

The Economics of Recycling

Educate
Equip
Empower





Why is a waste management plan important for the schools?

- **Good for the earth---**
 - less waste
 - conservation of resources through recovery
 - decreased green house gas emissions
- **Good for the kids---**
 - environmental stewardship & leadership
 - connection to natural resource,
 - purchasing power
- **Good for the school—**
 - potential cost savings,
 - better use of resources,
 - can be source of revenue
- **It's the Law!** AB 341 (Generators of ≥ 4 cubic yards of waste **MUST** recycle)





Goals of a Waste Reduction and Recycling Program

- Reduce waste
- Divert waste from landfill
- Increase resource recovery
- Decrease operational costs
- Improve and sustain waste reduction programs





10 Strategies for Success

1. Have a *clear plan* with measurable goals and a realistic time line.
2. Get buy in from *ALL* the stakeholders.
3. Assign tasks to appropriate personnel.
4. Meet regularly to discuss progress.
5. Know your waste stream!
6. Know your waste collection process!
7. Educate personnel about recycling.
8. Have proper signage.
9. Have proper collection containers.
10. **STAY POSITIVE!!!!!!**





Stakeholder Involvement

1. Superintendent
2. School Board
3. Facilities Manager
4. District Green Committee
5. School Green Committees
6. Waste Hauler-MSS
7. School Lunch Vendors
8. Site Councils
9. PTA/HSC
10. Student Green Teams



Know the Services offered by Marin Sanitary Service



Commercial Container Options

When you call 415-456-2601 to start your new service, you may select the size can that best suits your property's needs. You may change the size of your container by calling the number above. Customers may opt to buy their own compactors for commercial debris instead of using the ones provided by Marin Sanitary Service. Rates are based on container size. MSS does not provide collection bins for internal collection of materials.

Recycling Options:

Container Size Chart	64-gallon cart	96-gallon cart	1 cubic yards	2 cubic yards
Glass bottles, plastic small-neck bottles #1-7, aluminum and tin cans	X			
Newspaper	X	X		
Office waste paper	X	X		
Cardboard		X	X	X

Garbage Options:

- **Tipper Can Sizes** 32-gallon, 64-gallon, 96-gallon
- **Roll-off Box Sizes** 10, 18, 20 and 42 cubic yards
- **Front-Loader Box Sizes** 3 or 5 cubic yards
- **Rear-Loader Boxes** 2 cubic yards (equivalent to fourteen 32-gallon cans) of debris.

Other bulky debris options for non-garbage items:

- 3 cubic yards
- 5 cubic yards
- 10 cubic yards
- 18 cubic yards of loose debris.
- Larger sizes are available on request.

** Each cubic yard holds the equivalent of seven, 32-gallon containers).*

Materials Accepted:

You may dispose of any material in these boxes weighing less than 500 lbs. per cubic yard EXCEPT: dirt, rock, concrete, roofing materials and hazardous waste. All debris boxes are processed through the Marin Resource Recovery Center to garner any recyclable materials from the debris.

Dirt Boxes

If you need to dispose of materials that are over 500 lbs. per yard, you may order a dirt box. Dirt boxes are available in 5 or 10 cubic yards.

Dixie Waste Audit Data

		Waste Composition		Comments & Recommendations	
Audit Date	6/4/10	Inorganic		<p>COMMENTS: Large amounts of lunch waste and bathroom paper waste was found in the waste bin. Much of this contained contents that may be recyclable (i.e. plastic containers, tin foil, paper bags, etc.). Nearly 40% of the inorganic volume was paper towels from bathrooms and cardboard from classrooms. There was also a large amount of end of year items that were thrown out without sorting. No CRV bottles or cans were found in the inorganic waste.</p> <p>RECOMMENDATIONS: Educate staff on what types of paper can be recycled. Continue CRV collection. Continue sorting education of students, staff, and teachers. Reenforce concept of No Waste Lunches with parents.</p>	
Account #	23070	Organic	Food Waste		40%
Waste Bin Type & Size	1-3 yrd frontloader		Yard Waste		15%
Service Days	Tues/Fri	Paper			5%
Recycling Bin Type & Size	4-64 blue paper; 1-64 brown general recycling	Cardboard			15%
		Bottles: plastic and cans*			25%
Service Days	once a week	e-Waste**			NA
		Wood**			NE
		Batteries**			NE
		CFL, bulbs/tubes**			NE



Dixie School Waste Costs

Marin Sanitary Service	2007-2008	2008-2009	2009-2010	2010-2011
July	\$773.39	\$867.75	\$762.70	544.81
August	\$559.30	\$605.94	\$652.70	\$336.73
September	\$562.73	\$1168.19	\$802.70	\$642.66
October	\$809.75	\$867.75	\$652.70	\$624.40
November	\$809.75	\$867.75	\$652.70	\$624.40
December	\$809.75	\$867.75	\$652.70	\$624.40
January	\$809.75	\$867.75	\$652.70	\$624.40
February	\$809.75	\$931.50	\$557.41	\$624.40
March	\$1,028.03	\$931.50	\$707.91	\$760.40
April	\$867.75	\$931.50	\$624.40	\$692.40
May	\$867.75	\$931.50	\$624.40	\$692.40
June	\$867.75	\$931.50	\$707.91	\$692.40
Total cost	\$9,575.45	\$10770.38	\$8050.93	\$7483.80



Why sort?---the business case

More Waste = More Money Spent

Less Waste = Money savings

- Model School: Dixie Elementary School
 - Implemented lunch time sorting
 - Worked with Custodians on Waste plan for snack and lunch.
 - Educated parents on Zero Waste lunches

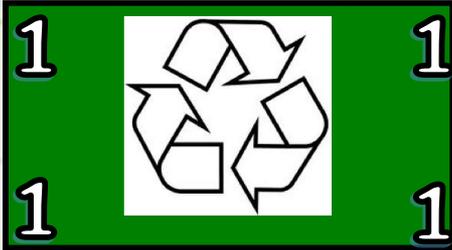


Total savings for Dixie so far:
\$2719.45 (2009-2010 school year)
\$567.13 (2010-2011 school year)

SORT IT OUT CAMPAIGN!

waste disposal education





Incentives-Contests

- Champion Recycler Trophy
- New to You Store
 - Green Bucks
 - Earned by bringing in CRV recycling on Recycle Fridays
 - Getting caught using green behaviors
 - Green jobs—recycler, energy monitor
 - Teacher rewards---cash, conferences, free time while Green Chair teaches a lesson
 - Financial award from the district to school for meeting set diversion rates



Awards and Recognition



Internal Sorting Containers



External Sorting Containers



Other ways to reduce waste

Five Simple Ways to Pack a Zero Waste Lunch



Yes	NO
REUSABLE carrier (cloth bag, lunchbox)	NO throw-away bags
REUSABLE containers	NO plastic wrap, foil or styrofoam
REUSABLE bottle for drinks	NO single-use cartons or cans
CLOTH NAPKIN to wash and re-use	NO paper napkins
SILVERWARE to wash and re-use	NO plastic forks and spoons

Other ways to reduce waste

Reusable Dishes for Classrooms



Zero Waste = zero disposal costs!

