

WASTE MANAGEMENT & RECYCLING

EXECUTIVE SUMMARY

The Department of Waste Management and Recycling (DWMR) Five-Year Capital Improvement Plan (CIP) is equally split between department-wide equipment replacements and projects at the Kiefer Landfill and the North Area Recovery Station. Kiefer Landfill projects are required for ongoing landfill operations and are prescribed by various state regulations and permit conditions. The DWMR completed in the previous fiscal year new liner construction and landfill gas collection system improvements at Kiefer Landfill. Ongoing projects at Kiefer Landfill include landfill gas and leachate management system improvements, water supply improvements, and building improvements. North Area Recovery Station capital projects will improve and repair the site as mandated by state regulations and permit conditions. One such project is the North Area Recovery Station Green Waste Building and Master Plan project. The DWMR continues to replace fully-depreciated equipment for solid waste and recycling collection, recovery, and disposal operations. Selected new collection equipment will improve operational efficiencies with the purpose of resulting in net cost savings. All DWMR capital projects are funded through the Solid Waste Enterprise Fund without any contributions from the County General Fund. The projects proposed to be completed in the 2009-10 Fiscal Year Capital Budget include an "Operating Budget Impact" statement.

The following is a representative sample of the Kiefer Landfill and the North Area Recovery Station projects in the DWMR 5-year CIP.

- **Kiefer Landfill – Gas Collection System Expansion** – These projects expand the Kiefer Landfill's gas collection system into Module 2 and beyond into other areas of the landfill. As Kiefer Landfill expands, additional wells, replacement wells, and new collection piping will be needed. These projects will be completed in phases. **Estimated Total Cost: \$4,516,330**
- **Kiefer Landfill – Landfill M1 Phases 2 and 3 Partial Closure** – These projects involve the construction of partial final closure components such as final cover, drainage improvements, and landfill gas modifications on seventy-one acres of Kiefer Landfill Unit 1. **Estimated Total Cost - \$11,331,000**
- **North Area Recovery Station – Green Waste Building and Master Plan Project** – This project includes preparation of a twenty-year master plan for the facility; design and construction of a building for tipping, processing, and loading green and wood waste; improvement of the facility's storm water, sewer, and electrical utilities; and improvements to existing site buildings. **Estimated Total Cost: \$16,381,000**

WASTE MANAGEMENT & RECYCLING

SUMMARY

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	FISCAL YEAR 2012-13	FISCAL YEAR 2013-14	TOTAL
1	Collections - Automated Refuse Collection Trucks, 30 CY (3)	\$0	\$809,550	\$0	\$0	\$0	\$0	\$809,550
2	Collections - Automated Refuse Collection Trucks, 35 CY (2)	0	552,000	0	0	0	0	552,000
3	Collections - GPS Equipment Project	0	100,000	0	0	0	0	100,000
4	Collections - Rear Loading Collection Trucks, (3)	0	630,000	0	0	0	0	630,000
5	Equipment Replacements	0	0	4,166,500	6,881,000	2,262,000	3,000,500	16,310,000
6	Kiefer Landfill - Bufferland Property Purchases	2,600,000	0	1,000,000	0	0	0	3,600,000
7	Kiefer Landfill - Dozer	0	0	875,000	0	0	0	875,000
8	Kiefer Landfill - Gas and Leachate Management Systems Improvements	1,435,686	821,100	489,935	811,245	460,207	498,157	4,516,330
9	Kiefer Landfill - Gas Monitoring Probes	0	137,500	0	0	0	0	137,500
10	Kiefer Landfill - Gas Remediation	363,660	206,360	164,560	138,160	127,160	116,160	1,116,060
11	Kiefer Landfill - Horizontal Grinder	0	600,000	0	0	0	0	600,000
12	Kiefer Landfill - Landfill Gas Beneficial Use Project	353,676	27,500	225,500	27,500	0	0	634,176
13	Kiefer Landfill - Loader, Wheeled with Claw	0	120,000	0	0	0	0	120,000
14	Kiefer Landfill - M1 Phase 2 Partial Closure	503,000	0	231,000	3,916,000	0	0	4,650,000
15	Kiefer Landfill - M1 Phase 3 Partial Closure	0	0	0	319,000	6,362,000	0	6,681,000
16	Kiefer Landfill - M3 Phase 3 Liner and Ancillary Features	0	100,000	4,050,000	0	0	0	4,150,000
17	Kiefer Landfill - Monitoring Well Construction	0	250,000	0	0	0	0	250,000
18	Kiefer Landfill - Rest Stop Area	0	50,000	495,000	0	0	0	545,000
19	Kiefer Landfill - Truck, Articulating Haul	0	375,000	0	0	0	0	375,000
20	Kiefer Landfill - Truck, Water, All-Wheel Drive	0	200,000	0	0	0	0	200,000
21	Kiefer Landfill - Water Supply Project	0	0	1,450,000	0	0	0	1,450,000
22	North Area Recovery Station - Compactor, wheeled	0	490,000	0	0	0	0	490,000
23	North Area Recovery Station - Master Plan and Expansion	591,000	2,650,000	4,100,000	4,100,000	2,470,000	2,470,000	16,381,000
24	North Area Recovery Station - Trailers, Transfer (4)	0	240,000	0	0	0	0	240,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	FISCAL YEAR 2012-13	FISCAL YEAR 2013-14	TOTAL
25	North Area Recovery Station - Truck, Tractor (2)	0	250,000	0	0	0	0	250,000
26	North Area Recovery Station - Truck, Water, 2,500-Gallon	0	160,000	0	0	0	0	160,000
	TOTAL	\$5,847,022	\$8,769,010	\$17,247,495	\$16,192,905	\$11,681,367	\$6,084,817	\$65,822,616

CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

PRIOR-YEAR COMPLETED/CANCELLED PROJECTS SUMMARY

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2008-09	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	FISCAL YEAR 2012-13	TOTAL	REASON DROPPED
1	Collections - Automated Refuse Collection Truck, 15 Cubic Yards (4)	\$0	\$800,000	\$0	\$0	\$0	\$0	\$800,000	Project Completed
2	Collections - Automated Refuse Collection Truck, 27 Cubic Yards	0	3,000,000	0	0	0	0	3,000,000	Project Completed
3	Collections - Automated Refuse Collection Truck, 30 Cubic Yards	0	2,650,000	0	0	0	0	2,650,000	Project Completed
4	Collections - Flat Bed Truck (3)	0	225,000	0	0	0	0	225,000	Project Completed
5	Collections - Wheeled Loader with Claw (4)	0	440,000	0	0	0	0	440,000	Project Completed
7	Kiefer Landfill - Antifreeze, Batteries, Oil and Paint (ABOP) Facility Construction Project (Kiefer Landfill Entrance Improvement)	5,727,825	50,000	0	0	0	0	5,777,825	Project Completed
8	Kiefer Landfill - Bufferland Development	340,000	250,000	0	0	0	0	590,000	Project Cancelled
10	Kiefer Landfill - Diesel Tank	0	175,000	0	0	0	0	175,000	Project Cancelled
11	Kiefer Landfill - Engineering Building	0	0	0	198,500		1,214,000	1,412,500	Project Cancelled
12	Kiefer Landfill - Flare Improvement and Landfill Gas Delivery Project	135,686	1,300,000	0	0	0	0	1,435,686	Project Contract Awarded May 09
13	Kiefer Landfill - Former Graves Property Levee Replacement	100,000	100,000	0	0	0	0	200,000	Project Completed Continues as Annual Maintenance
15	Kiefer Landfill - Gas Collection System Expansion	240,216	350,000	1,000,000	438,020	376,310	0	2,404,546	Project Renamed to: Kiefer Landfill - Gas and Leachate Management Systems Improvements
17	Kiefer Landfill - Groundwater Monitoring Wells 43A, B; 44A, B; 37C	0	300,000	0	0	0	0	300,000	Project Completed
18	Kiefer Landfill - Landfill Compactor (1)	0	980,000	0	0	0	0	980,000	Project Completed
19	Kiefer Landfill - Landfill M1 Phase 2 Partial Closure	503,000	0	4,200,000	0	0	0	4,703,000	Project Continues Deferred to FY 11
21	Kiefer Landfill - Landfill M3 Phase 1 and 2 Liner and Ancillary Features	13,053,000	1,000,000	0	0	0	0	14,053,000	Project Completed
23	Kiefer Landfill - Regenerative Air Sweeper (1)	0	145,000	0	0	0	0	145,000	Project Completed
24	Kiefer Landfill - Replace HVAC System in the Operations Building	0	0	100,000	0	0	0	100,000	Project Cancelled
26	Kiefer Landfill - Wheeled Loader (1)	0	275,000	0	0	0	0	275,000	Project Completed
27	North Area Collection - Remodel Locker Room	0	0	100,000	0	0	0	100,000	Project Cancelled
30	North Area Recovery Station - Site Operations Area Improvements and Repairs	150,000	300,000	300,000	300,000	300,000	300,000	1,650,000	Project Merged with North Area Recovery Station Master Plan and Expansion
31	North Area Recovery Station - Wheeled Loader (2)	0	650,000	0	0	0	0	650,000	Project Completed
32	Weather and Stream Gauging	0	0	120,000	0	0	0	120,000	Project Cancelled
	TOTAL	\$20,249,727	\$12,990,000	\$5,820,000	\$936,520	\$676,310	\$1,514,000	\$42,186,557	

CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

Collections – Automated Refuse Collection Truck, 30 Cubic Yards (3)

9611 Conservation Road, Sacramento, CA 95827

Project #1

Department: Waste Management & Recycling

Estimated Project Cost: \$809,550

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise
Fund Capital Outlay



Project Description:

This project is for the purchase of three fully automated, side-loading refuse collection trucks with thirty-cubic yard capacity. These are replacement vehicles for fully depreciated vehicles currently in use. These will be three-axle trucks, powered by liquid natural gas fuel, and equipped with a right-hand drive.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Collections - Automated Refuse Collection Truck, 30 Cubic Yards (3)

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost							
3 units @ \$269,850	0	809,550	0	0	0	0	809,550

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise							
Fund Capital Outlay	0	809,550	0	0	0	0	809,550

CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

Collections – Automated Refuse Collection Truck, 35 Cubic Yards (2)

9611 Conservation Road, Sacramento, CA 95827

Project #2

Department: Waste Management & Recycling

Estimated Project Cost: \$552,000

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise
Fund Capital Outlay



Project Description:

This project is for the purchase of two fully-automated, side-loading refuse collection trucks with 35-cubic yard capacity. These are replacement vehicles for fully depreciated vehicles in current use. These will be four-axle trucks, powered by liquid natural gas fuel, and equipped with a right hand drive.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Collections - Automated Refuse Collection Truck, 35 Cubic Yards (2)

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost 2 units @ \$276,000	0	552,000	0	0	0	0	552,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	552,000	0	0	0	0	552,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Collections – GPS Equipment Project

9611 Conservation Road, Sacramento, CA 95827

Project #3

Department: Waste Management & Recycling

Estimated Project Cost: \$100,000

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise Fund Capital Outlay

Project Description:

This project is for the purchase of 120 units of the G4ECHO GPS system to replace the current tracking system. All new equipment is ordered with this tracking unit. This project will upgrade the current fleet.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

Collections - GPS Equipment Project

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost for 120 units	0	100,000	0	0	0	0	100,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	100,000	0	0	0	0	100,000

CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

Collections – Rear Loading Collection Trucks, (3)

9611 Conservation Road, Sacramento, CA 95827

Project #4

Department: Waste Management & Recycling

Estimated Project Cost: \$630,000

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise
Fund Capital Outlay



Project Description:

This project is for the purchase of three rear-loading refuse collection trucks with fifteen to twenty-cubic yard capacity. These vehicles are replacement vehicles for fully depreciated vehicles currently in use. These will be two- or three-axle trucks, powered by liquid natural gas fuel, and equipped with a left-hand drive.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Collections - Rear Loading Collection Trucks, (3)

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost 3 units @ \$210,000	0	630,000	0	0	0	0	630,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	630,000	0	0	0	0	630,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Equipment Replacements

12701 Kiefer Boulevard, Sloughouse, CA 95683 Project #5
 4450 Roseville Road, North Highlands, CA 95660
 9611 Conservation Road, Sacramento, CA 95827

Department: Waste Management & Recycling **Estimated Project Cost:** \$16,310,000

Expected Completion Date: 2014 **Funding Sources:** Solid Waste Enterprise
 Fund Capital Outlay

Project Description:

This project displays the amounts of anticipated equipment purchases to replace older, fully-depreciated heavy equipment for various Collection, Landfill, Transfer, Engineering and Hazmat programs over the next four years.

Equipment Replacements

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost	0	0	4,166,500	6,881,000	2,262,000	3,000,500	16,310,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	0	4,166,500	6,881,000	2,262,000	3,000,500	16,310,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Kiefer Landfill – Bufferland Property Purchases

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #6

Department: Waste Management & Recycling

Estimated Project Cost: \$3,600,000

Expected Delivery Date: 2011

Funding Sources: Solid Waste Enterprise Fund Capital Outlay

Project Description:

This project continues the systematic purchase of privately-held lands within the County General Plan–defined Kiefer Landfill Bufferlands.

Kiefer Landfill - Bufferland Property Purchases

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost	2,600,000	0	1,000,000	0	0	0	3,600,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	2,600,000	0	1,000,000	0	0	0	3,600,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Dozer

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #7

Department: Waste Management & Recycling

Estimated Project Cost: \$875,000

Expected Completion Date: 2011

Funding Sources: Solid Waste Enterprise
Fund Capital Outlay



Project Description:

This project is for the purchase of a D9 refuse dozer, without ripper. It will be used to push and spread refuse at the Kiefer Landfill. This purchase will replace a fully depreciated unit.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill - Dozer

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost	0	0	875,000	0	0	0	875,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	0	875,000	0	0	0	875,000

**CAPITAL IMPROVEMENT PLAN
WASTE MANAGEMENT & RECYCLING**

Kiefer Landfill – Gas and Leachate Management Systems Improvements

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #8

Department: Waste Management & Recycling

Estimated Project Cost: \$4,516,330

Expected Delivery Date: 2014

Funding Sources: Solid Waste Enterprise Fund Capital Outlay

Project Description:

This project involves the expansion of the Kiefer Landfill gas collection system into module M2. Additional gas collectors are required to maintain compliance with regulatory requirements. The project will involve the installation of replacement wells, new wells for M2, and the installation of new piping for wells installed in M2.

Kiefer Landfill - Gas and Leachate Management Systems Improvements

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Construction Costs	1,435,686	740,415	489,935	811,245	460,207	498,157	4,435,645
Consultant Services	0	26,895	0	0	0	0	26,895
Construction Inspection	0	53,790	0	0	0	0	53,790
	1,435,686	821,100	489,935	811,245	460,207	498,157	4,516,330

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	1,435,686	821,100	489,935	811,245	460,207	498,157	4,516,330

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Gas Monitoring Probes

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #9

Department: Waste Management & Recycling

Estimated Project Cost: \$137,500

Expected Delivery Date: 2010

Funding Sources: Solid Waste Enterprise Fund Capital Outlay

Project Description:

This project will involve the installation of additional Landfill gas monitoring probes on the Kiefer Landfill site perimeter. The new probes will bring the landfill gas monitoring network into compliance with recently revised regulatory requirements effective October 2009.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

Kiefer Landfill - Gas Monitoring Probes

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Construction Costs	0	110,000	0	0	0	0	110,000
Consultant Services	0	16,500	0	0	0	0	16,500
Construction Inspection	0	11,000	0	0	0	0	11,000
	0	137,500	0	0	0	0	137,500

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	137,500	0	0	0	0	137,500

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Gas Remediation

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #10

Department: Waste Management & Recycling

Estimated Project Cost: \$1,116,060

Expected Completion Date: 2014

Funding Sources: Solid Waste Enterprise Fund Capital Outlay

Project Description:

Offsite landfill gas (LFG) has been detected at Kiefer Landfill since the mid-1990's and has been the subject of ongoing remedial activities. Regulations require landfill owners to control landfill gas at the facility boundary. The magnitude of the remediation required to fully address the issue is unknown at this time. For the purpose of this estimate it is assumed that four extraction wells will be installed in the impacted areas in each fiscal year through 2014. These wells would be connected to the existing LFG collection and destruction system using the aboveground piping and sumps.

Kiefer Landfill - Gas Remediation

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Construction Costs	363,660	135,300	118,800	96,800	96,800	96,800	908,160
Consultant Services	0	57,530	33,880	31,680	20,680	9,680	153,450
Construction Inspection	0	13,530	11,880	9,680	9,680	9,680	54,450
	363,660	206,360	164,560	138,160	127,160	116,160	1,116,060

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	363,660	206,360	164,560	138,160	127,160	116,160	1,116,060

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Horizontal Grinder

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #11

Department: Waste Management & Recycling

Estimated Project Cost: \$600,000

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise
Fund Capital Outlay



Project Description:

This project is for the purchase of a green waste horizontal grinder that will be used to process residential green waste for alternative daily cover at Kiefer Landfill. This purchase will replace a fully depreciated unit currently in operation.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill - Horizontal Grinder

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost	0	600,000	0	0	0	0	600,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	600,000	0	0	0	0	600,000

**CAPITAL IMPROVEMENT PLAN
WASTE MANAGEMENT & RECYCLING**

Kiefer Landfill – Landfill Gas Beneficial Use Project

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #12

Department: Waste Management & Recycling

Estimated Project Cost: \$634,176

Expected Delivery Date: 2012

Funding Sources: Solid Waste Enterprise Fund Capital Outlay

Project Description:

This project will involve the construction of site improvements to support construction of a facility to recover energy from collected landfill gas (LFG). The majority of the project costs would be borne by the project developer. The Department of Waste Management and Recycling will pay for the site grading and improvements.

Kiefer Landfill - Gas Beneficial Use Project

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Construction Costs	353,676	0	165,000	0	0	0	518,676
Consultant Services	0	27,500	44,000	27,500	0	0	99,000
Construction Inspection	0	0	16,500	0	0	0	16,500
	353,676	27,500	225,500	27,500	0	0	634,176

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	353,676	27,500	225,500	27,500	0	0	634,176

CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Loader, Wheeled with Claw

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #13

Department: Waste Management & Recycling

Estimated Project Cost: \$120,000

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise
Fund Capital Outlay



Project Description:

This project will be for the purchase of a wheeled loader with claw for use in the recycling area for loading and moving commodities. This unit will replace a fully depreciated unit having an air emissions Tier 0 engine that is scheduled for retirement to maintain regulatory compliance.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill - Loader, Wheeled with Claw

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost	0	120,000	0	0	0	0	120,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	120,000	0	0	0	0	120,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – M1 Phase 2 Partial Closure

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #14

Department: Waste Management & Recycling

Estimated Project Cost: \$4,650,000

Expected Completion Date: 2012

Funding Sources: Solid Waste Enterprise Fund Capital Outlay

Project Description:

This project includes the planning, design, construction, construction management, inspections, and reporting associated with construction of partial final closure components such as final cover, drainage improvements, and landfill gas modifications on twenty-five acres of Kiefer Landfill Unit 1. The estimates are based on information contained in the Partial Final Closure Plan and also include costs to monitor performance of an alternative “evapotranspiration” final cover test plot. The estimates are based on a composite geosynthetic clay liner/geomembrane final cover over all areas to receive final cover. Costs will likely be lower if an alternative final cover is constructed, pending monitoring results that support successful performance of an ongoing vegetated test plot.

Kiefer Landfill - M1 Phase 2 Partial Closure

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Construction Costs	0	0	0	3,730,000	0	0	3,730,000
Project Design	0	0	0	0	0	0	0
Consultant Services	503,000	0	231,000	0	0	0	734,000
Construction Inspection	0	0	0	186,000	0	0	186,000
	503,000	0	231,000	3,916,000	0	0	4,650,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	503,000	0	231,000	3,916,000	0	0	4,650,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – M1 Phase 3 Partial Closure

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #15

Department: Waste Management & Recycling

Estimated Project Cost: \$6,681,000

Expected Completion Date: 2013

Funding Sources: Solid Waste Enterprise Fund Capital Outlay

Project Description:

This project includes the planning, design, construction, construction management, inspections, and reporting associated with construction of partial final closure components such as final cover, drainage improvements, and landfill gas modifications on forty-six acres of Kiefer Landfill Unit 1. The estimates are based on information contained in the Partial Final Closure Plan and also include costs to monitor performance of an alternative “evapotranspiration” final cover test plot. The estimates are based on a composite geosynthetic clay liner/geomembrane final cover over all areas to receive final cover. Costs will likely be lower if an alternative final cover is constructed, pending monitoring results that support successful performance of an ongoing vegetated test plot.

Kiefer Landfill - M1 Phase 3 Partial Closure

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Construction Costs	0	0	0	0	6,059,000	0	6,059,000
Consultant Services	0	0	0	319,000	0	0	319,000
Construction Inspection	0	0	0	0	303,000	0	303,000
	0	0	0	319,000	6,362,000	0	6,681,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	0	0	319,000	6,362,000	0	6,681,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – M3 Phase 3 Liner and Ancillary Features

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #16

Department: Waste Management & Recycling

Estimated Project Cost: \$4,150,000

Expected Completion Date: 2011

Funding Sources: Solid Waste Enterprise
Fund Capital Outlay

Project Description:

This project includes the planning, design, construction, construction management, inspections, reporting, and oversight associated with construction of approximately twelve acres of landfill liner and leachate collection systems for Module 3, Phase 3 at Kiefer Landfill. The budget is based on experience with Module 3, Phases 1 & 2 and conceptual design and cost estimating documents.

Kiefer Landfill - M3 Phase 3 Linear and Ancillary Features

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Construction Costs	0	0	3,700,000	0	0	0	3,700,000
Project Design	0	0	0	0	0	0	0
Consultant Services	0	100,000	150,000	0	0	0	250,000
Construction Inspection	0	0	200,000	0	0	0	200,000
	0	100,000	4,050,000	0	0	0	4,150,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	100,000	4,050,000	0	0	0	4,150,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Monitoring Well Construction

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #17

Department: Waste Management & Recycling

Estimated Project Cost: \$250,000

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise Fund Capital Outlay

Project Description:

The California Regional Water Quality Control Board requires well construction to facilitate monitoring of the groundwater at Kiefer Landfill. The Board's requirement is a condition on the permit granted to the County to operate the Landfill.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

Kiefer Landfill - Monitoring Well Construction

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Consultant Services	0	250,000	0	0	0	0	250,000
	0	250,000	0	0	0	0	250,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	250,000	0	0	0	0	250,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Rest Stop Area

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #18

Department: Waste Management & Recycling

Estimated Project Cost: \$545,000

Expected Delivery Date: 2011

Funding Sources: Solid Waste Enterprise Fund Capital Outlay

Project Description:

This project includes the planning, design, construction, construction management, inspections, and reporting associated with construction of this one-acre site near the Kiefer Landfill main entrance gates. Currently, there is no formal customer rest area. Truck drivers and customers may use the restroom inside the administration building. Drivers also park their trucks in open areas around the scale house or outside the landfill premises along Kiefer Boulevard to complete paper work, rest, and use the restroom facility. The new customer rest area is to include a restroom facility, picnic tables, a parking area for landfill customers, and an interpretive center. The interpretive center is to feature the environmentally friendly aspects and overall benefits of the energy plant, modern landfill technology, and should highlight the coexistence of an industrial facility with the adjacent vernal pool preserve. It is the Department of Waste Management & Recycling's (DWMR) intent to have this one-acre facility certified by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program.

Kiefer Landfill - Rest Stop Area

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Construction Costs	0	0	440,000	0	0	0	440,000
Project Design	0	50,000	10,000	0	0	0	60,000
Consultant Services	0	0	0	0	0	0	0
Construction Inspection	0	0	45,000	0	0	0	45,000
	0	50,000	495,000	0	0	0	545,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	50,000	495,000	0	0	0	545,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Truck, Articulating Haul

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #19

Department: Waste Management & Recycling

Estimated Project Cost: \$375,000

Expected Delivery Date: 2010

Funding Sources: Solid Waste Enterprise Fund Capital Outlay



Project Description:

This thirty-five-ton capacity off-road haul truck will be used to haul cover material at the Kiefer Landfill. This unit will replace a current unit.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill - Truck, Articulating Haul

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost	0	375,000	0	0	0	0	375,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	375,000	0	0	0	0	375,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Truck, Water, All–Wheel Drive

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #20

Department: Waste Management & Recycling

Estimated Project Cost: \$200,000

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise Fund Capital Outlay



Project Description:

This purchase will be a 2,500 gallon all–wheel drive water truck used to apply water for dust control at the Kiefer Landfill. This truck will replace a fully depreciated unit having an air emissions Tier 0 engine that is scheduled for retirement to maintain regulatory compliance.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill - Truck, Water, All Wheeled Drive

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost	0	200,000	0	0	0	0	200,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	200,000	0	0	0	0	200,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill – Water Supply Project

12701 Kiefer Boulevard, Sloughouse, CA 95683

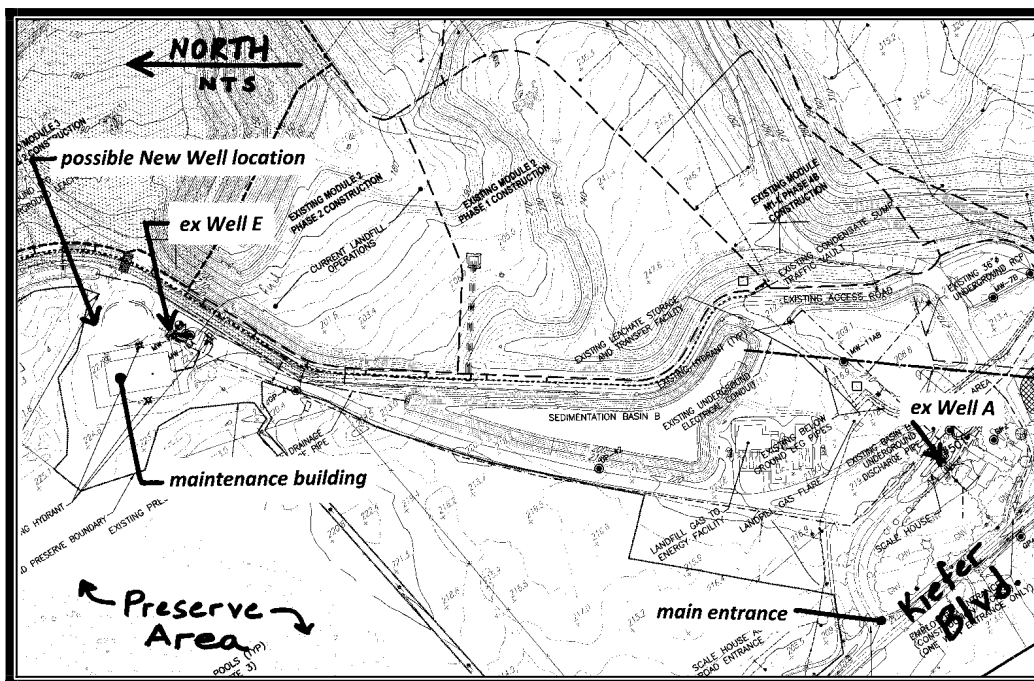
Project #21

Department: Waste Management & Recycling

Estimated Project Cost: \$1,450,000

Expected Completion Date: 2011

Funding Sources: Solid Waste Enterprise Fund Capital Outlay



Project Description:

Currently there are two production wells that supply water to the Kiefer Landfill water supply system known as wells A and E. Well E produces over 1,200 gallons, while Well A produces at best 200 gallons per minute. Well A is a sub-standard back up for Well E. A new well is needed for three reasons: 1) better system redundancy, 2) to maintain adequate fire protection, and 3) dust suppression, mainly in the summer time. This project includes the planning, design, construction, construction management, inspections, and reporting associated with construction of new production Well F (location to be determined). Well A infrastructure will also be decommissioned as a part of this project. The Department of Water Resources (DWR) has been consulted and is involved in the initial planning phase.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

Kiefer Landfill - Water Supply Project

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Construction Costs	0	0	1,300,000	0	0	0	1,300,000
Consultant Services	0	0	20,000	0	0	0	20,000
Construction Inspection	0	0	130,000	0	0	0	130,000
	0	0	1,450,000	0	0	0	1,450,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	0	1,450,000	0	0	0	1,450,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

North Area Recovery Station – Compactor, Wheeled

4450 Roseville Road, North Highlands, CA 95660

Project #22

Department: Waste Management & Recycling

Estimated Project Cost: \$490,000

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise Fund Capital Outlay



Project Description:

This purchase will be a 54,000–pound wheeled trash compactor for precompaction of refuse material to be top loaded or bailed at the Transfer Station. It will replace a fully depreciated unit having an air emissions Tier 0 engine that is scheduled for retirement to maintain regulatory compliance.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

North Area Recovery Station - Compactor, Wheeled

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost	0	490,000	0	0	0	0	490,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	490,000	0	0	0	0	490,000

CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

North Area Recovery Station – Master Plan and Expansion

4450 Roseville Road, North Highlands, CA 95660

Project #23

Department: Waste Management & Recycling

Estimated Project Cost: \$16,381,000

Expected Completion Date: 2014

Funding Sources: Solid Waste Enterprise Fund Capital Outlay



Project Description:

This Project is a multiyear project composed of a suite of improvements to provide increased efficiency, safety, regulatory compliance and capacity.

1. Reconfigure the sewer and storm inlets and piping at refuse top loading area to improve storm water quality.
2. Reconfigure the storm system with a lift station and storm water basin, and increase the electrical system capacity and distribution.
3. Modify the Administration Building.
4. Widen the existing tipping building to the south to provide three new bays.
5. Widen the existing tipping building to the west to provide increased covered area for bays 1-8.
6. Construct green waste/wood waste processing building.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

North Area Recovery Station - Master Plan and Expansion

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Construction Costs	0	2,350,000	3,300,000	3,300,000	2,000,000	2,000,000	12,950,000
Project Design	0	22,500	552,500	552,500	350,000	350,000	1,827,500
Consultant Services	591,000	55,500	49,500	49,500	0	0	745,500
Construction Inspection	0	222,000	198,000	198,000	120,000	120,000	858,000
	591,000	2,650,000	4,100,000	4,100,000	2,470,000	2,470,000	16,381,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	591,000	2,650,000	4,100,000	4,100,000	2,470,000	2,470,000	16,381,000

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

North Area Recovery Station – Trailers, Transfer (4)

4450 Roseville Road, North Highlands, CA 95660

Project #24

Department: Waste Management & Recycling

Estimated Project Cost: \$240,000

Expected Delivery Date: 2010

Funding Sources: Solid Waste Enterprise Fund Capital Outlay



Project Description:

This purchase is for four forty-foot, walking-floor transfer trailers. These units will be used to haul refuse from the Transfer Station to the Landfill, or recyclables to vendors. The four units will replace aging, fully depreciated units in the current Transfer fleet.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

North Area Recovery Station - Trailers, Transfer (4)

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost 4 units @ \$60,000	0	240,000	0	0	0	0	240,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	240,000	0	0	0	0	240,000

CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

North Area Recovery Station – Truck, Tractor (2)

4450 Roseville Road, North Highlands, CA 95660

Project #25

Department: Waste Management & Recycling

Estimated Project Cost: \$250,000

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise
Fund Capital Outlay



Project Description:

This purchase will be for two fifth-wheeled truck tractors with Tier 3 engines, for replacement of fully depreciated units currently in the fleet that will otherwise become air emission noncompliant. The truck tractors are used to pull the trailers of refuse to the Landfill and recyclables to vendors.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

North Area Recovery Station - Truck, Tractor (2)

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost 2 units @ \$125,000	0	250,000	0	0	0	0	250,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	250,000	0	0	0	0	250,000

CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

North Area Recovery Station – Truck, Water, 2,500–Gallon

4450 Roseville Road, North Highlands, CA 95660

Project #26

Department: Waste Management & Recycling

Estimated Project Cost: \$160,000

Expected Completion Date: 2010

Funding Sources: Solid Waste Enterprise
Fund Capital Outlay



Project Description:

This purchase will be a 2,500–gallon all wheel drive water truck used to apply water for dust control at the North Area Recovery Station. This unit will replace a fully depreciated unit that would otherwise become air emissions noncompliant.

Operating Budget Impact:

The operating cost impact of this project is unknown at this time.

CAPITAL IMPROVEMENT PLAN

WASTE MANAGEMENT & RECYCLING

North Area Recovery Station - Truck, Water, 2,500 Gallon

Project Costs	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Purchase Cost	0	160,000	0	0	0	0	160,000

Funding Source	Prior Years	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Total
Solid Waste Enterprise Fund Capital Outlay	0	160,000	0	0	0	0	160,000