

SOLID WASTE MANAGEMENT PLAN FOR NEW MEXICO, 2007



Prepared by: Six Ad Hoc Working Groups

AND

New Mexico Environment Department
Solid Waste Bureau



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This Plan represents the combined efforts of a large group of dedicated New Mexicans and others who generously contributed their time, ideas, and knowledge to formulate a practical, action-oriented blueprint for integrated waste management in the state.

Special recognition goes to Ms. Cindy Padilla, former New Mexico Environment Department Solid Waste Bureau Chief, who in late 2004 mobilized the process to engage concerned stakeholders in developing the first updated Solid Waste Management Plan for New Mexico since 1993. Special thanks to the following individuals who answered the call; current and former New Mexico Environment Department employees: E. Gifford Stack, Gretchen Brewer, and Julia Barnes; and Chairs of the six working groups: Auralie Ashley-Marx (Waste Characterization), Justin Stockdale (Diversion), Keith Gordon (Facilities), Joseph Lobato and English Bird (Education), Randall Kippenbrock (Funding), and Douglas Meiklejohn (Environmental Justice).

Special thanks also go to the many other individuals from all sectors who participated in drafting this Plan. The Solid Waste Bureau expresses warm thanks to all who contributed. For a list of participants and their affiliations, kindly see Appendix A. Stakeholders in Solid Waste Management Plan Development.

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List of Selected Acronyms and Terms Used in This Document

(For more information, see Appendix B. Glossary of Terms)

Act	New Mexico Solid Waste Act, NMSA 1978, §§ 74-9-1 to 74-9-42.
C&D	construction and demolition debris
CESQG	Conditionally Exempt Small Quantity Generator
EIB	Environmental Improvement Board
EJ	environmental justice
EMNRD	New Mexico Energy, Minerals, and Natural Resources Department
EPA	US Environmental Protection Agency
ESGRT	environmental services gross receipts tax
Executive Order	New Mexico Environmental Justice Executive Order 2005-056
HHW	household hazardous waste
ICIP	Infrastructure Capital Improvement Program
MSW	municipal solid waste
NMDOT	New Mexico Department of Transportation
NMED	New Mexico Environment Department
NMRC	New Mexico Recycling Coalition
Plan	Solid Waste Management Plan of 1993 and this revision
RAID	Recycling and Illegal Dumping Act, NMSA 2005, §§ 74-13-1 to 74-13-20.
RCRA	Resource Conservation and Recovery Act, 40 CFR Part 257-258 (Solid Waste) and Part 260-279, various sections (Hazardous Waste)
Regulations	Solid Waste Management Regulations, 20 NMAC 9.1
SWANA	Solid Waste Association of North America
SWARs	Solid Waste Annual Reports
SWB	Solid Waste Bureau
SWFGF	Solid Waste Facility Grant Fund

EXECUTIVE SUMMARY

In order to develop goals and recommendations for the 2007 update of the 1993 Solid Waste Management Plan (the “Plan”), six ad hoc working groups were formed by 140 stakeholders representing all sectors. The working groups were divided into six subjects, represented by chapters in this document: Waste Characterization, Diversion, Facilities, Education, Funding, and Environmental Justice.

Stakeholders collected extensive data to appraise the present status of solid waste management in New Mexico, and serve as the basis for setting realistic goals that can be attained in a three-year period. Stakeholders determined that the overarching priorities, objectives and goals for the Plan are:

- Address statutory requirements and goals specified in the New Mexico Solid Waste Act.
- Where possible, define objectives for a three-year planning period.
- Develop a practical strategy framework supporting a phase-in of the solid waste management hierarchy in New Mexico. The priorities are:
 - Diversion first—waste reduction, reuse, and recycling
 - Safe transformation second, and
 - Lastly, environmentally sound landfill disposal.
- Set diversion / recycling goals in terms of creating *access* to basic recycling opportunities for all New Mexicans, as opposed to setting a numerical goal or percent of total waste targeted for diversion.
- Foster access to recycling via a tiered strategy that encourages all communities, at a minimum, to target and provide drop-off or collection services for the easiest and most readily recycled materials.
- Initiate a process to improve reporting systems and assemble adequate information on which to base long-term planning of environmentally sound waste management and waste reduction facilities and capacity.
- Identify and analyze challenges to overcome to meet objectives and goals.

This Plan and its recommendations provide the mechanisms for meeting these objectives. The working groups developed a number of innovative recommendations. These were evaluated by the New Mexico Environment Department’s (NMED) Solid Waste Bureau (SWB), keeping in mind the three-year time frame. From these, the following 30 recommendations were selected for inclusion in the 2007 Plan. For a complete list of working group recommendations, see Appendix C. Detailed Working Group Recommendations by Chapter.

RECOMMENDATIONS TO NMED / SWB TO ACCOMPLISH WITH EXISTING RESOURCES:

- a. Implement a process to upgrade statewide waste management data systems needed to support long-term planning of disposal and diversion efforts and capacity needs. These efforts should include revising the Solid Waste Annual Report form and database, providing technical assistance, and including training modules in the Certification

Courses for Landfill, Transfer Station, Composting, and Recycling Facility operators on proper data collection and reporting methods. (Chapt. 3-7)

- b. Adopt the tier strategy of recycling priorities, with the objective of increasing access to recycling. (Chapt. 4)
- c. Evaluate methodologies, models, voluntary reporting systems and databases already developed and tested to capture recycling and diversion information from the private sector, as well as small recycling operations and reuse programs, including volumes from composting operators, home composting, and non-municipal solid waste materials diverted for recycling or *beneficial use*. Allow construction and demolition debris (C&D) recycling and reuse to be counted as diversion. (Chapt. 4)
- d. Promote, document, and track existing and potential source reduction programs in New Mexico, including reuse programs that intercept discards before they actually enter the solid waste stream. (Chapt. 4)
- e. Prepare and maintain a current list of mercury lamp recyclers, and strongly encourage all businesses to recycle mercury-containing lamps. (Chapt. 4)
- f. Evaluate environmental justice (EJ) outcomes and coordinate uniform standards as they pertain to the Solid Waste Management Regulations (the "Regulations"). (Chapt. 8)
- g. Implement EJ training and assistance. (Chapt. 8)
- h. Develop and implement an outreach and technical assistance program to assist local governments and communities with strategies to limit illegal dumping. (Chapt. 8)
- i. Implement website postings consistent with EJ. (Chapt. 8)

RECOMMENDATIONS TO NMED / SWB TO ACCOMPLISH DEPENDING ON FUNDING AND / OR PARTNERSHIPS:

- a. Require all waste management entities statewide to undertake waste characterization surveys to quantify waste generation and diversion data. Provide technical assistance and including training modules in the Certification Courses for Landfill, Transfer Station, Composting, and Recycling Facility operators on waste characterization methods. Compile and evaluate resulting waste survey data, and prepare and release a public report of waste characterization findings. Working in a coalition with the Recycling and Illegal Dumping Alliance, New Mexico Recycling Coalition (NMRC), and the Solid Waste Association of North America (SWANA) Road Runner Chapter, evaluate findings of preliminary waste characterization surveys around the state and determine whether funding should be sought for a more intensive, formal statewide waste characterization study. If such a study is warranted, the projected cost at present is estimated to be \$250,000 to \$350,000. (Chapt. 3)
- b. Assure consistency of waste collection data by requiring all facilities to install scales for weighing waste, and / or obtain scale data for wastes delivered from disposal sites. In lieu of scaled weights, require facility operators to convert all waste disposal or diversion data from volume to tons using an approved formula. Provide oversight and training to assist facility operators with corrective measures to resolve data collection problems. (Chapt. 3)
- c. Provide initiatives for voluntary programs that increase a community's access to recycling; take steps to marshal grants, incentives, and other resources; and elicit support from partner organizations, such as the New Mexico Municipal League and the New Mexico Association of Counties. (Chapt. 4)

- d. Coordinate with NMED Pollution Prevention’s Green Zia education and recognition programs in expanding private sector efforts to reduce quantities and toxicities of solid waste. (Chapt. 4)
- e. In collaboration with SWANA, expand the waste quality, screening, and segregation training modules in Landfill and Transfer Station Certification Courses. (Chapt. 4)
- f. In collaboration with the Hazardous Waste Bureau and Pollution Prevention, conduct a study to evaluate the status and impacts of household hazardous waste (HHW) and conditionally exempt small quantity generators (CESQG), particularly in rural areas. Based on results, determine best practices, including a potential ban of these materials. If a ban is recommended, include an exemption for curbside haulers. (Chapt. 4)
- g. Conduct a county by county survey to assemble statewide data on disposal and diversion, and develop / utilize additional tools to help compile and evaluate findings, including waste shed and diversion maps. (Chapt. 5)
- h. Work with a coalition of organizations to support a joint effort to identify and pursue funding to offset increased infrastructure and transportation costs for smaller communities closing local landfills and transitioning to transfer stations. (Chapt. 5)
- i. Work with a coalition of organizations to support a joint effort to identify funding sources for recycling and composting initiatives statewide. (Chapt. 5)
- j. Partner with the Recycling and Illegal Dumping Alliance, NMRC, SWANA, and other interested parties to develop a statewide message campaign to advance environmentally sound solid waste management, household hazardous waste management and diversion for New Mexico. (Chapt. 4 & 6)
- k. Explore options to provide technical assistance from a neutral source for affected environmental justice communities and the public. (Chapt. 8)
- l. Work with the NMED EJ Policy Committee on these and other recommendations to ensure effective implementation of the EJ Executive Order mandates. (Chapt. 8)

ENVIRONMENTAL IMPROVEMENT BOARD (EIB) OR LEGISLATIVE RECOMMENDATIONS TO ACCOMPLISH WITH EXISTING RESOURCES:

- a. Amend the Regulations to include further requirements for used motor oil, lead-acid batteries, and liquids, and for mercury-containing and other hazardous lamps that are currently listed as a universal waste, and that have not been previously addressed in New Mexico. (EIB—Chapt. 4)
- b. Amend the Regulations to accommodate a range of facility and siting choices, including recycling and composting facilities, transfer stations and convenience centers, to reduce the cost and complexity of solid waste management for smaller communities. (EIB—Chapt. 5)
- c. Discuss with the Legislature a variety of funding mechanisms for funding the Plan for \$1.5 million annually, including:
 - Creating a capital outlay revolving funding source within the control of SWB. The funding criteria should contain both sustainability and accountability components.
 - Enacting a surcharge through the legislature on some identified item, such as a per-ton fee on waste sent to landfills, or a tax on plastic retail bags, and dedicate the resulting revenues to a solid waste management / diversion fund. NOTE:

Some working group members agreed to support a landfill surcharge only if it contained limits that would prevent the fee from being increased for other purposes later.

- Adding an additional percentage to the environmental services gross receipts tax to fund solid waste management program priorities.
- Enacting a “bottle bill.” Though this type of legislation has been introduced several times before in New Mexico, reportedly the earlier bills and redemption programs they set forth were poorly designed. The Hawaii and California redemption systems offer good models to follow in crafting a sound bill.
- Enacting disposal fees on tires or other problem waste items, with the resulting monies earmarked to a solid waste management / diversion fund.
- Establishing a legislatively funded trust that would provide interest sufficient to provide \$1.5 million in interest income for SWB program priorities. (Legislature—Chapt. 7)

LEGISLATIVE RECOMMENDATIONS TO ACCOMPLISH DEPENDING ON FUNDING:

- a. Establish a Solid Waste Infrastructure Grant program that will allow qualifying municipalities to obtain funds to purchase and install appropriate truck scales. (Chapt. 3)
- b. Establish a HHW and CESQG Fund to help government units and generators implement management, collection, and recycling programs for hazardous items. (Chapt. 4)
- c. Replenish the Solid Waste Facility Grant Fund. (Chapt. 7)

RECOMMENDATIONS TO THE RECYCLING AND ILLEGAL DUMPING ALLIANCE TO ACCOMPLISH WITH EXISTING RESOURCES:

- a. Adopt the tier strategy of recycling priorities in evaluating and awarding grants. Assure successfully-funded grant proposals are economically viable and sustainable in providing access to recycling. (Chapt. 4)
- b. Help SWB identify and pursue funding mechanisms, including existing funds, a New Mexico Recycling Grant Fund established through legislation and / or fees, revolving loans, and other financial resources. (Chapt. 4)

RECOMMENDATIONS TO THE RECYCLING AND ILLEGAL DUMPING ALLIANCE TO ACCOMPLISH DEPENDING ON PARTNERSHIPS:

- a. Partner with NMED / SWB, NMRC, SWANA and other interested parties to develop a statewide message campaign to advance environmentally sound solid waste management and diversion for New Mexico (same as Recommendations to NMED / SWB to Accomplish Depending on Funding and / or Partnerships).
- b. With NMRC and the Ad Hoc C&D Recycling Task Force, assist SWB in researching C&D material reuse and recycling potential and developing C&D recycling / reuse markets. (Chapt. 4)

CHAPTER 1. INTRODUCTION

1.1 1993 Solid Waste Management Plan

The New Mexico Solid Waste Act (the “Act”) required development of a comprehensive solid waste management program by December 1, 1992, with implementation by July 1, 1994. The Act charged the New Mexico Environment Department (NMED) with overseeing most of the requirements in the Act and developing a solid waste management plan.

NMED published the first New Mexico Solid Waste Management Plan (the “Plan”) in 1993. That Plan included many far-reaching recommendations to dramatically overhaul solid waste management in the state. Highlights included:

1. The Plan advocated integrated waste management following the solid waste hierarchy:
 - First reduce, reuse, and recycle (or compost) discards
 - Then use environmentally safe transformation, such as incineration with energy recovery, for discards that cannot be reduced, reused or recycled (Note: There are currently no solid waste incinerators or other transformation facilities in New Mexico.)
 - Finally, use landfill disposal for what remains.
2. The Act set goals to divert 25 percent of all solid waste from disposal facilities by July 1, 1995, and 50 percent by 2000.
3. The Plan emphasized collaboration among state agencies, the private sector, local governments, community organizations of all types, the general public, and many others to implement and participate in education and waste diversion initiatives.
4. The Plan and Solid Waste Management Regulations (the “Regulations”) launched a framework and process for closing sub-standard landfills around the state and constructing disposal facilities meeting more stringent Resource Conservation and Recovery Act (RCRA) Subtitle D requirements for protecting ground water, air, soil, the environment, and public health.
5. The Plan encouraged neighboring governments to form regional solid waste management districts, authorities, or agencies for economies of scale in building new disposal facilities.
6. The Solid Waste Facility Grant Fund (SWFGF) and Recycling Grant Fund, both established in 1990 / 91, provided funding to help overhaul the state’s waste management system.

1.2 Developing the 2007 Plan

The proposed Plan is the first update since 1993. It was developed through an extensive public participation process encouraging input from six ad hoc working groups that were formed by 140 stakeholders, representing all sectors. The planning process is detailed in Appendix D. Solid Waste Management Plan Stakeholder Process.

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CHAPTER 2. STATUS OF SOLID WASTE MANAGEMENT IN NEW MEXICO

This chapter summarizes the status of solid waste disposal, recycling, and composting in New Mexico, drawing on 2004 and 2005 Solid Waste Annual Reports (SWARs) and other sources.

2.1 Solid Waste Management Facilities and Capacity

Since the first Plan was adopted, the principal focus of state and local efforts and resources has been to make environmentally sound waste disposal available to 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 need to implement an infrastructure of modern landfills and transfer stations took precedence over other goals and recommendations in the first Plan for priority use of limited economic and staff resources.

Since 1989, New Mexico communities have made excellent progress closing substandard landfills and opening modern Subtitle D landfills compliant with RCRA and state regulations. A total of 93 landfills stopped accepting waste and are closed or in the process of closing. Presently 19 permitted and 16 registered landfills are active in New Mexico, including two landfills permitted to accept only special waste. Other permitted facilities include: 13 transfer stations, five recycling facilities¹, three compost facilities¹, and one infectious waste treatment facility.

The SWFGF 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 Recycling Grant Fund, administered by the Energy Minerals and Natural Resources Department (EMNRD), awarded \$3.7 million—matched by \$4.6 million in local funds—to help launch recycling programs from 1990 to 1997.

Figure 2.1 shows local government progress consolidating waste management through formation of 12 regional solid waste authorities.

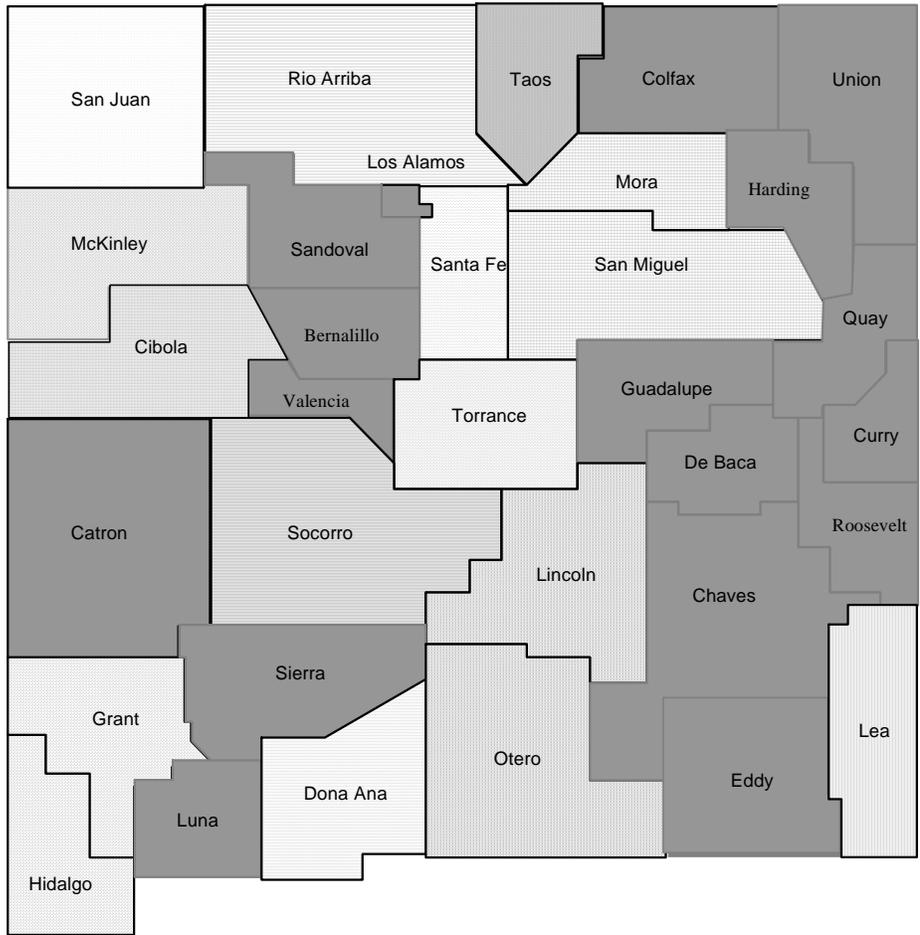
According to 2004 SWARs, New Mexico has 30 years of remaining aggregate disposal capacity statewide. This capacity is not evenly distributed throughout the state, as discussed in Chapter 5.

2.2 Solid Waste Generation and Disposal in New Mexico

Data for calendar year 2005 shows that New Mexico disposal and recycling facilities received a total of 3,549,025 tons of solid waste. This figure represents total *generated* waste reported to the Solid Waste Bureau (SWB), including Municipal Solid Waste (MSW; defined as residential, commercial, and institutional discards; recyclables and compostables), construction and demolition debris (C&D), and MSW received for disposal from out-of-state communities. It does not include waste stream fractions monitored by other agencies, such as auto bodies, municipal sludges, combustion ash, agricultural wastes, and industrial process wastes.

¹ Note: In 2005, NMED modified the policy and subsequent regulations on solid waste permits to remove recycling and composting facilities from this requirement.

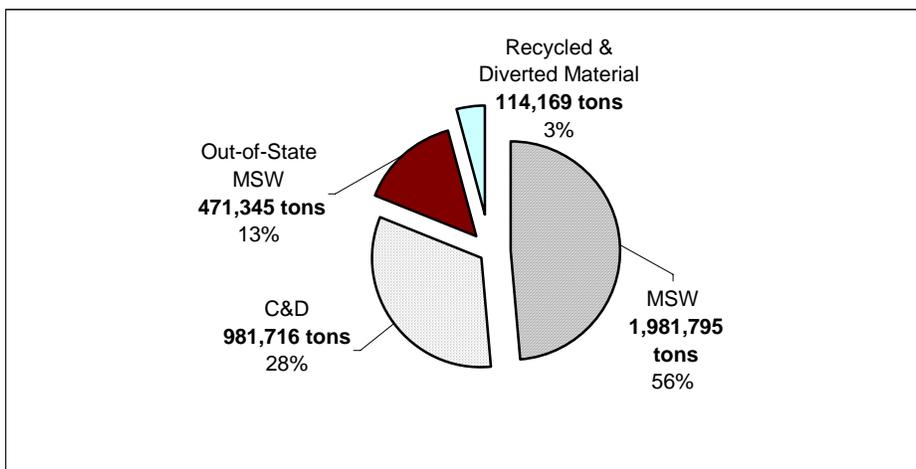
Figure 2.1
New Mexico Solid Waste Authorities



- | | | | |
|---|---|---|--|
|  | San Juan County Regional Solid Waste Management Authority |  | Central Solid Waste Authority (Socorro County) |
|  | North Central Solid Waste Authority (Rio Arriba County) |  | Otero County SWA; Otero/Lincoln County SWA; Lincoln County SWA |
|  | Taos Intergovernmental Council & Taos Regional Landfill |  | Southwest Solid Waste Authority (Grant and Hidalgo Counties) |
|  | Northwestern New Mexico Regional Solid Waste Authority (Cibola and McKinley Counties) |  | South Central Solid Waste Authority (Dona Ana County) |
|  | Santa Fe Solid Waste Management Agency |  | Lea County Solid Waste Authority |
|  | Sangre de Cristo Solid Waste Authority (Mora and San Miguel) |  | No Solid Waste Authorities Established |
|  | Estancia Valley Solid Waste Authority (Torrance County) | | |

As seen in Figure 2.2, C&D comprises 28 percent of waste generated. For planning purposes, C&D waste is included in solid waste generation figures because the large quantity of C&D generated in New Mexico requires substantial disposal capacity.

Figure 2.2 New Mexico 2005 Total Waste



For purposes of comparison, excluding C&D and out-of-state waste gives the remaining balance that is strictly MSW. New Mexicans generated a total of 2,095,964 tons of MSW (including waste and recyclables) in 2005. On a population basis, this represents an average of 6.1 pounds per person / day or approximately 1.6 pounds more per day than the US Environmental Protection Agency’s (EPA) estimated national average of 4.5 pounds per person / day.

2.3 Recycling and Diversion in New Mexico

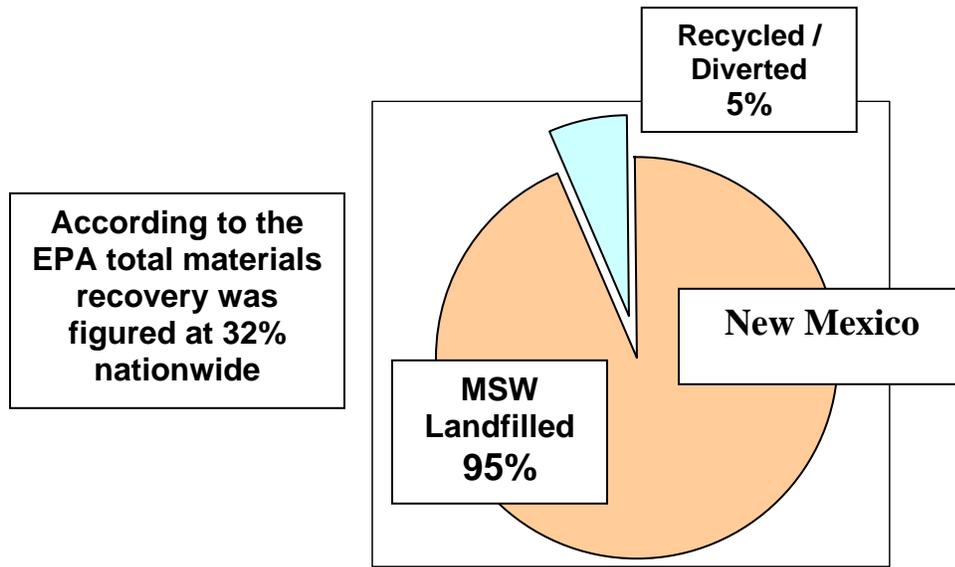
SWARs indicate that New Mexicans diverted 114,169 tons of solid waste, or five percent of MSW, from landfills through recycling and composting in 2005, see Figure 2.3. On a per capita basis, using New Mexico’s 2005 census population of 1,887,200, the recycling-plus-composting rate is calculated as an average of 0.3 pounds per person / day diverted from landfills.

For comparison, EPA’s study of MSW in the US in 2005 found a national recycling / composting rate of 32 percent of MSW, or an average of 1.46 pounds per person / day diverted from the 4.5 pounds per person / day generated (EPA, 2006). Though EPA and New Mexico data and reporting differ (for example, EPA does not include C&D tonnages in the generation rate), this gives a rough picture of how New Mexico’s diversion rate compares to the national average.

2.4 Calculated New Mexico Diversion Rate

The Act stipulated method utilizing a base year (1992) target and calculation formula for determining solid waste diversion based on a per capita generation rate of four pounds of solid waste per person / day. The targeted goals were 25 percent diversion by the year 1995 and 50 percent diversion by 2000. As seen in Table 2.1, the current calculated recycling rate is

Figure 2.3 New Mexico MSW Recycling Rate, 2005



3.22 percent when factored against the total *solid waste generated* in 2005. This falls significantly *short* of the 1995 and 2000 goals.

Table 2.1 2005 State Recycling Rate Calculation

Base Year	1992
Base year population	1,583,774
Conversion Factors = four lbs / person / day, 365 days / year, one ton / 2000 lb	
<i>Base Year</i>	
Base year Tons of Solid Waste Generated at four lbs per person / day	1,156,155
1995 Recycling target - divert 25% of Solid Waste tonnage generated in the Base year	289,039
2000 Recycling target - divert 50% of Solid Waste tonnage generated in the Base year	578,077
<i>Year 2005</i>	
2005 Tons of Solid Waste Generated in New Mexico	3,549,025
2005 recycling tonnage including compost w/o sludge and metals	114,169
State Recycling Rate (2005 recycled materials / 2005 Solid Waste generated total)	3.22%

Another recycling rate calculation is based on the net per capita discard rate; or the quantity of solid waste generated, less the quantity diverted from landfills, divided by the population. The New Mexico net per capita discard rate in 2005 is 9.97 pounds per person / day, based on total solid waste disposed in the state. According to the 1993 Plan, a base net per capita discard rate of four pounds per person / day is to be reduced by 25 percent by 1995 and 50 percent by 2000, respectively, or a net reduction of one pound (1995) and two pounds (2000) per person / day. In fact, by this method of calculation, the net per capita discard rate has actually *increased* by 5.97 pounds to 9.97 pounds per person / day in 2005, rather than decreased. [This once again

illustrates that New Mexico has significantly missed the mark when it comes to meeting the previously set goals, as well as in comparison with other US states.]

For further discussion of New Mexico's recycling rate compared with other US states, see Chapter 3 Waste Characterization. Additional information is provided in Appendix E *Recycling Goals and Progress, US States 2005*, by Raymond Communications, Inc. (This publisher graciously gave permission for SWB to use this copyrighted work in developing the new Plan.)

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

- 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 have been required to have solid waste permits and to report diversion tonnages to SWB. However, other sources indicate that over 70 government units have recycling programs, there are 28 active composting operations, and there are numerous private sector recyclers. See Appendix F. Recycling Program Inventory by County lists all the jurisdictions with government-run recycling programs and Appendix G. New Mexico Compost Facility List for composting contact information.
- New Mexico is a net importer of waste from surrounding states and Mexico. While this waste is included in the total solid waste generated in New Mexico, there is little opportunity to recycle or divert these materials.
- 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.

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CHAPTER 3. WASTE CHARACTERIZATION ELEMENT

3.1 Waste Characterization Goals

The goals of the Waste Characterization Working Group were to:

- Support decision-makers in creating long term, cost-effective and environmentally sound solid waste management systems for New Mexicans.
- Increase the amount of waste diversion in New Mexico, and encourage the use of local alternative disposal methods to conserve landfill space.
- Provide information to allow managers / operators at landfills, and decision-makers within municipal boundaries and / or as a group within waste sheds to complete at least one, and preferably two, waste surveys within the next three years.
- Begin a process for statewide collection of equivalent data from each landfill, municipal unit, and regional waste shed to allow for valid comparisons by waste categories both within the state and nationally as the basis for determining “realistic” waste reduction, diversion, and recycling rates and goals.

To assist with meeting these goals general information is provided on waste generation and composition trends. Tools for a preliminary waste survey are included in Appendix H. Waste Characterization Data Collection Forms and also see Appendix I. Links for Selected Waste Characterization Studies. Waste characterization surveys can be used to analyze quantities and composition of New Mexico’s waste stream, and provide a sound basis for planning future diversion and disposal strategies.

3.2 National Waste Characterization Data

There are two national waste characterization reports published annually, one by BioCycle Magazine, and the other by EPA. The most recent BioCycle study, using data collected from 45 states in 2004, shows that the US continues to generate increasing volumes of solid waste, most of which are landfilled. According to this study, which has been repeated annually since 1989, Americans generated 388 million tons of MSW in 2004. This averages 7.25 pounds per person / day. (These figures and those below do not include C&D, industrial, agricultural, or imported wastes.)

According to the EPA study for the same period, Americans generated 247.3 million tons of MSW, averaging 4.61 pounds per person per day. EPA’s most recent data indicates that we generated approximately 245.7 million tons of MSW in 2005—a *decrease* of 1.6 million tons from 2004. MSW generation in 2005 declined to 4.54 pounds per person per day. This is a decrease of 1.5 percent from 2004 to 2005.

The EPA study uses an input-output methodology based on Department of Commerce data on annual production of goods, population, and consumption patterns—not waste disposal data reported by states as used by Biocycle. EPA’s method generally yields more conservative figures.

3.3 Solid Waste Data Collection in New Mexico

New Mexico has never done a formal statewide waste characterization study due to lack of funds for such a project. However, the Act requires that the Plan identify types and quantities of solid waste generated by season, and estimate per capita waste generation.

For purposes of this Plan, general information is provided on estimated quantities of wastes currently *generated*, as reported by counties in SWARs. However, it must be noted that the confidence level regarding accuracy of this data varies, primarily due to the lack of a single standardized reporting methodology based on scaled weights. Given these limitations, waste generation and diversion information provided here is for a general context of the current status of solid waste management in New Mexico.

Data on disposal and diversion activities at privately owned and operated landfills may not always be provided to SWB. Also, private sector diversion efforts, such as retailer corrugated recycling, are not currently captured unless materials are delivered to municipally operated facilities, or to in-state processors who report recovery figures to NMED.

There is a clear need to redouble efforts to obtain consistent data to evaluate viable waste diversion activities and support phased statewide landfill diversion efforts in the future. Key steps in this process include improved solid waste data collection, and a statewide systematic waste characterization.

In the absence of a formal waste characterization study, Appendix J. Estimated New Mexico Waste Generation by County, 2004 provides estimates of waste generation as reported to SWB in SWARs.

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

- There is 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.
- C&D 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 upward trend. However, tonnage from neighboring states like Texas can be unpredictable and vary based on local conditions. For instance, a short-term shortfall of out-of-state disposal capacity can occur if construction of a new landfill cell falls behind schedule.

3.4. Waste Characterization Program Design

A successful waste management program is based on reliable information about the quantity and types of wastes generated by the service area (EPA, 1995). To obtain the necessary information, the state, county, municipal, or regional landfill or transfer station operator needs to conduct a

systematic assessment to determine the types and amounts of materials disposed at solid waste facilities. These *waste characterization studies* have the following benefits:

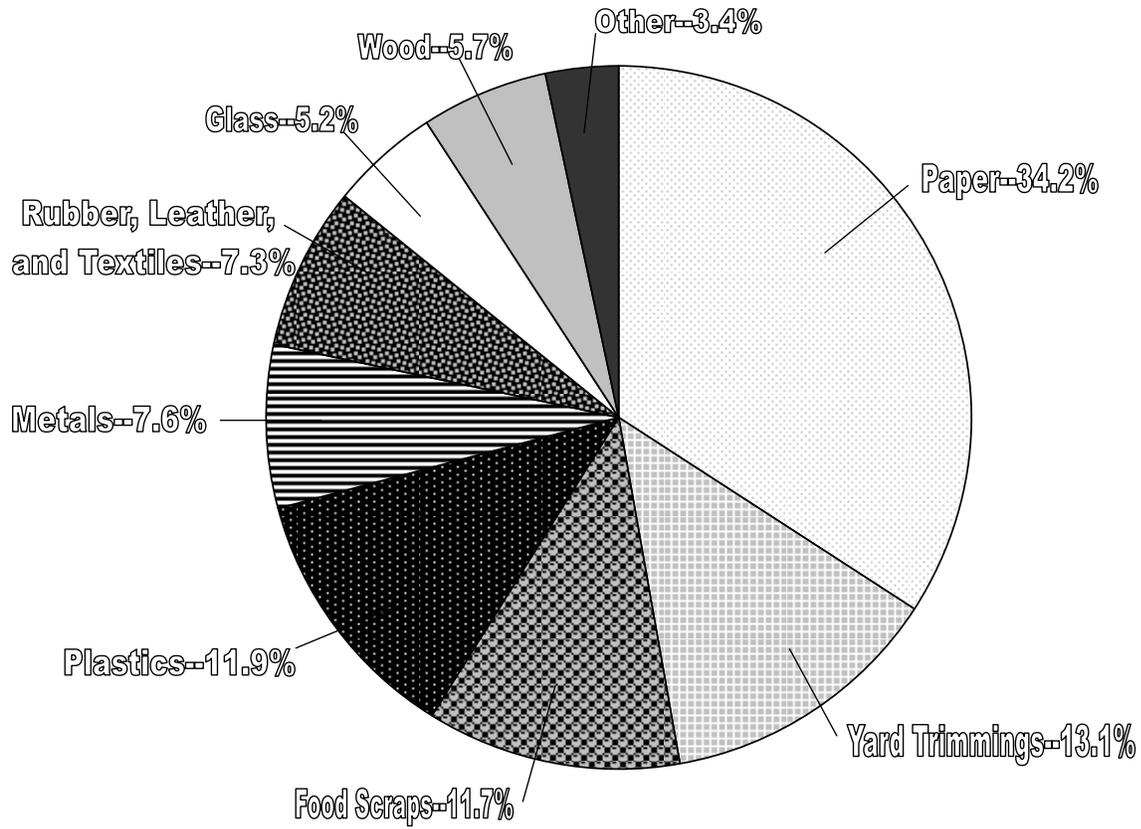
1. Provide detailed local information about the types and quantities of products being purchased, wastes generated, as well as current waste disposal practices
2. Give decision-makers the opportunity to target materials in a systematic manner to ensure that cost-effective, specific waste reduction, recycling, composting, and other diversion activities, plus landfill space conservation objectives are met
3. Create a baseline set of data to use as a starting point allowing comparative measures of the success of subsequent waste reduction, recycling, or diversion efforts and programs at local, state and federal levels.

A waste characterization study can be:

- As simple as a seasonal record of visually estimated percentages for material fractions delivered to a facility completed by an experienced operator at predetermined dates and times; and / or
- A survey form completed by haulers and / or generators in a defined service area; and / or
- The completion of a seasonal comprehensive analysis that involves a systematic sorting and weighing process at a landfill or transfer station to obtain more accurate estimates of waste composition.

The EPA published the waste characterization summary shown in Figure 3.1 providing an “average” composition of material percentages in the US MSW stream in 2005. While this characterization is useful as a starting point, it must be noted that there is variability by region, state, county, and urban or rural areas. For example, the quantity of yard wastes in New Mexico is probably significantly lower than in wetter Northeastern areas of the US, as the arid climate discourages green lawns. Waste types and quantities also vary by the sector (residential, commercial, etc) in which wastes are generated, and by delivery method. Waste characterization studies must be designed to capture generation patterns and diversion opportunities by classifying types, quantities, and mixtures of materials generated on the sector level. Also, characterization studies must be sufficiently representative to yield data supporting waste management planning and allocation of resources.

Figure 3.1
2005 Total US MSW Composition – 245 Million Tons (before recycling)



Source: EPA, *Municipal Solid Waste in the United States 2005 Basic Facts*

CHAPTER 4. DIVERSION ELEMENT

The Diversion Working Group took a pragmatic approach in developing the recycling and diversion strategy outlined below. They ruled out adopting a new strategy with numerical diversion goals in light of: recycling markets, the state's low recycling rates, and the lack of ongoing state funding for recycling education or recycling programs.

Following the appointment of the Recycling and Illegal Dumping Alliance (the "Alliance"), a new planning task force formed under the Recycling and Illegal Dumping Act (RAID) charged with creating statewide strategies to increase recycling and reduce illegal dumping, the Diversion Working Group transferred its recommendations to the Alliance for further development. On November 1, 2005, the Alliance adopted the proposed primary and secondary diversion plan.

4.1 Diversion Goals

The Diversion Working Group retained the overarching priorities set forth in the Act:

- Diversion first
- Transformation second
- Disposal last

Within this context, the group elected to set near-term, achievable goals for the Plan, and they opted for a "groundswell" strategy encouraging communities to create citizen *access* to recycling services for the most readily recycled materials in New Mexico.

As one group member put it, "New Mexico will have a paper drive." The Durango-McKinley corrugated cardboard mill in Prewitt, NM, and the Abitibi-Consolidated newsprint mill in Snowflake, AZ, both can accept all the recycled feedstock New Mexicans can generate. Targeting fibers first for recovery can build a sustainable recycling and diversion foundation in any community. (See section 4.4 for more on the recycling market outlook in New Mexico.)

4.2 Primary Diversion Plan

The primary goal of the Diversion Plan is to increase *access* to recycling utilizing existing markets and market development for recycled materials. This goal will be met by creating a voluntary program for counties, cities with populations over 3,000 people, tribes and other organizations (referred to here as "Participating Organizations").

Through this voluntary program, Participating Organizations will agree to provide access to recycling to the populations they serve. In order to encourage counties, cities, tribes and other organizations to participate in the program, there *must be* incentives and grants available to support the Participating Organizations.

Once a Participating Organization has chosen to participate, it will select the Tier (as listed below) at which it is now providing, or has a plan to provide, access to recycling to its population served. (Counties shall only be considered to be serving those people in their counties not living

in the city limits of a Participating Organization. For example, if the City of Albuquerque becomes a Participating Organization under this plan, then Bernalillo County will be considered to be all people living outside of the city limits of Albuquerque.) As long as NMED determines that a Participating Organization is working towards an economically viable and sustainable system for providing access to recycling, that entity will retain Participating Organization status, even if it has not yet accomplished the access to recycling listed in Tier One.

Participating Organizations shall be entitled to the incentives created for the program and shall be entitled to receive technical assistance made available from NMED to improve access to recycling in their areas.

Participating Organizations are required to provide the reports created under the Plan documenting access to recycling.

4.2.1 Community Recycling Plans

Each year, every Participating Organization will prepare a Community Recycling Plan that identifies:

1. The tier that the Participating Organization has achieved or is working toward achieving (see below)
2. The diversion and recycling goals
3. Target commodities
4. Performance measures, and
5. Anticipated or potential barriers to success.

The Community Recycling Plan shall be economically feasible and sustainable.

4.2.2 Definition of Access to Recycling

A Participating Organization is considered to be providing “access to recycling” if:

1. The Participating Organization can identify at least one entity (referred to here as “Service Center”) in the Participating Organization’s area that collects or accepts each of the materials targeted for recycling as listed on the Tier chosen by the organization; and
2. The Participating Organization must also show that a Service Center exists for each of the targeted materials so that 50 percent of the population served by the Participating Organization has access to recycling of those items without driving more than 30 minutes to a Service Center. Note: Access to recycling does not have to be at a landfill.

4.2.3 Access to Recycling Tiers

The Tier structure is described below.

- A. Tier One.**
- Tires Diverted for a beneficial use
 - Motor Oil Required by law to be separated from trash at a landfill
 - Lead acid car batteries Required by law to be separated from trash at a landfill
 - Corrugated Cardboard Collected, sold, and shipped to a viable recycling market
 - Newspaper ONP #7 Collected, sold, and shipped to a viable recycling market
 - Other items diverted as approved by SWB to count towards this tier.
- B. Tier Two. Recycling or diverting the items listed in Tier One and choose two additional items to recycle or put to a beneficial use:**
- Cans
 - Glass containers
 - Scrap metal / appliances
 - Plastic bottles
 - Mixed paper
 - Office paper
 - Green waste and / or woody landscaping waste (e.g., for producing compost or mulch)
 - Other items diverted as approved by SWB to count towards this tier.
 - Phone books
 - C&D
 - Concrete
 - Electronic scrap
 - Household hazardous waste
 - Boxboard / Paperboard
 - Textiles / Clothing
- C. Tier Three. Recycling or diverting the items listed in Tier One and four of those listed in Tier Two**
- D. Tier Four. Recycling or diverting the items listed in Tier One and six of those listed in tier Two**

4.3 Secondary Diversion Goals

The Diversion Working Group recommended the following secondary diversion goals for the Plan, which were reviewed and adopted by the Alliance:

- Encourage diversion in addition to recycling
- Promote recycling at landfills
- Start a reporting system so that accurate counting is possible by the next Plan update
- Educate the community to ask for / about recycling
- Enlist champions to help move programs forward
- Work to encourage counties to participate, and allow other entities to participate in the program as long as they agree to provide the data.

4.4 Recycling Potential in New Mexico

The *2004 Strategic Plan for Transforming the Economics of Recycling*, prepared by SWB and the New Mexico Recycling Coalition (NMRC), represents the best thinking of a dedicated, multi-sector task force of professionals and provides a good picture of recycling potential in New Mexico. Excerpts below give a context for the recommended Diversion Plan and Goals.

“The quantities of key materials generated and recycled in New Mexico [in 2003] are shown in Table 4.1. Those materials with excellent markets could be recycled at rates close to 100 percent. If paper and metal were recycled at 70 percent instead of 11 percent² and 47 percent respectively, that alone would increase the overall recycling rate to 30 percent. This indicates that there are immediate opportunities to reduce waste disposal and increase the recycling industry in New Mexico, and that a goal of 25 percent is a reasonable target for the overall recycling rate.”

Table 4.1 Potential for Recycling in New Mexico (2004)

Material	Volume in NM waste (tons)	Volume recycled in NM (tons)	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%	
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 9%	

Source: 2004 Strategic Plan for Transforming the Economics of Recycling in New Mexico

In addition, diversion of electronic scrap was addressed by a legislatively appointed task force in 2005. See Appendix K. E-waste Task Force Recommendations.

4.5 Research Diversion Activities and Opportunities

In reviewing the status of solid waste management in New Mexico, it is apparent that a number of programs and activities—particularly source reduction, recycling, composting, and other diversion efforts like beneficial use—are uncounted in current reporting systems. As stated in Chapter 3, there is a lack of consistent data with which to evaluate waste diversion in the state.

⁷ The national paper recycling rate is 50 percent [2003].

4.6 Special Waste: Household Hazardous Waste and CESQG Element

4.6.1 Household Hazardous Waste (HHW)

Many products used in the home for cleaning, painting, workshop activities, maintaining or repairing automobiles or equipment, craft projects, and yard care contain hazardous ingredients. Any product that is labeled with warning words such as *poison, toxic, corrosive, volatile, flammable, inflammable, combustible, explosive, danger, caution, warning* or *harmful* contains hazardous ingredients. These materials need to be used, stored and disposed of safely to protect the public health, water supplies, and the environment. Household-generated hazardous wastes are exempt from federal and state hazardous waste regulations because of their household origin. However, 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 ground water around landfill sites.

A typical home contains three to eight gallons of hazardous material. Over time, an average homeowner can accumulate as much as 100 pounds of HHW in the garage or basement. The largest components of HHW are oil-based paints, solvents and thinners, automotive products, garden chemicals, hobby supplies, cleaners, pool chemicals, batteries, and other miscellaneous items. HHW comprises one to two 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.

Several collection / management models exist:

- **Limited collection programs** accept easily recyclable or reusable materials such as motor oil, lead-acid batteries, antifreeze, and household batteries.
- **Single-day special collection programs** are periodic events that usually accept a wide range of HHW. These programs are the most common and require a significant publicity and volunteer staffing effort. A contractor is retained to sort, package, manifest, and properly recycle, treat and / or dispose of collected materials. Wastes from Conditionally Exempt Small Quantity Generators (CESQG) are also sometimes accepted. The cost for such programs currently range from \$50 - \$110 per participant
- **Permanent facilities** accept HHW year-round during specified hours at a dedicated site. Such sites require approved storage and handling procedures, trained staff, and public education. Regional centers for use by multiple jurisdictions can be established to allow for cost-sharing. Annual operating costs can range from \$250,000 - \$500,000 depending on quantities and types of materials accepted
- **Mobile collection** can be provided by trained staff for remote or rural areas.

4.6.2 Conditionally Exempt Small Quantity Generators

CESQGs are businesses that generate less than 220 pounds of hazardous wastes or 2.2 pounds of acutely hazardous wastes per month. Examples include: dry cleaners, auto repair shops, auto dealers, print shops, photographic developers, and demolition, construction, and painting contractors. There are an estimated 2,000 CESQGs in New Mexico.

EPA exempts CESQGs from compliance with many regulations that apply to larger hazardous waste generators. CESQG regulations are designed to protect human health and the environment, and to encourage businesses to minimize hazardous waste quantities produced. The less generated, the fewer regulations apply.

The largest components of the CESQG waste stream are used motor oil and lead-acid batteries (automobile and equipment batteries). Studies in other states have found that motor oil comprises 50 - 66 percent of the hazardous waste stream. Lead-acid batteries range from seven to 14 percent. These items are banned from landfill disposal in New Mexico, and many public and private recycling opportunities are available across the state.

Review of years of ground water monitoring data at permitted New Mexico landfills has not found problems associated with hazardous constituents such as petroleum products, volatile organic compounds, pesticides, or herbicides. There are problems with some older un-lined landfills that probably accepted these items in the past. This finding reinforces the hypothesis that monitoring mechanisms in place at permitted facilities are effective in protecting the health and environment of New Mexico residents. Permitted facilities are also required to conduct random waste inspections to confirm that hazardous materials are not delivered.

Aside from private sector efforts, New Mexico does not have public infrastructure in place to assist with managing hazardous wastes. Most communities do not have the necessary funds or trained staff to manage these materials.

Private sector collection of universal wastes (certain batteries, recalled and collected pesticides, and mercury-containing thermostats and lamps—fluorescent and high intensity discharge) is limited. Some firms accept batteries, but pesticides and mercury-containing wastes remain a problem.

Banning CESQG wastes from landfills and transfer stations is not feasible at this time. A ban would encourage additional illegal disposal of these materials outside of the current solid waste management system in arroyos and on public lands.

4.6.3 Mercury Containing Lamps

Many waste fluorescent lamps are hazardous due to their mercury, or in some cases lead, content. The accumulation of mercury in the environment and in food chains is a serious environmental and health hazard. EPA published a final rule in July 1999 that added hazardous waste lamps to the Universal Waste Rule (40 CFR Part 273). This rule was adopted by New Mexico in 2005. Other examples of discarded lamps commonly classified as hazardous waste include: high-intensity discharge lamps, neon, mercury vapor, high-pressure sodium, and metal halide lamps. Lamps generated by CESQGs or handled under the Universal Waste Rule cannot be put in a trash dumpster or in a disposal pit at a transfer station, because they would not be handled in a way to minimize breakage.

CHAPTER 5. FACILITIES ELEMENT

5.1 Facilities Goals

The goals of the Facilities Working Group were to review available data on existing and projected disposal capacity in the state, evaluate siting issues, and develop findings and recommendations for the Plan.

5.2 Findings

Conditions in New Mexico have changed dramatically since the September 1993 Plan, and several Plan objectives have been achieved. The number of landfills has been reduced from over 100 to 35, of which 19 are regional Subtitle D facilities. The proposed revised Regulations will set timetables for closure or upgrading of remaining non-compliant landfills.

Market conditions have driven the initiative toward regionalization, with fewer and larger disposal sites. Smaller and rural communities cannot generally afford modern landfills, and they will be taking on a much larger financial burden when forced to transport their waste greater distances. See Figure 5.1. Sample Format—New Mexico Solid Waste Facilities Map Current Conditions: 2005. Also see Appendix L. 2005 Review & Renewal Status for Solid Waste Facilities and Appendix M. Active Registered Landfill Status-2005 for a list of current permitted and registered facilities.

5.3 Solid Waste Facility Siting

SWB has established technical standards for the siting of landfills and transformation facilities. These solid waste facilities should be sited, designed, operated, and closed in accordance with Environmental Justice (EJ) principles. The Facilities Working Group believes the Plan should address the siting of recycling, composting, and transfer facilities in furtherance of state goals, and the Regulations should foster and simplify the siting of these facilities.

Economies of scale have promoted development of 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 permitted landfills with capacities in excess of the ten-year planning window as described in §74-9-6.E. of the Act.

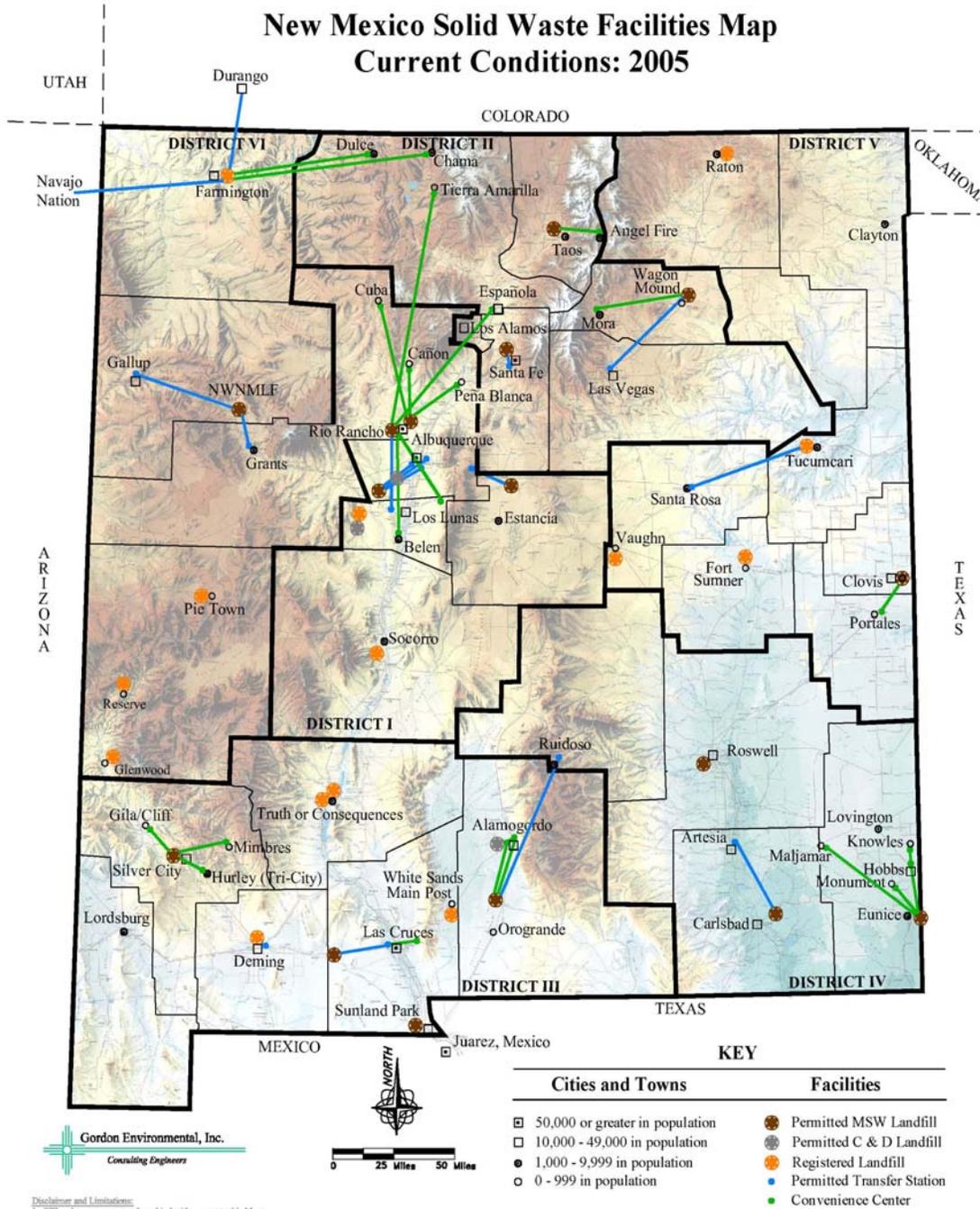
There will be ten to 15 small, unpermitted landfills closed within the next two to three years as a result of the Regulations. The Regulations should encourage the siting of solid waste transfer stations as a logical alternative for smaller communities that cannot afford modern local landfills.

5.4 Solid Waste Management Capacity

Nearly all population centers in New Mexico with more than 10,000 residents have developed disposal capacity with a longevity over ten years, or are currently transferring their waste to a regional Subtitle D landfill. Regional solid waste authorities have had mixed success, but local governments have been effective in siting new landfills.

Figure 5.1. Sample Format

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



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CHAPTER 6. EDUCATION ELEMENT

6.1 Education Goals

The goals of the Education Working Group were to identify past and current recycling and diversion education programs and resources and recommend priority education strategies, with emphasis on optimizing efforts with a minimal budget. The group then submitted its recommendations to the Alliance for further development, and to the Funding Working Group.

6.2 Education Working Group Findings

6.2.1 Past Funding for Recycling and Diversion Education in New Mexico

From 1990-1997, EMNRD administered a Recycling Grant Fund. The Recycling Grant Fund was established as a result of an environmental infraction. EMNRD awarded a total of \$478,000 in grants for recycling education, which, combined with local match funds, accounted for a little over ten percent of total project funds. Appendix N. EMNRD Recycling Project and Education Funding 1990-1997 shows funding for recycling education and lists recipient jurisdictions. The Recycling Grant Fund is no longer in existence.

6.2.2 Current Recycling Education Funding

Currently there are no state grants or funding for recycling, illegal dumping, or diversion education. The RAID Tire Recycling Grant Fund has been reallocated to provide about \$200,000 in grants per year for municipal-level non-tire recycling and illegal dumping abatement projects. [The grant split is two thirds towards funding tire dump abatement and tire recycling projects and one third non-tire illegal dumping abatement and recycling projects.] However, this funding may not be devoted solely to education. The Alliance is tasked with setting funding criteria and priorities, and these could include support for a range of programs.

6.2.3 Survey of Recycling Education Needs

In 2005, NMRC surveyed its members to assess the public's understanding of recycling. Key survey findings are:

- Fifty percent of the public does not understand how to recycle
- The majority does not understand HHW
- Two-thirds of the public does not understand the importance or impact of recycling
- The public does not understand how to buy recycled content products

This survey highlights the importance of ongoing education and awareness campaigns to keep all members of the public informed on how and why to participate in recycling and waste reduction activities.

6.2.4 Target Audiences for Recycling, Diversion, and Illegal Dumping Education

The Education Working Group identified the following target audiences for education efforts:

- Elected officials
- Public staff (e.g., solid waste departments, law and code enforcement officials, clean and beautiful organizations, extension agents)
- Teachers and students
- Private waste service providers
- Communities / generators of waste (e.g., public, business, industry, institutions, schools, hospitals, agriculture sector, tribes, land grant communities)
- Agencies and nonprofits to partner with to reach audiences (e.g., New Mexico Association of Counties, New Mexico Municipal League, Association of Commerce and Industry, local Chambers of Commerce, Sierra Club, NMRC, Solid Waste Association of North America (SWANA), Public Interest Research Groups, etc.)

6.2.5 Current Education Resources Available

The Education Working Group identified existing programs, resources, and partners that could be tapped to help promote diversion and recycling. Appendix O. Educational Programs, Resources and Partners provides a preliminary listing of these resources.

With this starting list—and coordinated effort—there is potential to begin raising public awareness for general support of recycling and waste reduction, and helping to curb illegal dumping. However, funding and much more comprehensive, ongoing education programs are needed to make real progress towards significant waste reduction and diversion levels in New Mexico.

6.3 Strategies and Priorities

The Education Working Group mapped out the following strategies and priorities and to build the base for future years:

6.3.1 Education Ideals

- Create a statewide public message campaign
- Identify champions to carry the message forward
- Survey trash generators
- Target appropriate audiences
- Create materials where needed
- Provide workshops
- Train the trainers
- Offer field days or tours
- Create instructional media
- Identify and train on what can be recycled

- Goal of updating the website to include permit applications and or make them available electronically.

6.3.2 Best Use of State Dollars

- Develop a common message
- Conduct market research
- Media campaigns for specific programs with statewide public service announcements
- Education on reuse and other ways of reducing the consumption-throwaway pattern
- Find support for on-going program costs
- Outreach and connection with tribal communities

6.3.3 Areas of Most Need

- Formulate an integrated plan for education
- Identify priority program areas for education emphasis
- Secure sustainable funding for ongoing education of all target audiences
- Create and foster stakeholder relationships to identify funding streams to support early and meaningful participation by diverse non-government organizations and community members.

6.3.4 Consider Two Types of Education

- Statewide educational program
- Specific education for focus of the Plan over the next three years

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CHAPTER 7. FUNDING ELEMENT

7.1 Funding Goals

The goals of the Funding Working Group were to:

- Assemble information on past and currently available state funds for solid waste management and diversion
- Look into additional funding prospects
- Examine funding options set forth in the Act
- Review funding mechanisms utilized in other parts of the US

The group concurred on the need to renew state funding for ongoing support of program priorities recommended by the other working groups. They also agreed to keep the field open for considering a range of funding methods, pending more information on methods used in other states and additional resources available in New Mexico.

7.2 Prior Funding for Disposal and Diversion

As discussed elsewhere, New Mexico had two funds in place for solid waste management and recycling programs:

The SWFGF awarded \$22.3 million for solid waste management projects from 1991 to 2002, and is currently inactive pending a further General Fund appropriation. This fund provided grants to government units for regional solid waste management plans; landfill closures; monitoring wells; transfer station construction; disposal trucks and equipment; convenience centers; and so on. Only six percent of SWFGF grants went to diversion programs (recycling, composting, mulch production).

From 1990 to 1997, EMNRD managed a Recycling Grant Fund that was established from a fine paid on an environmental infraction. EMNRD awarded \$3.68 million in grants, which leveraged \$4.59 million in local match funds, for a total of over \$8.2 million in recycling funding through 1997, when the fund was depleted. This program helped communities offset start-up costs for recycling program education and operation. Appendix N. EMNRD Recycling Project and Education Funding 1990-1997 summarizes this grant funding and provides a complete list of funded programs and a map of counties served.

7.3 Solid Waste Funding Available for FY 2005 / 2006

For the 2005 / 2006 fiscal year there is limited funding available for solid waste disposal or diversion programs. Table 7.1 summarizes funding identified for this period. A small balance remains in the SWFGF, but this is being held in reserve until the fund is renewed. Twenty local solid waste projects may receive legislatively approved funds from the Infrastructure Capital Improvement Program (ICIP) or State Bonds. SWB will continue operating at the same budget level, with no programmatic funds included for statewide initiatives.

Table 7.1 List of Solid Waste Funding Available FY 2005/ FY 2006

	Amount	Fund	County	
Grants and staffing				
Solid Waste Facilities Grant Fund (1991/1995/ 1996 legislation: seed money and bonds. Total \$18,250,000 + \$4,000,000 interest and \$100,000 penalty fees)	\$825,500			Fund balance uncommitted. If recharged, may do grant/loan program to allow program funds to regenerate.
Request to refund SW Facilities Grant Fund for FY'07 not passed in 06 Legislative session	\$5,000,000			Pending for 07 legislative session 70% general fund, 13% Tire Fund 2% SW Permit Fees, 15% Corrective Action Fund
NMED Solid Waste Bureau Budget FY'06	\$1,799,000			
Legislatively Approved Projects -2005				
Loving Refuse Collection Truck Purchase	\$60,000	ICIP	Eddy	When landfill charges don't cover landfill costs, special project funds sought from legislature, particularly for rural areas.
Ruidoso Solid Waste Transfer Station	\$65,000	ICIP	Lincoln	
Luna Co Landfill/Transfer Station Construct/Equip	\$200,000	ICIP	Luna	
NWNM Regional Solid Waste Auth Landfill Equip	\$35,000	ICIP	Multiple	
San Miguel/Mora Counties Solid Waste Vehicles	\$20,000	ICIP	Multiple	
NWNM Regional Solid Waste Auth Landfill	\$100,000	ICIP	Multiple	
Valencia Co Landfill Site Closure	\$40,000	ICIP	Valencia	
Valencia Co Solid Waste Transport Trailers	\$51,600	ICIP	Valencia	
ABQ Landfill Reuse & Renew Energy Improve	\$43,933	ICIP	Bernalillo	
Melrose Sanitation Truck Purchase	\$90,000	ICIP	Curry	
Lincoln Co Waste Recycling Center Construct	\$100,000	ICIP	Lincoln	
NWNM Solid Waste Auth Trucks & Trailer	\$20,000	ICIP	Multiple	
NWNM Solid Waste Auth Maintenance Shop	\$6,500	ICIP	Multiple	
Red River Transfer Station	\$75,000	ICIP	Taos	
Luna Co Landfill/Transfer Station Construct/Equip	\$250,000	State Bonds	Luna	
Chaparral Solid Waste Transfer Station	\$430,000	State Bonds	Otero	
Red River Transfer Station	\$100,000	State Bonds	Taos	
Clayton Landfill Improvements	\$235,000	State Bonds	Union	
ABQ Landfill Reuse & Renew Energy Improve	\$75,000	State Bonds	Bernalillo	
20 Projects Funded at 2005 Legislature Via ICIP & NMED	\$1,997,033			

7.4 Additional Funding Research Findings

Appendix P. Overview of Integrated Waste Management Funding Mechanisms presents descriptions of 14 funding mechanisms utilized by various states for integrated waste management, and includes sample state recycling budgets. Appendix Q. Existing Economic Development Incentives in New Mexico also details funding mechanisms. This information can be useful for the Funding Working Group and the overall planning process for the Plan and beyond.

7.5 Next Steps

Further research is needed to appraise funding mechanisms in other states and fees proposed in the Act. Likewise, more research is necessary to pinpoint the amount of funding sufficient to implement recommendations in this Plan to upgrade New Mexico waste reduction and waste management systems. The information collection process mapped out in this Plan should provide a stronger basis for determining funding needs and mechanisms.

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CHAPTER 8. ENVIRONMENTAL JUSTICE COMPONENT

8.0 Introduction

Two of the stated purposes of the Act are the enhancement of the beauty and quality of the environment, and protection of the public health, safety, and welfare. NMSA 1978 74-9-2. C. The Act requires the preparation of the Plan, but it does not make specific reference to EJ issues. In the absence of statutory language defining EJ, the preparation of this chapter of the Plan relies on the definition provided in the New Mexico EJ Executive Order 2005-056 (“Executive Order”).

Consistent with the Executive Order, New Mexico is committed to affording all of its residents, including communities of color and low-income communities, fair treatment and meaningful involvement in the development, implementation, and enforcement of environmental laws, regulations, and policies regardless of race, color, ethnicity, religion, income or educational level.

New Mexico is further committed to promoting the protection of human health and the environment, empowerment via public involvement in the development, implementation, and enforcement of environmental laws, regulations, and policies, and the dissemination of information related to the environment to inform and educate, especially in people of color and low-income communities.

NMED should provide sufficient direction to implement the Executive Order as it relates to Solid Waste Management in the Regulations and other NMED initiatives.

8.1 Environmental Justice Goals

The goals of the EJ Working Group were to:

- Promote regulations and policies that include requirements to ensure compliance with the Executive Order. NMED SWB is committed to affording the residents of the state, including communities of color and low-income communities, fair treatment and meaningful involvement regardless of race, color, ethnicity, religion, income or educational level and is committed to providing the opportunity to participate in the appropriate language.
- Develop policies that ensure compliance, enforcement, remediation, and closure requirements that are administered equally in all communities, regardless of ownership or operation of the facility or the racial, ethnic, education, or income level of the populations in those communities. Each facility should be held to the same requirements for protection of health and the environment. The allocation of resources for enforcement should depend upon the nature and severity of the threat to human health and the environment.

8.2 Conclusion

NMED SWB has initiated and completed significant tasks to identify EJ concerns regarding siting, permitting, and compliance monitoring of solid waste management facilities and, subsequently, amended the Regulations to include EJ protections in permitting decisions in advance of the redrafting of the Plan. The recommendations provided in Appendix C. Detailed Working Group Recommendations by Chapter go beyond what has already been implemented by NMED SWB. These recommendations provide a basis for developing an integrated policy within NMED, but extend to changes in regulations administered by the other bureaus within NMED to provide a comprehensive and integrated application of EJ policies throughout NMED.

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