

# GALLATIN SOLID WASTE MANAGEMENT DISTRICT

FISCAL REPORT

2011-2012



**The Gallatin Solid Waste Management District manages the Logan Landfill and the Bozeman Convenience Site. The Logan Landfill is a modern environmentally regulated state-of-the-art Class II sanitary landfill. Internal programs include \*Special Wastes\*Environmental Monitoring\*Education\* Recycling\***

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## A LETTER FROM THE DISTRICT MANAGER



Martin Bey was appointed as a member of the Solid Waste Advisory Committee (SWAC) in 2011 representing compost, public, and private. They meet quarterly. The mission statement of SWAC: *To enhance communication and the working relationship between the Department and solid waste management facility owners/operators, through the discussion of issues and the exchange of ideas.*

I am pleased to present this year's Annual Report for the Gallatin Solid Waste Management District. This report covers the time period from July 1, 2011 to June 30, 2012. With an aggressive planning timeline and the good fortune of mild weather, we were able to focus on all of our planned maintenance and several site improvements, as well as, accomplishing some infrastructure and capital improvements during the Fiscal Year 2012 (FY12).

Construction project highlights included processing the County's old Detention Center demolition material into over 1,600 tons of reusable crushed concrete that helped create our new road to Cell III. That project also yielded the use of the old D.U.I. processing building, allowing us to relocate it to Logan Landfill and convert it into a multi-use building and loading dock for processing, storage and shipping of recycled electronic waste (e-waste), processing fluorescent bulbs, Freon removal from white goods and isolating household hazardous waste (HHW).

Notable among capital improvements for FY12 was the removal of the old lined leachate collection and evaporation pond, along with the excavation and replacement of the old style PVC collection pipes with newer style, regulatory approved High Density Polyethylene collection lines. The new pond design allows for more future capacity and utilizes a pump and spray nozzles to assist in a higher rate of leachate evaporation.

As a commitment to keep the costs associated with our Recycling program down to acceptable levels, we repaired and painted 32 of our older 8 cubic yard cardboard collection bins saving several thousand dollars in replacement costs. As part of our expanded educational outreach program, we held over two dozen presentations and event booths at schools and events throughout the County during the year.

I am proud to report that despite the challenges from a slightly slower economy, we have continued to provide environmentally sustainable solid waste management services to residents and businesses in and around Gallatin County and to keep moving forward with innovative programs to encourage waste reduction and recycling. We will continue to promote prosperity in Gallatin County by looking at ways to balance cost-effectiveness with service excellence.

Sincerely,

Martin Bey, District Manager

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## **GALLATIN SOLID WASTE MANAGEMENT DISTRICT**

The Gallatin Solid Waste Management District consists of Gallatin County and the Cities of Belgrade, Bozeman, Manhattan, and Three Forks. The District operates as an enterprise fund. The values and operating principles are customer focus that is responsive, prompt, compassionate and provides quality service; Accountability for being responsible and cost effective in the use of public resources; Teamwork that promotes creative cooperation; Communication that is open and honest with sharing of information and ideas and; Professionalism in everything we do by being innovative, qualified, honest, full of integrity, and personal excellence.

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## **GALLATIN SOLID WASTE MANAGEMENT BOARD OF DIRECTORS**

The Gallatin Solid Waste Management District, its Board of Directors, Manager and staff, recognize and promote Gallatin County's Vision and Goals: Equate community needs with budgetary decisions; Adhere to the long-term plans; Demonstrate exceptional customer service; Serve as a model for excellence in government; Improve communication within County government, other jurisdictions and our public; To be an employer of choice and maintain high employee retention.

The Gallatin Solid Waste Management Board consists of representatives from the Cities of Belgrade, Bozeman, Three Forks, and Manhattan. Two additional seats are occupied by Members-at-large, and the remaining seat is occupied by a County Commissioner.

Currently, the Board of Directors are Kevin Handelin, City of Bozeman; Dave Hanson, City of Three Forks (Chairman); Phil Ideson, Member at Large; Clark Johnson, City of Manhattan; Dan Klemann, Member at Large; Kevin Moriarty, City of Belgrade; and R. Stephen White, County Commissioner, Commission District #3.



## The Board of Directors and their Responses to Being a Member



Chairman Dave Hanson  
Three Forks



Kevin Handelin  
City of Bozeman



Phil Ideson  
Secretary  
Member at Large



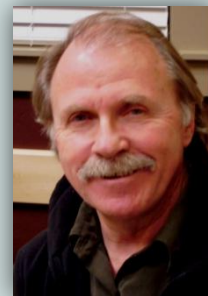
Dan Klemann,  
Vice Chairman  
Member at Large



Kevin Moriarty  
Treasurer  
Belgrade



Clark Johnson  
Manhattan



Steve White  
Gallatin County  
Commissioner

“My goal is to continue driving positive change in the community while setting a goal to make sure Gallatin County is a leader in waste management throughout Montana. I also want to improve region wide recycling efforts by effectively using available resources, both physical and financial, in an efficient manner.” Kevin Moriarty

“I joined the Gallatin Solid Waste Management Board to help where I could. I believe it is everyone’s responsibility to help make the community a better, and more productive place to work and recreate. The opportunity to raise a family in Montana and Gallatin Valley has been a rewarding experience and well worth taking the extra time to make sure that we handle our natural resources and wastes appropriately. I encourage all to recycle and be mindful of what we are blessed with and to leave the next generation the same enjoyment opportunities.” Dan Klemann

“This is an important board and I have enjoyed serving on it, representing the County Commissioners. Over the last several years many decisions have been made that have benefitted the County users of this facility. I also appreciate the hard work and dedication of the landfill staff in making sure that the public is well-served.” Steve White

“Some people would not consider serving on the Landfill Board an honor, but I love working with all the staff and the other Board members. I look forward to all the coming challenges and opportunities. I cannot thank all those that I have worked with enough for all that I have learned. This opportunity has taught me so much. I look forward to all that I can learn in the future. I would like to thank all of you for the opportunity to serve with all these great individuals in the time to come.” Dave Hanson

## **GALLATIN SOLID WASTE MANAGEMENT BOARD OF DIRECTORS MISSION STATEMENT**

**The purpose of the Gallatin Solid Waste Management District is: to provide constituents with cost efficient solid waste services; to provide for the balanced consideration and representation of the diverse views and issues regarding solid waste management; to advocate for the health, safety and welfare of the residents; to manage the processing, reclaiming, storing, transporting, or disposing of waste in ways that protect the ecology of lands in the District; to identify goals, policies and procedures that will aid local jurisdictions in meeting solid waste reduction and recycling goals.**

## **GALLATIN SOLID WASTE MANAGEMENT DISTRICT BUDGETS 3-YEAR COMPARISON FINAL APPROVED TO ACTUAL BUDGET EXPENDED FISCAL YEARS 2010, 2011, 2012**

**Table 1**

<b>Object of Expenditures</b>	<b>Final Budget Approved FY 2010</b>	<b>Actual Budget Expended FY 2010</b>	<b>Final Budget Approved FY 2011</b>	<b>Actual Budget Expended FY 2011</b>	<b>Final Budget Approved FY 2012</b>	<b>Actual Budget Expended FY 2012</b>
<b>Personnel</b>	\$983,398	\$792,082	\$ 875,540	\$ 776,389	887,796	\$747,322
<b>Operations</b>	2,144,758	1,870,980	1,845,347	1,037,070	2,454,719	2,109,544
<b>Debt Service</b>	1,177,623	895,296	1,275,442	917,585	938,199	938,199
<b>Capital Outlay</b>	3,446,500	1,836,836	4,902,527	93,738	1,112,500	500,625
<b>Transfers Out</b>	-----	-----	-----	-----	-----	-----
<b>Reserves</b>	-----	-----	-----	-----	-----	-----
<b>Total</b>	<b><u>\$7,752,27</u></b>	<b><u>\$5,395,194</u></b>	<b><u>\$8,898,856</u></b>	<b><u>\$2,824,782</u></b>	<b><u>\$5,393,214</u></b>	<b><u>\$4,295,690</u></b>

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## **GALLATIN SOLID WASTE MANAGEMENT ADMINISTRATION**



**DAILY OPERATIONS OF THE GALLATIN SOLID WASTE MANAGEMENT DISTRICT  
ARE ADMINISTERED BY PROFESSIONAL STAFF, HEADQUARTERED AT THE  
LOGAN LANDFILL**

**GALLATIN SOLID WASTE MANAGEMENT DISTRICT  
10585 TWO DOG ROAD  
P.O. BOX 461  
THREE FORKS, MONTANA 59752  
406.284.4029 OR 406.582.2495  
FAX: 406.582.2491  
WEBSITE**

**[HTTP://WWW.GALLATIN.MT.GOV/DISTRICT](http://www.gallatin.mt.gov/district)**



**Dawn Chretien  
Office Manager**



**Susan Dellinger  
Accountant**



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**GALLATIN SOLID WASTE  
OPERATIONS  
LOGAN LANDFILL**





Jesse Hermanson,  
Operator

Scott Brenden,  
Operator

Ray Harrison,  
Operator

Mitch Davies,  
Operator

Jim Simon, Site  
Foreman



Kurt Dykema (Front)

Mike SeeFried (Back)

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## GALLATIN SOLID WASTE OPERATIONS LOGAN LANDFILL SCALEHOUSE & BOZEMAN CONVENIENCE SITE

Bozeman Convenience Site



Logan Landfill

**LOGAN LANDFILL AND BOZEMAN CONVENIENCE SITE SCALE HOUSE OPERATORS**



**Jerilyn Webb,  
Scalehouse Operator**

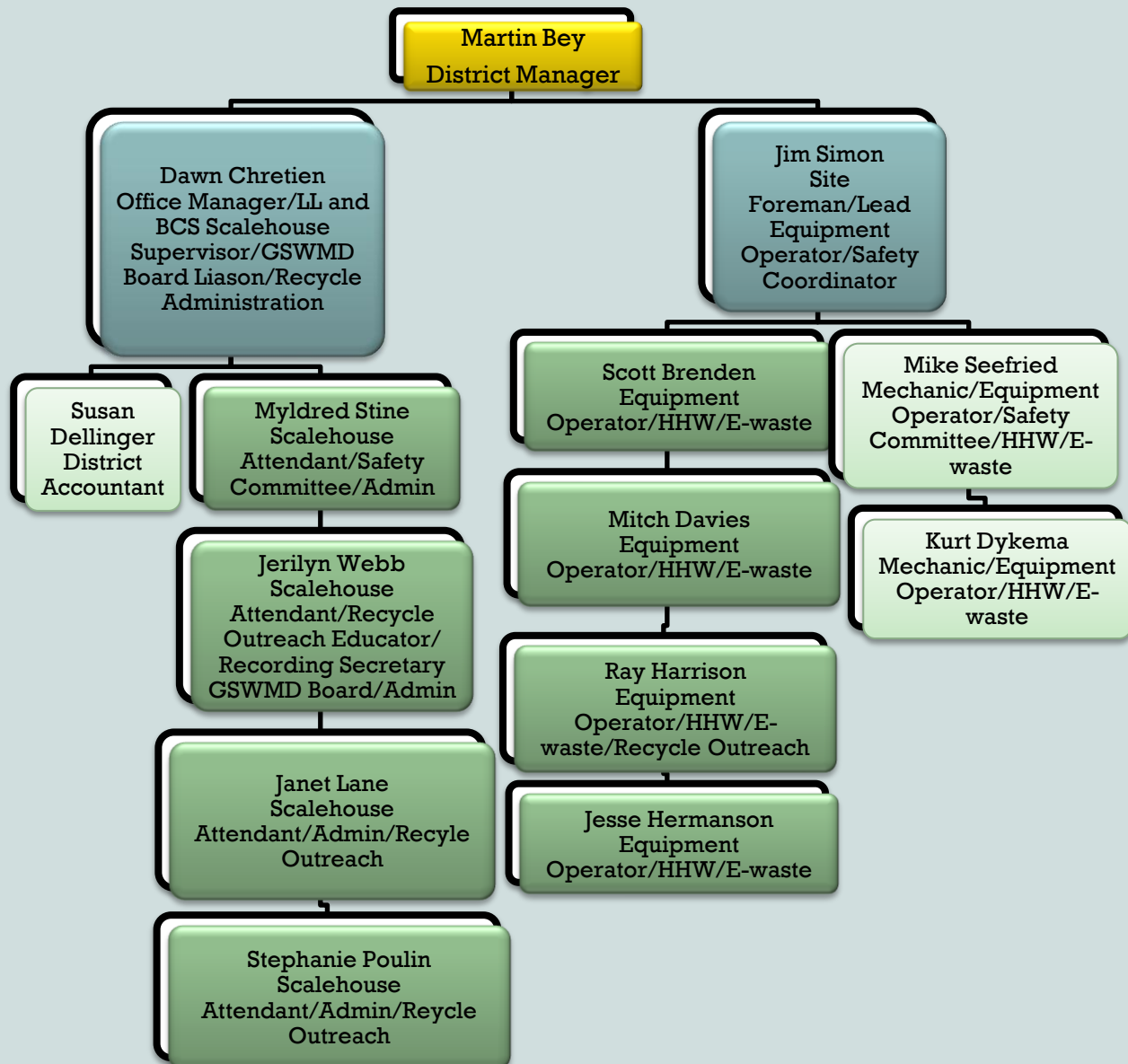
**Stephanie Poulin,  
Scalehouse Operator**

**Janet Lane,  
Scalehouse Operator**

**Myldred Stine,  
Scalehouse Operator**



# GALLATIN SOLID WASTE MANAGEMENT DISTRICT ORGANIZATIONAL CHART



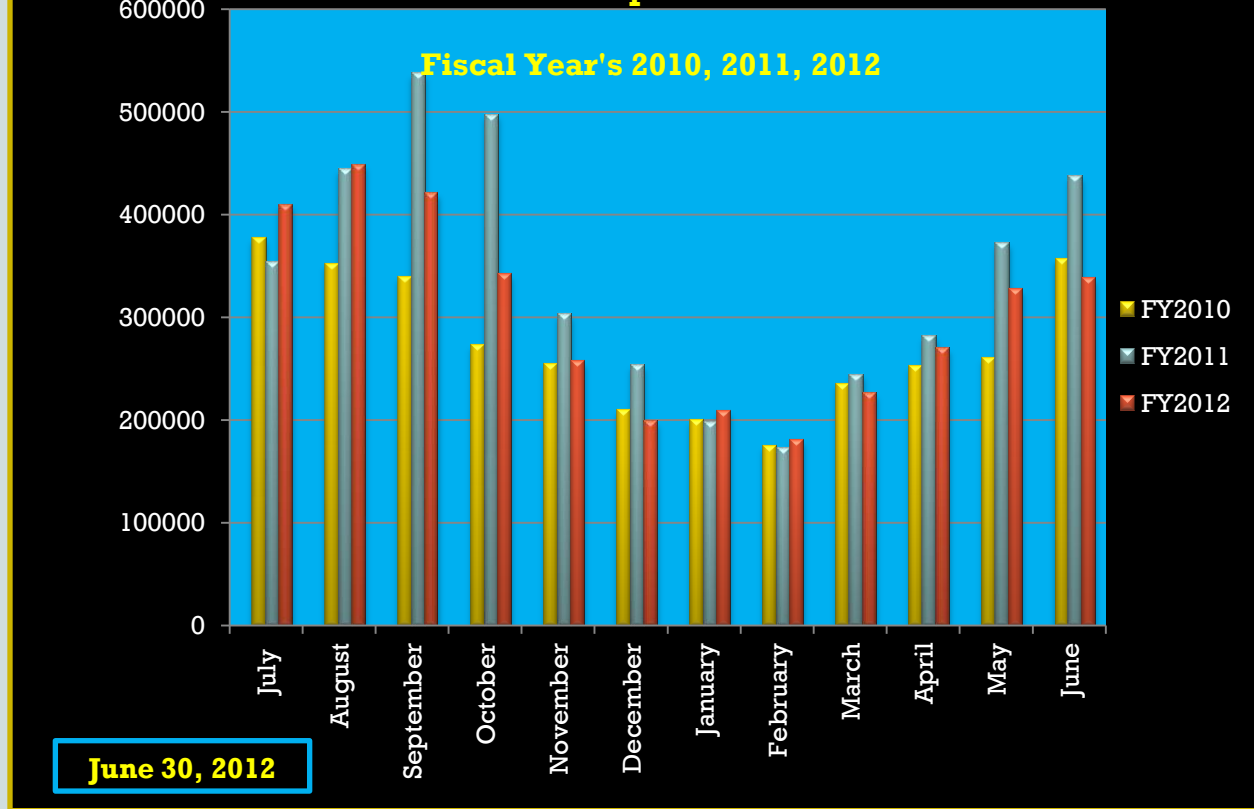
## OPERATIONS AT THE LOGAN LANDFILL DISTRICT TONNAGES

Between July 1, 2011, and June 30, 2012, total waste disposed of at the Logan Landfill was 105,665.34 tons. The seven primary components of the waste stream included approximately 69,398.80 (66%) tons of municipal solid waste, of which, 64,795.88 (93%) tons were disposed of by commercial carriers and 4,602.92 (7%) tons by the general public. Light construction waste disposed of totaled 9,813.30 (8%) tons, of which, commercial carriers disposed of approximately 9,342.78 (95%) tons and 470.52 (5%) tons by the general public. Heavy construction tonnage totaled 938.16 (<1%) tons, of which, 929.41 (99%) tons was from commercial carriers and 8.75 (1%) tons from the general public. Class IV totaled 24,550.08 (16%) tons, of which, 23,651.87(96%) from commercial carriers and 898.21 (4%) tons from the general public. Compost collected totaled 628.03 (<1%) tons, of which, 256.32 (83%) came from commercial carriers and 371.71(17%) tons were from the general public. E-waste disposed of totaled 110.08 tons, of which, 54.44 (49%) came from commercial carriers and 55.64 tons (51%) came from the general public. The remainder of the miscellaneous waste stream components disposed of totaled 226.89 tons, of which 145.27 (65%) came from commercial carriers and 81.62 (35%) came from the general public (Table 2: Tonnages & Components). This fiscal year tonnages were down 9,723.75 tons from the previous fiscal year of 115,389.09 tons.

**TABLE 2 TONNAGES & COMPONENTS JULY 1, 2011 TO JUNE 30, 2012**

Primary Components	Total Tons	% Tons	Tons Commercial	% Tons	Tons Public	% Tons	Total % of Commercial & Public Tonnages
Municipal Solid Waste (MSW)	69,398.80	66%	64,795.88	93%	4,602.92	7%	100%
Light Construction	9,813.30	8%	9,342.78	95%	470.52	5%	100%
Heavy Construction	938.16	<1%	929.41	99%	8.75	1%	100%
Class IV	24,550.08	16%	23,651.87	96%	898.21	4%	100%
Compost	628.03	>1%	256.32	83%	371.71	17%	100%
Miscellaneous	226.89	>1%	145.27	65%	81.62	35%	100%
E-Waste	110.08	>1%	54.44	49%	55.64	51%	100%
<b>Totals</b>	<b>105,665.34</b>	<b>100%</b>	<b>99,175.97</b>	<b>94%</b>	<b>6,489.37</b>	<b>6%</b>	<b>100%</b>

**Graph 1: 3-Year Incoming Tonnage by Month Comparison**

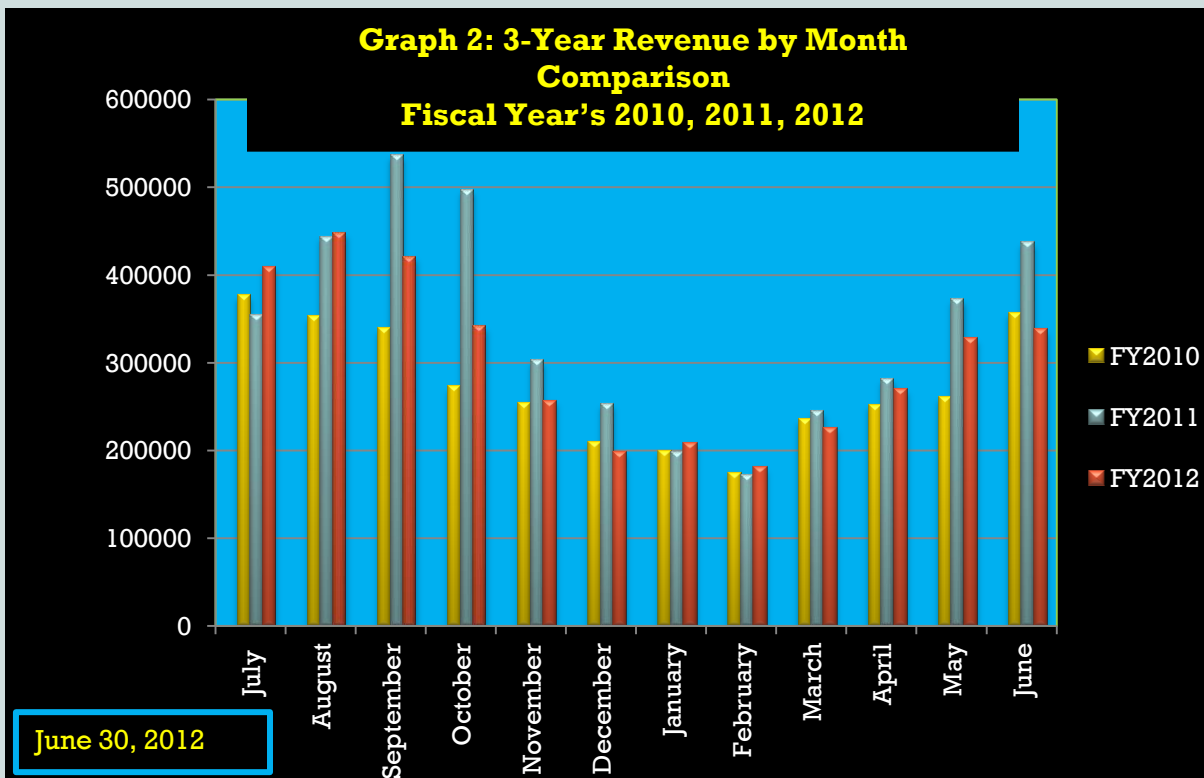


### DISTRICT REVENUES

The Revenue from the tipping fees at the Logan Landfill between July 1, 2011, and June 30, 2012, was \$3,625,456.54. The seven primary components of the revenue collected are municipal solid waste totaled \$1,890,746 (52%) of the waste stream, of which, \$1,741,314 (92%) came from commercial carriers and \$149,432 (8%) from the general public. Light construction totaled \$435,261 (12%) of the waste stream, of which, \$412,556 (95%) came from commercial carriers and \$22,705 (5%) came from the general public. Heavy construction totaled \$53,974 (1%) of the waste stream, of which, \$53,465 (99%) came from commercial carriers and \$509 (1%) came from the general public. Class IV totaled \$1,168,401 (32%) of the waste stream, of which, \$1,126,397 (96%) came from commercial carriers and \$42,004 (4%) came from the general public. Compost earned \$21,157 (1%) of the waste stream, of which, \$9,613 (45%) was from commercial carriers and \$11,544 (55%) came from the general public. E-waste collected totaled \$5,515 (1%) of the waste stream, of which \$2,658 (48%) was from commercial carriers, and \$2,857 (52%) was from the general public. The remainder of the revenue collected from miscellaneous fees totaled approximately \$50,402.54 (1%) of the waste stream, of which, \$39,715.54 (79%) came from commercial carriers and \$10,687 (21%) came from the general public. (Table 3: Revenue & Components). The revenue decreased \$463,901.92 dollars from the last fiscal year's revenue of \$4,089,358.46 dollars to this fiscal year's revenue of \$3,625,456.54.

**TABLE 3 REVENUE & COMPONENTS JULY 1, 2011 TO JUNE 30, 2012**

Primary Components of Revenue	Total Revenue	% Comp	Revenue Commercial Customers	% Com Cust	Revenue General Public	% General Public	Total % Com & Public
Municipal Solid Waste (MSW)	\$1,890,746	52%	\$1,741,314	92%	\$149,432	8%	100%
Light Construction	\$435,261	12%	\$412,556	95%	\$22,705	5%	100%
Heavy Construction	\$53,974	1%	\$53,465	99%	\$509	1%	100%
Class IV	\$1,168,401	32%	\$1,126,397	96%	\$42,004	4%	100%
Compost	\$21,157	1%	\$9,613	45%	\$11,544	55%	100%
E-Waste	\$5,515	1%	\$2,658	48%	\$2,857	52%	100%
Miscellaneous	\$50,402.54	1%	\$39,715.54	79%	\$10,687	21%	100%
<b>Totals</b>	<b>\$3,625,456.54</b>	<b>100%</b>	<b>\$3,385,718.54</b>		<b>\$239,738</b>		<b>100%</b>





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## PERFORMANCE AT THE LOGAN LANDFILL

Table 4 shows the landfill performance over the last eight periods and the average to date. The overall space utilization over the last period as measured by the volume per ton ratio was 1.81 CY/Ton. This was 46% more air space utilization than the last time period. The overall performance of the landfill is measured by the volume per ton ratio. The two components which directly impact the overall landfill performance are the compacted waste density and the waste-to-soil ratio. The increase in air space usage is related to the Phase 3 accepting Class IV material between January 2, 2012, and May 8, 2012, due to the landfill closing the Class IV area. The Class IV area was closed to avoid problems of blowing litter during the windy spring and winter months.

The site achieved a compacted waste density of 1,378 LB/CY over the last period. This is continued excellent compaction that the landfill staff should be commended for. The industry standard for compacted waste density at landfills which operate 826-equivalent compactors is 1,200 LB/CY. The District staff is far exceeding that metric with the operation. This high compaction is due to dedicated and consistent application of compaction techniques in conjunction with quality equipment and operators. The District will continue with the compaction techniques it currently uses on the site.

The overall waste-to-soil ratio for the time period was 3.97:1. This is 31% increase in soil usage over the previous period. The District will continue to utilize the approved alternative daily cover as often as possible in lieu of soil.

Great West Engineering, Inc., the engineering company of record, did not survey Phase 2 cell due to only 4.8% of the total waste was placed in the cell. The Phase 2 cell will be surveyed during the next performance evaluation survey.

The landfill performance for this time period shows more air space utilization, lower compacted waste density, and lower waste to soil ratio. This lower performance can be linked to the Class IV waste being routed to Phase 3 cell between January 2, 2012, and May 8, 2012, due to the Class IV area being closed. Class IV materials are more difficult to compact, require more dirt to cover the material on a daily basis, thus resulting in more air space utilized.

In summary, the industry standard for landfills this size is a compacted waste density of 1,200 LB/CY and a 3:1 waste-to-soil ratio which results in an overall volume per ton performance of 2.22 CY/Ton. The overall performance measured by GPS over this last period was 18% better than standard landfill performance metrics. The landfill staff are commended for obtaining this outstanding waste density and overall landfill performance, which insures the landfill life is maintained and in this case, actually extended via excellent performance criteria.

**Table 4  
Gallatin County Landfill  
Municipal Solid Waste Cells Phase 2 & Phase 3  
Performance Analysis Summary**

	05/18/05- 10/15/05	10/16/05- 03/30/06	03/31/06- 11/08/06	11/08/06- 10/29/07	10/29/07- 8/12/08	8/12/08- 4/16/09	4/17/09- 11/25/09	11/26/09- 6/28/2010	6/28/2010- 4/11/2011	4/11/2011- 12/8/2011	12/8/2011- 10/10/2012	Total to Date
<b>Total Fill Volume</b>	41,836 CY	56,005 CY	123,015 CY	218,970 CY	157,620 CY	112,656 CY	91,484 CY	61,328 CY	81,190 CY	66,261 CY	118,087 CY	1,128,452 CY
<b>Soil Volume</b>	0	0	18,732 CY	38,500 CY	36,846 CY	22,310 CY	13,858 CY	10,526 CY	15,014 CY	9,738 CY	23,759 CY	189,283 CY
<b>Waste to Soil Ratio</b>	NA	NA	5.6:1	4.7:1	3.3:1	4.05:1	5.6:1	4.83:1	4.41:1	5.80:1	3.97:1	4.96:1
<b>Tonnage Accepted</b>	28,720 T	43,646 T	77,587 T	116,490 T	84,395 T	62,770 T	55,018 T	42,254 T	60,187 T	53,484 T	65,028 T	689,579 T
<b>Compact ed Waste Density</b>	1,373 LB/CY	1,559 LB/CY	1,488 LB/CY	1,291 LB/CY	1,397 LB/CY	1,390 LB/CY	1,417 LB/CY	1,663 LB/CY	1,819 LB/CY	1,892 LB/CY	1,378 LB/CY	1,468 LB/CY
<b>Volume Per Ton Ratio</b>	1.46 CY/T	1.28 CY/T	1.59 CY/T	1.88 CY/T	1.88 CY/T	1.79 CY/T	1.66 CY/T	1.45 CY/T	1.35 CY/T	1.24 CY/T	1.81 CY/To n	1.63 CY/Ton

### CLASS IV AREA PERFORMANCE EVALUATION

Great West measured Class IV performance since the Class IV area opened. Class IV materials are much more difficult to obtain high compaction levels because of the nature of the waste. Industry standard metrics for Class IV landfills are 750 LB/CY compacted waste density and a waste-to-soil ratio of 6:1. This results in an overall volume per ton ratio of 3.1 CY/Ton. Table 5 shows that the landfill is exceeding industry metrics the last four time periods with the Class IV operation.



**Table 5  
Gallatin County Landfill  
Class IV Performance Analysis**

	4/17/2009- 11/25/2009	11/26/2009- 7/7/2010	7/7/2010- 4/14/2011	4/14/2011- 12/8/2011	12/8/2011- 10/10/2012	Total
<b>Total Fill Volume</b>	33,767 CY	20,768 CY	46,752 CY	51,699 CY	28,538 CY	181,524 CY
<b>Soil Volume</b>	3,780 CY	2,285 CY	6,432 CY	6,977 CY	6,225 CY	25,699 CY
<b>Waste to Soil Ratio</b>	7.93:1	8.09:1	6.27:1	6.40:1	3.58:1	6.06:1
<b>Tonnage Accepted</b>	14,557 Tons	9,175 Tons	29,381 Tons	27,577 Tons	14,622 Tons	95,312 Tons
<b>Compacted Waste Density</b>	970 LB/CY	993 LB/CY	1,457 LB/CY	1,233 LB/CY	1,310 LB/CY	1,223 LB/CY
<b>Volume Per Ton Ratio</b>	2.32 CY/Ton	2.26 CY/Ton	1.59 CY/Ton	1.87 CY/Ton	1.95 CY/Ton	1.90 CY/Ton

### **LIFE ESTIMATES**

The performance data, tonnage and the Logan Landfill Master Plan were used to estimate the remaining life of Phase 3 and the overall landfill. To estimate the remaining life of Phase 3, the first step is to calculate the remaining air space in the phase. The computer generated land surface model from the October 10, 2012, survey was compared to the interim fill plan for Phase 3 to determine the remaining air space. The amount of air space used in Phase 2 and the remaining life was not calculated due to the low amount of waste placed in the cell. In order to estimate the remaining life of Phase 3, the waste generation throughout the remaining life of this cell had to be projected. Currently 105,000 Tons per year is the best estimate of the annual tonnage for projections on remaining site life.

The total air space includes the final cover for the portion of Phase 3 fill which reaches the final proposed elevations, so this is subtracted out of the air space available for waste and daily/intermediate soil cover. The last seven measurement periods are the best estimate of how much daily and intermediate cover will be utilized at the site. However, it is critical that the District continues to use alternative daily cover (ADC) to the extent possible in order to minimize the air space usage of the landfill. It is estimated that the landfill will be able to utilize soil long term at a 4:1 waste to soil ratio. The estimated daily and intermediate soil cover usage is then subtracted from the available air space to determine the volume available for waste.

The last variable to determine is the compacted waste density. The landfill averaged 1,378 LB/CY over the last period. The industry standard for compacted waste density for a landfill of this size with an 826 equivalent compactor is 1,200 LB/CY. However, it appears from the last seven periods that the District should be able to consistently achieve waste densities of 1,300 LB/CY and above. The landfill staff does an excellent job of placing the waste in thin lifts and compacting the waste with multiple equipment passes in both directions. For the basis of these life estimates, a 1,350 LB/CY waste density was used. The landfill staff has proven that they can achieve this density consistently.

The life estimate analysis is summarized in Table 6. The estimates assume there will be no large “one-time” disposal projects. An example would be a large hail storm or earthquake generating a great deal of construction and demolition waste. The capacity estimate also assumes that the District will not expand its service area during the remaining landfill life. If the District does expand its service area in the future, the life estimate would need to be updated. The ultimate life of the site will be highly dependent on the waste tonnage received at the site and the landfill performance. If the tonnage increases over this estimate, or the landfill performance drops, the District will have less life than predicted.

In September 2010, an Addendum to the Landfill Master Plan was designed to include the Class IV Expansion. During this Master Plan update, a new life estimate was developed. Table 6 uses the updated Master Plan numbers to determine life projection estimates. The volumes used to develop Table 6 were calculated using CAD applications and the volumes were double checked by hand calculations utilizing cross sections.

Based on the waste streams received this last time period, it was estimated that 4.8% of the waste went into the Phase 2 cell, 77.6% to the Phase 3 cell, and the other 17.6% of the waste was diverted into the Class IV area. However, 8,109 tons of Class IV material was placed in the Phase 3 cell between January 2, 2012, and May 8, 2012. Therefore the Phase 3 life was estimated using 68% of 105,000 tons per year (combining Phase 2 and Phase 3) and 32% of 105,000 tons per year for the Class IV life estimates. The life of each area was calculated and is shown in Table 6. The life estimates for the waste accepted in Phase 3 shown in Table 6 are based on 71,400 tons per year waste, with a 1,350 LB/CY compacted waste density, 4:1 soil-to-waste ratio and an overall volume per ton ratio of 1.85 CY/Ton. The life estimates for the waste accepted in the Class IV area shown in Table 6 are based on 33,600 tons per year waste, with a 1,000 LB/CY compacted waste density and 7:1 soil-to-waste ratio.

The life of Phase 3 is based on 71,400 tons per year for 5.3 years while the Class IV is accepting waste. Once the Class IV has reached full capacity, Phase 3 will accept Class II and Class IV waste. Once Phase 3 accepts both waste streams at 105,000 tons per year, Phase 3 will have an additional 2.2 years of life. The total life of Phase

3 is 7.5 years concurrent with the placement of waste in the Class IV cell. Phase 4 will have 7.3 years of life at 105,000 tons per year. The total life of the landfill is 14.8 years (Table 6).

Phase 2 Life	Not calculated
Class IV Area (Based on 33,600 Tons/Year)	5.3 years
Phase 3 Life (Based on 71,400 Tons/Year for 5 years, then 105,000 Tons/Year for the remaining volume)	7.5
<b>Total Life (Based on 105,000 Tons/Year)</b>	<b>14.8 years</b>

## **CLOSURE WORK AT THE LOGAN LANDFILL**

The remaining overall life of the landfill site is estimated on the following information:

- The current Master Plan for the site dated December 2007 and the Addendum to the Landfill Master Plan-Class IV Expansion dated September 2010.
- Estimated annual tonnage of 110,000 tons per year based on detailed tonnage records the District has maintained since the City began transporting the majority of its waste to the landfill in October, 2005.
- Estimated waste disposal efficiency of 1.85 CY/Ton based on 1,350 LB/CY waste density and 4:1 waste-to-soil ratio. The District has routinely exceeded these metrics on previous measurements taken at the site.

There is one very important item to note regarding the projections of facility life. The landfill has routinely exceeded the design performance criteria for compaction and overall space utilization, which effectively increases the life. For example, the 2011 financial assurance report estimated 14.2 years of life remaining. A year later in 2012, the facility currently has 13.5 years of life remaining. The difference is created by the high level of compaction efficiency the landfill has routinely achieved over the last several years. The final life of the overall site will be affected by the actual waste quantities accepted at the landfill, the amount of waste diverted out of the landfill, and the waste disposal efficiency that is achieved.

The total Class II and Class IV landfill area was increased from 53 to 55 acres in the 2010 addendum to the Master Plan. The County closed approximately three acres of the landfill in 1996. The remaining 52 acres of waste area will require closure over the remaining life of the site. The Montana Department of Environmental Quality (MDEQ) has approved an alternative final cover design which relies on native soil materials for the cover system rather than synthetic materials. This alternative cover system will be used for the

remainder of the closure projects at the landfill. The final cover design is a four-foot thick soil cover system that includes the following section from bottom to top:

- Final contouring of the site making sure that all areas are properly sloped, graded and intermediate covered per the final contour plan.
- Installation of twelve inches of native sand material.
- Twenty-four inches of select fine-grained native silt soil material placed as the evapotranspiration layer for the cover. This material will be selectively excavated on-site with scrapers and pushed into place with low ground pressure equipment likely D-7 dozers or smaller.
- Twelve inches of native sand material of which the top six inches will be topsoil material amended with compost or other fertilizer.
- Vegetating the site with a seed/fertilizer mixture as outlined in the closure plan. It is assumed that the seed mixture will be tilled in using a tractor and an end wheel press drill or another acceptable seeder. In areas which are too steep for drill seeding, hydroseeding techniques will be used.

The total estimated cost per acre for installing the final cover system is shown in Table 7.

**Table 7**  
**Gallatin**  
**County Landfill**  
**Estimated Closure Costs Per Acre Alternative Final Cover System**  
**Updated August 2012**

Activity	Quantity	Unit	Cost/Unit	Cost
Mobilization/Bonding/Insurance	1	LS	\$3,000.00	\$3,000.00
Subgrade Preparation	800	CY	\$4.00	\$3,200.00
12" Capillary Sand Layer	1,600	CY	\$3.00	\$4,800.00
24" ET Silt Layer	3,200	CY	\$4.00	\$12,800.00
12" Sand Erosion & Topsoil Layer	1,600	CY	\$3.00	\$4,800.00
Drainage Controls	1	LS	\$2,000.00	\$2,000.00
Seed, Fertilizer, Mulch	1	AC	\$1,000.00	\$1,000.00
Gas Venting System	1	AC	\$5,000.00	\$5,000.00
Survey/Certification	1	AC	\$2,000.00	\$2,000.00
Engineering/QA/Inspection	1	LS	\$8,000.00	\$8,000.00
<b>Closure Cost Per Acre</b>				<b>\$46,600.00</b>

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## POST CLOSURE CARE COSTS AT THE LOGAN LANDFILL

In regard to the post-closure costs, the regulations require each landfill owner to monitor for methane, monitor the groundwater, have an independent Professional Engineer conduct an annual inspection, update the closure and post-closure costs annually, and maintain the cap and drainage structures for settlement, erosion, cracking or any other situation that may jeopardize the integrity of the cap or drainage controls. The estimated costs for these items for the 30-year post-closure period are summarized in Table 8. To calculate these costs, the following assumptions were used:

- The annual costs for groundwater and methane monitoring are based on the current annual monitoring costs. Groundwater monitoring costs have increased significantly with the addition of new monitoring points associated with the corrective measures assessment. Also, the proposed expansion of license boundary to accommodate the composting area will add monitoring and testing costs. It is estimated that monitoring will cost approximately \$25,000 per year during the post-closure period.
- The leachate collection will require periodic inspections, periodic pumping and minor maintenance. This is estimated to cost approximately \$500 per year.
- Once annually, an independent third party Professional Engineer will inspect the site for any non-compliance or maintenance issues including the integrity of the cap, drainage, fencing, etc. The Engineer will correspondingly write a report summarizing his/her findings and recommendations. The Engineer will also prepare an updated cost estimate indicating the cost to close the site along with the cost for the 30-year post-closure monitoring, etc. These costs will correspondingly be sent to the appropriate officials. The estimate assumes 20 hours of labor at \$95 per hour and miscellaneous word processing and expenses.
- It is necessary for the Owner of the facility to maintain the integrity of the cap and drainage controls. It is difficult to estimate what the annual cost to conduct this work might be several years from now. For this estimate, it was assumed that once per year a contractor will provide 16 hours of equipment time to haul in and blade soil in a settled area(s) at \$250 per hour and revegetate areas for \$500.
- The EPA has passed new regulations requiring annual reporting of greenhouse gas emissions. This process is currently costing the District approximately \$1,000 per year for the professional services to report the annual emissions.

**TABLE 8**  
**Gallatin County Landfill**  
**Post-Closure Care Cost Estimate**  
**August 2012**

Item	Annual Cost	Total 30 Year Cost
Groundwater & Methane Monitoring	\$25,000	\$750,000
Leachate Collection System Operation & Maintenance	\$500	\$15,000
Annual Engineering Inspection	\$2,000	\$60,000
Periodic Cap and Stormwater Maintenance	\$4,500	\$135,000
Annual Greenhouse Gas Reporting	\$1,000	\$30,000
<b>Total</b>	<b>\$33,000</b>	<b>\$990,000</b>

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**FINANCIAL ASSURANCE UPDATE BASED ON OVERALL  
SITE LIFE APPROACH  
AT THE  
LOGAN LANDFILL**

Five years ago, the District elected to utilize the overall site life approach to determine the financial assurance obligation. The MDEQ has agreed with the approach in correspondence. The balance in the closure post-closure reserve is \$1,989,567.36, current as of June 30, 2012. This reserve has been the same since 2009. The District is trying to let the closure liability catch up with the reserve balance. Table 9 calculates the cost per ton to meet financial assurance requirements under the overall site method.



<b>Table 9</b> <b>Gallatin County Landfill</b> <b>Estimated Closure Costs - Closure of Largest Open Area</b> <b>Updated August 2012</b>				
Activity	Quantity	Unit	Cost/Unit	Cost
Alternative Final Cover System	28.5	AC	\$46,600.00	\$1,328,000
10% Contingency				\$133,000
<b>Cost to Close Maximum Area</b>	<b>28.5</b>	<b>AC</b>		<b>\$1,461,000</b>

Table 10 calculates the cost per ton to meet financial assurance requirements under the overall site method.

<b>TABLE 10</b> <b>Gallatin County Landfill</b> <b>FINANCIAL ASSURANCE CALCULATION</b> <b>August 2012</b>	
<b>Overall Site Closure Costs</b>	<b>\$2,665,000</b>
<b>Post Closure Costs</b>	<b>\$990,000</b>
<b>Total Obligation</b>	<b>\$3,655,000</b>
<b>Closure/Post Closure Reserve (July 2012)</b>	<b>-\$1,989,600</b>
<b>Amount to Finance Over Remaining Site Life</b>	<b>\$1,665,400</b>
<b>Total Remaining Tonnage</b>	<b>1,490,000 tons</b>
<b>Cost Per Ton to meet Closure Post Closure Financial Assurance Requirements Under Overall Site Method</b>	<b>\$1.12/ton</b>

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## ENVIRONMENTAL COMPLIANCE



The Logan Landfill is in a five-year remediation pilot study. The pilot study ends September of 2012. At that time, the facility is in corrective action, which requires semi-annual water monitoring. The groundwater monitoring reports submitted to MDEQ in July (2011) and November (2011) met the requirements of the Administrative Rules of Montana Title 17, Chapter 50, Subchapter 13.

The Logan Landfill's current Methane Monitoring plan follows the requirements for methane monitoring at municipal solid waste facilities in the State of Montana under ARM 17.50.511 1 (f) and (g). The points of monitoring include seven methane monitoring wells, eight passive vents, and five structures. The results of the methane monitoring must be reported to the MDEQ.

This year's methane gas monitoring reports submitted and reviewed by MDEQ in November (2011), March (2012), and June (2012), show the results of the methane monitoring are within regulatory limits and are consistent with previous reports submitted.

The Logan Landfill is subject to yearly site inspections by MDEQ. This reporting period, two inspections were done on July 26, 2011, and April 18, 2012. No violations reported.

On September 19, 2011, the District received a letter from MDEQ for a proposal submitted for additional groundwater monitoring for the compost operations. They recommended sampling of coliform and tannins and lignins at the old and new shop wells, and the facility background well, LMW-1, for Orthophosphates.

On September 29, 2011, the District submitted to the Environmental Protection Agency (EPA) the Annual Greenhouse Gas (GHG) report required by the EPA for 2010. Bruce Siegmund, Senior Hydrologist for Great West Engineering, Inc., is the District's agent of record. March 23, 2012, the 2011 GHG report was electronically sent, received, and certified.

On September 29, 2011, the District and the City of Bozeman entered into an Interlocal Agreement for acceptance of biosolids in Logan Landfill's compost operation from the City of Bozeman's Wastewater Treatment plant. The District applied to the MDEQ to modify Logan Landfill's Operations & Maintenance Manual to include accepting biosolids in its composting operation. MDEQ approved the amendment and the District started working on the process for accepting biosolids.

On December 11, 2011, a fire broke out in Cell 2 at 2:00 a.m. and was out by 5:00 a.m. The landfill received a bill from the Manhattan Rural Fire Department (MRFD). Martin Bey, District Manager and Site Foreman Jim Simon attended a MRFD Board meeting. The District and the MRFD agreed the landfill would give the MRFD \$2,500 donation annually towards the fire District in order that the District could allocate it in the budget each year. Fires are common in landfills and it is hard to predict the costs associated. Previously, no fires at the landfill had ever been billed by any fire department.

On December 30, 2011, the Logan Landfill was forced to close its gates temporarily due to high wind conditions and blowing litter on top of Cell 2. In order to prevent any future problems or closings during the windy season, staff opened up the tipping area down in Cell 3 and covered the top of Cell 2 with intermediate dirt cover.

On January 2, 2012, the District sent to MDEQ, the annual permit renewal for the Permit Authorization MTR000358 under the Montana Pollutant Discharge Elimination System (MPDES) General Permit for Storm Water Discharges Associated with Industrial Activity (General Permit). It is the Landfill's 2011 Annual Compliance Report for Storm Water Discharges (CER) and the DMR for Permit #MTR000358 – monitoring period 7/01/2011 to 12/31/2011.

In February, 2012, the District sent in the Annual Biosolids Report for 2011 for renewal of its Biosolid Permit #MT650071.

On March 19, 2012, the District submitted to MDEQ the FY 2013 Annual Solid Waste Management System application to renew its State of Montana Solid Waste Management

System Annual License Renewal for License #158. Along with the permit application, it included the Closure/Post Closure 2011 report and the Financial Assurance letter written by Gallatin County's Finance Director, Ed Blackman. The letter contains support for the statements and calculations in the letter: 1. A letter from Gallatin County's engineer which summarizes the County's landfill closure plan and related cost estimates. 2. A letter from Gallatin County's external auditor which confirms the calculations for financial assurance. 3. A copy of the completed annual report annual audit report for fiscal year 2011-2012. The District included a copy of its Annual Report for the period of July 1, 2011 to June 30, 2012.

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## **LOGAN LANDFILL PROJECTS & IMPROVEMENTS**



- The District traded the former DUI Building the Gallatin County Detention Center had for sale during the construction of the new detention center for processing and recycling concrete and metal from the old jail demolition. In July, preparation for the building was completed for the move to the Logan Landfill in August. The building was put on a foundation and other renovations such as garage doors, exterior siding, awnings, and a loading dock were added throughout the year in order to use it as a lighted and heated warehouse space for the collection of e-waste. The bulb machine was moved into the building.
- In July, the District received approval for the leachate pond improvement plan.
- In September, the old shop building was scraped, cleaned and insulated with spray urethane foam. The foam and new weatherized garage door reduced the amount of propane utilized to keep it heated for storage of the Alternate Daily Cover (ADC).
- In October, the first compost test pile was successful in producing enough heat to destroy bacteria and pathogens, while generating no discernible odors during the process.
- In October, the District submitted a minor modification plan for Class IV, Construction Debris Boundary to MDEQ to include a small triangular area west of the leachate pond to be expanded into the fill area.

- In January, the District completed installation of a new 25 foot service pole and a 300 Amp electrical service drop to the old shop at the request of North Western Energy for additional service to the new e-waste building.
- The waste oil burner in the new shop has not worked right since the shop had been completed in 2008. Staff has worked with the contractor/manufacturer but at the end of this fiscal year, it has not been fixed. In January, the District requested price and installation cost estimates for a waste oil fired, air blower unit that will utilize the existing Crown burner unit from the boiler furnace. One problem that was determined was the mechanical room needed to be expanded. The expansion was completed in June 2012.
- In March 2012, prep work began on the new leachate pond improvement project by identifying surveyed offsets, plugging off intake pipes and cleaning out residual leachate and mud in the bottom of the old liner.
- April 5, 2012, a pre-bid conference was held for the leachate pond improvement project. The bid for the leachate pond improvement was awarded on May 29, 2012, to Montana Civil Contractors. A pre-construction meeting was held on June 28, 2012. The project started in July.
- In May, final cover on the partial closure of Cell 2 began on the West side slope.
- In June, gutter and downspouts were installed on the south side of the maintenance shop.
- A new designated area for burying non-friable Category II asbestos was located on the NW corner of Cell 3. The area is isolated from the public tipping area and large enough to handle the increased “special waste” requests received.

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## **BOZEMAN CONVENIENCE SITE PROJECTS & IMPROVEMENTS**

- In October, we paid our contractor \$9,567.50 to grind 2,250 Cubic Yards of brush and wood waste on site.
- In January, the storage shed that was located next to the HHW building was relocated next to the scalehouse. The added space allows a larger area to weigh in and process HHW on site.



## Bozeman Convenience Site Profit and Loss Fiscal Year 2012

	Jul '11 - Jun 12
<b>Ordinary Income/Expense</b>	
<b>Income</b>	
Charges for Services-Bozeman	129,969.84
<b>Total Income</b>	129,969.84
<b>Cost of Goods Sold</b>	
80% Compost Due to City	9,850.40
Transport from BCS	76,001.00
<b>Total COGS</b>	85,851.40
<b>Gross Profit</b>	\$44,118.44
<b>Expense</b>	
Personnel	41,592.92
Maintenance	873.67
Small Tools	1,182.03
Utilities	3,518.31
Supplies	1,572.39
Insurance	1,489.62
Printing & duplicating	473.00
Advertising	505.20
Outside Services	20,593.26
Licenses	225.00
Rent	214.00
Administrative Fixed Costs	5,831.40
Depreciation	7,692.06
<b>Total Expense</b>	\$85,762.86
<b>Net Ordinary Income</b>	\$-41,644.42
<b>Other Expense</b>	
Capital improvements	0.00
<b>Total Other Expense</b>	0.00
<b>Net Other Income</b>	0.00
<b>Net Income</b>	\$-41,644.42

## Bozeman Convenience Site Balance Sheet Fiscal Year 2012

Jun 30, 12

**ASSETS**

**Current Assets**

**Checking/Savings**

**Cash operational Combined**

-499,622.00

**Total Checking/Savings**

-499,622.00

**Accounts Receivable**

**Accounts Receivable**

345.00

**Total Accounts Receivable**

345.00

**Total Current Assets**

-499,277.00

**Fixed Assets**

166,123.78

**Total Fixed Assets**

166,123.78

**TOTAL ASSETS**

\$-333,153.22

**Liabilities**

**Current Liabilities**

**Other Current Liabilities**

**City of Bozeman**

9,025.60

**20-6120 · Wages Payable**

1,750.77

**20-6135 · W.C. Payroll Liability Payable**

4.11

**20-9100 · Compensated Absences Payable**

48.84

**Total Other Current Liabilities**

\$10,829.32

**Long Term Liabilities**

**23-9000 · Compensated Absences - Non-Current**

389.47

**Total Long Term Liabilities**

389.47

**Total Liabilities**

\$11,218.79

**Equity**

**3900 · Total Net Assets**

-302,727.59

**Net Income**

-41,644.42

**Total Equity**

\$-344,372.01

**TOTAL LIABILITIES & EQUITY**

\$-333,153.22



## RECYCLING AND WASTE DIVERSION

**The Solid Waste Management District’s overall purpose is to develop a recycling program and continue to make it successful. To reuse, reduce, recycle and intelligently dispose of waste materials. Its Mission: to conserve, protect and preserve the environmental resources of our community through advocacy, education and outreach programs in Gallatin County.**

The District’s recycling program began in April 1, 2008. This fiscal year, the approved budget was \$293,113. At the end of this fiscal year, we spent \$284,144.44. We came in under budget by \$8,968.56 dollars.



**Table 11: Budget to Actual & Expenses for Fiscal Years 2011- 2012**



<b>Expenses</b>	<b>Budget 2011</b>	<b>Actual 2011</b>	<b>Budget 2012</b>	<b>Actual 2012</b>
<b>Hauling/Processing</b>	\$210,000	\$225,107	\$230,000	\$230,993
<b>Wages</b>	0	0	0	0
<b>Bins</b>	\$6,000	\$6,000	\$15,000	\$8,185
<b>All Other</b>	\$81,060	\$48,661	\$48,113	\$44,966
<b>Total</b>	\$297,060	\$279,768	\$293,113	\$284,144.

The revenue from recyclable commodities in the waste stream with existing markets was \$182,083.96, an increase of \$21,604.52 from the previous fiscal year (\$160,479.44). It is still less than Fiscal Years' 2009 (\$276,178.85) and 2010 (\$187,826.42). Commodities accepted at each recycling site are plastic (#1-7), tin, aluminum cans, paper, news print, magazines, and cardboard. Other waste diversion efforts by the District include metal diversion of 190.25 Tons (\$33,491.90); 389 batteries (\$2,953); 2,067 gallons of oil of those, 450 gallons came from the Bozeman Convenience Site (no revenue). There was not any antifreeze collected and recycled this fiscal year. Other recycled commodities: Propane tanks (processed with the scrap metal); Freon; 1,259 pesticide containers in collaboration with the Montana Department of Agriculture (no revenue); and bear spray canisters, in collaboration with the Gallatin National Forest (no revenue); The District is still trying to find a viable and financially feasible way to offer glass recycling. We started a tire diversion program storing tires on site until they can be baled and shipped to market.

Processing costs for the District's recyclables are \$74 per ton for all commodities. Tonnages for only aluminum and steel are reduced 6% for estimated loss (waste) when revenues are calculated. The District's Recycle Tonnage Chart compares this fiscal year with the previous three fiscal years.

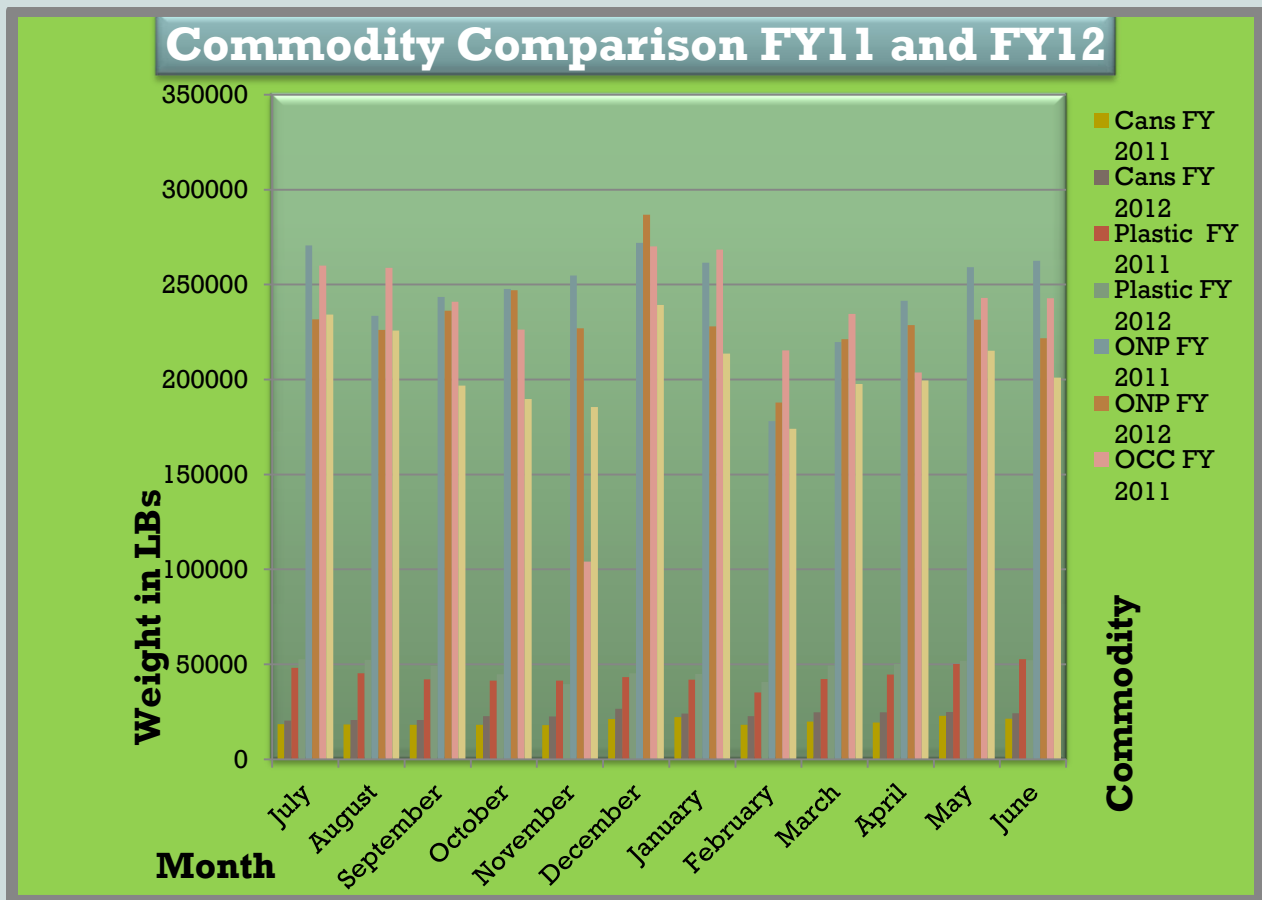
**TABLE 12: DISTRICT RECYCLE REVENUE COMPARISON FOR FISCAL YEARS 2009, 2010, 2011, 2012**

<b>Roll-off Program</b>	<b>FY '09 Revenue</b>	<b>FY '10 Revenue</b>	<b>FY '11 Revenue</b>	<b>FY' 12 Revenue</b>
<b>Paper</b>	\$127,019.37	\$69,418.27	\$51,101.36	\$59,315.80
<b>Plastic</b>	\$22,034.77	\$11,510.15	\$21,200.62	\$39,539.58
<b>Tin/aluminum</b>	\$49,665.49	\$38,216.91	\$32,602.78	\$34,118.63
<b>Cardboard</b>	\$77,459.22	\$77,459.22	\$22,574.68	\$49,109.95
<b>TOTALS</b>	\$276,178.85	\$187,826.42	\$160,479.44	\$182,083.96

**TABLE 13: DISTRICT RECYCLE COMMODITIES TONNAGES**

Roll-off Program	FY '09 (Tons)	FY '10 (Tons)	FY '11 (Tons)	FY' 12 (Tons)
Paper	1,528.54	1,422.80	1,460.17	1416.11
Plastic	156.57	182.93	242.00	264.25
Tin/aluminum	113.03	113.49	111.59	117.96
Cardboard	1,106.70	1,148.04	1219.97	680.22
<b>TOTALS</b>	<b>2,904.84</b>	<b>2,867.26</b>	<b>3,033.73</b>	<b>2,478.54</b>

**GRAPH 3: COMMODITY COMPARISON FISCAL YEARS 2011-2012**



The District added a site at the Logan Landfill “Last Chance Recycling” and the new Safeway store in Bozeman. We also added recycling bins at the Bozeman Convenience Site.



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## RECYCLING EDUCATIONAL OUTREACH

Management continued working with staff to continue to find new opportunities for educational outreach in the District's communities.

The programs educational component's continued success is contributed to dedicated staff who are committed to educating the community in being environmentally responsible to protect resources in Gallatin County and our beautiful State of Montana.

## RECYCLING OUTREACH EVENTS

	GALLATIN COUNTY FAIR	JULY 20-24, 2011
	BIG SKY COUNTRY FAIR	JULY 30, 2012
	MANHATTAN POTATO FESTIVAL	AUGUST 20, 2011
	MONTANA STATE CATAPALOZA	AUGUST 24-26, 2011
	IRVING SCHOOL ASSEMBLY RECYCLING PRESENTATION	SEPTEMBER 15, 2011
	BELGRADE FALL FESTIVAL	SEPTEMBER 24, 2011
	NATIONAL DRUG TAKE BACK	OCTOBER 29, 2011
	AMERICA RECYCLE DAY WILLOW CREEK TF SCHOOLS	NOVEMBER 15, 2011
	THREE FORKS 7 <sup>TH</sup> GRADE SCIENCE CLASS	NOVEMBER 17, 2011
	WILLOW CREEK SCHOOL LANDFILL TOUR	NOVEMBER 29, 2011

	LANDFILL/RECYCLING TOUR FOR WILLOW CREEK SCHOOL	NOVEMBER 29, 2011
	GALLATIN COUNTY FAIRGOUNDS WINTERFEST	FEBRUARY 18-19, 2012
	HEARTS & HANDS MONTESSORI SCHOOL	APRIL 11 & 18, 2012
	HYALITE ELEMENTARY	APRIL 18 & 20, 2012
	LANDFILL/RECYCLING TOUR HEARTS & HANDS MONTESSORI	APRIL 18, 2012
	EARTH DAY CELEBRATION FREE E-WASTE EVENT	APRIL 21, 2012
	SOURDOUGH SCHOOL TOUR	APRIL 26, 2012
	CITY OF BOZEMAN COMPOST BIN SALE	MAY 19, 2011
	CHILDREN'S MUSEUM, BOZEMAN	APRIL 27, 2012
	BELGRADE YMC RECYCLING & LANDFILL TOUR	JUNE 7, 2012
	HYALITE YOUTH CAMP & LIONS CLUB RECYCLING & TOUR	JUNE 15, 2012



**Four Corners Recycling Processing Plant  
Processing Contactor of Record**



Gallatin County Fair Featuring Ricky the Recycle Bear



Irving School



Hyalite School



### **Preparations for receiving the Old Detention Center DUI Building**



## **E-WASTE COLLECTION**

In the previous fiscal year, the Gallatin Solid Waste Management District purchased the old Gallatin County Detention Center DUI building to convert it into an e-waste building. In August of 2011, the District made preparations to receive it. District staff and contractor worked through the months refurbishing it to store and process the collected e-waste (pictured above).

The District started accepting e-waste year-round at the Logan Landfill. The fee is \$27 dollars per ton, or under 400 pounds, there is a \$5.00 minimum fee. It is recycled through UNICOR. UNICOR's goal is to be a responsible steward of the environment by ensuring their recycling operations meet all national standards. Electronic items accepted by our program are computer hard drives, monitors, keyboards, mice, printers, faxes, VCRs, DVDs, televisions, stereo equipment, cell phones, laptops, rechargeable batteries, and hand-held electronics.

The District along with Yellowstone E-Waste Solutions held a free e-waste collection event for household residents living in the District on April 21, 2012, at the Gallatin County Fairgrounds (GCF) in conjunction with the Earth Day Festivities. The District collected 12.31 tons. The free event cost the District approximately \$3,608.81.

The grand total of 121.35 tons of e-waste was collected at the Logan Landfill and shipped to UNICOR to process this fiscal year. The District collected \$6,106 from 175.40 tons of e-waste collected at the Logan Landfill. According to the records, there was a 54.05 ton difference in tonnage received and tonnage collected at the scale to the certifications we received back from UNICOR. The difference appears to be items collected that were not true e-waste that UNICOR accepts. Staff sort and stack and have to dispose of the unacceptable e-waste items collected and dispose of them in the landfill's cell. UNICOR pays transportation costs, which helps keep the costs of our e-waste collection program low. The relationship with UNICOR continues to work well for the District.



## Recycling Program Profit and Loss Fiscal Year 2012

	Jul '11 - Jun 12
<b>Ordinary Income/Expense</b>	
<b>Income</b>	
E-Waste Donations	65.00
Recycling Revenue	182,083.96
<b>Total Income</b>	182,148.96
<b>Cost of Goods Sold</b>	
357 - Transport Recycling Materials	793.00
Recycle Processing Costs	230,200.60
<b>Total COGS</b>	230,993.60
<b>Gross Profit</b>	-48,844.64
<b>Expense</b>	
Maintenance	10,006.21
Small Tools	1,430.00
Supplies	6,553.28
Insurance	1,664.00
Printing & Duplicating	406.95
Advertising	984.00
Travel	3,265.11
Outside Services	185.89
Rent	443.00
Service Charges	3.12
Administrative Fixed Costs	8,258.35
Depreciation	11,765.93
<b>Total Expense</b>	44,965.84
<b>Net Ordinary Income</b>	-93,810.48
<b>Other Expense</b>	
Capital improvements	0.00
<b>Total Other Expense</b>	0.00
<b>Net Other Income</b>	0.00
<b>Net Income</b>	-93,810.48



## Recycle Program Balance Sheet Fiscal Year 2012

	Jun 30, 2012
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
Cash operational Combined	-878,889.88
<b>Total Checking/Savings</b>	-878,889.88
<b>Total Current Assets</b>	-878,889.88
<b>Fixed Assets</b>	
Fixed assets	205,208.78
<b>Total Fixed Assets</b>	205,208.78
<b>TOTAL ASSETS</b>	-673,681.10
<b>LIABILITIES &amp; EQUITY</b>	
<b>Liabilities</b>	
<b>Current Liabilities</b>	
<b>Other Current Liabilities</b>	
Four Corners Recycling.	20,470.62
<b>Total Other Current Liabilities</b>	20,470.62
<b>Total Current Liabilities</b>	20,470.62
<b>Total Liabilities</b>	20,470.62
<b>Equity</b>	
3900 - Total net assets	-600,341.24
Net Income	-93,810.48
<b>Total Equity</b>	-694,151.72
<b>TOTAL LIABILITIES &amp; EQUITY</b>	-673,681.10



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## HOUSEHOLD HAZARDOUS WASTE COLLECTION

The Gallatin Solid Waste Management District holds a free Household Hazardous Waste (HHW) Event the second Saturday of every month at the Bozeman Convenience Site. This year we held 12 events. We had 268 household customers that used this free service and 92 commercial businesses that paid to use this service. The number of customers appears to be about the same as the last fiscal year. Commercial businesses are charged a fee. We collected \$521 from those businesses. The District paid \$7,170.76 to the contractor to properly dispose the HHW collected. The program does not include the District's labor, gas, and miscellaneous expenses for holding the event or after the event to bulk and prepare the HHW for shipment for receivership by the disposal service.

Last year, the District purchased a bulb crusher to help save costs to the program. We receive the bulbs, crush them and send them out in bulk. To dispose of the bulbs the District pays by the pound, not by the bulb or by the foot for the fluorescents, which is more cost efficient. This year we received certification we sent 1,147 pounds of crushed florescent lamps to the processor. We paid \$2,279.20 for the service. This does not include the District's labor of collection and crushing of the bulbs on-site.



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## FINANCIAL SUMMARY

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The Gallatin Solid Waste District operates as an enterprise fund. No tax revenues are used for District operations or capital improvements. Revenues are generated by tipping fees, the sale of recycled commodities, and interest earnings.

The District's total income for the year was \$4,032,960.93. Tipping fees from Logan (\$3,621,120.86) and the Bozeman Convenience Site (\$126,169.84) accounted for \$3,747,290.70 or over 90% of the income. Sale of metal and junk salvage at the Logan Landfill totaled \$36,556.90. The sale of metal and junk salvage from the Bozeman Convenience Site totaled \$3,279.00 for a total of \$39,835.90. The Recycling program commodities collected generated \$182,083.96 in revenue. Interest earnings for the year totaled \$60,246.87. The grazing lease earned \$2,400.00. Interest earnings had been steadily going down for the previous three fiscal years. This year they were up

\$691.87 from the previous fiscal year at \$59,555.00, but still far from what was earned in Fiscal Year 2008 (\$140,845) and 2009 (\$122,930). The District continues to stick to its plan to keep a strict restraint over the budget once again.

The Equipment Reserve fund is used to pay cash for future equipment replacement. The fund balance at the end of the year was \$1,417,873.27. Operational cash at the end of the year for the Logan Landfill was \$2,620,521.68; a negative <\$499,622.00> for the Bozeman Convenience Site (since assuming operations on July 1, 2008), and the Recycling program a negative <\$878,889.88> (since startup on April 1, 2008). Total cash operational combined totaled \$1,242,009.80. Fixed assets were \$6,688,625.61. The balance at the end of the year for the District's total assets was \$13,419,830.44, an increase of \$506,210.13 from the previous fiscal year.

The required financial assurance funding for landfill closure and post closure costs had a balance of \$1,989,567 at the end of the fiscal year. Total long-term liabilities at the end of the year totaled \$2,629,648.92.

The District did not take on any new debt this fiscal year. For the purchase of the Logan Springs Ranch, the District makes a principal payment of \$62,500.00 twice a year to the State Board of Investments. Each successive payment goes more to principal and less to interest. The interest rate is 1.95%. The Logan Spring Ranch is still in the process of applying to the State Lands Board for a land swap for future expansion of the landfill. The District makes a principal payment twice a year for Cell III in the amount of \$239,000.00.

Each year we pay rent to the Department of Natural Resource and Conservation (DNRC) for the leases for the landfill operation: Rent for the 8-acre parcel (scalehouse and administration building) = \$6,107.58 annually; the 40 acre parcel the landfill uses to stockpile excavated dirt costs \$19,168 annually.

The landfill incurs considerable insurance that requires permitting, and costs to keep in compliance with new rules and changes in laws. We pay \$47,658.96 to MDEQ annually for our landfill permit. We paid \$18,549.17 a year for our pollution insurance above Gallatin County's allocated liability insurance cost to us of \$30,380.00 per year. The Profit and Loss and Balance Sheets for July 2011 through June 2012 show the year's revenues, operating expenditures, assets, and liabilities. We continue to bring the services our customers want, at affordable prices. The operations continue to see waste volumes go down. Some of this is due to citizen recycling and diversion, but most of the decreases are attributable to the slow down in the economy and construction in Gallatin Valley.

The District leases the Bozeman Convenience Site from the City of Bozeman under an interlocal agreement that commenced on July 1, 2008. Under the agreement the District agreed to pay the City of Bozeman 80% of the compost being disposed of on-site to help maintain it with their equipment. The District receives 20% of the revenue. The District paid the City of Bozeman \$9,850.40 this fiscal year for the compost we received across the scale. The District earned \$2,462.60 on compost this fiscal year.

## GALLATIN SOLID WASTE MANAGEMENT DISTRICT

### 7-YEAR LONG RANGE STRATEGIC PLAN

Fiscal Years		2011	2012	2013	2014	2015	2016	2017
Tonnage	1%	115,389	105,665	106,700	107,700	108,700	109,700	110,700
\$/Ton (ave)		35	34					
Equipment Reserve Fund		420,000	420,000	420,000	420,000	420,000	420,000	420,000
year end balance		1,526,995	1,417,873	1,619,673	1,236,173	838,173	530,673	930,673
<b>CAPITAL OUTLAY</b>								
Land (Logan springs)								
Buildings (shop, admin)		4,205	67,822	14,000				
Improvements on land			78,203	285,000	20,000	20,000	20,000	
Public Tipping Area				0	20,000			
Compost Area								
HHW Building					75,000			
Cell 4 Construction							800,000	800,000
Equipment								
Haul Truck					400,000			
Trackhoe/Excavator					300,000			
Compactor (T72RB)		499,000						
Compactor (826H)								
Cat (826H) Wheels					75,000			
Scraper								
Dozer						400,000		
Agri-Tractor (used)				50,000				
Windrow Turner				80,000				
Front Loader						300,000		
963 track		265,293						
973 Track							400,000	
Grader								
Water Truck						100,000		
Toyota Pickup							40,000	
Pickup (3/4 Chev)								
Pickup (snow plow)								
Roll-Off Truck							225,000	
2012 Dodge Ram				30,000				
Admin Vehicle								20,000
Service Truck (used)			39,500					
Hydroseeder (ADC)							50,000	
Other Assets								
Computers			12,124					
Copier		9,763						
Hydraulic Press				1,200				
Bulb Grinder		3,963						
CFL Crusher					3,500			
Manlift		2,094						
Rotary Cutter		4,000						
Hooklift Bins		14,805						
Dump Bed		4,790						
Eye Wash Station				10,000				
Public Tipping Area Lid				6,000				
Skidsteer Sweeper				6,500				
Pallet Jack				2,000				
E-Waste Stacker Forklift					10,000			
E-Waste Container-Bzn Site								
Bzn Site Skid Steer								
Pump for Spring				2,500				
Waste Oil Containers - 2							6,000	
Bzn Roll-off containers								
Bzn Stationary Compactor		2,951						
Recycling Containers		6,000	8,185	30,000	15,000	18,000	6,500	
<b>Total</b>		<b>834,364</b>	<b>205,834</b>	<b>517,200</b>	<b>918,500</b>	<b>838,000</b>	<b>1,547,500</b>	<b>820,000</b>

## Gallatin Solid Waste Management District Profit & Loss July 2011 – July 2012

<b>Income</b>	
Miscellaneous Revenue	\$417.50
Sale of Fixed Assets	100.00
E-Waste Donations	65.00
Charges for Services-Logan	3,657,677.76
Grazing Lease	2,400.00
Charges for Services BCS	129,969.84
Recycling Revenue	182,083.96
Interest Earnings	60,246.87
<b>Total Income</b>	<b>\$4,032,960.93</b>
<b>Cost of Goods Sold</b>	
80% Compost Due to COB	\$9,850.40
Transport from BCS	76,001.00
Transport Recycling	793.00
Recycle Processing Costs	230,200.60
<b>Total COGS</b>	<b>\$316,845.00</b>
<b>Gross Profit</b>	<b>3,716,115.93</b>
<b>Expense</b>	
Amortization	\$1,276.91
Membership Dues	817.00
Personnel	825,793.51
Maintenance	136,402.77
Small Tools	12,011.96
Utilities	45,466.83
Supplies	82,568.50
Insurance	48,929.17
Fuel	165,723.66
Postage	1,744.01
Printing & duplicating	1,745.70
Advertising	2,379.21
Travel	9,053.32
Training	4,314.76
Outside Services	143,001.20
Licenses	52,699.20
Rent	71,427.08
Service charges	21.91
Administrative Fixed Costs	62,000.00
Closure/Post Closure	95,808.12
Loan Interest Payments	57,221.99
Depreciation	620,538.41
<b>Total Expense</b>	<b>\$2,440,945.22</b>
<b>Net Income</b>	<b>\$1,275,170.71</b>

**Gallatin Solid Waste Management District**  
**Balance Sheet**  
**As of June 30, 2012**

**ASSETS**

**Current Assets**

**Checking/Savings**

Cash Operational Combined	\$1,242,009.80
Restricted Cash - Closure Costs	1,989,567.36
Cash - Fixed Asset Purchases	1,417,873.27
Cash Reserved for Security Deposit	89,500.00
Loan Payment Reserve	103,000.00
Loan Reserve (Future Year Payment)	349,200.00
Reserve for Next Cell	1,150,000.00

<b>Total Checking/Savings</b>	\$6,341,150.43
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<b>Accounts Receivable</b>	390,054.40
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<b>Total Current Assets</b>	\$6,731,204.83
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<b>Total Fixed Assets</b>	\$6,688,625.61
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**TOTAL ASSETS**

\$13,419,830.44
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**LIABILITIES & EQUITY**

**Liabilities**

**Current Liabilities**

City of Bozeman	\$9,025.60
Four Corners Recycling	20,470.62
Wages Payable	18,537.32
Payroll Liabilities	16,752.72
W.C. Payroll Liability Payable	563.00
Compensated Absences Payable	6,082.35
Security Deposits Payable	89,500.00
Current Portion-Long Term Debt	368,000.00

<b>Total Current Liabilities</b>	\$528,931.61
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**Long Term Liabilities**

Cell 3 - SRF Loan	\$243,000.00
Land Loan - Board of Investment	1,062,500.00
Current Portion	-368,000.00
Closure Cost Liability	1,612,509.61
Compensated Absences - Non-Current	54,741.19
GASB 45 OPEB Net Obligation	24,898.12

<b>Total Long Term Liabilities</b>	\$2,629,648.92
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<b>Total Liabilities</b>	\$3,158,580.53
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**Equity**

Net Assets	\$1,126,924.76
Total Net Assets	7,859,154.44
Net Income	1,275,170.71

<b>Total Equity</b>	\$10,261,249.91
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**TOTAL LIABILITIES & EQUITY**

\$13,419,830.44
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