

FISCAL YEAR 2010  
YEAR END REPORT



## **Solid Waste Management Department**

### **2010 Year-End Report**

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Fiscal Year 2010 – Year-End Report Ada County<sup>[CU1]</sup>

**Solid Waste Management Department**  
**200 West Front Street – Boise, Idaho 83702**  
**Phone 208-577-4725 • Fax 208-577-4729**

[www.adaweb.net](http://www.adaweb.net)

**BOARD OF ADA COUNTY COMMISSIONERS**

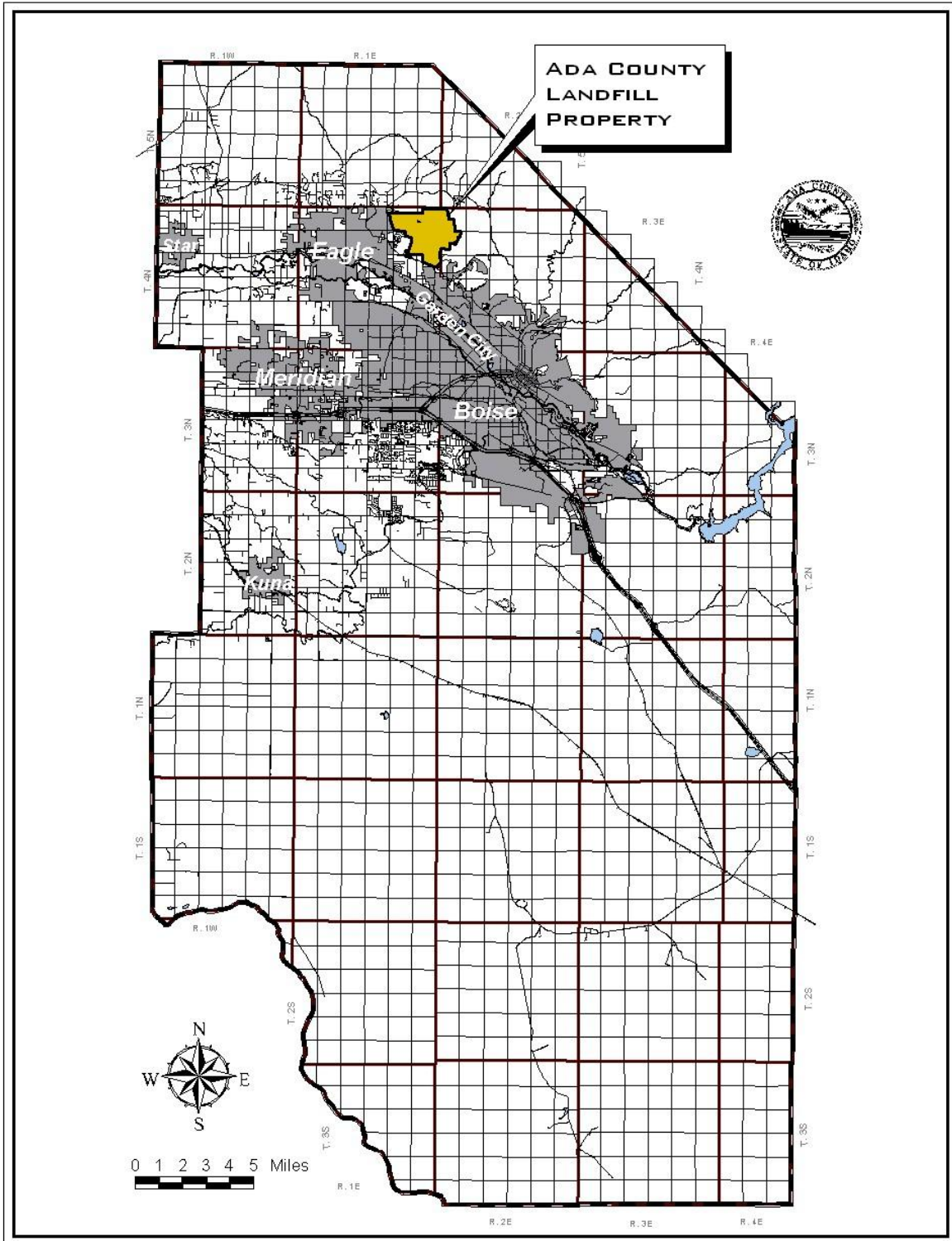
Fred Tilman, Chairman  
Sharon Ullman, First District  
Rick Yzaguirre, Second District

**CITY MAYORS**

J. Scott Dowdy, City of Kuna  
Tammy deWeerd, City of Meridian  
John G. Evans, City of Garden City  
David H. Bieter, City of Boise  
Nathan Mitchell, City of Star

**SOLID WASTE MANAGEMENT DEPARTMENT**

Ted Hutchinson, Deputy Solid Waste Director  
Ken Wall, Hazardous Materials Coordinator  
Rick Schreiber, Environmental Systems Coordinator  
Kurt Hunt, Landfill Operations Coordinator  
Kathie Herman, Account Clerk  
Jim Krosschell, Account Clerk  
Barbara Burkhardt, Cashier  
Kathy Foster, Cashier  
Carol Hyde, Cashier  
Kathy Nelson, Cashier



ADA COUNTY - The County's property (purchased for landfill needs) is highlighted.

## DEPARTMENT MISSION

*The Solid Waste Management Department seeks to pro-actively manage County waste disposal facilities, enforce applicable codes, and 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,*
- *Educational resource for local schools and service groups.*

# Executive Summary

## *Landfill Economics*

State of Idaho statutory obligations require Ada County to maintain a municipal solid waste disposal system. To meet these obligations, Ada County established the Solid Waste Enterprise Fund for the development and operation of the disposal system. Charged with the responsibilities of complying with the federal, state and local laws, rules and regulations, the County's Solid Waste Management Department oversees operation and management of the:

- County's landfills – Hidden Hollow and North Ravine;
- Household hazardous waste collection and disposal;
- Wood and organics recycling;
- Solid waste collection contract; and
- 2,700-acre multi-use Ada County Landfill Complex.

As an enterprise fund, the Solid Waste Management Department receives no tax-dollar support for the activities of the department. All departmental financial responsibilities are met through collection of user fees assessed at the landfill gate. User fees pay for all daily operations, payroll expense, long-term obligations (i.e., landfill closure and post-closure care), capital improvements, special waste collections, and diversion and recycling programs (i.e., household hazardous waste management and organics recycling).

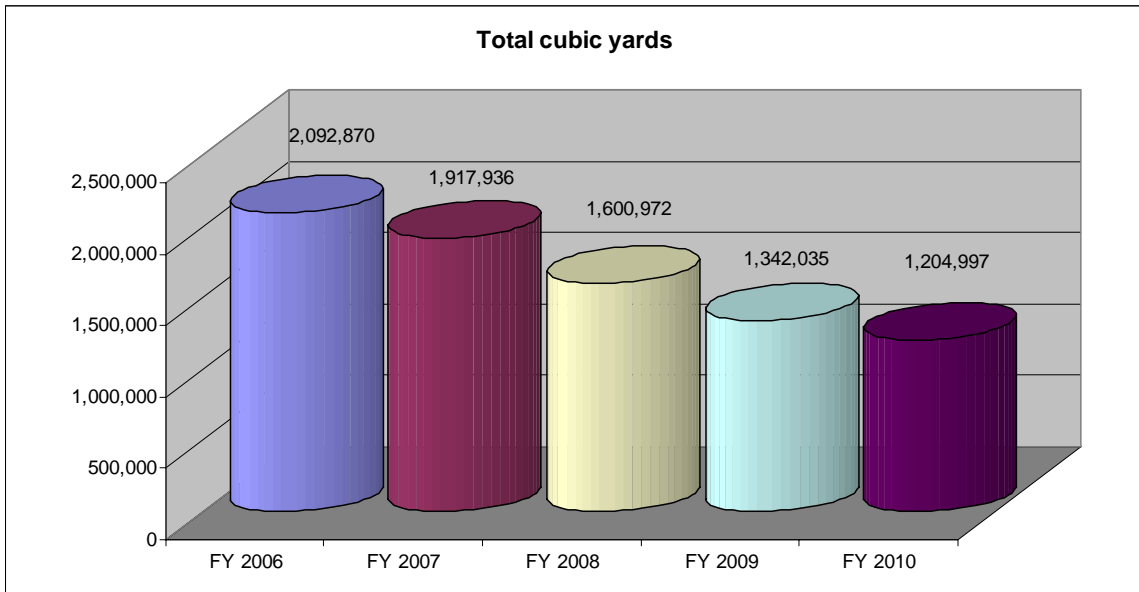
Across the board, waste disposal volumes at the landfill dropped. Total volume was down 10.21% from the previous year and over 42.42% in the last 5 years. For the landfill, drops in volume equate to loss of revenue. Loss of revenue means the department must look for ways to cut expenditures to avoid a decrease in the services provided by the department while meeting its statutory obligations.

# Financial Health

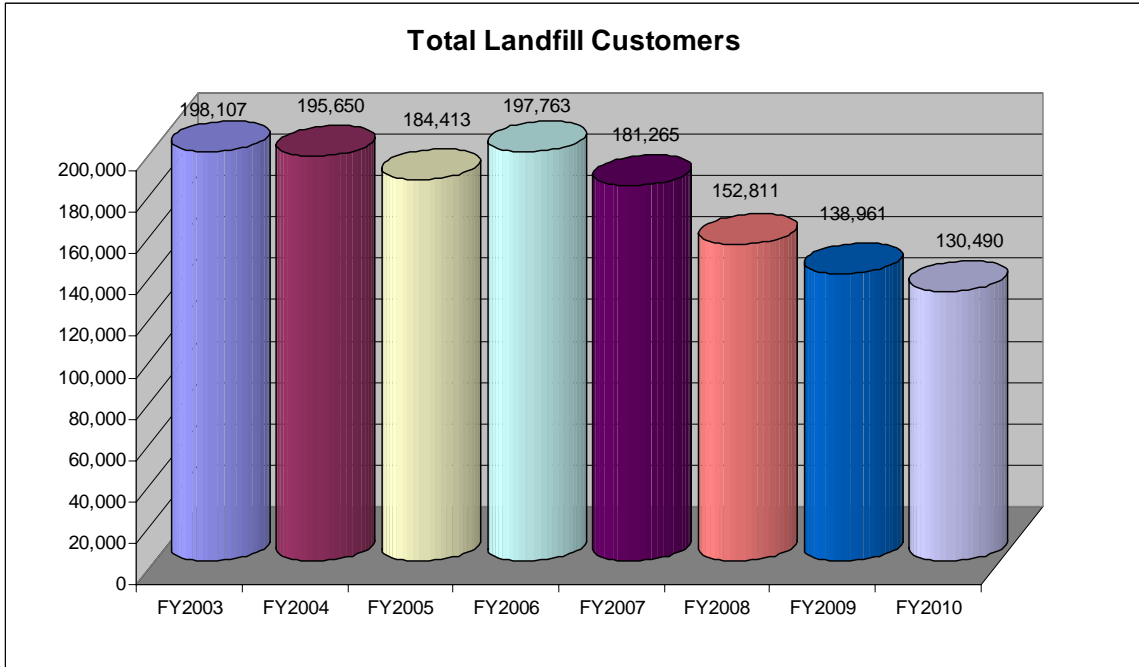
The Financial Health section of this report looks at expenditures and revenues, examines the impact of revenues on long-term planning, and looks at the effects on landfill programs subsidized by landfill user fees. This year's report contains graphs with volume comparisons, customer counts and program costs covering several years.

## *Landfill Operations*

Ada County's Solid Waste Management Department as stated was established by the Board of Ada County Commissioners as an Enterprise Fund. As an Enterprise Fund, the department is self-funded and self-supporting. No tax dollars are used for department operations. The primary source of department revenue is from the landfill user fees collected at the landfill gates.

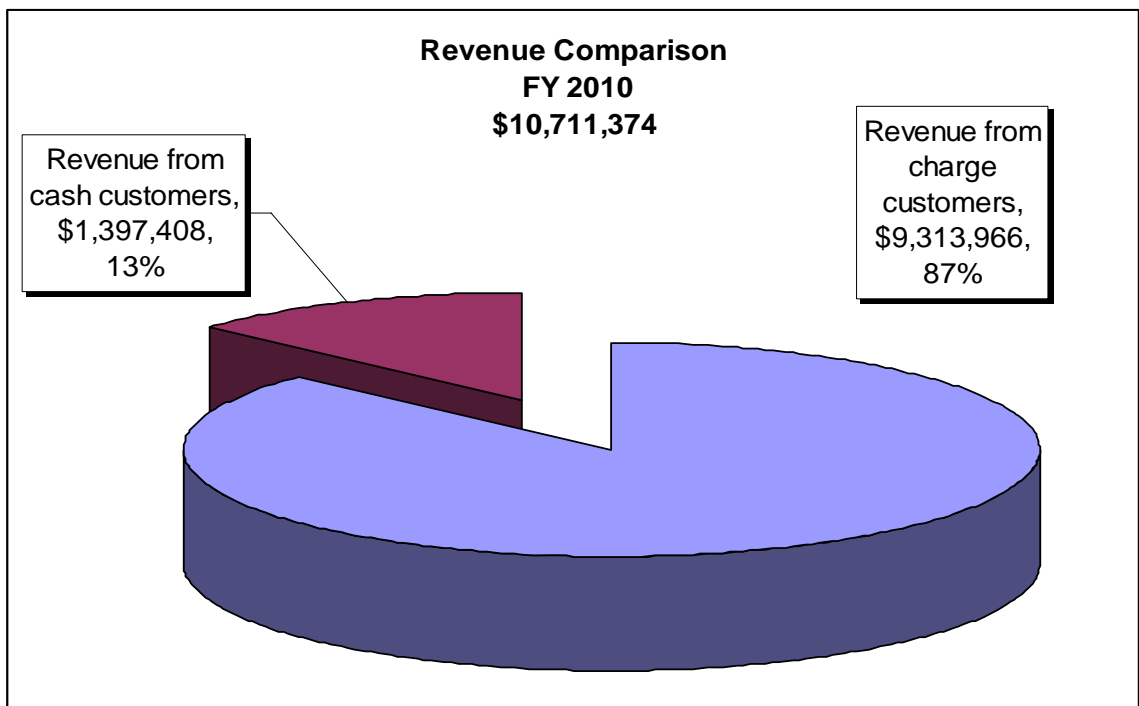


The department has adjusted its revenue projections to keep pace with the associated decline in landfill user fees as a result of the lower volumes through the gate at the landfill.



Each customer through the landfill gates represents revenue. On average for FY 2010, a typical customer delivered 9.23 cubic yards and paid \$82.09 per customer. When the regular haulers with charge accounts are removed from the equation, these figures drop to about three (3) cubic yards paying \$16.49 per customer. The contracted solid waste haulers provide the largest portion of waste received at the landfill. This is the trash collected for residents at the curbside.

The following chart compares the number of customer trips to the landfill by their method of payment (cash customer or charge customer).





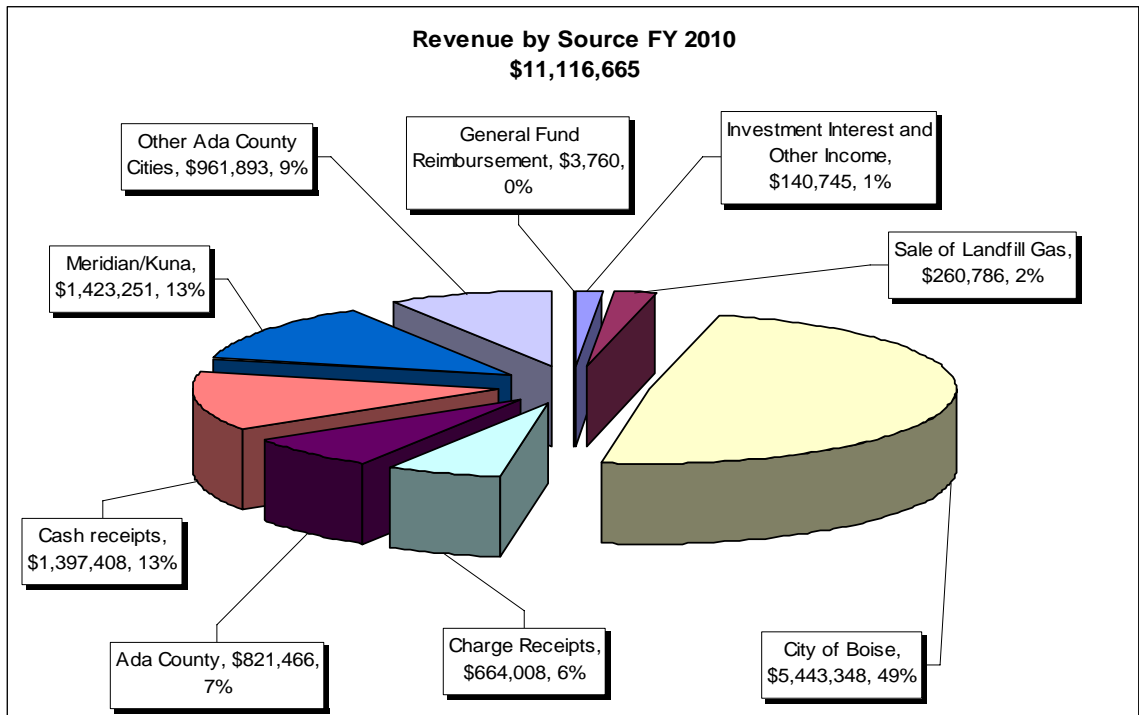
## Revenue and Expenditures in Detail

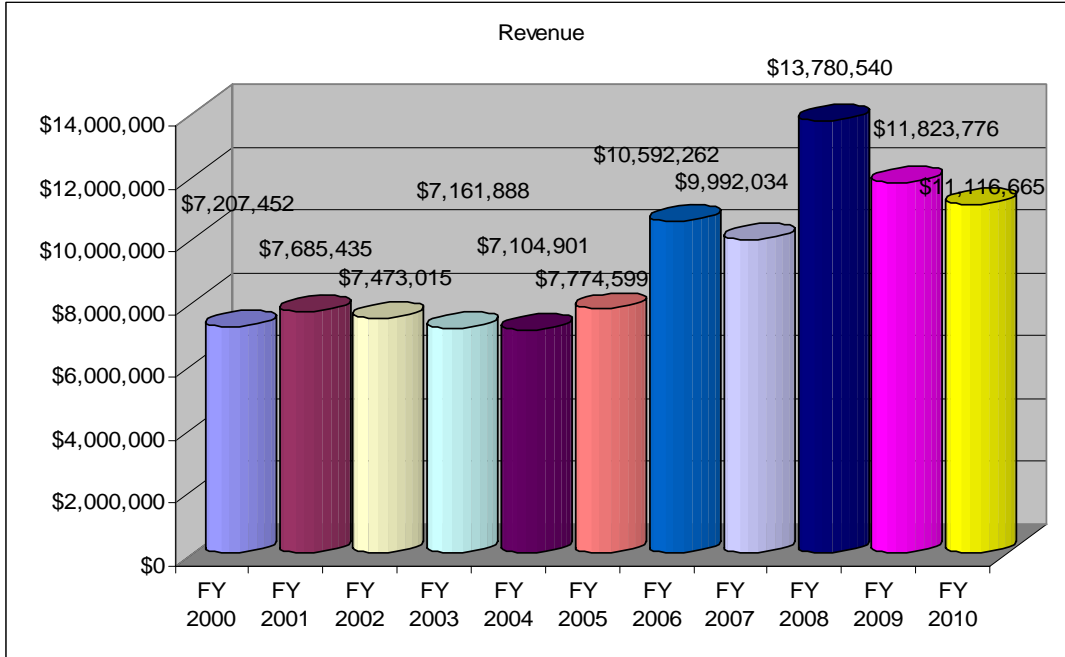
The revenue and expenditures go beyond just the daily operational items. Major expenditures occur on a periodic basis, and obligations for closure and post-closure expenses need to be accrued annually to ensure that the monies are available when needed.

The future expenditures for expansion of landfill capacity, closure and post-closure expenses, compliance with existing regulations, and anticipating new requirements are all factors affecting the financial health and capabilities of the solid waste disposal system.

The charts below show the revenue and its source for FY 2010 and then a look at total revenues over the last 11 years. It is important to track the history of the revenues to anticipate the revenues for the upcoming year and to budget appropriately.

Revenue by source is charted below.

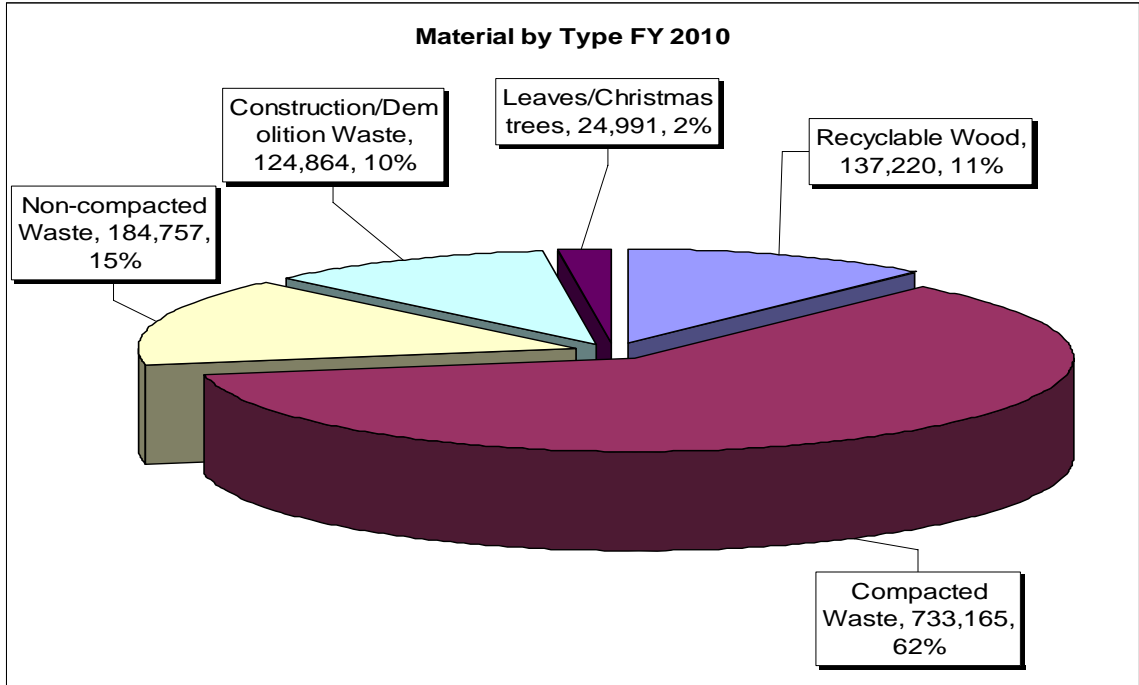




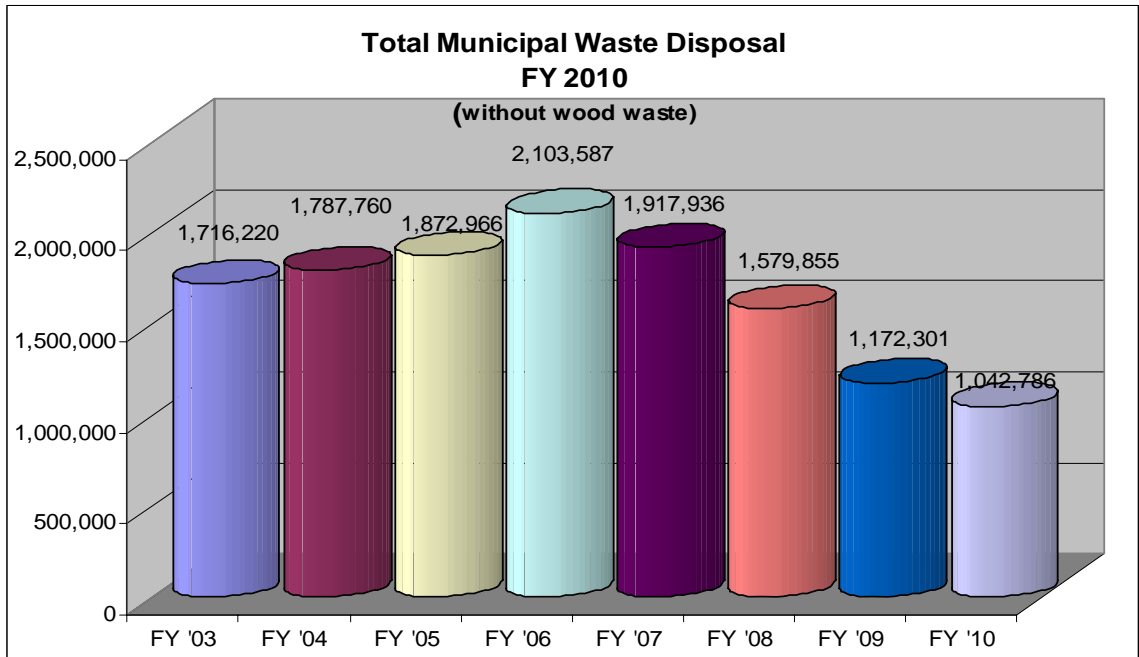
Fees collected at the landfill gate generate 87.87% of the department's revenue.

The next chart shows the amount of material received by the department by material type. The department tracks five (5) waste materials:

- Compacted waste
- Non-compacted waste
- Construction/demolition waste
- Recyclable wood
- Leaves/Christmas trees



The following chart is a comparison of the total number of cubic yards received at the landfill over an eight-year period.



EXPENDITURES BY CATEGORY

This section explains the expenditures for Fiscal Year 2010 with a look at the history and at the future needs.

**EXPENDITURES:**

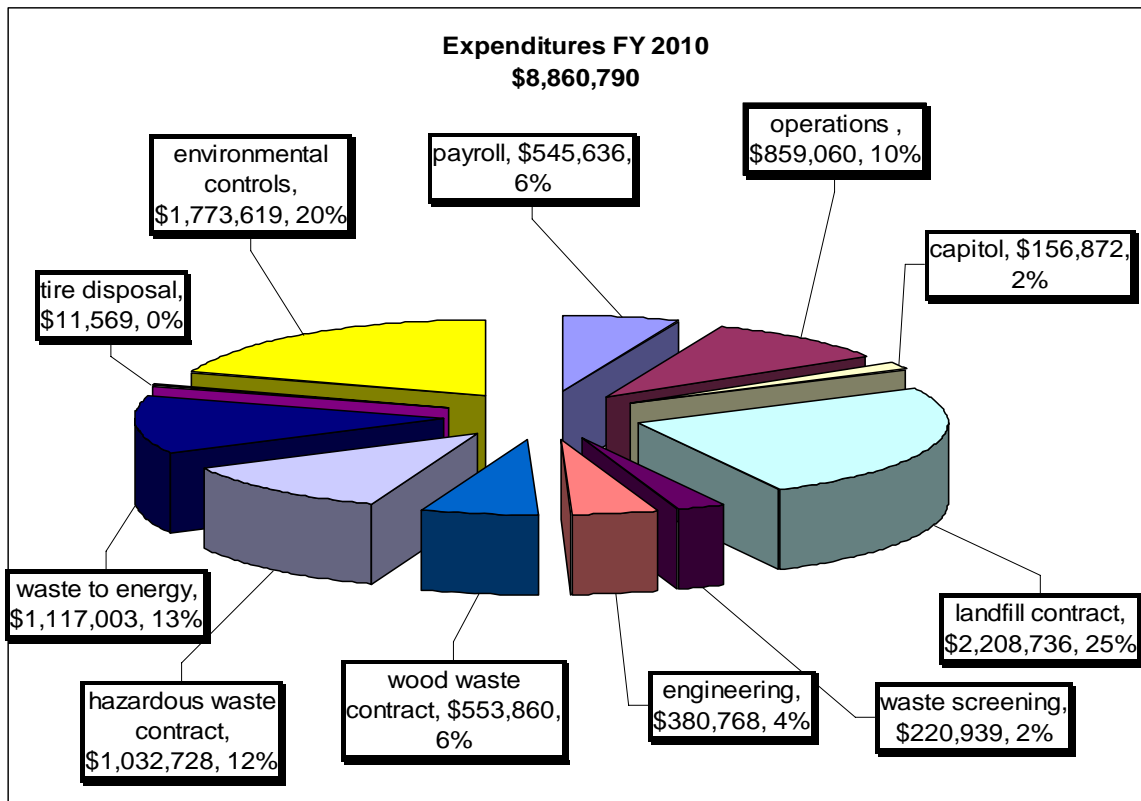
The Solid Waste Management Department oversees a variety of activities and contracts. The majority of departmental activities are centered on daily operations of the landfill. To accomplish the department’s mission, the department manages contracts for:

- ▶ Landfill services (\$2.21 million),
- ▶ Hazardous waste management (\$1.03 million),
- ▶ Wood and organics recycling (\$554,000), and
- ▶ Engineering services (\$381,000).

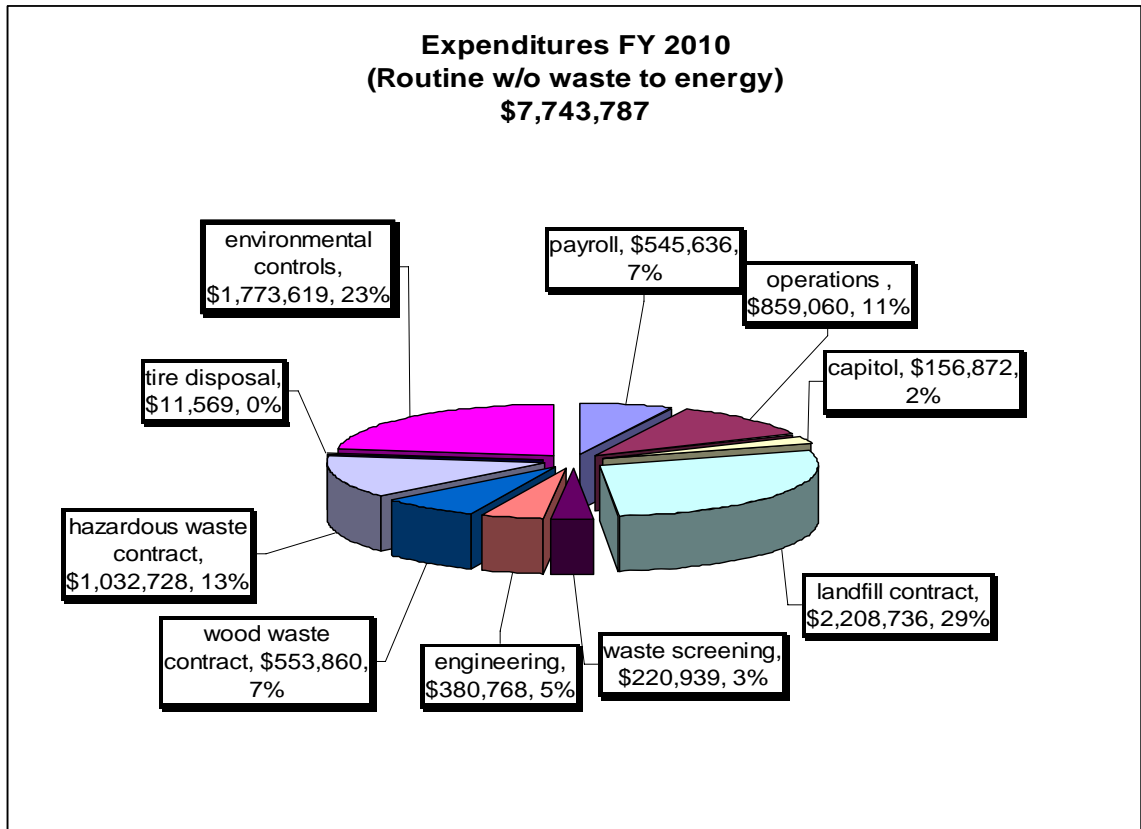
Beyond these contracts, the department spent more than \$4.69 million for:

- ❖ environmental controls (landfill gas collection),
- ❖ equipment maintenance,
- ❖ improvements and expansion in the North Ravine Cell landfill,
- ❖ payroll,
- ❖ capital expenditures, and other expenses.

The following chart shows the major expenditure categories for the department.

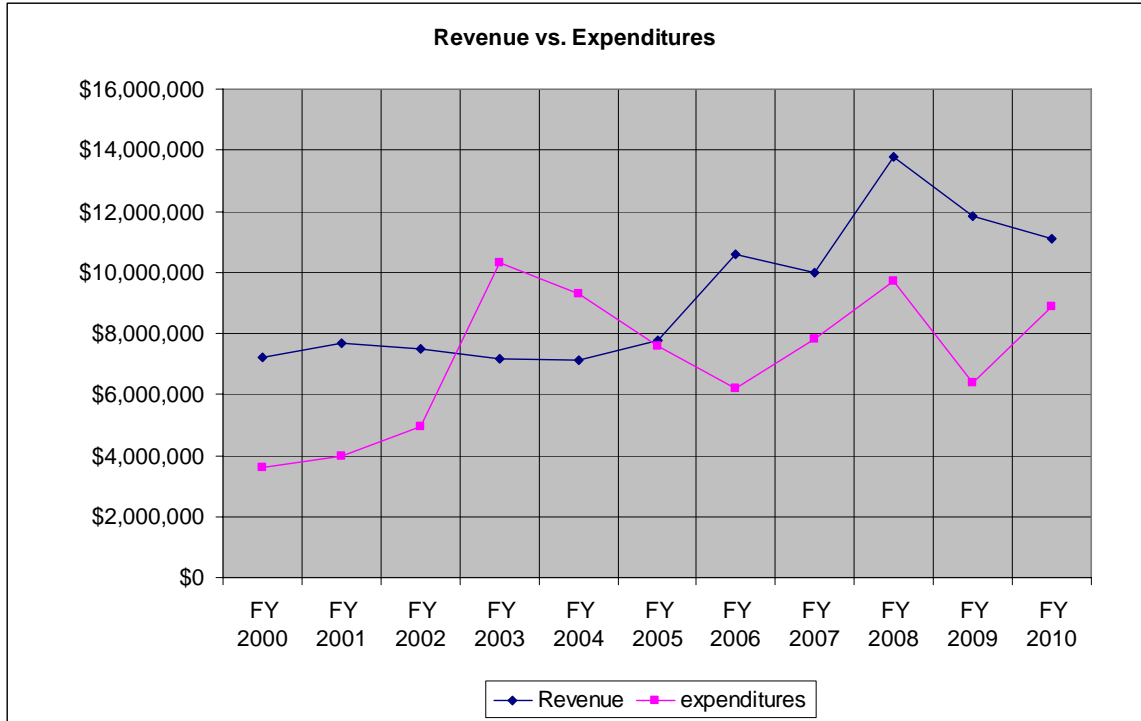


This chart looks at the routine expenses without the extraordinary expense of developing alternate waste to energy programs.



In years when revenue exceeds expenditure, the excess funds are placed in a special reserve account that is managed by the Ada County Treasurer’s Office. The reserve account is used for capital expenditures and major construction projects. It is also for long-term financial obligations for maintenance of the landfill property once landfill operations have ceased (post-closure). Ada County has a statutory obligation to care for the landfill for a minimum of thirty years after the landfill has closed.

In years where major construction projects are planned, a portion of the reserve account funds are included in the department’s budget to cover the contractual commitments of construction. These major projects often look like the department is operating in the ‘red’ by expending more money than it takes in. The following chart compares the department’s expenditures and revenues over a number of years.



Keep in mind that when revenue exceeds expenditure, the money is deposited in the reserve account. When expenditures exceed revenue, money is removed from the reserve account. As an enterprise fund, no tax dollars are collected or used for support of the department.

**The largest single expense** the department faces other than the closure of a disposal cell is construction of additional landfill space. In 2005, Ada County began expanding its landfill space by constructing the first stage of the North Ravine Cell (NRC). The NRC is the replacement landfill for the nearly full Hidden Hollow Landfill.

Being built in stages, the first NRC stage was finished in 2007. The 20-acre landfill cost over \$17 million. The project was paid for from the funds held in the department’s enterprise fund. The department began filling the first stage with trash on August 15, 2007. By the end of fiscal year 2008 (September 30, 2008), the first stage was nearly filled to its initial operating capacity.

NRC Stage 2 was constructed in FY 2009 and cost roughly \$7 million. As with all landfill projects, the funds were in the bank before a construction contract was issued. Funds must continually be accrued to ensure the enterprise fund is replenished in preparation for the next construction cycle and there is enough capacity constructed in each successive stage to provide the department with enough time to finance the next construction phase.

**FEES: DISCOUNTS, WAIVERS AND DONATIONS**

Because the Solid Waste Management Department operates as an enterprise fund, the fees collected at the gate pay for all department activities. The rates charged at the gate are established by the Board of Ada County Commissioners and are applied equally to all customers with a few exceptions as set forth by the Board of Ada County Commissioners.

CHARITABLE ORGANIZATIONS. Many charitable organizations become the dumping grounds for unusable items. These organizations are often inundated with items impossible for them to sell or to use. Because of the services they provide to the community, the Board of Ada County Commissioners has authorized a discounted rate for the waste they bring to the landfill. Without this discount, many of the organizations would be unable to continue many of their important services.

COMMUNITY SERVICE GROUPS often undertake projects to assist elderly or less fortunate individuals in maintenance of their homes and property. Typically a one-time project, there is often a considerable amount of trash collected by the groups. The landfill will waive fees for disposal of this waste. An example of this fee waiver is the Paint the Town organization's annual program.

Clean-up projects performed by other community groups or scouts benefit the community by gathering litter and illegally discarded items in public areas. Oftentimes, the waste hauling companies in the community donate their services to haul the collected trash. When these projects are undertaken, the County typically donates the disposal fees as authorized by the Commissioners.

For specified periods each year, the landfill accepts, at no charge, leaves and Christmas trees. When the department has the need, these items are processed into compost at the landfill for re-vegetation projects and erosion-control projects.

By far, the largest discount (in a dollar amount) is the discount offered for recyclable wood. Customers who separate their recyclable wood from their other trash receive a sizable discount for their wood placed in the wood-recycling area. As noted in this report, over 137,220 cubic yards of wood was shipped away from the landfill for other uses.

# What We Do

## The Department

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Although the department has the large responsibility of ensuring proper disposal of Ada County's municipal solid waste, it does so with a staff of ten, four of whom work part-time.

The Solid Waste Management Department is part of Ada County government. As such, the Deputy Director reports to the Director of Ada County Operations. All daily operational decisions are under the discretion of the Deputy Director with long-term plans and needs discussed with Director of Ada County Operations and the Board of Ada County Commissioners.

### 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 Deputy Director are a Landfill Operations Coordinator, Environmental Systems Coordinator, Hazardous Materials Coordinator, two Account Clerks and four part-time Cashiers. These employees:

- ▶ Oversee contracts for waste collection, landfill operation, wood-waste recycling, and hazardous waste screening;
- ▶ Account for department receipts and expenditures;
- ▶ Collect landfill disposal fees;
- ▶ Provide public education and outreach programs about solid and hazardous waste disposal, recycling, and waste reduction.

#### THE STAFF

The Deputy Director directs the overall daily activities at the landfill and provides short- and long-range analysis, plans 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.

The Environmental Systems Coordinator oversees operation and maintenance of the landfill-gas extraction system, leachate collection and control systems, irrigation system, and other facilities located at the Hidden Hollow Sanitary Landfill. This position is also responsible for creating reports regarding systems function and operation.



## ADA COUNTY LANDFILL

The Hazardous Materials Coordinator oversees operation and maintenance of the County's hazardous materials collection program. This position works with the municipalities in the County to provide a seamless program for proper disposal of household hazardous wastes.

The Landfill Operations Coordinator oversees the daily operation and landfill activities. This position works directly with the onsite contractors in the daily receipt, placement and cover of the waste into the landfill or through the wood-waste recycling area.

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

Supplementing the County's staff are temporary employees from a contracted employment services company. These supplemental employees help with supervising Sheriff Inmate Labor Details in grounds maintenance, litter control and onsite routine grounds maintenance.

## Hazardous Waste Division



Ada County's Household Hazardous Materials Collection Facility

## Hazardous Material Management

Since 1988, Ada County has proactively worked to keep household hazardous waste 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, the County opened its Household Hazardous Material Collection Facility operated by a privately owned firm experienced in hazardous waste management. Ada County is contracted with PSC Environmental for hazardous material management and disposal. PSC Environmental operates the facility according to an operations plan and contract documents. For fiscal year 2010, the County paid PSC Environmental \$1,032,728.



The hazardous waste management contract includes the requirements of operating the mobile hazardous waste collection program for the City of Boise. The City pays for the personnel services and collection materials, but Ada County pays for disposal of the hazardous wastes collected at the mobile sites.

The City of Boise maintains ten (10) sites – each site is open one day per month. The City of Meridian, through their franchise trash collection firm, maintains one (1) site that is open five

days per month. The City of Eagle also participates in the program with quarterly collections. The City of Kuna, through their franchise trash collection firm, has quarterly collections.

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 (PSC Environmental Services), County residents may bring their household hazardous materials such as paints, pesticides, fertilizers, cleansers, solvents and automotive products (oils, anti-freeze, batteries, etc.) to the Facility at no charge. Conditionally exempt small quantity generators (commercial enterprises that generate less than 220 pounds of hazardous wastes per month) may qualify to use the Facility services at a nominal cost.

During Fiscal Year 2010, more than 26,403 households participated in the collection program.

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, Eagle, Meridian, and Kuna.



## MOBILE COLLECTION – AN INTEGRAL PART

### 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 various sites around the City. More than 9,306 city households took advantage of the

collection sites in this last fiscal year.

### CITY OF MERIDIAN

Each Monday, 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. Almost 6,268 households took advantage of the Meridian collection site during Fiscal Year 2010.

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 week-long 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 to manage the household hazardous material collected during the last day of the event. The City of Kuna and J&M Sanitation also sponsor a quarterly household hazardous material collection. This fiscal year, 638 households participated in the household hazardous material collection events.

### CITY OF EAGLE

Quarterly, the City of Eagle sponsors collection locations for household hazardous waste. Over 393 residents in the Eagle area dropped off material during these collections.



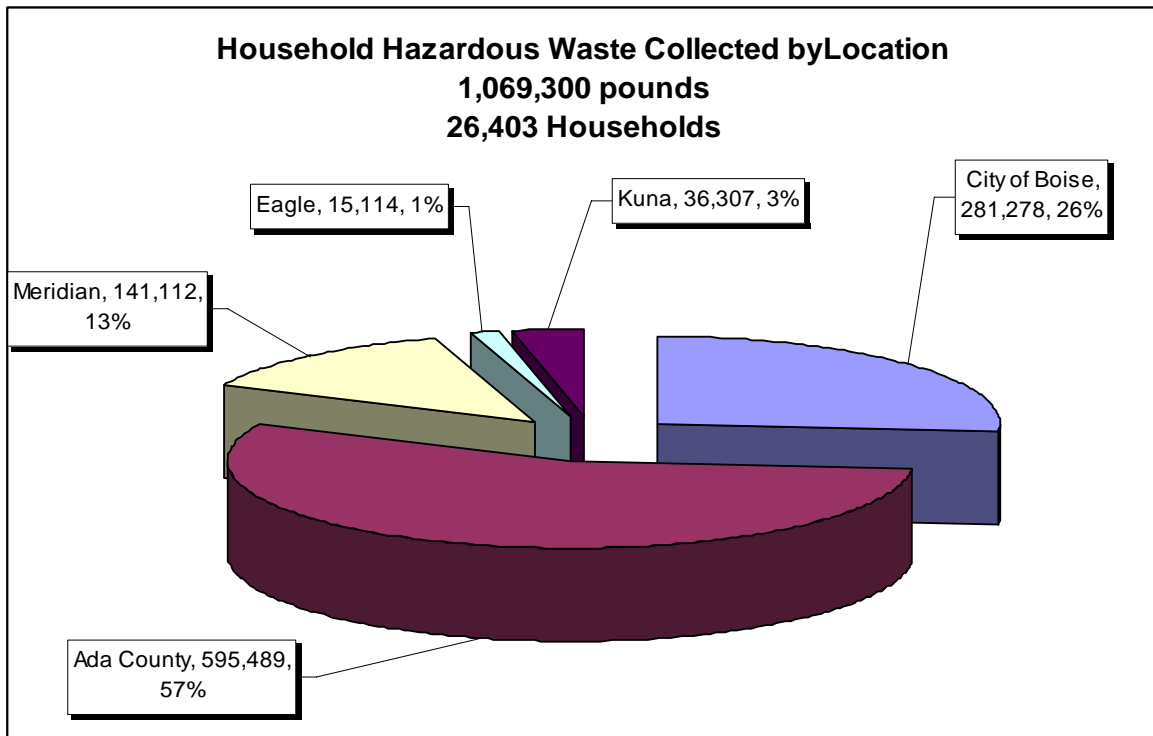
## COLLECTED MATERIALS

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, PSC, categorized and processed 1,069,300 pounds of material.

PSC segregates 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, PSC strives to recycle/reuse as much of the collected material as possible. This past fiscal year saw 920,827 pounds (86%) recycled/reused, with 148,473 pounds (14%) destroyed at an off-site incinerator.

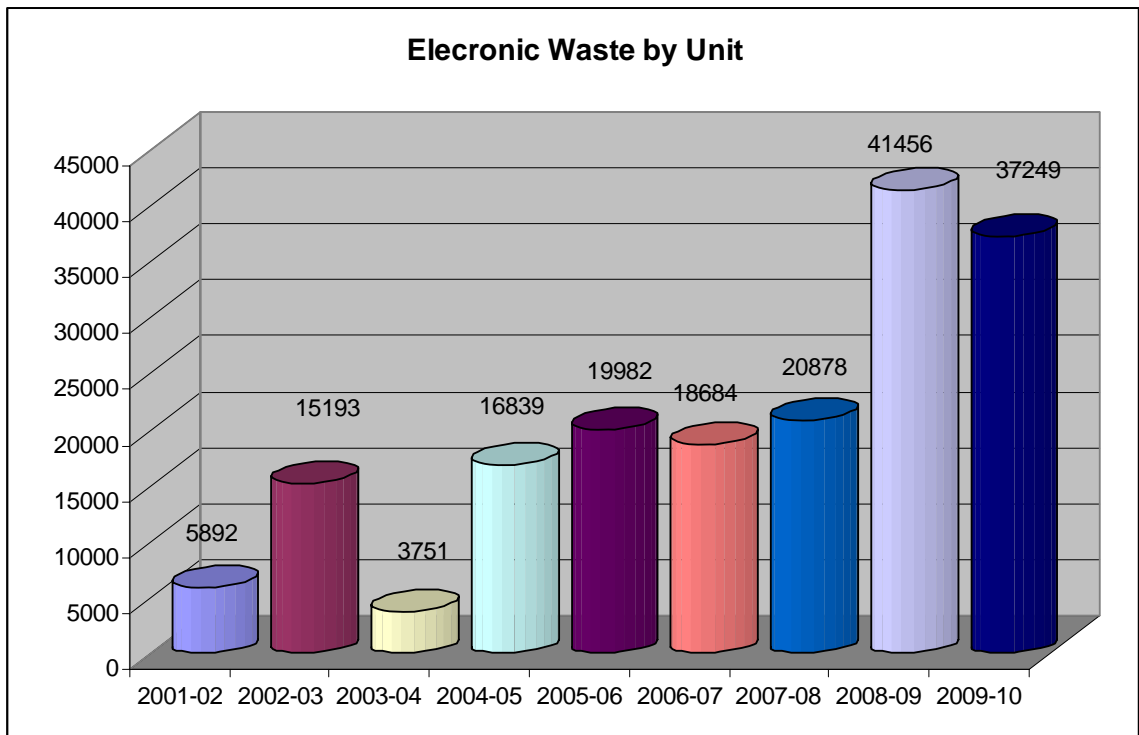


While this program is free of charge to participating residents, Ada County pays the cost of disposal of the household hazardous materials collected in the countywide program. Ada County wishes to express its appreciation to the participating municipalities that help make the program such a success.

## COMPUTER MONITORS AND TELEVISIONS

A real problem in the waste stream is electronics disposal. Modern electronics contain various hazardous or potentially hazardous components, such as heavy metals. Because technology changes so rapidly, computer equipment quickly becomes obsolete. Of particular concern to Ada County are computer monitors and television sets. This year has seen a large influx of television sets due to the new digital and flat screen technology.

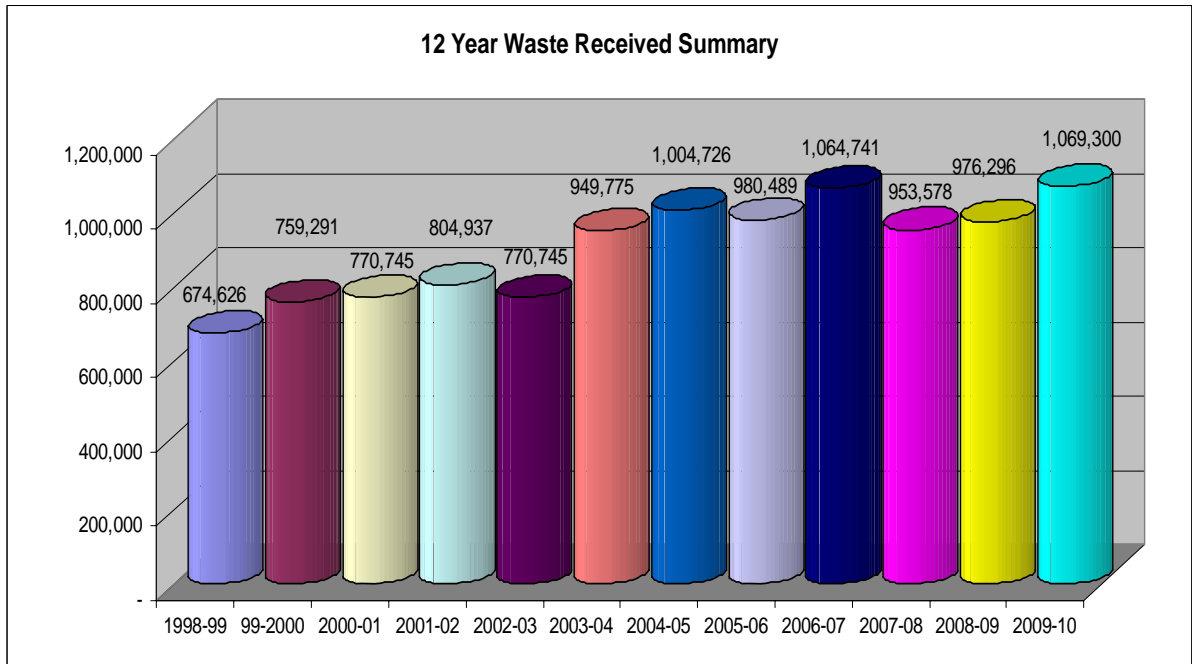
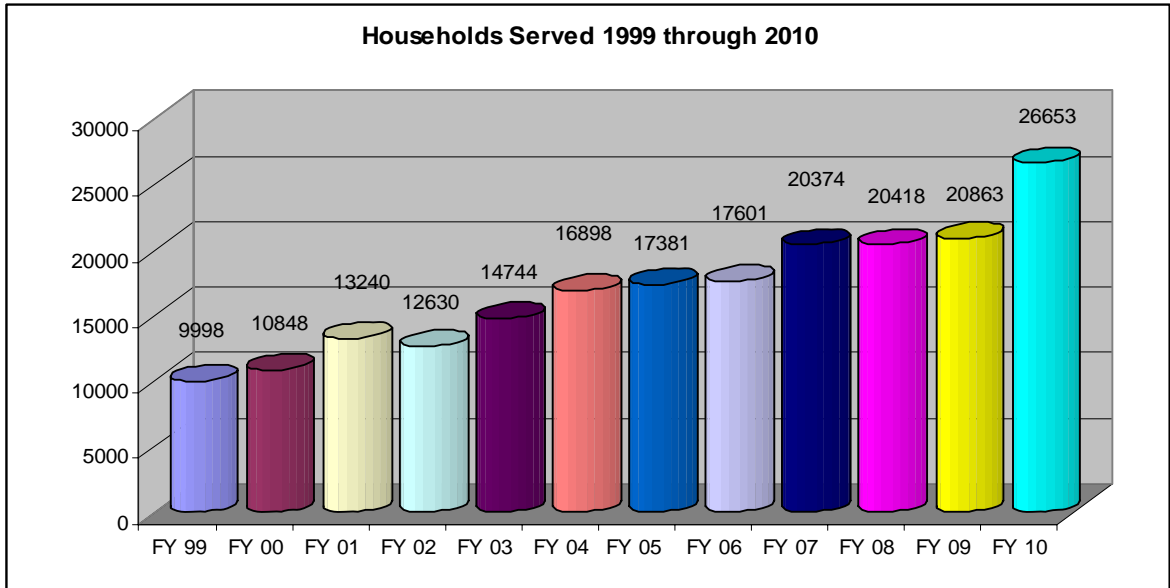
Monitors and television sets, and other electronic devices containing a cathode ray tube (CRT), contain up to eight pounds of lead. If the glass of the CRT is broken, the lead becomes leachable and can be a hazard to human health and the environment.



In Fiscal Year 2010, Ada County shipped more than 37,249 units (CRTs) to a recycling facility. Since the program began, Ada County has shipped over 169,580 units.

CRTs prepared for shipment to recycle center.





**T**he success of this program is directly attributable to the partners who have contributed so much to planning and execution. Ada County wishes to sincerely thank the following public agencies and private companies for their energy, resources and support that helped Ada County reduce the environmental threat to our community by over 9.7 million pounds.

Thank you:

- ▶ City of Boise
- ▶ City of Meridian
- ▶ City of Eagle
- ▶ Ada County Highway District
- ▶ Idaho Department of Environmental Quality
- ▶ Central District Health Department
- ▶ Allied Waste Services of Idaho
- ▶ Sanitary Services Company
- ▶ City of Kuna



## Environmental Division

The Environmental Division oversees the specialized systems for landfill gas, groundwater remediation, leachate management, and other mechanical/electrical systems around the landfill. One full-time employee is responsible for these various systems to ensure compliance with regulations and operating requirements.



Landfill Gas Well-drilling Rig.

### LANDFILL GAS MANAGEMENT

Landfill gas management continues to be a high priority for the department. Balancing the gas extraction system to optimize gas control for regulatory compliance is nearly a full-time job in itself. The County also desires to maximize the amount of gas being used in the landfill-gas-to-energy project located at the landfill. To meet these goals, the department installs additional collectors in the Hidden Hollow Landfill, as needed.

Landfill gas collectors consist of both vertical collectors (wells) and horizontal collectors. Collectors are perforated HDPE pipe connected to a blower system. The blower system creates negative pressure in the landfill drawing the gas to the desired location. Ada County's desired location is the electricity co-generation plant or the utility flare located in the Hidden Hollow Complex.

### FROM NUISANCE TO RESOURCE

#### LANDFILL GAS 101

**Landfill gas is a nuisance** at any landfill. It is the natural by-product of the decomposition of organic materials in the

waste. It is only created when the buried waste has reached an anaerobic state (a condition where there is no oxygen present). It consists of primarily two (2) gases: carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>). Methane is also known as natural gas. Both gases are odorless and colorless. They have, however, very different characteristics.

Carbon dioxide is lighter than air and has many uses including use as a fire extinguisher. Methane is heavier than air, and it has many uses including use as a fuel. In landfill gas, these two gases are created in nearly equal amounts. There are very small amounts of "trace gases" including

sulfides that, unlike carbon dioxide and methane, are not odorless. It is this mix of gases – now called landfill gas – that is a problem for landfills.

Having half the BTU value of natural gas, the odors of the trace gases, and a tendency toward corrosiveness, landfill gas does not have many uses. Typically, landfills manage landfill gas by collecting it for destruction. In 2001 Ada County began destroying its landfill gas in an enclosed utility flare.

#### NUISANCE TO USEFUL

In 2005, the Board of Ada County Commissioners entered into an agreement for the utilization of the County's landfill gas. The gas is to be used as fuel in an electricity co-generation facility. Presently, Ada County captures enough landfill gas for its contractor to generate roughly 3.2 mega-watts of electricity – enough electricity to power about 2,400 homes.



Ada County contracts with Fortistar Energy for utilization of the landfill gas produced as the County's landfill. In fiscal year 2010, Fortistar Energy paid Ada County \$260,786.

Electricity co-generation facility

#### WASTE TO ENERGY PROJECT

The Ada County Commissioners signed on June 30, 2010 an agreement with Dynamis Energy LLC to design, build and operate a state of the art Waste-to-Energy facility to be located at the Ada County landfill.

This technology utilizes a controlled (starved) air gasification process, which thermally converts waste products into a combustible gas. With capacities of 250 tons per day and thermal recovery equipment this system will add to the electricity co-generated at the Ada County landfill.

This system requires no pre-treatment of waste and has few moving parts. Its durable, simple design is easy to install and operate. Once the system is loaded, it requires minimal operator attention and thus has lower labor costs. The system is highly resourceful for energy production and the environment.

The design, permitting and construction of this facility will continue in FY 2010 -2011.

# Getting the Job Done

## PUBLIC – PRIVATE PARTNERSHIP

From the landfill's opening in the spring of 1972, Ada County has evaluated which services it could most economically perform in-house and which services it would be most cost effective to contract with privately owned companies. This evaluation is reviewed regularly to ensure that revenues are being spent in the most cost-effective manner.

When it is determined to contract for services with privately owned companies, Ada County is able to ensure the most cost-effective service delivery for the County through competitive bids. Before issuing any contract for services, the County issues a Request for Qualifications or a Request for Proposal. The request specifies the criteria for qualifications and the specifics of the work to be performed under the terms of the contract.

**Through carefully written contracts,** Ada County provides an effective, low-cost solid waste disposal system to the residents, businesses and institutions in the county.

## THE CONTRACTORS

### LANDFILL OPERATIONS



Typically, the Solid Waste Management Department's largest contract is for daily operations. 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.** fills the contract for daily operations. 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.

Since 2007, the County has been operating in the North Ravine landfill and in Hidden Hollow Landfill. While this can increase the daily operating expenses it is necessary as the Hidden

Hollow Landfill reaches its capacity and keeping all daily operations in that area becomes too congested, causing a safety risk.

Environmental Earthworks provides additional services to the department by installing parts of the landfill-gas extraction system and by doing preparatory work for expansion of the North Ravine landfill.



#### WASTE SCREENING

To ensure that hazardous, dangerous, or other inappropriate wastes are not deposited in the landfill, the County contracts for waste screening services. Employees of Environmental Earthworks interview landfill users and examine loads to intercept inappropriate material.

For the services provided to Ada County through their contracts, Environmental Earthworks, Inc. was paid \$2,208,736 to fulfill the requirements of the operational contract.



## ORGANICS RECYCLING

Wood-waste recycling is a very popular and highly successful program at the landfill. Since 1994, landfill customers have been encouraged to separate their wood waste from their other waste for recycling. From its modest beginnings with 10,000 cubic yards of wood recycled the first year, the program has grown. 137,220 cubic yards of wood were recycled in fiscal year 2010. The economic slow-down has affected the wood-recycling program. In fiscal year 2006, 197,593 cubic yards of wood was recycled; in fiscal year 2010, 137,220 cubic yards. This is a ~30% decrease in volume.

**Enviro-Progress, Inc.** is the contractor for wood and organics recycling. The County pays this firm for material that is chipped and hauled away from the landfill. Enviro-Progress is paid per cubic yard and they received \$553,860 for their services in fiscal year 2010. Along with wood recycling, Ada County provides programs to encourage leaf and Christmas tree recycling. In the fall, residents can bring their leaves to the landfill at no charge during a six-week period. In addition, following Christmas, residents may bring their Christmas trees to the landfill for recycling.



## ENGINEERING

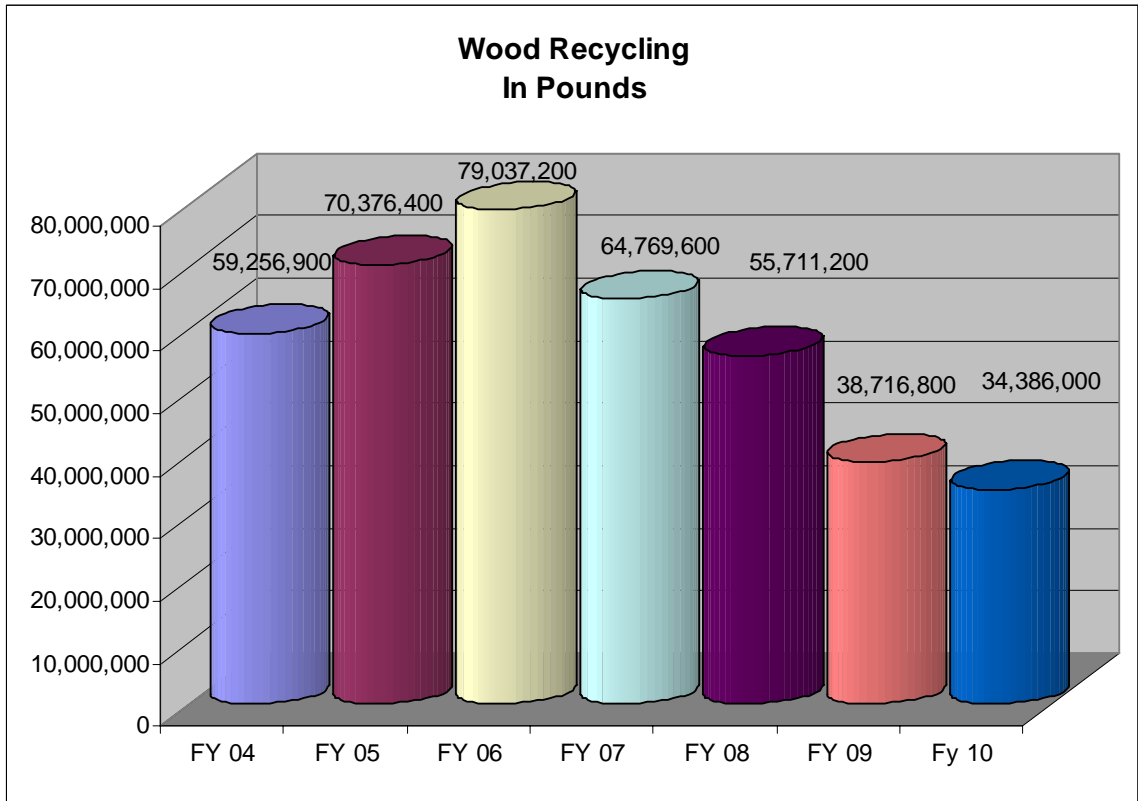
CH2M HILL, Inc. is the department's engineering consultant. They provide a full-range of engineering services that includes annual operations, surveying, rate-of-fill calculations, landfill gas system design, and support services. In fiscal year 2010, the County paid CH2M HILL \$380,768.

## DETAILS ON RECYCLING

Following are the graphic details of the diversion and recycling programs at the landfill. These figures are important to the department in that they represent material that was not buried in the landfill. These graphs compare seven years of data to serve as a guide and a reminder that sometimes more effort is due. They also serve as indicators of how well a program is working, and, it can show the effects of external events, such as economic status.

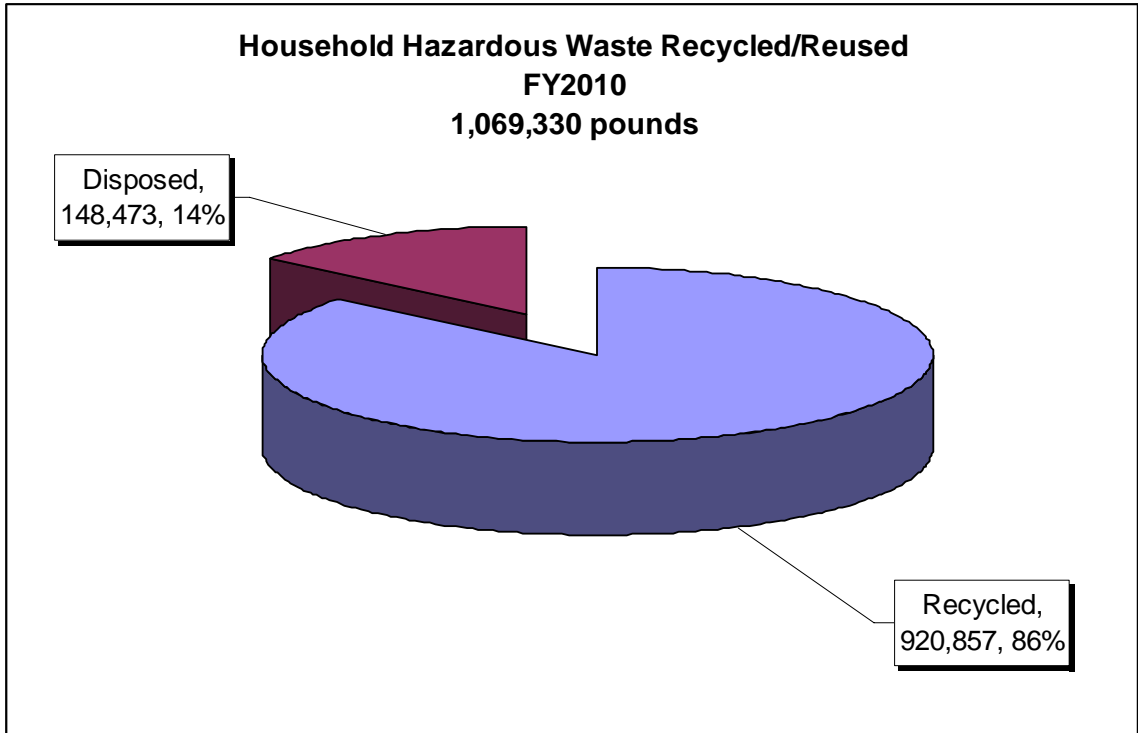
### Wood Waste Recycling

The decreases in the past fiscal years reflect the effects of the collapse of the building industry. With less construction, there is less material for disposal. Wood waste remains the most successful recycling program at the landfill.



## Household Hazardous Waste

Household hazardous waste is recycled or reused in a variety of ways depending on its composition.

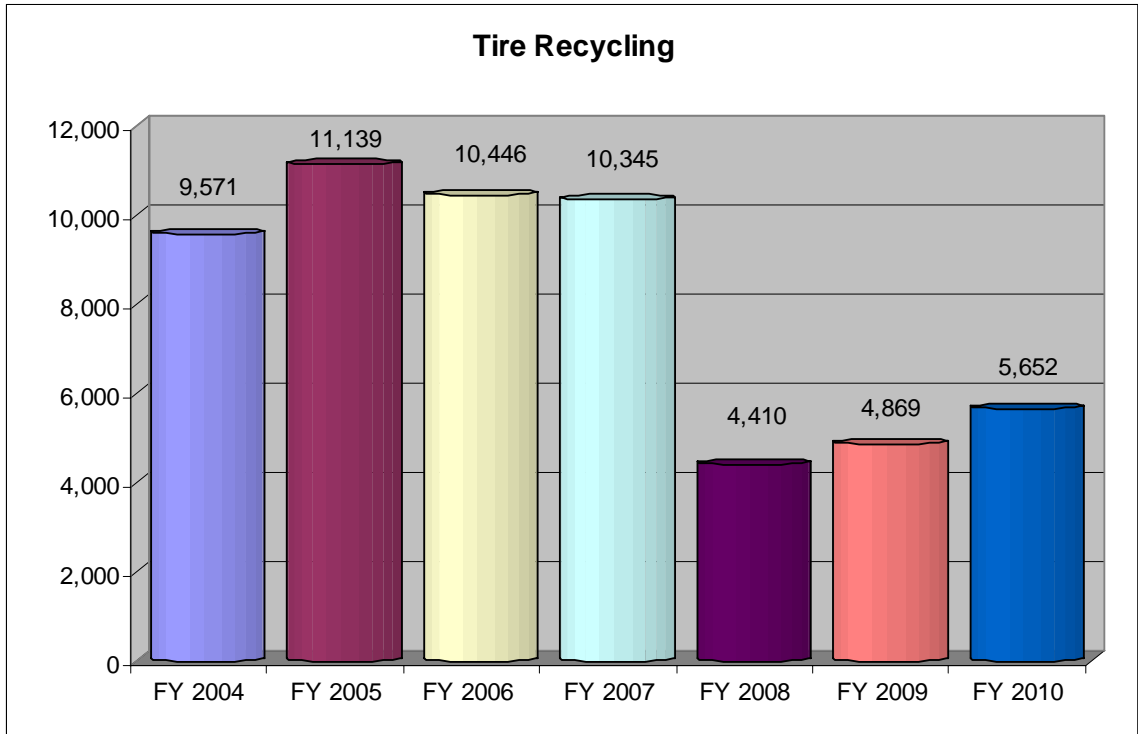


## Curbside Recycling

The residents of Ada County are doing their part to recycle, reuse and reduce the waste before it arrives at the landfill. This not only is the best thing for the environment, it helps extend the life of the landfill. The residents of the cities of Ada County and all county residents utilize a single stream curbside recycling program, and in FY 2010, over 17,252 tons of material was recycled through this program. Continual changes to improve the curbside program make it easier for everyone to utilize it, and Ada County will continue to make it more accessible and easier to use.

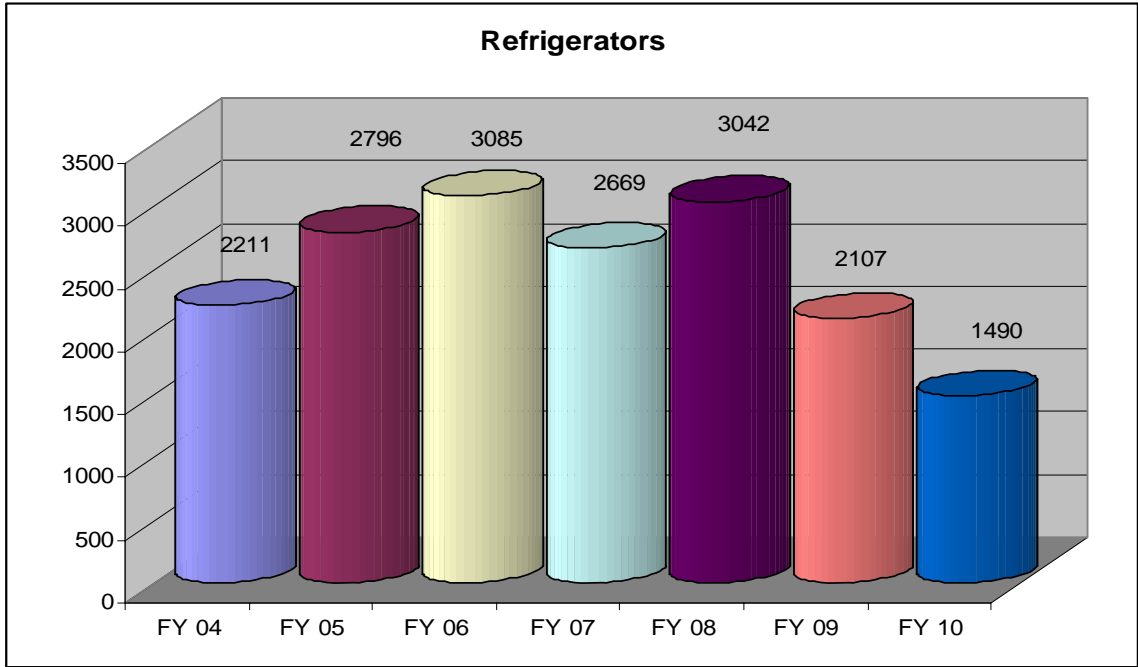
## Tire Recycling

Tires delivered to the landfill are recycled through a privately owned company. The tires are used for various projects, such as athletic tracks, road base, and fuel in the process of making cement.





## Refrigeration Unit Recycling



Appliances that use Freon are collected separately at the landfill because Freon is a greenhouse gas. If the Freon from these units were released to the atmosphere, the Freon would damage the ozone layer of the atmosphere. Qualified technicians at the landfill remove the Freon for recycling. The metal cases from the appliances are then shipped to a local metals recycler. Over 552,000 pounds of metal was recycled as a result of the appliances and a voluntary drop off area for all metals.

## THE FUTURE

FY 2010-2011 will see many changes at the Ada County Landfill. The evolving Federal regulations require all material coming to the landfill be weighed. Scales will be installed and the traffic flow will be adjusted to accommodate them. Customers coming to the landfill will experience a major new look with this project as well as see a switch from being accessed a fee based on the cubic yard to a fee based on the more accurate per-ton basis.

Ongoing regulatory requirements and the anticipation of new requirements are a continual part of the planning process and will be planned and accrued for to keep the landfill operating in compliance.

The Federal regulations continue to become stricter in an effort to monitor and reduce emissions of greenhouse gases in the United States and possible pollution of the environment. These regulations are evolving now and will continue to evolve. They affect the daily operations of the landfill, gas collections and reporting requirements. The Solid Waste Management Department will continue to place more gas-collection wells in the Hidden Hollow Cell to collect the landfill gases being created and send these gases to the waste-to-energy plant.

The maximization of the collection of landfill gases will ensure the regulatory requirements are met for maximum allowable air emissions, as well as prevent underground gas migration and the potential groundwater contamination it could bring. The changes will result in additional costs of doing business. Ongoing regulatory requirements and the anticipation of new requirements are a continual part of the planning process and will be planned and accrued for to keep the landfill operating in compliance.

The end of FY 2009-2010 led to big changes for the electricity co-generation facility in FY 2010-2011. The current electricity co-generation facility has been a very positive venture for both the contractor and Ada County, and it will be expanded to twice its current size. The completion of this expansion will be either late in FY 2011 or early FY2012.

The Ada County Commissioners signed on June 30, 2010 an agreement with Dynamis Energy to design, build and operate a state of the art Waste-to-Energy facility to be located at the Hidden Hollow Landfill in Ada County. The planning, design and permitting of the waste-to-energy gasification plant will continue through the fiscal year.

The management staff of the Solid Waste Management Department has already started various cost-saving plans that will be implemented in the coming year. Some of the more significant changes that will make the landfill operate more cost effectively include assuming the duties of hazardous waste screening as a part of the daily operations and not renewing the contract on this service. This contract has been a \$220,000 plus expense and performing it in-house will result in a significant cost savings. Using equipment owned by the Solid Waste Management Department to repair erosion issues and perform smaller onsite projects that occur on an unforeseen, usually one-time basis, that had previously required using outside contractors, is anticipated to bring significant savings, based on the number of projects and amount of erosion that occur each year.

## SYNOPSIS

The operation of the Hidden Hollow Landfill and the North Ravine Cell landfill by the Solid Waste Management Department continues to concentrate on meeting its daily obligations while looking to the needs of the future. The Hidden Hollow Cell is getting closer to meeting its maximum capacity. The Solid Waste Management Department needs to ensure that enough funds are accrued in the reserve account to cover the extensive work that will need to be performed to place this cell into final closure. More and more waste is being directed to the North Ravine Cell, and again the funds to continue expansion of this cell must be accrued prior to any construction.

Careful planning, innovative cost-saving procedures and continual vigilance on the evolving regulatory requirements will ensure the Ada County Solid Waste Management Department continues its excellent record of operating the landfills in the most efficient and compliant manner while meeting the needs of the community now and in the future.

The Solid Waste Management Department thanks you for your interest in the progress of the department.

## SPECIAL THANKS

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