

Victor Valley Wastewater Reclamation Authority

Taking the Waste Out of Wastewater **AB1600**



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WASTEWATER TREATMENT SYSTEM CONNECTION FEES

The wastewater treatment system connection fee was first established by Ordinance No. 002, which the Board of Commissioners of Victor Valley Wastewater Reclamation Authority (VVWRA) adopted on May 26, 1983. This ordinance was revised several times since then, and its most current revision was adopted on March 20, 2014.

Purpose of the Fund:

The wastewater system connection fee is assessed as a condition of approval for all new development to pay for wastewater lines connected to VVWRA treatment facilities to support new development. The funds collected are accounted for as connection fee revenues and shall be used for the following purposes:

- 1. Acquisition of additional property for wastewater treatment facility system and right-of-ways
- 2. Design and construction of treatment facilities, buildings, infrastructure, and pipelines for wastewater collection and treatment services
- 3. Construction of facility buildings, pumps, and lift station to collect wastewater and provide wastewater treatment services
- 4. Purchases of treatment equipment for such treatment services
- 5. Growth and expansion of wastewater system excluding repairs and replacements

Amount of Fees:

Connection fees rate is \$4,000 per Equivalent Dwelling Unit (245 gallons per day or 20 fixture units) per Ordinance 002 that was adopted on March 20, 2014, effective on July 1, 2014.

14.5 and 18 MGD Regional Plant Expansion

The 14.5 and 18 MGD capacity expansions at the wastewater treatment plant located in Victorville cost 51.3 million dollars. The expenses occurred between FY 2002 and 2009.

Year	14.5 + 18 MGD	14.5 MGD	18 MGD
FY 2002	1,753,006.00	1,753,006.00	
FY 2003	-	-	-
FY 2004	-	-	-
FY 2005	960,251.00	651,713.00	308,538.00
FY 2006	18,323,667.00	12,514,692.00	5,808,975.00
FY 2007	19,484,531.63	9,115,556.25	10,368,975.38
FY 2008	9,576,706.64	1,552,135.60	8,024,571.04
FY 2009	1,235,323.85	280,928.48	954,395.37
	51,333,486.12	25,868,031.33	25,465,454.79

In addition VVWRA spent 14.4 million dollars on other construction projects between FY 2002 and 2009.

Year	Other Construction Projects
FY 2002	409,655.00
FY 2003	1,816,256.00
FY 2004	846,469.80
FY 2005	2,166,270.00
FY 2006	886,227.00
FY 2007	321,795.32
FY 2008	4,661,337.38
FY 2009	3,370,249.90
	14,478,260.40

VVWRA received 35.3 million dollars in connection fees from the City of Victorville between FY 2002 and 2009. VVWRA also received 24.7 million dollars in connection fees from Apple Valley, Hesperia and San Bernardino County between FY 2002 and 2009. Total Connection Fees paid between 2002 and 2009 were just over 60 million dollars.



		Connection	ı Fees Revenue	2	
			SB County		All
Year	Victorville	Apple Valley	Special	Hesperia	Connection
			Districts		Fees
FY 2002	1,241,729.25	568,795.50	166,273.72	266,177.44	2,242,975.91
FY 2003	2,768,218.65	602,537.75	196,393.96	382,498.90	3,949,649.26
FY 2004	4,986,939.25	697,837.80	245,328.75	1,168,312.75	7,098,418.55
FY 2005	4,841,563.14	1,720,235.75	280,650.00	1,820,769.57	8,663,218.46
FY 2006	8,145,023.53	2,452,297.75	121,650.00	2,903,514.67	13,622,485.95
FY 2007	7,475,182.72	1,854,318.22	185,993.00	2,705,500.11	12,220,994.05
FY 2008	4,212,909.20	1,768,985.10	32,954.20	2,105,566.10	8,120,414.60
FY 2009	1,617,245.10	1,065,668.20	365,123.00	1,090,642.00	4,138,678.30
	35,288,810.84	10,730,676.07	1,594,366.63	12,442,981.54	60,056,835.08

Between FY 2002 and 2009 VVWRA paid for all construction projects in cash utilizing existing reserves and connection fees.

		Other Construction	All Connection
Year	14.5 + 18 MGD	Projects	Fees
FY 2002	1,753,006.00	409,655.00	2,242,975.91
FY 2003	-	1,816,256.00	3,949,649.26
FY 2004	-	846,469.80	7,098,418.55
FY 2005	960,251.00	2,166,270.00	8,663,218.46
FY 2006	18,323,667.00	886,227.00	13,622,485.95
FY 2007	19,484,531.63	321,795.32	12,220,994.05
FY 2008	9,576,706.64	4,661,337.38	8,120,414.60
FY 2009	1,235,323.85	3,370,249.90	4.138,678.30
	51,333,486.12	14,478,260.40	60,056,835.08
	Total		
	Construction		
	2002-2009	65,811,746.52	

The 14.5 and 18.0 MGD expansions increased the regional plant's ability to handle increased flows at a total cost of 51.3 million dollars. The 51.3 million dollars was paid <u>in cash</u> from connection fee revenue. This is why the 14.5 and 18.0 MGD expansion projects are not listed on VVWRA's debt service, which consists of State Revolving Fund (SRF) loans. If all of Victorville's connection fees were allocated to the 14.5 and 18.0 MGD projects between 2002 and 2009, the City of Victorville contributed 35.3 million dollars or 69% (35,288,810.84 / 51,333,486.12). The remaining Member Agencies contributed the balance of 16.0 million dollars or 31% [(51,333,486.12 – 35,288,810.84) / 51,333,486.12] to the 14.5 and 18.9 MGD projects. The 14.5 and 18.0 MGD expansions were built to expand the hydraulic capacity of the wastewater treatment plant located in Victorville. The Phase IIIA Regulatory Upgrade Project at a cost of 15.7 million dollars, was financed with an SRF loan, which was done to address regulatory concerns (Nitrogen) and to provide Victorville with as much recycled water as the facility could produce in excess of the Fish and Game MOU.



Funding Source Definition

Funding sources and connection (capacity) fees:

VVWRA has determined allocation percentage to keep track of capital project costs separately from operation costs based on historical data. For example, for the Sub-Regional projects, VVWRA has 61% for operations and 39% for capital for all grants and SRF loans. The allocation summary for the SRF loan follows.

SRF (State Revolving Fund) Loans:

The California State Water Resource Control Board provides local government entities with relatively low interest rates for its SRF loans for mainly infrastructure projects. VVWRA has eight SRF loans as shown below.

2019	9.5 MGD Capital Improvements	11 MGD Expansion	Val	Apple lley ceptor	Phase IIIA Regulatory Upgrades		per Narrows eplacement Project	Nanticoke pass Project		le Valley Sub- gional Project	esperia b-Regional Project	:	2019 Total
SRF Loan Amount	\$ 4,069,859	\$ 11,430,726	\$ 4.	,084,688	\$ 15,717,668	\$	4,286,380	\$ 4,459,190	\$	27,129,023	\$ 40,658,810	\$	111,836,344
Annual Payment	\$ 265,050	\$ 579,870	\$	258,151	\$ 1,027,610	\$	257,745	\$ 270,220	\$	1,050,521	\$ 1,574,511	\$	5,283,678
Payment Date	September 15	April 3	Febru	iary 13	June 30	De	ecember 31	June 30	I	February 28	February 28		
1. Operations	4.30%	0.00%		0.00%	75.00%		100.00%	75.00%		61.00%	61.00%		
Original Loan	\$ 175,004	\$ -	\$	-	\$ 11,788,251	\$	4,286,380	\$ 3,344,393	\$	16,548,704	\$ 24,801,874		
Principal	\$ 10,827	\$ -	\$	-	\$ 530,766	\$	197,174	\$ 142,474	\$	486,104	\$ 727,394	\$	2,094,739
Interest	\$ 570	\$ -	\$	-	\$ 239,942	\$	60,571	\$ 61,251	\$	154,714	\$ 233,058	\$	750,106
Annual Payment	\$ 11,397	\$ -	\$	-	\$ 770,708	\$	257,745	\$ 203,725	\$	640,818	\$ 960,452	\$	2,844,845
2. Capital	95.70%	100.00%	1	100.00%	25.00%		0.00%	25.00%		39.00%	39.00%		
Original Loan	\$ 3,894,855	\$ 11,430,726	\$ 4.	,084,688	\$ 3,929,417	\$	-	\$ 1,114,798	\$	10,580,319	\$ 15,856,936		
Principal	\$ 240,960	\$ 538,835	\$	222,603	\$ 176,922	\$	-	\$ 47,491	\$	310,787	\$ 465,055	\$	2,002,653
Interest	\$ 12,693	\$ 41,035	\$	35,548	\$ 79,981	\$	-	\$ 20,417	\$	98,916	\$ 149,004	\$	437,594
Annual Payment	\$ 253,653	\$ 579,870	\$	258,151	\$ 256,903	\$	-	\$ 67,908	\$	409,703	\$ 614,059	\$	2,440,247
Total Principal	\$ 251,787	\$ 538,835	\$	222,603	\$ 707,688	\$	197,174	\$ 189,965	\$	796,891	\$ 1,192,449	\$	4,097,391
Total Interest	\$ 13,263	\$ 41,035	\$	35,548	\$ 319,922	\$	60,571	\$ 81,668	\$	253,630	\$ 382,062	\$	1,187,700
Annual Payment	\$ 265,050	\$ 579,870	\$	258,151	\$ 1,027,610	\$	257,745	\$ 271,633	\$	1,050,521	\$ 1,574,511	\$	5,285,091

Prop (Proposition) 1 grant:

On November 6, 2015, the California State Water Resource Control Board provided VVWRA with a grant to fund the construction of Apple Valley (only) subregional plant. The loan amount of \$9,181,841 was limited to \$8,961,687 due to funding allocation determined as the grant percentage against the total grant and SFR loan actually used. VVWRA uses the same allocation rates, 61% for operations and 39% for capital.

Prop (Proposition) 13 "Water Recycling" grant:

On November 6, 2015, the California State Water Resource Control Board provided VVWRA with a grant to fund the construction of Apple Valley (only) subregional plant. The loan amount of \$4,000,000 was limited to \$3,992,567 due to funding allocation determined as the grant percentage against the total grant and SFR loan actually used. VVWRA uses the same allocation rates, 61% for operations and 39% for capital.

Prop (Proposition) 84 grant:

State of California, Department of Water Resources has provided VVWRA with \$3,000,000 grant per 'Round 2 Integrated Regional Water Management Implementation Grant Agreement' dated July 14, 2014. The entire \$3,000,000 was utilized on the construction of both Apple Valley and Hesperia plants and granted for reimbursements. VVWRA uses the same allocation rates, 61% for operations and 39% for capital.

Title 16 grant:

United States Department of the Interior, Bureau of Reclamation has provided VVWRA with a grant (originally \$5,000,000 on September 30, 2011 and then modified to \$4,866,994.46 on July 9, 2018) based on Southern California Desert Region Integrated Water and Economic Sustainability Plan. Mojave Water Agency (MWA) received Title 16 authorizing a regional recycled water program under PL 102-575. MWA has designated VVWRA to receive up to \$5,000,000 of the Title 16 fund to construct sub-regional water reclamation plants and recycled water distribution systems that implement the water recycling program. The two sub-regional plants will produce 2,240 AFY for groundwater recharge and recycled water customers, satisfying about 7% of the area's water demand. This use of recycled water will replace current uses of the local groundwater and State Water Project Water. The entire \$4,866,994.46 was granted. VVWRA uses the same allocation rates, 61% for operations and 39% for capital.

FEMA and Cal OES grants:

Federal Emergency Management Agency (FEMA) and California Office of Emergency Services (Cal OES) have granted VVWRA with grants based on President Obama's declaration of national disaster announced on January 26, 2011. These grants include \$33,124,002 for Upper Narrows pipeline, \$7,954,740 for Lower Narrows pipeline, \$228,416 for other large projects, and \$24,940 for other small projects, making a total grant of \$41,332,098. This entire amount was utilized for the construction of a temporary pipeline, a permanent pipeline to replace the temporary line, and all large and small projects affected by this national disaster. These grants were for 100% operations.

		Additions	Funding Sources								
Project Code	e Project Description	during YE 6/30/07	SRF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
Miscelleneous	S Other Projects	645,488							645,488		645,488
C034	14.5 MGD Regional Plant Expansion	9,115,556								9,115,556	9,115,556
C036	18 MGD Regional Plant Expansion	10,368,975								10,368,975	10,368,975
		20,130,020	-	-	-	-	-	-	645,488	19,484,532	20,130,020

_	FY 2007
Operating Revenues	5,169,936
Operating Expenses excluding Depreciation	(8,575,362)
Operating Loss	(3,405,426)
-	

Connection (Capacity) Fee Received 12,220,994

Debt Service Payment		Connection (Ca	apacity) Fee Received	Captal Fund Balance	
		Apple Valley	1,872,049	Beginning Balance	12,443,634
Operating Revenue/Reserve	11,397	SB County	185,993	Connection (Capacity) Fee	12,220,994
Connection (Capacity) Fee	1,091,674	Hesperia	2,705,500	Interest and Misc Income	1,316,360
	1,103,071	Victorville	7,457,452	Capital Acquisitions	(19,484,532)
		_	12,220,994	Capacity Loan Repayments	(1,091,674)
		_			5,404,782

^{*}Note: VVWRA has spent \$36M on both 14.5 and 18 MGD projects prior to FY 2007.

Project Description

14.5 MGD Regional Plant Expansion (C034)

The 14.5 MGD expansion project increased overall capacity at the wastewater treatment plant to 14.5 MGD by building.

18 MGD Regional Plant Expansion (C036)

The 18 MGD expansion project increased overall capacity at the wastewater treatment plant to 18 MGD by designing and building.



		Additions		Funding Sources							
Project Code	Project Description	during YE 6/30/08	SRF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
C034	14.5 MGD Regional Plant Expansion	1,552,136								1,552,136	1,552,136
C036	18 MGD Regional Plant Expansion	8,024,571								8,024,571	8,024,571
C038	CIP Financing and Bond	214,945								214,945	214,945
C100	Westside WRP Phase III	4,022,057							3,016,543	1,005,514	4,022,057
C105	Eastside WRP	34,607								34,607	34,607
C107	Reclaimed Water Studies	49,789								49,789	49,789
C108	Sewer Master Plan	257,737							257,737		257,737
C109	SAFARI Sewer	82,203							82,203		82,203
		14,238,044	-	_	-	-	-	-	3,356,483	10,881,561	14,238,044

	FY 2008
Operating Revenues	6,339,380
Operating Expenses excluding Depreciation	(8,751,911)
Operating Loss	(2,412,531)
-	

Connection (Capacity) Fee Received 8,120,414

Debt Service Payn	ne nt	Connection (C	Capacity) Fee Received	Captal Fund Balance	
		Apple Valley	1,768,985	Beginning Balance	5,404,782
Operating Revenue/Reserve	11,397	SB County	32,954	Connection (Capacity) Fee	8,120,414
Connection (Capacity) Fee	1,091,674	Hesperia	2,105,566	Interest and Misc Income	923,569
	1,103,071	Victorville	4,212,909	Capital Acquisitions	(10,881,561)
			8,120,414	Capacity Loan Repayments	(1,091,674)
		-			2,475,530

Project Description

14.5 MGD Regional Plant Expansion (C034)

The 14.5 MGD expansion project increased overall capacity at the wastewater treatment plant to 14.5 MGD by building.

18 MGD Regional Plant Expansion (C036)

The 18 MGD expansion project increased overall capacity at the wastewater treatment plant to 18 MGD by designing and building.

CIP Financing and Bond (C038)

The CIP financing and bond project provided financial planning services for proposed capital projects and to prepare the Authority to issue bonds for those capital projects.

Westside WRP Phase III (C100)

The 14.5 MGD project addressed specific regulatory and capacity issues at the wastewater treatment plant including: installation of helical skimmers on the primary clarifiers, a gas conditioning system, aqua diamond tertiary filters, and ultraviolet disinfection.

Eastside WRP (C105)

The eastside water reclamation plant is a project to address flows from the golden triangle area of Victorville and the unincorporated area of the Town of Apple Valley. The concept is to eliminate the installation of an additional interceptor through the lower narrows.

Reclaimed Water Studies (C107)

The reclaimed water studies were performed to identify issues associated with the construction of the Sub-Regional water reclamation plants in Hesperia and Apple Valley. The studies were also used to prepare the Report of Waste Discharge for permitting the WRP's through Lahontan Regional Water Quality Control Board.

Sewer Master Plan (C108)

The State of California required that all utilities operating a sewer collection system prepare a sewer master plan that identified and evaluated a set criteria dictated by the State.

SAFARI Sewer (C109)

The Santa Fe Regional Interceptor (SAFARI) sewer project replaced an undersized interceptor on Santa Fe Avenue in Hesperia that experienced multiple sewer overflows.

			Funding Sources								
Project Code	e Project Description	Additions during YE 6/30/09	SRF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
C034	14.5 MGD Regional Plant Expansion	280,928								280,928	280,928
C036	18 MGD Regional Plant Expansion	954,395								954,395	954,395
C038	CIP Financing and Bond	219,034								219,034	219,034
C100	Westside WRP Phase III	1,906,783							1,430,087	476,696	1,906,783
C101	Hesperia WRP	148,591							90,640	57,950	148,591
C102	Hesperia Pump Station & Force Main	1,610							982	628	1,610
C103	Apple Valley WRP	84,413							51,492	32,921	84,413
C104	Nanitake Gravity Interceptor	300,000							225,000	75,000	300,000
C105	Eastside WRP	20,029								20,029	20,029
C107	Reclaimed Water Studies	105,903								105,903	105,903
C108	Sewer Master Plan	442,423							442,423		442,423
C109	SAFARI Sewer	116,241							116,241		116,241
C113	S Apple Valley Interceptor	25,223							25,223		25,223
		4,605,574	-	-	-	-	-	-	2,382,089	2,223,485	4,605,574

FY 2009
7,313,826
(8,263,574)
(949,748)

Connection (Capacity) Fee Received_	4,138,678

Debt Service Paym	ent	Connection (Capaci	ty) Fee Received	Captal Fund Balance	
		Apple Valley	1,065,669	Beginning Balance	2,475,530
Operating Revenue/Reserve	11,397	SB County	365,123	Connection (Capacity) Fee	4,138,678
Connection (Capacity) Fee	1,091,674	Hesperia	1,090,642	Interest and Misc Income	443,881
	1,103,071	Victorville	1,617,245	Capital Acquisitions	(2,223,485)
_			4,138,678	Capacity Loan Repayments	(1,091,674)
					3,742,930

Project Description

14.5 MGD Regional Plant Expansion (C034)

The 14.5 MGD expansion project increased overall capacity at the wastewater treatment plant to 14.5 MGD by building.

18 MGD Regional Plant Expansion (C036)

The 18 MGD expansion project increased overall capacity at the wastewater treatment plant to 18 MGD by designing and building.

CIP Financing and Bond (038)

The CIP financing and bond project provided financial planning services for proposed capital projects and to prepare the Authority to issue bonds for those capital projects.

Westside WRP Phase III (C100)

The 14.5 MGD project addressed specific regulatory and capacity issues at the wastewater treatment plant including: installation of helical skimmers on the primary clarifiers, a gas conditioning system, aqua diamond tertiary filters, and ultraviolet disinfection.

Hesperia WRP (C101)

The Hesperia WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the City of Hesperia.

Hesperia Pump Station and Force Main (C102)

The Hesperia Pump Station and force main project takes wastewater from Maple Street in Hesperia and pumps it to the Hesperia water reclamation Plant (WRP).

Apple Valley WRP (C103)

The Apple Valley WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the Town of Apple Valley.

Nanticoke Gravity Interceptor (C104)

The Nanticoke gravity interceptor replaces the obsolete Nanticoke pump station with a gravity sewer line. The new interceptor will significantly reduce VVWRA's operation and maintenance costs by eliminating the pump station.

Eastside WRP (C105)

The eastside water reclamation plant is a project to address flows from the golden triangle area of Victorville and the unincorporated area of the Town of Apple Valley. The concept is to eliminate the installation of an additional interceptor through the lower narrows.

Reclaimed Water Studies (C107)

The reclaimed water studies were performed to identify issues associated with the construction of the Sub-Regional water reclamation plants in Hesperia and Apple Valley. The studies were also used to prepare the Report of Waste Discharge for permitting the WRP's through Lahontan Regional Water Quality Control Board.

Sewer Master Plan (C108)

The State of California required that all utilities operating a sewer collection system prepare a sewer master plan that identified and evaluated a set criteria dictated by the State.

SAFARI Sewer (C109)

The Santa Fe Regional Interceptor (SAFARI) sewer project replaced an undersized interceptor on Santa Fe Avenue in Hesperia that experienced multiple sewer overflows.

S Apple Valley Interceptor (C113)

The South Apple Valley Interceptor is a project in conjunction with San Bernardino County Flood Control District to replace the portion of the interceptor in Desert Knolls Wash. The County will be performing improvements to the flood control basin and the interceptor line was damaged in December of 2016 which will require its replacement.

		Additions	Funding Sources								
Project Code	e Project Description	during YE 6/30/10	SRF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
C100	Westside WRP Phase III	308,688	-						231,516	77,172	308,688
C101	Hesperia WRP	1,450,257	1,138,889				311,368				1,450,257
C103	Apple Valley WRP	1,080,755	543,079	186,430	81,057		270,189				1,080,755
C104	Nanitake Gravity Interceptor	20,000							15,000	5,000	20,000
C107	Reclaimed Water Studies	37,784								37,784	37,784
C108	Sewer Master Plan	190,342								190,342	190,342
C109	SAFARI Sewer	18,325								18,325	18,325
C113	S Apple Valley Interceptor	17,129								17,129	17,129
C115	Lab-EC-IT-Constr Bldg (Butler Bldg)	9,845								9,845	9,845
Fund 07	Miscellaneous Projects	446,907								446,907	446,907
		3,580,032	1,681,968	186,430	81,057	-	581,557	-	246,516	802,504	3,580,032

_	FY 2010
Operating Revenues	9,715,020
Operating Expenses excluding Depreciation	(8,638,434)
Operating Loss	1,076,586
_	
Connection (Capacity) Fee Received	3,166,772

Debt Service Payn	Debt Service Payment		apacity) Fee Received	Captal Fund Balance	
		Apple Valley	569,060	Beginning Balance	3,742,930
Operating Revenue/Reserve	11,397	SB County	10,875	Connection (Capacity) Fee	3,166,772
Connection (Capacity) Fee	1,091,674	Hesperia	1,309,521	Interest and Misc Income	122,022
	1,103,071	Victorville	1,277,316	Capital Acquisitions	(802,504)
			3,166,772	Capacity Loan Repayments	(1,091,674)
		_			5,137,546

Project Description

Westside WRP Phase III (C100)

The 14.5 MGD project addressed specific regulatory and capacity issues at the wastewater treatment plant including: installation of helical skimmers on the primary clarifiers, a gas conditioning system, aqua diamond tertiary filters, and ultraviolet disinfection.

Hesperia WRP (C101)

The Hesperia WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the City of Hesperia.

Apple Valley WRP (C103)

Nanticoke Gravity Interceptor (C104)

The Nanticoke gravity interceptor replaces the obsolete Nanticoke pump station with a gravity sewer line. The new interceptor will significantly reduce VVWRA's operation and maintenance costs by eliminating the pump station.

Reclaimed Water Studies (C107)

The reclaimed water studies were performed to identify issues associated with the construction of the Sub-Regional water reclamation plants in Hesperia and Apple Valley. The studies were also used to prepare the Report of Waste Discharge for permitting the WRP's through Lahontan Regional Water Quality Control Board.

Sewer Master Plan (C108)

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SAFARI Sewer (C109)

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S Apple Valley Interceptor (C113)

The South Apple Valley Interceptor is a project in conjunction with San Bernardino County Flood Control District to replace the portion of the interceptor in Desert Knolls Wash. The County will be performing improvements to the flood control basin and the interceptor line was damaged in December of 2016 which will require its replacement.

Lab-EC-IT-Construction Building (C115)

Replacement of obsolete laboratory and former administration building. Construction delayed due to cash flow issues associated with the Upper Narrows Emergency and completion of Phase IIIA.

Miscellaneous Projects

The minor projects include retrofitting existing aeration basins, repairing four metering stations, upgrading the emergency generator, as well as rebuilding the number 2 engine.

				Funding Sources							
Project Code	Project Description	Additions during YE 6/30/11	SRF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
C100	Westside WRP Phase III	1,983,642	1,535,624						336,013	112,004	1,983,642
C101	Hesperia WRP	411,035	308,277				102,759				411,035
C103	Apple Valley WRP	291,390	146,424	50,265	21,854		72,848				291,390
C104	Nanitake Gravity Interceptor	8,814							6,611	2,204	8,814
C109	SAFARI Sewer	123,103							123,103		123,103
C114	Energy Efficiency	52,157								52,157	52,157
C115	Lab-EC-IT-Constr Bldg (Butler Bldg)	104,181							104,181		104,181
E003	UNE - Temp Pipeline	2,420,808						2,269,507	151,300		2,420,808
Fund 07	Miscellaneous Projects	21,086							21,086		21,086
		5,416,216	1,990,324	50,265	21,854	-	175,606	2,269,507	742,295	166,365	5,416,216

	FY 2011
Operating Revenues	10,616,850
Operating Expenses excluding Depreciation	(9,327,938)
Operating Loss	1,288,912
•	

Connection (Capacity) Fee Received 2,205,637

Debt Service Payment		Connection (Capacit	ty) Fee Received	Captal Fund Balance	
		Apple Valley	764,740	Beginning Balance	5,137,546
Operating Revenue/Reserve	11,397	SB County	99,188	Connection (Capacity) Fee	2,205,637
Connection (Capacity) Fee	1,091,674	Hesperia	374,187	Interest and Misc Income	90,544
_	1,103,071	Victorville	967,522	Capital Acquisitions	(166,365
-			2,205,637	Capacity Loan Repayments	(1,091,674
		-		•	6,175,688

Project Description

Westside WRP Phase III (C100)

The 14.5 MGD project addressed specific regulatory and capacity issues at the wastewater treatment plant including: installation of helical skimmers on the primary clarifiers, a gas conditioning system, aqua diamond tertiary filters, and ultraviolet disinfection.

Hesperia WRP (C101)

The Hesperia WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the City of Hesperia.

Apple Valley WRP (C103)

Nanticoke Gravity Interceptor (C104)

The Nanticoke gravity interceptor replaces the obsolete Nanticoke pump station with a gravity sewer line. The new interceptor will significantly reduce VVWRA's operation and maintenance costs by eliminating the pump station.

SAFARI Sewer (C109)

The Santa Fe Regional Interceptor (SAFARI) sewer project replaced an undersized interceptor on Santa Fe Avenue in Hesperia that experienced multiple sewer overflows.

Energy Efficiency (C114)

A project to improve the energy efficiency and to produce power from biogas at the wastewater treatment plant.

Lab-EC-IT-Construction Building (C115)

Replacement of obsolete laboratory and former administration building. Construction delayed due to cash flow issues associated with the Upper Narrows Emergency and completion of Phase IIIA.

Upper Narrows Emergency Temporary Pipeline (E003)

VVWRA experienced severe rain storm during December 2010 causing damage to its interceptor. VVWRA installed an emergency temporary bypass over the Mojave River to divert the wastewater flow from damaged interceptor.

Miscellaneous Projects

The minor projects include a plant-wide telemetry system, and other minor projects.

				Funding Sources							
Project Code	Project Description	Additions during YE 6/30/12	SRF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
C100	Westside WRP Phase III & III-A	14,288,662	14,288,662								14,288,662
C101	Hesperia WRP - Sub Regional	683,772	547,871				135,901				683,772
C103	Apple Valley WRP - Sub Regional	570,570	288,281	98,962	43,027		140,300				570,570
C104	Nanticoke Gravity Interceptor	11,210							8,408	2,803	11,210
C113	S Apple Valley Interceptor	4,025							4,025		4,025
C115	Lab-EC-IT-Constr Bldg (Butler Bldg)	35,467							35,467		35,467
C117	Santa Fe Interceptor	2,004,555							2,004,555		2,004,555
C124	Biogas Project for Biosolids Facility	25,441								25,441	25,441
E004	UNE - Permenant Pipeline	555,961						483,504	72,457		555,961
		18,179,662	15.124.814	98,962	43,027	-	276,200	483,504	2.124.912	28,243	18,179,662

^{*}Note: Project code C109 and C117 are both used to record the contruction of Santa Fe Interceptor

_	FY 2012
Operating Revenues	10,469,338
Operating Expenses excluding Depreciation	(12,057,130)
Operating Loss	(1,587,792)
-	

Connection (Capacity) Fee Received 2,012,423

Debt Service Paym	ent	Connection (C	Capacity) Fee Received	Captal Fund Balance	
		Apple Valley	679,478	Beginning Balance	6,175,688
Operating Revenue/Reserve	11,397	SB County	68,063	Connection (Capacity) Fee	2,012,423
Connection (Capacity) Fee	1,091,674	Hesperia	349,390	Interest and Misc Income	35,698
	1,103,071	Victorville	915,494	Capital Acquisitions	(28,243)
_			2,012,423	Capacity Loan Repayments	(1,091,674)
					7,103,892

Project Description

Westside WRP Phase III (C100)

The 14.5 MGD project addressed specific regulatory and capacity issues at the wastewater treatment plant including: installation of helical skimmers on the primary clarifiers, a gas conditioning system, aqua diamond tertiary filters, and ultraviolet disinfection.

Hesperia WRP (C101)

The Hesperia WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the City of Hesperia.

Apple Valley WRP (C103)

Nanticoke Gravity Interceptor (C104)

The Nanticoke gravity interceptor replaces the obsolete Nanticoke pump station with a gravity sewer line. The new interceptor will significantly reduce VVWRA's operation and maintenance costs by eliminating the pump station.

S Apple Valley Interceptor (C113)

The South Apple Valley Interceptor is a project in conjunction with San Bernardino County Flood Control District to replace the portion of the interceptor in Desert Knolls Wash. The County will be performing improvements to the flood control basin and the interceptor line was damaged in December of 2016 which will require its replacement.

Lab-EC-IT-Construction Building (C115)

Replacement of obsolete laboratory and former administration building. Construction delayed due to cash flow issues associated with the Upper Narrows Emergency and completion of Phase IIIA.

Santa Fe Interceptor (C117)

The purpose of the Santa Fe Interceptor is to address the sewer overflow occurred at the "I" Avenue pipeline in the City of Hesperia during the severe rain storm in December 2010.

Biogas Project for Bio-solids Facility (C124)

This project is to enable VVWRA to generate electrical power from the biogas it produces from FOG, ADM and traditional waste streams.

Upper Narrows Emergency Permanent Pipeline (E004)

This project will construct a permanent pipeline to replace the emergency temporary bypass over the Mojave River to divert wastewater flow from the damaged interceptor.

		Additions		Funding Sources							
Project Code	e Project Description	during YE 6/30/13	SRF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
Miscelleneous	S Capital Assets Not in Service	227,006							227,006		227,006
C100	Westside WRP Phase III & III-A	2,757,275	2,757,275								2,757,275
C101	Hesperia WRP - Sub Regional	355,782	291,390				64,392				355,782
C103	Apple Valley WRP - Sub Regional	307,049	167,551	57,517	25,008		56,973				307,049
C104	Nanticoke Gravity Interceptor	2,373							1,780	593	2,373
E004	UNE - Permanent Pipeline	156,436						82,676	73,760		156,436
		3,805,921	3,216,215	57,517	25,008	-	121,366	82,676	302,546	593	3,805,921

_	FY 2013
Operating Revenues	11,526,052
Operating Expenses excluding Depreciation	(9,977,454)
Operating Loss	1,548,598
=	

Connection (Capacity) Fee Received 1,620,728

Debt Service Payn	nent	Connection (C	Capacity) Fee Received	Captal Fund Balance			
		Apple Valley	783,604	Beginning Balance	7,103,892		
Operating Revenue/Reserve	738,773	SB County	33,938	Connection (Capacity) Fee	1,620,728		
Connection (Capacity) Fee	1,334,133	Hesperia	223,005	Interest and Misc Income	23,236		
	2,072,906	Victorville	580,182	Capital Acquisitions	(593)		
			1,620,729	Capacity Loan Repayments	(1,334,133)		
			_		7,413,130		

Project Description

Capital Assets Not in Service

VVWRA has purchased equipment including pumps and instruments that are not placed into service at the fiscal year end.

Westside WRP Phase III (C100)

The 14.5 MGD project addressed specific regulatory and capacity issues at the wastewater treatment plant including: installation of helical skimmers on the primary clarifiers, a gas conditioning system, aqua diamond tertiary filters, and ultraviolet disinfection.

Hesperia WRP (C101)

The Hesperia WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the City of Hesperia.

Apple Valley WRP (C103)

Nanticoke Gravity Interceptor (C104)

The Nanticoke gravity interceptor replaces the obsolete Nanticoke pump station with a gravity sewer line. The new interceptor will significantly reduce VVWRA's operation and maintenance costs by eliminating the pump station.

Upper Narrows Emergency Permanent Pipeline (E004)

This project will construct a permanent pipeline to replace the emergency temporary bypass over the Mojave River to divert wastewater flow from the damaged interceptor.

		Additions		Funding Sources							
Project Code	Project Description	during YE 6/30/14	SRF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
C101	Hesperia WRP - Sub Regional	311,069	248,360				62,709				311,069
C103	Apple Valley WRP - Sub Regional	199,321	22,744	7,808	3,395		165,374				199,321
C105	Eastside WRP	7,150							7,150		7,150
C115	Lab-EC-IT-Construction Building (Butler Bld	66,891							66,891		66,891
C116	Westside Plant Phase III-B Regulatory	13,505							13,505		13,505
C124	Biogas Project for Bio-solids Facility	38,925								38,925	38,925
C126	Oro Grande Interceptor Project	218,489							218,489		218,489
C127	Ossum Wash Interceptor Project	43,148							43,148		43,148
E004	UNE - Permanent Pipeline	4,377,852	239,921					4,094,315	43,616		4,377,852
		5,276,351	511,025	7,808	3,395	-	228,084	4,094,315	392,799	38,925	5,276,351

_	FY 2014
Operating Revenues	10,744,312
Operating Expenses excluding Depreciation	(10,090,899)
Operating Loss	653,413

Connection (Capacity) Fee Received 1,524,577

Debt Service Payn	nent	Connection (C	Capacity) Fee Received	Captal Fund Balance	
		Apple Valley	512,445	Beginning Balance	7,413,130
Operating Revenue/Reserve	782,104	SB County	47,063	Connection (Capacity) Fee	1,524,577
Connection (Capacity) Fee	1,348,577	Hesperia	229,116	Interest and Misc Income	34,881
	2,130,681	Victorville	735,954	Capital Acquisitions	(38,925)
•			1,524,577	Capacity Loan Repayments	(1,348,577)
					7,585,086

Project Description

Hesperia WRP (C101)

The Hesperia WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the City of Hesperia.

Apple Valley WRP (C103)

The Apple Valley WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the Town of Apple Valley.

Eastside WRP (C105)

The eastside water reclamation plant is a project to address flows from the golden triangle area of Victorville and the unincorporated area of the Town of Apple Valley. The concept is to eliminate the installation of an additional interceptor through the lower narrows.

Lab-EC-IT-Construction Building (C115)

Replacement of obsolete laboratory and former administration building. Construction delayed due to cash flow issues associated with the Upper Narrows Emergency and completion of Phase IIIA.

Westside Plant Phase III-B Regulatory (C116)

The WDR permit adopted in 2012 for the percolation ponds and drying beds requires that the bio-solids equalization basins be lined with an impermeable material. The Permit includes a timeline for completion of the project.

Biogas Project for Bio-solids Facility (C124)

This project is to enable VVWRA to generate electrical power from the biogas it produces from FOG, ADM and traditional waste streams.

Oro Grande Interceptor Project (C126)

This project serves as the Replacement or lining of the interceptor in the Mojave River serving Oro Grande.

Ossum Wash Interceptor Project (C127)

The double barrel interceptor that crosses Ossum Wash requires lining to ensure its structural integrity.

Upper Narrows Emergency Permanent Pipeline (E004)

This project will construct a permanent pipeline to replace the emergency temporary bypass over the Mojave River to divert wastewater flow from the damaged interceptor.

		Additions	Funding Sources								
Project Code	Project Description	during YE 6/30/15	SRF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
Miscelleneous	Capital Assets Not in Service (9999)	191,842							191,842		191,842
C101	Hesperia WRP - Sub Regional	3,762,954	2,905,071				857,883				3,762,954
C103	Apple Valley WRP - Sub Regional	1,461,117	833,462	286,114	124,397		217,143				1,461,117
C113	S Apple Valley Interceptor	117,640							117,640		117,640
C115	Lab-EC-IT-Construction Building (Butler Bld	53,604							53,604		53,604
C116	Westside Plant Phase III-B Regulatory	1,615,480							1,615,480		1,615,480
C124	Biogas Project for Bio-solids Facility	193,460								193,460	193,460
C126	Oro Grande Interceptor Project	45,525							45,525		45,525
C127	Ossum Wash Interceptor Project	7,371							7,371		7,371
E004	UNE - Permanent Pipeline	24,612,333	970,137					23,521,494	120,703		24,612,333
R128	Tao Road Realignment	11,100							11,100		11,100
R129	Yates Road Relocation	112,008								112,008	112,008
		32,184,435	4,708,670	286,114	124,397	-	1,075,026	23,521,494	2,163,266	305,468	32,184,435

	FY 2015
Operating Revenues	11,312,474
Operating Expenses excluding Depreciation_	(10,005,845)
Operating Loss	1,306,629
_	

Connection (Capacity) Fee Received 1,387,175

Debt Service Payn	nent	Connection (C	Capacity) Fee Received	Captal Fund Balance		
		Apple Valley	775,175	Beginning Balance	7,585,086	
Operating Revenue/Reserve	782,104	SB County	80,600	Connection (Capacity) Fee	1,387,175	
Connection (Capacity) Fee	1,348,577	Hesperia	306,058	Interest and Misc Income	25,627	
	2,130,681	Victorville	225,342	Capital Acquisitions	(305,468)	
			1,387,175	Capacity Loan Repayments	(1,348,577)	
					7,343,842	

Project Description

Capital Assets Not in Service

VVWRA has purchased equipment including pumps and instruments that are not placed into service at the fiscal year end.

Hesperia WRP (C101)

The Hesperia WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the City of Hesperia.

Apple Valley WRP (C103)

S Apple Valley Interceptor (C113)

The South Apple Valley Interceptor is a project in conjunction with San Bernardino County Flood Control District to replace the portion of the interceptor in Desert Knolls Wash. The County will be performing improvements to the flood control basin and the interceptor line was damaged in December of 2016 which will require its replacement.

Lab-EC-IT-Construction Building (C115)

Replacement of obsolete laboratory and former administration building. Construction delayed due to cash flow issues associated with the Upper Narrows Emergency and completion of Phase IIIA.

Westside Plant Phase III-B Regulatory (C116)

The WDR permit adopted in 2012 for the percolation ponds and drying beds requires that the bio-solids equalization basins be lined with an impermeable material. The Permit includes a timeline for completion of the project.

Biogas Project for Bio-solids Facility (C124)

This project is to enable VVWRA to generate electrical power from the biogas it produces from FOG, ADM and traditional waste streams.

Oro Grande Interceptor Project (C126)

This project serves as the Replacement or lining of the interceptor in the Mojave River serving Oro Grande.

Ossum Wash Interceptor Project (C127)

The double barrel interceptor that crosses Ossum Wash requires lining to ensure its structural integrity.

Upper Narrows Emergency Permanent Pipeline (E004)

This project will construct a permanent pipeline to replace the emergency temporary bypass over the Mojave River to divert wastewater flow from the damaged interceptor.

Tao Road Realignment (R128)

This project will result in the elimination of two 90 degree interceptor bends at Tao road with 45 degree bends to reduce odor generation.

Yates Road Relocation (R129)

The Town of Apple Valley is constructing the Nisqualli Bridge which requires that the road be widened. The existing metering site needs to be relocated to accommodate the enlarged roadway.

		4 1 11/1					Fu	inding Sources				
Project Code	Project Description	Additions during YE 6/30/16	SRF	Edison OBF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
C101	Hesperia WRP - Sub Regional	17,060,383	13,513,829				2,227,586	1,318,968				17,060,383
C103	Apple Valley WRP - Sub Regional	16,488,587	9,804,096		3,365,585	1,463,298	772,414	1,083,194				16,488,587
C104	Nanticoke Gravity Interceptor	312,670	269,129							32,656	10,885	312,670
C115	Lab-EC-IT-Construction Building (Butler Bld	5,142								5,142		5,142
C126	Oro Grande Interceptor Project	1,106								1,106		1,106
C127	Ossum Wash Interceptor Project	425								425		425
E004	UNE - Permanent Pipeline	3,436,513	674,209						2,545,710	216,594		3,436,513
R128	Tao Road Realignment	21,600								21,600		21,600
R129	Yates Road Relocation	58,940									58,940	58,940
R133	Aeration Efficiency Project	986,554		270,689						715,865		986,554
		38,371,919	24,261,263	270,689	3,365,585	1,463,298	3,000,000	2,402,161	2,545,710	993,387	69,825	38,371,919

_	FY 2016
Operating Revenues	12,305,439
Operating Expenses excluding Depreciation_	(11,174,660)
Operating Loss	1,130,779
_	

Connection (Capacity) Fee Received____

Debt Service Payn	ent	Connection (Cap	acity) Fee Received	Captal Fund Balance			
		Apple Valley	744,967	Beginning Balance	7,343,842		
Operating Revenue/Reserve	782,104	SB County	76,400	Connection (Capacity) Fee	1,146,089		
Connection (Capacity) Fee	1,348,577	Hesperia	324,722	Interest and Misc Income	32,096		
	2,130,681	Victorville	=	Capital Acquisitions	(69,825)		
•		_	1,146,089	Capacity Loan Repayments	(1,348,577)		
				_	7,103,625		

Project Description

Hesperia WRP (C101)

The Hesperia WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the City of Hesperia.

Apple Valley WRP (C103)

The Apple Valley WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the Town of Apple Valley.

Nanticoke Gravity Interceptor (C104)

The Nanticoke gravity interceptor replaces the obsolete Nanticoke pump station with a gravity sewer line. The new interceptor will significantly reduce VVWRA's operation and maintenance costs by eliminating the pump station.

Lab-EC-IT-Construction Building (C115)

Replacement of obsolete laboratory and former administration building. Construction delayed due to cash flow issues associated with the Upper Narrows Emergency and completion of Phase IIIA.

Oro Grande Interceptor Project (C126)

This project serves as the Replacement or lining of the interceptor in the Mojave River serving Oro Grande.

Ossum Wash Interceptor Project (C127)

The double barrel interceptor that crosses Ossum Wash requires lining to ensure its structural integrity.

Upper Narrows Emergency Permanent Pipeline (E004)

This project will construct a permanent pipeline to replace the emergency temporary bypass over the Mojave River to divert wastewater flow from the damaged interceptor.

Tao Road Realignment (R128)

This project will result in the elimination of two 90 degree interceptor bends at Tao road with 45 degree bends to reduce odor generation.

Yates Road Relocation (R129)

The Town of Apple Valley is constructing the Nisqualli Bridge which requires that the road be widened. The existing metering site needs to be relocated to accommodate the enlarged roadway.

Aeration Efficiency Project (R133)

This project will improve the oxygen transfer efficiency of the facility and reduce energy consumption.

		Additions	Funding Sources									
Project Code	Project Description	during YE 6/30/17	SRF	Prop 1	Prop 13	Prop 84	Title 16	FEMA/Cal OES	CEC	Operating Revenue/Reserve	Connection (Capacity) Fee	Total
C005	Desert Knolls Wash	37,620								37,620		37,620
C101	Hesperia WRP - Sub Regional	16,401,444	16,401,444									16,401,444
C103	Apple Valley WRP - Sub Regional	16,658,875	11,161,446	3,831,541	1,665,887							16,658,875
C104	Nanticoke Gravity Interceptor	4,041,514	3,548,373							369,855	123,285	4,041,514
C115	Lab-EC-IT-Construction Building (Butler Bld	2,696								2,696		2,696
C126	Oro Grande Interceptor Project	1,680								1,680		1,680
C131	Micro-grid/Battery Storage	135,973							135,973			135,973
E004	UNR - Permanent Pipeline	2,952,720	2,402,113					326,053		224,554		2,952,720
R128	Tao Road Realignment	960								960		960
R133	Aeration Efficiency Project	49,226								49,226		49,226
		40,282,707	33,513,376	3,831,541	1,665,887	-	-	326,053	135,973	686,591	123,285	40,282,707

13,655,631
(10,904,348)
2,751,283

Connection (Capacity) Fee Received 2,802,002

Debt Service Payr	nent	Connection (Capaci	ty) Fee Received	Captal Fund Balance		
		Apple Valley	765,073	Beginning Balance	7,103,625	
Operating Revenue/Reserve	1,041,339	SB County	129,200	Connection (Capacity) Fee	2,802,002	
Connection (Capacity) Fee	1,348,577	Hesperia	132,065	Interest and Misc Income	37,886	
	2,389,916	Victorville	1,775,664	Capital Acquisitions	(123,285	
			2,802,002	Capacity Loan Repayments	(1,348,577	
					8,471,651	

Project Description

Desert Knolls Wash (C005)

San Bernardino County Flood Control intends to reconstruct desert knolls wash which will require VVWRA to realign its manholes in that area.

Hesperia WRP (C101)

The Hesperia WRP project will reduce flow in the VVWRA interceptor system thus eliminating extensive sewer interceptor upgrades. In addition the facility will provide recycled water to the City of Hesperia.

Apple Valley WRP (C103)

Nanticoke Gravity Interceptor (C104)

The Nanticoke gravity interceptor replaces the obsolete Nanticoke pump station with a gravity sewer line. The new interceptor will significantly reduce VVWRA's operation and maintenance costs by eliminating the pump station.

Lab-EC-IT-Construction Building (C115)

Replacement of obsolete laboratory and former administration building. Construction delayed due to cash flow issues associated with the Upper Narrows Emergency and completion of Phase IIIA.

Oro Grande Interceptor Project (C126)

This project serves as the Replacement or lining of the interceptor in the Mojave River serving Oro Grande.

Micro-grid (C131)

This project will improve the power management and energy production of VVWRA electrical infrastructure.

Upper Narrows Emergency Permanent Pipeline (E004)

This project will construct a permanent pipeline to replace the emergency temporary bypass over the Mojave River to divert wastewater flow from the damaged interceptor.

Tao Road Realignment (R128)

This project will result in the elimination of two 90 degree interceptor bends at Tao road with 45 degree bends to reduce odor generation.

Aeration Efficiency Project (R133)

This project will improve the oxygen transfer efficiency of the facility and reduce energy consumption.