#### **EXECUTIVE SUMMARY**

The Department of Waste Management and Recycling (DWMR) Five-Year Capital Improvement Plan (CIP) includes department—wide equipment replacements and projects at the Kiefer Landfill and North Area Recovery Station. Kiefer Landfill projects are required for ongoing landfill operations and are prescribed by various state regulations and permit conditions. Ongoing Kiefer Landfill projects include expansion of the landfill gas collection system and construction of final cover. North Area Recovery Station capital projects will improve and repair the site as mandated by state regulations and permit conditions. he DWMR continues to replace fully-depreciated equipment for solid waste and recycling collection, recovery, and disposal operations. 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 2015-16 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.

- <u>Kiefer Landfill Final Cover</u> These projects involve the phased construction of partial final closure components such as final cover, drainage improvements, and landfill gas modifications on Kiefer Landfill Unit 1. <u>Estimated Total Cost</u>: \$3,074,384
- North Area Recovery Station Master Plan Improvements This ongoing project includes the planning, design, and construction of new and replacement pavement, utility, and structural improvements to enhance operational efficiency, facility durability, and environmental protection. Estimated Total Cost: \$9,928,368

# Waste Management & Recycling

# **PROJECT SUMMARY**

	Projects Not Appearing on Previous 5-Year CIP are Highlighted								
PROJ. #	PROJECT	Prior Years	FISCAL YEAR 2015-16	FISCAL YEAR 2016-17	FISCAL YEAR 2017-18	FISCAL YEAR 2018-19	FISCAL YEAR 2019-20	TOTAL	
1	Collections - Automated Collection Truck 2- Axle with Tag	0	403,000	0	0	0	0	403,000	
2	Collections - Automated Collections Trucks 3-Axle with Tag (12)	0	4,884,000	0	0	0	0	4,884,000	
3	Collections - Knuckle Boom Truck	0	250,000	0	0	0	0	250,000	
4	Collections - Knuckle Boom Trucks (2) FY15	0	500,000	0	0	0	0	500,000	
5	Equipment Replacements	0		7,205,000	9,995,000	4,648,000	9,204,000	31,052,000	
6	Kiefer Landfill - Administration Building HVAC Replacement	0	100,000	0	0	0	0	100,000	
7	Kiefer Landfill - Backhoe	0	150,000	0	0	0	0	150,000	
8	Kiefer Landfill - Customer Rest Area	8,310	253,865	0	0	0	0	262,175	
9	Kiefer Landfill - Final Cover	950,107	75,000	1,799,277	0	0	250,000	3,074,384	
10	Kiefer Landfill - Gas and Leachate Management Systems Improvements	5,395,749	1,069,036	1,563,348	927,609	1,073,084	1,442,794	11,471,620	
11	Kiefer Landfill - Groundwater Remediation Project Upgrades	162,249	169,000	115,000	49,600	49,600	49,600	595,049	
12	Kiefer Landfill - Liner and Ancillary Features	0	146,000	0	0	225,523	5,187,021	5,558,544	
13	Kiefer Landfill - Roll-Off Truck	0	175,000	0	0	0	0	175,000	
14	Kiefer Landfill - Storm Water Improvements	0	209,330	0	0	0	0	209,330	
15	Kiefer Landfill - Street Sweeper	0	235,000	0	0	0	0	235,000	
16	North Area Recovery Station - Land Transfer	1,751,391	250,278	250,278	250,278	250,278	250,278	3,002,781	
17	North Area Recovery Station - Master Plan Improvements	5,401,868	810,000	1,605,000	866,500	720,000	525,000	9,928,368	
18	North Area Recovery Station - Roll-Off Truck	0	175,000	0	0	0	0	175,000	
19	North Area Recovery Station - Terminal Trackers (2)	0	200,000	0	0	0	0	200,000	
	TOTAL	\$13,669,674	\$10,054,509	\$12,537,903	\$12,088,987	\$6,966,485	\$16,908,693	\$72,226,251	

# PRIOR-YEAR COMPLETED/CANCELLED PROJECTS SUMMARY

PROJ. #	PROJECT	Prior Years	Prior Year Roll Over	FISCAL YEAR 2014-15	FISCAL YEAR 2015-16	FISCAL YEAR 2016-17	FISCAL YEAR 2017-18	FISCAL YEAR 2018-19	TOTAL	Reason Dropped
1	Collections - Automated 2-Axle Collection Trucks (4)			1,440,000					1,440,000	Completed
2	Collections - Automated 3-Axle Collection Trucks (12)			4,584,640					4,584,640	Completed
3	Collections - Compressed Natural Gas Fueling Infrastructure	180,000	2,400	1,548,000					1,730,400	Scheduled for completion FY15
4	Collections - Knuckle Boom Truck (2)			448,800					448,800	Re-scheduled for FY 16 Proj. 04
5	Collections - Wheeled Loader with Claw (2)			250,000					250,000	Completed
6	Equipment Replacements				7,233,000	3,200,000	7,472,000	7,306,000	25,211,000	Project continues FY16 project 05
	Kiefer Landfill - Final Cover	70,000	71,110	1,730,000	60,000	2,490,855			4,421,965	Project continues FY16 project 09
8	Kiefer Landfill - Gas and Leachate Management Systems Improvements	5,198,869	8,000	924,360	630,247	940,172	576,485	655,547	8,933,680	Project continues FY16 project 10
9	Kiefer Landfill - Groundwater Remediation Project Upgrade	158,600		300,000	150,000				608,600	Project continues FY16 project 11
10	Kiefer Landfill - Regenerative Air Sweeper			178,500					178,500	Re-scheduled for FY16 project 15
11	Kiefer Landfill - Roll Off Truck			122,400					122,400	Re-scheduled for FY16 project 13
12	Kiefer Landfill - Tarping Machine			153,000					153,000	Cancelled
13	North Area Recovery Station - Compactor			520,200					520,200	Cancelled
14	North Area Recovery Station - Land Transfer	1,501,112		250,278	250,278	250,278	250,278	250,278	2,752,502	Project continues FY16 project 16
15	North Area Recovery Station - Master Plan Improvements	4,396,173	158,144	1,522,000	800,000	600,000	550,000	0	8,026,317	Project continues FY16 project 17
16	North Area Recovery Station - Trailer, Transfer (14)			1,005,360					1,005,360	Completed
17	North Area Recovery Station - Truck, Tractor (5)			785,400					785,400	Completed
	North Area Recovery Station - Wheeled Loader with Claw (2)			287,640					287,640	Cancelled
	North Area Recovery Station - Wheeled Loader, Articulating			306,000					306,000	Cancelled
20	South Area Transfer Station - Entrance Improvement Project			250,000					250,000	Completed
	TOTAL	\$11,504,754	\$239,654	\$16,606,578	\$9,123,525	\$7,481,305	\$8,848,763	\$8,211,825	\$62,016,404	

# Collections – Automated Collection Truck 2 – Axle with Tag

9611 Conservation Road, Sacramento, 95827

Project #1

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$403,000

**Expected Completion Date: 2015** Funding Sources: Solid Waste Enterprise

Fund Capital Outlay



#### **Project Description:**

This project is for the purchase of one fully-automated side-loading collection truck. This will be a 2-axle truck with tag, powered by compressed natural gas fuel with right hand drive. This vehicle will be used primarily for dead-end street routes and as a backup vehicle. This purchase will replace a fully-depreciated truck currently in operation.

# Collections – Automated Collection Truck 2-Axle with Tag

	Prior	Fiscal Year					
Estimated Project Costs	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In-House)	0	0	0	0	0	0	0
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0		0	0	0
Right-of-way/ Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	403,000	0	0	0	0	403,000
Other	0	0	0	0	0	0	0
TOTAL	. 0	403,000	0	0	0	0	403,000
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	0	403,000	0	0	0	0	403,000
TOTAL	. 0	403,000	0	0	0	0	403,000

Analysis Done	Analysis Results
Operating budget impact analyzed	Project will result in a decrease in operating costs due to less maintenance for new
	equipment

# **Collections – Automated Collection Truck 3 – Axle with Tag (12)**

9611 Conservation Road, Sacramento, 95827

Project #2

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$4,884,000

**Expected Completion Date:** 2015 **Funding Sources:** Solid Waste Enterprise

Fund Capital Outlay



#### **Project Description:**

This project is for the purchase of twelve fully-automated side-loading collection trucks. These will be 3-axle with tag trucks, powered by compressed natural gas fuel with right hand drive. These vehicles will be used primarily for prime routes, and as backup vehicles. This purchase will replace fully-depreciated trucks currently in operation.

# Collections – Automated Collection Trucks 3-Axle with Tag (12)

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2015-16 Budget	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Total
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In-House)	0	0	0	0	0	0	0
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	4,884,000	0	0	0	0	4,884,000
Other	0	0	0	0	0	0	0
TOTAL	0	4,884,000	0	0	0	0	4,884,000
Funding Sources	Prior Years Expenses	Fiscal Year 2015-16 Budget	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Total
Solid Waste Enterprise Fund							
Capital Outlay	0	4,884,000	0	0	0	0	4,884,000
TOTAL	0	4,884,000	0	0	0	0	4,884,000

Analysis Done	Analysis Results
Operating budget impact analyzed	Project will result in a decrease in operating costs due to less
	maintenance for new equipment

### **Collections – Knuckle Boom Truck**

9611 Conservation Road, Sacramento, CA 95827

Project #3

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$250,000

**Expected Completion Date:** 2015 **Funding Sources:** Solid Waste Enterprise

Fund Capital Outlay



#### **Project Description:**

This project is for the purchase of one knuckle boom collection truck. This will be a 2- axle truck, powered by compressed natural gas fuel. This vehicle will be used primarily for our Appointment Based Neighborhood Clean Up routes. It will also be used to pick up illegally dumped rubbish piles in unincorporated Sacramento County. This purchase will replace a fully depreciated truck currently in operation.

### **Collections – Knuckle Boom Truck**

	Prior	Fiscal Year					
Estimated Project Costs	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In-							
House)	0	0	0	0	0	0	0
Project Management/ Design							
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	250,000	0	0	0	0	250,000
Other	0	0	0	0	0	0	0
TOTAL	0	250,000	0	0	0	0	250,000
	Prior	Fiscal Vear	Fiscal Year	Fiscal Voar	Fiscal Year	Fiscal Year	
Funding Courses							Tatal
Funding Sources	Years -	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	0	250,000	0	0	0	0	250,000
TOTAL	0	250,000	0	0	0	0	250,000

Analysis Done	Analysis Results
Operating budget impact	Project will result in a decrease in operating costs due to less
analyzed	maintenance for new equipment

# Collections - Knuckle Boom Trucks (2) FY15

9611 Conservation Road, Sacramento, CA 95827

Project #4

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$500,000

**Expected Completion Date: 2015** Funding Sources: Solid Waste Enterprise

Fund Capital Outlay



#### **Project Description:**

This project is for the purchase of two knuckle boom collection trucks. They will be 2- axle trucks, powered by compressed natural gas fuel. These vehicles will be used primarily for our Appointment Based Neighborhood Clean Up routes. They will also be used to help pick up illegally dumped rubbish piles in unincorporated Sacramento County. This purchase will replace fully-depreciated trucks currently in our collection fleet. These trucks were ordered in early 2015, but are not expect to arrive until Fiscal Year 2015-16.

# Collections – Knuckle Boom Trucks (2) FY15

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2015-16 Budget	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Total
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In- House) Project Management/ Design	0	0	0	0	0	0	0
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	500,000	0	0	0	0	500,000
Other	0	0	0	0	0	0	0
TOTAL	0	500,000	0	0	0	0	500,000
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	

**Project Analysis:** 

TOTAL

Capital Outlay

Analysis Done	Analysis Results
Operating budget impact analyzed	Project will result in a decrease in operating costs due to less
	maintenance for new equipment

500,000

500,000

500,000

500,000

# **Equipment Replacements**

12701 Kiefer Boulevard, Sloughhouse, CA 95683 4450 Roseville Road, North Highlands, CA 95660 9611 Conservation Road, Sacramento, CA 95827

Project #5

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$31,052,000

**Expected Completion Date: 2020 Funding Sources: Solid Waste Enterprise** 

Fund Capital Outlay

#### **Project Description:**

This project displays the amounts of anticipated equipment purchases to replace older, fully-depreciated equipment for various Collection, Landfill, Transfer, Engineering, and Special Waste programs.

#### **Equipment Replacement**

Estimated Project Costs	Prior Years	Fiscal Year 2015-16	Fiscal Year 2016-17	Fiscal Year 2017-18	Fiscal Year 2018-19	Fiscal Year 2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In- House)	0	0	0	0	0	0	0
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way.Land/Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	7,205,000	9,995,000	4,648,000	9,204,000	31,052,000
Other	0	0	0	0	0	0	0
TOTAL	0	0	7,205,000	9,995,000	4,648,000	9,204,000	31,052,000
Funding Sources	Prior Years	Fiscal Year 2015-16	Fiscal Year 2016-17	Fiscal Year 2017-18	Fiscal Year 2018-19	Fiscal Year 2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	0	0	7,205,000	9,995,000	4,648,000	9,204,000	31,052,000
TOTAL	0	0	7,205,000	9,995,000	4,648,000	9,204,000	31,052,000

Analysis Done	Analysis Results
Operating budget impact analyzed	Project will result in a decrease in operating costs due to less
	maintenance for new equipment

# **Kiefer Landfill – Administration Building HVAC Replacement**

12701 Kiefer Boulevard, Sloughhouse, CA 95683

Project #6

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$100,000

**Expected Completion Date: 2016** Funding Sources: Solid Waste Enterprise

**Fund Capital Outlay** 



#### **Project Description:**

This project is to replace existing air-conditioning and heating units located at the administration building at Kiefer Landfill.

# Kiefer Landfill – Administration Building HVAC Replacement

	Prior	Fiscal Year					
<b>Estimated Project Costs</b>	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	0	0	0	0
Project Management/Design (In-							
House)	0	0	0	0	0	0	0
Project Management/Design							
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	100,000	0	0	0	0	100,000
Other	0	•	0	0	0	0	0
TOTAL	0	100,000	0	0	0	0	100,000
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	. • • • • •
Solid Waste Enterprise Fund							
Capital Outlay	0	100,000	0	0	0	0	100,000
TOTAL	0		0	0	0	0	100,000

Analysis Done	Analysis Results
Operating budget impact	Project will result in a decrease in operating costs due to less
analyzed	maintenance for new equipment

### Kiefer Landfill - Backhoe

12701 Kiefer Boulevard, Sloughhouse, CA 95683

Project #7

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$150,000

**Expected Completion Date:** 2016 **Funding Sources:** Solid Waste Enterprise

Fund Capital Outlay



#### **Project Description:**

This project is for a backhoe needed for Kiefer Landfill operations. This equipment will be powered by a Tier 4 diesel engine to comply with CARB rules. This will replace a fully-depreciated backhoe currently in operation at the landfill.

### Kiefer Landfill – Backhoe

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2015-16 Budget	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Total
Construction Costs	C	0	0	0	0	0	0
Project Management/ Design (In-			0	0	0	٥	0
House) Project Management/ Design	C	0	0	0	0	0	0
(Consultant)	C	0	0	0	0	0	0
Construction Fees and Services	C	0	0	0	0	0	0
Right-of-way/Land Acquisition	C	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	C	150,000	0	0	0	0	150,000
Other	C	0	0	0	0	0	0
TOTAL	0	150,000	0	0	0	0	150,000
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total

	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	C	150,000	0	0	0	0	150,000
TOTAL	0	150,000	0	0	0	0	150,000

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Analysis Done	Analysis Results					
	Project will result in a decrease in operation					
Operating budget impact analyzed	costs due to less maintenance for new					
	equipment					

### Kiefer Landfill - Customer Rest Area

12701 Kiefer Blvd., Sloughhouse, CA 95683

Project #8

**Department:** Waste Management & Recycling **Estimated Project Cost:** \$262,175

**Expected Completion Date: 2016** Funding Sources: Solid Waste Enterprise

Fund Capital Outlay



#### **Project Description:**

This project consists of construction of a customer rest area adjacent to the Kiefer Landfill exit within the facility's gated area. The project will include customer restrooms and a shaded picnic table area.

### Kiefer Landfill - Customer Rest Area

Catimated Desirat Costs	Prior	Fiscal Year 2015-16	Fiscal Year 2016-17	Fiscal Year 2017-18	Fiscal Year 2018-19	Fiscal Year 2019-20	Total
<b>Estimated Project Costs</b>	Years Expenses	Budget	Budget	Budget	Budget	Budget	Total
Our about a Our	•						044.005
Construction Costs	0	211,365	0	0	0	0	211,365
Project Management/ Design (In-House)	8,310	10,000	0	0	0	0	18,310
Project Management/ Design							
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	32,500	0	0	0	0	32,500
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	8,310	253,865	0	0	0	0	262,175
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	8,310	253,865	0	0	0	0	262,175
TOTAL	8,310		0	0	0	0	262,175

1 To jour 7 that your						
Analysis Done	Analysis Results					
Operating budget impact analyzed	Project will result in an increase in operating costs due to it					
	being a new facility					

### **Kiefer Landfill – Final Cover**

12701 Kiefer Blvd., Sloughhouse, CA 95683

Project #9

**Department:** Waste Management & Recycling **Estimated Project Cost:** \$3,074,384

**Expected Completion Date: 2020 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, landfill gas modifications, vegetation, and erosion control.

### Kiefer Landfill – Final Cover

	Prior	Fiscal Year					
<b>Estimated Project Costs</b>	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	1,544,797	0	0	0	1,544,797
Project Management/ Design (In-							
House)	0	0	0	0	0	100,000	100,000
Project Management/ Design							
(Consultant)	950,107	75,000	100,000	0	0	150,000	1,275,107
Construction Fees and Services	0	0	154,480	0	0	0	154,480
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Puchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	950,107	75,000	1,799,277	0	0	250,000	3,074,384
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
. unumg courses	Expenses	Budget	Budget	Budget	Budget	Budget	. • • • •
		Daugot	Duagot	Daagot	Daagot	Buugot	
Solid Waste Enterprise Fund							
Capital Outlay	950,107	75,000	1,799,277	0	0	250,000	3,074,384
TOTAL	950,107	75,000	1,799,277	0	0	250,000	3,074,384

Analysis Done	Analysis Results
Operating budget impact analyzed	The project will not result in a significant impact to existing
	operating costs

# **Kiefer Landfill – Gas and Leachate Management Systems Improvements**

12701 Kiefer Blvd., Sloughhouse, CA 95683

Project #10

**Department:** Waste Management & Recycling **Estimated Project Cost:** \$11,471,620

**Expected Completion Date: 2020 Funding Sources: Solid Waste Enterprise** 

Fund Capital Outlay

#### **Project Description:**

This project includes expansion of the Kiefer Landfill gas collection system into Module 3 (M3) and installation of additional gas and leachate infrastructure in and around modules M1, M1-L, and M2. Additional gas collectors are required to maintain compliance with regulatory requirements. The project will involve the installation of new and replacement wells, horizontal gas collectors, and new piping. Leachate recirculation system components will be installed in module M3.

# Kiefer Landfill – Gas and Leachate Management Systems Improvements

	Prior	Fiscal Year					
<b>Estimated Project Costs</b>	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	5,395,749	603,510	1,033,346	480,530	607,030	928,516	9,048,681
Project Management/ Design (In-House)	0	0	0	0	0	0	0
Project Management/ Design (Consultant)	0	30,175	51,667	24,026	30,351	46,426	182,645
Construction Fees and Services	0	,	103,335	48,053	,	92,852	365,294
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	375,000	375,000	375,000	375,000	375,000	1,875,000
Other	0	0	0	0	0	0	0
TOTAL	5,395,749	1,069,036	1,563,348	927,609	1,073,084	1,442,794	11,471,620
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
,	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	5,395,749	1,069,036	1,563,348	927,609	1,073,084	1,442,794	11,471,620
TOTAL	5,395,749	1,069,036	1,563,348	927,609	1,073,084	1,442,794	11,471,620

Analysis Done	Analysis Results				
Operating budget impact analyzed	The project will result in an increase in operating costs due to				
Operating budget impact analyzed	installation of new facilities				
	The original Module M1 landfill gas extraction wells were				
Age of existing	installed during 1997. System expansion has been ongoing.				
facility/system/equipment	Wells require replacement when no longer effectively collecting				
	landfill gas				

## **Kiefer Landfill – Groundwater Remediation Project Upgrades**

12701 Kiefer Blvd., Sloughhouse, CA 95683

Project #11

**Department:** Waste Management & Recycling **Estimated Project Cost:** \$595,049

**Expected Completion Date: 2020 Funding Sources: Solid Waste Enterprise** 

Fund Capital Outlay

#### **Project Description:**

The Kiefer Landfill Groundwater Remediation Project initiated operation in 1994. The project upgrades include the contingent replacement of aging equipment and a small number of extraction wells at Kiefer Landfill to more efficiently target the progressively reducing groundwater contamination levels.

Kiefer Landfill - Groundwater Remediation Project Upgrades

	Prior	Fiscal Year					
<b>Estimated Project Costs</b>	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs Project Management/ Design (In-	162,249	125,000	90,000	40,000	40,000	40,000	497,249
House) Project Management/ Design	0	6,000	5,000	4,800	4,800	4,800	25,400
(Consultant)	0	30,000	10,000	0	0	0	40,000
Construction Fees and Services	0	8,000	10,000	4,800	4,800	4,800	32,400
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	162,249	169,000	115,000	49,600	49,600	49,600	595,049
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	162,249	169,000	115,000	49,600	49,600	49,600	595,049
TOTAL	162,249	169,000	115,000	49,600	49,600	49,600	595,049

Analysis Done	Analysis Results
Operating budget impact	Project will result in a decrease in operating costs due to less electricity
analyzed	and maintenance for new equipment
Age of existing	The original system was installed during 1994 and project upgrades are
facility/system/equipment	ongoing

## Kiefer Landfill – Liner and Ancillary Features

12701 Kiefer Blvd., Sloughhouse, CA 95683

Project #12

Department: Waste Management & Recycling Estimated Project Cost: \$5,558,544

**Expected Completion Date: 2021** 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 landfill liner, leachate collection, and landfill gas piping systems for the Kiefer Landfill. The project will be constructed over multiple fiscal years. Liner and supporting infrastructure is planned to be constructed along the interface of modules M1-L and M3 during 2015 and in module M4 during 2019-21.

# Kiefer Landfill – Liner and Ancillary Features

	Prior	Fiscal Year					
Estimated Project Costs	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	110,000	0	0	0	4,510,453	4,620,453
Project Management/ Design (In-House)	0	0	0	0	0	451,045	451,045
Project Management/ Design (Consultant)	0	25,000	0	0	225,523	225,523	476,046
Construction Fees and Services	0	11,000	0	0	0	0	11,000
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	0	146,000	0	0	225,523	5,187,021	5,558,544
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	0	146,000	0	0	225,523	5,187,021	5,558,544
TOTAL	0	146,000	0	0	225,523	5,187,021	5,558,544

Analysis Done	Analysis Results			
Operating budget impact analyzed	The project will result in an increase in operating costs due to			
	installation of new facilities			

### Kiefer Landfill – Roll-Off Truck

12701 Kiefer Boulevard, Sloughhouse, CA 95683

Project #13

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$175,000

**Expected Completion Date: 2015** Funding Sources: Solid Waste Enterprise

Fund Capital Outlay



#### **Project Description:**

This project is for the purchase of one roll-off truck. This vehicle will be used primarily at Kiefer Landfill to empty roll-off containers currently located at the Multi-Purpose Area. This purchase will replace a fully-depreciated roll-off truck in current operation.

### Kiefer Landfill – Roll-Off Truck

	Prior	Fiscal Year					
<b>Estimated Project Costs</b>	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	0	0	0	0
Project Management/Design (In-							
House)	0	0	0	0	0	0	0
Project Management/Design							
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	175,000	0	0	0	0	175,000
Other	0	0	0	0	0	0	0
TOTAL	0	175,000	0	0	0	0	175,000

Funding Sources	Prior Years Expenses	2015-16	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Total
Solid Waste Enterprise Fund							
Capital Outlay	(	175,000	0	0	0	0	175,000
TOTA	L	175,000	0	0	0	0	175,000

Analysis Done	Analysis Results			
Operating budget impact analyzed	Project will result in a decrease in operating costs due to less			
	maintenance for new equipment			

### **Kiefer Landfill – Storm Water Improvements**

12701 Kiefer Blvd., Sloughhouse, CA 95683

Project #14

**Department:** Waste Management & Recycling **Estimated Project Cost:** \$209,330

**Expected Completion Date: 2016** Funding Sources: Solid Waste Enterprise

Fund Capital Outlay

#### **Project Description:**

This project consists of planning, design, and construction of storm water improvements near the main entrance/exit at Kiefer Landfill. Improvements are necessary to convey storm water to an existing on-site sedimentation basin.

#### **Kiefer Landfill – Storm Water Improvements**

	Prior	Fiscal Year					
<b>Estimated Project Costs</b>	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	165,330	0	0	0	0	165,330
Project Management/ Design (In-House)	0	27,500	0	0	0	0	27,500
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	16,500	0	0	0	0	16,500
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	0	209,330	0	0	0	0	209,330
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	0	209,330	0	0	0	0	209,330
TOTAL	0	209,330	0	0	0	0	209,330

Analysis Done	Analysis Results
Operating budget impact	Project will result in an increase in operating costs due to it being a new
analyzed	facility
Alternatives analyzed	<ul> <li>Existing alternative approaches to managing storm water at the site entrance/exit location have not met water quality goals</li> <li>The storm water conveyance project was determined to be the most feasible approach to meet the project goals</li> </ul>

# Kiefer Landfill - Street Sweeper

12701 Kiefer Boulevard, Sloughhouse, CA 95683

Project #15

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$235,000

**Expected Completion Date: 2015** Funding Sources: Solid Waste Enterprise

**Fund Capital Outlay** 



#### **Project Description:**

This project is for the purchase of one street sweeping vehicle. This vehicle will be used primarily at Kiefer Landfill to improve storm water quality and to control offsite tracking of soil and debris onto public roadways. This purchase will replace a fully-depreciated sweeper in current use.

# Kiefer Landfill – Street Sweeper

	Prior	Fiscal Year					
<b>Estimated Project Costs</b>	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In- House)	0	0	0	0	0	0	0
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	235,000	0	0	0	0	235,000
Other	0	0	0	0	0	0	0
TOTAL	0	235,000	0	0	0	0	235,000
Funding Sources	Prior Years	Fiscal Year 2015-16	Fiscal Year 2016-17	Fiscal Year 2017-18	Fiscal Year 2018-19	Fiscal Year 2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	. • • • • • • • • • • • • • • • • • • •
Solid Waste Enterprise Fund							
Capital Outlay	0	235,000	0	0	0	0	235,000

# **Project Analysis:**

TOTAL

Analysis Done	Analysis Results
Operating budget impact	Project will result in a decrease in operating costs due to less
analyzed	maintenance for new equipment

235,000

235,000

### North Area Recovery Station - Land Transfer

4450 Roseville Road, North Highlands, CA 95660

Project #16

**Department:** Waste Management & Recycling **Estimated Project Cost**: \$2,500,000\*

**Expected Completion Date: 2019 Funding Sources: Solid Waste Enterprise** 

**Fund Capital Outlay** 

#### **Project Description:**

The Sacramento County Department of Waste Management and Recycling (DWMR) has agreed to the transfer of land located at the North Area Recovery Station from the Sacramento County Department of Economic Development and Intergovernmental Affairs (Econ Dev), and to complete the financial obligation agreed to in the June 22, 1999 Informational Report to the Board of Supervisors and the approved July 20, 1999 Board action, Resolution 99-0917.

The price for the transfer of the asset shall be two million, five hundred thousand dollars (\$2,500,000 plus interest)\*. DWMR made the initial payment to Econ Dev of \$500,000 on July 1, 2009, and will continue to make annual payments of \$250,278 for ten years through July 1, 2019.

# North Area Recovery Station – Land Transfer

	Prior	Fiscal Year					
<b>Estimated Project Costs</b>	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In-	·	·	•	•	·	•	•
House)	0	0	0	0	0	0	0
Project Management/ Design							
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Land Transfer	1,751,391	250,278	250,278	250,278	250,278	250,278	3,002,781
TOTAL	1,751,391	250,278	250,278	250,278	250,278	250,278	3,002,781
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	1,751,391	250,278	250,278	250,278	250,278	250,278	3,002,781
TOTAL	1,751,391		250,278	250,278	250,278	250,278	3,002,781

Analysis Done		Analysis Results
	Operating budget impact analyzed	This project has no measurable impact on
	Operating budget impact analyzed	the operating budget once complete

### North Area Recovery Station – Master Plan Improvements

4450 Roseville Road, North Highlands, CA 95660

Project #17

**Department:** Waste Management & Recycling **Estimated Project Cost:** \$9,928,368

**Expected Completion Date: 2020** Funding Sources: Solid Waste Enterprise

Fund Capital Outlay

#### **Project Description:**

This project at the North Area Recovery Station includes the ongoing planning, design, and construction of new and replacement pavement, structural, and utility improvements to enhance operational efficiency, facility durability, and environmental protection.

#### North Area Recovery Station – Master Plan Improvements

	Prior	Fiscal Year					
<b>Estimated Project Costs</b>	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	5,401,868	655,000	200,000	750,000	600,000	450,000	8,056,868
Project Management/ Design (In-House)	0	0	0	16,500	10,000	10,000	36,500
Project Management/ Design (Consultant)	0	65,000	20,000	25,000	50,000	15,000	175,000
Construction Fees and Services	0	90,000	20,000	75,000	60,000	50,000	295,000
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	1,365,000	0	0	0	1,365,000
Other	0	0	0	0	0	0	0
TOTAL	5,401,868	810,000	1,605,000	866,500	720,000	525,000	9,928,368
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	5,401,868	810,000	1,605,000	866,500	720,000	525,000	9,928,368
TOTAL	5,401,868	810,000	1,605,000	866,500	720,000	525,000	9,928,368

Analysis Done	Analysis Results
Operating budget impact analyzed	Project will result in a decrease in operating costs due to less maintenance and increased operational efficiency.
Age of existing facility/system/equipment	Pavement, structural, and utility improvement replacements are scheduled based upon physical inspections and useful life analyses.

# North Area Recovery Station – Roll-Off Truck

4450 Roseville, North Highlands, CA 95660

Project #18

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$175,000

**Expected Completion Date:** 2015 **Funding Sources:** Solid Waste Enterprise

Fund Capital Outlay



#### **Project Description:**

This project is for the purchase of one roll-off truck. This vehicle will be used primarily at the North Area Recovery Station to empty roll-off bins, move bins around the site, and transfer e-waste to the recycler.

# North Area Recovery Station – Roll-Off Truck

	Prior	Fiscal Year					
<b>Estimated Project Costs</b>	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	0	0	0	C
Project Management/ Design (In-							
House)	0	0	0	0	0	0	(
Project Management/ Design (Consultant)	0	) 0	0	0	0	0	0
(Oonsultant)		, 0	O	O	U	U	•
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	175,000	0	0	0	0	175,000
Other	0	0	0	0	0	0	0
TOTAL	0	175,000	0	0	0	0	175,000
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
· ·	Expenses	Budget	Budget	Budget	Budget	Budget	
Solid Waste Enterprise Fund							
Capital Outlay	0	175,000	0	0	0	0	175,000
TOTAL	0		0	0	0	0	175,000

Analysis Done	Analysis Results			
Operating budget impact analyzed	Project will result in a decrease in operating costs due to less			
	maintenance for new equipment			

# North Area Recovery Station – Terminal Tractors (2)

4450 Roseville Road, North Highlands, 95660

Project #19

**Department:** Waste Management and Recycling **Estimated Project Cost:** \$200,000

**Expected Completion Date:** 2015 **Funding Sources:** Solid Waste Enterprise

Fund Capital Outlay



#### **Project Description:**

This project is for the purchase of two terminal tractors. These vehicles will be powered by diesel fuel. These vehicles will be used primarily at the North Area Recovery Station to move trailers around the North Area Recovery site. These purchases are new to our NARS equipment fleet and will replace existing, fully-depreciated transfer tractors that are currently used to shuttle trailers.

# North Area Recovery Station – Terminal Tractors (2)

	Prior				Fiscal Year		
Estimated Project Costs	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs Project Management/ Design (In-	0	0	0	0	0	0	C
House)	0	0	0	0	0	0	C
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	200,000	0	0	0	0	200,000
Other	0	0	0	0	0	0	0
TOTAL	0	200,000	0	0	0	0	200,000
	Prior	Fiscal Year					
Funding Sources	Years	2015-16	2016-17	2017-18	2018-19	2019-20	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	

**Project Analysis:** 

**TOTAL** 

Capital Outlay

Analysis Done	Analysis Results
Operating budget impact	This project will result in a decrease in the operating budget due to
analyzed	less maintenance and increased operational efficiency

200,000

200,000

200,000

200,000