

# WASTE MANAGEMENT & RECYCLING - EXECUTIVE SUMMARY

## EXECUTIVE SUMMARY

The Department of Waste Management and Recycling (DWMR) Five-Year Capital Improvement Plan (CIP) is split between equipment replacements (accounts for about 40 percent of the program) and projects at the Kiefer landfill (KLF) and North Area Recovery Station (NARS) (accounts for about 60 percent of the program). KLF 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 a major improvement to the entrance of the KLF. Ongoing projects include new liner construction, landfill gas collection system components, water supply improvements, wetland mitigation, bufferland management and building improvements. NARS capital projects will improve and repair the site as mandated by state regulations and permit conditions. One such project is the NARS Green Waste Building and Master Plan project. The DWMR continues to replace fully depreciated equipment for solid waste and recycling collection 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 2008-09 Fiscal Year Capital Budget include an "Operating Budget Impact" statement.

The following is a representative sample of the Kiefer and NARS projects in the DWMR five-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: \$2,404,546**
- **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 71 acres of Kiefer Landfill Unit 1. **Estimated Total Cost - \$11,004,960**
- **Kiefer Landfill – Landfill M3 Liner and Ancillary Features** -- These projects include the planning, design, construction, construction management, inspections, report and oversight associated with construction of approximately 56 acres of landfill liner and leachate collection systems for module 3. **Estimated Total Cost: \$19,204,700**
- **North Area Recovery (NARS) – Green Waste Building and Master Plan Project** -- This project includes design and construction of a building for tipping, grinding, and loading green and wood waste; and preparation of a 20-year master plan for the facility. **Estimated Total Cost: \$8,650,000**

# WASTE MANAGEMENT & RECYCLING

## 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
1	Collections - Automated Refuse Collection Truck, 15 Cubic Yards (4)	\$0	\$800,000	\$0	\$0	\$0	\$0	\$800,000
2	Collections - Automated Refuse Collection Truck, 27 Cubic Yards (12)	0	3,000,000	0	0	0	0	3,000,000
3	Collections - Automated Refuse Collection Truck, 30 Cubic Yards (10)	0	2,650,000	0	0	0	0	2,650,000
4	Collections - Flat Bed Truck (3)	0	225,000	0	0	0	0	225,000
5	Collections - Wheeled Loader with Claw (4)	0	440,000	0	0	0	0	440,000
6	Equipment Replacements	0	0	7,606,200	8,701,140	7,161,525	7,694,925	31,163,790
7	Kiefer Landfill - Antifreeze, Batteries, Oil and Paint (ABOP) Facility Construction Project	5,727,825	50,000	0	0	0	0	5,777,825
8	Kiefer Landfill - Bufferland Development	340,000	250,000	0	0	0	0	590,000
9	Kiefer Landfill - Bufferland Property Purchases	2,600,000	750,000	0	0	0	0	3,350,000
10	Kiefer Landfill - Diesel Tank	0	175,000	0	0	0	0	175,000
11	Kiefer Landfill - Engineering Building	0	0	0	198,500		1,214,000	1,412,500
12	Kiefer Landfill - Flare Improvement and Landfill Gas Delivery Project	135,686	1,300,000	0	0	0	0	1,435,686
13	Kiefer Landfill - Graves Property Deer Creek Levee Repair	100,000	100,000	0	0	0	0	200,000
14	Kiefer Landfill - Gas Beneficial Use Project	144,676	209,000	0	0	0	0	353,676
15	Kiefer Landfill - Gas Collection System Expansion	240,216	350,000	1,000,000	438,020	376,310	0	2,404,546
16	Kiefer Landfill - Gas Remediation Project	192,830	170,830	200,000	200,000	200,000	200,000	1,163,660

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

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
17	Kiefer Landfill - Groundwater Monitoring Wells 43A, B; 44A, B; 37C	0	300,000	0	0	0	0	300,000
18	Kiefer Landfill - Landfill Compactor (1)	0	980,000	0	0	0	0	980,000
19	Kiefer Landfill - Landfill M1 Phase 2 Partial Closure	503,000	0	4,200,000	0	0	0	4,703,000
20	Kiefer Landfill - Landfill M1 Phase 3 Partial Closure	0	0	0	309,000	5,992,960	0	6,301,960
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
22	Kiefer Landfill - Landfill M3 Phase 3 Liner and Ancillary Features	0	0	245,000	4,906,700	0	0	5,151,700
23	Kiefer Landfill - Regenerative Air Sweeper (1)	0	145,000	0	0	0	0	145,000
24	Kiefer Landfill - Replace Heating Ventilation Air Conditioning System in the Operations Building	0	0	100,000	0	0	0	100,000
25	Kiefer Landfill - Water Supply Improvements	36,079	0	0	705,600	0	0	741,679
26	Kiefer Landfill - Wheeled Loader (1)	0	275,000	0	0	0	0	275,000
27	North Area Collection - Remodel Locker Rooms	0	0	100,000	0	0	0	100,000
28	North Area Recovery Station - Aluminum Open Topped Transfer Trailer (2)	0	120,000	0	0	0	0	120,000
29	North Area Recovery Station - Green Waste Building and Master Plan Project	650,000	0	2,000,000	2,000,000	2,000,000	2,000,000	8,650,000
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
31	North Area Recovery Station - Wheeled Loader (2)	0	650,000	0	0	0	0	650,000
32	Weather and Stream Gauging Station	0	0	120,000	0	0	0	120,000
<b>TOTAL</b>		<b>\$23,873,312</b>	<b>\$14,239,830</b>	<b>\$15,871,200</b>	<b>\$17,758,960</b>	<b>\$16,030,795</b>	<b>\$11,408,925</b>	<b>\$99,183,022</b>

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### PRIOR-YEAR COMPLETED/CANCELLED PROJECTS SUMMARY

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2007-08	FISCAL YEAR 2008-09	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	TOTAL	REASON DROPPED
1	Collections - Automated Refuse Collection Truck, 35 Cubic Yards	\$0	\$5,000,000	\$0	\$0	\$0	\$0	\$5,000,000	Project Completed
2	Collections - Claw Loader	0	208,080	0	0	0	0	208,080	Project Completed
3	Collections - Knuckle Boom Truck	0	418,200	0	0	0	0	418,200	Project Completed
4	Collections - Rear Loaders	0	526,320	0	0	0	0	526,320	Project Completed
5	Elk Grove Landfill Development Project	400,000	200,000	0	0	0	0	600,000	Project Cancelled Budgeted amount combined with NARS Master Project plan
8	Kiefer Landfill - Articulated Haul Truck	0	714,000	0	0	0	0	714,000	Project Completed
13	Kiefer Landfill - Crawler Dozer with Ripper	0	918,000	0	0	0	0	918,000	Project Completed
11	Kiefer Landfill - Crawler Dozer, Heavy	0	856,800	0	0	0	0	856,800	Project Completed
12	Kiefer Landfill - Crawler Dozer, Light	0	142,800	0	0	0	0	142,800	Project Cancelled
14	Kiefer Landfill - Diesel Tank	0	70,000	0	0	0	0	70,000	Project cancelled, deferred to next year
15	Kiefer Landfill - Engineering Building Design and Construction	0	0	0	0	0	0	0	Project renamed to Kiefer Landfill - Engineering Building #11
16	Kiefer Landfill - Entrance Improvement Project	427,825	2,185,941	0	0	0	0	2,613,766	Project Completed
23	Kiefer Landfill - Landfill-1, Phase III Partial Closure	0	0	0	0	0	0	0	Project renamed to Kiefer Landfill - Landfill M1 Phase 3 Partial Closure #20
25	Kiefer Landfill - Module 3, Phase III Liner and Ancillary Features	0	0	0	0	0	0	0	Project renamed to Kiefer Landfill - Landfill M3 Phase 3 Liner and Ancillary Features #22
26	Kiefer Landfill - Secondary Groundwater Remediation System Improvement	249,000	150,000	0	0	0	0	399,000	Project Canceled Budgeted amount combined with NARS Master Project plan
27	Kiefer Landfill - Skip Loader	0	120,000	0	0	0	0	120,000	Project Cancelled
28	Kiefer Landfill - Storm Water Protection Site Improvements	118,000	972,023	0	0	0	0	1,090,023	Project Cancelled Combined into the Entrance Site Project, #16
29	Kiefer Landfill - Water Supply Improvements	36,079	705,600	0	0	0	0	741,679	Project Cancelled Budgeted amount combined with NARS Master Project plan

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2007-08	FISCAL YEAR 2008-09	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	TOTAL	REASON DROPPED
30	Kiefer Landfill - Wetland Mitigation	2,050,000	1,150,000	0	0	0	0	3,200,000	Project Cancelled This expense is now an operating expense
31	North Area Recovery Station - Can Yard Grading and Sealing	0	339,675	0	0	0	0	339,675	Project Cancelled
32	North Area Recovery Station - Employee Parking Lot Paving	0	45,000	0	0	0	0	45,000	Project Cancelled Budgeted amount combined with NARS Master Project plan
33	North Area Recovery Station - Heavy Duty Inerts Trailer	0	150,000	0	0	0	0	150,000	Project Completed
35	South Container and Transfer Station - Site Improvements (including Can Yard)	155,000	345,000	0	0	0	0	500,000	Project Cancelled
36	Universal Waste Processing Equipment	0	120,000	0	0	0	0	120,000	Project Cancelled Combined into the ABOP Project, #7
	<b>TOTAL</b>	<b>\$3,435,904</b>	<b>\$15,337,439</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$18,773,343</b>	

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Collections – Automated Refuse Collection Truck, 15 Cubic Yards (4)

9611 Conservation Road, Sacramento, CA 95827

Project #1

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$800,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

This project is for the purchase of four fully automated side loading refuse collection trucks with 15 cubic yard capacity. These will be two axle trucks, powered by liquid natural gas fuel and 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, 15 Cubic Yards (4)

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost							
4 units @\$200,000	0	800,000	0	0	0	0	800,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	800,000	0	0	0	0	800,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Collections – Automated Refuse Collection Truck, 27 Cubic Yards (12)

9611 Conservation Road, Sacramento, CA 95827

Project #2

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$3,000,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

This project is for the purchase of twelve fully automated side loading refuse collection trucks with 27 cubic yard capacity. These will be three axle trucks, powered by liquid natural gas fuel and 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, 27 Cubic Yards (12)

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost							
12 units @\$250,000	0	3,000,000	0	0	0	0	3,000,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	3,000,000	0	0	0	0	3,000,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Collections – Automated Refuse Collection Truck, 30 Cubic Yards (10)

9611 Conservation Road, Sacramento, CA 95827

Project #3

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$2,650,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

This project is for the purchase of ten fully automated side loading refuse collection trucks with 30 cubic yard capacity. These will be three axle trucks with tag axle, powered by liquid natural gas fuel and 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 (10)

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost							
10 units @\$265,000	0	2,650,000	0	0	0	0	2,650,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	2,650,000	0	0	0	0	2,650,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Collections – Flat Bed Truck (3)

9611 Conservation Road, Sacramento, CA 95827

Project #4

**Department:** Waste Management & Recycling

**Estimated Equipment Cost:** \$225,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

The appropriation provides for three new flat bed trucks to be used by Neighborhood Cleanup to pick up and deliver residential collection cans.

**Operating Budget Impact:**

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

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Collections - Flat Bed Truck (3)

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost							
3 units @\$75,000	0	225,000	0	0	0	0	225,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital OutlayFund	0	225,000	0	0	0	0	225,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Collections – Wheeled Loader with Claw (4)

9611 Conservation Road, Sacramento, CA 95827

Project #5

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$440,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

Collections – Wheeled Loader with Claw – the wheeled claw loader is utilized for moving and loading residential material discarded by residents in the Neighborhood Cleanup program and moving commodities at other facilities. This project will fund the purchase of four Wheeled Loaders with Claw.

**Operating Budget Impact:**

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

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Collections - Wheeled Loader with Claw (4)

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost							
4 units @ \$110,000	0	440,000	0	0	0	0	440,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	440,000	0	0	0	0	440,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Equipment Replacements

Sacramento County

Project #6

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$31,163,790

**Expected Completion Date:** 2013

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

Purchase of equipment to replace older, fully-depreciated heavy equipment for various Collection, Landfill, Transfer, Engineering and Hazmat programs.

**Project Locations:**

- Kiefer Landfill – 12701 Kiefer Boulevard, Sloughouse, CA 95683
- South Container & Transfer Site – 8550 Fruitridge Road, Sacramento, CA 95826
- North Area Recover Station – 4450 Roseville Road, North Highlands, CA 95660
- South Collections – 9611 Conservation Road, Sacramento, CA 95827

#### Equipment Replacements

Project Costs	Prior Years	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Total
Purchase Cost	0	0	7,606,200	8,701,140	7,161,525	7,694,925	31,163,790

Funding Source	Prior Years	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Fiscal Year 2012-13	Total
Refuse Capital Outlay Fund	0	0	7,606,200	8,701,140	7,161,525	7,694,925	31,163,790



**CAPITAL IMPROVEMENT PLAN  
WASTE MANAGEMENT & RECYCLING**

**Kiefer Landfill – Antifreeze, Batteries, Oil and Paint (ABOP) Facility  
Construction Project**

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #7

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$5,777,825

**Expected Completion Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

The facility consists of a preengineered building, outside storage lockers, waste oil tanks, and other miscellaneous equipment. The Antifreeze, Batteries, Oil and Paint (ABOP) Facility at Kiefer Landfill will collect antifreeze, batteries, oil, paint and universal waste from citizens in the eastern part of Sacramento County. Fiscal Year 2008-09 funds will be used to purchase equipment for the ABOP facility.

**Operating Budget Impact:**

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

**Kiefer Landfill - Antifreeze, Batteries, Oil and Paint (ABOP) Facility Construction Project**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Equipment	5,727,825	50,000	0	0	0	0	5,777,825

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	5,727,825	50,000	0	0	0	0	5,777,825

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Bufferland Development

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #8

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$590,000

**Expected Completion Date:** 2009

**Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**

The Department has completed a Kiefer Bufferlands “Land Use Feasibility Analysis” (LUFA) in Fiscal Year 2007-08. The Board-approved analysis has identified several feasible land uses that can be implemented in the bufferlands. The current project is the next step in the development of bufferland. This project will take the information from the LUFA and produce a specific land use plan for county-owned and participating privately-owned bufferlands. The resulting land use plan will be ready for submittal to the Planning Department for entitlements, Department of Environmental Review and Assessment for environmental review.

The proposed budget is for consultant services needed to produce the deliverable by June 30, 2009. A subsequent project and budget will be proposed for application fees and environmental review costs.

**Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

**Kiefer Landfill - Bufferland Development**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Consultant Services	340,000	250,000	0	0	0	0	590,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Solid Waste Capital Outlay Fund	340,000	250,000	0	0	0	0	590,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Bufferland Property Purchases

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #9

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$3,350,000

**Expected Completion Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

This project continues the systematic purchase of privately-held lands within the county General Plan-defined Kiefer Landfill Bufferlands. The specific purchase contemplated in Fiscal Year 2008-09 is 86 acres of the bufferland. An appraisal completed in July 2007 valued the property at just under \$700,000. The proposed budget will cover the purchase price with contingencies for acquisition costs and change in valuation.

**Operating Budget Impact:**

Completion of this project has no measurable impact on the operating budget.

**Kiefer Landfill - Bufferland Property Purchases**

	Prior	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Project Costs	Years	2008-09	2009-10	2010-11	2011-12	2012-13	Total
Purchase Costs	2,600,000	750,000	0	0	0	0	3,350,000

	Prior	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Source	Years	2008-09	2009-10	2010-11	2011-12	2012-13	Total
Refuse Capital Outlay Fund	2,600,000	750,000	0	0	0	0	3,350,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Diesel Tank

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #10

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$175,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



#### **Project Description:**

Kiefer Landfill - Diesel Tank is used for the onsite storage of fuels at the Kiefer Landfill. It is a 10,000 gallon above ground, double-walled fuel tank. It will be equipped with a fast fill monitored fill system for better efficiency and spill control. The new fuel tank and system would cut fueling time from around 2 hours to 30-45 minutes.

#### **Operating Budget Impact:**

The operating costs for this project are not able to be determined at this time.

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill - Diesel Tank

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost	0	175,000	0	0	0	0	175,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	175,000	0	0	0	0	175,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Engineering Building

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #11

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$1,412,500

**Expected Completion Date:** 2013

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

The project will include design and construction of a new building for engineering and technician staff at Kiefer Landfill. The estimated structure size is 3,500 square feet. Additionally, the project includes renovation of the existing building to accommodate “special waste” management staff and departmental document storage needs. The project will incorporate “sustainable/green” building elements and seek industry certification.

**Kiefer Landfill - Engineering Building**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	0	0	0	0	990,000	990,000
Project Management/Design	0	0	0	50,000	0	50,000	100,000
Consultant Services	0	0	0	148,500	0	0	148,500
Construction Inspection	0	0	0	0	0	99,000	99,000
Misc Project Costs	0	0	0	0	0	75,000	75,000
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>198,500</b>	<b>0</b>	<b>1,214,000</b>	<b>1,412,500</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	0	0	198,500	0	1,214,000	1,412,500

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Flare Improvement and Landfill Gas Delivery Project

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #12

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$1,435,686

**Expected Completion Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

This project will improve the LFG collection system's delivery and flare capacities. The project includes the installation of the following:

- Automation upgrades to the existing flare in Fiscal Year 2008-09.
- Installation of a lower flow, low British Thermal Unit (BTU) flare in Fiscal Year 2008-09.
- Installation of a gas sales delivery manifold in Fiscal Year 2008-09.
- Installation of large diameter pipe from 30-inch pipe to delivery manifold location in Fiscal Year 2008-09.
- Upgrade of the condensate storage and treatment system in Fiscal Year 2008-09.

**Operating Budget Impact:**

This completion of this project has no measurable impact on the operation budget.

**Kiefer Landfill - Flare Improvement and Landfill Gas Delivery Project**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Costs	0	1,200,000	0	0	0	0	1,200,000
Construction Inspection	135,686	100,000	0	0	0	0	235,686
<b>TOTAL</b>	135,686	1,300,000	0	0	0	0	1,435,686

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	135,686	1,300,000	0	0	0	0	1,435,686

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Graves Property Deer Creek Levee Repair

13045 Jackson Road, Sloughouse, CA, 95683

Project #13

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$200,000

**Expected Completion Date:** 2009

**Funding Sources:** Solid Waste Capital Outlay Fund

**Project Description:**

On January 1, 2006 an intense storm raised Deer Creek water level to flood stage. The flow escaped the channel and flood plain by rupturing one segment of levee on county owned land known as the Graves Property. This project includes removing and replacing approximately 1,000 feet of existing, but poorly built, levee (the length of project is equal to the full width of the property). Existing berm soil, trees, and other vegetation will be left in windrows on site. Soil for the replacement levee will be borrowed from on site. This project includes the planning, design, construction, construction management, and inspections. The estimates are based on information provided by the consulting engineer. This project includes nominal funding for permitting, but not for environmental mitigation.

A 150-foot length portion of the levee was repaired in the fall 2006. Unspent monies from Fiscal Year 2007-08 are to be rebudgeted to Fiscal Year 2008-09 to fund continued repairs.

**Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

**Kiefer Landfill - Graves Property Deer Creek Levee Repair**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Consultant Services	15,000	0	0	0	0	0	15,000
Misc. Project Costs	85,000	100,000	0	0	0	0	185,000
<b>TOTAL</b>	<b>100,000</b>	<b>100,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>200,000</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Solid Waste Capital Outlay Fund	100,000	100,000	0	0	0	0	200,000



# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Gas Beneficial Use Projects

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #14

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$353,676

**Expected Completion Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

Construction of a facility to recover energy from collected landfill gas. The facility will likely consist of a plant that will convert landfill gas to liquid natural gas fuel to be used in Waste Management and Recycling Department's refuse collection fleet. The majority of the project costs would be borne by the project developer. The department will pay for site grading and improvements.

**Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

**Kiefer Landfill - Gas Beneficial Use Project**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	165,000	0	0	0	0	165,000
Project Management/Design	144,676	0	0	0	0	0	144,676
Consultant Services	0	27,500	0	0	0	0	27,500
Construction Inspection	0	16,500	0	0	0	0	16,500
<b>Total</b>	<b>144,676</b>	<b>209,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>353,676</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	144,676	209,000	0	0	0	0	353,676

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Gas Collection System Expansion

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #15

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$2,404,546

**Expected Completion Date:** 2012

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

This project expands the Kiefer Landfill's (KLF) gas collection system into Modules M2 (a section of KLF) and beyond. Additional gas wells will be needed as the KLF expands. The project is anticipated to be developed in phases. Major efforts include:

- Installation of replacement wells (15-year life) on an annual basis.
- New wells will be installed in M2 in Fiscal Years 2008-09 and 2009-10.
- Installation of new piping for wells installed on M2.
- The large diameter pipe from Sump No.1 to the flare manifold is included in the Flare Improvements and Landfill Gas Delivery Project and Permanent Perimeter Header costs are included in the liner construction projects.

**Kiefer Landfill - Gas Collection System Expansion**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	208,988	304,500	870,000	381,077	327,390	0	2,091,955
Project Management/Design	7,206	10,500	30,000	13,141	11,289	0	72,136
Consultant Services	1,682	2,450	7,000	3,066	2,634	0	16,832
Construction Inspection	22,340	32,550	93,000	40,736	34,997	0	223,623
<b>Total</b>	<b>240,216</b>	<b>350,000</b>	<b>1,000,000</b>	<b>438,020</b>	<b>376,310</b>	<b>0</b>	<b>2,404,546</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	240,216	350,000	1,000,000	438,020	376,310	0	2,404,546

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Gas Remediation Project

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #16

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$1,163,660

**Expected Completion Date:** 2013

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

Kiefer Landfill has recently detected additional offsite landfill gas (LFG). Regulations require landfill owners to control landfill gas at the facility boundary. The Department of Waste Management and Recycling is obligated to address the LFG migration. The extent of migration and magnitude of the remediation are unknown at this time. For the purposes of this estimate it is assumed that four extraction wells will be installed in the impacted areas in each fiscal year through 2013. These wells would be connected to the existing LFG collection and destruction system using aboveground piping and sumps.

**Kiefer Landfill - Gas Remediation Project**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	135,300	142,470	142,470	142,470	142,470	705,180
Project Management/Design	0	13,530	13,530	13,530	13,530	13,530	67,650
Consultant Services	192,830	22,000	44,000	44,000	44,000	44,000	390,830
<b>Total</b>	<b>192,830</b>	<b>170,830</b>	<b>200,000</b>	<b>200,000</b>	<b>200,000</b>	<b>200,000</b>	<b>1,163,660</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	192,830	170,830	200,000	200,000	200,000	200,000	1,163,660

## CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

### **Kiefer Landfill – Groundwater Monitoring Wells 43A, B; 44A, B; 37C**

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #17

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$300,000

**Expected Completion Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



#### **Project Description:**

The 2007 Waste Discharge Requirements (WDR) (these are permits from the Central Valley Region Water Quality Control Board) explicitly require the construction of new groundwater monitoring wells if contamination is found in particular existing wells. The recently discovered contamination at existing monitoring wells 37A, B and 21B have triggered this requirement.

The Department of Waste Management and Recycling anticipates a possibility of being required to construct several new groundwater monitoring wells 43A, B; 44A, B; and 37C.

#### **Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill - Groundwater Monitoring Wells 43A, B; 44A, B; 37C

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	300,000	0	0	0	0	300,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	300,000	0	0	0	0	300,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Landfill Compactor (1)

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #18

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$980,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



#### **Project Description:**

The landfill compactor is a specialized piece of equipment for spreading and compacting waste at the landfill to increase the density of waste material and increase the site life. This equipment improves site safety and increases site efficiency. It is used on the Kiefer landfill site in conjunction with the landfill dozers to move waste delivered to the site. This project will purchase one compactor.

#### **Operating Budget Impact:**

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

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill - Landfill Compactor (1)

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost	0	980,000	0	0	0	0	980,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	980,000	0	0	0	0	980,000



# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Landfill M1 Phase 2 Partial Closure

12701 Kiefer Boulevard, Sloughouse, CA, 95683

Project #19

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$4,703,000

**Expected Completion Date:** 2010

**Funding Sources:** Refuse Capital Outlay Fund



#### **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 25 acres of Kiefer Landfill Unit 1. The estimates are based on information contained in the Partial Final Closure Plan and also include costs to design and permit a proposed alternative “evapotranspiration” final cover. All costs are in 2007 dollars. The estimates are based on a composite geosynthetic clay liner/geomembrane final cover over all areas to receive final cover, consistent with current site permit documents. Costs will likely be lower if an alternative final cover is constructed, pending approval by the Regional Water Quality Control Board.



# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill - Landfill M1 Phase 2 Partial Closure

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	0	3,217,000	0	0	0	3,217,000
Project Management/Design	50,000	0	25,000	0	0	0	75,000
Consultant Services	453,000	0	208,000	0	0	0	661,000
Construction Inspection	0	0	96,510	0	0	0	96,510
Misc Project Costs	0	0	653,490	0	0	0	653,490
<b>TOTAL</b>	<b>503,000</b>	<b>0</b>	<b>4,200,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,703,000</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	503,000	0	4,200,000	0	0	0	4,703,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Landfill M1 Phase 3 Partial Closure

12701 Kiefer Boulevard, Sloughouse, CA, 95683

Project #20

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$6,301,960

**Expected Completion Date:** 2012

**Funding Sources:** Refuse Capital Outlay Fund



#### **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 46 acres of Kiefer Landfill Unit 1. The estimates are based on information contained in the Partial Final Closure Plan. The estimates are based on a composite geosynthetic clay liner/geomembrane final cover over all areas to receive final cover, consistent with current site permit documents. Costs will likely be lower if an alternative “evapotranspiration” final cover is constructed, pending approval by the Regional Water Quality Control Board.

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill - Landfill M1 Phase 3 Partial Closure

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	0	0	0	4,852,000	0	4,852,000
Project Management/Design	0	0	0	25,000	25,000	0	50,000
Consultant Services	0	0	0	284,000	0	0	284,000
Construction Inspection	0	0	0	0	145,560	0	145,560
Misc Project Costs	0	0	0	0	970,400	0	970,400
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>309,000</b>	<b>5,992,960</b>	<b>0</b>	<b>6,301,960</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	0	0	309,000	5,992,960	0	6,301,960

## CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Landfill M3 Phase 1 and 2 Liner and Ancillary Features

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #21

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$14,053,000

**Expected Completion Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



#### **Project Description:**

The liner is a system of sheets of a plastic membrane, gravel, rocks, and composite material that prevents leachate from entering the ground water. Leachate is the liquid that is composed of all sorts of “stuff” that is the result of the decomposition of the garbage placed on top of the liner. When the landfill cell has reached capacity, a final cover is laid over the top of the garbage that pretty much contains the decomposing garbage and protects the surrounding environment. The liner that you see is part of a system of components that could be from 1.5 feet to 2 feet in depth. This is part of the regulatory requirements dictated by the Federal Government for landfills. The man is sewing sections of the plastic membrane together.

This project includes the planning, design, construction, construction management, inspections, reporting and oversight associated with construction of approximately 40 acres of landfill liner and leachate collection systems for Module 3, Phases I and II at Kiefer Landfill. The budget is based on current contracts.

#### **Operating Budget Impact:**

The completion of this project has no measurable impact on the operating budget.

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill - Landfill M3 Phase 1 and 2 Liner and Ancillary Features

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	12,359,990	0	0	0	0	0	12,359,990
Project Management/Design	45,000	0	0	0	0	0	45,000
Consultant Services	263,010	0	0	0	0	0	263,010
Construction Inspection	385,000	300,000	0	0	0	0	685,000
Contingency	0	700,000	0	0	0	0	700,000
<b>Total</b>	<b>13,053,000</b>	<b>1,000,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,053,000</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	13,053,000	1,000,000	0	0	0	0	14,053,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Landfill M3 Phase 3 Liner and Ancillary Features

12701 Kiefer Boulevard, Sloughouse, CA 95683

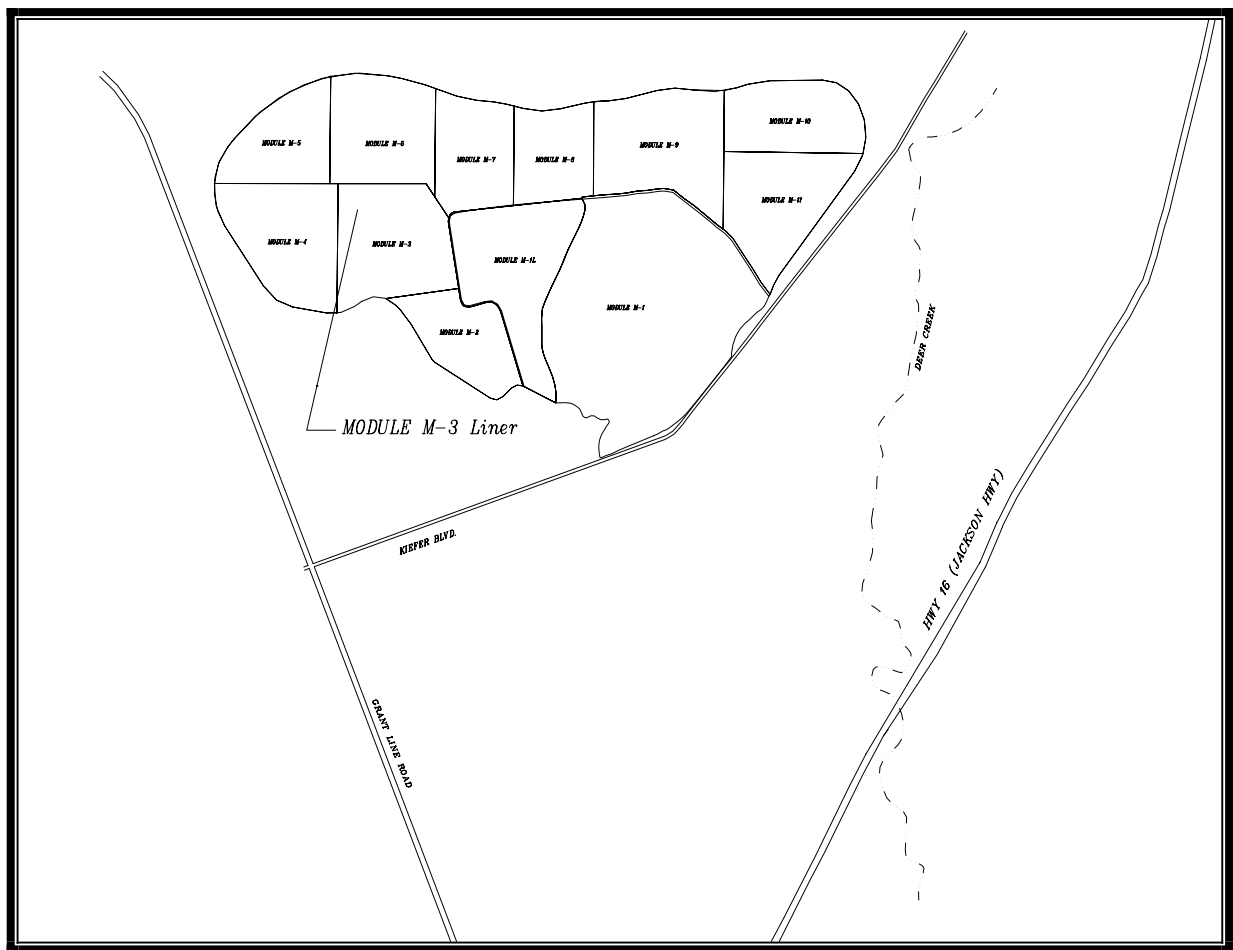
Project #22

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$5,151,700

**Expected Completion Date:** 2011

**Funding Sources:** Refuse Capital Outlay Fund



#### Project Description:

This project includes the planning, design, construction, construction management, inspections, reporting, and oversight associated with construction of approximately 16 acres of landfill liner and leachate collection systems for Module 3, Phase 3 at Kiefer Landfill. The budget is based on experience with Module 2 and conceptual design and cost estimating documents. The estimates do not include costs for permitting activities, groundwater monitoring wells, or costs for any aspects of the required mitigation for species and habitat.

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill - Landfill M3 Phase 3 Liner and Ancillary Features

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	0	0	4,780,000	0	0	4,780,000
Project Management/Design	0	0	45,000	45,000	0	0	90,000
Consultant Services	0	0	200,000	0	0	0	200,000
Construction Inspection	0	0	0	71,700	0	0	71,700
Misc Project Costs	0	0	0	10,000	0	0	10,000
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>245,000</b>	<b>4,906,700</b>	<b>0</b>	<b>0</b>	<b>5,151,700</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	0	245,000	4,906,700	0	0	5,151,700

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Regenerative Air Sweeper (1)

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #23

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$145,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



#### **Project Description:**

Kiefer Landfill – Regenerative Air Sweeper will be used to clean fugitive dust, contaminated material, dirt and silt from pavement and roadway cracks and crevices. The benefit of this process will be storm water pollution control, aesthetic beauty, preventative maintenance of Landfill roadways, safety and reduced air pollution. Also, this equipment will help clean offsite tracking of debris as required by our Landfill permit. This project will fund the purchase of one regenerative air sweeper.

#### **Operating Budget Impact:**

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



# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill - Regenerative Air Sweeper (1)

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost	0	145,000	0	0	0	0	145,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	145,000	0	0	0	0	145,000

**CAPITAL IMPROVEMENT PLAN  
WASTE MANAGEMENT & RECYCLING**

**Kiefer Landfill – Replace Heating, Ventilation and Air Conditioning (HVAC) System in the Operations Building**

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #24

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$100,000

**Expected Completion Date:** 2010

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

The project repair will replace the HVAC system in the Operations Building of the Kiefer Landfill.

**Kiefer Landfill - Replace HVAC System in the Operations Building**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	0	100,000	0	0	0	100,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	0	100,000	0	0	0	100,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Water Supply Improvements

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #25

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$741,679

**Expected Completion Date:** 2011

**Funding Sources:** Refuse Capital Outlay Fund

**Project Description:**

The project will include design and construction of water supply and distribution system improvements at Kiefer Landfill. Project elements will include review of the existing water supply infrastructure, possible decommissioning of the existing back-up water supply well “A,” providing water supply alternatives in the event of a failure to the primary water supply well “E,” and expanding the water distribution system to deliver water from the new supply alternative(s) and to provide water service to additional areas of the facility.

**Kiefer Landfill - Water Supply Improvements**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	0	0	572,000	0	0	572,000
Project Management/Design	0	0	0	10,000	0	0	10,000
Consultant Services	36,079	0	0	95,000	0	0	131,079
Misc Project Costs	0	0	0	28,600	0	0	28,600
<b>TOTAL</b>	<b>36,079</b>	<b>0</b>	<b>0</b>	<b>705,600</b>	<b>0</b>	<b>0</b>	<b>741,679</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	36,079	0	0	705,600	0	0	741,679

## CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill – Wheeled Loader (1)

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #26

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$275,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

The wheeled loader at the Kiefer Landfill is used to prepare the landfill cells, move landfill dirt into position with the cell, load greenwaste material into transportation vehicles, and other specialized tasks. This project will purchase one wheeled loader.

**Operating Budget Impact:**

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

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Kiefer Landfill - Wheeled Loader (1)

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost	0	275,000	0	0	0	0	275,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	275,000	0	0	0	0	275,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### North Area Collections – Remodel Locker Rooms

4450 Roseville Road, North Highlands, CA 95660

Project #27

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$100,000

**Expected Completion Date:** 2010

**Funding Sources:** Refusal Capital Outlay Fund

**Project Description:**

This project will remodel and clean up the appearance of the North Collections crew locker rooms.

**North Area Collections - Remodel Locker Rooms**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	0	100,000	0	0	0	100,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	0	100,000	0	0	0	100,000

## CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

### North Area Recovery Station – Aluminum Open Topped Transfer Trailer (2)

4450 Roseville Road, North Highlands, CA 95660

Project #28

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$120,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

The open topped transfer trailer is used to move disposal refuse from the transfer station to the landfill, recycle material to a material recovery facility, and greenwaste material to a processing facility. This project will purchase two open topped transfer trailers.

**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 - Aluminum Open Topped Transfer Trailer (2)

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost 2 @ \$60,000	0	120,000	0	0	0	0	120,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	120,000	0	0	0	0	120,000



# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### North Area Recovery Station – Green Waste Building and Master Plan Project

4450 Roseville Road, North Highlands, CA 95660

Project #29

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$8,650,000

**Expected Completion Date:** 2013

**Funding Sources:** Refusal Capital Outlay Fund

**Project Description:**

The current area at the North Area Recovery Station which is used for tipping, grinding, and loading green waste and wood waste suffers from three deficiencies: inadequate size, poor control of air emissions, and poor control of storm water drainage and quality. The Department of Waste Management and Recycling is preparing a plan to improve these deficiencies in a manner that is consistent with future improvements at the North Area Recovery Station during the next twenty years. In subsequent fiscal years, funds will be placed in reserve in anticipation of constructing a new green waste/wood waste processing building.

**North Area Recovery Station - Green Waste Building and Master Plan Project**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Project Reserve	650,000	0	2,000,000	2,000,000	2,000,000	2,000,000	8,650,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	650,000	0	2,000,000	2,000,000	2,000,000	2,000,000	8,650,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### North Area Recovery Station – Site Operation Area Improvements and Repairs

4450 Roseville Road, North Highlands, CA 95660

Project #30

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$1,650,000

**Expected Completion Date:** 2013

**Funding Sources:** Refusal Capital Outlay Fund

**Project Description:**

This project provides funds for pavement replacements, storm drain inlet improvements and small modifications to the site to improve efficiency. Work is performed on an “as-needed” basis. In Fiscal Year 2008-09, some of the funds will be used such that processing area will be expanded 40 feet to the south by placing a thin lift of asphalt as a short term measure. This project will be an ongoing maintaining and improvement effort over the course of the next five years.

**North Area Recovery Station - Site Operations Area Improvements and Repairs**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	260,000	260,000	260,000	260,000	260,000	1,300,000
Project Management/Design	75,000	10,000	10,000	10,000	10,000	10,000	125,000
Consultant Services	75,000	2,000	2,000	2,000	2,000	2,000	85,000
Construction Inspection	0	28,000	28,000	28,000	28,000	28,000	140,000
<b>Total</b>	<b>150,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>300,000</b>	<b>1,650,000</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	150,000	300,000	300,000	300,000	300,000	300,000	1,650,000

## CAPITAL IMPROVEMENT PLAN WASTE MANAGEMENT & RECYCLING

### North Area Recovery Station – Wheeled Loader (2)

4450 Roseville Road, North Highlands, CA 95660

Project #31

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$650,000

**Expected Delivery Date:** 2009

**Funding Sources:** Refuse Capital Outlay Fund



**Project Description:**

The wheeled loader is utilized at the transfer station for moving refuse material off the tipping pad to the baler, green waste to haul trailers, and other specialized tasks. This project will fund the purchase of two wheeled loaders.

**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 - Wheeled Loader (2)

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Purchase Cost 2 @ \$325,000	0	650,000	0	0	0	0	650,000

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	650,000	0	0	0	0	650,000

# CAPITAL IMPROVEMENT PLAN

## WASTE MANAGEMENT & RECYCLING

### Weather and Stream Gauging Station

12701 Kiefer Boulevard, Sloughouse, CA 95683

Project #32

**Department:** Waste Management & Recycling

**Estimated Project Cost:** \$120,000

**Expected Completion Date:** 1010

**Funding Sources:** Refusal Capital Outlay Fund

**Project Description:**

The weather and stream gauging station is proposed to monitor water flows and to provide data leading to a plan to mitigate erosive flows in the Deer Creek area of the Kiefer Landfill bufferlands. The Deer Creek area is currently suffering erosion damage due to weather and stream flow.

**Weather and Stream Gauging Station**

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Construction Costs	0	0	100,000	0	0	0	100,000
Project Management/Design	0	0	10,000	0	0	0	10,000
Consultant Services	0	0	1,000	0	0	0	1,000
Construction Inspection	0	0	8,000	0	0	0	8,000
Misc Project Costs	0	0	1,000	0	0	0	1,000
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>120,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120,000</b>

<b>Funding Source</b>	<b>Prior Years</b>	<b>Fiscal Year 2008-09</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Total</b>
Refuse Capital Outlay Fund	0	0	120,000	0	0	0	120,000