



New Mexico
Environment
Department
Solid Waste Bureau

Protecting the Environment,
Preserving the Enchantment

2006
New Mexico
Solid Waste
Annual Report

July 2006



2006 New Mexico Solid Waste Report

Notes from the Secretary

July 2006

I am pleased to provide the 2004-2005 Solid Waste Report. This document provides an updated snap-shot summary of the state of solid waste management and recycling in New Mexico. I encourage you to read this report.

Since the Solid Waste Management Act was adopted in 1990, the principal focus of state and local efforts and use of resources has been to make environmentally sound waste disposal options available to all New Mexicans. The State Environment Department—Solid Waste Bureau in conjunction with municipal officials, facility operators, solid waste professionals and the private sector have made great strides in developing a comprehensive solid waste management system in New Mexico as specified in the Act.

The basic need to implement an infrastructure of modern landfills and transfer stations took precedence over other goals and recommendations in the Act and the required Solid Waste Plan given the reality of the large number of substandard landfills, and their potential negative groundwater and environmental impacts.

By 1993, the waste disposal situation in the state had evolved from a landfill shortage — only 22 out of 33 counties had landfills in 1970 — to a proliferation of substandard “dumplings” constructed at geologically inadequate sites that needed to be brought up to standards or closed. The focus on the improvement provision of basic solid waste management services has largely been successful. The trend through 2005 has been to close substandard landfills, build more environmentally protective landfills, transfer stations, and waste and recycling convenience centers.

As seen in this report, substantial progress has been made relative to the provision of additional waste disposal opportunities; however, unfortunately fewer gains have been made meeting the diversion and recycling goals as set in the Act.

The Department is redoubling its efforts to encourage and mentor the development of alternative diversion activities, to encourage reuse, recycling, and composting. To these ends, we are completing these significant initiatives: revising and updating the Solid Waste Management Plan, promulgating new solid waste regulations, and preparing new rules in accordance with the Recycling and Illegal Dumping Act that was passed by the Legislature in 2005.

Significant progress has been made closing substandard landfills and opening facilities that comply with all applicable Federal and State requirements.

However, more Department mentoring, economic resources, and education are necessary to increase access to reuse and recycling programs to raise the amount of waste diversion in New Mexico.



2006 New Mexico Solid Waste Report

Solid Waste Management Act Requirements

The New Mexico Solid Waste Act (Act) of 1990 charged the New Mexico Environment Department (NMED) with:

- Preparing an inclusive annual state solid waste management report;
- Overseeing the requirements in the Act, and
- Developing a comprehensive Solid Waste Management Plan and program for New Mexico



The purpose of the annual report is to provide the Governor and the Legislature with a solid waste program status report to assist with improvement of solid waste management efforts in New Mexico.

This document is the seventh report from the Secretary of the

Purpose of the Report

Environment Department regarding the current management of solid waste in our State.

Information in this report is included for the period from January 1, 2004 through December 31, 2005.

The contents of this report are prepared in accordance

with the mandates of the New Mexico Solid Waste Act.

Data used in this report has been compiled from annual reports as provided by New Mexico owners and operators of solid waste facilities.

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Introduction

Almost every human activity generates solid waste that will require management or disposal at some point.

While federal rules establish national minimum standards for the design, performance and operation of municipal solid waste landfills, protecting public health and environment and implementation of solid waste programs, are largely the responsibility of local, state, or tribal governments. As a result regulations have been developed by the Federal Environmental Protection



Agency (EPA) and New Mexico to address solid waste management.

As mandated in the Solid Waste Management Act, a statewide Solid Waste Management Plan ("Plan") was prepared in 1993. During this reporting period, the Solid Waste Bureau has undertaken a stake holder process to update and revise this plan.

Two other significant efforts underway include revision of the 20 NMAC 9.1 Solid Waste Regulations, and creation of new Recycling And Illegal Dumping Rules (RAID).



Solid Waste Management Recommendations

The greatest need to meet the goals of the Solid Waste Management Act in New Mexico is the provision of additional funding of the Solid Waste Bureau, and grant and loan opportunities for communities to properly manage wastes and to protect the environment.

Recommendation:

The Solid Waste Facilities Grant Fund must be recharged with \$5 million dollars, as this fund has not been recharged since 1996.

The solid waste regulations have been effective at protecting the environment. However, communities across the state face increasing pressure and rising costs to properly address their solid waste management obligations and responsibilities. Smaller population centers and counties continue to experience disproportionate fiscal impacts when properly managing their solid waste. As discussed on pages 21 and 22 of this report, recharge of this fund will assist municipalities, regional agencies, and small and medium-sized communities to close local substandard landfills, transition to use of transfer stations, purchase and install appropriate waste scales, and start diversion, recycling, and composting programs. At this time, there are more than 20 old substandard landfills that require closing and on-going groundwater monitoring. Many of these sites are located in rural, poor counties. Solid Waste Grants should be:

- As large as possible and on-going;
- Awarded on an annual cycle with specified workplan goals and milestones;
- Given to those applicants that include plans for economically viable and sustainable access to solid waste services, recycling and diversion activities;
- Tailored to reward communities closing substandard landfills and transitioning to the transfer of wastes;
- Prioritized to help jump-start recycling and diversion activities in accordance with the Solid Waste Management Act, and the Recycling Alliance's recommendation for the tiered recycling process as discussed on Page 18; and
- Expanded to allow NMED additional sources of funding (such as the tire recycling fund and water quality grants) for requests for such programs as household hazardous waste and groundwater monitoring.

Recommendation:

The Solid Waste Bureau is almost entirely funded via the General Fund, and current staff levels need to be expanded to continue to meet the increasing demands of the program. Within the next three years, an on-going *Statewide Solid Waste Programmatic Initiatives Fund* should be enacted by the Legislature. This fund must be dedicated to support the program priorities as specified in the Act and Solid Waste Management Plan, and to provide adequate staff to successfully implement goals. This fund should have an annual budget of at least \$1,500,000.

Demand for this grant funding remains very strong as evidenced by 40 requests totaling \$11 million, in the last grant cycle in 2002, while \$1.4 million was available.

One priority for this funding is to conduct a statewide waste composition study within the next 3 years to yield waste generation quantities and projections by population and other relevant factors to be used as a basis for sound planning.

Recommendation:

In lieu of the *Programmatic Initiatives Fund*, consider the implementation of an annual funding mechanism such as a nominal per ton solid waste fee as used in other states and as proposed in the Solid Waste Act of 1990 to assist with funding of the Bureau.

Recommendation:

Establish a \$1-\$2 million Annual Recycling, Household Hazardous Waste (HHW) Grant/Low-Interest Loan Program Fund based on a Legislative Appropriation to provide needed funds to reimburse successful applicants for the implementation of recycling programs, as well as the collection and proper management of electronic wastes and household hazardous wastes.



Solid Waste Management Recommendations

Recommendation:

Encourage diversion in addition to recycling. Promote recycling at landfills by providing new modules in operator certification training courses. Educate all residents of New Mexico to ask for/about recycling. Enlist champions within the Legislature and from the community to help move diversion and recycling programs forward. Prepare a public outreach campaign stressing:

- “Buy Only What You Need” “How and Where to Recycle”
- “How to Find Safe Products” to reduce the amount of HHW purchased
- Increase citizen understanding of proper management and disposal of latex paints, which can be disposed of in landfills if allowed to harden before disposal.

Recommendation:

A concerted effort should be made to promote and document existing and potential *source reduction* programs in New Mexico.

Recommendation:

Provide funding for Research and Pilot testing for Construction and Demolition (C&D) material reuse and recycling potential. Although EPA does not count C&D recovery as Municipal Solid Waste (MSW) diversion, this material constitutes almost one-third of wastes sent to New Mexico landfills. Key stakeholders urge following the example of other states (e.g., CA, OR, MN), and revising New Mexico standards and regulations to allow C&D recycling and reuse to be counted as diversion.

C&D is often generated in large quantities, concentrated at the point of generation, and has the potential to be reused locally, which can simplify management logistics for rural areas and small towns, as well as urban areas. Composition studies elsewhere have found that over 75 percent of C&D materials are recyclable. Developing C&D recycling markets and counting C&D recovery in the state diversion rate demands further evaluation.

Recommendation:

State purchasing policy must be changed to include the procurement of recycled content commodities such as post-consumer papers and re-refined oil. State contracts/price agreements should be developed and opened to allow local communities, cities, and counties to procure recycled products, and Household Hazardous Waste contractor services.

Recommendation:

Provide the Solid Waste Bureau with enough funds to include new or updated training modules in the Certification Courses for Landfill, Transfer Station, Composting, and Recycling Facility operators on proper data collection and reporting methods, as well as waste screening and characterization instruction via hands-on field exercises, and a HHW training module in the transfer station and landfill certification courses to improve operations at facilities and the quality of data that is provided to the state.

Recommendation:

Assure consistency of waste collection data by requiring that all facilities install scales for weighing waste by 2008; and/or obtain scale data for wastes delivered from disposal sites (landfill). Provide templates, information and training on how to convert yards to tons for annual report inclusion in the interim.

Recommended Education Efforts:

The primary goals of recycling, diversion and solid waste management education that need to be implemented are:

- *Formulate an integrated state-wide plan for on-going education activities;*
- *Identify priority program areas for education emphasis; and*
- *Secure sustainable funding for ongoing education of all target audiences.*

Solid Waste Act Priorities

The New Mexico Solid Waste Act (Act), passed in 1990, required the development of a comprehensive integrated solid waste management program by December 1, 1992 with implementation by July 1, 1994. The priority basis to be used for developing a solid waste management program in New Mexico is:

- 1) First, source reduction and recycling;
- 2) Second, environmentally safe transformation

- (incineration); and
- 3) Third, environmentally safe landfill disposal.

The Act charged the Environment Department (NMED) with overseeing the majority of the requirements in the Act and developing a comprehensive solid waste management plan (Plan).

The regulatory mandates of the Act are implemented in New Mexico through the 1995 Solid Waste

Management Regulations (20 NMAC 9.1) as directed by the Solid Waste Bureau.

The U.S. Environmental Protection Agency approved these regulations on December 23, 1994, thus giving the state primacy for permitting and other measures to achieve compliance with Resource Conservation Recovery Act (RCRA) Subtitle D Solid Waste requirements.

Integrated Waste Management

Source Reduction

Reuse

Recycling

Composting

Transformation/
Incineration With
Energy Recovery

Incineration For
Volume Reduction

Other Forms of
Volume Reduction

Landfilling

- Most Efficient
- More Economic Value
- Less Ecological Damage



- Less Efficient
- Most Wasted Economic Value
- Greater Ecological Damage

Status of Implementation of the Solid Waste Act

As required by the Act, and since the first Plan was adopted in 1993, the principal focus of state and local efforts and resources has been to make environmentally sound waste disposal available to all New Mexicans. By 1993, the waste disposal situation in the state had evolved from a landfill shortage — only

22 out of 33 counties had landfills in 1970 — to a proliferation of substandard “dumplings” constructed at inadequate sites that needed to be brought up to standards or closed.

The number of landfills has been reduced from over 100 to approximately 35 as a result of the new and

more stringent regulations. Of the current inventory, over half are regional Federal and State compliant Subtitle D facilities; and the proposed revised 2007 Solid Waste regulations will set timetables for closure of a significant number of remaining non-compliant, substandard landfills.



Solid Waste Capacity Projections

Based on information provided in 2004 Annual Reports submitted to the Bureau, New Mexico has a total of 30 years of remaining combined municipal solid waste disposal capacity at existing landfills statewide. As discussed in greater detail on pages 15 and 16, nearly all population centers in

New Mexico greater than 10,000 people have developed landfills with sufficient disposal capacity to last at least 10 years, or they are currently transferring their waste to a regional Subtitle D landfill.

However, it must be noted that the remaining disposal capacity is not evenly

distributed throughout the state. The Southeastern corner of the state in the Solid Waste Bureau’s District 1 has greatest remaining capacity of 53 years, while in counties bordering Arizona, 3 of 5 landfills will be closing soon. In general, rural areas have less capacity than urban areas.

As of 2004, it is estimated that New Mexico has 30 years of remaining landfill disposal capacity statewide

Goals of Solid Waste Management in New Mexico

The goals of solid waste regulations and programs directed by the Solid Waste Bureau include, but are not limited to:

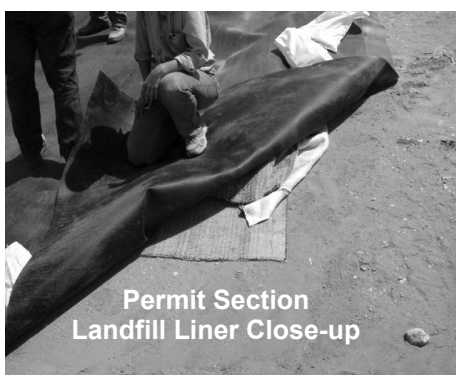
- *Protecting public health and quality of life of all residents of New Mexico and safeguarding the quality of the environment;*
- *Directing the continued establishment of a comprehensive, cost-effective, and environmentally sound solid waste management program in New Mexico;*
- *Promoting and encouraging cost-effective waste reduction, reuse, diversion, recycling and composting of materials to conserve resources and landfill disposal space;*
- *Ensuring that the siting, design, operation, and closure of engineered waste containment systems (landfills) isolate solid wastes from the environment to minimize possible groundwater and environmental impacts, while allowing for some flexibility in design;*
- *Regulating requirements for special waste such as treatment of infectious waste using alternate technologies, handling of asbestos waste, as well as manifesting and chain-of-custody documents to assure that these wastes are handled and disposed of properly;*
- *Encouraging and providing incentives to counties and municipalities to create regional solid waste management systems and new point-of-entry solid waste convenience centers and transfer stations; and*
- *Providing regulatory control of commercial and special waste haulers.*

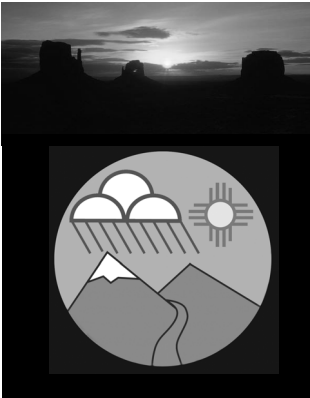
The Solid Waste Bureau (SWB) is the agency within the New Mexico Environment Department responsible for developing, implementing, and enforcing the comprehensive program defined in the Act and the Solid Waste Management



Solid Waste Bureau

The SWB carries out its duties through the Permit, Enforcement, and Outreach Sections, with support from the Administration Section. With a current staff of 25, the SWB has an annual budget of \$1.799 million dollars for salaries, rent, vehicles, utilities, and core operations. The existing SWB budget does not include programmatic dollars for supporting recycling initiatives, public education campaigns, comprehensive long-term planning, or like activities at the statewide level.





Significant Accomplishments



Old unlined landfill Capped and closed



Landfill liner system construction

Since 1993, many solid waste management system improvements have been made in New Mexico:

Significant progress has been made closing substandard landfills and opening facilities that comply with all applicable Federal and State requirements:

- 93 facilities have been closed or are in the process of closing;
- 19 permitted and 16 registered landfills are operating;
- Two landfills are permitted to accept only special waste;
- One medical waste management facility is in operation;
- Scales have been installed at landfills built using Solid Waste Facility Grant funds;
- Thirteen transfer stations have been permitted and are routing wastes to larger regional landfills;
- Twelve solid waste management regions formed, and in other areas individual governments were able to site needed disposal facilities;
- Residents have access to curbside recycling services and/or drop-off centers in more than 70 communities; and
- Twenty-eight composting operations actively divert or create a beneficial use for organic materials in New Mexico.

The Solid Waste Facility Grant Fund awarded \$22.3 million in funding to 111 projects for waste management facility construction, landfill closures, recycling programs, and equipment from 1991 to 2002. The Solid Waste Facility Grant Fund has not been recharged since 1996. Grant information is shown on pages 21 and 22.

The Recycling Grant Fund awarded \$3.7 million — matched by \$4.6 million in local funds — to help launch recycling programs from 1991 to 1997. This fund no longer exists due to lack of funding.

2004-2005 Milestones

Revision of the Solid Waste Regulations including Environmental Justice provisions. Awaiting final approval from the Environmental Improvement Board



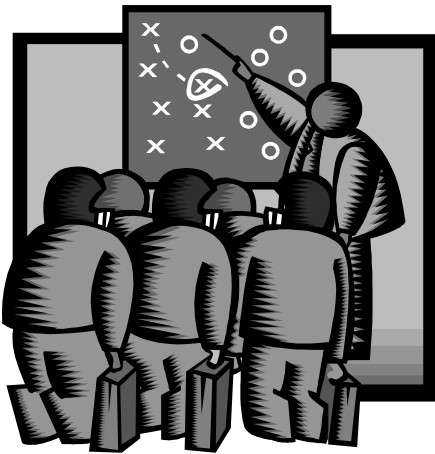
Completion of an extensive stakeholder process to update and revise the 1993 Solid Waste Management Plan



Passage of the Recycling and Illegal Dumping Act. Preparation of Draft Rules



Implementation of the Comprehensive Solid Waste Management Program



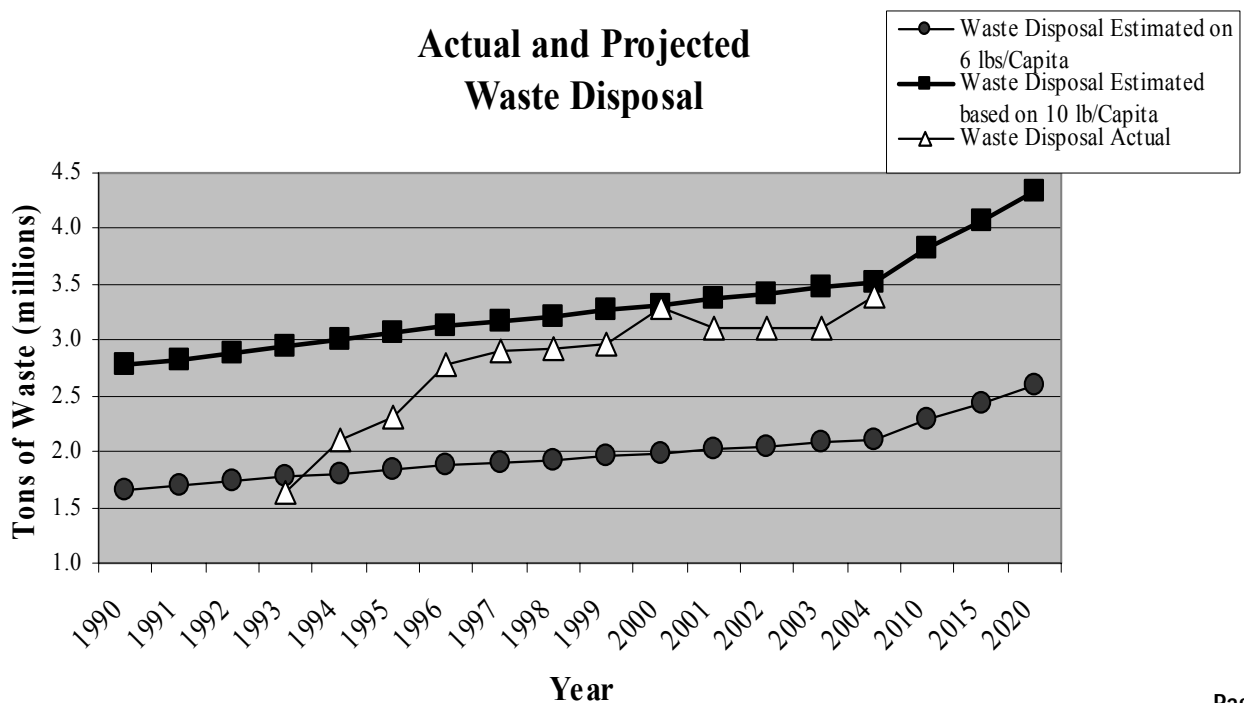
The SWB continues to be proactive in implementing an integrated and comprehensive solid waste management program

The Solid Waste Bureau has established and is currently actively implementing the majority of the elements in the comprehensive solid waste management program as required by the Solid Waste Act and the Tire Recycling Act. Those elements include:

- A program to provide standards for facility construction and operation, to process and issue permits, and to review and approve closure plans;
- A program to inspect and audit facilities to ensure operating and record-keeping standards are maintained, and to enforce against illegal dumping and improper handling of waste;
- A program to certify facility operators, publish educational brochures, and provide technical assistance to the solid waste community;
- A program to develop regulations, compile and analyze report data, publish an annual report, and produce special reports as required;
- A protocol to review applications for Solid Waste Facility Grant Funds;
- A scrap tire management program and Tire Recycling Grant program; and
- A program that provides technical assistance that includes a statewide business-recycling directory for the proper handling and disposal of household hazardous waste. This information is posted on the Environment Department's Web site at www.nmenv.state.nm.us

Estimated 20-Year Waste Generation and Disposal

As shown in the chart below by the red-line with the triangle symbol, the estimated amount of actual waste disposed per-capita in New Mexico is projected to continue to rise. The upward trend of waste generation in our state is consistent with the general trend found in the Western states as well as other areas in the United States. The other two trend lines are calculated at a rate of 6 pounds/capita or at 10 pounds/capita and are shown for comparison.

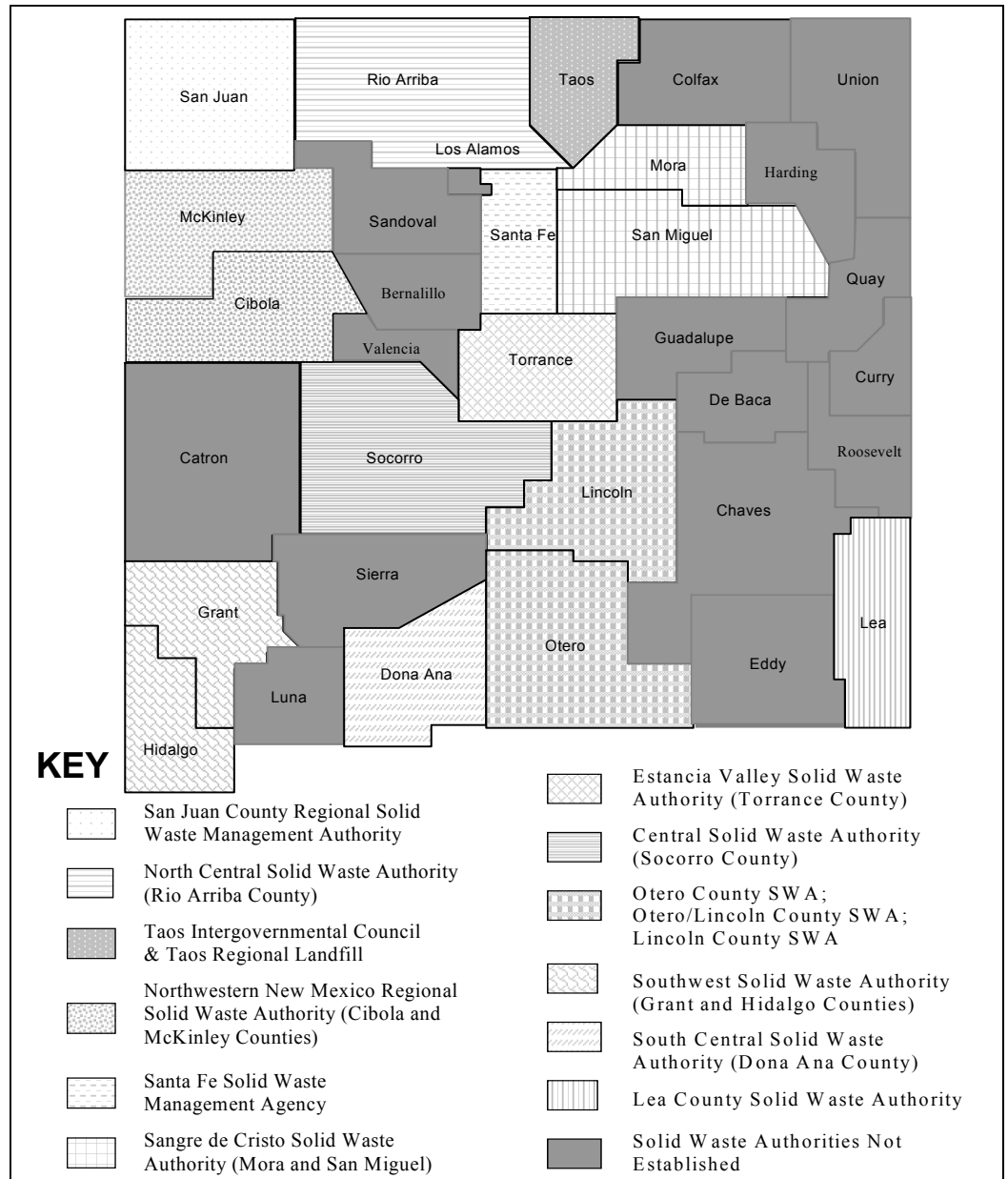


Solid Waste Authorities and Regional Agreements

Evaluation of the Development and Implementation of Local Solid Waste Management Programs

74-9-11 of the Act
Establishment of solid waste districts;
requirements changing boundaries

- As seen in the figure to the right, significant progress has been made to consolidate waste collection by the creation of twelve (12) regional solid waste authorities



Regionalization Progress

Economies of scale have promoted development of required regional Subtitle D landfills in areas where sufficient waste volumes are available.

“Regionalization” as described in 74-9-11 of the Act, is occurring as a result of financial realities, as opposed to government mandate.

Most regions with populations greater than 10,000 have NMED-permitted landfills with capacities

in excess of the 10-year planning window as discussed in the Act (74-9-6.E).

It is anticipated that there will be 10-20 small, un-permitted, old landfills closed within the next 2 to 3 years as a result of the proposed revised regulations. The update of the 20 NMAC 9.1 regulations scheduled to occur by the beginning of 2007 will continue to encourage the siting of solid waste transfer stations, small convenience centers, recycling collection points, and some

composting sites as logical alternatives for smaller communities that cannot afford modern local landfills.

For some rural areas, the costs to manage MSW are estimated to increase by more than 500% within the next 10 years.

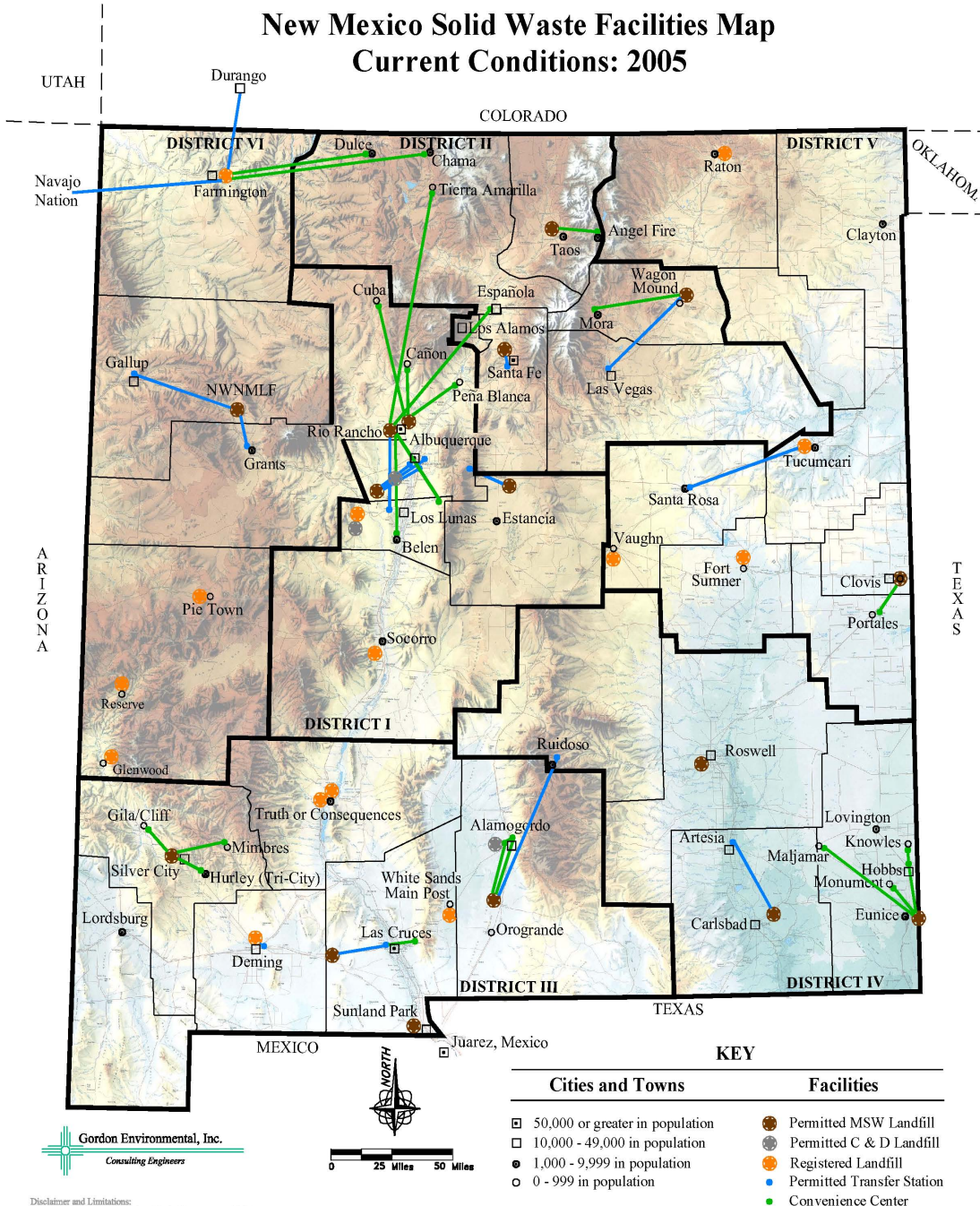
New Mexico Waste Sheds as of 2005

An evaluation of current disposal practices in New Mexico was undertaken in 2005 as part of the development of an updated Solid Waste Management Plan. The map clearly shows the waste-shed (or capture) areas for each facility as shown by the colored lines. It also provides a visual

representation of the transportation distances involved with delivering wastes to each site. The waste-shed concept helps to clarify and provide a visual understanding of the existing network of solid waste facilities in our state. As also seen in the map, a number of small registered landfills are still

open, and many of these will close within the next several years. The State of New Mexico has been very successful overseeing the improvement of both landfill capacity, and the proper siting of these facilities. The map below was created by Gordon Environmental Inc. in partnership with the NMED, Solid Waste Bureau.

**New Mexico Solid Waste Facilities Map
Current Conditions: 2005**



The general current disposal and diversion trends in New Mexico are:

- An unequal distribution of access to even basic diversion and recycling programs/opportunities in New Mexico. Small, rural counties have the least opportunity to divert wastes.
- Construction and Demolition (C&D) debris tonnage continues to rise due to major construction projects for roads and other infrastructure in New Mexico. These wastes may currently consume up to one-third of existing landfill capacity.
- Out-of-State wastes are increasing and are projected to have a continued slight upward trend. However, tonnage from neighboring states like Texas can be unpredictable and vary based on local conditions.

Gordon Environmental, Inc.
Consulting Engineers

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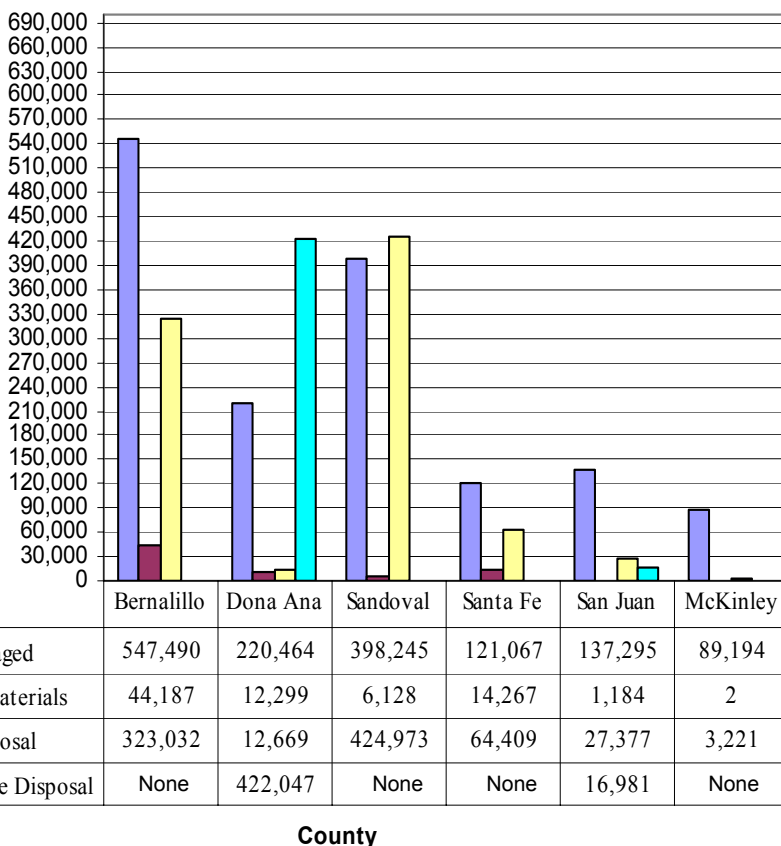
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Analysis of Solid Waste Generation and Disposal —

Counties Managing Greatest Amount of Tons

Figure A

**2005
Tons**



The counties included in Figure A to the left are the largest managers of solid waste in the state. Dona Ana County accepts the largest amount of out-of-state waste in New Mexico.

It must be noted that many of the larger facilities accept wastes from many of the counties that export waste as shown in Figures B, C and D. It must also be noted that operators did not always provide recycling or diversion data in the annual report.

Bernalillo County is a net importer of recycling materials, as there are several paper markets, and the county has a recycling processing facility. It must be noted that the significant decrease in the amount recycling tons reported in 2005 is due to fewer recycling markets voluntarily reporting tons received than in 2004. Bernalillo County processed 10,388 tons of source separated materials at their IPF sorting plant in 2005.

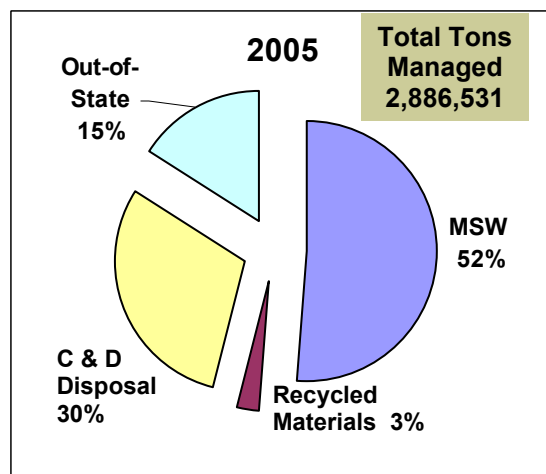
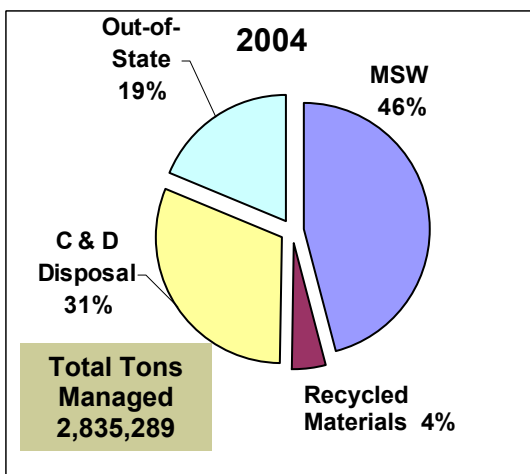
As seen in the comparison of pie charts below, the total amount of materials managed by this group increased by 2 % in 2005. C & D tons were down 1% in 2005, while disposal of out-of-state waste decreased by 4 %.

2004	Bernalillo	Dona Ana	Sandoval	Santa Fe	San Juan	McKinley
MSW Managed	535,118	215,261	233,350	145,219	91,415	81,418
Recycled Materials	110,450	2,694	0	10,536	156	0
C & D Disposal	396,843	23,413	373,019	64,483	11,853	5,861
Out-of State Disposal	None	506,278	None	None	18,224	9,698

The facilities in these counties account for 81% of wastes managed in New Mexico (more than one landfill can be located within a county).

Solid Waste Costs

In 2005, the average tipping fee (cost to dispose of waste) in this group was \$18.80. The fees ranged from \$7.57-\$31.00/ton

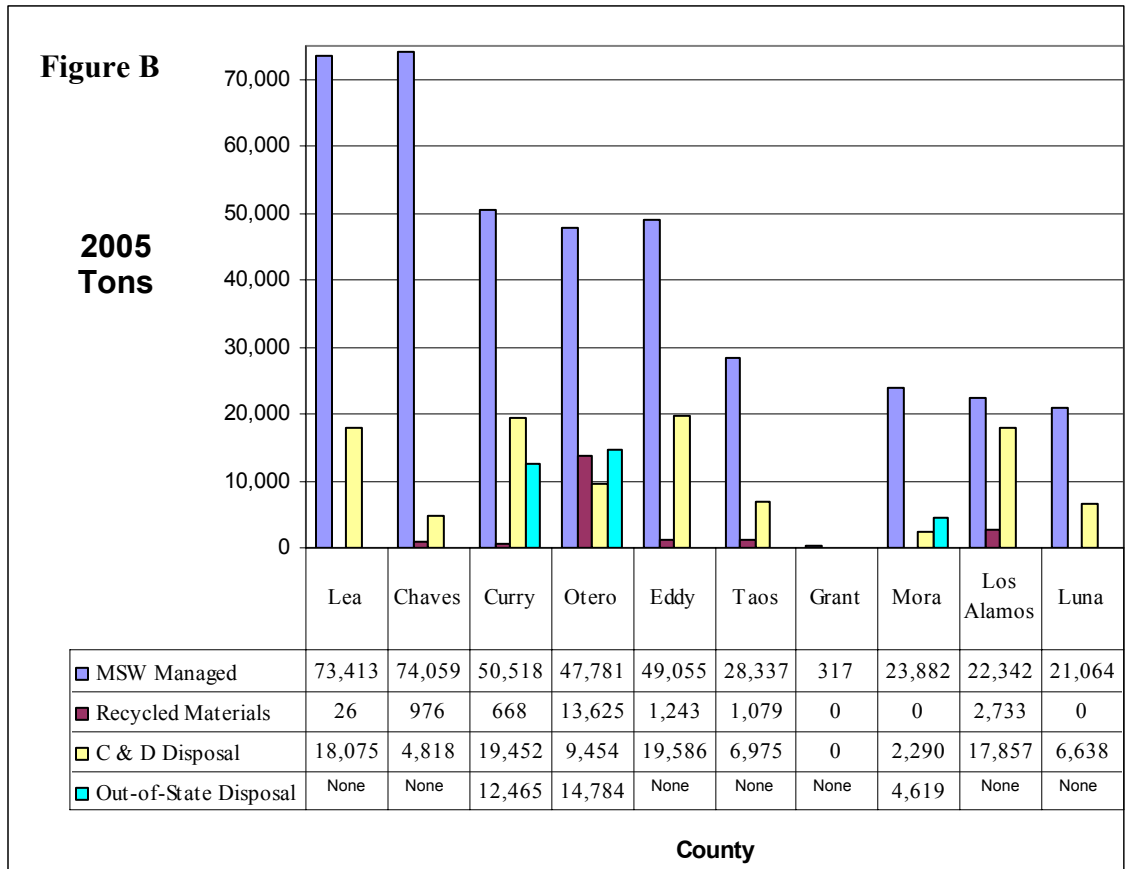


Analysis of Solid Waste Generation and Disposal —

Counties Managing a Mid-Range Amount of Tons

The counties included in Figure B are grouped in the mid-range of solid waste managed. Grant County contains four (4) disposal facilities at mines or industry that are not included in municipal solid waste data tabulation.

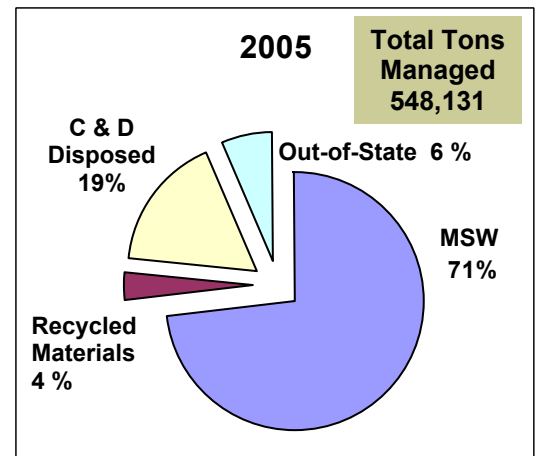
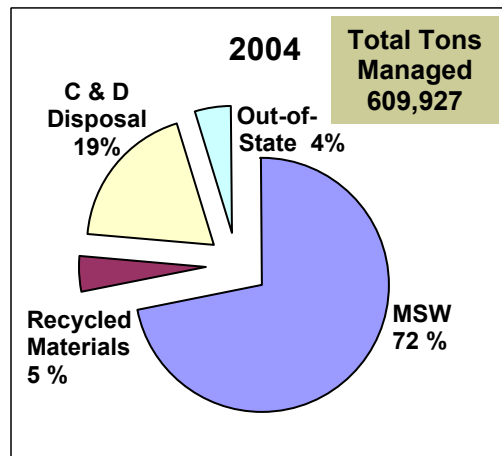
As seen in the 2004 and 2005 tables and pie charts, the percentage of C & D (construction and demolition debris) has remained the same, while out-of-state imported waste increased by 2%. Los Alamos County's recycling totals in the chart do not include 12,227 tons of asphalt and concrete that were crushed at the landfill and sold, and 23,000 tons that were recycled by the Burn Area Restoration Project.



2004	Lea	Chaves	Curry	Otero	Eddy	Taos	Grant	Mora	Los Alamos	Luna
MSW Managed	68,414	64,032	66,844	60,812	47,222	29,864	28,360	26,575	24,575	23,902
Recycled Materials	16,945	0	8,100	2,606	875	0	0	0	46	0
C & D Disposal	8,523	23,731	12,186	9,781	22,349	6,475	0	2,470	18,018	13,469
Out-of State Disposal	3,778	None	9,768	11,548	None	None	None	3,227	None	None

This group of 10 counties managed 15.5% of the total of solid waste materials in New Mexico.

Solid Waste Costs
 In 2005, the average tipping fee (cost to dispose of waste) in this group was \$25.61/ton. The fees ranged from \$5.00-\$36.00/ton



Analysis of Solid Waste Generation and Disposal —

Counties Managing 6,000-20,000 Tons



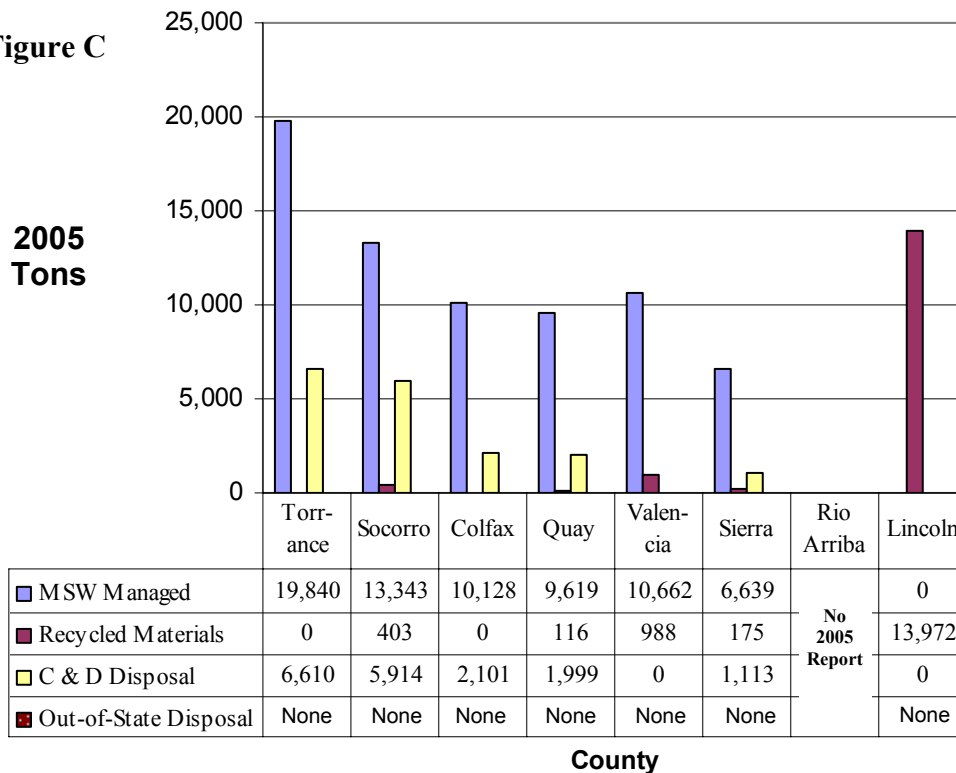
The counties included in Figure C are generally rural with a few cities. In most cases these counties still manage their own wastes at a local landfill. Rio Arriba county's wastes were disposed of in facilities in Bernalillo County.

Lincoln County is operating a composting facility at an old landfill, which is diverting a significant amount of tons of materials. This accounts for the 67% increase in Recycling/ diversion in this group in 2005.

On this table, zeros in the MSW row demonstrate that the county does not have an open local landfill or did not report tons for that item. In 2005, the amount of materials managed in this group increased by 7%.



Figure C

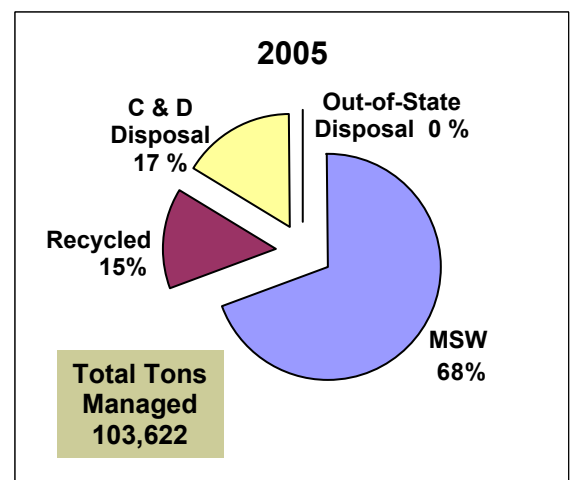
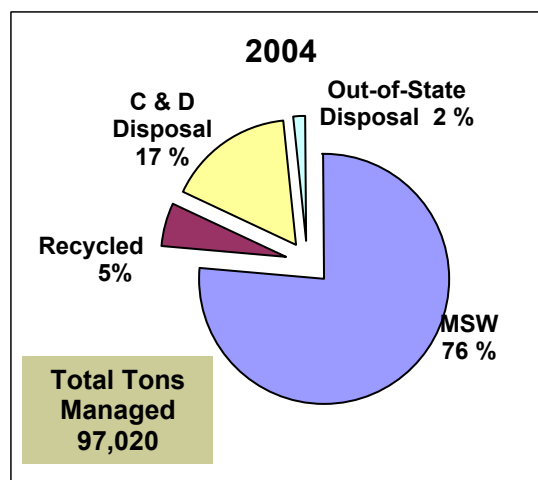


2004	Torrance	Valencia	Socorro	Sierra	Quay	Colfax	Rio Arriba	Lincoln
MSW Managed	23,253	15,125	12,281	9,930	9,735	7,895	0	0
Recycled Materials	0	500	139	73	71	0	3,760	429
C & D Disposal	6,186	2,726	3,698	1,459	199	2,043	0	0
Out-of-State Disposal	1,497	None	None	None	None	None	None	None

The facilities in this group account for 2.9% of wastes managed in New Mexico. (without Rio Arriba tonnage)

Solid Waste Costs

In 2005, the average tipping fee (cost to dispose of waste) in this group was \$13.67/ton. The fees ranged from \$0-\$35.00/ton



Analysis of Solid Waste Generation and Disposal —

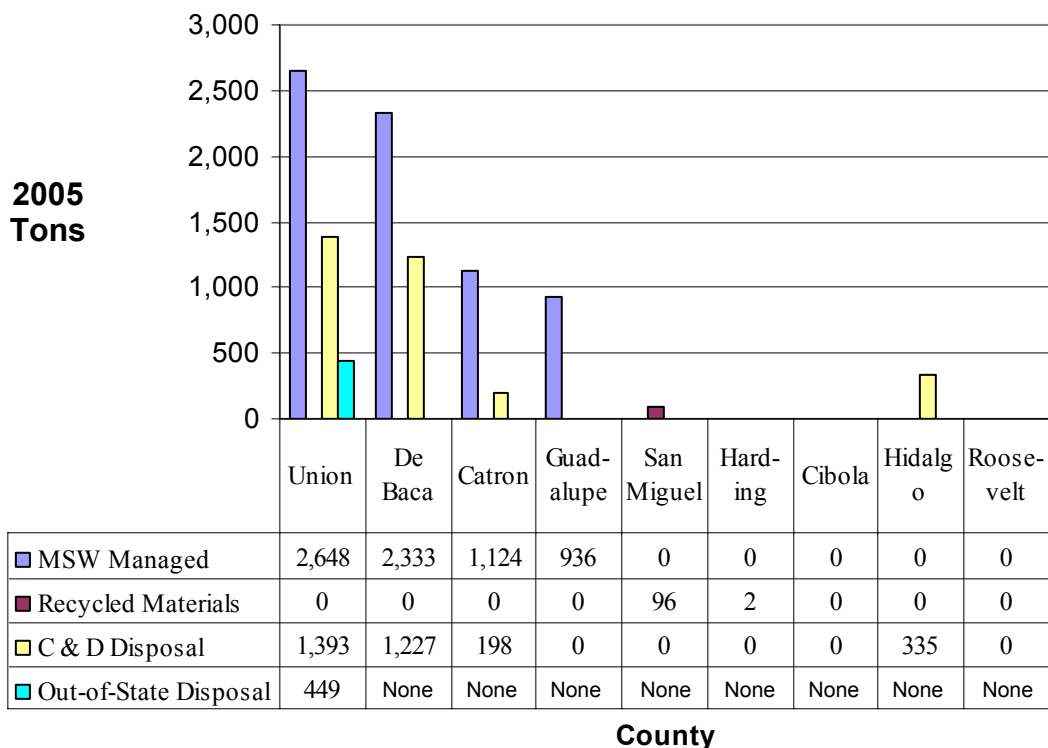
Counties Managing Less Than 6,000 Tons

The counties in Figure D are included in this group as they locally manage the lowest amount of solid wastes. The counties in this group are generally very rural with small populations.

These counties either landfill their wastes in small, unlined registered landfills, and/or transfer their wastes to larger regional facilities. For counties with zeros in the MSW row their wastes are landfilled at larger facilities. Zeros in other rows show that information was not included for that item.

As seen in the tables and charts the amount of solid waste handled locally is decreasing along with recycling, while C & D tonnage is increasing. Recycling is limited due to higher costs.

Figure D

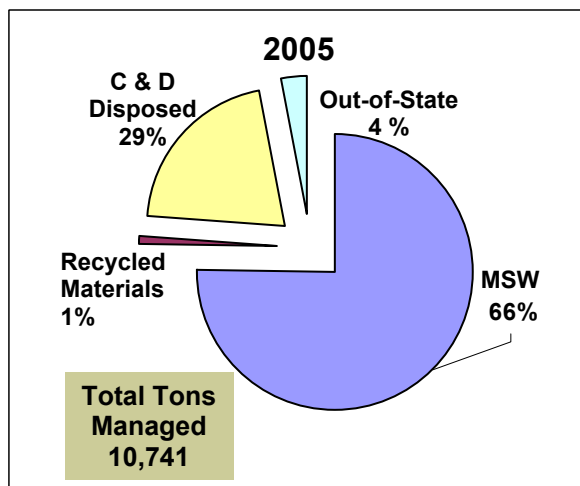
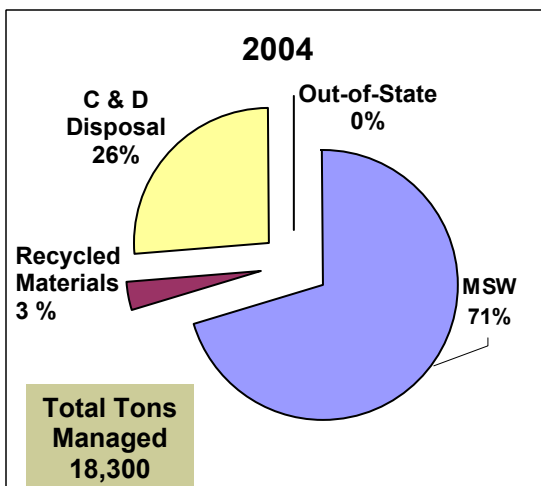


2004	Catron	Union	Guadalupe	DeBaca	San Miguel	Roosevelt	Harding	Cibola	Hidalgo
MSW Managed	5,566	3,542	2,449	1,213	0	0	0	0	0
Recycled Materials	0	0	0	0	302	175	129	0	0
C & D Disposal	31	2,726	1,134	933	0	0	0	0	0
Out-of-State Disposal	None	None	None	None	None	None	None	None	None

The facilities in this group managed 0.3% of wastes within their borders. It is estimated that approximately 66,500 tons are managed at other facilities

Solid Waste Costs

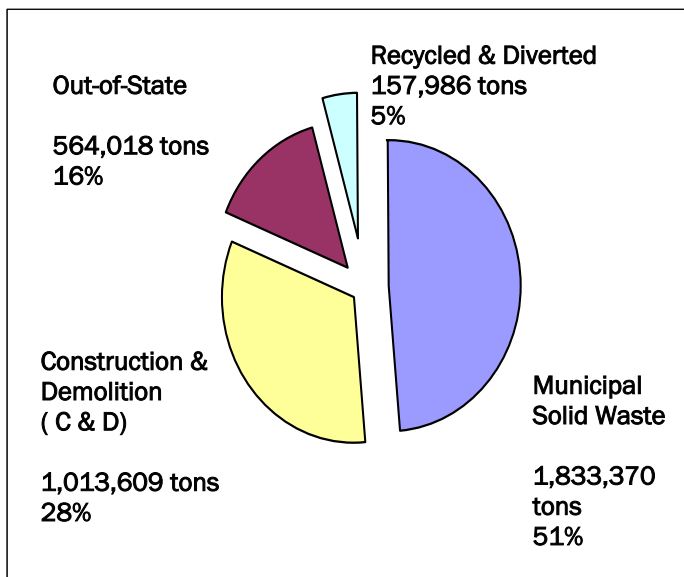
In 2005, costs per month ranged from \$6.00- \$10.10
The tipping fees ranged from \$0-\$23.00/ton



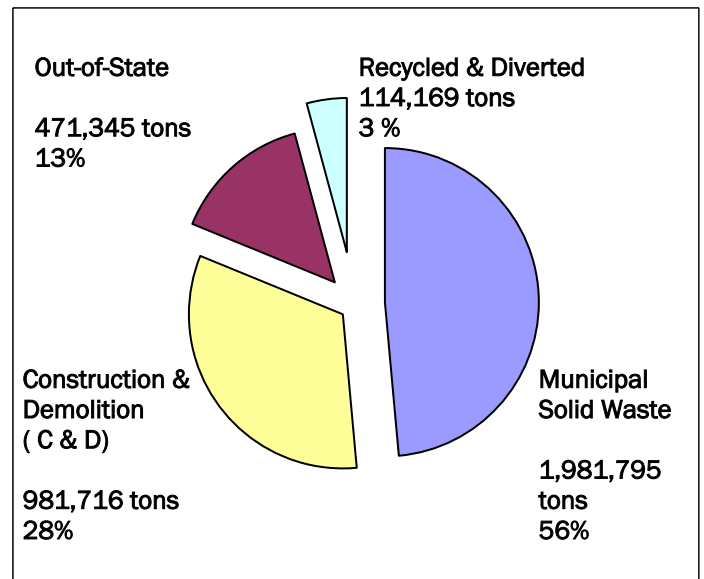
Total NM Solid Waste Generated in New Mexico 1995-2005 (Tons x 1,000)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Municipal Waste (before recycling)	1,396	1,789	2,009	2,081	2,261	1,940	1,501	2,021	1,975	1,991	2,096
Construction and Demolition (C&D) Waste	919	990	898	840	776	1,225	996	948	842	1,014	982
TOTAL WASTE GENERATED (excluding out-of-state tonnage)	2,315	2,779	2,907	2,921	3,037	3,165	2,497	2,969	2,817	3,005	3,078

New Mexico 2004 Total Waste

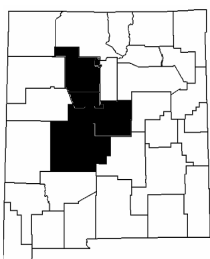


New Mexico 2005 Total Waste



Waste Management by Solid Waste Bureau District – 2004

District 1



District 1 includes Bernalillo, Sandoval, Socorro, Torrance, and Valencia Counties. In 2004, this district had an estimated population of 747,727 and encompassed a total area of 15,934 square miles. It is estimated that this district has 53 years of permitted landfill capacity remaining in nine (9) landfills. The nine landfills consist of

one C&D landfill, one asbestos landfill, one AFB landfill and four municipal-owned MSW landfills and two privately owned MSW landfills. In calendar year 2004, District 1 landfilled 1,603,735 tons of MSW which includes 782,472 tons of C&D and 1,497 tons of Out-of-State waste.

Operators in this area reported that they recycled 111,089

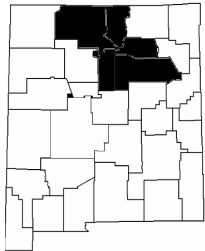
tons of MSW, and composted 1,488 tons of green waste.

District 1's MSW generation rate is estimated to 7.01 lbs/person/day; their disposal rate based on reported tonnage is 6.03 lbs/person/day.

**District 1
Remaining Landfill
Capacity
53 Years – 9 Landfills**

Waste Management by Solid Waste Bureau District – 2004

District 2



District 2 includes Los Alamos, Mora, Rio Arriba, Santa Fe, San Miguel, and Taos Counties. This district has an estimated population of 254,110 and a total land area of 16,727 square miles.

Remaining permitted landfill capacity is estimated to be 30 years in four municipal owned MSW landfills.

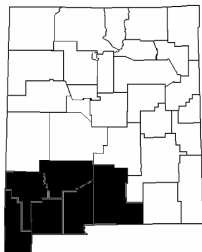
In calendar year 2004, District 2 landfilled 321,888 tons of MSW, which includes 91,445 tons of C&D, 4,840 of Out-of-State waste and diverted 7,953 tons through recycling.

District 2's MSW estimated generation rate is 5.04 lbs/person/day and their disposal rate is estimated to be 4.86 lbs/person/day.

It must be noted that Rio Arriba exports solid wastes to Bernalillo County. This tonnage was not reported via an annual report for 2005.

**District 2
Remaining Landfill
Capacity
30 Years – 4 Landfills**

District 3



District 3 consists of Grant, Sierra, Luna, Dona Ana, Otero, and Hidalgo Counties. This district has an estimated population of 312,200 and a total land area of 24,990 square miles. The 12 landfills in this area have an estimated 14.5 years of permitted landfill capacity. The facilities consist of one C&D landfill,

seven municipal owned MSW landfills and four small privately owned MSW landfills.

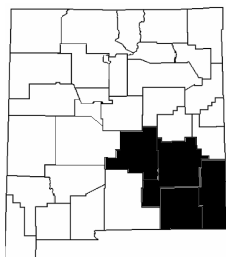
In calendar year 2004 District 3 landfilled, 904,213 tons of MSW, which includes 48,122 tons of C&D, and 513,977 tons of out-of state waste. District diverted 9,381 tons of MSW through recycling and 5,519 tons

of MSW through composting.

District 3's MSW generation rate is 6.27 lbs/person/day and their disposal rate is 6.0 lbs/person/day.

**District 3
Remaining Landfill
Capacity
14.5 Years – 12 Landfills**

District 4



District 4 includes Chaves County, Eddy County, Lincoln, and Lea Counties has an estimated population of 187,962 and a total area of 19,476 square miles.

The four landfills in this area have an estimated 46 years of permitted landfill capacity.

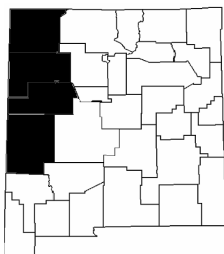
The four landfills consist of one privately owned industrial landfill and three municipal MSW landfills.

In calendar 2004, Operators in this district landfilled 238,049 tons of MSW which includes 54,603 of C&D. 20,915 tons of MSW were diverted through recycling.

District 4's estimated MSW generation rate is 5.96 lbs/person/day, their disposal rate is 5.35 lbs/person/day.

**District 4
Remaining Landfill
Capacity
46 Years – 4 Landfills**

District 5



District 5 is comprised of Catron, Cibola, McKinley, and San Juan Counties. It has an estimated population of 217,737 and a total land area of 22,429 square miles. Five (5) landfills are located in this district.

The landfills consist of three small municipal MSW landfills that are planned to close, one

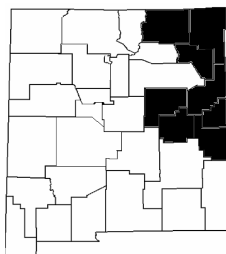
large municipal MSW landfill and one privately owned MSW landfill.

In calendar year 2004 District 5 landfilled 224,066 tons of MSW, which includes 17,745 tons of C&D and 12,149 tons of out-of-state waste. Operators in District 5 diverted 1,433 tons of MSW through recycling.

District 5's estimated MSW generation rate is 4.92 lbs/person/day, their disposal rate is 4.89 lbs/person/day. Information about tribal facilities are not included.

**District 5
Remaining Landfill
Capacity - Unknown
3 of 5 landfills closing soon**

District 6



District 6 encompasses Colfax, De Baca, Curry, Guadalupe, Harding, Quay, Roosevelt, and Union Counties. This district is rural, and has an estimated total population of 99,310. The total land area is 21,796 square miles.

There are six (6) landfills with an estimated 11 years of remaining permitted landfill capacity. The landfills consist of

three (3) municipal landfills that are closing, one municipality that is in the process of permitting an additional site, and two municipal MSW landfills.

In calendar year 2004, operators in District 6 landfilled 113,234 tons of MSW which included 21,021 tons of C&D and 9,517 tons of out-of-state waste. In the same year, 281 tons of

MSW was diverted through recycling.

District 6's estimated MSW generation rate is 4.58 lbs/person/day; their disposal rate is 4.56 lbs/person/day.

**District 6
Remaining Landfill
Capacity
11 Years – 6 Landfills**

Success in Meeting Solid Waste Reduction Goals 74-9-6

2004 Recycling Rate Calculation	
Base Year	1992
Base year population	1,583,774
Conversion Factors	
4 lb/person/day	
365 days/year	
1 ton/2000 lb	
Base Year	
Base year Tons of Solid Waste Generated at 4 lbs per person/day	1,156,155
1995 Recycling target - divert 25% of MSW tonnage generated in the Base year	289,039
2000 Recycling target - divert 50% of MSW tonnage generated in the Base year	578,077
Year 2004	
Estimated 2004 MSW Generated by population	2,004,955
2004 Solid Waste Disposed in New Mexico	3,404,541
2004 recycling tonnage including compost w/o sludge and metals	167,778
State Recycling Rate % of Target (2004 / 2000 base year target)	29.02%
State Recycling Rate (2004 recycled materials / 2004 MSW total generation)	8.37%
State Recycling Rate (2004 recycled materials / 2004 Solid Waste disposed total)	5%



There is considerably more recycling and diversion activity in New Mexico than is being reported.

The 2004 Solid Waste Annual Reports indicate that New Mexicans diverted 153,244 tons or 5% of MSW from landfills via recycling and composting. On a per capita basis, using New Mexico's estimated 2004 population of 1,927,373, the recycling-plus composting rate works out to 159 pounds per person/year diverted from the waste stream. On a daily basis, this averages 0.43 pound diverted per person/day.

For comparison, EPA's 2003 study of MSW in the US found a national recycling/composting rate of 30 percent of MSW, for an average of 1.36 pounds per person/day diverted out of 4.45 pounds per person/day generated.

Though EPA and New Mexico data and reporting differ, this gives a rough picture of how New Mexico's diversion rate compares to the national average.

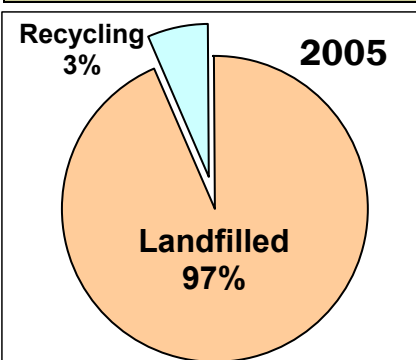
According to EPA, the 2003 net per capita discard rate in the US, after recycling and composting, was 3.09 pounds per person/day. In contrast, New Mexico's net per capita discard rate, after 0.43 pounds per person/day recycled/composted, is calculated to be 9.21 pounds per person/day, based on total solid waste disposed in the state.

As shown in the Figure to the left the materials recovery rate is about 5 percent in New Mexico (0.47 lbs/ 9.68 lbs), which is about one-seventh the nationwide average of 30 percent.

Cardboard is the item that is most often recycled in New Mexico.

By weight, scrap Metal, appliances, aluminum, steel cans, and car batteries are the most recycled items.

New Mexico Recycling



According to the EPA total materials recovery was figured at 30% nationwide

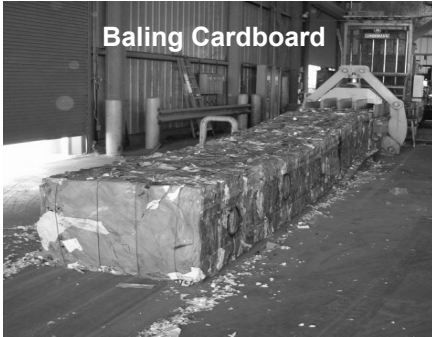
Like many other states that set ambitious recycling goals in the early 1990s, New Mexico did not meet the 50% recycling goals as specified in the Act for a number of reasons, including:



- Recycling markets and recycling processing capacity are limited in New Mexico. Some private and municipal markets exist in larger cities with industrial bases or in metropolitan areas such as Phoenix, AZ, or Denver, CO.
- As a whole, solid waste management systems and recycling efforts were and continue to be under-funded.
- Rural areas of New Mexico lack the population base and sufficient materials to make recycling or diversion activities cost-effective.
- Recyclables must be consolidated in large quantities to create economies of scale, cover handling and long distance transportation costs, and improve marketability.
- Rural residents often lack access to basic recycling services due to lack of financial resources and personnel to provide such services.
- In many areas of New Mexico, the cost per ton to landfill waste is less than the cost of diverting or recycling materials.

Potential for Recycling in New Mexico

In New Mexico, if paper was recycled at a rate of 70% instead of 11%, paper fiber alone would increase the overall state recycling rate to 30%



Baling Cardboard



Cardboard bales to ship to paper recycling markets



Plastic Container Bales ready for shipping



Composting Yard Waste in New Mexico



Chipping Wood Waste for Alternative Uses

This primary goal can be met by creating a voluntary program for counties, cities with populations over 3,000 people, tribes and other organizations. The Alliance ruled out adopting a new strategy with numerical diversion goals in light of limited existing recycling markets, the state's low recycling rates of 3-8 percent in recent years, and the current lack of ongoing state funding options for recycling education or recycling infrastructure and programs.

A tier structure is recommended to jump-start recycling. Tier 1 recycling items include common items that are easy to recycle and/or that are already banned from landfills by regulation. This group includes tires, used motor oil, lead acid batteries, corrugated cardboard, and newspaper. Tier 2-4 includes selection of other items that either represent a smaller percentage of the entire waste stream, have limited markets in NM, or require sorting or possible additional equipment. Some of the Tier 2 items include: scrap metal, composting materials, mixed and/or office papers, household hazardous wastes among others.

Many businesses are known to have in-house recycling for corrugated cardboard, pallet wrap, office paper, and other commodities, but this information is not presently available to the Bureau.

As well, there are informal reuse outlets like garage sales and the FreeCycle online exchange that keep heavy items like furniture and swing sets out of the waste stream. Tracking systems for capturing this diversion and source reduction data have yet to be developed. Estimated quantities of key materials generated and that have been recycled in

New Mexico in 2003 are shown in the Table at the top of page 19. Those materials with excellent markets could be recycled at rates close to 70 percent. The Durango-McKinley corrugated cardboard mill in Prewitt, NM, and the Master Fibers newsprint mill in Snowflake, AZ, can both accept all the recycled paper feedstock New Mexicans generate.

Targeting paper fibers first for recovery can build a sustainable recycling and diversion foundation in any community. Research of markets in 2005 indicates that there are immediate opportunities to reduce waste disposal and increase the recycling rate in New Mexico.

Besides government recycling programs, there are private sector recyclers, such as scrap metal and office paper dealers, and a thriving used goods sector of companies handling everything from auto parts to rare books. Data on material quantities diverted through these channels is not presently available to the Bureau.

Used Motor Oil Recycling



Metal collection for recycling



Estimated Potential for Recycling in New Mexico



Source:
2004
Strategic
Plan for
Transforming
the
Economics
of
Recycling
Task Force
Report

Material	Estimated Volume in NM waste (tons)	Estimated Volume Recycled in NM (tons)	Estimated Percentage Recycled	Notes
Mixed Paper	685,000	75,000	11%	Excellent in-state markets
Yard trimmings	234,000	11,000	5%	Biomass, NMDOT Revegetation
Food Scraps	218,000	0	0%	
Plastic	213,000	500	0%	Good out of state markets, lack processing
Metals	151,000	71,000	47%	Excellent markets
Rubber, Leather, Textile	136,000	900	1%	According to the New Mexico Recycling Alliance, "New Mexico needs to have a state-wide "paper drive."
Glass	105,000	900	1%	
Wood	109,000	0	0%	
Other	65,000	9,000	14%	
TOTAL	1,916,000	168,300	Overall Recycling Rate 5%	



Existing Recycling Program Summary by Type



As seen in the table to the right as of 2004, the New Mexico Recycling Coalition (NMRC) survey indicates that over 70 government units have recycling programs and 43 do not. There may be considerably

more recycling and diversion activity in New Mexico than is being reported or counted. Only the five largest recycling and three largest composting operations are required to have solid waste permits and are mandated to report diversion tonnages to the Solid Waste Bureau.

Recycling Program Type	Number
Drop-off Only	51
Drop-off / Curbside Pickup (residential)	12
Commercial Collection	6
Special collection events	1
Total Recycling Programs	70
Towns /Cities without Recycling (Estimated)	43

Composting Facilities



The New Mexico Environment Department, Solid Waste Bureau and the New Mexico Department of Transportation (NMDOT) have developed compost specifications for use on roadway projects. Both

departments are working in conjunction to educate and communicate the benefits of compost as compared to traditional ground cover products (rocks, hydroseed). The specifications enable NMDOT project managers and engineers to specify compost as a ground cover in bid documents thereby creating local markets and end users in the State.

Composting Facility	Material Diverted (Tons)
Soilutions, Inc	1,488.0
Holloman AFB Recycling Center	58.0
Lovington Composting Facility	298.0
Soil Foods, Inc	800.0
Las Cruces Landfill/Composting	5,519.0
Las Cruces Recycling	5,518.9
Total	13,681.9

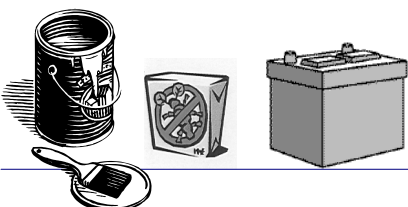
Solid Waste Act— Specific Programs Status

New Mexico Household Hazardous Waste Programs – 2004

Jurisdiction	Year-round Collection	Occasional Drop-Off Events	Quantity of HHW Collected in 2004
City of Albuquerque/Rinchem	X		103 tons
City of Farmington		X	NA
City of Las Cruces & Dona Ana County	X		7,951 gallons
City of Roswell	X		965 gals, 950 lbs
City of Santa Fe		X	17,403 gallons

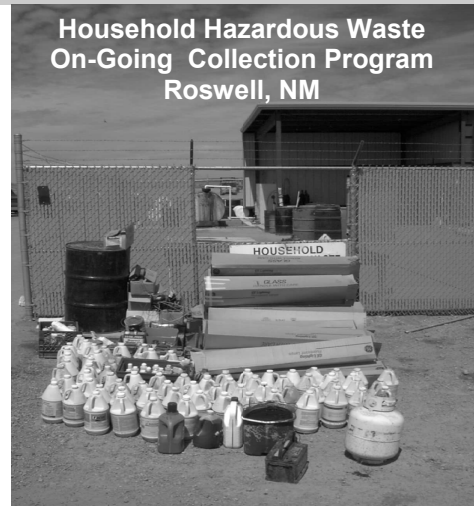
Any product that is labeled with warning words such as poison, toxic, corrosive, volatile, flammable, inflammable, combustible, explosive, danger, caution, warning or harmful contain hazardous ingredients. These materials need to be used, stored and disposed of safely to protect the public health, water supplies, and the environment.

Improving the management of HHW can diminish these threats and reduce the long-term environmental liability faced by local governments and private landfill operators for possible contamination of groundwater around landfill sites. A typical home contains three (3) to eight (8) gallons of hazardous material. Over time an average homeowner can accumulate as much as 100 pounds of HHW in the garage or basement. HHW comprises 1 to 2 percent of the solid waste stream. More than 50 percent of these wastes can be reused, treated, or recycled, especially paints, motor oil, and antifreeze. Five HHW programs were operational in 2004.



Three types of programs exist in New Mexico:

- **Limited collection programs** accept easily recyclable or reusable materials such as motor oil, lead-acid batteries, used antifreeze, and household batteries. Many communities collect some of these items at regional convenience centers or transfer stations. Private firms also accept these materials for recycling — especially used motor oil, lead-acid batteries, and some household batteries; or
- **Single-day special collection programs** are held once or twice a year and residents are allowed to deliver a wide range of unused HHW to a specified city/county site. An appropriate hazardous waste contractor is retained to sort, package, manifest, and properly recycle, treat and/or dispose of collected materials.
- **Permanent HHW Facilities** accept HHW year-round during specified hours at a specially-dedicated site. Such sites require development of approved storage and handling procedures, trained staff, and education of users.



Intel held an E-waste collection program in 2005 and 47.1 tons were collected and recycled in Arizona.

New Mexico State Government Source Reduction and Recycling Program



Telephone Book Recycling State Buildings, Santa Fe, NM

The State Agency Recycling Team, or START Program, was reactivated in 2005 through quarterly meetings with coordinators in about 30 agencies in Santa Fe, including 10 newly-recruited coordinators where replacements were needed (the program had been dormant 2 years). START coordinators are giving input for the new state pricing agreement for office paper recycling, and are measuring baseline recovery levels as of mid-2006 to serve as the basis from which program increases will be determined. In the next fiscal year, the SWB is responsible for guiding agencies to increase state government recycling rates by 10 percent.

Solid Waste Facility Grant Fund 74-9-40 and 41 of the Act

Background

The Solid Waste Facility Grant Fund Program (SWFGFP), created by the Solid Waste Act (74-9-41), provides grants for the construction or modification of solid waste disposal and recycling facilities to qualified municipalities and counties, individually or jointly. Since the funding cycle began in 1991 the program has awarded 111 grants totaling **\$21,507,539** to a wide

variety of solid waste projects across the state.

Historically, funding for the SWFGFP has come from various sources. In 1991, the Legislature appropriated \$750,000 to launch the program. Twice the Legislature authorized the New Mexico Finance Authority (NMFA) to issue bonds for the SWFGFP: \$10 million in 1995, and \$7.5 million in 1996. The bonds were to be repaid by using a portion of the 35%

of Government Gross Receipts Tax that NMFA makes available to the New Mexico Environment Department (NMED). Bond sale proceeds were deposited in the program fund. Additional income is generated from interest earned on fund deposits, and penalty fees collected in accordance with provisions of the Solid Waste Act.

Funding for this program has not been provided by the Legislature since 1996



Closed, unlined landfill

Current Program Status

The need and demand for grant funding far exceeds available funding. The Solid Waste Facility Grant Fund has not been replenished since 1996. As the fund balance decreased from grant awards made through 1999, interest earnings on the fund also decreased. Funding rounds were limited to \$2.9

million in 2000, and \$1.4 million in 2002. At present the fund has a remaining, uncommitted balance of \$825,509.

The Bureau plans to solicit proposals this fall to award all remaining funds. However, funds are insufficient to award grants to the many applicants needing assistance in

meeting the high costs of landfill closures, or construction of lined landfills or transfer stations. Grant funding is essential to help local governments pay engineering, excavation, and construction costs ranging \$6 to \$15 per cubic yard of landfill capacity, or \$550,000 to \$1.7 million per acre.

Current estimates for engineering, excavation, and construction of a MSW landfill liner systems range from \$550,000 to \$1.7 million per acre depending on the site and the final height



Transfer Station Built in Part with Grant Funds

On-Going Need

Communities across the state face increasing pressure to properly address their solid waste management obligations and responsibilities. Many are hoping to implement waste diversion or recycling alternatives, and/or to dispose of waste in a more cost-efficient manner. Some municipalities must close their outdated,

unlined landfills in order to decrease potential groundwater contamination. Numerous counties, cities, towns and villages need to replace old, inefficient solid waste collection and processing equipment, or need to build a new transfer or convenience station. Still others want to enhance waste diversion practices including

recycling and composting in accordance with the Solid Waste Management Act. In order to meet the demands and needs of New Mexico communities, an on-going source of financial assistance is warranted. The Solid Waste Facility Grant Fund Program is a proven, productive method to meet these needs.

Within the next three years more than 20 substandard, unlined landfills need to be closed and possibly replaced by transfer stations. Communities also wish to add recycling centers. Many of these sites are in rural counties or small cities that do not have the necessary funds.

Solid Waste Facility Grant Administration



Installation of Groundwater monitoring wells is fundable

Oversight of this grant program involves two bureaus within the New Mexico Environment Department — the Solid Waste Bureau and the Construction Programs Bureau. The Solid Waste Bureau manages the solicitation, review, prioritization, awarding, and funding amounts of the grants.

The Construction Programs Bureau oversees grants once awarded, including supervision of procurement of professional services, review of plans and specifications for the bidding and construction phases, oversight of construction, and project closure.

Funding Summary 2000—2002 Solid Waste Facilities Grant

2000 FUNDING CYCLE	Project #	PROJECT	APPROPRIATION	EXPENDITURES	Reverted Amounts	BALANCE	Termination Date / NOTES
ANGLE FIRE, ET AL	2000-01	Const Tfr. Sta.	\$75,000.00	\$75,000.00		\$0.00	COMPLETED
BERNALILLO COUNTY	2000-02	Renovate East Mtn. Tfr. Sta.	\$200,000.00	\$200,000.00		\$0.00	COMPLETED
CENTRAL SOLID WASTE AUTHORITY	2000-03	Collection Vehicle	\$90,000.00	\$90,000.00		\$0.00	COMPLETED
CLOVIS	2000-04	Const. Maintenance Facility	\$300,000.00	\$300,000.00		\$0.00	COMPLETED
CORONA	2000-05	Furch. Compactor Bin & Open Top Cont	\$17,500.00	\$17,500.00		\$0.00	COMPLETED
DE BACA CNTY	2000-06	Landfill Equip & Improvements	\$180,000.00	\$180,000.00		\$0.00	COMPLETED
GRANT CNTY	2000-07	Equipment/Convience Centers	\$70,000.00	\$70,000.00		\$0.00	COMPLETED
GUADALUPE CNTY	2000-08	Transfer Equipment	\$100,000.00	\$89,034.59	\$10,965.41	\$0.00	COMPLETED
HIDALGO CNTY	2000-09	Equipment/Landfill Closure	\$125,000.00	\$125,000.00		\$0.00	COMPLETED
LEA CNTY	2000-10	Const. & Equip 3 Convience Centers	\$264,000.00	\$264,000.00		\$0.00	COMPLETED
NORTHWEST NMRSWA	2000-11	Transfer Equipment	\$20,000.00	\$20,000.00		\$0.00	COMPLETED
PORTALES	2000-12	Transfer Equipment	\$150,000.00	\$150,000.00		\$0.00	COMPLETED
RATON	2000-13	Purch. & Instal Baler & Conveyor	\$200,000.00	\$200,000.00		\$0.00	COMPLETED
RUIDOSO	2000-14	Renovate Gavilan Canyon Tfr. Sta.	\$200,000.00	\$200,000.00		\$0.00	COMPLETED
SANGRE DE CRISTO	2000-15	Equipment	\$220,000.00	\$220,000.00		\$0.00	COMPLETED
SIERRA CNTY	2000-16	Landfill Equipment	\$210,000.00	\$210,000.00		\$0.00	COMPLETED
SOCORRO CNTY	2000-17	Construct landfill	\$100,000.00	\$75,736.56	\$24,263.44	\$0.00	COMPLETED
TAOS CNTY	2000-18	Const. & Equip Conv. Cntr./Taos L'fill Close	\$14,407.03	\$0.00	\$14,407.03	\$0.00	COMPLETED
TORRANCE CNTY	2000-19	Equipment/Const Conv. Centers	\$165,000.00	\$165,000.00		\$0.00	COMPLETED
TUCUMCARI	2000-20	Landfill Equipment	\$200,000.00	\$200,000.00		\$0.00	COMPLETED
VAUGHN	2000-21	Purch. Containers/Close Landfill	\$80,000.00	\$80,000.00		\$0.00	COMPLETED
2000 TOTALS			\$2,980,907.03	\$2,931,271.15	\$49,635.88	\$0.00	

2002 FUNDING CYCLE	Project #	PROJECT	APPROPRIATION	EXPENDITURES	Reverted Amounts	BALANCE	Termination Date / NOTES
CATRON COUNTY	2002-01	Construct 7 transfer Stations	\$215,000.00	\$156,000.09	\$58,999.91		COMPLETED
DE BACA COUNTY	2002-02	Landfill Equip, Bldg & Monitor Wells	\$126,000.00	\$82,208.66		\$43,791.34	December 31, 2007
GRANT COUNTY SWA	2002-03	Collection Equip	\$75,000.00	\$75,000.00		\$0.00	COMPLETED
GUADALUPE COUNTY	2002-04	Purchase Refuse Truck	\$50,000.00	\$47,326.55	\$2,673.45	\$0.00	COMPLETED
HARDING COUNT	2002-05	Purchase Truck & Equipment	\$100,000.00	\$99,999.50	\$0.50	\$0.00	COMPLETED
HIDALGO COUNTY	2002-06	Landfill Closure & Brush Chipper	\$50,000.00	\$50,000.00		\$0.00	COMPLETED
LUNA COUNTY	2002-07	Const. Convience centers	\$200,000.00	\$144,427.53	\$55,572.47	\$0.00	COMPLETED
MOSQUERO, VILLAGE OF	2002-08	Landfill Clo/Convience Center	\$24,100.00	\$24,100.00	\$0.00	\$0.00	COMPLETED 2/16/05
SAN JUAN COUNTY	2002-09	Purchase Compactor & Coll. Equip.	\$106,000.00	\$106,000.00		\$0.00	COMPLETED
SAN MIGUEL COUNTY	2002-10	Const. Conv. Cntr/Purch. Chipper	\$32,000.00	\$31,572.37	\$427.63	\$0.00	CLOSED 3/28/05
SANTA FE COUNTY	2002-11	Purchase Compactor	\$30,000.00	\$30,000.00		\$0.00	COMPLETED
SANTA ROSA, CITY OF	2002-12	Landfill Closure	\$72,000.00	\$21,560.16		\$50,439.84	Dec. 31, 2006
SPRINGER, TOWN OF	2002-13	Purchase Refuse Truck	\$94,900.00	\$94,900.00		\$0.00	COMPLETED
TORRANCE COUNTY SWA	2002-14	Const. Conv. Cntr/Purch Equip	\$100,000.00	\$100,000.00		\$0.00	COMPLETED
TUCUMCARI, CITY OF	2002-15	Landfill Construction	\$100,000.00	\$0.00		\$100,000.00	June 30, 2008
VAUGHN, TOWN OF	2002-16	Purchase Chipper	\$25,000.00	\$25,000.00		\$0.00	COMPLETED
2002 TOTALS			\$1,400,000.00	\$1,088,094.86	\$117,673.96	\$194,231.18	

Status of Implementation of 1994 Tire Recycling Act

In 1994, the Tire Recycling Act was passed by the 41st NM State Legislature to protect the health and welfare of present and future citizens of New Mexico by providing for the prevention and abatement of tire dumps and the promotion of environmentally sound methods for the use and recycling of scrap tires. The Tire Recycling Fund was created by that Act. During the same year, legislation was



passed that authorized the Motor Vehicle Division of the NM Tax and Revenue Department to collect a \$1.00 Tire Recycling Fee from each passenger vehicle registration. Those funds went into the Tire Recycling Fund, administered by the New Mexico Environment Department (NMED). Cities, counties, and cooperative associations were eligible for grants from that fund to clean up illegal tire dumps and stockpiles, to purchase equipment and supplies for creation of tire recycling facilities, and for construction of projects using scrap tires.

Unmanaged tire stockpile



Tire Baling using baler purchased with grant



Funding History

In 1999, legislation was passed that transferred all money collected in the Tire Recycling Fee from NMED to the NM State Highway and Transportation Department's Highway Infrastructure Fund. In 2003, legislation was passed that added \$0.50 to the Tire Recycling Fee, thereby generating a new Tire Recycling Fund to be administered by the NMED. Approximately \$800,000 per

year goes into the fund, of which \$600,000 is allotted for tire grants.

Since 1996, 34 grants have been used to clean up more than 35 tire dumps, create and maintain 17 tire recycling facilities, and design and construct 10 erosion control projects using tire bales. Between 1996 and 2005, \$4,442,605 has been awarded.

Baled tires used for bank stabilization at a closed landfill



New Recycling and Illegal Dumping Act 2005

In 2005, the Tire Recycling Act was repealed and replaced by the Recycling and Illegal Dumping Act ("Act"). The Act, in-turn, created the Recycling and Illegal Dumping Fund. According to the Act up to 1/3 of available grant funds can be awarded to non-tire recycling projects upon adoption of Recycling and Illegal Dumping Rules

("Rules"). A draft of the Rules is available on the Solid Waste Bureau Web site and was open to public comment until July 21, 2006. Stakeholder meetings have been held in Alamogordo, Albuquerque and Santa Fe. The proposed date for the Environmental Improvement Board hearing is December 5, 2006.

Baled tires used for erosion control



Tire Recycling Act Grant Award Summary

COUNTY	GRANTEE	CAL. YEAR	TOTAL \$ AWARDED	PROJECT DESCRIPTION	STATUS
Grant	SWNM Regional SWA	2004	\$80,000	Purchase tire baler and consumable materials; hire contract labor; abate 2 tire dumps.	Project in progress
Grant	City of Bayard	2004	\$116,924	Construct (3) tire bale erosion control projects. Funds used for engineering, permitting, transportation, installation.	Project in progress
Luna	County of Luna	2004	\$265,620	Purchase tire baler, tire de-rimmer, tire cutter, and consumable materials used in tire baling; hire contract labor; abate 6 tire dumps.	Project successfully completed
Mora + San Miquel	San De Crisco SWA	2004	\$77,500	Purchase baler, consumable materials and contract labor; abate 3 tire dumps.	Project in progress
Otero	Otero County	2004	\$60,000	Refurbish tire baler; purchase consumables; bale stock pile at Transfer Station.	Project successfully completed
Otero	Village of Tularosa	2004	\$9,000	Contract labor to abate 1 tire dump.	Project successfully completed
Sierra	Sierra County	2004	\$60,000	Purchase a tire baler, tire baling consumables and training for personnel for Sierra County.	Project successfully completed
Torrance	Estancia Valley SWA	2004	\$107,450	Purchase tire cutter, tire de-rimmer, and consumables; maintain tire baling equipment; labor, and transportation; abate 5 tire dumps	Project successfully completed
TOTAL AWARDED		2004	\$776,494		
Cibola + McKinley	NWNM Regional SWA	2005	\$23,000	Purchase a tire cutter.	Project successfully completed
Colfax	City of Raton	2005	\$60,000	Engineer and construct erosion control project using approximately 300 tire bales.	Project in progress
Lincoln	Lincoln County SWA	2005	\$125,000	Construct tire bale retaining walls, ramps and a perimeter fence. Project would use approximately 1,000 tire bales.	Project in progress
Luna	County of Luna	2005	\$200,000	Abate one large illegal tire dump.	Project in progress
Otero	County of Otero	2005	\$108,000	Engineer and construct a tire bale perimeter fence using approximately 2,250 tire bales; upgrade tire baler.	Project in progress
Santa Fe	Santa Fe SWMA	2005	\$109,200	Purchase tire baler; tire shear; tire de-rimmer; consumables.	Project in progress
Torrance	Torrance County	2005	\$33,000	Construct erosion control project using tire bales in partnership with Conservation District.	Project successfully completed
Torrance	Estancia Valley SWA	2005	\$27,500	Construct a tire bale wall at the Estancia Valley SWA Northern Convenience Station in Moriarty.	Project successfully completed
TOTAL AWARDED		2005	\$662,700		
PENDING GRANTS - NO SIGNED AGREEMENTS YET					
Bernalillo	Bernalillo County Dept. of Env. Health		\$15,083	Abate 3 tire dumps and transport tires to tire recycling facility	
Bernalillo	Bernalillo County Parks and Rec. Dept.		\$38,750	Purchase ground rubber produced from NM scrap tires to reconstruct turf at the Equestrian Park, soccer fields, and county owned and maintained landscaped areas.	
Taos	Taos County		\$110,000	Purchase tire baler, tire cutter, de-rimmer and wire to establish a tire recycling facility	
2006 PROPOSED TO DATE (6-21-06)			\$298,833		
TOTAL AWARDED AND PENDING GRANTS 2004 TO JUNE 2006 = \$1,738,027					

Solid Waste Bureau



modifications, reviews and renewals for permits. They complete review of closure and post-closure care plans for existing landfills to ensure compliance with regulations. Reviews are completed of the Hydrologic Evaluation of Landfill Performance (HELP) model demonstrations, for proposed liners and covers for landfills. Staff also consider groundwater monitoring suspension reviews, evaluate groundwater monitoring system plans, sampling

reports, and oversee field activities as necessary. Regulatory oversight is provided for well installations. Scientists verify the implementation and completion of approved closure plans at inactive solid waste facilities. They provide technical assistance and detailed reports regarding findings of their reviews.



Permit Section

The six staff in this section are responsible for technical review of applications and engineering plans for new solid waste facilities, permits and

In 2005,
2 Solid Waste Facility permits issued
1 Solid Waste Facility permit review completed
5 Landfill closure plans approved
11 Landfill closure plans verified

Permitted Landfills		Permit Issued Date
1	Caja del Rio	6/27/1995
2	Camino Real	3/5/1997
3	Cerro Colorado	6/22/2000
4	Clovis	6/15/1998
5	Corralitos	8/9/1995
6	Lea County	12/17/1997
7	Magdalena C&D	8/7/2000
8	Mesa Verde C&D	3/12/2001
9	Northeastern NM Regional	3/26/1997
10	Northwestern NM Regional	10/12/1995
11	Otero/Lincoln Regional	10/4/1993
12	Rhino	1/30/2002
13	Rio Rancho	4/29/1994
14	Roswell	5/21/1997
15	Sand Point	3/2/1994
16	Sandoval County	6/17/2005
17	San Juan County Regional	1/12/2006
18	Southwest	5/8/1997
19	SW NM Regional	12/19/1994
20	Taos	8/16/2001
21	Torrance/Bernalillo County	6/18/1997
22	Tucumcari	5/31/2005
Permitted Special Waste (only) Landfills		
1	Keers Asbestos	7/16/1993
2	Lea Land Industrial	2/27/1996

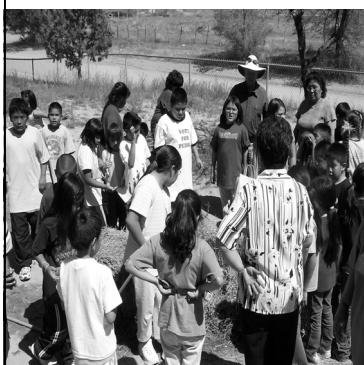
Permitted Transfer Stations		Permit Issued Date
1	Artesia	3/16/1995
2	Cibola County	1/23/1996
3	Deming	11/11/2001
4	Don Reservoir	8/24/2000
5	Eagle Rock	8/7/2000
6	East Mountain	12/2/2002
7	Las Vegas	10/19/1999
8	Los Lunas	11/17/1999
9	McKinley County	1/23/1996
10	Montessa Park	5/11/1998
11	Gavilan Canyon (Ruidoso)	12/19/1994
12	Buckman Road (Santa Fe SWMA)	5/7/1996
13	South Central SWA (Las Cruces)	11/2/1995
Permitted Processing Facilities		
1	Stericycle	7/15/1994
Permitted Recycling Facilities		
1	Camino Real	3/5/1997
2	Cerro Colorado IPF	8/5/1999
3	Environmental Control	1991
4	Master Fibers	11/15/1996
5	Durango-McKinley Fiber Co.	4/17/1996
Permitted Composting Facilities		
1	Albuquerque	8/5/1999
2	Artesia	9/17/1993

Special Waste Landfills and Facilities

X = Permitted to Accept
 X* = Not accepting at this time
 # = Pending Permit Approval

Landfills Accepting Special Waste	County	Asbestos	Ash	Chemical Spill Residue	Industrial Process Waste	Offal (animal processing waste)	Sludge (Municipal)	Sludge (Other)	PCS	Treated Formerly Hazardous Waste
Caja Del Rio Landfill	Santa Fe								X	
Camino Real Landfill	Dona Ana				X		X		X	
Cerro Colorado Landfill	Bernalillo			X	X	X	X		X	X
Corralitos Landfill	Dona Ana						X			
De Baca County Landfill	De Baca						X			
Keers Environmental Special Waste Monofill	Torrance	X								
Lea County Regional Landfill	Lea			X	X		X		X	
Lea Land Inc. Industrial Solid Waste Landfill	Lea		X*		X		X	X	X	
Northwest New Mexico Regional Landfill	Mora	X*			X				X	
Otero/Lincoln County Regional Landfill	Otero	X					X		X	
Rio Rancho Sanitary Landfill	Sandoval			X	X	X	X		X	X
San Juan County Regional Landfill	San Juan			X	X	X	X	X	X	X
Sandoval County Landfill	Sandoval						X			
Southwest New Mexico Regional Landfill	Grant					X				
Torrance County/Bernalillo County Regional Landfill	Torrance								X	
Truth or Consequences Landfill	Sierra						X			
Valencia Regional Landfill	Valencia								X	
White Sands Missile Range Main Post Landfill	Dona Ana	#								

Outreach



The Outreach section's primary mission is to help

educate citizens, companies and government agencies and municipal staff about beneficial and cost-effective ways to handle waste, including waste reduction, diversion alternatives, recycling, composting, transfer and landfilling.

This is accomplished via operator certification classes, presentations at

- ### ACCOMPLISHMENTS
- Trained 250 Certified facility operators
 - Facilitated Task Force that sent "Electronic Waste Report" sent Legislature
 - Updated Solid Waste Management Plan with input from 141 stakeholders

conferences, assemblies, civic gatherings, workshops on solid waste issues, development of comprehensive waste management planning, tracking various waste efforts, meeting with interested parties and stakeholder groups, and

providing grants for recycling projects and abatement of illegal dumps. Six Outreach staff are key in working with stakeholder groups including the Secretary appointed Recycling Alliance, Tribal groups, NM Recycling Coalition, among others.

2004-2005 Enforcement Actions Resulted in payments of \$83,608 for fines and penalties



Enforcement

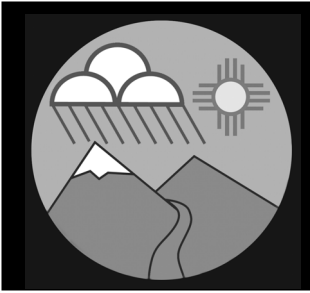
The SWB's enforcement section personnel conduct inspections of regulated solid waste facilities, tire recycling facilities, commercial waste haulers, scrap tire haulers and infectious waste generators to verify proper handling, transportation and disposal of solid waste and tires. Seven staff document and investigate complaints of

illegal dumping and unlawful handling or transportation of solid waste.


Additionally, staff review and approve (or recommend approval) of special waste disposal management plans, commercial waste hauler registrations, small facility registrations and minor amendments to solid waste facility operat-

ing plans; prepare and issue reports of investigation, notices of violation, compliance orders – assessing monetary penalties; provide testimony at public hearings; and respond to questions from the regulated community and other governmental entities.






Recommendation Summary


 **The Solid Waste Facilities Grant Fund must be recharged with \$5 million dollars.** At this time, there are more than 20 old substandard landfills that require closing and on-going groundwater monitoring.

Demand for this grant funding remains very strong as evidenced by 40 requests totaling \$11 million, in the last grant cycle in 2002, while only \$1.4 million was available. Funding for this program has not been provided by the Legislature since 1996.


 **The current staff level within the Solid Waste Bureau (SWB) needs to be expanded** to continue to meet the increasing demands of the program. The SWB is almost entirely funded via the General Fund. To meet this need, within the next three years, an on-going *Statewide Solid Waste Programmatic Initiatives Fund* should be enacted by the Legislature. This fund must be dedicated to support the program priorities as specified in the Act and Solid Waste Management Plan, and to provide adequate staff to successfully implement goals

The SWB currently has 25 staff. In the past, the Bureau has employed 34 employees.

For example, the current single enforcement employee in District I is responsible for annual inspections, facility oversight and responding to complaints for 597 permitted operations, such as open and closed landfills, commercial waste haulers, infectious waste generators, tire haulers, and recycling facilities; in addition to responding to all illegal dumping complaints in the five county district area.

 **Establish a \$1-\$2 million Recycling, Household Hazardous Waste (HHW) Grant/Low-Interest Loan Annual Fund** based on a Legislative Appropriation to help implement state-wide recycling programs, collection of electronic waste and proper management of hazardous household waste.

Only four (4) Household Hazardous Waste collection programs operated in New Mexico in 2004. The recycling Rate in NM in 2004 was 5%, and in 2005 it equaled 3.2 %.

 **State purchasing policy must be changed to include policies for the procurement of recycled commodities such as post-consumer papers and re-refined oil.** State purchasing contracts should be developed to allow local communities, cities, and counties to procure recycled products, and Household Hazardous Waste contractor services under state bid contracts.

Not implemented at this time.

NOTES:





Notes





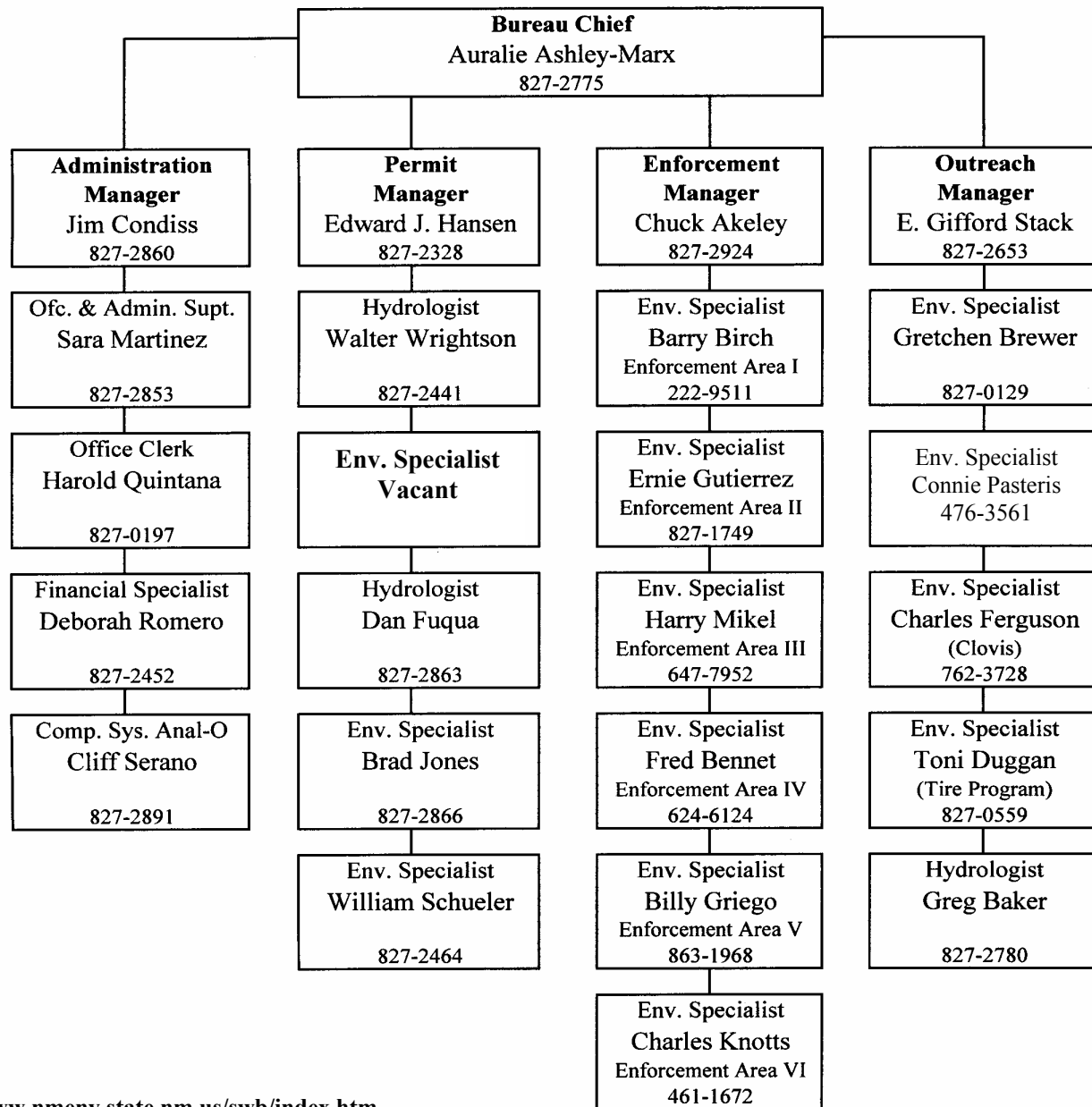
New Mexico Environment Department

Protecting Our Environment, Preserving The Enchantment

Secretary, Ron Curry / Deputy Secretary, Derrith Watchman-Moore

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**NEW MEXICO ENVIRONMENT DEPARTMENT
SOLID WASTE BUREAU
ORGANIZATIONAL CHART
5/24/2006**

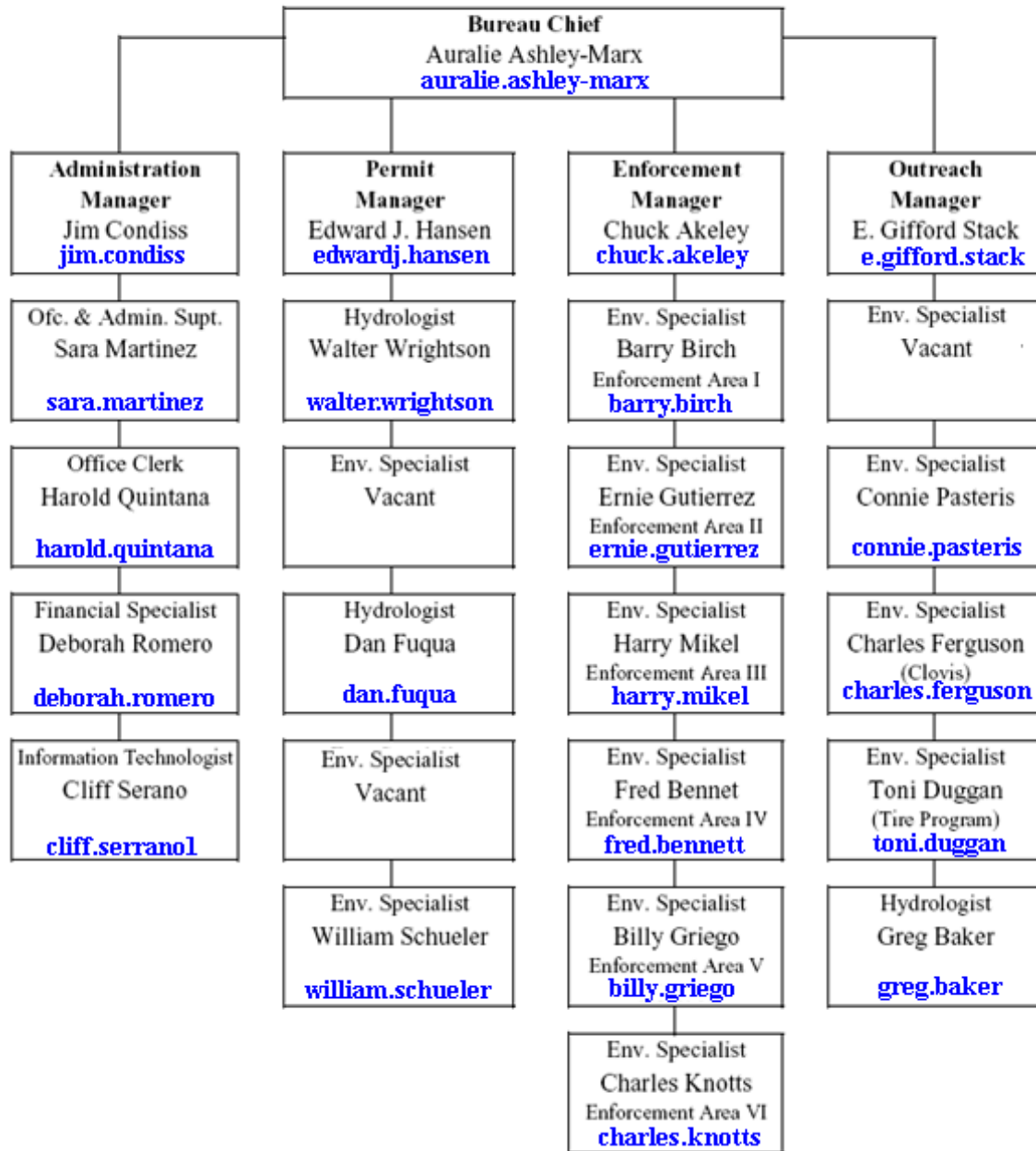


www.nmenv.state.nm.us/swb/index.htm



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