



# Construction & Demolition Recycling





PENDLETON-DELUZ

RAINBOW

FALLBROOK

PALOMAR

BONSALL

VALLEY CENTER

PALA-PAUMA

NORTH MOUNTAIN

BORREGO SPRINGS

NC METRO

TWIN OAKS

NC METRO

NC METRO

NC METRO

NC METRO

SAN DIEGO

RAMONA

JULIAN

DESERT

CENTRAL MOUNTAIN

CUYAMACA

ISLANDS

LAKESIDE

ALPINE

DESCANSO

PINE VALLEY

MOUNTAIN EMPIRE

PEPPER DRIVE  
BOS TOMAS

CREST/  
DEHESA

VALLE DE  
RAMON

SPRING  
VALLEY

JAMUL/DULZURA

MTH  
EMPIRE

LAKE MORENA/  
CAMPO

BOULEVARD

JACUMBA

ISLANDS

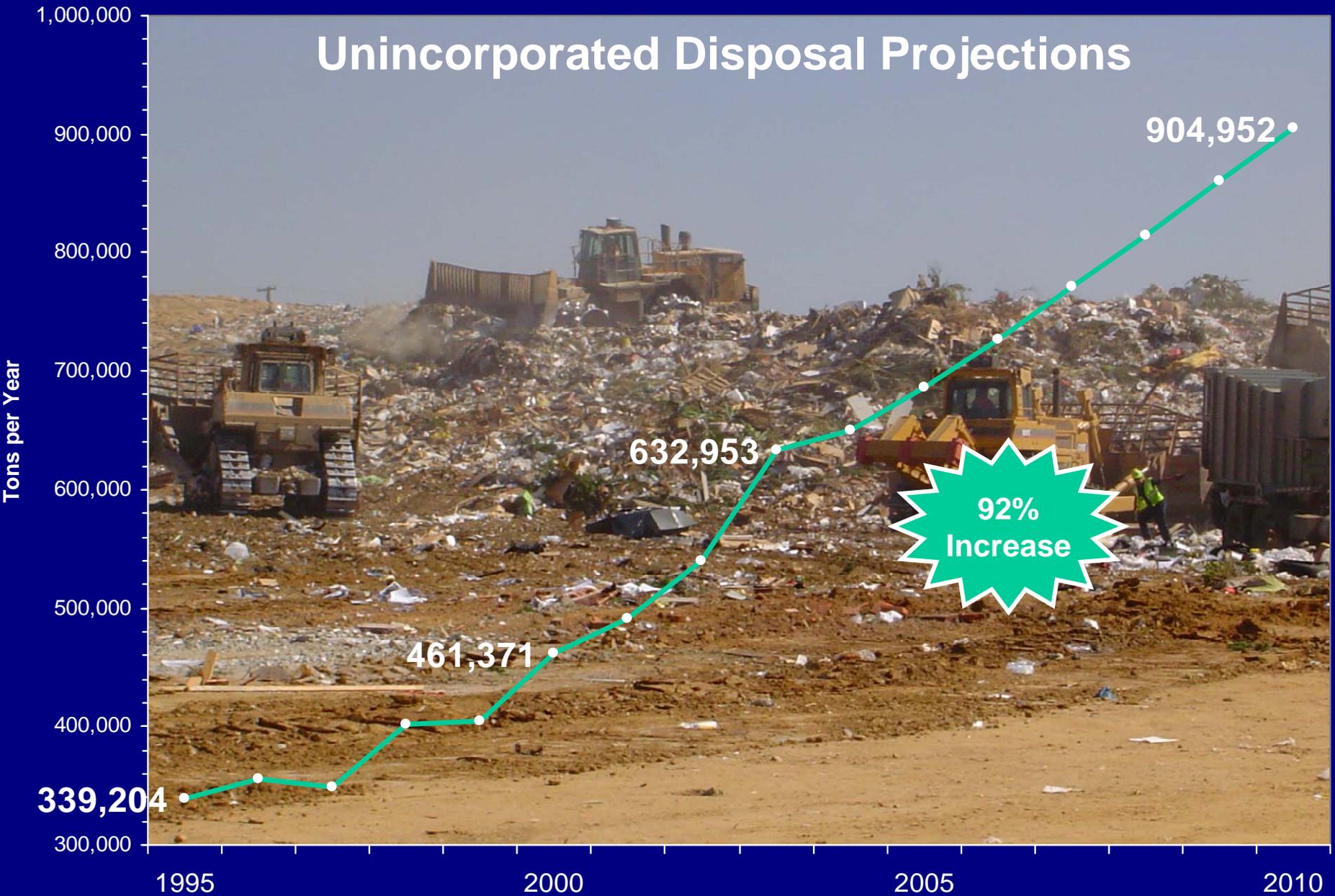
SWEETWATER

OTAY

POTRERO

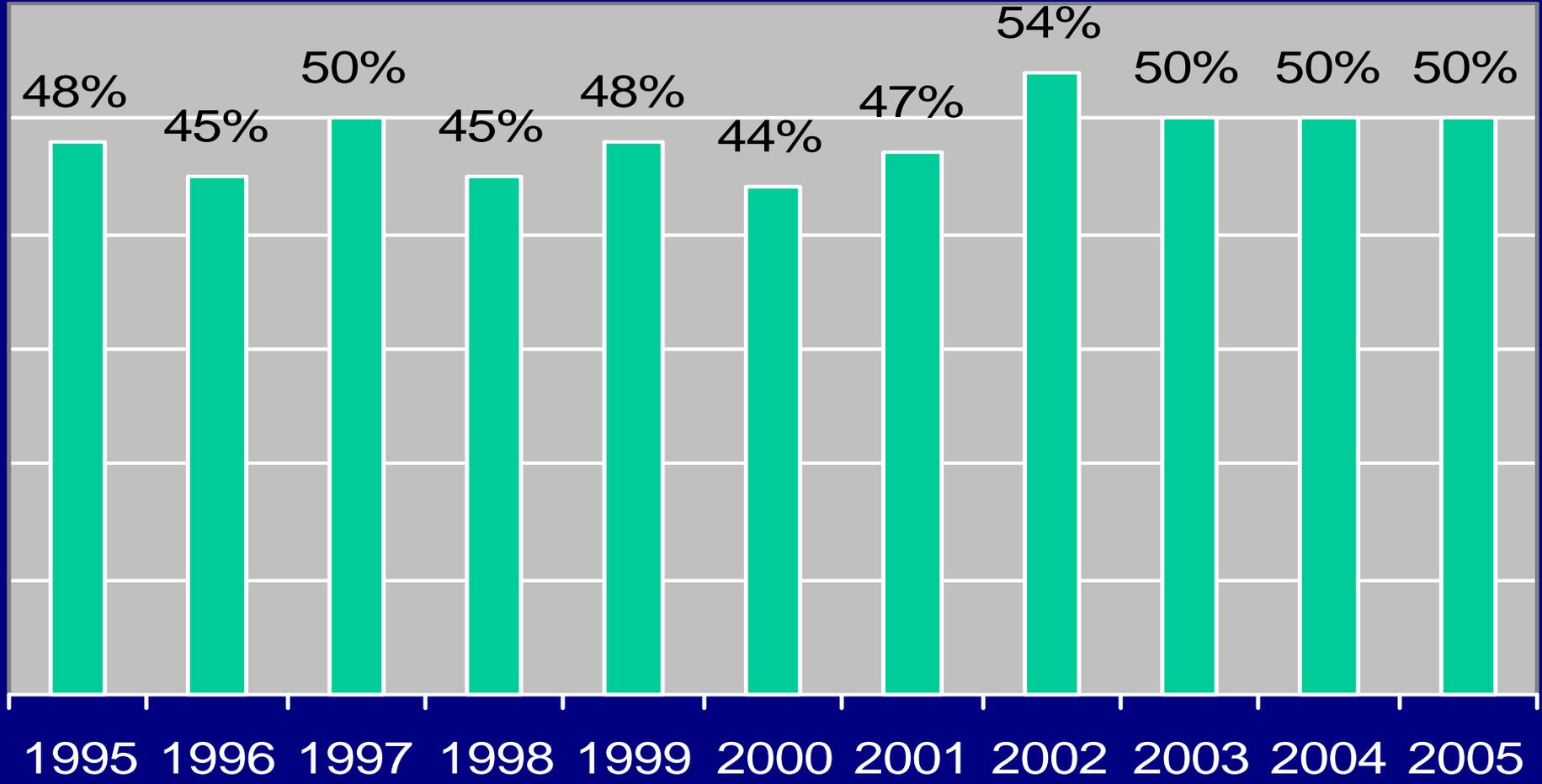
TECATE

# Unincorporated Disposal Projections



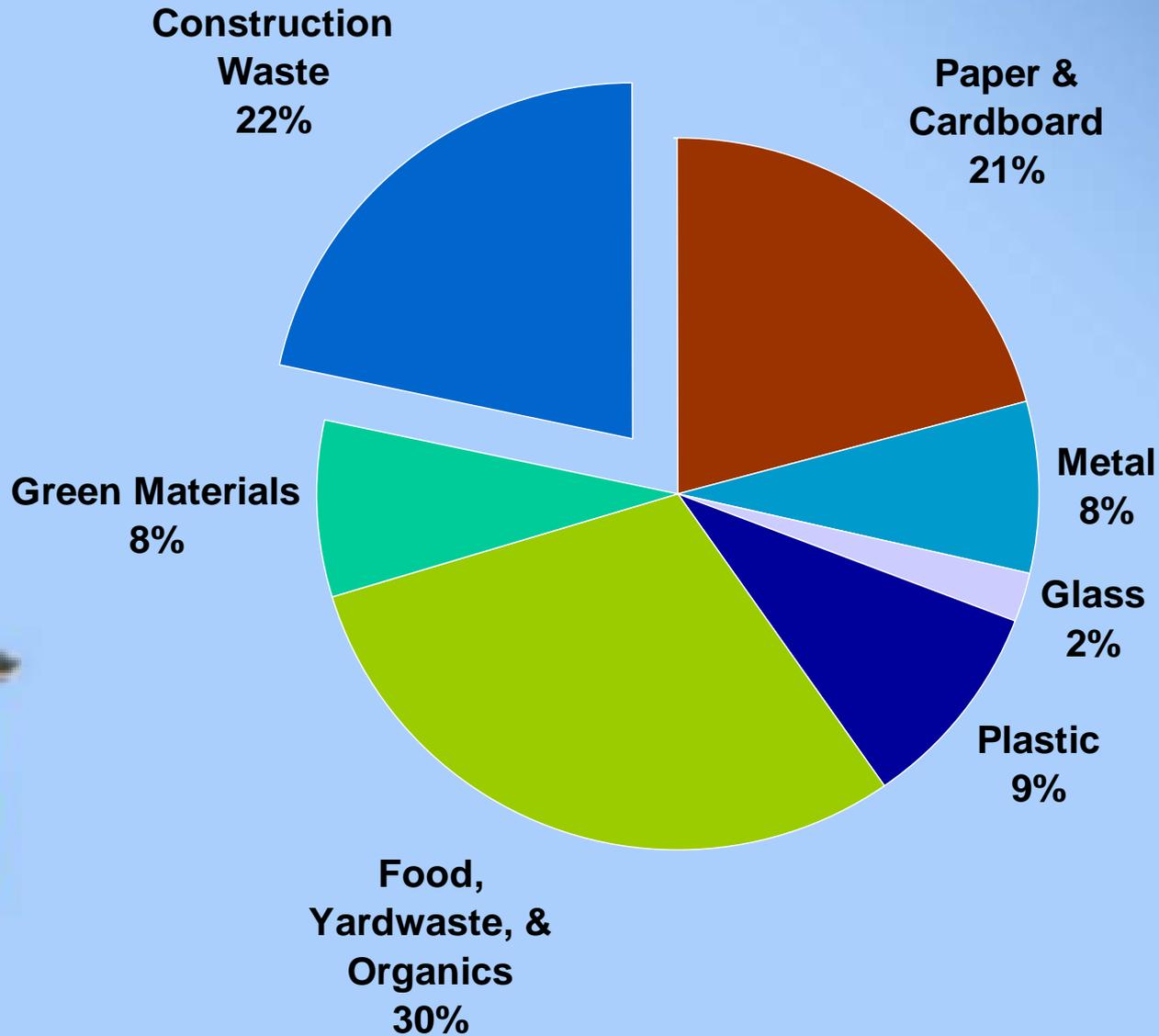
92%  
Increase

# Unincorporated County AB 939 Recycling Rates 1995-2005





# What is in the Landfill?





# The Process

- 2002 Local Task Force TAC & CAC
- 2004 Countywide Model
- 2005 Stakeholders
- Dec 2004 BOS Approves Grant Program
- July 2005 Grant Awarded
- Jan 2007 Facility Opens
- April 2007 Ordinance Effective
- July 2007 Ordinance Implemented



# Creating Infrastructure

- Mixed C&D Technical Assistance Grant
- \$400,000
- 2:1 Match Grantee:County
- \$ for Equipment Only
- Equipment Lien
- Recycling Incentive





# Grant Evaluation Criteria

- Financial Viability and Assurance
- Impact
- Organizational Capacity
- Project Conception
- Specialized Experience and Technical Competence
- Past Performance Record
- Zoning and Permits
- Price and Value to the County



# What we got...

- San Diego's First Mixed C&D Facility
- 100,000 TPY
- ~ 8:1 Match
- Public/Private Cooperation





16 9:35AM

# The Ordinance





# Other Jurisdictions

- Countywide Model Ordinance
  - Chula Vista
  - La Mesa
  - Carlsbad
  - Imperial Beach
  - Vista
  - Santee (policy)
  - Oceanside (policy)
  - City of San Diego (ordinance in process)
- Over 140 cities and counties statewide





# Goals

- Recover Inert Materials
- Preserve Landfill Capacity
  - 2011-Miramar and Ramona Landfills
- Meet State Mandates
  - Reduce Disposal
  - Increase Recycling Rate 4%





# Applicable Projects

- Initially Projects  $\geq 40,000$  ft<sup>2</sup>
  - New construction
  - Demolition
  - Renovations, including conversions
  - Phased construction
  - Commercial
  - Multi-Family
  - County Projects





# Requirements

- Recycling/Reuse
  - 90% Inerts
  - 50% Everything Else





# Applicant Process

1. Conditions of Approval for a building permit.
2. Complete [debris management plan](#).
3. Pay [security](#).
4. Keep a log and submit [proof of recycling](#) quarterly

Jan–Mar – April 15

Jul–Sep - October 15

Apr–Jun – July 15

Oct–Dec– January 15

5. Final recycling calculation within 180-days of certificate of occupancy.
6. Security + Interest returned.





# Tracts & Multi-Building Commercial

1. Each new phase must comply.
2. New Debris Management Plan.
3. New security.





# County Projects

1. New Board Policy
2. Part of RFP.
3. Complete debris management plan.
4. Plan approved.
5. Keep a log and submit proof of recycling quarterly.



# Public Education

- Before ordinance: 18 public stakeholder meetings
- After ordinance
  - AGC & BIA informational meetings
- Quarterly email newsletter
- Website & Hotline
- C&D Recycling Guide – Bilingual
- Staff Assistance



# Industry Benefits

1. CEQA
2. Green/LEED Building
3. Future Disposal Costs





# Results

- C&D Facility – 10% Capacity





# Results

- \$13,000 Actual + \$48,000 Invoices
- 13 Debris Management Plans
- Quarterly Report Enforcement
- Pre-Plans and estimates
- Open doors to County departments
- Model for other jurisdictions



# County of San Diego

## Solid Waste Planning and Recycling

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# Additional Slides





# Debris Management Plan

Complete this form before obtaining a building or demolition permit. Submit this form and your performance guarantee to the Department of Public Works Building Counter at 5201 Ruffin Road, Suite B, San Diego, CA 92123.

Part 1

Permit # (include all permit #'s in the phase) \_\_\_\_\_ Project Name (if applicable) \_\_\_\_\_

Project Location \_\_\_\_\_  
Address (Cross Street, Floor, Suite, etc) City Zip

Contact Name \_\_\_\_\_ Company Name \_\_\_\_\_

Mailing Address \_\_\_\_\_  
Address City State Zip

Phone \_\_\_\_\_ Fax \_\_\_\_\_ Email \_\_\_\_\_

Estimated Start Date \_\_\_\_\_ Estimated Completion Date \_\_\_\_\_ Project Square Footage \_\_\_\_\_

Part 2

**Debris Estimation**  
 Identify how the materials generated by the project listed in Part 1 will be handled. Use the Materials Conversion Table to convert volumes to tons. If you do not know the amount of materials, you can use the Standard Generation Worksheet.  
**Requirement - Reduce the quantity of materials disposed at landfills by 90% for inerts and 50% for the rest (determined by weight)**

Identify Materials (estimate amount by weight)				
Material Type	Recycle	Salvage or Onsite Reuse	Dispose	Handling Procedure, Hauler or Final Destination for Materials
Inerts				
Asphalt & Concrete				
Brick/Masonry/Tile				
Dirt				
Mixed Inerts <sup>1</sup>				
<b>Total Inert</b>				

Other Materials	Cabinets, Doors, Fixtures, Windows (circle all that apply)				
	Cardboard				
	Carpet				
	Padding/Foam (carpet)				
	Ceiling Tile (acoustic)				
	Drywall (used)				
	Drywall (new, unpainted or scrap)				
	Landscaping (brush, trees, stumps, etc.)				
	Mixed Recyclables <sup>1</sup>				
	Roofing Materials				
	Scrap Metal				
	Stucco, Cement (no wire)				
	Unpainted Wood & Pallets				
	Trash				
	Other (describe)				
<b>Total Other</b>					

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# Security - \$0.20 per ft<sup>2</sup>

Project Size	Security
40,000 ft <sup>2</sup>	\$ 8,000
50,000 ft <sup>2</sup>	\$10,000
60,000 ft <sup>2</sup>	\$12,000

Maximum = \$25,000

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TV made for Identification #1

PHONE: 653-1911	TERMS: 30-10 DAYS
3/29/20	5/20
NO. 1	NO. 1
CUSTOMER: Dalmar	NO. 1
NO. 1	NO. 1
NO. 1	NO. 1

2040 Market Street  
Wilmington, Delaware 19801

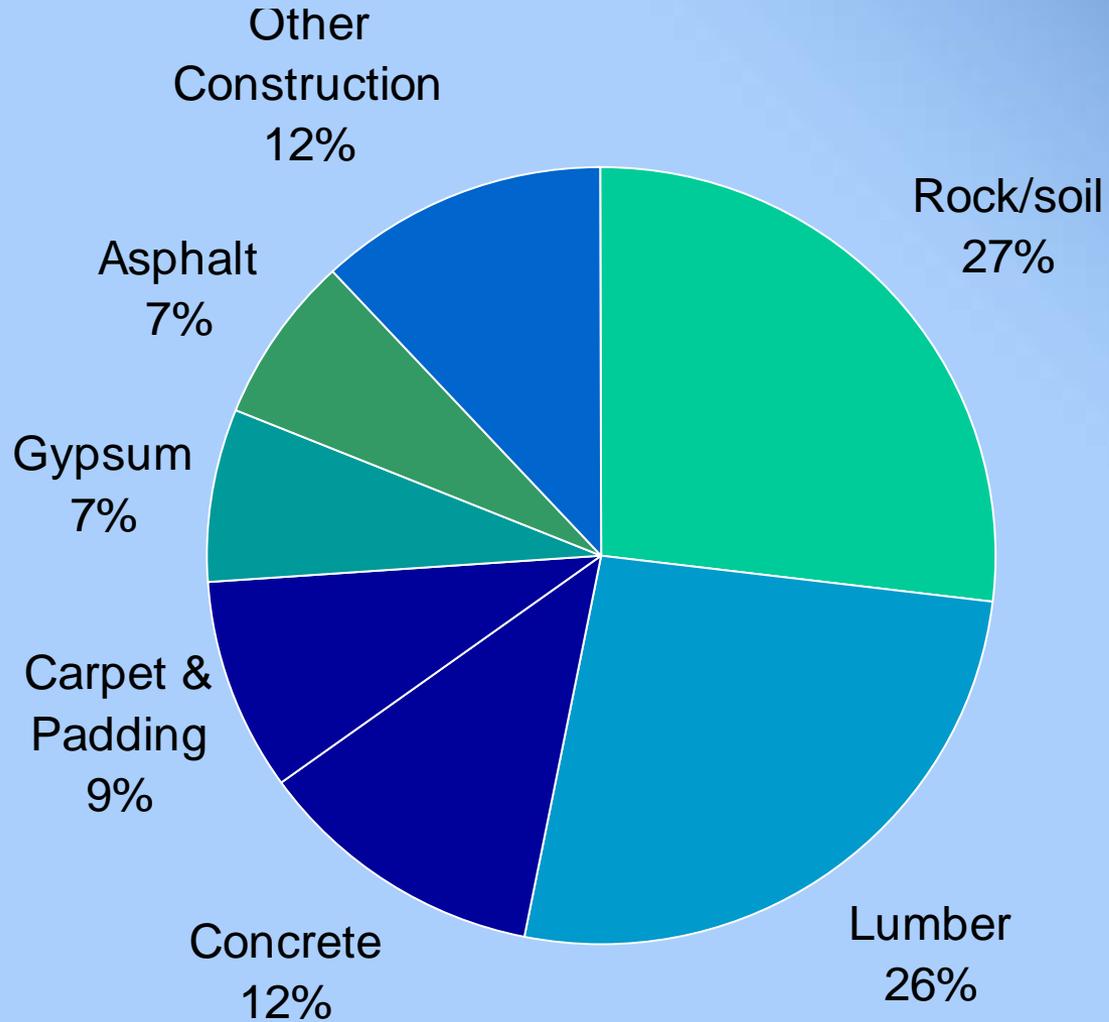


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# C&D Composition



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## Solid Waste Planning and Recycling



### Construction & Demolition Debris Recycling

**Construction & Demolition Debris Recycling Overview**

**Performance Guarantee & Refund Requirements**

**Materials & Facilities**

**Forms, FAQ's & Ordinance**

#### Why Recycle Construction and Demolition Debris?

Each year 20 to 35% of the waste that goes to landfills in San Diego is construction and demolition debris. This amounts to more than 100,000 tons annually for the unincorporated areas of the county and over 1 MILLION tons countywide.

#### What is the construction and demolition debris ordinance?

Effective April 21, 2007, debris from construction and demolition projects must be diverted away from landfill

**Sign up now for email updates**

Email:



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# CONSTRUCTION & DEMOLITION RECYCLING GUIDE



## 1-877-R-1-EARTH

(1-877-713-2784)

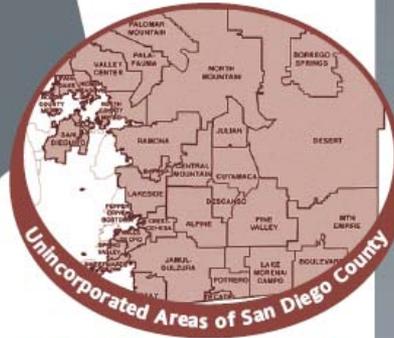
Toll Free Recycling Hotline

2007 - 2008



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- 8 City Recycling Contacts /Other Guides
- 10 Recycling & Salvage Centers



This guide is designed to help residents of the County of San Diego to recycle and reduce pollution.

Listing in this directory is not a recommendation or endorsement by the County of San Diego. To add your business to this directory, contact:

### 1-877-R-1-EARTH

The County of San Diego's Toll Free Recycling & Household Hazardous Waste Hotline

Special thanks to I Love A Clean San Diego, the Alameda County Waste Management Authority and the Sonoma County Waste Management Agency for their assistance in developing this guide. Brochure design by Eric Noether and illustrations by Sheryl Chapman.



This guide is printed on 100% post-consumer recycled content paper with soy-based inks.

[www.sdcounty.ca.gov/dpw/recycling](http://www.sdcounty.ca.gov/dpw/recycling)

## The County of San Diego Recycles It's In Our Nature!

Since 1990, San Diego County residents and business increased our recycling from 20% to over 50%. But we can still do more!

### WHY RECYCLE?

San Diegans throw away approximately 1.4 million tons of materials from construction, demolition and renovation projects each year. Most of the materials are valuable and could be used again.

### Natural Resources

Recycling conserves our precious – and increasingly rare – raw materials, such as concrete, dirt, trees, metals, and water. If you have to demolish a structure, consider SALVAGE and DECONSTRUCTION to preserve fixtures, concrete, and wallboard.

### Landfill Space

As the County of San Diego continues to grow, recycling construction and demolition materials is vital to preserving our existing landfill space. Most of the construction waste found in landfills including dirt, rock, concrete and carpet could have been recycled.

### Water and Energy

Producing and consuming products uses energy and water. Producing those same products from recycled material uses up to 50% less energy and water—ensuring that there is enough for all of us. You can also conserve by choosing water and energy efficient appliances for remodels and new home construction— lower operating costs over the life of the building.

### Pollution

Less energy is used to make the same products from recycled materials than from virgin material—that means less air and water pollution!

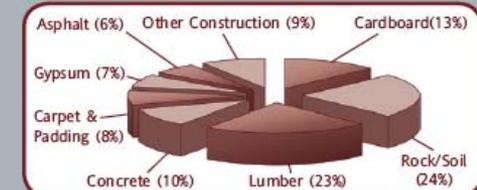
### Jobs

Recycling creates long-term jobs and improves the economy.

### It's the Law

Several cities have mandatory construction and demolition recycling programs. The County of San Diego's and several other cities' Solid Waste Ordinance prohibits placing the following materials in the trash: ASPHALT, CARDBOARD, CONCRETE, DIRT, ROCK, SAND AND BRUSH

## WHAT CONSTRUCTION MATERIALS ARE IN THE LANDFILL?



Source: Miramar Landfill Waste Characterization Study

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## County of San Diego's Construction & Demolition Debris Recycling News

June 2007

### The Construction & Demolition Debris Recycling Ordinance is Here!

Effective July 9th, 2007



As of July 9th, 2007 debris from construction and demolition projects must be diverted away from landfill disposal in the unincorporated County of San Diego. The ordinance requires that 90% of inerts and 50% of all other materials must be recycled from projects 40,000 square feet or greater. In order to comply with the Ordinance, applicants must submit a Construction and Demolition Debris Management

Plan and a fully refundable Performance Guarantee prior to building permit issuance. (*Sections 68.508 through 68.518 of the County Code of Regulatory Ordinances*).

[C&D Ordinance](#)

[C&D Frequently Asked Questions](#)

#### What You Need to Know:

Phased residential, commercial, and renovation projects 40,000 square feet or greater in the unincorporated county of San Diego must recycle construction and demolition debris. A new Debris Management Plan and Performance Guarantee will be required for each phase of a residential tract or multi-building project 40,000 square feet or greater.

