

LANDFILL ENTERPRISE FUND

FY 2011 will see the continuation of various improvements to the Glendale Municipal Landfill and the Materials Recovery Facility (MRF), including the replacement of equipment that has reached the end of their useful life such as forklifts and a water pull tractor. An entrance signal into the landfill is also expected to be completed during the fiscal year.

Starting in FY 2013 are projects that will lay the groundwork for the closing of the south area of the Glendale Landfill and preparing the north expansion area for future waste cell development as identified in Landfill Development Plan (October 2001).



Project Name: LF Water Pull Tractor Replace
Fund #: 2440
Project #: 78522

**FY 2011 - 2020 Capital Improvement Program
Capital Projects By Fund and Project Number**

2440 - Landfill			Category: Other					
			FY 2011:	FY 2012:	FY 2013:	FY 2014:	FY 2015:	FYs 16-20:
Capital Project Expenses	<u>Carrvover</u>	<u>New Funding</u>						
Existing Assets								
<i>Improvement of Existing Assets</i>								
78518 MRF Process Line Improvements	0	0	0	650,000	0	0	0	0
T2371 *Scalehouse & Road Relocation	0	0	52,900	774,015	0	0	0	0
<i>Replacement of Existing Assets</i>								
78506 Landfill Repl Pickup Truck	0	30,000	27,000	0	0	66,050	0	0
78509 MRF Forklifts	32,600	0	30,000	0	31,800	32,700	69,900	
78511 Landfill Compactor Replacement	0	0	0	952,160	0	0	1,054,504	
78512 Fuel Tanker Replacement	0	0	0	0	0	0	255,780	
78514 Sanitation Insp Trucks - 17740	0	0	0	0	59,406	31,783	208,808	
78520 Landfill Bulldozer Replacement	0	0	0	0	1,250,480	0	1,187,550	
78521 MRF Loader Replacement	0	0	0	0	0	0	243,600	
78522 LF Water Pull Tractor Replace	0	492,275	0	0	0	0	657,416	
T2360 Landfill Motor Grader Replace	0	0	289,275	0	0	0	0	
T2370 Landfill Auger Scraper Replace	0	0	0	0	1,436,225	0	0	
Sub-Total - Existing Assets	32,600	522,275	399,175	2,376,175	2,777,911	130,533	3,677,558	
New Assets								
78503 Landfill Closure (South)	0	0	0	0	0	256,296	9,141,306	
78505 LF Phase Construction (North)	0	0	0	0	102,518	4,624,184	4,672,358	
78507 Landfill Soil Excavation	0	0	0	102,403	13,060,382	0	0	
78508 Landfill Stormwater Drainage	0	0	566,581	0	0	0	0	
78519 Landfill Entrance Signal	1,306,752	0	0	0	0	0	0	
Sub-Total - New Assets	1,306,752	0	566,581	102,403	13,162,900	4,880,480	13,813,664	
Total Project Expenses:	\$1,339,352	\$522,275	\$965,756	\$2,478,578	\$15,940,811	\$5,011,013	\$17,491,222	
Total FY 2011 Funding:		\$1,861,627						

* New Project

FY 2011-2020 Capital Improvement Plan

Capital Project Expenses Detail

2440 - Landfill

Category: Other

Project: 78518 - MRF Process Line Improvements (I)

Funding Source:

Landfill Revenues

Project Description:

Improvements to the Materials Recovery Facility (MRF) processing line equipment to increase the overall efficiency of the 10-year old recyclables processing system. Modifications will include consolidation of the two fiber lines and an automated container sorting line. The fiber line consolidation and automated container sorting line will increase production throughput, separation quality and reduce operating costs related to manual labor needs.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Equipment	\$0	\$0	\$650,000	\$0	\$0	\$0
TOTAL	\$0	\$0	\$650,000	\$0	\$0	\$0

Operating Description:

No additional O and M is needed due to process line modifications at current amount of incoming tonnage.

Project: T2371* - Scalehouse & Road Relocation (I)

Funding Source:

Landfill Revenues

Project Description:

Project provides for roadway improvements to the internal entrance roadway and relocation of the scale house to be in closer proximity to the North area filling operations. The scale house is currently located in an area where waste will be placed prior to closing the south area of the landfill. Revised waste capacity calculations include filling in the current scale house location, and it will take approximately one year to fill this permitted air space.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Design	\$0	\$50,000	\$50,000	\$0	\$0	\$0
Construction	\$0	\$0	\$675,201	\$0	\$0	\$0
Finance Charges	\$0	\$750	\$10,878	\$0	\$0	\$0
Engineering Charges	\$0	\$2,150	\$31,184	\$0	\$0	\$0
Arts	\$0	\$0	\$6,752	\$0	\$0	\$0
TOTAL	\$0	\$52,900	\$774,015	\$0	\$0	\$0

Operating Description:

Additional O and M will be absorbed by the department; however, none is anticipated at this time.

Project: 78506 - Landfill Repl Pickup Truck (R)

Funding Source:

Landfill Revenues

Project Description:

The landfill currently has five pickup trucks in its equipment fleet, in which four trucks will require replacement during this 10-year Capital Improvement Plan. Two pickup trucks will reach the end of their serviceable life in FY 2011 and FY 2012, and replacement will occur in FY 2015 for the other two trucks. Landfill vehicles and equipment are not included in the Vehicle Replacement Fund. The pick up trucks at the landfill are used by the landfill inspector, crew leader, supervisor and the spotters who direct traffic on the site, and assist in litter collection.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Equipment	\$30,000	\$27,000	\$0	\$0	\$66,050	\$0
TOTAL	\$30,000	\$27,000	\$0	\$0	\$66,050	\$0

Operating Description:

No additional O and M cost as new equipment will replace aging existing equipment.

* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

FY 2011-2020 Capital Improvement Plan

Capital Project Expenses Detail

2440 - Landfill

Category: Other

Project: 78509 - MRF Forklifts (R)

Funding Source:

Landfill Revenues

Project Description:

The Materials Recovery Facility (MRF) currently has a total of four forklifts in its fleet used for a variety of heavy lifting purposes including loading, unloading, and transporting recyclable bales. This project includes the replacement of three forklifts reaching the end of their serviceable lives in FY 2012, FY 2014, and FY 2015 as well as replacement of forklifts that will be due for replacement during the second five years. The MRF forklifts have an estimated service life of approximately seven years, although replacement schedules may be adjusted depending on hours of use. MRF vehicles and equipment are not included in the Vehicle Replacement Fund.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Equipment	\$0	\$30,000	\$0	\$31,800	\$32,700	\$69,900
Sub-Total New Funding	\$0	\$30,000	\$0	\$31,800	\$32,700	\$69,900
FY 2011 Carryover	\$32,600	\$0	\$0	\$0	\$0	\$0
TOTAL	\$32,600	\$30,000	\$0	\$31,800	\$32,700	\$69,900

Operating Description:

No additional O and M cost as new equipment will replace aging existing equipment.

Project: 78511 - Landfill Compactor Replacement (R)

Funding Source:

Landfill Revenues

Project Description:

Replacement of landfill compactors that will reach the end of their serviceable lives in FY 2013 and FY 2016. Landfill vehicles and equipment are not included in the Vehicle Replacement Fund but instead are debt financed at the time of acquisition. The compactor is an essential piece of equipment used on a daily basis for proper placement and compaction of solid waste into the landfill.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Finance Charges	\$0	\$0	\$14,072	\$0	\$0	\$15,584
Equipment	\$0	\$0	\$938,088	\$0	\$0	\$1,038,920
TOTAL	\$0	\$0	\$952,160	\$0	\$0	\$1,054,504

Operating Description:

No additional O and M cost as new equipment will replace aging existing equipment.

Project: 78512 - Fuel Tanker Replacement (R)

Funding Source:

Landfill Revenues

Project Description:

Replacement of a landfill fuel tanker that is expected to reach the end of its serviceable life in FY 2018. The current fuel tanker was purchased in 2008 and is anticipated to be replaced in ten years. Landfill equipment is not included in the Vehicle Replacement Fund. The fuel tanker truck refuels the diesel equipment on the site so as to maximize efficiency of the equipment around the landfill.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$3,780
Equipment	\$0	\$0	\$0	\$0	\$0	\$252,000
TOTAL	\$0	\$0	\$0	\$0	\$0	\$255,780

Operating Description:

No additional O and M cost as new equipment will replace aging existing equipment.

* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

FY 2011-2020 Capital Improvement Plan

Capital Project Expenses Detail

2440 - Landfill

Category: Other

Project: 78514 - Sanitation Insp Trucks - 17740 (R)

Funding Source:

Landfill Revenues

Project Description:

Sanitation Inspectors enforce the regulations related to refuse collection, recycling collection and loose trash services. They contact residents to respond to questions and educate residents on proper procedures for services. Demand for the work inspection staff performs is anticipated to grow as housing increases. Purchase of nine replacement pickups over a 10-year period including one additional truck in FY 2015 due to growth. Service life is projected to be approximately seven years for newly purchased equipment. FY 2014, two replacement trucks costing a projected \$29,703 each. In addition, a new inspector and truck will be needed in FY 2015 at a projected cost of \$31,783. FY 2016, four replacement trucks at a cost of \$34,008 each. In FY 2017, a replacement truck at a cost of \$36,388. In FY 2018, a replacement truck at a cost of \$36,388.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Finance Charges	\$0	\$0	\$0	\$878	\$470	\$3,020
Equipment	\$0	\$0	\$0	\$58,528	\$31,313	\$205,788
TOTAL	\$0	\$0	\$0	\$59,406	\$31,783	\$208,808

Operating Description:

Staffing includes salary and benefits. In FY 2015 a new inspector is planned at a projected cost of \$69,133. Equipment Maintenance costs are included for an inspector one new growth truck based on shop information. Insurance cost is based on the current average cost (\$3,390) per employee for insurance for Fund 2480. Vehicle replacement costs are based on a seven- year life. Also a supplement will be submitted for 2015 for the new inspector position

Operating Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Staffing	\$0	\$0	\$0	\$0	\$71,204	\$389,373
Equip. Maint.	\$0	\$0	\$0	\$0	\$18,261	\$99,859
Insurance	\$0	\$0	\$0	\$0	\$3,494	\$19,107
PC/Vehicle Replacement	\$0	\$0	\$0	\$0	\$3,500	\$19,139
TOTAL	\$0	\$0	\$0	\$0	\$96,459	\$527,478

Project: 78520 - Landfill Bulldozer Replacement (R)

Funding Source:

Landfill Revenues

Project Description:

Replacement of two landfill bulldozers that will reach the end of their serviceable life in FY 2014 (Model D-9) and FY 2019 (Model D-8). Landfill vehicles and equipment are not included in the Vehicle Replacement Fund. Bulldozers are used at the landfill primarily to push garbage into position so the compactors can crush the debris to maximize compaction.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Finance Charges	\$0	\$0	\$0	\$18,480	\$0	\$17,550
Equipment	\$0	\$0	\$0	\$1,232,000	\$0	\$1,170,000
TOTAL	\$0	\$0	\$0	\$1,250,480	\$0	\$1,187,550

Operating Description:

No additional O and M cost as new equipment will replace aging existing equipment.

* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

FY 2011-2020 Capital Improvement Plan

Capital Project Expenses Detail

2440 - Landfill

Category: Other

Project: 78521 - MRF Loader Replacement (R)

Funding Source:

Landfill Revenues

Project Description:

Replacement of loader used to move recyclables from truck tipping floor to Materials Recovery Facility processing line. The current loader was purchased in FY 2009, and this unit will be due for replacement in 2019. MRF vehicles and equipment are not included in the Vehicle Replacement Fund.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Finance Charges	\$0	\$0	\$0	\$0	\$0	\$3,600
Equipment	\$0	\$0	\$0	\$0	\$0	\$240,000
TOTAL	\$0	\$0	\$0	\$0	\$0	\$243,600

Operating Description:

No additional O and M cost as new equipment will replace aging existing equipment.

Project: 78522 - LF Water Pull Tractor Replace (R)

Funding Source:

Landfill Revenues

Project Description:

Replacement of 6,500 gallon water pull tractor that is expected to reach the end of its serviceable life in FY 2011 and again in FY 2020. Landfill vehicles and equipment are not included in the Vehicle Replacement Fund. This machine is critical to reducing dust and staying compliant with the existing air quality permit.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Finance Charges	\$7,275	\$0	\$0	\$0	\$0	\$9,716
Equipment	\$485,000	\$0	\$0	\$0	\$0	\$647,700
TOTAL	\$492,275	\$0	\$0	\$0	\$0	\$657,416

Operating Description:

No additional O and M cost as new equipment will replace aging existing equipment.

Project: T2360 - Landfill Motor Grader Replace (R)

Funding Source:

Landfill Revenues

Project Description:

Replacement of motor grader that is expected to reach the end of its serviceable life in FY 2012. Landfill vehicles and equipment are not included in the Vehicle Replacement Fund. The motor grader is used to establish and maintain the temporary roads on the active portion of the landfill.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Finance Charges	\$0	\$4,275	\$0	\$0	\$0	\$0
Equipment	\$0	\$285,000	\$0	\$0	\$0	\$0
TOTAL	\$0	\$289,275	\$0	\$0	\$0	\$0

Operating Description:

No additional O and M cost as new equipment will replace aging existing equipment.

* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

FY 2011-2020 Capital Improvement Plan

Capital Project Expenses Detail

2440 - Landfill

Category: Other

Project: T2370 - Landfill Auger Scraper Replace (R)

Funding Source:

Landfill Revenues

Project Description:

Replacement of the auger scraper in FY 2014, which is at the end of its serviceable life. It will be 11 years old with 15,000 to 17,000 hours. The scraper is used to remove dirt from the earth that is used for daily and intermittent cover of the refuse at the landfill. Landfill vehicles and equipment are not included in the Vehicle Replacement Fund.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Finance Charges	\$0	\$0	\$0	\$21,225	\$0	\$0
Equipment	\$0	\$0	\$0	\$1,415,000	\$0	\$0
TOTAL	\$0	\$0	\$0	\$1,436,225	\$0	\$0

Operating Description:

No additional O and M cost as new equipment will replace aging existing equipment.

Project: 78503 - Landfill Closure (South) (N)

Funding Source:

Landfill Revenues

Project Description:

Closure of south areas of landfill after permitted air space is completely filled with waste. Completed landfills are required by federal and state law to have a final cover system design and constructed. It is projected that the 140 acres in the south half of the landfill will reach approved filling capacity during FY 2015. Closure will take place during FY 2016.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Design	\$0	\$0	\$0	\$0	\$250,000	\$250,000
Construction	\$0	\$0	\$0	\$0	\$0	\$8,583,027
Finance Charges	\$0	\$0	\$0	\$0	\$3,750	\$132,495
Engineering Charges	\$0	\$0	\$0	\$0	\$2,546	\$89,954
Arts	\$0	\$0	\$0	\$0	\$0	\$85,830
TOTAL	\$0	\$0	\$0	\$0	\$256,296	\$9,141,306

Operating Description:

Annual cost for post-closure landscape maintenance, methane gas management and ongoing environmental monitoring after site is closed.

Operating Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Landscape	\$0	\$0	\$0	\$0	\$0	\$220,554
TOTAL	\$0	\$0	\$0	\$0	\$0	\$220,554

* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

FY 2011-2020 Capital Improvement Plan

Capital Project Expenses Detail

2440 - Landfill

Category: Other

Project: 78505 - LF Phase Construction (North) (N)

Funding Source:

Landfill Revenues

Project Description:

This project is required for the development of the northern portion of the landfill and includes phased installation of liner and leachate collection system. It is anticipated that the north portion of the landfill will be accepting waste in FY 2015-16. Funds identified in FY 2014 (\$102,518) will be used for engineering design, and funds in FY 2015 (\$4,624,184) will pay for construction of North Phase 1a. Funds identified in the second five years (4,672,358) will pay for development of North Phase 1b, which will need to be constructed in 2017.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Design	\$0	\$0	\$0	\$100,000	\$100,000	\$200,000
Construction	\$0	\$0	\$0	\$0	\$4,368,000	\$4,318,400
Finance Charges	\$0	\$0	\$0	\$1,500	\$67,020	\$64,776
Engineering Charges	\$0	\$0	\$0	\$1,018	\$45,484	\$45,998
Arts	\$0	\$0	\$0	\$0	\$43,680	\$43,184
TOTAL	\$0	\$0	\$0	\$102,518	\$4,624,184	\$4,672,358

Operating Description:

No additional O and M is needed at this time.

Project: 78507 - Landfill Soil Excavation (N)

Funding Source:

Landfill Revenues

Project Description:

Project provides for excavation of Phase 1 in the north expansion area to prepare for future waste cell development. It includes excavation of approximately one-third of the north expansion area, removal of berm located between north area and Materials Recovery Facility (MRF) as well as utility relocation due to berm removal, and construction of screening berm along eastern boundary as an interim soil storage area. Excavation of the remaining two-thirds will occur as part of future landfill phase construction.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Design	\$0	\$0	\$100,000	\$100,000	\$0	\$0
Construction	\$0	\$0	\$0	\$12,531,498	\$0	\$0
Finance Charges	\$0	\$0	\$1,500	\$189,472	\$0	\$0
Engineering Charges	\$0	\$0	\$903	\$114,097	\$0	\$0
Arts	\$0	\$0	\$0	\$125,315	\$0	\$0
TOTAL	\$0	\$0	\$102,403	\$13,060,382	\$0	\$0

Operating Description:

No additional O and M is needed at this time.

* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset

FY 2011-2020 Capital Improvement Plan

Capital Project Expenses Detail

2440 - Landfill

Category: Other

Project: 78508 - Landfill Stormwater Drainage (N)

Funding Source:

Landfill Revenues

Project Description:

Construction of a series of storm water diversion devices that are necessary to minimize erosion of the landfill final cover surface. A total of 16 storm water drainage devices (down drains) are included in the original landfill design. This project provides for the installation of six down drains on the eastern and southern portions of the landfill, which are anticipated to reach final grade in early 2012. Installation of the remaining down drains will be completed during the south area closure project.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
Construction	\$0	\$451,584	\$0	\$0	\$0	\$0
Finance Charges	\$0	\$6,774	\$0	\$0	\$0	\$0
Engineering Charges	\$0	\$29,805	\$0	\$0	\$0	\$0
Arts	\$0	\$4,516	\$0	\$0	\$0	\$0
Contingency	\$0	\$73,902	\$0	\$0	\$0	\$0
TOTAL	\$0	\$566,581	\$0	\$0	\$0	\$0

Operating Description:

Repairs to drains will be completed by staff on site, no additional contractual maintenance is anticipated until south area closure is completed.

Project: 78519 - Landfill Entrance Signal (N)

Funding Source:

Landfill Revenues

Project Description:

Project provides for the design and construction of a new traffic signal and reconfiguration of the Glendale Municipal Landfill entrance (115th Avenue alignment). This project will also include a connection to the adjacent Glendale Regional Public Safety Training Center just north of this intersection.

Capital Costs:

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FYs 16-20
FY 2011 Carryover	\$1,306,752	\$0	\$0	\$0	\$0	\$0
TOTAL	\$1,306,752	\$0	\$0	\$0	\$0	\$0

Operating Description:

No additional O and M is needed at this time.

* New Project

N=New Asset, R=Replacement of Existing Asset, I=Improvement of Existing Asset