in the collection zone. The standard service will include collection at the curb. Qualified individuals requiring backyard service due to physical disability or frailty will have that option at no additional fee. The contractor will be responsible for collecting the refuse and delivering it to the identified disposal site(s).

The contractor will be responsible for purchasing, distributing, and maintaining all refuse carts proposed for residential customers. The cost of these containers should be included in the service fee proposal. The contractor shall utilize wheeled carts for refuse with securable attached lids in the following approximate capacities: 48-gallons for trash and 87-gallons for recycling, smaller capacities may meet resident needs. This may require a pilot study to determine the best sizes since currently all bins are 87 gallon. All recycling will be blue and clearly marked "recycling" at all times and all refuse cans will be brown or grey and clearly marked "waste", "trash" and/or "to the landfill" at all times. Labels will be checked and replaced as needed to maintain clearly labeled bins at all times. CSUMB will not pay for carts that do not meet these requirements. Payment will be suspended until the appropriate color and label are remedied.

#### **Collection of Main Campus Refuse**

The contractor will provide weekly (at a minimum) collection of refuse with dumpsters sized to appropriately service the needs of each location. The collection container size will be variable depending on each site's needs and to maintain a once per week maximum pickup schedule during the academic term. The contractor will be required to submit costs for roll-off container service in terms of a cubic-yard to meet the additional and varying waste needs of the campus. The contractor will be responsible for collecting the refuse and delivering it to the appropriate disposal site(s).

If the method of collection the contractor proposes requires the campus to use a particular type of collection container (yard waste, food collection, etc.) the contractor will provide the campus with the appropriate color and labeling for such bins. The contractor will be responsible for purchasing, distributing, maintaining and collecting the correctly colored and labeled containers, dumpsters or bins provided. The cost of any such containers should be included in the service fee proposal.

The contractor will not be permitted to separately bill the customer for bins or containers, other than for replacement of damaged containers due to the customer's intentional negligence.

#### **Garbage Overages Collection**

In order to reduce illegal dumping, the contractor will collect overages from residential cart customers provided that such overage is set out by the customer and is mutually agreed upon by the contractor and CSUMB. Customers may use bags or extra cans, or some other method identified by the proposer, for overages and to set out such bags or cans with the refuse

collection. Bags or extra cans will be used for occasional overages. Frequent use beyond the 10 free days per year would result in requiring the customer to change their container size.

Contractor will provide overage charges per location or address in this proposal and be responsible for tracking and billing the campus for this service.

#### **Biannual Move Out Waste Diversion Events**

Main Campus and ECH have different move schedules. All residents in the Main Campus residence halls are required to move out around mid-May whereas ECH apartment tenants may choose to end their stay at the end of May if they are leaving or stay through the summer and into the next school year. Thus, Move Out waste diversion events differ for each housing area.

#### **1. Main Campus Move Out (May)**

The mid-May residence hall Move Out is the biggest event of the year where 1800 students are required to move out their rooms by a specific date. The waste diversion event involves a minimum of 3 days of moving and sorting waste at designated stations into reusables/donation items, recyclable, waste, e-waste, household hazardous waste and other items to reduce landfill volumes. The contractor will need to:

- Provide clearly labeled extra (recycling or trash/waste) dumpsters of desired size or containers for this event and empty as needed to prevent overflowing. 20 yard or other extra dumpsters may require daily emptying during peak days, including weekends.
- Provide labeled HHW containers and disposal for waste sorting stations and/or residence halls free of charge. Labels should specify what is accepted. Exterior collection containers should be emptied each day.
- In 2010 the event required a combination of 11 to 22, 20-yard recycling and waste dumpsters to meet a 50% diversion rate of 17 tons.

#### **2. Main Campus Move Out (January)**

The January Move Out event is much smaller than the May Move Out event. During these events the contractor will:

- Provide clearly labeled extra (recycling or trash/waste) dumpsters of desired size or containers for this event and empty as needed to prevent overflowing. 20 yard or other extra dumpsters may require daily emptying during peak days.
- Provide labeled HHW containers and disposal for waste sorting stations and/or residence halls free of charge. Labels should specify what is accepted. Exterior collection containers should be emptied each day.

#### **3. ECH Campus Move Out (end of May)**

During one week at the end of May/beginning of June (to be determined) the contractor will:

- Provide clearly labeled extra (recycling or trash/waste) dumpsters of desired size or containers for this event and empty as needed to prevent overflowing. 20 yard or other extra dumpsters may require daily emptying during peak days.

- Collect extra trash in cans, bags or bundles of refuse when placed at the point of collection by any resident in ECH free of charge.
- Provide 3 labeled containers for household hazardous waste at 3 stations free of charge. Labels should specify what is accepted. Containers should be emptied by 5:00 pm each day.

#### **4. ECH Campus Move Out (January)**

During one week in January (to be determined) the contractor will:

- Provide clearly labeled extra (recycling or trash/waste) dumpsters of desired size or containers for this event and empty as needed to prevent overflowing. 20 yard or other extra dumpsters may require daily emptying during peak days.
- Collect extra trash in cans, bags or bundles of refuse when placed at the point of collection by any resident in ECH free of charge.
- Provide 3 labeled containers for household hazardous waste at 3 stations free of charge. Labels should specify what is accepted. Containers should be emptied by 5:00 pm each day.

#### **Bulky Goods Collection**

The contractor may provide a bulky goods collection service. The service requires pickup of bulky goods from the campus on an on-call basis for a service fee. The contractor is to provide pick up rates in advance and a report in electronic format containing the weight, materials collected and how they were disposed of (recycled, resold or sent to the landfill) to the campus. The contractor should collect bulky goods at a 50% discount over the bulky goods rate during the four annual Move Out event.

The plan also includes a community relations component for all bulky goods collection services. The plan will be approved by CSUMB prior to implementation.

#### **Christmas Trees**

The contractor will, without additional compensation, collect all Christmas trees discarded by customers during the first three regularly scheduled collection days after New Year's Day for each collection route. In addition, contractor will provide up to 4 drop boxes for Christmas tree collection at locations designated by the ECH managers.

#### **Other Services**

Other services include providing customer service, community relations/collection education programs, AB 75 reporting, litter abatement, and compliance with environmental standards.

#### **Customer Billing Services**

The contractor will provide three billing services to the entities listed below which currently includes the following locations:

1. **University Corporation** - the Main Campus residence halls (buildings 204, 205, 211, 208, 301, 302, 303), Otter Express/food (14), Dining Commons/food (16) and book store/Otter Bay Restaurant/food (29).

Attn: University Corporation, Bldg 201, Room 109B  
100 Campus Center  
Seaside CA, 93955  
(831) 582-4083 phone  
(831) 582-4715 fax  
Bella Morgenstern  
[bmorgenstern@csumb.edu](mailto:bmorgenstern@csumb.edu)

2. **CSUMB's Facilities Services and Operations Department** – all other Main Campus building dumpster locations.

Attn: Facilities Services & Operations, Bldg 37  
100 Campus Center  
Seaside CA, 93955  
(831) 482-3706 phone  
(831) 582-3729 fax  
Alfredo Corona  
[acorona@csumb.edu](mailto:acorona@csumb.edu)

3. **Alliance Residential Company** (or current ECH management entity) who manages all ECH units. Invoices will be divided by Frederick's Park I and II, Schoonover I and II and For Sale homes, or as desired.

3

Attn: Accounts Payable  
East Campus Housing  
601 Thomas Court  
Marina, Ca. 93933  
Jackie Feierman  
(831) 883-3150 phone  
(831) 883-3153 fax  
[jfeierman@allresco.com](mailto:jfeierman@allresco.com)

2

The Facilities Operations and Services Department will receive a master invoice with all charges by building name and number or address for ECH, but will only pay for those buildings within its purview. All bills must be itemized with clear descriptions of the location, bin size and services provided.

The contractor will supply the three invoice recipient departments on campus with a computer link to the contractor's billing and records system designed and formatted to CSUMB's requirements and specifications to be used by CSUMB to accommodate ongoing sustainability and state required reporting requirements.

### **3.3.2 RECYCLABLES COLLECTION**

The contractor is required to collect co-mingled recyclables to be source-separated from residential cart customers at the curbside in ECH and from institutional or multi-family dumpsters on the Main Campus.

#### **ECH**

Cart collection services include unlimited recycling at no additional fee. The minimum level of recycling service will consist of carts of sufficient capacity, preferably larger than waste bins, and a weekly collection frequency equivalent to the weekly refuse service. The residential cart recyclables collection services will be provided weekly, on the same day as refuse collection.

#### **Main Campus**

Recyclables from the Main Campus will be collected as needed, however the campus aims to adjust dumpster quantities and volumes to maintain a once per week service during normal circumstances. The campus aims for recycling collection for the Main Campus dumpsters to be provided on the same day and at the frequency as waste collection, or at a frequency required to meet a site's specific needs. The campus is willing to discuss Monday trash and Tuesday Recycling collection.

CSUMB recognizes that some campus entities currently rely on or may in the future rely on other service providers to collect certain material types for purposes of recycling, reuse, or salvaging. This practice will not be prohibited; campus entities will be permitted to contract with other service providers for collection of source-separated materials that may be recyclable, reusable, or salvageable. However, campus generators of recycling which make such arrangements will still be eligible to receive service from the contractor. The contractor will collect only those materials designated for pick up.

The materials that the contractor shall collect include the following:

- Newspaper (including inserts, coupons, and store advertisements)
- Corrugated cardboard
- Office paper
- Mixed waste paper (including junk mail, catalogs, kraft bags and kraft paper, paperboard, egg cartons, phone books, brown paper, grocery bags, colored paper, construction paper, envelopes, legal pad backings, shoe boxes, cereal and other similar food boxes)
- Computer paper
- Magazines

- Aseptic packaging
- Milk and juice cartons
- Film plastics
- Glass containers (including brown, clear, and green glass bottles and jars)
- Aluminum (including beverage containers, foil, food containers, small scrap metal)
- Steel (including "tin" cans, small scrap metal)
- Bimetal containers
- Plastics, including PETE, HDPE (natural and colored), and mixed plastic containers (#3 through #7)
- Household batteries
- Used motor oil
- Used automotive oil filters
- Any other materials mutually agreed by the contractor and the Campus

The contractor will be responsible for purchasing, distributing, and maintaining the collection carts and dumpsters. CSUMB requires the use of a single, wheeled cart of approximately 87-gallon capacity (unless a more appropriate size is determined) for residential recyclables collection, and bins of varying sizes, primarily between 4 and 8 cubic yards but up to 20 cubic yards in capacity, for Main Campus weekly recyclables collection. The contractor will collect these recyclables using a method compatible with the designated processing facility. The contractor will accept responsibility for maintaining minimum contamination levels. The contractor will transport the recyclables to the designated recyclables processing facility.

By mutual written agreement, the contractor will collect and transport additional types of recyclables.

#### **Recycling Requirements**

There will be no disposal of any of the recyclable materials listed for collection through the contracted curbside waste collection program. The contractor is obligated to decline collection and provide appropriate notification and corrective instruction to any customer whose refuse cart is found to contain appreciable amounts (over 5% by volume) of banned, recyclable materials. The contractor's participation and adherence to this requirement is required.

#### **3.3.3 YARD WASTE COLLECTION**

The contractor will provide weekly curbside yard waste collection to the 66 for sale home customers in ECH, on the same collection day as refuse and recyclables collection.

All ECH for sale home cart customers within the collection zone will be eligible to receive unlimited yard waste collection service. The contractor shall also offer, at no extra charge, a backyard home composting bin as a service. Resident bin ownership may be tied to completion of a compost class or other educational opportunity provided by the Proposer. Yard waste collection may also be proposed and provided to the Main Campus at an additional fee.

### 3.3.4 RECYCLABLES PROCESSING AND MARKETING

Proposers will include all recyclables processing and marketing services with collection services. The contractor will market and sell recyclables collected. All sale prices, volumes, terms, and purchasers will be reported to the CSUMB. The contractor will pay to CSUMB 10% of all recycling profits on a bi-annual basis.

The contractor shall be required to provide processing facility capacity and shall designate a site for such purpose in the proposal and its distance to the campus. The contractor will have the responsibility to assure the technical and environmental suitability of any site for its intended purpose and for the duration of the required services. Contractors must provide documentation with that all facilities are appropriately secured and permitted for the intended uses.

If at any time during the term of the Agreement the contractor is unable to accept and/or process CSUMB's recyclables at the contractor's designated facility(ies), the contractor will pay to CSUMB all costs incurred by the CSUMB to implement alternative processing of materials collected.

By mutual written agreement, the contractor will process and market additional types of recyclables as required by CSUMB.

The contractor will be responsible for providing customer service, community relations/public education programs, AB 75 reporting and campus sustainability reporting requirements and compliance with regulatory and environmental standards.

### 3.3.5 YARD WASTE PROCESSING

Proposers shall include all yard waste and wood waste processing services for the ECH for sale homes. CSUMB does not currently collect yard waste in ECH or the Main Campus. The Main Campus currently utilizes the services of its landscaper to dispose of yard waste. It is estimated that the Main Campus landscape contractors dispose 8 tons of green waste of each year. The Proposer may choose to provide a rate for Main Campus yard waste disposal.

### 3.3.6 SUSTAINABILITY

CSUMB is a signatory of the American College & University Presidents' Climate Commitment <http://www.presidentsclimatecommitment.org/> and is dedicated to achieving climate neutrality in the near future. We believe we must exercise leadership within our campus community and throughout society by modeling ways to minimize global warming emissions, and by providing the knowledge and the educated graduates to achieve climate neutrality. By

addressing the climate challenge and reducing global warming emissions by integrating sustainability into CSUMB's curriculum we will serve our students and meet the social mandate to help create a thriving, ethical and civil society.

The contractor can aid CSUMB in reducing its greenhouse gas emissions related to waste by helping the campus meet the following goals:

1. Decrease the overall volume of its waste stream.
2. Increase the volume of recyclable materials including food, yard waste, e-waste and household hazardous waste.
3. Reduce the number and length of vehicle trips required to service its disposal stream.
4. Employ trucks with the highest fuel efficiency and lowest emissions.
5. Increase education and outreach to ensure a lower volume and cleaner waste stream.

#### **Green House Gas Emissions Calculations**

The contractors will provide the following information related to greenhouse gas emissions:

- The number of vehicle miles traveled per week required to service the campus
- The make and model of its vehicles serving the campus
- The type of fuel used by vehicles
- The average fuel economy of the vehicles
- Yearly waste and recycling processing facility energy consumption x % CSUMB waste or recycling processed at that facility.

#### **3.3.7 STUDENT INTERN**

To help meet the campus' sustainability goals, increase recycling on campus and in turn increase profits to the contractor, the Proposer shall be required to hire a student intern to work on campus and with the contractor an average of 20 hours per week or 1,040 hours/year at \$15/hour for the life of this contract and any extensions mutually agreed upon. The intern will be responsible for activities such as: education and outreach for staff, faculty and students, organizing waste reducing events such as Move Out and performing waste audits for the life of the contract. At the end of the year the contractor will credit CSUMB any hours not paid to the intern or hire additional students to fill these required hours of service.

#### **DUMPSTER AND CART LABELS**

All receptacles will be colored blue for recycling and green, brown or gray for waste. Other types of waste containers (green waste, HHW, food waste or other) will also be clearly labeled at all times. Dumpsters will be top loading and easy to open. At all times they will have large-font, easily readable stickers identifying the materials accepted. CSUMB will stop payment for bins or dumpsters that are not the appropriate color or if stickers are not readable until such a time as the deficiencies are corrected.

#### **CALRECYCLE ANNUAL REPORT**

Data will be provided to the campus Facilities Services & Operations Department on April 1 of each year or one month prior to the CalRecycle Annual Report deadline, which is currently May 1. For every calendar day the report is late, the campus will charge the contractor \$500.00. Data will be provided electronically in a spreadsheet format that includes the following for all services (trash, recycling, green waste, HHW, food waste, special service...etc):

- All ECH units
  - address
  - cart size
  - volume to weight assumptions and tonnages based on volume to weight assumptions and/OR
  - truck weight attributed to CSUMB service
  - cart type – waste, recycling and/or green waste
  - monthly totals and annual total
  - pickup frequency
- Main Campus – based on each dumpster location and regular service and special service
  - Building name and number, e.g. Willett Hall (204)
  - Dumpster size
  - Volume to weight assumptions and tonnages based on volume to weight assumptions OR
  - truck weight attributed to CSUMB service
  - Cart type – waste, recycling and/or green waste
  - Monthly totals and annual total
  - Pickup frequency

## **SECTION 3.4 CONTRACTUAL ARRANGEMENTS**

### **3.4.1 TERM OF AGREEMENT**

CSUMB intends to enter into a five-year agreement for services. The selected contractor will be required to provide services from September 1, 2012 through June 30, 2017, with the option of extending the agreement for three, one-year extensions before rebidding. CSUMB has the option to also extend past the three, one-year extensions, until a decision is made to rebid.

### **3.4.2 SOLID WASTE SERVICES**

The work is to be done by the contractor pursuant to this RFP. Work will include the furnishing of all labor, supervision, equipment, materials, supplies, and all other items necessary to perform the services required. The work to be done by contractor pursuant to this RFP will be accomplished in a thorough and professional manner so that the residents and members of the campus within the CSUMB campus are provided reliable, courteous and high-quality solid waste, recycling, yard and other waste collection at all times. The enumeration of, and specification of requirements for, particular aspects of service quality will not relieve contractor

of the duty of accomplishing all other aspects in the manner whether such other aspects are enumerated elsewhere in this document.

The contractor will be required to submit several plans to the CSUMB shortly after the agreement has been finalized. The contractor is to provide a service schedule that includes ECH and Main Campus route maps and miles traveled to the disposal sites for all collection routes to the campus representative or his/her designee for review and approval a minimum of three weeks prior to implementation of each new route. Start and end points for each daily route are to be clearly indicated, along with the number of accounts, vehicle type, miles per gallon, fuel type, capacity, and labor requirements. The contractor is required to submit an implementation schedule by the date of execution of the Agreement that provides a detailed plan for implementation of the collection services including purchase, licensing, and testing of equipment, staffing, personnel training, community outreach work, and all other activities to assure timely start-up of operations.

Lastly, the contractor will be responsible for submitting a collection education and outreach work plan for approval by the CSUMB. The community education and outreach work plan will detail the types of collection education and outreach programs to be implemented, the materials to be distributed, and the schedule for activities. The contractor will be asked to coordinate its materials with CSUMB existing Move Out and Outreach programs.

#### **3.4.3 CONTINGENCY PLAN**

The contractor will be required to submit to CSUMB a written contingency plan demonstrating the contractor's arrangements to provide vehicles and personnel and to maintain uninterrupted service during mechanical breakdowns, and in case of natural disaster, strikes or other emergency.

Trash and recycling dumpsters will be emptied every Monday before 10 am, unless otherwise agreed upon. CSUMB will not pay for missed or late service unless prearranged. The campus expects trash and recycling pick up within 24 hours of any missed service. The contractor will submit a schedule for any day service cannot be provided as agreed upon and a plan for when the alternative services will be provided that will be mutually agreed upon between the campus and the contractor.

#### **3.4.4 DISPOSAL OF SOLID WASTE AND PROCESSING OF RECYCLABLE MATERIALS AND YARD/WOOD WASTE**

The contractor is to transport all source-separated recyclable material to processing sites identified by the contractor. Such sites are to be proposed in the RFP process.

Proposers will be required to provide a disposal fee component for each service and include the estimated weight used for each size of refuse collection container. It is CSUMB's intent to treat disposal fees as a pass through cost to the contractor.

The contractor is to maintain accurate electronic records of the quantities of solid waste transported to the disposal site and source-separated recyclable materials and yard waste transported to the processing sites and will cooperate with CSUMB in any audits or investigations of such quantities. This information will be provided to the campus on a quarterly basis online and in a format required to comply state and campus sustainability requirements.

The contractor will cooperate with the operator of the disposal site and processing site with regard to operations therein, including, for example, complying with directions from the operator to unload collection vehicles in designated areas, accommodating maintenance operations and construction of new facilities, cooperating with its hazardous waste exclusion programs, and so forth.

#### **3.4.5 ENVIRONMENTAL REQUIREMENTS**

Any component of the system proposed in response to this RFP shall comply with all federal, state, CSU, and local laws, statutes, ordinances, rules, goals and regulations. In compliance with the California Environmental Quality Act (CEQA), CSUMB cannot commit to the approval or implementation of a project on its campus prior to the completion of the required CEQA documentation.

The contractor will be solely responsible for determining which federal, state, and local laws, statutes, ordinances, permits, rules, and regulations apply to the proposed project and shall bear the cost of obtaining and complying with all permits and requirements.

#### **3.4.6 ANNUAL REVIEW OF PERFORMANCE AND QUALITY OF SERVICE**

At CSUMB's sole option, with 30 days written notification to the contractor, the campus may request the contractor be present and participate in a review of the contractor's performance and quality of service and provide for evaluation of technological and regulatory changes. The reports required by this RFP regarding complaints may be utilized as a basis for review. Performance and service quality review meetings may be scheduled by CSUMB at its discretion throughout the term of the Agreement.

Within 30 days after the conclusion of the meeting, CSUMB will issue a report on the adequacy of performance and quality of service. If any noncompliance with the contract(s) is found CSUMB will direct the contractor to correct the inadequacies in accordance with the terms of the Agreement and reimburse the campus for any missed services within 30 days.

#### **3.4.7 BILLING, AUDITS, RECORDS**

##### **Billing**

The contractor will coordinate and issue bills for the defined services including refuse collection, disposal and recyclables and yard waste collection to:

1. **University Corporation** - the Main Campus residence halls (buildings 204, 205, 211, 208, 301, 302, 303), Otter Express/food (14), Dining Commons/food (16) and book store/Otter Bay Restaurant/food (29)
2. **CSUMB's Facilities Services and Operations Department** – all other Main Campus buildings dumpster locations
3. **Alliance Residential Company** who manages payment and services for all ECH units

See Customer **Billing Services** details on page 21.

#### **Monthly Statements**

At the end of each calendar month of service, the contractor will submit a statement that all services were performed as required under the Agreement. Said monthly statement will be accompanied by any monthly report or other reports due to the campus. Except where noted, or otherwise not applicable, all reports will be submitted electronically in a format compatible with the CSUMB's needs. The campus will review the reports, and provide feed back as to the content and adequacy of the reports where appropriate and applicable and expect revisions to the reports content or format within 30 days.

#### **Computer System**

The contractor shall maintain a computer database, which specifies account information on each location, cart and bin as well as other information, and this database shall be linked, via web based connection, to all designated CSUMB staff involved with contract oversight.

#### **Right to Prescribe Records**

The contractor will maintain such accounting and statistical records as will be necessary to develop the financial statements and reports prescribed by the CSUMB. Such records must be maintained for a period of not less than three years following the expiration or termination of the agreement.

#### **Right to Inspect Records**

CSUMB will have the right to inspect or review the income tax returns, payroll tax reports, specific documents or records required pursuant to the Agreement, or any other similar records or reports of the contractor that it will deem, at its sole discretion, necessary to evaluate annual reports and the contractor's performance provided for in the Agreement.

#### **Inspection by CSUMB**

The designated representatives of CSUMB will have the right to observe and review the contractor's waste and recycling handling operations and enter premises for the purposes of such observations at any time without prior notification.

#### **Reports**

The contractor will be required to provide monthly, quarterly, and annual reports as needed by the campus. The reports will include information needed to comply with AB 75 CalRecycle state required report and campus sustainability reporting requirements as well as other information needs identified by CSUMB at the time of the Agreement and into the future.

#### **3.4.8 SERVICE PRAISES OR COMPLAINTS**

The contractor agrees to maintain a written log of all oral and written service praises or complaints registered with the contractor from customers within CSUMB. Contractor will record in a separate log all written and oral praises or complaints, noting the name and address of individual, date and time of the comment, nature of comment, and nature and date of resolution of all complaints. The contractor will be responsible for the prompt and courteous attention to, and prompt and reasonable resolution of, all customer complaints. Such log will be kept so that it may conveniently be inspected by representatives of CSUMB upon request. The contractor will provide a monthly report to the Director of Facilities and Operations Services summarizing any complaints received and actions taken during the month.

The contractor will respond to all complaints from customers within 24 hours, weekends and holidays excluded. In particular, if a complaint involves a failure to collect garbage from premises, required by the Agreement, the contractor will collect the solid waste in question within such 24-hour period.

#### **3.4.9 COMPENSATION FOR SERVICES**

##### **3.4.9.1 Customer Rate Schedule**

The contractor will perform all responsibilities and services specified in this RFP and in return CSUMB will pay for the various rates identified in their proposal. This cost will be adjusted annually to reflect changes in the Consumer Price Index (CPI) applied to the appropriate portion of the vendor's fee. The annual total contract escalation will not exceed the average SF-Oakland-SJ Consumer Price Index for the previous 12 months or 3%, whichever is lower.

##### **3.4.9.2 Payment for Special Services**

In addition to the proposed cost specified in the cost forms, the contractor may charge and receive fees for performing special services at rates agreed to by the contractor and CSUMB, requesting such special services, and as approved in writing by the Director of Facilities Services and Operations or his/her designee, in accordance with the Agreement.

##### **3.4.9.3 Damages**

The contractor is required to submit payment to CSUMB within 30 days for damages payable by the contractor during the previous month.

##### **3.4.9.4 PERFORMANCE BOND**

##### **Performance Bond**

Simultaneously with the execution of the Agreement, the contractor shall file with CSUMB a bond, payable to the CSUMB, securing the contractor's faithful performance of its obligations under the Agreement. The principal sum of the bond shall be in the amount of \$1,000,000. The bond shall be executed as surety by a corporation admitted to issue surety bonds in the State of California, with a financial condition and record of service satisfactory to CSUMB.

#### 3.4.9.5 CSUMB'S RESPONSIBILITIES

##### CSUMB Representative

CSUMB will designate an employee(s) to manage this program and to serve as contact for the contractor.

##### 3.4.9.6 Community Relations Program

The contractor will work with the CSUMB's staff to provide a community-based program to meet the following objectives: (1) inform residents, staff, faculty and students of services offered and special events; (2) assist in achieving maximum participation levels; (3) respond to special collection problems or needs; (4) increase public awareness of the need for diversion alternatives to landfill disposal; (5) to reduce illegal dumping and (6) meet the campus' sustainability goals and objectives.

The community relations program will include:

- Development of community relations program goals, objectives, tactics, and evaluation criteria
- Program initiation announcements
- Guidelines for participation in recycling and other waste diversion programs
- When applicable, the promotional literature and news releases consistent with the campus' existing program information as found at: [http://ecoact.org/Programs/Zero\\_Waste/Multi\\_Family\\_Recycling/index.htm](http://ecoact.org/Programs/Zero_Waste/Multi_Family_Recycling/index.htm)
- Vehicle educational signs and other material
- Customer information about waste reduction.

##### 3.4.9.7 CSUMB's Efforts to Deter Scavenging

Current code prevents unauthorized collection of recyclable materials, and unauthorized removal of materials from solid waste facilities. The contractor will report violation of these ordinances to the University Police Department and/or other staff representative(s) as determined by the Director of Facilities Services and Operations Department.

## Attachment F – Recommended Design Standard for Dumpster Enclosures

There are a number of recycling bins in inventory in warehouse storage– approximately (11) black 23 gallon slim jims, (86) blue 23 gallon slim jims, (24) blue slim jim lids, and (33) blue 32 gallon bins. In addition, there are reportedly (1,552) recycling totes for dorm rooms. Many classrooms and most cubicles and offices have slim jim bins. All of these existing bin supplies can be used in the new system and therefore save money for the university. (Note: in many of the images it shows each stream being the same size, whenever possible, the landfill receptacle should be the smallest size)

CSUMB Proposed Collection Site Receptacles and Costs													
Building #	Location Type	Bin Type	Dimensions	Specifications	Made from Recycled Content	ADA Compliance	Indoor/Outdoor	1, 2 or 3 Stream	Signage: standard or custom	Image	Cost	Total Number Required	Total Estimated Cost
28, 30, 81, 98	Arts & Lecture Venue	Max R Terra: Gray with color panels: Left/Landfill - Black; Center/Recycling - Blue; Right/Compost -Green	Length: 57.5; Width 24; Height 50.5 (with headerboard = 64.25)	22 / 55 / 55 gallon Split Side Load with Vail Top	Y	Y	Indoor	3	Standard		Style with header \$2,250. Bottom pallet \$703.50. 10% discount + freight. For orders over \$50 K, discount increased to 12-15%.	7	\$20,674.50
29	University Center: Ballroom	Rubbermaid Configure: SKU# 1961789: stainless steel	Total width: 44", height: 37", depth: 19.5"	Total capacity: 45 gallons, 15 gallons per stream	N	Y	Indoor	3	Standard		\$2,930 / ea	1	\$2,930.00
29	University Center: common area	Max R Terra: Gray with color panels: Left/Landfill - Black; Center/Recycling - Blue; Right/Compost -Green	Length: 57.5; Width 24; Height 50.5 (with headerboard = 64.25)	22 / 55 / 55 gallon Split Side Load with Vail Top	Y	Y	Indoor	3	Standard		Style with header \$2,250. Bottom pallet \$703.50. 10% discount + freight. For orders over \$50 K, discount increased to 12-15%.	2	\$5,907.00
29	University Center: restaurant	Max R Terra: Gray with color panels: Left/Landfill - Black; Center/Recycling - Blue; Right/Compost -Green	Length: 57.5; Width 24; Height 50.5 (with headerboard = 64.25)	22 / 55 / 55 gallon Split Side Load with Vail Top	Y	Y	Indoor	3	Standard		Style with header \$2,250. Bottom pallet \$703.50. 10% discount + freight. For orders over \$50 K, discount increased to 12-15%.	1	\$2,953.50

**CSUMB Proposed Collection Site Receptacles and Costs (Continued)**

Building #	Location Type	Bin Type	Dimensions	Specifications	Made from Recycled Content	ADA Compliant	Indoor/Outdoor	1, 2 or 3 Stream	Signage: standard or custom	Image	Cost	Total Number Required	Total Estimated Cost
508	Library: break room	Rubbermaid FG354007 Slim Jims: landfill - black, recycling - blue	23 gallons: length 20; width 11; height 30 16 gallon: length 23.1, width 11, height 24.9	23 gallon recycle with lid, 16 gallon landfill.	Y	Y	Indoor	2	Standard	 Same as 3-stream with lids, lock together, minus the compost bin.	23 gal slim jim for recycling and compost - \$38.84 (for 32); 16 gal slim jim for landfill - \$29.37 (for 32); lids \$38.00	10	\$1,442.10
508	Library: break room	Exaco ECO-2000 Countertop Compost Collector	Length: 8.5", width: 9", height: 11"	2.4 gallon capacity, plastic with carbon filter	N	Y	Indoor	1	Standard		\$24.30 / each	10	\$243.00
508	Library building: common area (hallway or entrance)	Max R Terra: Gray with color panels: Left/Landfill - Black; Center/Recycling - Blue; Right/Compost -Green	Length: 57.5; Width 24; Height 50.5 (with headerboard = 64.25)	22 / 55 / 55 gallon Split Side Load with Vail Top	Y	Y	Indoor	3	Standard		Style with header \$2,250. Bottom pallet \$703.50. 10% discount + freight. For orders over \$50 K, discount increased to 12-15%.	6	\$17,721.00
508	Library Building: printer area	Rubbermaid FG354007 Slim Jim: recycling - blue	23 gallons: length 20; width 11; height 30	23 gallon recycle with lid	Y	Y	Indoor	1	Standard		23 gal slim jim for recycling and compost - \$38.84 (for 32); 16 gal slim jim for landfill - \$29.37 (for 32); lids \$38.00	10	\$768.40

**CSUMB Proposed Collection Site Receptacles and Costs**

Building #	Location Type	Bin Type	Dimensions	Specifications	Made from Recycled Content	ADA Compliant	Indoor/Outdoor	1, 2 or 3 Stream	Signage: standard or custom	Image	Cost	Total Number Required	Total Estimated Cost
2, 3, 4, 6, 10, 13, 18, 27, 41,45, 46, 48, 49, 50, 53, 59, 71, 72, 73, 91	Classroom and Faculty Offices Building: entryway	Max R Terra: Gray with color panels: Left/Landfill - Black; Center/Recycling - Blue; Right/Compost -Green	Length: 57.5; Width 24; Height 50.5 (with headerboard = 64.25)	22 / 55 / 55 gallon Split Side Load with Vail Top	Y	Y	Indoor	3	Standard		Style with header \$2,250. Bottom pallet \$703.50. 10% discount + freight. For orders over \$50 K, discount increased to 12-15%.	40	\$118,140.00
2, 3, 4, 6, 10, 13, 18, 27, 41,45, 46, 48, 49, 50, 53, 59, 71, 72, 73, 91	Classroom and Faculty Offices Building: stair landing	Rubbermaid FG354007 Slim Jims: landfill - black, recycling - blue, compost - green	23 gallons: length 20; width 11; height 30 16 gallon: length 23.1, width 11, height 24.9	23 gallon recycle, 23 gallon compost with lids, 16 gallon landfill.	N	Y	Indoor	3	Standard		23 gal slim jim for recycling and compost - \$38.84 (for 32); 16 gal slim jim for landfill - \$29.37 (for 32); lids \$38.00	100	\$22,105.00
12, 14, 16	Student Center, Starbucks, Dining Commons	Max R Terra: Gray with color panels: Left/Landfill - Black; Center/Recycling - Blue; Right/Compost -Green	Length: 57.5; Width 24; Height 50.5 (with headerboard = 64.25)	22 / 55 / 55 gallon	Y	Y	Indoor	3	Custom - Standard with additional Starbucks items		Style with header \$2,250. Bottom pallet \$703.50. 10% discount + freight. For orders over \$50 K, discount increased to 12-15%.	10	\$29,535.00

**CSUMB Proposed Collection Site Receptacles and Costs (Continued)**

Building #	Location Type	Bin Type	Dimensions	Specifications	Made from Recycled Content	ADA Compliance	Indoor/Outdoor	1, 2 or 3 Stream	Signage: standard or custom	Image	Cost	Total Number Required	Total Estimated Cost
202,203, 204, 205,206, 208, 210, 211, 301, 302, 303	Residential Hall: outdoor common area	Victor Stanley SD-42 Stand Alone 36 Gallon	Diameter 28; height 46.5	Recycled Steel, interior plastic liner. 36 gallons	N	Y	Outdoor	2	Custom, strip around bin or on top		Approximately \$2,285 with tax, freight, galvanizing (average of "litter" and "recycling" bins). Relay pricing additional. Signs at least extra \$100 - \$200.	22	\$53,570.00
202,203, 204, 205,206, 208, 210, 211, 301, 302, 303	Residential Hall: indoor common area	Rubbermaid FG354007 Slim Jims: landfill - black, recycling - blue, compost - green	23 gallons: length 20; width 11; height 30 16 gallon: length 23.1, width 11, height 24.9	23 gallon recycle, 23 gallon compost with lids, 16 gallon landfill.	Y	Y	Indoor	3	Standard		23 gal slim jim for recycling and compost - \$38.84 (for 32); 16 gal slim jim for landfill - \$29.37 (for 32); lids \$38.00	230	\$50,841.50
80, 81, 82, 84, 86, 91, 97	Office Building: break room	Rubbermaid FG354007 Slim Jims: landfill - black, recycling - blue	23 gallons: length 20; width 11; height 30 16 gallon: length 23.1, width 11, height 24.9	23 gallon recycle with lid, 16 gallon landfill.	Y	Y	Indoor	2	Standard	 Same as 3-stream with lids, lock together, minus the compost bin.	23 gal slim jim for recycling and compost - \$38.84 (for 32); 16 gal slim jim for landfill - \$29.37 (for 32); lids \$38.00	20	\$2,884.20
1, 8, 35, 42, 43, 44, 47, 80, 97, 201	Office Building: break room	Exaco ECO-2000 Countertop Compost Collector	Length: 8.5", width: 9", height: 11"	2.4 gallon capacity, plastic with carbon filter	N	Y	Indoor	1	Standard		\$24.30 / each	20	\$486.00

**CSUMB Proposed Collection Site Receptacles and Costs (Continued)**

Building #	Location Type	Bin Type	Dimensions	Specifications	Made from Recycled Content	ADA Compliant	Indoor/Outdoor	1, 2 or 3 Stream	Signage: standard or custom	Image	Cost	Total Number Required	Total Estimated Cost
1, 8, 35, 42, 43, 44, 47, 80, 97, 201	Office building: common area (hallway or entrance)	Rubbermaid FG354007 Slim Jims: landfill - black, recycling - blue	23 gallons: length 20; width 11; height 30 16 gallon: length 23.1, width 11, height 24.9	23 gallon recycle with lid, 16 gallon landfill.	Y	Y	Indoor	2	Standard	 Same as 3-stream with lids, lock together, minus the compost bin.	23 gal slim jim for recycling and compost - \$38.84 (for 32); 16 gal slim jim for landfill - \$29.37 (for 32); lids \$38.00; prices	30	\$4,326.30
1, 8, 35, 42, 43, 44, 47, 80, 97, 201	Office Building: printer area	Rubbermaid FG354007 Slim Jim: recycling - blue	23 gallons: length 20; width 11; height 30	23 gallon recycle with lid	Y	Y	Indoor	1	Standard		23 gal slim jim - \$38.84 (for 32)	40	\$3,073.60
36, 37, 74, 75	Facilities & Maintenance	Rubbermaid FG354007 Slim Jims: landfill - black, recycling - blue, compost - green	23 gallons: length 20; width 11; height 30 16 gallon: length 23.1, width 11, height 24.9	23 gallon recycle, 23 gallon compost with lids, 16 gallon landfill.	N	Y	Indoor	3	Standard		23 gal slim jim for recycling and compost - \$38.84 (for 32); 16 gal slim jim for landfill - \$29.37 (for 32); lids \$38.00	10	\$2,210.50
90, 100, 902	Sports Complex	Max R Terra: Gray with color panels: Left/Landfill - Black; Center/Recycling - Blue; Right/Compost -Green	Length: 57.5; Width 24; Height 50.5 (with headerboard = 64.25)	22 / 55 / 55 gallon Split Side Load with Vail Top	Y	Y	Indoor	3	Standard		Style with header \$2,250. Bottom pallet \$703.50. 10% discount + freight. For orders over \$50 K, discount increased to 12-15%.	5	\$14,767.50

**CSUMB Proposed Collection Site Receptacles and Costs (Continued)**

Building #	Location Type	Bin Type	Dimensions	Specifications	Made from Recycled Content	ADA Compliant	Indoor/Outdoor	1, 2 or 3 Stream	Signage: standard or custom	Image	Cost	Total Number Required	Total Estimated Cost
All	Key Building Lobbies: Residence halls, Library, Student Center, Chapman, Ocean Hall, Student Services, VPA and the Recreation Center	Used battery bins, <a href="http://www.newpig.com">www.newpig.com</a>	Length 9.8"; width 7.8"; height 9.6"	2 gallons; lid and handle	N	Y	Indoor	NA	Comes with signs		\$19.00 each for 10 or more.	5	\$95.00
All	Facilities & Maintenance Warehouse and vehicles only	Fluorescent lamp recycling drum	14.6" diameter; 49" height.	Fiber. Holds up to 150 4 ft T8 tubes.	N	N/A	Indoor	NA	Would require labels.		\$68 each for 10 or more.	10	\$68.00
All	All Building Types: common or utility area	E-waste Bin (utilize existing) with Sticker <a href="https://www.recycle-reminders.com/recycle-print-cartridges-signs">https://www.recycle-reminders.com/recycle-print-cartridges-signs</a>	16 gallon: length 23.1, width 11, height 24.9	NA	N	Y	Indoor	NA	Sticker labels.		50 for \$59.50	50	\$59.50
All	All Building Types: common or utility area	Printer Cartridge Bin (utilize existing) with Sticker	16 gallon: length 23.1, width 11, height 24.9	NA	N	Y	Indoor	NA	Sticker labels		5 for \$21.19	50	\$201.90
All	All Building Types: common or utility area	Hazardous waste labels. Hazardous Waste Publishing Inc.	Width 6"; height 5"	Correct label for fluorescent lamp and e-waste bins	N	N/A	Indoor	NA	Sticker for Fluorescent light tube bins		\$35.00 for 100, plus \$10.00 shipping.	2	\$70.00

**CSUMB Proposed Collection Site Receptacles and Costs (Continued)**

Building #	Location Type	Bin Type	Dimensions	Specifications	Made from Recycled Content	ADA Compliance	Indoor/Outdoor	1, 2 or 3 Stream	Signage: standard or custom	Image	Cost	Total Number Required	Total Estimated Cost
<b>Subtotal for Indoor Bins Estimated Cost</b>												\$355,073.50	
<b>Cost reduction from using existing Slim Jim bins (100 recycling bins with lids in inventory, 100 refuse bins):</b>												<b>-\$15,368.00</b>	
<b>Total Indoor Bins Estimate Costs</b>												<b>\$339,705.50</b>	
*	Quad Areas	Max R Terra: Gray with color panels: Left/Landfill - Black; Center/Recycling - Blue; Right/Compost -Green May be converted for outdoor use	Length: 57.5; Width 24; Height 50.5 (with headerboard = 64.25)	22 / 55 / 55 gallon	Y	Y	Outdoor	3	Custom		Style with header \$2,250. Bottom pallet \$703.50. 10% discount + freight. For orders over \$50 K, discount increased to 12-15%.	15	\$44,302.50
*	Parking Lots	Victor Stanley SD-42 Stand Alone 36 Gallon	Diameter 28; height 46.5	Recycled Steel, interior plastic liner. 36 gallons	N	Y	Outdoor	2	Custom, strip around bin or on top		Approximately \$2,285 with tax, freight, galvanizing (average of "litter" and "recycling" bins). Relav pricing	20	\$48,700.00
All	Events	Event bins - Clear Stream Recycling Systems	Width 25; depth 18; height 40.	45 gallons	Y	Y	Outdoor	3	Comes with signs		5 pack = 5 lids and frames of one type, with 10 bags. \$299. Extra bags - 200 for \$59.	3	\$1,074.00
<b>Subtotal for Outdoor Bins</b>												<b>\$94,076.50</b>	
<b>Total Indoor and Outdoor Bin Estimated Costs</b>												<b>Total: \$433,782.00</b>	

## **Attachment G - CSUMB Proposed Phased Approach to Installation of Collection Sites**

Per the Materials Management and Conservation Plan (MMCP) for California State University Monterey Bay, it is proposed that 3-stream waste collection sites (interior and exterior recycling, landfill and compost bins) be phased into the operations at CSUMB. It is recommended that it first be piloted at the Student Center. Universal Waste Collection sites will be set up in the Student Center as well. Learning from the implementation of centralized 3-stream waste collection and universal waste collection at the Student Center will help drive a more effective roll out to a larger Phase II Pilot in four proposed buildings:

1. The Tanimura and Antle Family Memorial Library
2. Chapman Hall
3. An administrative building such as the President's Building 1
4. The Dining Commons and The Otter Express

It is recommended that Phase III will include implementation in the Residence Halls, and the remainder of Main Campus buildings. Phase IV will include off-site buildings such as the Steinbeck Center, East Campus and Ryan Ranch.

The small pilot implementation at the Student Center can be used to trouble-shoot problem areas before the collection sites are rolled out to the rest of the campus, and to inform the best practices developed in the MMCP. Following completion of the MMCP in the fall of 2017, comprehensive collection sites will be installed in all campus buildings, and will include a system for collecting all universal waste. In this sense, the project will be implemented in four phases.

While both interior and exterior landfill and recycling bins have been distributed around the campus, they are not always located where they are needed, or they are not co-located, and they lack consistent signage. There also has not been a recent assessment of the needs of different buildings. With universal waste, some is being collected, but there are gaps in the system and a lack of a defined process. There are several reasons to address these tasks now instead of waiting a number of months until the end of the planning process. First, recycling collection is an obvious and visible aspect of sustainability, and staff and students will feel reassured to see significant movement in this area. Second, the campus already has a number of smaller bins that could be used for waste collection; so much of this task could be done easily without substantial additional purchases. Additionally, the lessons learned during the first phase of the project could further inform the MMCP, which is meant to be an iterative document. Lastly, by phasing in the collection sites, the cost required will be spread over time, making it more feasible.

This process will assess bin requirements, signage on and above the bins, bin and sign installation, and draft standards for the placement of interior recycling, landfill and compost bins at CSUMB. It also suggests system(s) by which e-waste, fluorescent tubes, and batteries can be reliably collected. It was developed following consultations with sustainability professionals at the following universities: University of Oregon, U. C. Davis, CSU East Bay, UC Santa Barbara, and CSU San Marcos.

### **Phase I: Process for Assessing Interior Bin Requirements in the Student Center**

An initial walk-through has already been completed for the Student Center. The purpose of the walk-through was to assess the needs for waste bins in different locations, and to site and count the number of bins existing and required for one pilot location. Potential sites for 3-stream recycling, compost and garbage bins were noted on a map of the Student Center during the assessment.

There are several considerations for siting bins in a building, including:

- The primary traffic routes, and nodes of intersection
- The location of common areas, for example, break rooms where people eat, and areas where office equipment is shared
- The distance from individual offices to a common area
- The distance from classrooms to a hallway area where a 3-stream system could be set up
- The balance of convenience for students and employees versus ease of collection for custodial workers
- Consider whether a 3-stream system in office break areas, with additional recycling bins in printing areas, will be adequate
- Consider whether a 3-stream system in the hallway close to classrooms, and no bins inside the classrooms, will be adequate
- Communications with University staff and students regarding roll-out of the phases of implementation and the benefits of the centralized collection.

Following this initial joint walk-through, a system will be implemented and piloted in this first phase of the project. Lessons learned and problems will be noted and fixed. The draft standards for siting interior recycling, landfill and compost bins will be revised and developed for the rest of campus. The number and sites of bins existing and required for these first buildings, including bins for universal wastes, will be recorded during the assessment. The outcomes will be incorporated into this iterative MMCP.

## **Phase II: Process for Implementation in Other Building Types**

Phase II will be implemented in the Library, Chapman Hall, an administrative building such as the President's Building 1, the Dining Commons, and the Otter Express. With the standards previously developed, and maps of the remaining buildings, a walk-through will be performed for these buildings, noting the locations and numbers of the bins existing and required. New bins required will be purchased and distributed. Bins requested by Athletics and Events staff during the MMCP campus stakeholder meetings will also be distributed during Phase II.

## **Phase III: Centralizing Waste and Materials Collection Campus-Wide**

Before moving on to Phase III, careful planning and communication will be used to shift from decentralized collection of materials and waste to centralized collection. This will require discussions with CSUMB leadership to ascertain the best approach to implementing this change.

Sample language for an email to the CSUMB community follows:

Dear CSUMB staff and faculty:

As you may know, all CSUs are under a mandate to divert 80% of waste from landfills by 2020, and in the long term, strive for 90% diversion or zero waste. At CSUMB we are working hard to meet these goals. They are not only required, but they are the right thing to do, and support our focus on sustainability as expressed in the CSUMB Master Plan, the CSUMB Strategic Plan, the CSUMB Climate Action Plan, and our recent Materials Management and Conservation Plan.

You will see evidence of changes at CSUMB as we move towards using fewer new materials, reusing and donating those that are "lightly used", and recycling and composting as much as possible of the waste that is left. One change long in coming is a coordinated recycling/compost/garbage collection system throughout campus. Another is encouragement to

purchase products with recycled content. A third change is a move towards centralized 3-stream waste bins in common areas of buildings, and away from individual bins in each room.

Why centralized bins? The first and most important reason is that it will allow our community to collect all three waste streams. Logistically, it is not possible to have a 3-stream bin system in each room, and evidence from other campuses shows us that if we want to collect recycling and compost, we need to have it available with the garbage bins. Another reason is that centralized bins will be easier for the custodial staff to manage, especially since they will be emptying the compost bins each day. Lastly, we will be able to furnish these centralized bins with effective pictorial signs, allowing everyone to understand which items should be disposed where.

Can you still retain a recycling bin at your desk? Sure – just ask. We think you may change your mind eventually, but it is your decision.

Thank you for your support.

#### **Phase IV Off-site Locations: East Campus, Ryan Ranch, Steinbeck Center**

Walk-throughs, bin purchases, and bin distribution will continue similar to the previous phases. Since some of these locations have different waste haulers, though, there may be different requirements for collection. For example, while Green Waste services the Main Campus of CSUMB, Ryan Ranch is serviced by the City of Monterey, and Republic services Steinbeck Center.

#### **Bins (all phases)**

CSUMB already has a number of bins that can be used to set up a comprehensive indoor collection system. Many buildings already have recycling and landfill bins, even if they are not always in the best location and may lack proper signage. There are also a number of recycling bins in inventory – approximately (11) black 23 gallon slim jims, (86) blue 23 gallon slim jims, (24) blue slim jim lids, and (33) blue 32 gallon bins. In addition, there are reportedly (1552) recycling totes for dorm rooms. All of these existing bin supplies can be used in the new system and so save money for the university.

Following the walk-through, the number of bins still needed of each type can be determined. There likely will be sufficient recycling bins, and enough bins for a three-stream system in all four of the piloted buildings. Depending on the number of landfill bins already in use, there may be some need for more of this type. Primarily, though, it will be compost bins, with lids, that CSUMB will need to purchase. “Slim Jim” bins of each type can be purchased relatively inexpensively. The more expensive Max R Terra bins, where available and feasible to purchase will be used in high traffic, high visibility areas. See the full MMCP for specifics on which bins are recommended where.

#### **Signage (all phases)**

Simple, pictorial, instructive, and consistent signage will be developed for the smaller recycling, landfill and compost bins. The signs will depict images of the major types of waste that a student or staff member at CSUMB is likely to encounter, so that these items will easily be sorted into the correct bins. The signs will be colorful and attractive, and include the CSUMB otter logo.

CSUMB will work with Green Waste to develop the signage. The final versions should be editable so that they can easily be replaced by CSUMB if they disappear. Several versions of pictorial bin signs have already been developed for the campus, and it has been decided that signs originally produced for the Otter Express will serve as a general template for this project. Green Waste is willing to work with the campus

to modify them so that they will be appropriate to current needs. All signs will be updated to include pictures of current items typically disposed on campus, and any new information regarding disposal. In addition to one generalized sign for the entire campus, customized signs will be developed for specific high-volume locations, including the Library, with Peet's Coffee, the Student Center, with Starbucks, and Dining Commons, and the Otter Express.

CSUMB will ultimately purchase and update the smaller recycling, landfill and compost bins in central areas, known as "slim jims", with a larger, more durable 3-stream system that has already been chosen. Several of these larger bins are currently located at Monte's and the University Center. These larger 3-stream bins come with signage, although Phase I work may indicate the need for additional signage. CSUMB may wish to customize these signs with signs that work better for the hauler, Green Waste.

Universal waste signs will be designed following consultation with appropriate campus staff and piloted during Phase I implementation in the Student Center.

### **Developing a Timeline:**

It is recommended that a timeline be constructed to structure the bin rollout through the different phases. The timeline would include columns for tasks, dates, and people (if applicable). Tasks to address would include:

- Communication with building occupants regarding the coming changes
- Dates for each phase to begin
- Within each phase, timing of the walk-through, determination of number of existing bins that might be used, purchase of new bins (including universal waste), and installation of bins
- Finalization of sign design with Green Waste, and printing and lamination of signs
- Deadline for review of each phase, with lessons learned for the next phase

## Attachment H - Red List

Note: this list is copied from the LCC slide shown to the Planning and Development group – they thought there were a few that would be difficult, eg, PVC, lead

Building projects cannot contain any of the following Red List materials or chemicals:

- Alkylphenols
- Asbestos
- Bisphenol A (BPA)
- Cadmium
- Chlorinated Polyethylene and Chlorosulphonated Polyethylene
- Chlorobenzenes
- Chlorofluorocarbons (CFCs) and Hydrochlorofluorocarbons (HCFCs)
- Chloroprene (Neoprene)
- Chromium VI
- Chlorinated Polyvinyl Chloride (CPC)
- Formaldehyde (added)
- Halogenated Flame Retardants (HFRs)
- Lead (added)
- Mercury
- Polychlorinated Biphenyls (PCBs)
- Perfluorinated Compounds (PFCs)
- Phthalates
- Polyvinyl Chloride (PVC)
- Polyvinylidene Chloride (PVDC)
- Short Chain Chlorinated Paraffins
- Wood treatments containing Creosote, Arsenic, or Pentachlorophenol
- Volatile Organic Compounds (VOCs) in wet-applied products