

permit applicant to address their waste before the permit is approved. There are also minimum amounts of the waste that must be recycled or reused according to type.

Staff recently instituted process changes for the C&D ordinance to increase diversion to the goal of 60%. These changes make it more likely that the City will get 60% diversion through enforcement of the C&D ordinance and by encouraging material salvage.

According to the California Integrated Waste Management Board, Construction and Demolition materials account for 10.4% of business disposal. A stricter ordinance would reduce this number and help San Carlos achieve its 1% per year diversion goal. Additionally, recycling or reusing C&D material is often less expensive than disposing of it. Organizations such as RecycleWorks have instruction manuals on how to recycle or find reuse for almost all materials.

Initial Cost

The City of San Carlos is already well on its way to preparing for increased waste diversion. A consultant has been hired to address the C&D waste diversion ordinance and prepare a more stringent program. This extra effort for C&D recycling is currently funded through garbage rates, but it may be funded in the future through C&D permit fee add-ons. The additional counter work would most likely be absorbed by applicants for a construction or demolition permit.

Greenhouse Gas Emissions Reductions

It is estimated that a more restrictive C&D ordinance, along with the next measure and previously planned improvements to waste collection would increase waste diversion by 1% per year. A 1% increase per year as compared to the previous year (compounded) would bring San Carlos' total waste diversion rate to over 70% by 2030. It is estimated that this reduction measure will decrease greenhouse gas emissions by approximately 6,222 metric tons of CO₂ equivalent.⁶⁰

4.2. Provide for expanded recycling outreach and services to multi-family residential buildings, including renter-occupied apartment buildings

Although there are many sources of waste in San Carlos, concentrating on large waste sources like C&D and multi-family residential buildings will be most cost effective in attaining our 1% a year waste diversion goal.

Multi-family houses, especially those that are renter-occupied, often do not offer recycling, green waste, or composting services. There is a need for outreach to property managers and landlords about the cost-savings and environmental benefits of waste diversion. Additionally, residents of multi-family buildings could be urged to ask their landlords for these services.



⁶⁰ Based on a compound interest rate of 1% from 2020 solid waste projections.

Expanded outreach to the residents of San Carlos is underway concerning recycling and composting services. In October 2008, City Council directed Staff to begin negotiations with NorCal Waste Systems of San Mateo County to become the new Solid Waste, Recycling and Organics Collection firm in San Carlos starting on January 1, 2011. As part the agreement, NorCal Waste will be providing a six month recycling publicity program to advertise their new programs. They will also do ongoing outreach and public education as part of their contract with the City.

Initial Cost

As a result of the recent contract with NorCal Waste (see page 82 for details), the initial cost to the City for this reduction measure is expected to be negligible.

Greenhouse Gas Emissions Reductions

It is estimated that this measure, along with the previous measure and previously planned improvements to waste collection would increase waste diversion by 1% per year. A 1% increase per year as compared to the previous year (compounded) would bring San Carlos' total waste diversion rate to over 70% by 2030. It is estimated that this reduction measure will decrease greenhouse gas emissions by approximately 6,222 metric tons of CO₂ equivalent.⁶¹

4.3. Mandate commercial recycling

The California Integrated Waste Management Board (CIWMB) waste stream profile for San Carlos indicates that 63% of the City's waste comes from commercial properties. Mandatory recycling for daily commercial activities would greatly reduce this percentage, therefore reducing the amount of methane released from landfills.

It is likely that commercial recycling will become mandatory in the near future under the AB 32 Scoping Plan. The preliminary draft recommendations, approved in January 2009, clearly state that the Air Resources Board and CIWMB are considering mandatory programs to increase commercial recycling through local government partnerships.

A mandatory commercial recycling program would require enforcement. Local police would partner with the waste management provider to identify businesses with improperly sorted waste. Enforcement and coordination would be funded by the money generated from fines to commercial properties.

Initial Cost

Costs to mandate commercial recycling would be minimal. The 2011 service contract with NorCal Waste is assumed to have capacity for increased commercial recycling.

Greenhouse Gas Emissions Reduction

It is estimated that mandatory commercial recycling within the City of San Carlos would ensure that San Carlos' waste diversion rate reaches over 60% by 2020. This diversion rate would meet, if not exceed, the future State target for overall waste diversion which is now at 50%.

⁶¹ Based on a compound interest rate of 1% from 2020 solid waste projections.

Table 31
Summary of Solid Waste Reduction Measure 4

	Supporting measure	Initial Cost to the City	GHG Reduction (metric tons CO ₂ e / year)	Cost per metric ton CO ₂ e
1	Increase required Construction and Demolition (C&D) diversion rate beyond the 50% currently required.	Negligible	6,222	Negligible
2	Provide for expanded recycling outreach and services to multi-family residential buildings	Negligible		
3	Mandate commercial recycling	Negligible		
TOTAL		Negligible	6,222	Negligible

Solid Waste Reduction Measures – Progress to Date

San Carlos has taken a proactive approach to reducing waste and increasing waste diversion among residents and businesses. This section describes San Carlos's progress to date in achieving the reduction targets of the measures in this chapter.

NorCal Waste Contract

At the October 13, 2008 meeting, the City Council approved a resolution to begin negotiations with Norcal Waste Systems of San Mateo County to become the new Solid Waste, Recycling and Organics Collection firm in San Carlos starting on January 1, 2011. Norcal was chosen as the City's new provider in part because of its expanded composting, recycling, and outreach services that will help reduce greenhouse gas emissions levels within the City of San Carlos. Specifically, Norcal offers the following with respect to waste reduction:



1. The company pioneered Commercial Organics Recycling Collection Service in Northern California and is highly committed to diversion from all service sectors.
2. Norcal's proposal includes the high levels of diversion and is specifically strong in the area of Commercial Recycling and Organics Collection Service and in the On-Call (Bulky Items) Collection Service. The company has put forth an aggressive, yet achievable Commercial Recycling diversion goal and innovative approach to attain the desired results.
3. Norcal's proposal included environmental enhancements including the use of B-40 fuel (40% bio diesel), regular carbon footprint monitoring and reporting, use of hybrid trucks for route supervisors, and incorporating green building practices and standards at its facilities.
4. Norcal will provide a free 6 month Commercial and Multi-Family Dwelling "Recycling Blitz" educational program (estimated to cost \$478,435) and will remit to the SBWMA Member Agencies the revenue derived from the recyclable material that is collected during this program (estimated at \$210,000).

This contract will play an essential role in reducing emissions by the amount set forth in this plan. The "Recycling Blitz" is already in the planning stages.

Construction & Demolition (C&D) Ordinance

As mentioned previously, City staff is taking forward an amendment on the C&D ordinance with a 60% diversion goal. The process charges make it more likely we will get 60% diversion through the C&D ordinance enforcement and the salvage of materials.

The C&D ordinance is expected to be crucial to reaching a 1% diversion increase per year for an overall goal of over 70% by 2030.

Analysis of Reduction Target – Solid Waste

With the four reduction measures described in this chapter, San Carlos would reduce its solid waste emissions by 25%.

Table 32
Summary of Solid Waste Emissions Reductions

		Metric Tons CO ₂ e per year
Reference year 2030 “Business as Usual” Solid Waste Projection		14,636
1	Promote zero waste.	- 510
	1.1. For municipal operations, establish a zero waste policy	
2	Require recycling and composting as a condition of approval for public events.	- 255
	2.1. Require recycling and composting as a condition of approval for public events.	
3	Establish an environmentally preferable purchasing program (EPP) for government operations.	- 287
	3.1. Create an Environmentally Preferable Purchasing Policy (EPP) for municipal operations.	
4	Increase overall waste diversion by at least 1% per year.	- 6,222
	4.1. Increase required Construction and Demolition (C&D) diversion rate beyond the 50% currently required.	
	4.2. Provide for expanded recycling outreach and services to multi-family residential buildings, including renter-occupied apartment buildings.	
	4.3. Mandate commercial recycling	
Total Community Reduction		-7,274
Net Community Waste Emissions		7,362
Base Year 2005 Solid Waste Emissions (reference)		12,777
Percent below 2005 level		42.3%