Facility Capacity Component
4.8 FACILITY CAPACITY COMPONENT

The purpose of the Facility Capacity Component is to review the disposal capacity available to Sonoma County residents and businesses at permitted solid waste disposal facilities. The goal is to ensure that adequate landfill capacity is allocated for disposing of solid waste that cannot be diverted through source reduction, recycling, or composting activities. Non-recyclable wastes, residue from materials recovery operations, and non-processible materials and residue from incineration/transformation operations are wastes that will not be diverted from the landfills. A projection of solid waste disposal facility needs has been calculated by estimating the disposal capacity required to accommodate the total solid waste that will be generated in Sonoma County during the next 15-year period (2003 to 2018).

This section includes a description of existing permitted solid waste landfills located in Sonoma County and a projection of the county's solid waste disposal facility needs. (There are no transformation facilities located in Sonoma County.) Also included is a discussion of solid waste facilities that are to be phased out or closed, expanded, or that are newly established, and plans to import or export wastes out of Sonoma County.

4.8.1 SOLID WASTE MANAGEMENT SYSTEM

Over the years, Sonoma County has developed a comprehensive solid waste management infrastructure utilizing local transfer stations and disposal facilities. The following discussion summarizes local collection practices for both refuse and recyclables; waste generation, diversion, and disposal amounts; and transportation and storage procedures for all materials collected in Sonoma County.

4.8.1.1 Collection Practices

All municipal solid waste collected in Sonoma County is hauled by licensed commercial haulers. Table 4-37 lists these firms, their service areas, and their operating status as of 2002. Figure 4.1 shows a map of the haulers' territories.

Refuse collection service within the cities of Sonoma County is franchised via a competitive bid process. In return, the Cities receive a franchise fee from the franchised hauler serving their jurisdictions based upon the gross revenues. The County provides collection services in the unincorporated areas through commercial haulers operating in individual territories under license from the Sonoma County Department of Transportation and Public Works (DTPW). Table 4-37 summarizes the refuse collection areas franchise status for all haulers operating in Sonoma County.

4.8.1.2 Total Waste Generation

The 1992 Solid Waste Generation Studies (SWGS) and the 1995/96 Waste Characterization Study support all solid waste diversion and disposal projections. The SWGS for each jurisdiction quantify and track the flow of materials collected for both diversion and disposal by local haulers. By definition, waste diversion (source reduction, recycling, and composting) plus waste disposal by landfilling equals waste generation, or hypothetically, the amount of waste "collected" by local haulers. However, source reduction efforts, which reduce the amount of waste collected, were not separated from other diversion programs in the SWGS. Hence, waste diversion estimates presented on the following pages are slightly over estimated due to the inclusion of source reduction efforts in the calculations.

4.8.1.3 Transportation and Storage of Collected Materials

In 1985, there were five municipal solid waste landfills operating in Sonoma County. These sites were geographically dispersed throughout the county, allowing refuse collection trucks to also serve as disposal vehicles. With the closure of all of these disposal sites except the Central Landfill, a series of transfer stations have been built by the County to facilitate economical disposal of refuse generated in the
Figure 4-1: Licensed Waste Hauler Territories

Legend

Waste Haulers
- Cloverdale Disposal (CD)
- Empire Waste Management (EWM)
- Industrial Carting (IC)
- Larry's Disposal Service (LSD)
- Sonoma Garbage Collector (SGC)
- West Sonoma County Disposal (WSCD)

PACIFIC OCEAN

SAN PABLO BAY

October 15, 2003
county. The Annapolis, Guerneville, Sonoma, Healdsburg, and Occidental Transfer Stations are all located at sites which once served as landfills. Refuse destined for disposal is delivered to these facilities in refuse collection trucks and then loaded into 100 cubic yard long-haul vehicles for transfer to the Central Landfill. Nearly all waste collected in the county is disposed of at the Central Landfill. In addition, a small quantity of debris box waste generated in Sonoma County is disposed at the Redwood Sanitary Landfill in Marin County.

Recyclable materials collected by local haulers, drop-off/buy-back operations, and the material reuse/recovery program operating in the county are consolidated at private yards for shipment to secondary materials processors and end-users. Waste Management, Inc. and West Sonoma County Disposal process recyclable materials at their Intermediate Processing Centers in Santa Rosa. Processed materials are then marketed through secondary materials brokers and internal staff. Reusable materials collected at the Garbage Reincarnation, Inc. (GRI) Material Reuse/Recovery Centers (Central Disposal Site and Healdsburg Transfer Station) and the Sonoma Transfer Station Material Reuse/Recovery Center are stored on-site for resale to the general public.

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Hauler</th>
<th>Current Franchise or Permit Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloverdale</td>
<td>Cloverdale Disposal (WMI Subsidiary)</td>
<td>Ten year franchise with an evergreen clause and annual rate reviews.</td>
</tr>
<tr>
<td>Cotati</td>
<td>Larry's Sanitary Service (WMI Subsidiary)</td>
<td>Ten year franchise with an evergreen clause and periodic rate reviews at haulers request. Contract will terminate in 2005.</td>
</tr>
<tr>
<td>Healdsburg</td>
<td>Empire Waste Management (EWM)</td>
<td>Seven year franchise with annual rate reviews. Contract will terminate in 2002.</td>
</tr>
<tr>
<td>Petaluma</td>
<td>EWM</td>
<td>Five year franchise with annual rate reviews. Contract will terminate in 2004.</td>
</tr>
<tr>
<td>Santa Rosa</td>
<td>EWM</td>
<td>Ten year franchise with periodic rate reviews. Franchise will terminate in 2006.</td>
</tr>
<tr>
<td>Sonoma</td>
<td>Sonoma Garbage Collector</td>
<td>Ten year franchise with periodic rate reviews at haulers request. Contract will terminate in 2013.</td>
</tr>
<tr>
<td>Windsor</td>
<td>West Sonoma County Disposal</td>
<td>Ten year franchise with annual rate reviews. Contract will terminate in 2007.</td>
</tr>
</tbody>
</table>
## Table 4-38: Solid Waste Disposed, Diverted and Generated (1990)
(Sonoma County, Including Incorporated Cities)

<table>
<thead>
<tr>
<th>Waste Category</th>
<th>Diverted</th>
<th></th>
<th>Disposed</th>
<th></th>
<th>Generated</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tons</td>
<td>%*</td>
<td>Tons</td>
<td>%*</td>
<td>Tons</td>
<td>%*</td>
</tr>
<tr>
<td>Paper</td>
<td>37,035</td>
<td>5.8</td>
<td>141,760</td>
<td>22.2</td>
<td>178,795</td>
<td>28.0</td>
</tr>
<tr>
<td>Plastics</td>
<td>236</td>
<td>0.0</td>
<td>37,508</td>
<td>5.9</td>
<td>37,744</td>
<td>5.9</td>
</tr>
<tr>
<td>Glass</td>
<td>4,540</td>
<td>0.7</td>
<td>15,505</td>
<td>2.4</td>
<td>20,045</td>
<td>3.1</td>
</tr>
<tr>
<td>Metals</td>
<td>34,124</td>
<td>5.3</td>
<td>43,408</td>
<td>6.8</td>
<td>77,532</td>
<td>12.1</td>
</tr>
<tr>
<td>Yard Waste</td>
<td>1,960</td>
<td>0.3</td>
<td>83,976</td>
<td>13.2</td>
<td>85,936</td>
<td>13.5</td>
</tr>
<tr>
<td>Other Organics</td>
<td>5,000</td>
<td>0.8</td>
<td>174,916</td>
<td>27.4</td>
<td>179,916</td>
<td>28.2</td>
</tr>
<tr>
<td>Other Wastes</td>
<td>14,089</td>
<td>2.2</td>
<td>37,858</td>
<td>5.9</td>
<td>51,947</td>
<td>8.1</td>
</tr>
<tr>
<td>Special Wastes</td>
<td>11</td>
<td>0.0</td>
<td>6,576</td>
<td>1.0</td>
<td>6,588</td>
<td>1.0</td>
</tr>
<tr>
<td>Totals **</td>
<td>96,996</td>
<td>15.1</td>
<td>541,406</td>
<td>84.8</td>
<td>638,502</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* Percent of total waste stream.
** Numbers may not add due to rounding.

## Table 4-39: Solid Waste Disposed, Diverted and Generated (1995/96)
(Sonoma County, Including Incorporated Cities)

<table>
<thead>
<tr>
<th>Waste Category</th>
<th>Diverted</th>
<th></th>
<th>Disposed</th>
<th></th>
<th>Generated</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tons</td>
<td>%*</td>
<td>Tons</td>
<td>%*</td>
<td>Tons</td>
<td>%*</td>
</tr>
<tr>
<td>Paper</td>
<td>73,089</td>
<td>10.7</td>
<td>111,047</td>
<td>16.2</td>
<td>184,136</td>
<td>26.9</td>
</tr>
<tr>
<td>Plastics</td>
<td>21,342</td>
<td>3.1</td>
<td>32,051</td>
<td>4.7</td>
<td>53,393</td>
<td>7.8</td>
</tr>
<tr>
<td>Glass</td>
<td>9,800</td>
<td>1.4</td>
<td>14,843</td>
<td>2.2</td>
<td>24,643</td>
<td>3.6</td>
</tr>
<tr>
<td>Metals</td>
<td>20,961</td>
<td>3.1</td>
<td>31,747</td>
<td>4.6</td>
<td>52,708</td>
<td>7.7</td>
</tr>
<tr>
<td>Yard Waste</td>
<td>18,363</td>
<td>2.7</td>
<td>27,500</td>
<td>4.0</td>
<td>45,863</td>
<td>6.7</td>
</tr>
<tr>
<td>Other Organics</td>
<td>94,652</td>
<td>13.8</td>
<td>144,246</td>
<td>21.2</td>
<td>158,809</td>
<td>23.2</td>
</tr>
<tr>
<td>Other Wastes</td>
<td>28,063</td>
<td>4.1</td>
<td>42,443</td>
<td>6.2</td>
<td>67,768</td>
<td>9.9</td>
</tr>
<tr>
<td>Special Wastes</td>
<td>5,722</td>
<td>0.8</td>
<td>8,653</td>
<td>1.3</td>
<td>14,375</td>
<td>2.1</td>
</tr>
<tr>
<td>Totals **</td>
<td>271,991</td>
<td>39.7</td>
<td>412,530</td>
<td>60.3</td>
<td>684,521</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* Percent of total waste stream.
** Numbers may not add due to rounding.

The 1995/96 Waste Characterization Study is included in Appendix C.
4.8.2 SOLID WASTE MANAGEMENT FACILITIES

Several facilities are currently in use to consolidate, transfer, and dispose of solid waste in the county. The following sections discuss these facilities and the functions they serve within the county's solid waste management infrastructure.

4.8.2.1 Permitted Facilities

Currently, there are two permitted disposal sites (one for MSW) and six permitted transfer stations (five with public access) operating in Sonoma County. These sites, which are shown in Figure 4-2, are as follows:

<table>
<thead>
<tr>
<th>Disposal Facilities</th>
<th>Transfer Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Central Landfill</td>
<td>• Occidental Transfer Station</td>
</tr>
<tr>
<td>• Santa Rosa Geothermal WMU</td>
<td>• West College Transfer Station</td>
</tr>
<tr>
<td>Disposal Site</td>
<td>• Guerneville Transfer Station</td>
</tr>
<tr>
<td>• Sonoma Transfer Station</td>
<td>• Sonoma Transfer Station</td>
</tr>
<tr>
<td>• Healdsburg Transfer Station</td>
<td>• Annapolis Transfer Station</td>
</tr>
<tr>
<td>• Annapolis Transfer Station</td>
<td></td>
</tr>
</tbody>
</table>

Transfer stations within the county have drop-off and floor-sort operations to separate recyclable materials remaining in the waste stream and consolidate refuse for transport to the Central Landfill for disposal.

A description of all permitted solid waste management facilities in the county is presented on the following pages. Each description briefly presents information regarding operations at the site, including disposal capacity, permitted capacity, permit constraints, and site characteristics, as required by Section 18744(a). Figure 4-2 shows the location of the five transfer stations and the Central Disposal Site. Table 4-40 lists the permitted facilities, the date permits were issued, and permit review dates.
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DISPOSAL SITES

Central Disposal Site

Name: Central Disposal Site
Address: 500 Mecham Road, Petaluma, CA 94952
Location: 2.8 miles southwest of the City of Cotati, in Sections 4 & 9, T5N, R8W, MDB&M
Assessor Parcel No.: 024-080-19 & 24-080-018
SWIS No.: 49-AA-0001
Permitted Area: 398.5 acres
Waste Types Accepted: All non-hazardous wastes consisting of household and commercial wastes, agricultural and demolition wastes, sludge from wastewater treatment plants (as per Title 23, Subchapter 15, Section 2523[c]).
Average Daily Loading: 1,461 tons per day; 2,435 cubic yards per day
Permitted Daily Capacity: 2,500 tons per day; 4,167 cubic yards per day
Site Owner: County of Sonoma, Department of Transportation and Public Works
Site Operator: County of Sonoma, Department of Transportation and Public Works, Integrated Waste Division

Santa Rosa Geothermal WMU Disposal Site

Name: Santa Rosa Geothermal WMU
Address: 1 Ridge Road
The Geysers
Location: SE 1/4, Section 34, T11N, R8W, MDB&M
Assessor Parcel No.: 141-04-11 & 12
SWIS No.: 49-AA-0148
Permitted Area: 7 acres
Waste Types Accepted: Geothermal drilling muds
Average Daily Loading: Not Available
Permitted Daily Capacity: 130 tons per day
Site Owner: U.S. Department of the Interior
Site Operator: Cal-Pine, Inc.
TRANSFER STATIONS

Name: Annapolis Transfer Station
Address: 33551 Annapolis Road, Annapolis, CA 95412
Location: Annapolis Road, southwest of the community of Annapolis
Assessor Parcel No.: 123-040-04
SWIS No.: 49-AA-0364
Permitted Area: 1.8 acres
Waste Types Accepted: MSW and inert solid wastes.
Average Daily Loading: 21.2 tons per day
Permitted Daily Capacity: 50 tons per day

Quantity of Waste Received from September 1999 to August 2000:
- 2,890 tons per year
- 12.6 tons per day (based on 228 operating days per year)
- 33 tons/day (average annual pak day tonnage)

Projection over 5-year period based on 2% per year growth rate and including Mendocino County waste):
   Estimated average annual loading after five years (2005):
   - 6,183 tons per year
   - 22.1 tons per day average (based on 280 operating days per year)
   - 36.4 tons per day peak (projected highest peak tonnage of year)

Site Owner: County of Sonoma, Department of Transportation and Public Works
Site Operator: County of Sonoma, Department of Transportation and Public Works, Integrated Waste Division
Name: Guerneville Transfer Station
Address: 13450 Pocket Drive, Guerneville, CA 95446
Location: Approximately 3/4 mile from State Highway 116, 3 miles east of Guerneville and 5½ miles west of Forestville (SE1/4, SEC 34, T8N, R10W, MDB&M)
Assessor Parcel No.: 085 090-02,03 & 085-100-01
SWIS No.: 49-AA-0139
Permitted Area: 1.52 acres of a 90-acre parcel
Waste Types Accepted: MSW, including municipal, agricultural, construction and demolition wastes. Hazardous wastes are not accepted at this facility.
Average Daily Loading: 64.3 tons per day
Permitted Daily Capacity: 160 tons per day
Quantity of Waste Received in 2000:
- 23,083 tons per year
- 64.3 tons per day (based on 359 operating days per year)
Projection over 5-year period based on 2% per year growth rate:
Estimated average annual loading after five years (2005)
- 25,485 tons per year
- 71 tons per day average (based on 359 operating days per year)
Site Owner: County of Sonoma, Department of Transportation and Public Works
Site Contract Operator: West Sonoma County Disposal
Name: **Healdsburg Transfer Station**

Address: 166 Alexander Valley Road, Healdsburg, CA 95446

Location: Off Alexander Valley Road, 1/4 mile east of Healdsburg Avenue, north of the City of Healdsburg

Assessor Parcel No.: 091-070-22,24,32,37 & 38

SWIS No.: 49-AA-0245

Permitted Area: 1.74 acres

Waste Types Accepted: MSW and inert solid wastes

Average Daily Loading: 206 tons per day

Permitted Daily Capacity: 435 tons per day; 1740 cubic yards per day

Quantity of Waste Received in 2000:
- 65,759 tons per year
- 184 tons per day (average based on 359 operating days per year)
- 402 tons per day (highest peak day tonnage of year)

Projection over 5-year period based on 4% per year growth rate:
Estimated average annual loading after five years (2001):
- 83,206 tons per year
- 232 tons per day (average based on 359 operating days per year)

Site Owner: County of Sonoma, Department of Transportation and Public Works

Site Contract Operator: West Sonoma County Disposal
<table>
<thead>
<tr>
<th>Name:</th>
<th>Occidental Transfer Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>4985 Stoetz Lane, Sebastopol, CA 95472</td>
</tr>
<tr>
<td>Location:</td>
<td>15 miles northwest of Interstate Highway 101, on Highway 116, west 3 miles on Green Valley Road, south 1 mile on Harrison Grade Road, and ½ mile northwest on Stoetz Lane to the Transfer Station boundary; 6½ miles northwest of the City of Sebastopol.</td>
</tr>
<tr>
<td>Assessor Parcel No.:</td>
<td>075-010-06</td>
</tr>
<tr>
<td>SWIS No.:</td>
<td>49-AA-0006</td>
</tr>
<tr>
<td>Permitted Area:</td>
<td>0.62 Acres</td>
</tr>
<tr>
<td>Waste Types Accepted:</td>
<td>MSW and inert solid wastes.</td>
</tr>
<tr>
<td>Average Daily Loading:</td>
<td>17 tons per day; 100 cubic yards per day</td>
</tr>
<tr>
<td>Permitted Daily Capacity:</td>
<td>60 tons per day; 240 cubic yards per day</td>
</tr>
</tbody>
</table>

**Quantity of Waste Received in 2000:**
- 27,10 tons per year
- 10.5 tons per day (based on 257 operating days per year)

**Projection over 5-year period based on 2% per year growth rate:**
- Estimated average annual loading after five years (2005)
  - 2,992 tons per year
  - 11.6 tons per day average (based on 257 operating days per year)

<table>
<thead>
<tr>
<th>Site Owner:</th>
<th>County of Sonoma, Department of Transportation and Public Works</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Contract Operator:</td>
<td>West Sonoma County Disposal</td>
</tr>
</tbody>
</table>
Name: Sonoma Transfer Station
Address: 4376 Stage Gulch Road, Sonoma, CA 95476
Location: 7.5 miles from Interstate Highway 101, southeast on Lakeville Highway, northeast to Stage Gulch Road to the Transfer Station entrance road; 5 miles southwest of the City of Sonoma
Assessor Parcel No.: 142-051-20
SWIS No.: 49-AA-0144
Permitted Area: 4.96 acres
Waste Types Accepted: MSW and inert solid wastes.
Average Daily Loading: 247 tons per day
Permitted Daily Capacity: 760 tons per day
Permitted Yearly Capacity: Not Applicable in Sonoma County
Quantity of Waste Received in 2000
• 88,696 tons per year
• 247 tons per day (based on 359 operating days per year)
• 447 tons per day (highest peak day tonnage of year)
Projection over 5-year period based on 2% per year growth rate:
Estimated average annual loading after five years (2005):
• 97,927 tons per year
• 273 tons per day average (based on 359 operating days per year)
• 493 tons per day peak (projected highest peak tonnage of year)
Site Owner: County of Sonoma, Department of Transportation and Public Works
Site Contract Operator: West Sonoma County Disposal
RSI: Dated September, 2000
Name: West College Transfer Station
Address: 35 Stony Point Road, #A, Santa Rosa, CA 95401
Location: College & Stony Point Roads, Santa Rosa
Assessor Parcel No.: Not available
SWIS No.: 49-AA-0007
Permitted Area: Temporary storage - 10,000 sq. ft.
Waste Types Accepted: Green waste
Average Daily Loading: Not Available
Permitted Daily Capacity: 10 tons per day; 80 cubic yards per day
Site Owner: City of Santa Rosa
Site Operator: City of Santa Rosa

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Permit Issued</th>
<th>Permit Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Disposal Site</td>
<td>06/27/00</td>
<td>06/27/06</td>
</tr>
<tr>
<td>Santa Rosa Geothermal WMU Disposal Site</td>
<td>11/21/91</td>
<td>11/21/96</td>
</tr>
<tr>
<td>Annapolis Transfer Station</td>
<td>12/01/00</td>
<td>12/01/05</td>
</tr>
<tr>
<td>Guerneville Transfer Station</td>
<td>06/05/01</td>
<td>06/05/06</td>
</tr>
<tr>
<td>Healdsburg Transfer Station</td>
<td>04/14/97</td>
<td>04/14/02</td>
</tr>
<tr>
<td>Occidental Transfer Station</td>
<td>08/09/01</td>
<td>08/09/06</td>
</tr>
<tr>
<td>Sonoma Transfer Station</td>
<td>09/05/01</td>
<td>09/05/06</td>
</tr>
<tr>
<td>West College Transfer Station</td>
<td>8/18/98</td>
<td>8/18/03</td>
</tr>
</tbody>
</table>

4.8.2.2 Facilities Exempt From Permit Requirements

Because of the size and/or type of waste handled, several facilities have been granted exemptions from the requirement to obtain a solid waste facility permit, but are, nonetheless, subject to Local Enforcement Agency inspections. The following is a brief description of these operations.

Aidlin A-2: Exemption. Non-hazardous geothermal drilling mud and well cuttings only disposal sump. 4,000 cubic yards site capacity. Privately owned; operated by Calpine Corporation.
Aidlin B: Exemption. Non-hazardous geothermal drilling mud and well cuttings only disposal sump. 12,000 cubic yards site capacity. Privately owned; operated by Calpine Corporation.

Aidlin C: Exemption. Non-hazardous geothermal drilling mud and well cuttings only disposal sump. 12,000 cubic yards site capacity. Privately owned; operated by Calpine Corporation.

CCPA 2-3.3: Exemption: Non-hazardous geothermal drilling mud and well cuttings only disposal sump. 26,000 cubic yards site capacity. Privately owned; operated by Coldwater Creek Power Authority.

Cloverdale II: Inactive permitted wood waste disposal site. Estimated in-place volume of wood waste is 400,000 cubic yards. Clean closure of this site has been proposed. Owned and operated by Valley Construction and Development Corporation.

Howarth Park: Notification. Limited Quantity Transfer Station. Primarily landscape/yard waste debris generated from City of Santa Rosa Parks and Recreation Department. May accept up to 60 cubic yards or 15 tons per operating day. Owned and operated by the City of Santa Rosa.

Korbel: Exemption. Inert debris only from roadside slides and other County Roads Division maintenance activities. Privately owned; operated by Sonoma County Department of Transportation and Public Works.

Santa Rosa Biosolids North: Exemption. Agricultural land application of municipal biosolids on 450 acres. Owned and operated by the City of Santa Rosa.

Santa Rosa Biosolids South: Exemption. Agricultural land application of municipal biosolids on 670 acres. Owned and operated by the City of Santa Rosa.

Synagro: Exemption. Agricultural land application of municipal biosolids on 3,000 acres. Privately owned; operated by Synagro West, Inc.

Santa Rosa Geysers Pipeline: Notification. Non-hazardous petroleum contaminated soil storage/processing site. Approximately 800 cubic yard site capacity. Site owned by County of Sonoma and operated by City of Santa Rosa.

Tubbs Island: Exemption. Agricultural land application of municipal biosolids on 1,400 acres. Owned and operated by the Vallejo Sanitation and Flood Control District.

Unocal WMU: Exemption. Non-hazardous geothermal drilling mud and well cuttings only disposal sump. 15,530 cubic yard site capacity. Privately owned; operated by Calpine Corporation.

4.8.2.3 Illegal Disposal Activities

Illegal disposal in outlying areas and illegal importation of waste into the county are ongoing issues for DTPW staff. DTPW, Road Division, maintains the public right-of-way along county roads. A community cleanup program is operated by DTPW staff to assist communities with recycling and solid waste disposal of material illegally dumped onto public property.

Other illegal activities taking place in the county are the creation of small scale transfer stations. Illegal transfer stations are commonly operated by private construction, landscaping, and roofing companies which use their yards to consolidate materials prior to disposal. These sites create a public health nuisance for surrounding residential and commercial property owners, and as such, are reported to the Department of Health Services, Environmental Health Division for closure.
4.8.3 FUTURE DISPOSAL CAPACITY NEEDS

The projection of solid waste disposal facility needs provides an estimate of the available disposal capacity each year through 2018. The disposal needs projection anticipates future solid waste generation over that period. As a planning tool, the needs projection is calculated using certain reasonable assumptions about waste management practices and trends over the next 15 years. The actual capacity needs may vary if these assumptions do not hold true over the 15-year period. The projection of disposal capacity needs will require periodic revision to reflect future diversion rates and the evolving solid waste management environment.

4.8.3.1 Determining Disposal Capacity Needs

The projection of disposal capacity needs for the 15-year planning period from 2003 to 2018 is based on the solid waste generation projection conducted in accordance with the 1992 Solid Waste Generation Study (SWGS), as set forth in Section 18722, Article 6.1. The disposal capacity needs projection is calculated using the additional capacity equation defined in Section 18744, Article 6.2. Table 4-41 contains the additional capacity equation and definitions of its terms. Each term used in the equation was defined according to local conditions and current and future solid waste management activities.

<table>
<thead>
<tr>
<th>Table 4-41: Determining Disposal Capacity Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity Needs Equation</td>
</tr>
<tr>
<td>For Year n: Additional Capacity = ([(G + I) - (D + TC + LF + E)])</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Definition of Terms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>The amount of solid waste projected to be generated in the Sonoma County.</td>
</tr>
<tr>
<td>I</td>
<td>The amount of solid waste that is expected to be imported to the Sonoma County and disposed of in permitted solid waste disposal facilities through agreement(s) with other cities or counties, or through agreements with solid waste enterprises, as defined in Section 40193 of Public Resources Code.</td>
</tr>
<tr>
<td>D</td>
<td>The amount diverted through successful implementation of proposed source reduction, recycling, and composting programs.</td>
</tr>
<tr>
<td>TC</td>
<td>The amount of volume reduction occurring through available, permitted transformation facilities.</td>
</tr>
<tr>
<td>LF</td>
<td>The amount of permitted solid waste disposal capacity that is available for disposal in Sonoma County, of solid waste generated in Sonoma County.</td>
</tr>
<tr>
<td>E</td>
<td>The amount of solid waste generated in Sonoma County that is exported to solid waste disposal facilities through agreement(s) with other cities or counties, or through agreements with solid waste enterprises, as defined in Section 40193 of Public Resources Code.</td>
</tr>
<tr>
<td>n</td>
<td>Each year of a 15-year period commencing in 1991.</td>
</tr>
</tbody>
</table>
Solid Waste Generated

The amount of solid waste generated (G) for each year in the planning period was obtained by using the CIWMB Diversion Rate Measurement Calculation Worksheet (Worksheet). The Worksheet allows changes to the reporting-year disposal tons and four input factors (population, taxable sales, employment and the consumer price index). When these changes are made to the Worksheet, it automatically computes the estimated generation rate for the reporting-year.

Solid Waste Imported

There is no solid waste imported (I) into Sonoma County. In addition to waste generated in the Unincorporated County, the Central Landfill receives all solid waste generated by the incorporated cities (Sonoma, Santa Rosa, Rohnert Park, Cotati, Petaluma, Sebastopol, Healdsburg, Cloverdale, and Windsor) of Sonoma County with the exception of a fraction, which goes to the Redwood Sanitary Landfill.

Solid Waste Diverted

The amount of solid waste diverted (D) through successful implementation of proposed source reduction, recycling, and composting programs was obtained by using the CIWMB Diversion Rate Measurement Calculation Worksheet (Worksheet). The Worksheet allows changes to the reporting-year disposal tons and four input factors (population, taxable sales, employment and the consumer price index). When these changes are made to the Worksheet, it automatically computes the estimated generation rate for the reporting-year. Subtracting the projected disposal tons from the estimated generation rate provides the estimated diversion tons.

Transformation Facility Reduction

The amount of transformation facility reduction (TC) is zero throughout the planning period. No transformation facilities exist or are planned for Sonoma County.

Permitted Disposal Capacity

The permitted disposal capacity (LF) available is the permitted disposal capacity (in cubic yards) of the Central Landfill.

Solid Waste Exported

For the years 2000 and 2001, the amount of solid waste exported (E) from Sonoma County is the actual tonnage reported to the CIWMB by the facilities who accepted waste generated in Sonoma County. A six-year average of actual tonnages reported to the CIWMB (1995 to 2000) was calculated to be 25,000 tons which is used as the estimated solid waste exported for the years 2002 to 2018.

4.8.3.2 Projecting Disposal Capacity Needs

Title 14 CCR, Section 18744 requires that the solid waste disposal facility needs projection begin with 1991. Results from the disposal capacity needs projection for the period 1990 to 2005 are shown in Table 4-42. Table 4-43 shows the needs projection for the period 2000 to 2018. Impacts of closed, new, or expanded facilities have been accounted for in the projection. All values are given in compacted, in-place cubic yards of solid waste using an estimated average compacted density of 1,200 pounds per cubic yard.
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</tr>
</thead>
<tbody>
<tr>
<td><strong>G</strong> Total Waste Generated *</td>
<td>406,343</td>
<td>414,470</td>
<td>422,579</td>
<td>431,214</td>
<td>439,839</td>
<td>448,636</td>
<td>457,609</td>
<td>466,760</td>
<td>476,096</td>
<td>485,617</td>
<td>495,329</td>
<td>505,236</td>
<td>515,340</td>
<td>525,647</td>
<td>536,160</td>
<td>546,863</td>
</tr>
</tbody>
</table>

* **Total Waste Generated:** The total solid waste generated by the unincorporated county.

** **Solid Waste Imported:** The total solid waste disposed by the incorporated cities at the Central Landfill.

*** **Solid Waste Diverted:** The total solid waste diverted by the unincorporated county from disposal.

Note: This chart summarizes the information contained in the 1996 Source Reduction and Recycling Elements for the nine jurisdictions in Sonoma County. When prepared, Windsor residents were part of the unincorporated county.
### Table 4-3: Disposal Capacity Requirements (in cubic yards and tons) for the SCWMA (2000 to 2018)

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>LF</td>
<td>1402460</td>
<td>1326602</td>
<td>12338684</td>
<td>11497071</td>
<td>10972017</td>
<td>9986904</td>
<td>9997017</td>
<td>8297517</td>
<td>7490164</td>
<td>6674851</td>
<td>5951516</td>
<td>5002016</td>
<td>4180251</td>
<td>3332351</td>
<td>2470018</td>
<td>1611165</td>
</tr>
<tr>
<td>LF</td>
<td>1402460</td>
<td>1326602</td>
<td>12338684</td>
<td>11497071</td>
<td>10972017</td>
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<td>5951516</td>
<td>5002016</td>
<td>4180251</td>
<td>3332351</td>
<td>2470018</td>
<td>1611165</td>
</tr>
<tr>
<td>Available Permitted Disposal Capacity (tons) 5</td>
<td>8429659</td>
<td>7934716</td>
<td>7436726</td>
<td>6947176</td>
<td>6456726</td>
<td>5996672</td>
<td>5531726</td>
<td>5002026</td>
<td>4587626</td>
<td>4108420</td>
<td>3624426</td>
<td>3135526</td>
<td>2947120</td>
<td>2424226</td>
<td>2140226</td>
<td>1639126</td>
</tr>
<tr>
<td>Available Permitted Disposal Capacity (cubic yards)</td>
<td>13175745</td>
<td>12338684</td>
<td>11497071</td>
<td>10672317</td>
<td>9696904</td>
<td>8996904</td>
<td>8297517</td>
<td>7490164</td>
<td>6674851</td>
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<td>5002016</td>
<td>4180251</td>
<td>3332351</td>
<td>2470018</td>
<td>1611165</td>
<td>129728</td>
</tr>
<tr>
<td>Additional Disposal Capacity (tons) 5</td>
<td>8429659</td>
<td>7934716</td>
<td>7436726</td>
<td>6947176</td>
<td>6456726</td>
<td>5996672</td>
<td>5531726</td>
<td>5002026</td>
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<td>2947120</td>
<td>2424226</td>
<td>2140226</td>
<td>1639126</td>
</tr>
<tr>
<td>Additional Disposal Capacity Required (cubic yards) 5</td>
<td>13175745</td>
<td>12338684</td>
<td>11497071</td>
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<td>9696904</td>
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<td>3332351</td>
<td>2470018</td>
<td>1611165</td>
<td>129728</td>
</tr>
</tbody>
</table>

1. Projected numbers using factors (population, taxable sales, employment, and CPI) and CIWMB diversion rate calculation worksheet.
2. Transformation Reduction is the estimated amount of wood chips shipped to fuel markets by Sonoma Compost Company.
3. Available Permitted Disposal Capacity (cy) for the years 2000 and 2001 are actual numbers reported to the CIWMB for the Central Landfill.
4. Diversion Rate calculated using CIWMB Diversion Rate Measurement Calculation Worksheet. Adjustment factors for 2001 to 2015 include annual growth projections of 7% for taxable sales; 2% for employment, 3% for CPI; and CDF population projections (based on the 2000 census).
5. For Additional Disposal Capacity a negative number represents sufficient disposal capacity to meet the disposal needs for Sonoma County.
4.8.4 PLANNED DISPOSAL FACILITY CLOSURES

The Central Landfill was expanded in 2001 to provide sufficient capacity for solid waste disposal through 2015. The Solid Waste Management Alternatives Analysis (Analysis) adopted by the Board of Supervisors on February 6, 2001 recommends using the existing landfill to its fullest extent. The earliest estimated date of closure for Central Landfill is 2015. However, if the facility is expanded as recommended in the Analysis, there is potential for closure to be postponed further into the future.

4.8.5 NEW OR EXPANDED DISPOSAL FACILITIES

The Central Landfill, which will reach permitted capacity in 2015 with the expansion of the east canyon, is adjacent to a west canyon that has the potential of providing additional landfill capacity. If the west canyon is expanded it would provide capacity through the year 2017. The Analysis recommends siting a new landfill in Sonoma County once the Central Landfill has reached capacity.

4.8.6 EXPORT/IMPORT OF SOLID WASTE IN SONOMA COUNTY

Some municipal solid waste is exported from Sonoma County, and the majority of it consists of waste collected in debris boxes by Waste Management, Inc. However, Group I wastes, which consist of or contain toxic substances or other substances which could significantly impair the quality of the environment, are exported to out-of-county disposal/recycling facilities. In 2000, most Group I wastes generated in Sonoma County were taken to the Forward Landfill in Solano County. Currently, these wastes are still being shipped to out-of-county facilities for proper treatment and disposal.

Geothermal drilling muds and sewage sludge are the only other waste types known to be exported from the county. A small portion of the drilling muds generated in Sonoma County are transported to Lake County for landfill disposal. Most of this material, however, is kept at the drilling site and is used to reinforce the bore hole, with the remainder deposited into clay lined sumps. Similarly, a small fraction of the sewage sludge generated in the county is transported to Marin County for landfill disposal. The exact quantity and contractual terms for removal of all exported wastes, including hazardous wastes, is unknown.