

# Ada County

Solid Waste  
Management Department



---

## YEAR END REPORT FISCAL YEAR 2003

---

**DECEMBER 2003**

**BOARD OF ADA COUNTY COMMISSIONERS**

Judy M. Peavey-Derr, Chairman  
Rick Yzaguirre, Second District  
Fred Tilman, Third District

**SOLID WASTE MANAGEMENT DEPARTMENT**

Dave Neal, Director  
Rene Phillips, Health Protection Officer  
Ted Hutchinson, Solid Waste Planner  
Ken Wall, Hazardous Materials Coordinator  
Jim Krosschell, Account Clerk  
Kathie Van Curen, Account Clerk  
Brad Noble, Maintenance Mechanic  
Joey Smith, Maintenance Mechanic  
Judy Roell, Cashier  
Kathy Nelson, Cashier  
R.B. Nooner, Cashier  
Barbara Burkhardt, Cashier  
Jolie Rosenfield, Cashier

**CITY MAYORS**

Carolyn Terteling-Payne, City of Boise  
Ted Ellis, City of Garden City  
Robert Corrie, City of Meridian  
Nancy Merrill, City of Eagle  
W.G. Nelson, City of Kuna  
Gail Glasgow, City of Star

## TABLE OF CONTENTS

Executive Summary.....	1
Department Mission.....	3
Solid Waste Management.....	4
The Department.....	4
Public - Private Partnership.....	5
The Contractors.....	5
Landfill Closure (Phase I).....	5
Engineering.....	5
Final Cover Construction.....	5
Landfill Operations.....	6
Organics Recycling.....	6
Hazardous Waste Management).....	6
Waste Screening.....	6
Staffing and Divisions.....	7
Solid Waste Division.....	7
The Staff.....	7
Operation and Maintenance.....	9
Burn Permits.....	10
Accounting.....	10
Hazardous Waste Division.....	10
Hazardous Material Management.....	11
Computer Monitors and Televisions.....	11
Mobile Collection Events.....	11
City of Boise.....	11
City of Meridian.....	11
City of Kuna.....	12
Garden City.....	12
Collected Material.....	12
Environmental Division.....	12
Groundwater Monitoring.....	12
Surface Water Monitoring.....	12
Air Quality.....	13
Financial Health.....	14
Revenue and Expenditures.....	14
Money in the Bank.....	15
Waste Material.....	16
Diversion Programs.....	17
Landfill Recycling Programs.....	17
Wood Waste Recycling.....	17
Used Tires.....	17
Refrigeration Units.....	17
Household Hazardous Material.....	19
ReUse Program.....	19
Oil-Based Paint.....	19
Automotive Batteries.....	20
Latex Paint.....	20

Motor Oil and Anti-Freeze.....	20
Other Items .....	20
Curbside.....	23

# EXECUTIVE SUMMARY

Fiscal Year 2003 (October 1, 2002 through September 30, 2003), was an exciting year for the Ada County Solid Waste Management Department. For the first time in the department's history, the department undertook a final closure project at the Hidden Hollow Sanitary Landfill.

A portion of the landfill has reached its designed capacity. No longer able to bury trash in that area, the department closed roughly 40 acres of the landfill's 110 acres. Landfill closure is a complicated process and involved receiving approval of the closure plan from the Idaho Department of Environmental Quality.

Ada County's consulting engineer designed a cover that uses soil and native vegetation to prevent water from infiltrating the landfill. Additionally, the landfill closure contains a landfill gas extraction system.

Ada County spent more than \$4.8 million on the closure project in Fiscal Year 2003. The County paid most of this amount to the construction firm contracted to perform the closure. The department expects additional closure expenditures during the current fiscal year. In roughly three years, Ada County will conduct the second of a three-phased closure.

As an Enterprise Fund, the Solid Waste Management Department receives no tax dollar support for its operations. The department relies solely upon revenue from disposal fees paid by customers using the landfill. Besides meeting its daily operation requirements, the department's revenue must be sufficient to meet long-term obligations and future needs. Current operating expenses, long-term obligations and future needs are weighed against the fees collected at the gates. Through careful fiscal management, Ada County enjoys some of the lowest disposal fees in the State.

The Solid Waste Management Department continually strives to build a partnership between Ada County and privately owned companies. By using carefully constructed contracts, Ada County provides its residents a high quality solid waste management and disposal system at reasonable cost. Where feasible and appropriate, the County prefers that private enterprise perform the work rather than enlarging government to meet the needs. At the landfill, the Solid Waste Management Department oversees six contracts - contracts totaling more than \$7.6 million paid to private companies.

For Fiscal Year 2003, Ada County contracted with Earth Tech, Inc. for landfill closure; with Environmental Earthworks, Inc. for landfill operations and for waste screening services; with CH2MHill, Inc. for engineering services; with Enviro-Progress, Inc. for wood and organics recycling; and with Teris, Inc. for hazardous waste management. Most of these companies have been in business in the Treasure Valley for a long time. They employ local people, buy local products, and contribute to the local economy.

Planning for the future best describes the department's activities during Fiscal Year 2003. As the Hidden Hollow Sanitary Landfill nears its designed capacity, the Board of Ada County Commissioners and the Solid Waste Management Department are working toward long-term solutions to the County's waste disposal needs.

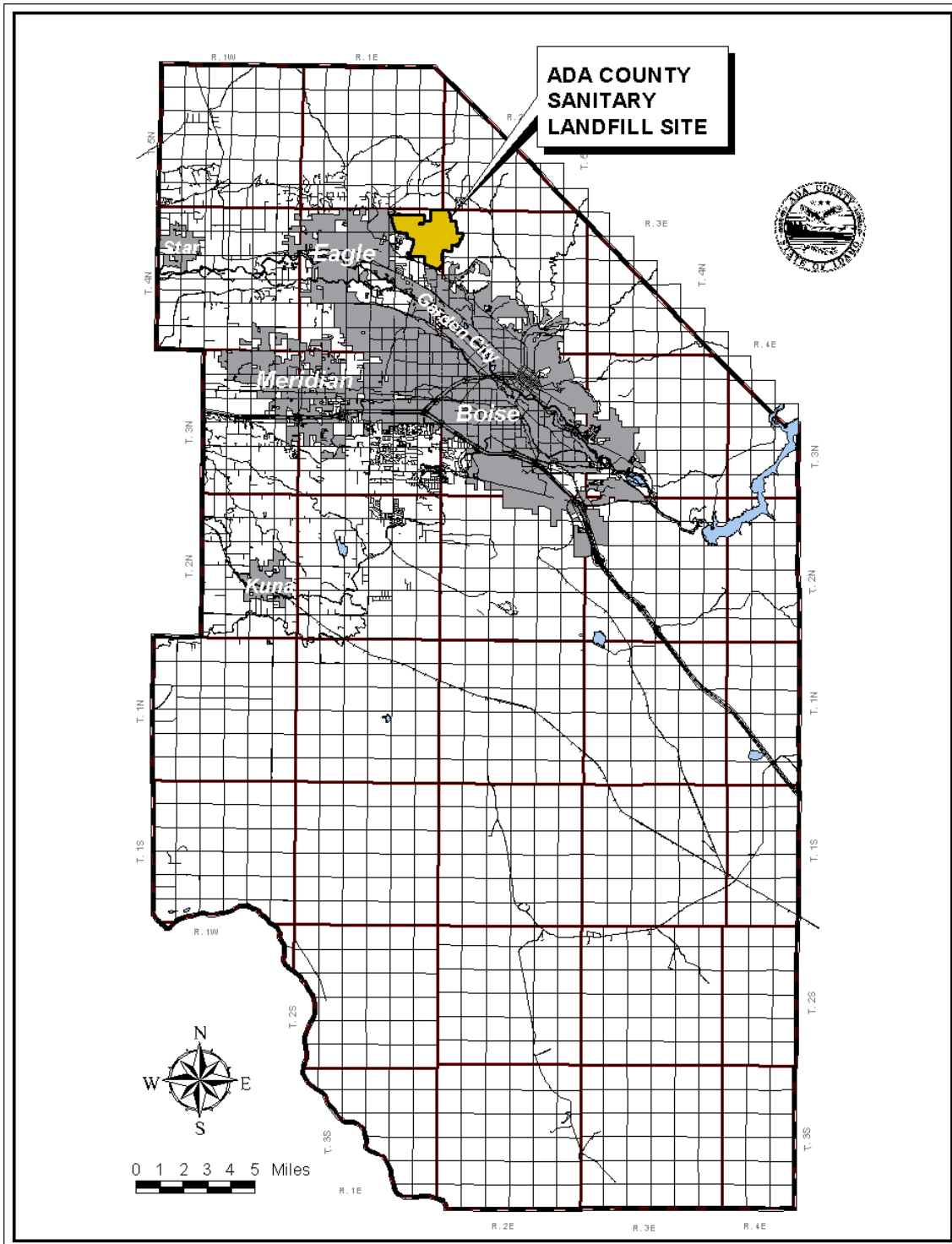


Figure 1 - Ada County, Idaho

# DEPARTMENT MISSION

*The Solid Waste Management Department seeks to pro-actively manage County waste disposal facilities, enforce applicable codes, provide reasonably priced and environmentally acceptable methods for solid and hazardous wastes reduction and disposal for County residents and businesses. Services provided by the department include:*

- *Maintenance of a sanitary landfill for acceptance of wastes generated by County residents,*
- *Operation of a permanent year-round facility for disposal of household and small business hazardous wastes,*
- *Contractual oversight of the franchised trash collection in unincorporated Ada County ensuring compliance with trash pick up, recycling and rates,*
- *On-site recycling programs for wood, tires, automotive batteries, refrigerators and air conditioners,*
- *Enforcement of health codes regarding accumulation of solid waste, and,*
- *Educational materials for local schools and service groups.*

# ADA COUNTY

## SOLID WASTE MANAGEMENT DEPARTMENT

### SOLID WASTE MANAGEMENT

Ada County's Solid Waste Management Department is responsible for proper disposal of the over 800 million pounds of trash generated in Ada County annually. The department's primary duties include operational oversight of:

- The Hidden Hollow Sanitary Landfill;
- The County's Household Hazardous Materials Management Program;
- The landfill's environmental controls systems; and,
- The on-site recycling and diversion programs.

Included among these responsibilities are:

- Enforcement of County codes relating to human health, waste accumulation, unlawful disposal, uncovered and unsecured loads, and littering;
- Collection of landfill disposal fees;
- Issuance of burn permits of locations outside fire districts;
- Accounting for all department receipts and expenditures;
- Provision of public education and information about solid and hazardous waste, recycling, and waste reduction methods; and,
- Overseeing contracts with privately owned companies performing a variety of services and projects for the County.

To accomplish its responsibilities and duties, the department relies heavily on well-developed partnerships between Ada County and privately owned companies with which the County contracts for services. These contracts range from engineering services to landfill

operations and waste screening, to recycling projects, to hazardous material management, to final landfill cover construction. In all, more than \$7.6 million dollars was paid for contract services rendered to Ada County in Fiscal Year 2002-2003.

### THE DEPARTMENT

Although the department has the large responsibility of ensuring the proper disposal of Ada County's municipal solid waste, it does so with a small staff. The department employs a staff of 13, six of whom work part-time. All other personnel working at the Landfill are employees of the various contractors.

The Solid Waste Management Department is part of Ada County government. As such, the department Director answers directly to the Board of Ada County Commissioners. All daily operational decisions are under the discretion of the Director with long-term plans and needs discussed with the Commissioners. Besides daily operation and oversight of the previously mentioned contracts, the Director meets with the Ada County Treasurer to recommend contractual adjustments to the waste collection contract to the Commissioners.



## PUBLIC - PRIVATE PARTNERSHIP

Since opening the Hidden Hollow Sanitary Landfill in the spring of 1972, Ada County has contracted with privately owned companies for daily landfill operations. Over the years, the County has increased the number of private contractors performing work for the Solid Waste Management Department.

Initially, just daily landfill operations were covered. At the end of Fiscal Year 2003, the Solid Waste Management Department was overseeing six (6) contracts totaling more than \$7.6 million. These contracts for services covered engineering services, landfill closure, daily operations, waste screening, organics recycling, and hazardous waste management.

By contracting for services with privately owned companies, Ada County is able to ensure the most cost-effective service delivery for the County through competitive bids. This method has enable Ada County to provide its residents a solid waste management system with some of the lowest disposal fees in the State.

For more than thirty years, Ada County has proven that a public-private partnership works and works well. Ada County's Solid Waste Management Department provides the system-core management while the private sector provides the equipment and manpower to accomplish the tasks associated with safely managing more than 850 million pounds of trash annually.

This practice allows the department to control expenses for payroll and benefits. Besides providing job opportunities within the community and support to the local economy, using private contractors selected through competitive bidding, Ada County controls its overall disposal costs.

Before issuing any contract for services, Ada County issues a Request for Qualifications or a Request for Proposal. The Request specifies the criteria for qualification and the specifics for the work to be done under the

terms of the contract. Each contractor listed below competed with other firms for their contracts affording Ada County the opportunity to obtain the highest quality for the best price.

## THE CONTRACTORS

Through carefully written contracts, Ada County provides an effective, low-cost solid waste disposal system to its residents. The Solid Waste Management Department oversees six (6) contracts for services ranging from engineering services to waste screening services. Following is a description of the contracts and the contractors.

### LANDFILL CLOSURE (Phase I)

Roughly, 40 acres of the Hidden Hollow Sanitary Landfill has reached its designed capacity and the department will no longer bury waste there. As required by the Operating and Closure Plan for the landfill, the County is installing the final cover for that portion of the landfill. Ada County will close the Hidden Hollow Sanitary Landfill in three phases over the next 7 to 10 years.

### ENGINEERING

CH2MHill, Inc. designed the final cover. CH2MHill, Inc. is the department's engineer consultant. The contract between Ada County and CH2MHill extends beyond Phase I of the closure. During Fiscal Year 2003, Ada County paid CH2MHill \$771,000 for engineering services.

### FINAL COVER CONSTRUCTION

Ada County chose Earth Tech, Inc. as the company to construct the first phase of the final cover. During Fiscal Year 2003, Ada County paid Earth Tech \$4,087,000. Earth Tech's contract extends into Fiscal Year 2004.

Ada County will expend funds for the first phase of closure during Fiscal Year 2003 and Fiscal Year 2004.

#### LANDFILL OPERATIONS

Typically, the Solid Waste Management Department's largest contract is for daily operations at the landfill. This includes waste compaction, daily waste cover, intermediate cover, road construction and maintenance, as well as other incidental work keeping the landfill open and operating.

Environmental Earthworks, Inc. provides all of the daily operations at the landfill. As required by the contract between Ada County and Environmental Earthworks, this contractor supplies all the equipment and personnel necessary to complete the work specified in the contract. Last fiscal year, Ada County paid Environmental Earthworks \$1,543,000.

#### ORGANICS RECYCLING

Ada County has operated a highly successful recycling program at the landfill since 1994. Customers are encouraged to separate their wood waste from their other waste for recycling. Originally, a 2-year pilot project, the wood recycling program proved popular and successful. From its modest beginnings with 10,000 cubic yards recycled the first year, Ada County's current contractor recycled more than 133,000 cubic yards for Fiscal Year 2003.

Ada County contracts with Enviro-Progress, Inc. for wood and organics recycling. The County pays for material that Enviro-Progress hauls away from the landfill. Ada County pays Enviro-Progress \$4.57 per cubic yard. For Fiscal Year 2003, Ada County paid \$612,000 for wood waste and organics recycling.

#### HAZARDOUS WASTE MANAGEMENT

Since 1988, Ada County has proactively worked to keep household hazardous materials from entering the landfill. Starting with a one-day annual collection event, the popularity of the program grew to the point where Ada County saw the need for a permanent collection facility that was open year-round. In 1998, Ada County opened its Household Hazardous Material Collection Facility operated by a privately owned firm that was experienced in hazardous waste management.

In 1998, Ada County contracted with MSE Environmental for hazardous material management and disposal. MSE operates the facility according to an operations plan and contract documents. By the end of Fiscal Year 2003, Ada County paid MSE \$430,000.

#### WASTE SCREENING

To ensure that hazardous or dangerous wastes are not disposed in the landfill, Ada County contracts for waste screening services. Employees of Environmental Earthworks, Inc. interview landfill users and examine loads to intercept inappropriate material. Environmental Earthworks takes the hazardous material collected at the landfill disposal area to the household hazardous material facility for proper management and disposal. For services during Fiscal Year 2003, Ada County paid Environmental Earthworks \$173,000.

## STAFFING AND DIVISIONS

To accomplish its responsibilities, goals and mission, the department consists of three divisions identified by their primary objectives. The three divisions are: Solid Waste Division, Hazardous Waste Division, and Environmental Division. Although the department divisions define the division of labor, the three divisions are closely allied and coordinated to achieve the common objectives of environmentally and fiscally sound management of Ada County's municipal solid waste management system.

### SOLID WASTE DIVISION

The Solid Waste Division is the largest division in the department. Under the direction of the Director are a Health Protection Officer, a Solid Waste Planner, two Account Clerks, two Maintenance Mechanics, and five part-time Cashiers. These employees:

- Operate and maintain the Landfill;
- Enforce Ada County codes relating to human health, waste accumulation, unlawful waste disposal, uncovered or unsecured loads, and littering;
- Issue burn permits for locales outside fire districts;
- Collect landfill disposal fees;
- Account for department receipts and expenditures;
- Oversee contracts for waste collection, landfill operation, wood waste recycling, and solid waste screening;
- Provide public education and outreach programs about solid and hazardous waste disposal, recycling, and waste reduction.

### THE STAFF

The Health Protection Officer (HPO) is a sworn deputy for the Ada County Sheriff who

works for the Solid Waste Management Department. The HPO enforces, by vehicular patrol and visual inspection, County ordinances and federal laws relating to solid waste, hazardous waste, and air pollution. With jurisdiction in the unincorporated areas of Ada County, the HPO patrols over 900 square miles. The HPO also serves as the first-line supervisor for the department. He ensures proper landfill operation, oversees maintenance projects, and acts under the department's Director's authority in resolution of questions and disagreements.

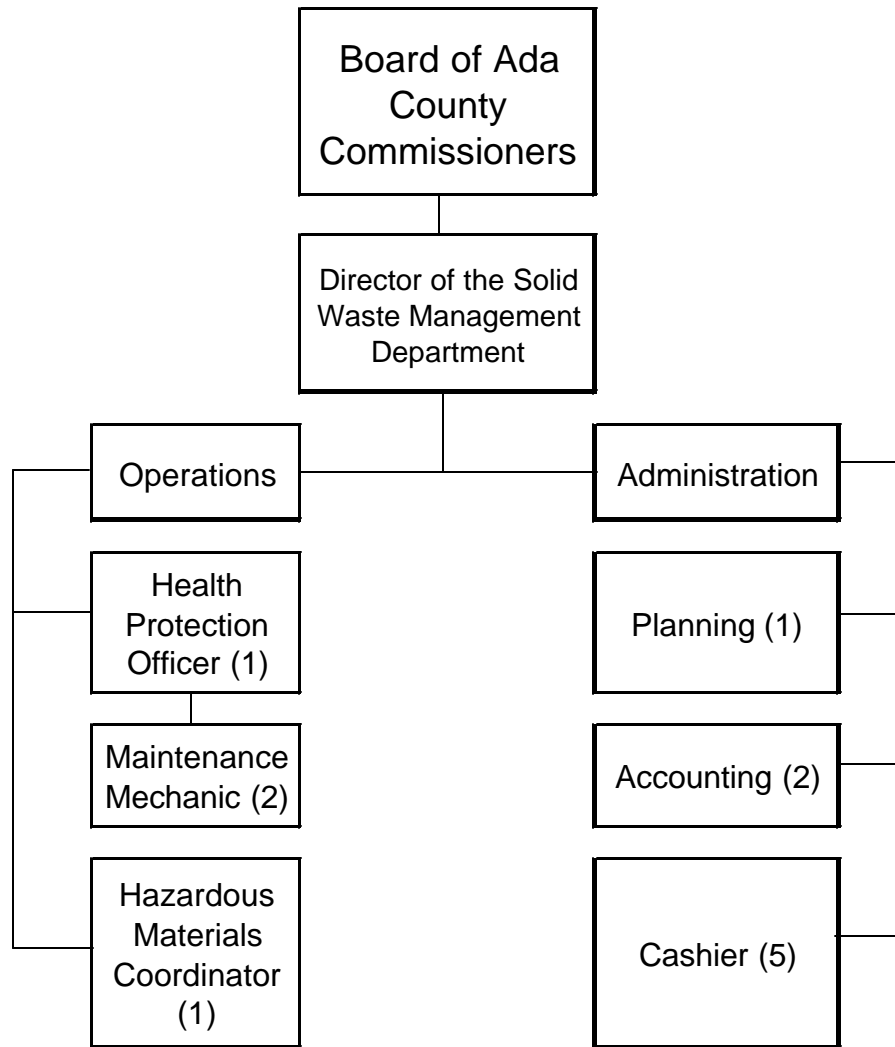
The Solid Waste Planner provides short and long range analysis and plan development for various solid and hazardous waste functions and activities, conducts analysis of annual waste streams, recommends the development of new programs that result in diversion and/or reduction of the waste stream, and conducts studies of special areas of emphasis.

Account Clerks perform the full range of record keeping work in the detailed maintenance of the financial status of the Solid Waste Management Department, maintain accurate details of daily receipts and transactions, and monitor charge account activities of approved customers, and accomplish secretarial duties for the department.

Maintenance Mechanics perform a variety of tasks in the maintenance of buildings and grounds and maintenance of automobiles and small engines.

Cashiers greet customers, charge and collect fees from landfill customers, maintain custody and account for money received.

# Ada County Solid Waste Management Department Organization Chart



Board of Ada County Commissioners		
<u>First District</u> Judy M. Peavey-Derr	<u>Second District</u> Rick Yzaruirre	<u>Third District</u> Fred Tilman

Director of the Solid Waste Management Department Dave Neal
--

Figure 2 - Department Organization Chart

## OPERATION AND MAINTENANCE

Ada County owns 2,655 acres of land in the foothills northwest of the City of Boise. The main entrance to the Landfill is on Seaman's Gulch Road about 1½ mile north of Hill Road Parkway. Ada County acquired the land over a number of years. The Landfill sits on roughly 110 acres near the center of the property.

Several buildings are located on the landfill property, including the department's office, maintenance shop, hazardous material collection facility, cashiers' booths, and three

large storage buildings. The property is fenced with nearly 12 miles of barbwire fence.

Wind-blown litter is a constant problem for landfills. The Hidden Hollow Sanitary Landfill is no exception. Under the direction of department maintenance mechanics and temporary employees, inmates from the Ada County Sheriff's Inmate Labor Detail (S.I.L.D.) Program (an alternative sentencing program) perform litter gathering and other maintenance projects on the landfill property. Use of inmates from the S.I.L.D. program saves the department thousands of dollars each year in labor costs (FY 2003 - approximate savings of \$120,000).

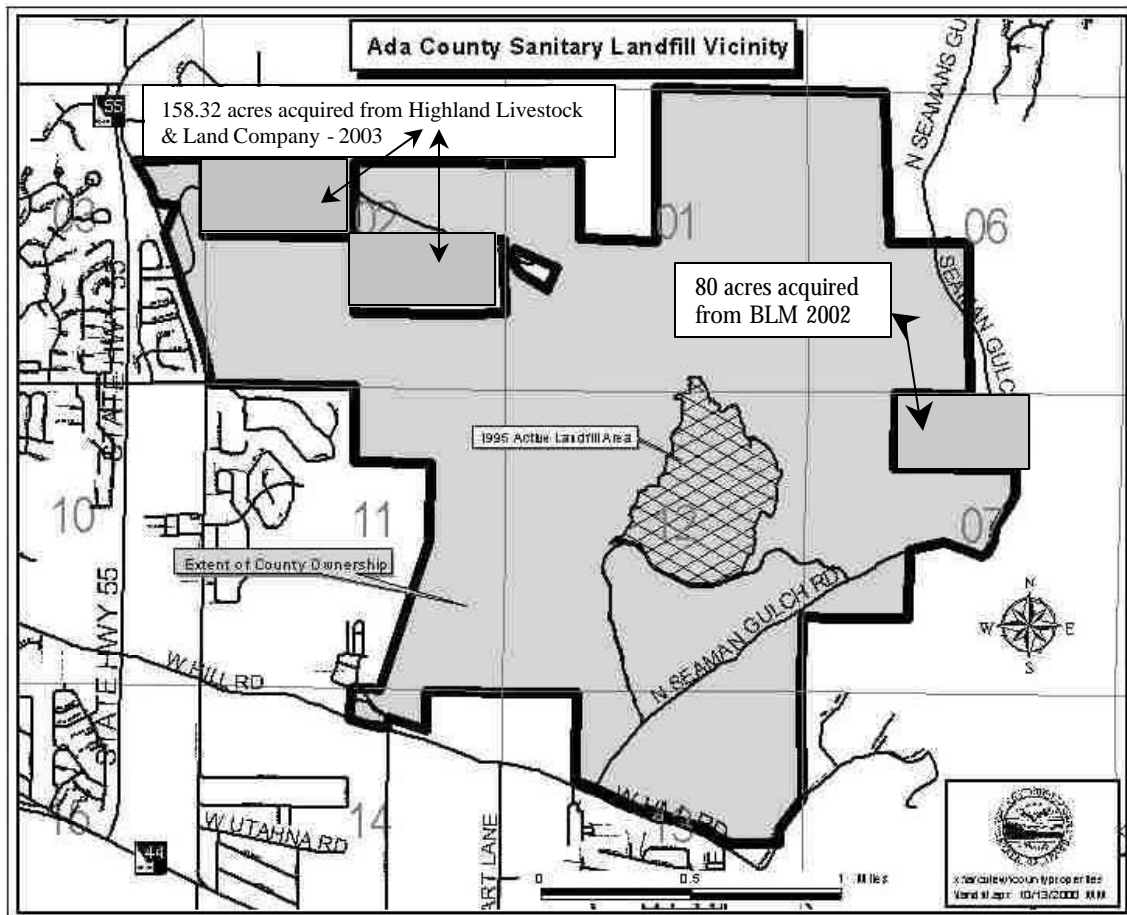


Figure 3 - Ada County's Landfill Property

## BURN PERMITS

For areas outside fire department or fire district boundaries (approximately 665 square miles), the Ada County Solid Waste Management Department is the issuing authority for burn permits. The department issues burn permits for weed control, field burning, maintenance of irrigation ditches, or removal of tree limbs and brush; or, if another practical method of disposal is unavailable. Ada County Code prohibits disposal of trash by burning (burn barrels).

## ACCOUNTING

Because the Solid Waste Management Department is an Enterprise Fund, the only revenue source for the department is the fee collected at the landfill gate. Customers are assessed a disposal fee at the gate. Fiscal Year 2003 saw more than 184,300 customers pass through the landfill gate. This represents an increase of 2.6% over last fiscal year.

The department's Account Clerks manage and track the monthly balances of more than 450 charge accounts. They also verify daily cash receipts and charges assessed by the cashiers.

Besides accounting for daily gate receipts and monthly charge accounts, the department is responsible for managing its annual budget. Since no tax dollars are expended for operation of the department, careful revenue and expenditure estimates have been calculated by the department to ensure that not only the operating budget is met, but that sufficient money is being saved by the department to meet long-term financial obligations required by Federal regulation.



Figure 4 - Welcome to Hidden Hollow Sanitary Landfill

## HAZARDOUS WASTE DIVISION

Recognizing a threat to the environment and to human health, Ada County established the Hazardous Waste Division to manage potentially hazardous material brought to the Landfill. The division is a direct descendant of annual household hazardous waste collection events held between 1989 and 1996. These highly successful and popular events were the result of cooperative efforts among Ada County, Boise City, the Central District Health Department, and the Ada County Highway District.

Because of the popularity and the increasing costs of the events, Ada County made the commitment to construct a permanent household hazardous material collection facility at the Landfill. In 1998, the County's Household Hazardous Material Collection Facility (Facility) opened. One County employee, a Hazardous Material Coordinator, oversees the operation of the Facility.

The Board of County Commissioners directed that any household hazardous material collected by local jurisdictions in Ada County could be brought to the facility and Ada County would pay the disposal costs. As part of its continuing support of the hazardous material collection program, the City of Boise purchased a van to for use as a mobile collection site. Boise's very successful program has been copied, to a lesser extent, by the City of Meridian and by the City of Kuna.



Figure 5 - Ada County's Household Hazardous Materials Collection Facility

## HAZARDOUS MATERIAL MANAGEMENT

Located at the Landfill, Ada County's Household Hazardous Material Collection Facility accepts hazardous, potentially hazardous, or dangerous material from households in Ada County. Through a contract with a private firm specializing in hazardous material management (MSE Environmental), County residents may bring their household hazardous materials, such as, paints, pesticides, fertilizers, cleansers, solvents and automotive products to the Facility at no charge. Conditionally exempt small quantity generators (C.E.S.Q.G.) may qualify to use the Facility services at a nominal cost.

The Facility at the Landfill is open to Ada County residents each Friday and Saturday. The Facility accepts conditionally exempt small quantity generator waste by appointment only. Supplementing Landfill collection activities are collection activities in the cities of Boise, Meridian, and Kuna. For Fiscal Year 2003, more than 13,200 households were served by the collection program.

### COMPUTER MONITORS AND TELEVISIONS

Technology changes quickly. Today's modern computer is tomorrow's paperweight. With rapid changes and obsolescence of electronics, Ada County, with the support and cooperation of the City of Boise, disposes computer monitors and television sets through the Household Hazardous Material Management Program

Monitors and television sets, and other electronic devices containing a cathode ray tube, have up to eight pounds (8#) of lead in them. When the glass of the cathode ray tube is broken, the lead becomes leachable and is a hazard to human health and the environment.

Although these electronic devices are exempt from hazardous waste regulations (household exemption), Ada County proactively banned disposal of cathode ray tubes in the Landfill. The disposal option is management through the Program.

In Fiscal Year 2003, Ada County shipped more than 25,000 pounds of electronics waste to a recycling facility in Utah.



Figure 6 - CRTs ready for shipment to nxtcycle's™ processing center in Utah

### MOBILE COLLECTION AND EVENTS City of Boise

The City of Boise has been a long-time partner and supporter of the hazardous material collection program in Ada County. With the opening of Ada County's permanent facility, Boise City recognized an opportunity to provide a convenient service to its residents. Boise City purchased a van and equipped it for use as a mobile collection vehicle. Each week, the City visits one of eight (8) sites around the City. More than 3,800 city households took advantage of the collection sites in this last fiscal year. This number is an increase over the prior year by nearly 1,000 participating households.

### City of Meridian

Revenue from commodities collected in the curbside recycling program pays for the City of Meridian's household hazardous material collection. One day each month, residents in the Meridian area can take their household hazardous materials to the Meridian collection site. Through a cooperative agreement with the City of Boise, the City of Meridian is able to use the Boise's collection van for the monthly event. Over 520 households took advantage of the Meridian collection site.

The Meridian event is rather unique in its design. Meridian's trash collection company, Sanitary Services Company (SSC) collects recyclable commodities at curbside. Revenue from the sales of the commodities pays for the collection event with any money left over going to the City. The City has paid for playground equipment with the extra funds.

## City of Kuna

Another unique program happens within the City of Kuna. Each spring, the City of Kuna promotes a weeklong community clean up. J&M Sanitation, the City's trash collection contractor, is a major contributor to the event by paying the hazardous waste firm (Ada County's hazardous waste contractor - MSE Environmental) to manage the household hazardous material collected during the last day of the event. Each Fall, the City of Kuna and J&M Sanitation sponsor a one-day household hazardous material collection. Last fiscal year, over 400 households participated in the household hazardous material collection events.

## GARDEN CITY

On the second Tuesday of each month, residents of Garden City may take their household hazardous material to the North Ada County Fire and Rescue station on Glenwood from noon until 7 P.M. As with the other mobile programs, Ada County accepts the material collected at the Garden City site. Last year, over 300 Garden City households took advantage of the program.

## COLLECTED MATERIALS

Hazardous material collected in the countywide program is taken to the County's Facility for processing and shipment to disposal facilities. Ada County's hazardous material contractor, MSE Environmental, categorized and processed 949,775 pounds of material.

MSE Environmental segregates into the material into following categories:

- ReUse Program
- Automotive Batteries
- Oil-based Paint
- Flammable Liquids
- Latex Paint
- Motor Oil
- Antifreeze
- Pesticides
- Other

Due in large part to Ada County's priority for waste management, MSE Environmental strives to recycle/reuse as much of the collected material as possible. This past fiscal year saw 813,719 pounds (85.6%) recycled/reused, with 136,056 pounds (14.3%) destroyed by incineration.

## ENVIRONMENTAL DIVISION

Responsibility for monitoring conditions in, on, under, and around the Landfill falls to the Environmental Division. Areas monitored by the division include:

- Groundwater
- Surface water
- Air Quality

There are no permanently assigned Solid Waste Management Department employees in the Environmental Division. Monitoring is performed on a scheduled basis or on an "as needed" basis by either department staff or by the department's consulting engineer, CH2M Hill. The following functions are included in the monitoring program.

### GROUNDWATER MONITORING

As required under Federal and State regulations, Ada County monitors groundwater flowing under the Landfill to quantify water quality and to detect contaminants. Groundwater flowing away from the Landfill contains trace amounts of volatile organic compounds (VOCs). VOCs come from landfill gas that has contacted the groundwater. To rectify this problem, Ada County installed a system that extracts groundwater, removes the VOCs, and returns the groundwater to the aquifer. Since the groundwater system operations began in April 1998, over 42 million gallons of water have been treated.

### SURFACE WATER MONITORING

Federal and State regulations require the Solid Waste Management Department to manage run-on and runoff water that reaches the Landfill. Surface water controls include earthen berms that intercept and direct rainfall



and snowmelt into collection ditches and then into a containment pond.

New interceptor ditches are installed as the surface of the Landfill changes. These ditches not only direct the flow of water across the Landfill but also reduce erosion by slowing the water as it passes over the Landfill.

#### AIR QUALITY

A natural by-product of trash decomposition is landfill gas. Landfill gas consists of methane and carbon dioxide in nearly equal amounts. Methane and carbon dioxide are both odorless and colorless gases. However, other trace gases are quite odoriferous.

Because methane, in certain conditions, is explosive, care must be exercised at the Landfill to ensure that concentrations of landfill gas are not found outside of the landfill property. Several monitoring wells are located around the Landfill for the purpose of monitoring and recording landfill gas concentrations.

# FINANCIAL HEALTH

## REVENUE AND EXPENDITURES

Ada County's Solid Waste Management Department operates as an Enterprise Fund. As such, the department receives no tax dollars for support or operation. The department must pay for all expenses from disposal fees collected at the gate.

Fiscal Year 2003 was a bit of an anomaly in that the department's expenditures exceeded revenues. Fortunately, the department maintains a reserve fund for these events. Following are charts detailing the department's revenues (by source) and expenditures.

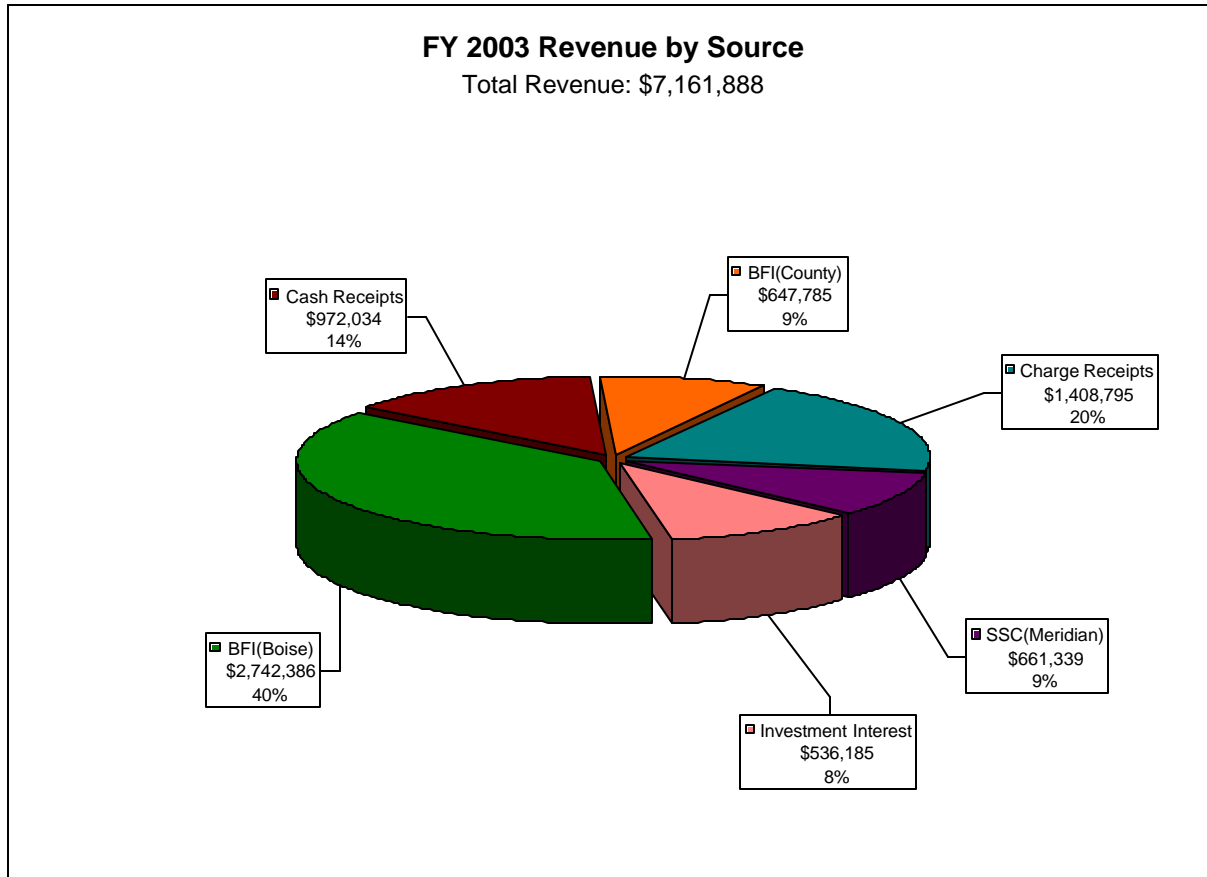


Figure 7 - FY 2003 Revenue by Source

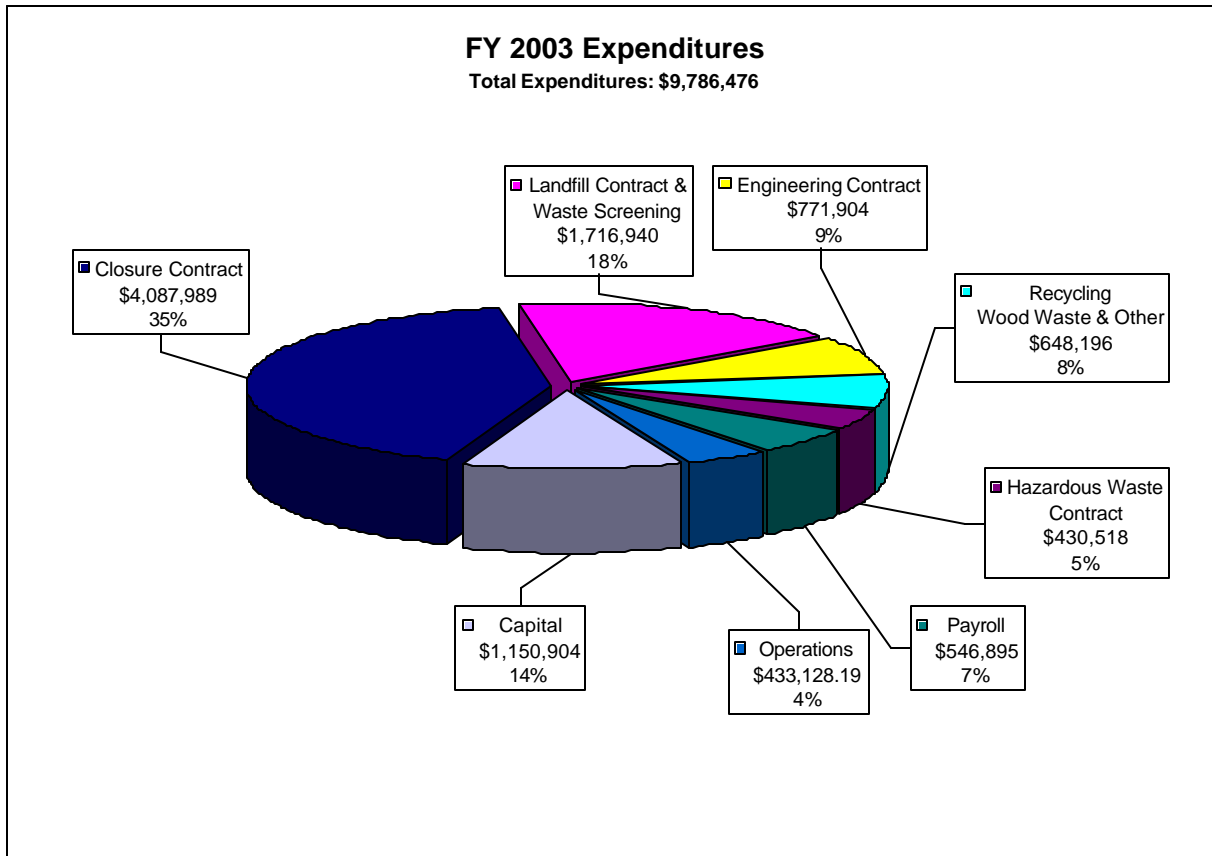
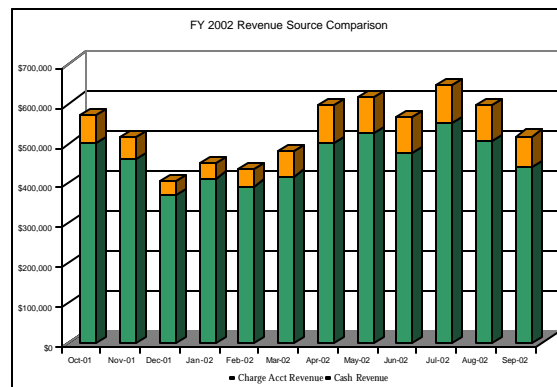
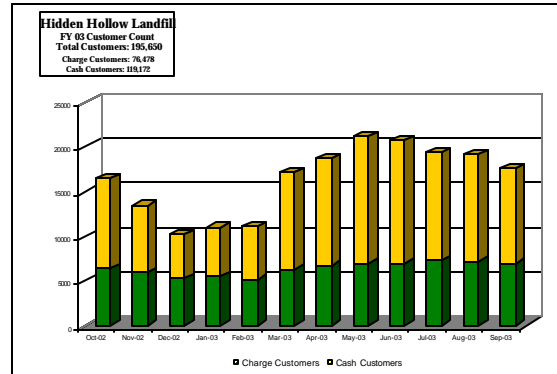


Figure 8 - Expenditures

As mentioned before, Fiscal Year 2003 was unusual because expenditures exceeded revenues. The major construction project undertaken as Phase 1 of the landfill closure created this unusual situation. For the next few years, until the next closure phase, the department expects revenues to exceed expenditures.

#### MONEY IN THE BANK

For many years, the department placed all revenues that exceed expenditures into a reserve fund. The department's reserve fund is for closure, post-closure, and long-term solid waste system projects. Presently, Ada County's reserve fund is sufficient to meet regulatory requirements for closure and post-closure care. Post-closure care is a minimum of 30 years after the landfill closes and includes monitoring and remediation of environmental issues that may arise after closure.



# WASTE MATERIAL

Waste entering the Hidden Hollow Sanitary Landfill arrives in all forms. However, for convenience and simplicity, this report classifies waste into four (4) basic categories:

- **Compacted Waste** - waste that arrives in a “packer” truck or commercial compactor.
- **Non-compacted Waste** - typically regular household trash; may be delivered by persons hauling their own waste.
- **Construction/Demolition Waste** - waste from any construction or demolition project. This waste type includes wood, metal, wallboard, rocks, concrete, dirt,

appliances, or any other material that does not compact well in the landfill. For the purposes of this report, asbestos-containing material is being included in this waste category although it has its own set of regulations and disposal standards.

- **Recyclable Wood** - wood waste placed in the wood recycling area. This material is recycled and not buried in the landfill.

The following chart shows the breakdown of materials received at the landfill in cubic yards.

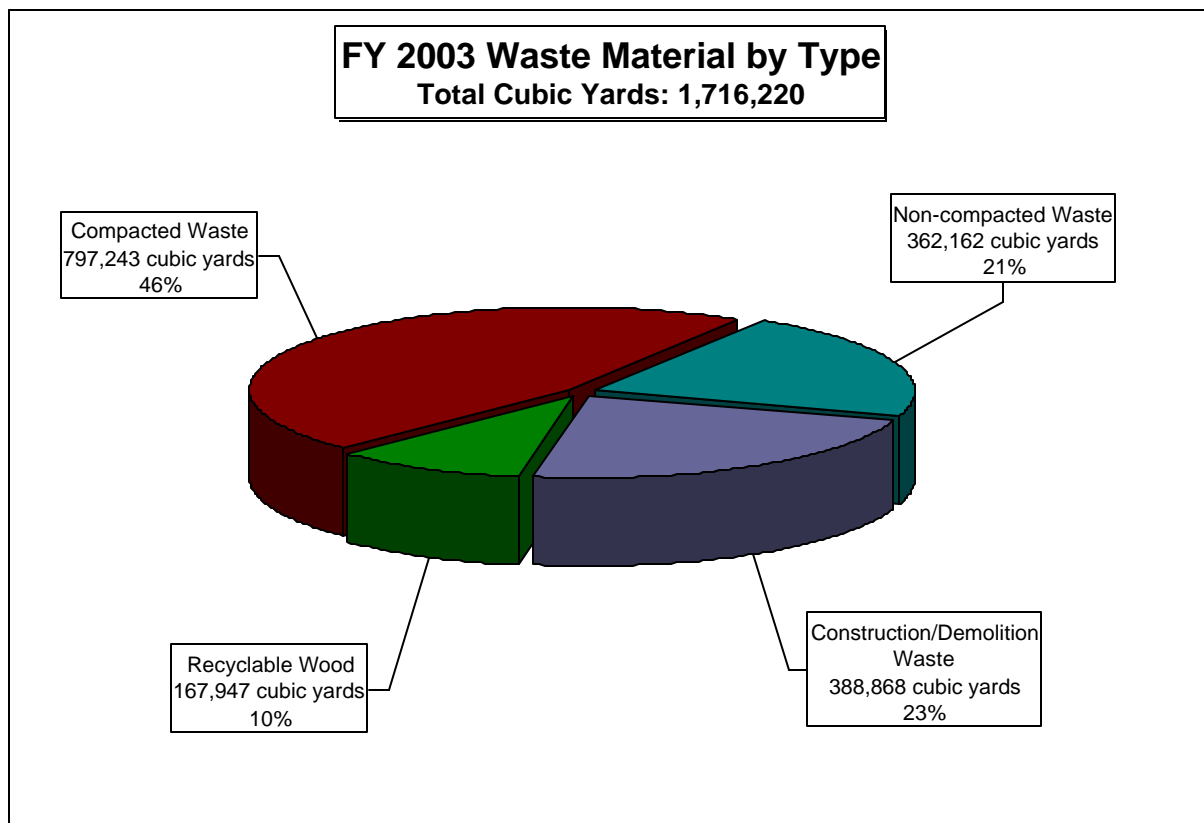


Figure 9 - Hidden Hollow Waste Types by Volume

# DIVERSION PROGRAMS

Diversion programs are efforts by the people and businesses of Ada County to reduce the quantities of reusable materials wasted by disposal in the Landfill. Much of the material in the waste-stream is recyclable or reusable.

Three highly successful diversion programs occur in Ada County:

- On-site recycling at the Landfill;
- Curbside recycling;
- And hazardous waste collection.

Following are descriptions of these diversion efforts.

## LANDFILL RECYCLING PROGRAMS

At the Landfill, recycling programs serve two highly useful needs. First, they provide environmentally sound methods of putting reusable resources back into the marketplace. Second, they reduce the amount of material actually being disposed in the Landfill.

### WOOD WASTE RECYCLING

Through the rate-structure at the Landfill, customers are encouraged to separate and recycle wood. The Wood Waste Recycling Program takes any wood, whether in a processed form or in its natural state. Wood received at the recycling area is chipped on-site and then shipped away from the Landfill for fuel at an electricity co-generation facility, compost feedstock, or landscaping. Through this diversion program, Ada County recovers a reusable resource normally lost to disposal. This program removes a resource that would take up considerable space in the Landfill.

Enviro-Progress, Inc., a privately owned company, holds the contract for the wood waste-recycling program. This company is responsible for managing the wood recycling area, chipping the wood, and shipping to end-

users. Enviro-Progress, Inc., must find its own markets for the chipped material.

The Wood Recycling Program is the most successful recycling program at the Landfill. By the end of Fiscal Year 2003, more than 59 million pounds (over 29,910 tons) of wood was hauled from the Landfill.

### USED TIRES

Idaho state law prohibits disposal of tires (or parts of tires) in landfills. For the convenience of Ada County residents, the Landfill accepts limited quantities of tires at an additional fee. Ada County ships the tires from the area for recycling into other uses.

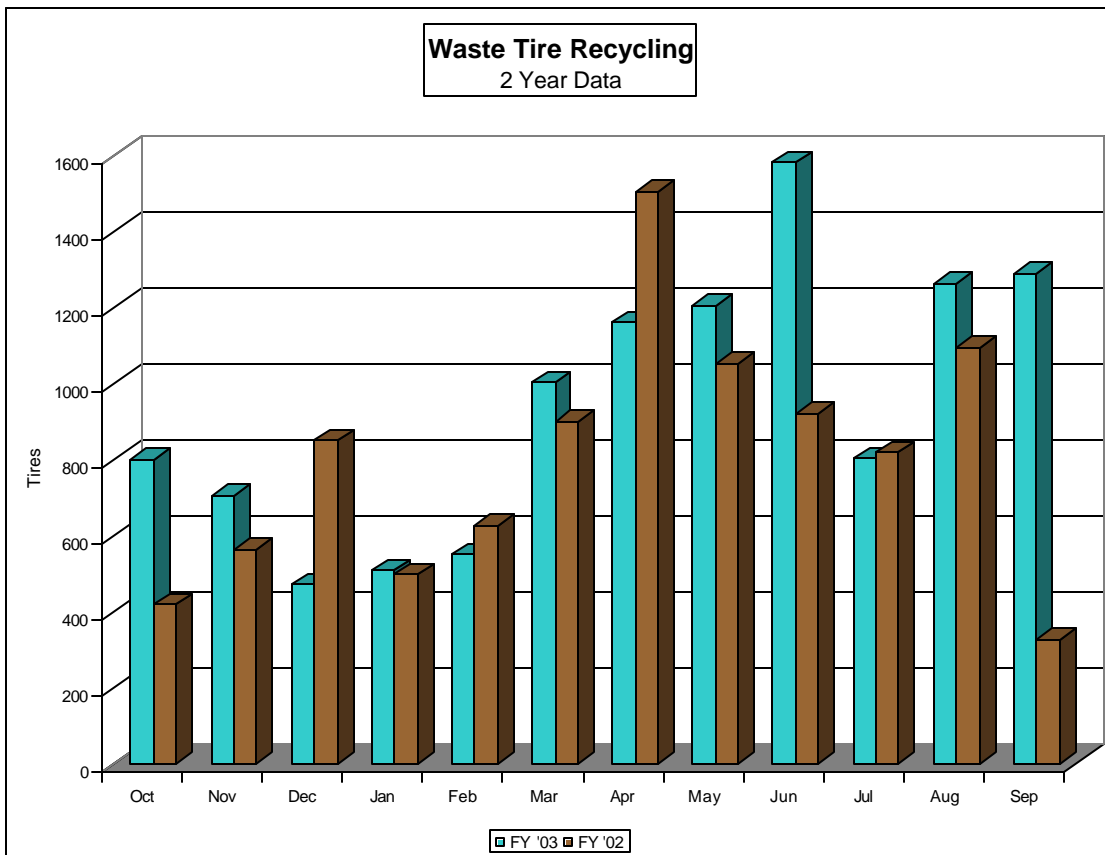
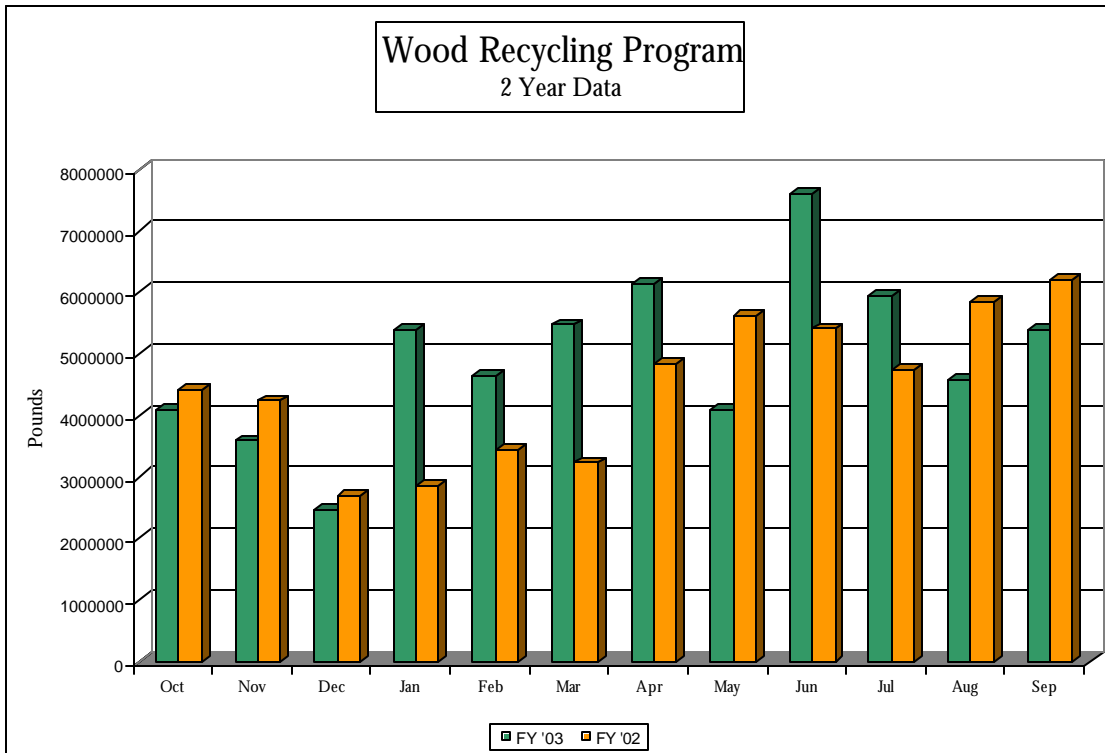
### REFRIGERATION UNITS

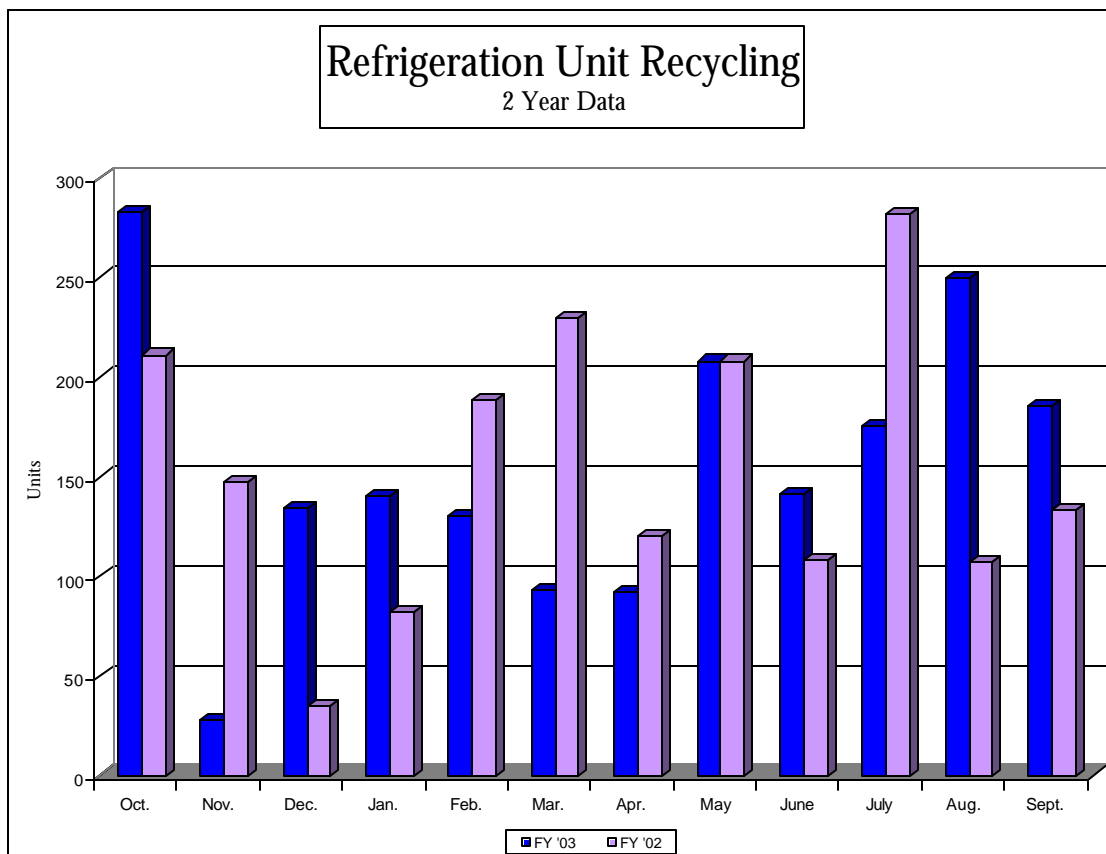
Unlike other appliances, refrigerators, freezers and air conditioners pose particular problems at landfills. Appliances with refrigeration units contain Freon, a "greenhouse gas" regulated by the US EPA. Deliberate or inadvertent release of Freon to the atmosphere violates Federal law and is subject to prosecution and severe fines. If placed in the landfill, the refrigeration unit can release its Freon when crushed by trash compaction equipment.

Besides Freon, the compressor motor in the refrigeration unit contains oil. Often the oil contains a known carcinogen, Poly-Chlorinated Biphenyl (PCB) and/or Chlorinated Fluorocarbons (CFC). Besides being a health risk, the oil is liquid and Federal law bans liquids from disposal in landfills. To address these issues, a privately owned firm, specializing in Freon recovery and compressor oil recovery, removes the refrigeration units from the Landfill.

Although refrigeration units are of special concern, there is a positive side to collecting refrigeration units separately from the waste stream. Once a qualified firm removes the Freon and compressor oil, nearly 100% of the appliance is recyclable.

The following pages are graphic illustrations of the various landfill diversion programs.





## HOUSEHOLD HAZARDOUS MATERIAL

A highly successful part of the on-site diversion/recycling efforts occurs at the Household Hazardous Materials Collection Facility. Ada County's hazardous materials contractor segregates material received in the program into basic categories. A large portion of the material is recyclable or reusable in some fashion. With the exception of the ReUse Program available at the Facility, the following materials are packaged and shipped to disposal facilities where a majority of the materials are recycled or reused.

Based on a waste management hierarchy set by Ada County, Ada County's contractor distributes materials collected in the Program in to the following categories:

- Reuse
- Recycle
- Incinerate
- Landfill

Fortunately, Ada County's hazardous materials contractor, MSE Environmental,

reuses or recycles over 85% of the material collected (based on weight) with only 14% (by weight) being incinerated.

### REUSE PROGRAM

At the Facility, material arriving in its original container, is at least half full, is in good condition, and is not a banned material is placed on shelves and offered to the public free of charge. Ada County would rather see this material used up than disposed. People taking advantage of the program used more than 35,000 pounds of material.

### OIL-BASED PAINT

The Facility receives a large quantity of oil-based paint and other flammable liquids. Because these materials are both flammable liquids, the contractor combines them for use as fuel supplement. The Facility shipped out more than 193,600 pounds of oil-based paint

and flammable liquids collected in the Hazardous Materials Collection Program.

#### AUTOMOTIVE BATTERIES

The largest single category of material received in the Program is automotive batteries. These are nearly 100% recyclable. A recycling company drains the acid and removes the lead cores. After cleaning, they mix the acid with new acid for use in new batteries. They melt down the lead cores to form new cores. Finally, they take the plastic cases, crush and melt them for use in forming new battery cases. Last year, the Facility shipped more than 208,00 pounds of batteries to the battery recycler.

#### LATEX PAINT

Although not a hazardous material, the Program accepts latex paint. As a liquid, Federal law prohibits its disposal in landfills. There is a demand for the pigment found in latex paint. Ada County's contractor ships the paint to a facility in California where they dry the paint to recover the pigment. The

California facility sells the pigment to companies that color cement with it. The Facility shipped 177,473 pounds of latex paint from the Facility last year.

#### MOTOR OIL AND ANTI-FREEZE

Thermo-Fluids recycles the motor oil and anti-freeze collected in the Program. Last year, Thermo-Fluids picked up more than 118,130 pounds of motor oil and 36,360 pounds of anti-freeze.

#### OTHER ITEMS

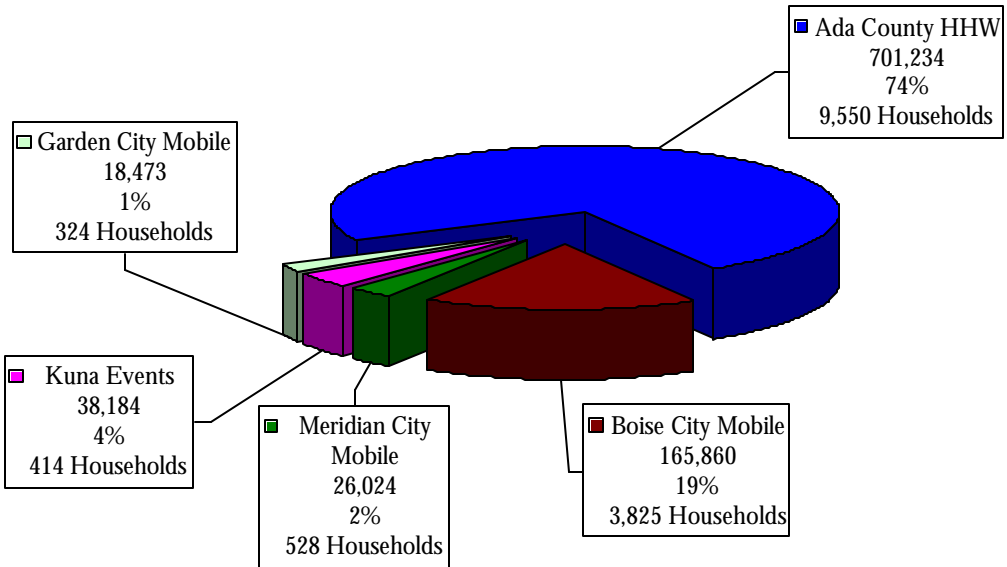
The Program receives several other categories of material, although in lesser quantities. As with the categories listed above, these too are recycled or reused. Included in this category are cathode ray tube devices -- computer monitors and televisions. The Facility shipped more than 44,500 pounds of additional items.

The following charts summarize the fiscal year for the Household Hazardous Materials Collection Program.



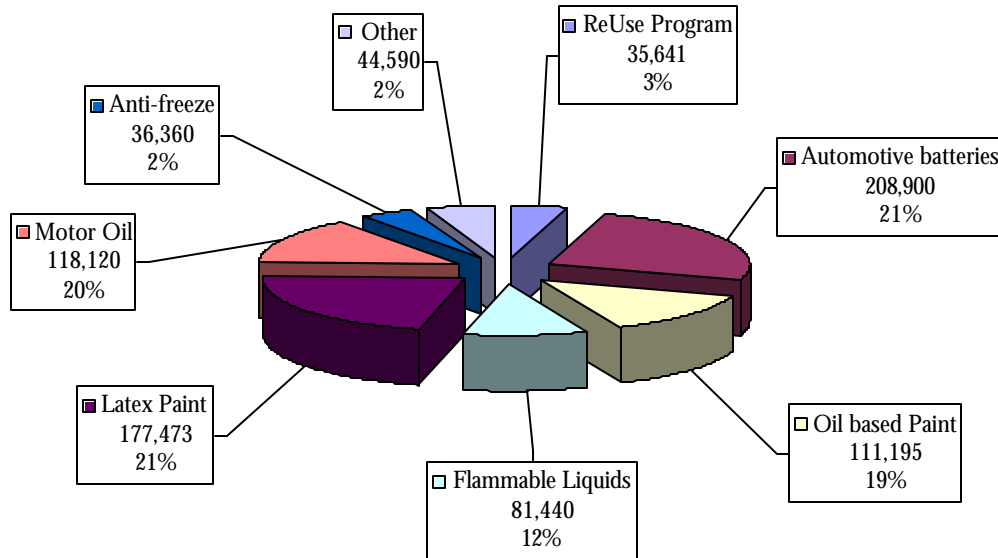
# FY 2003 Household Hazardous Material Collection by Location

Total Pounds Collected: 949,775  
Total Households Served: 14,641



# FY 2003 HHW Material Recycled

Total Pounds Recycled: 813,719



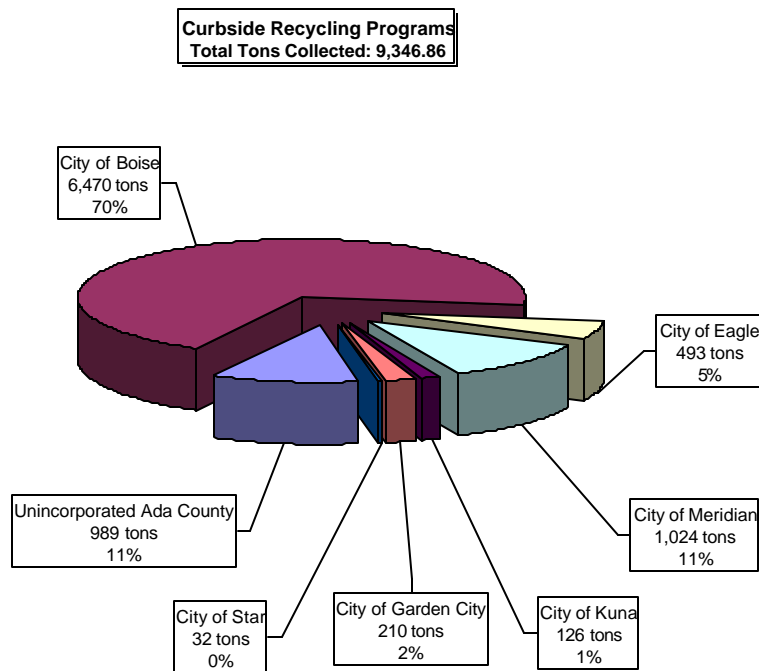
# CURBSIDE RECYCLING

Although curbside recycling is not an on-site landfill project, the Ada County Solid Waste Management Department encourages curbside recycling as a method of waste diversion and reduction. Many residents in the County take advantage of the convenience of the curbside recycling programs.

Presently, Ada County is the only county within the State of Idaho where every single-family residence may access curbside

recycling. The department wishes to acknowledge the citizens of Ada County for their outstanding efforts in waste reduction and waste diversion.

Ada County and city residents placed over 9,340 tons of material at curbside for recycling. This number does not reflect the additional efforts of residents and businesses that take their recyclable commodities to recycle centers.



# APPENDICES

## Appendix - A

Ada County  
Curbside Recycling Program  
Commodities Collected by BFI  
(Measured in Tons)

Commodity	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
ONP	43.63	46.95	42.64	48.91	42.09	43.80	50.06	51.76	40.66	44.93	44.90	47.74	548.07
MWP/OCC	3.92	4.22	3.84	4.40	3.79	3.94	5.69	6.00	4.62	5.10	5.10	5.43	56.05
Plastic	2.17	2.32	2.10	2.41	2.08	2.17	2.62	2.74	2.12	2.34	2.35	2.49	27.91
Tin	1.38	1.49	1.35	1.55	1.34	1.39	1.68	1.77	1.36	1.51	1.50	1.60	17.92
Aluminum	18.08	19.46	17.67	20.27	17.44	18.15	23.77	25.05	19.30	21.35	21.32	22.67	244.53
OMG	7.31	7.87	7.15	8.20	7.05	7.34	8.86	9.34	7.19	7.95	7.95	8.45	94.66
Totals	76.49	82.31	74.75	85.74	73.79	76.79	92.68	96.66	75.25	83.18	83.12	88.38	989.14

ONP = Newspaper

MWP/OCC = Recovered Paper/Cardboard Boxes

Plastic = #1, #2, #3

Tin = Steel "Tin" Cans

OMG = Magazines and Catalogs

## Appendix - B

City of Boise  
Curbside Recycling Program  
Commodities Collected by BFI  
(Measured in Tons)

Commodity	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
ONP	322.73	312.34	364.20	306.63	276.08	279.51	309.33	302.56	276.14	289.77	273.17	281.52	3593.98
MWP/OCC	29.03	28.09	32.76	27.58	24.83	25.14	35.16	34.39	31.39	32.94	31.05	32.00	364.36
Plastic	15.96	15.44	18.00	15.16	13.65	13.82	16.15	15.79	14.36	15.13	14.26	14.70	182.42
Tin	10.24	9.91	11.56	9.73	8.76	8.87	10.36	10.14	9.24	9.71	9.15	9.43	117.1
Aluminum	133.75	129.45	150.94	127.08	114.42	115.84	146.88	143.66	131.09	137.59	129.71	133.67	1594.08
OMG	54.08	52.35	61.04	51.39	46.27	46.85	54.74	53.55	48.86	51.28	48.34	49.82	618.57
Totals	565.79	547.58	638.5	537.57	484.01	490.03	572.62	560.09	511.08	536.42	505.68	521.14	6470.51

ONP = Newspaper

MWP/OCC = Recovered Paper/Cardboard Boxes

Plastic = #1, #2, #3

Tin = Steel "Tin" Cans

OMG = Magazines and Catalogs

## Appendix - C

City of Eagle  
Curbside Recycling Program  
Commodities Collected by BFI  
(Measured in Tons)

Commodity	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
ONP													
MWP/OCC													
Plastic													
Tin													
Aluminum													
OMG													
<b>Totals</b>	<b>42.44</b>	<b>45.60</b>	<b>48.97</b>	<b>46.67</b>	<b>32.47</b>	<b>33.11</b>	<b>46.50</b>	<b>45.21</b>	<b>36.44</b>	<b>34.46</b>	<b>34.21</b>	<b>47.50</b>	<b>493.58</b>

With the City of Eagle, records for commodities collected are only kept for monthly totals.

- ONP = Newspaper
- MWP/OCC = Recovered Paper/Cardboard Boxes
- Plastic = #1, #2, #3
- Tin = Steel "Tin" Cans
- OMG = Magazines and Catalogs

## Appendix - D

City of Garden City  
Curbside Recycling Program  
Commodities Collected by BFI  
(Measured in Tons)

Commodity	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total		
ONP															
MWP/OCC					No monthly commodity breakdown is available for Garden City only the annual total.										
Plastic															
Tin															
Aluminum															
OMG															
Totals													210.08		

ONP = Newspaper

MWP/OCC = Recovered Paper/Cardboard Boxes

Plastic = #1, #2, #3

Tin = Steel "Tin" Cans

OMG = Magazines and Catalogs



## Appendix - E

City of Star  
Curbside Recycling Program  
Commodities Collected by BFI  
(Measured in Tons)

Commodity	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
ONP													
MWP/OCC													
Plastic					No monthly commodity breakdown is available for the city of Star only the annual total.								
Tin													
Aluminum													
OMG													
Totals													32.43

ONP = Newspaper

MWP/OCC = Recovered Paper/Cardboard Boxes

Plastic = #1, #2, #3

Tin = Steel "Tin" Cans

OMG = Magazines and Catalogs

## Appendix - F

City of Meridian  
Curbside Recycling Program  
Commodities Collected by BFI  
(Measured in Tons)

Commodity	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
ONP	53.71	54.44	60.18	53.38	48.95	48.88	53.62	56.31	49.25	48.67	47.33	55.66	630.38
MWP/OCC	5.79	5.87	6.49	5.76	5.28	5.27	5.79	6.07	5.31	5.25	5.10	6.00	67.98
Plastic	5.35	5.43	6.00	5.32	4.88	4.87	5.35	5.61	4.91	4.85	4.72	5.55	62.84
Tin	2.55	2.58	2.85	2.53	2.32	2.32	2.54	2.67	2.33	2.30	2.24	2.64	29.87
Aluminum	1.40	1.42	1.57	1.40	1.28	1.28	1.40	1.47	1.29	1.27	1.24	1.46	16.48
OMG	18.52	18.77	20.75	18.40	16.88	16.85	18.49	19.41	16.98	16.78	16.32	19.19	217.34
Totals	87.32	88.51	97.84	86.79	79.59	79.47	87.19	91.54	80.07	79.12	76.95	90.5	1024.89

ONP = Newspaper

MWP/OCC = Recovered Paper/Cardboard Boxes

Plastic = #1, #2, #3

Tin = Steel "Tin" Cans

OMG = Magazines and Catalogs

## Appendix - G

City of Kuna  
Curbside Recycling Program  
Commodities Collected by BFI  
(Measured in Tons)

Commodity	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
ONP	5.82	7.10	7.72	7.61	5.21	4.63	7.35	8.22	6.52	6.38	5.61	6.55	78.72
MWP/OC C	0.63	0.77	0.83	0.82	0.56	0.50	0.82	0.92	0.73	0.71	0.72	0.80	8.81
Plastic	0.58	0.71	0.77	0.76	0.52	0.46	0.76	0.85	0.67	0.66	0.66	0.74	8.14
Tin	0.28	0.34	0.37	0.36	0.25	0.22	0.36	0.40	0.32	0.31	0.32	0.35	3.88
Aluminum	0.15	0.28	0.20	0.20	0.14	0.12	0.20	0.22	0.18	0.17	0.15	0.18	2.19
OMG	1.57	2.02	2.17	2.06	1.40	1.14	2.58	2.62	2.01	1.96	2.38	2.58	24.49
Totals	9.03	11.22	12.06	11.81	8.08	7.07	12.07	13.23	10.43	10.19	9.84	11.2	126.23

ONP = Newspaper

MWP/OCC = Recovered Paper/Cardboard Boxes

Plastic = #1, #2, #3

Tin = Steel "Tin" Cans

OMG = Magazines and Catalogs

# SPECIAL THANKS

The Solid Waste Management Department wishes to acknowledge and to extend a special “Thank You” to the following people and companies who helped in the preparation of this report.

## THE BOARD OF ADA COUNTY COMMISSIONERS

Judy Peavey-Derr, Chairman  
Rick Yzaguirre, Commissioner  
Fred Tilman, Commissioner

## THE SOLID WASTE MANAGEMENT DEPARTMENT STAFF

Dave Neal, Director  
Rene Phillips, Health Protection Officer  
Ted Hutchinson, Solid Waste Planner  
Ken Wall, Hazardous Material Coordinator  
Jim Krosschell, Account Clerk  
Kathie Van Curen, Account Clerk  
Brad Noble, Maintenance Mechanic  
Joey Smith, Maintenance Mechanic  
Judy Roell, Cashier  
Kathy Nelson, Cashier  
R.B. Nooner, Cashier  
Barbara Burkhardt, Cashier  
Jolie Rosenfield, Cashier

## THE BOISE PUBLIC WORKS DEPARTMENT - ENVIRONMENTAL DIVISION STAFF

Catherine Chertudi  
Angela Deckers  
Symantha Zeimet

## BFI WASTE SYSTEMS

Dave Fisher, General Manager  
Tanya Mericle

## SANITARY SERVICES COMPANY

Steve Sedlacek  
Bill Gregory

## J&M SANITATION

Tim Gordon

## ENVIRO-PROGRESS, INC.

Devon Downs

## MSE Environmental

Janice Oldemeyer  
Reggie Ruffin

## ENVIRONMENTAL EARTHWORKS, INC.

Joanne Haile  
Terry Haile