Budget Committee (final): March 12, 2015
Prelim Budget Board Meeting: March 26, 2015
Final Budget Board Meeting: June 25, 2015

Carmel Area Wastewater District
Final Budget
2015-16

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Carmel Area Wastewater District

2015-16

Board of Directors

Ken White	Board President
Gregory D'Ambrosio	Director (Budget Committee)
Michael Rachel	Director
Robert Siegfried	Director (Budget Committee)
Charlotte F. Townsend	Director

Management Staff

Barbara Buikema	General Manager
Robert Wellington	Legal Counsel
James Pinkevich	Wastewater Treatment Superintendent
Daryl Lauer	Collection System Superintendent
Drew Lander	Principal Engineer
James Grover	Principal Accountant
Dotty Hall	Administrative Services Coordinator

Mission Statement

Carmel Area Wastewater District is a special district dedicated to protecting the public health and the environment by the cost-effective collection and treatment of wastewater and the return of clean water to the environment

Message from the General Manager

June 26, 2015

Honorable President and Members of the Board of Directors:

I am pleased to submit the Carmel Area Wastewater District 2015-16 Operating and Capital Improvement Program Budget. This document provides a framework for District activities during the upcoming fiscal year and serves as a source of information for ratepayers, the District's Board of Directors, and our employees. The budget continues to reflect the District's commitment to protecting the public's health and the environment and make the needed infrastructure improvements to our facilities.

In presenting this budget, it is an exciting time for our agency as we are on the cusp of a signification capital rehabilitation project – Phase I of our Long Term Capital Plan. There has been an incredible amount of analysis and planning to bring us to this point. We engaged Kennedy/Jenks Consulting Engineers in early 2012 to perform an intensive evaluation of all treatment plant assets. The result was a planning document for rehabilitation or replacement of infrastructure at the treatment plant for the next 15 years. We knew that we needed to invest in the plant; but we wanted to make sure that we approached that investment in a solid and well considered manner.

The Long Term Capital Plan was the template for the next step – the design of Phase I. This process took over a year but in 2015 we were able to go out to bid and are very pleased with the results. An engineering estimate predicted $15.5M. The final bid came in at $13.9M; or $1.6M less that the estimate. Understandably we are very pleased with the results and have issued a Notice to Proceed effective August 1, 2015.

The District in good financial shape for the first phase of the planned infrastructure rehab efforts. Because of careful planning, savings, and analysis of future needs we are in a position to pay cash for Phase I. Without question, we are in an enviable situation; there are agencies across the State that are also attempting to improve infrastructure but they do not have the money in the bank and have been forced to borrow. The Board of Directors, and our community, has been supportive of a series of rate increases over the last four years and made the commitment to rehabilitate and improve the significant community asset we have in our wastewater treatment facility. There has been a consistent effort to look long term and envision the best facility for our community.

Although construction is slated to begin this coming year for Phase I we are already analyzing the next phase of work and how we will finance it. Additionally we know that we have some significant challenges in our collection system that must be addressed. As with the treatment plant, the first step will be a thorough analysis of the collection system assets and a prioritization of any work that needs to be done. We anticipate publication of a Long Term Capital Plan document for the Collection System by November and will post it to our web site.

This budget reflects not only our commitment to rehabilitation of the physical treatment plant facilities – it includes the challenges we face on other fronts as well.

- Monterey County's Causeway Project under Highway 1 puts a timeline on when we need to complete our project to move the outfall and force main under the Carmel Lagoon. Both of these pipelines are critical infrastructure to the District. Environmental review is currently well underway and we believe that in the end, our project will benefit the Lagoon. It will certainly mean that there will be some disruption during construction, but we will do everything possible to minimize and mitigate any footprint in the Lagoon. When the project is complete it means our infrastructure will be out of sight and protected for the next 70 years.
- Accountability and Performance metrics are issues we're struggling to quantify here at CAWD. We've made considerable progress in that direction with implementation of a Computerized Maintenance Program and Laboratory Information Management System. We also have a Collection Management System that can give us a considerable amount of data on the system's assets. Our Mission Statement includes the phrase "the cost-effective collection and treatment of wastewater" – we're serious about being able to quantify operational efficiency and provide results for our ratepayers.
- We've included a formal study of Sea Level Rise and its potential impacts on both our Treatment facility and Collection system. All the structures at the Treatment Plant are built three feet above current 100 year flood level; nonetheless we recognize that we live at the mouth of the Carmel River and are potentially vulnerable. Additionally the Regional Water Quality Control Board will require us to respond to potential impacts of Sea Level Rise at our next permit renewal in 2018 so we've started to make a budgetary provision for it now.
- The Ecosystem Protection Barrier in the Carmel Lagoon is of some concern to the District because of the potential for flooding of our facilities. We are engaged with the County and other regulatory agencies on this issue and are advocating for our ratepayers. It is our position that we not only protect and serve 16,000 user accounts in Carmel and

the Del Monte Forest but we also provide a significant economic benefit to the region through the CAWD/PBCSD Reclamation Project whereby we provide 100% of the water used for the golf courses in Del Monte Forest.

- The Calle la Cruz force main and our Outfall are part of a project for the upcoming year that will present significant engineering and environmental challenges for the coming year. Our plan is to place both pipelines underneath the lagoon, which we feel, will protect our infrastructure and in the long run protect the lagoon.
- Finally we, like nearly everyone, are challenged every year to maintain cost effective salaries and benefit plans for our employees. Healthcare costs have increased dramatically over the last few years and our employees have been clear that they don't like the uncertainty. So much so that this past negotiation session employees agreed to give back some benefits in order to move into CalPERS Health plans which they perceive to be more stable given the market share. We are also challenged by CalPERS pension – our employees are on track to contribute a greater percentage of this benefit which is all part of making sure the plan is healthy for the long term.
- Finally, we are in the process of evaluating our long term financial plan. We need to make sure that our capital plan needs match our financial plan abilities. The Board has been supportive of increasing user fees over the last few years, but they've also asked staff to examine the potential of long term borrowing. This year we'll come back to the Board with a recommendation on what the potential options are.

CAWD has transformed itself since its beginnings in 1908 when the District provided septage facilities for the village of Carmel-by-the-Sea. We are no longer simply a sanitation district treating, collecting and disposing of wastewater. We are a water resource recovery facility looking to capture, recycle and reuse the products resulting from wastewater treatment. We are committed to being a partner in protecting our beautiful central coast environment so future generations can enjoy Carmel and the surrounding areas.

We are deeply committed towards making CAWD the most efficient and effect District possible. I have summarized our goals for the upcoming budget year into these five statements:

Protecting the public health and the environment remain our core focus: Our core business is and will remain to protect the public health and environment 24 hours a day, 365 days a year. Our job is to make sure that our customers don't have to worry about wastewater.

Our staff is our key asset: Our business depends on our staff. This is an ongoing effort of comprehensive workforce planning and development to ensure we have the right people with the right skills and abilities in the right place, at the right time. People are the key at CAWD.

Safety is a 24/7 commitment: We will continue to evaluate our vulnerabilities and make improvements whenever necessary to provide a safe workplace for our employees and protect our infrastructure. This is more important than ever as we move into Phase I or our Capital Project where we will have a considerable amount of activity at the facility and yet we still need to ensure we continue to operate safely each day.

The public expects us to manage with the long term in mind: We are committed to managing CAWD focusing on the long term. Our decisions to rehabilitate the plant and collection system, to ensure we have the right people with the right skills, and to examine any and all new technology for potential application at CAWD is central to the long term vision of the District.

Demonstrate to the public our prudent management of fiscal resources: Finally, it is our duty to manage the resources of the public prudently and safely. We take this charge seriously, and despite inflationary increases on many external costs we will continue our efforts to minimize the impact on ratepayers by aggressively negotiating contracts, ensuring a competitive bidding environment, responsibly managing debt, and implementing efficiencies wherever possible.

In the coming year we know that we will focus even more on plant reliability. We fully expect a successful plant rehabilitation project starting in August 2015. As we move forward we remain committed to ensuring we meet our permit guidelines and reduce sewer overflows in ways that are cost effective as well as protective of the public health and the environment. We are committed to the District's Mission Statement and those goals remain our top priority. We will continue to provide value to all our customers in a manner that stands up to a comparison with *any* wastewater district in California, as measured by cost and level of service.

I would like to thank the Budget Committee for their comments and input at various meetings to refine and clarify areas of the budget. My expectation for Fiscal Year 2015-16 is that it will be an extremely busy and productive year for rehabilitating our facility and providing the quality service our ratepayers and the community rightfully expect. Thank you to the entire Board for its service, support, and guidance.

Sincerely,

Barbara Buikema
General Manager

Carmel Area Wastewater District
2015-16

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Carmel Area Wastewater District

Budget Summary

2015-16

Description	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr. Budget
Beginning Fund Balance	21,793,086	19,260,000		22,680,073	22,230,948		24,460,414		18,533,904	
Operating Revenues	6,465,750	6,105,551	105.90%	6,574,108	6,716,616	97.88%	7,352,595	9.47%	7,946,566	8.08%
	6,465,750	**6,105,551**	105.90%	**6,574,108**	**6,716,616**	97.88%	**7,352,595**	9.47%	**7,946,566**	8.08%
Op Expend. (less deprec.)										
Collection	1,139,018	1,045,655	108.93%	883,177	919,600	96.04%	1,189,416	29.34%	1,070,775	-9.97%
Treatment	2,875,922	3,142,045	91.53%	2,910,955	3,422,498	85.05%	3,514,144	2.68%	3,539,251	0.71%
Administration	998,091	1,115,625	89.46%	966,423	1,151,151	83.95%	1,422,034	23.53%	1,363,146	-4.14%
Reclamation Project	471,671	481,422	97.97%	507,918	516,945	98.25%	503,702	-2.56%	522,375	3.71%
Total Operating Exp	**5,484,702**	**5,784,747**	94.81%	**5,268,474**	**6,010,194**	87.66%	**6,629,296**	10.30%	**6,495,547**	-2.02%
Operating Gain/(Loss) (exclusive of depreciation)	981,048	320,804	305.81%	1,305,634	706,422	184.82%	723,299	2.39%	1,451,019	100.61%
Depreciation Expense	2,437,836	2,555,100	95.41%	2,559,000	2,555,100	100.15%	2,559,000	0.15%	2,559,000	0.00%
Amortization Expense	4,858	4,860	99.97%	4,860	4,860	100.00%	4,860	0.00%	4,860	0.00%
Operating Gain/(Loss)	**(1,461,647)**	**(2,239,156)**	65.28%	**(1,258,226)**	**(1,853,538)**	67.88%	**(1,840,561)**	-0.70%	**(1,112,841)**	-39.54%
Non Operating Revenues	2,159,580	4,266,310	50.62%	2,119,305	5,121,068	41.38%	5,745,454	12.19%	4,885,735	-14.96%
Non Operating Expend.	102,431	257,252	39.82%	224,905	224,809	100.04%	215,563	-4.11%	218,813	1.51%
Net Income/(Loss)	**595,502**	**1,769,902**	33.65%	**636,174**	**3,042,721**	20.91%	**3,689,330**	21.25%	**3,554,082**	-3.67%
Capital Budget										
Equipment Purchases										
Administration	42,437	25,000	169.75%	0	0	n/a	0	n/a	$0	n/a
Collections	30,544	55,000	55.53%	315,504	230,000	137.18%	210,840	-8.33%	35,000	-83.40%
Treatment	25,537	163,000	15.67%	112,340	332,500	33.79%	168,601	-49.29%	122,500	-27.34%
Capital Improvement Projects										
Administration		0	n/a	0	0	n/a	12,000	n/a	0	n/a
Collections	246,910	701,979	35.17%	217,832	857,510	25.40%	1,267,428	47.80%	650,201	-48.70%
Treatment	422,317	1,971,459	21.42%	259,826	2,071,500	12.54%	1,098,000	-46.99%	226,666	-79.36%
Treatment Long Term Capital	1,003,085	3,940,000	n/a	1,578,170	5,694,000	27.72%	9,422,831	65.49%	7,971,332	-15.40%
Total Capital Budget	**1,770,830**	**6,856,438**	25.83%	**2,483,672**	**9,185,510**	27.04%	**12,179,700**	32.60%	**9,005,699**	-26.06%
Ending Fund Balance	**23,060,453**	**16,733,424**	137.81%	**23,396,435**	**18,648,119**	125.46%	**18,533,904**	-0.61%	**15,646,146**	-15.58%

Carmel Area Wastewater District

Revenue Budget

2015-16

Description	2013-14			Estimated 2014-15			Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr. Budget
	Actual	Budget	% of Budget	Actual	Budget	% of Budget				
OPERATING REVENUES										
Sewer service fees - residents	4,819,615	4,619,129	104.34%	5,315,526	5,194,671	102.33%	5,800,715	11.67%	6,380,787	10.00%
Treatment fees - PBCSD	1,080,050	1,000,000	108.01%	826,028	1,000,000	82.60%	1,000,000	0.00%	1,000,000	0.00%
Reclamation Project O & M reimbursement	502,740	481,422	104.43%	420,354	516,945	81.32%	546,880	5.79%	560,779	2.54%
Permits & inspection fees	8,225	5,000	164.50%	12,200	5,000	244.00%	5,000	0.00%	5,000	0.00%
Total Operating	6,410,629	6,105,551	105.00%	6,574,108	6,716,616	97.88%	7,352,595	9.47%	7,946,566	8.08%
NON OPERATING REVENUES										
Property tax revenue	1,529,137	1,436,225	106.47%	1,583,222	1,457,768	108.61%	1,479,635	1.50%	1,501,829	1.50%
Interest Income	83,889	70,000	119.84%	67,650	70,000	96.64%	60,000	-14.29%	45,000	-25.00%
Highlands Inn assessment revenue	233,688	230,838	101.23%	216,938	216,938	100.00%	215,563	-0.63%	218,813	1.51%
Reimbursement from PBCSD for 1/3 secondary treatment plant improv.	448,320	1,775,062	25.26%	5,800	2,396,417	0.24%	3,260,506	36.06%	2,526,843	-22.50%
Plant Connection fees	16,165	5,000	323.31%	15,603	5,000	312.06%	5,000	0.00%	5,000	0.00%
Reclamation Project reimbursement	101,712	749,185	n/a	122,508	974,945	12.57%	724,750	-25.66%	588,250	-18.83%
Other	79,942	0	n/a	107,520	0	n/a	0	n/a	0	n/a
Gain/Loss on Investments	1,300	0	n/a	63	0	n/a	0	n/a	0	n/a
Total Non Operating	2,494,154	4,266,310	58.46%	2,119,305	5,121,068	41.38%	**5,745,454**	12.19%	**4,885,735**	-14.96%
TOTAL REVENUES	**8,904,784**	**10,371,861**	85.86%	**8,693,413**	**11,837,684**	73.44%	**13,098,049**	10.65%	**12,832,301**	-2.03%

Carmel Area Wastewater District

Non-Operating Expenses Budget

2015-16

Description	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr. Budget
NON OPERATING EXPENSES										
Debt Service - Principal	137,291	135,000	101.70%	125,000	125,000	100.00%	130,000	4.00%	140,000	7.69%
Debt Service - Interest	94,150	95,838	98.24%	89,338	89,338	100.00%	82,963	-7.14%	76,213	-8.14%
Bond Fees	2,247	2,800	80.23%	2,600	2,600	100.00%	2,600	0.00%	2,600	0.00%
Lease (ion chromatograph) - Principal	23,614	22,438	105.24%	7,872	7,776	101.23%	0	-100.00%	0	n/a
Lease - Interest	1,176	1,176	100.02%	95	95	100.04%	0	-100.00%	0	n/a
TOTAL	**258,478**	**257,252**	100.48%	**224,905**	**224,809**	100.04%	**215,563**	-4.11%	**218,813**	1.51%

Note:

1. Highlands Bond is charged to project participants annually on property tax statements in addition to annual user fees

Carmel Area Wastewater District

Consolidated Operating Expense Summary Budget 2015-16

Description	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr. Budget
Salaries	1,792,881	1,899,415	94.39%	1,861,053	2,028,049	91.77%	2,047,290	0.95%	2,115,945	3.35%
Payroll Taxes	152,643	144,245	105.82%	155,738	151,635	102.71%	152,298	0.44%	158,764	4.25%
Employee Benefits	652,599	1,010,362	64.59%	865,882	859,879	100.70%	697,934	-18.83%	727,903	4.29%
Directors Fees	19,848	21,600	91.89%	25,502	24,100	105.82%	24,150	0.21%	24,400	1.04%
Gen'l Liability/Prop Ins.	74,115	90,370	82.01%	78,477	96,505	81.32%	95,320	-1.23%	102,025	7.03%
Trucks & Autos	51,432	67,795	75.86%	75,961	80,385	94.50%	91,378	13.68%	89,625	-1.92%
Office Supplies & Svc.	64,219	51,925	123.68%	78,629	64,875	121.20%	70,650	8.90%	68,540	-2.99%
Total Operating Supplies	295,951	276,590	107.00%	204,826	285,050	71.86%	286,450	0.49%	312,630	9.14%
Safety Supplies	38,945	26,355	147.77%	38,759	32,960	117.59%	36,715	11.39%	37,845	3.08%
Contractual Services	488,407	569,950	85.69%	481,280	544,775	88.34%	662,204	21.56%	616,380	-6.92%
Engineering Fees	151,170	210,000	71.99%	46,527	220,000	21.15%	245,000	11.36%	195,000	-20.41%
Audit/Financial Expense	19,000	21,500	88.37%	22,250	21,500	103.49%	21,500	0.00%	21,500	0.00%
Attorney Fees	50,228	35,500	141.49%	33,820	42,000	80.52%	111,000	164.29%	42,000	-62.16%
Maint & Repairs	712,246	381,900	186.50%	309,069	523,900	58.99%	781,400	49.15%	669,365	-14.34%
Utilities	232,254	242,615	95.73%	256,116	256,615	99.81%	290,815	13.33%	283,605	-2.48%
Telephone	31,163	27,650	112.70%	27,554	36,250	76.01%	34,800	-4.00%	35,150	1.01%
Travel & Meetings	72,076	73,300	98.33%	59,551	79,300	75.10%	74,850	-5.61%	74,350	-0.67%
Membership/Subscrip.	28,487	20,970	135.85%	35,012	27,950	125.27%	31,150	11.45%	31,820	2.15%
Other Expense	85,369	131,283	65.03%	104,549	117,521	88.96%	370,690	215.42%	366,325	-1.18%
CAWD Subtotal	5,013,032	5,303,325	94.53%	4,760,556	5,493,249	86.66%	6,125,595	11.51%	5,973,172	-2.49%
Reclamation Project	471,671	481,422	97.97%	507,918	516,945	98.25%	503,702	-2.56%	522,375	3.71%
Final Subtotal	5,484,702	5,784,747	94.81%	5,268,474	6,010,194	87.66%	6,629,296	10.30%	6,495,547	-2.02%
Depreciation	2,437,836	2,555,100	95.41%	2,559,000	2,555,100	100.15%	2,559,000	0.15%	2,559,000	0.00%
Amortization	4,858	4,860	99.97%	4,860	4,860	100.00%	4,860	0.00%	4,860	0.00%
Total Operating Expense	**$7,927,397**	**$8,344,707**	95.00%	**$7,832,334**	**$8,570,154**	91.39%	**$9,193,156**	7.27%	**$9,059,407**	-1.45%

Carmel Area Wastewater District
Consolidated Departmental Detail
2015-16 Operating Expense Budget

Description	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr. Budget
Salaries	1,709,232	2,076,215	82.32%	1,781,108	2,192,169	81.25%	2,228,060	1.64%	2,296,715	3.08%
Salaries - Overtime	44,649	77,200	57.84%	35,810	77,200	46.39%	87,200	12.95%	87,200	0.00%
Salaries - Standby	39,000	39,000	100.00%	44,135	43,680	101.04%	43,680	0.00%	43,680	0.00%
Allocation to MF\RO Operations	0	(293,000)	0.00%	0	(285,000)	0.00%	(311,650)	n/a	(311,650)	n/a
Total Salaries	**1,792,881**	**1,899,415**	94.39%	**1,861,053**	**2,028,049**	91.77%	**2,047,290**	0.95%	**2,115,945**	3.35%
Payroll Taxes	152,643	166,665	91.59%	155,738	151,635	102.71%	174,445	15.04%	180,911	3.71%
Allocation to Reclamation	0	(22,420)	0.00%	0	0	n/a	(22,147)	n/a	(22,147)	n/a
Total Payroll Taxes	**152,643**	**144,245**	105.82%	**155,738**	**151,635**	102.71%	**152,298**	0.44%	**158,764**	4.25%
Employee Benefits:										
Workers Compensation	56,928	70,480	80.77%	66,859	70,240	95.19%	86,665	23.38%	90,084	3.95%
Retirement Plan - CalPERS	103,311	306,467	33.71%	326,890	291,389	112.18%	292,635	0.43%	314,415	7.44%
Retirement Plan - CalPERS EE	0	0	n/a	0	0	n/a	(78,265)	n/a	(100,195)	28.02%
Retirement Plan - CalPERS Unfund	0	0	n/a	0	0	n/a	17,755	n/a	23,970	35.00%
Pension Contribution - SAM	332,640	332,640	100.00%	215,276	216,415	99.47%	130,569	-39.67%	130,569	0.00%
Medical Insurance - Premium	202,420	280,335	72.21%	240,120	293,260	81.88%	312,940	6.71%	331,160	5.82%
Medical Claims/HSA	26,806	36,000	74.46%	26,893	30,375	88.54%	0	-100.00%	1,655	n/a
Medical Acct Fees	5,755	6,095	94.43%	1,645	1,220	134.84%	0	-100.00%	5,500	n/a
Life Insurance	7,410	7,330	101.10%	7,555	7,455	101.34%	7,455	0.00%	7,295	-2.15%
Dental Claims	29,662	44,000	67.41%	39,635	38,000	104.30%	40,500	6.58%	40,500	0.00%
Vision Insurance	6,523	7,365	88.57%	6,570	7,475	87.89%	7,190	-3.81%	7,190	0.00%
Unemployment Insurance	0	0	n/a	0	0	n/a	0	n/a	0	n/a
Long Term Disability Ins.	16,261	18,650	87.19%	17,964	18,540	96.89%	19,810	6.85%	20,580	3.89%
Employee Assistance Program	3,825	4,185	91.41%	3,828	3,955	96.78%	3,930	-0.63%	3,930	0.00%
PEHP	19,995	20,895	95.69%	21,090	22,455	93.92%	0	-100.00%	0	n/a
Tuition Reimbursement	572	0	n/a	4,580	5,000	91.60%	5,250	5.00%	0	n/a
Allocate to Reclamation	(159,511)	(124,080)	128.55%	(113,022)	(145,900)	77.47%	(148,500)	1.78%	(148,750)	0.17%
Total Employee Benefits	**652,599**	**1,010,362**	64.59%	**865,882**	**859,879**	100.70%	**697,934**	-18.83%	**727,903**	4.29%
Directors Fees										
Regular Board Meetings	7,900	8,800	89.77%	8,300	8,800	94.32%	8,800	0.00%	8,800	0.00%
Special Board Meetings	2,500	2,600	96.15%	2,250	5,700	39.47%	5,700	0.00%	5,700	0.00%
CASA - Directors fees	0	1,050	0.00%	2,337	750	311.62%	500	-33.33%	750	50.00%
PBCSD - Directors fees	1,800	1,750	102.86%	1,750	1,750	100.00%	1,750	0.00%	1,750	0.00%
Committee Meetings	1,400	800	175.00%	1,500	800	187.50%	800	0.00%	800	0.00%
Water Reuse Mtgs	0	600	0.00%	2,020	300	673.33%	300	0.00%	300	0.00%
Director's Dental Claims	6,248	6,000	104.13%	7,345	6,000	122.42%	6,300	5.00%	6,300	0.00%
Total Directors Fees	**19,848**	**21,600**	91.89%	**25,502**	**24,100**	105.82%	**24,150**	0.21%	**24,400**	1.04%
Insurance										
Auto insurance	0	0	n/a	1,230	0	n/a	1,350	n/a	1,485	10.00%
Property Insurance	20,570	20,570	100.00%	21,780	21,780	100.00%	23,705	8.84%	25,695	8.40%
General Liability	46,895	63,150	74.26%	48,817	68,075	71.71%	63,570	-6.62%	68,100	7.13%
Errors & Ommissions	4,800	4,800	100.00%	4,800	4,800	100.00%	4,800	0.00%	4,800	0.00%
Commercial Crime Policy	1,850	1,850	100.00%	1,850	1,850	100.00%	1,895	2.45%	1,945	2.61%
Total Insurance	**74,115**	**90,370**	82.01%	**78,477**	**96,505**	81.32%	**95,320**	-1.23%	**102,025**	7.03%
Trucks & Autos										
Gasoline	9,189	12,375	74.26%	10,080	13,800	73.04%	11,580	-16.09%	11,820	2.07%
Diesel	14,707	23,650	62.19%	19,050	23,250	81.94%	25,313	8.87%	25,375	0.24%
Oil & Grease	2,382	420	567.12%	1,120	2,475	45.25%	2,475	0.00%	2,475	0.00%
Tires, Batteries, Service	5,350	10,400	51.44%	7,585	8,000	94.81%	8,700	8.75%	5,150	-40.80%
Repair Parts	14,876	18,300	81.29%	27,045	18,550	145.80%	28,100	51.48%	29,350	4.45%
Paint, Coolant, Cleaner	219	350	62.47%	3,857	300	1285.67%	750	150.00%	750	0.00%
Tools	2,508	450	557.42%	4,280	11,000	38.91%	11,100	0.91%	11,355	2.30%
Medical Exams - Drivers	553	550	100.55%	1,403	500	280.60%	1,000	100.00%	1,025	2.50%
Radio Servicing	0	0	n/a	0	0	n/a	250	n/a	260	4.00%
Waste Oil Disposal	190	100	190.00%	380	100	380.00%	100	0.00%	100	0.00%
Smog Check - Vehicles	320	550	58.18%	218	550	39.62%	550	0.00%	500	-9.09%

Carmel Area Wastewater District
Consolidated Departmental Detail
2015-16 Operating Expense Budget

Description	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr. Budget
DMV fees	108	0	n/a	0	50	n/a	0	-100.00%	0	n/a
DATCO Drug Testing	769	650	118.37%	815	1,020	79.90%	1,070	4.90%	1,075	0.47%
Cleaning/Detailing	260	0	n/a	128	790	n/a	390	-50.63%	390	0.00%
Total Trucks & Autos	**51,432**	**67,795**	75.86%	**75,961**	**80,385**	94.50%	**91,378**	13.68%	**89,625**	-1.92%
Office Supplies & Service										
Postage	2,330	2,850	81.75%	1,839	2,500	73.56%	2,250	-10.00%	2,260	0.44%
Duplicating Supplies	6,045	7,550	80.07%	2,509	8,100	30.98%	7,400	-8.64%	7,200	-2.70%
Stationery & Printing	2,206	3,525	62.60%	5,176	4,025	128.58%	5,250	30.43%	5,280	0.57%
Data Processing Supplies	42,824	21,000	203.92%	62,180	41,800	148.76%	44,000	5.26%	44,875	1.99%
Other Office Supplies	10,725	9,200	116.58%	6,052	5,450	111.05%	10,450	91.74%	7,590	-27.37%
Data Processing Repairs	88	7,800	1.13%	873	3,000	29.09%	1,300	-56.67%	1,335	2.69%
Total Office Supplies & Svc.	**64,219**	**51,925**	123.68%	**78,629**	**64,875**	121.20%	**70,650**	8.90%	**68,540**	-2.99%
Operating Supplies										
Chemicals	124,419	151,500	82.12%	109,158	140,000	77.97%	140,850	0.61%	151,940	7.87%
Lubricants & Packing	1,596	1,575	101.32%	0	7,500	0.00%	5,000	-33.33%	5,175	3.50%
Microturbine Supplies	0	3,400	0.00%	0	3,400	0.00%	3,400	n/a	3,520	3.53%
Electrical Supplies	3,819	10,100	37.81%	14,992	10,000	149.92%	12,500	25.00%	12,920	3.36%
Laboratory Supplies	22,583	23,600	95.69%	25,345	25,600	99.00%	28,300	10.55%	41,000	44.88%
Paint	1,095	12,275	8.92%	9,520	12,150	78.35%	10,000	-17.70%	10,280	2.80%
Janitorial Supplies	1,403	1,200	116.90%	565	1,100	51.33%	1,450	31.82%	1,580	8.97%
Standby Generator Fuel	0	1,000	0.00%	0	4,800	0.00%	1,000	n/a	1,035	3.50%
Personnel Supplies	14,522	13,200	110.02%	6,547	12,200	53.66%	12,200	0.00%	12,500	2.46%
Hand Tools	15,561	12,800	121.57%	10,785	14,400	74.89%	17,700	22.92%	17,735	0.20%
Welding Supplies	542	440	123.19%	380	400	95.00%	500	25.00%	520	4.00%
General Operating Supplies	67,320	44,300	151.96%	21,587	51,300	42.08%	50,300	-1.95%	51,175	1.74%
Safety & Training	1,959	1,000	195.85%	0	2,000	0.00%	2,000	0.00%	2,000	0.00%
Source Control	115	200	57.50%	5,948	200	2974.00%	1,250	525.00%	1,250	0.00%
Burglary Replacement	41,019	0	n/a	0	0	n/a	0	n/a	0	n/a
Total Operating Supplies	**295,951**	**276,590**	107.00%	**204,826**	**285,050**	71.86%	**286,450**	0.49%	**312,630**	9.14%
Safety										
First Aid Supplies	1,461	850	171.88%	4,223	700	603.29%	2,300	228.57%	2,320	0.87%
Safety Supplies/Emerg Response	20,820	9,240	225.32%	8,575	4,265	201.06%	4,265	0.00%	4,410	3.40%
Fire Extinguisher Service	976	1,650	59.14%	1,229	1,550	79.29%	1,550	0.00%	1,585	2.26%
Uniforms/Boots/Gear	10,820	10,215	105.92%	1,955	0	n/a	1,500	n/a	1,555	3.67%
Emergency Response Supplies	0	0	n/a	3,530	3,955	n/a	4,000	1.14%	4,140	3.50%
Safety Training	0	0	n/a	3,134	6,865	n/a	7,000	1.97%	7,250	3.57%
Laundry	4,869	4,400	110.65%	16,113	15,625	103.12%	16,100	3.04%	16,585	3.01%
Total Safety Expenses	**38,945**	**26,355**	147.77%	**38,759**	**32,960**	117.59%	**36,715**	11.39%	**37,845**	3.08%
Contractual Services										
Sludge Haul/Disposal	88,213	102,670	85.92%	88,782	102,670	86.47%	102,670	0.00%	106,775	4.00%
Alarm System	1,984	2,700	73.48%	2,190	2,650	82.64%	2,250	-15.09%	2,800	24.44%
Pest Control	1,068	0	n/a	1,095	1,200	n/a	1,200	0.00%	1,250	4.17%
Power Signal-CSD Standby	195	1,300	15.03%	195	1,200	16.25%	1,200	0.00%	1,200	0.00%
TV Sewer Inspection	94,206	0		0	0	n/a	0	n/a	0	n/a
Contractual Services	19,520	105,000	18.59%	65,000	52,800	123.11%	53,000	0.38%	53,000	0.00%
Instrumentation Services	456	6,250	7.30%	58,625	6,250	938.00%	95,000	1420.00%	30,300	-68.11%
Grit & Screening Disposal	11,153	7,700	144.84%	10,815	8,000	135.19%	10,000	25.00%	10,000	0.00%
Laboratory Analysis	25,550	30,000	85.17%	29,780	30,000	99.27%	27,000	-10.00%	28,000	3.70%
Calibration	400	1,100	36.36%	0	1,000	0.00%	1,000	0.00%	1,000	n/a
Radio Service	850	0	n/a	0	0	n/a	0	n/a	0	n/a
Equipment Rental	14,470	0	n/a	9,000	7,000	128.57%	10,000	42.86%	10,400	4.00%
Pager Service	560	540	103.77%	0	0	n/a	0	n/a	0	n/a
Janitorial Service	8,578	7,900	108.58%	9,575	9,900	96.72%	11,300	14.14%	11,400	0.88%
Copier Service	5,597	5,100	109.75%	4,738	5,100	92.90%	5,200	1.96%	5,355	2.98%
Plant Rehabilitation	25,805	100,000	25.81%	69,975	100,000	69.98%	100,000	0.00%	104,000	4.00%
Outfall/Ocean Monitoring Program	17,418	23,000	75.73%	12,919	23,000	56.17%	33,000	43.48%	34,320	4.00%
Landscape Maintenance	24,955	22,000	113.43%	11,200	19,000	58.95%	20,000	5.26%	17,600	-12.00%

Carmel Area Wastewater District
Consolidated Departmental Detail
2015-16 Operating Expense Budget

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Accounting Services	3,000	3,800	78.95%	3,600	13,800	26.09%	3,800	-72.46%	3,800	0.00%
Hazardous Waste Disposal	4,426	2,400	184.40%	2,234	1,000	223.40%	1,500	50.00%	1,560	4.00%
Underground Service Alert	274	325	84.26%	274	350	78.38%	350	0.00%	350	0.00%
Postage Meter Service	176	195	90.20%	132	195	67.69%	195	0.00%	195	0.00%
Payroll Processing	5,835	6,350	91.89%	5,260	6,350	82.83%	6,495	2.28%	6,640	2.23%
Network Administration	54,984	58,500	93.99%	41,854	78,935	53.02%	79,435	0.63%	81,050	2.03%
Data Processing Svcs.-County	20,103	18,000	111.68%	19,929	18,000	110.72%	20,429	13.50%	20,940	2.50%
Actuarial Service	16,290	17,000	95.82%	11,122	17,000	65.42%	27,000	58.82%	27,000	0.00%
Post Office Box Rental	128	125	102.40%	125	125	100.00%	130	4.00%	135	3.85%
Recycle Waste	2,005	0	n/a	0	0	n/a	0	n/a	0	n/a
Boiler Service	0	1,000	0.00%	0	1,000	0.00%	1,000	0.00%	1,000	n/a
Hoist Certification	0	1,000	0.00%	1,330	1,000	133.00%	1,500	50.00%	7,800	420.00%
Pump Station Monitoring	2,432	2,435	99.87%	2,435	2,500	97.40%	2,800	12.00%	2,800	0.00%
Other Special Studies	22,579	20,000	112.89%	19,096	20,000	95.48%	30,000	50.00%	30,400	1.33%
Fleet Management	0	9,750	0.00%	0	750	n/a	750	n/a	750	n/a
Microturbine Service	13,806	13,810	99.97%	0	14,000	0.00%	14,000	0.00%	14,560	4.00%
Plant Safety Officer	790	0	n/a	0	0	n/a	0	n/a	0	n/a
Plant tree trimming	600	0	n/a	0	0	n/a	0	n/a	0	n/a
Total Contractual Services	**488,407**	**569,950**	85.69%	**481,280**	**544,775**	88.34%	**662,204**	21.56%	**616,380**	-6.92%
Engineering Fees										
Consulting Fees	151,170	210,000	71.99%	46,527	220,000	21.15%	245,000	n/a	195,000	-20.41%
Audit/Financial Expense	19,000	21,500	88.37%	22,250	21,500	103.49%	21,500	0.00%	21,500	0.00%
Attorney Fees										
District Counsel	48,723	34,500	141.22%	33,820	41,000	82.49%	110,000	168.29%	41,000	-62.73%
CASA Conference Attendence	1,505	1,000	150.50%	0	1,000	0.00%	1,000	0.00%	1,000	0.00%
Total Attorney Fees	**50,228**	**35,500**	141.49%	**33,820**	**42,000**	80.52%	**111,000**	164.29%	**42,000**	-62.16%
Repairs & Maintenance										
General Repairs	115,988	266,450	43.53%	129,997	332,500	39.10%	286,000	-13.98%	286,000	0.00%
Microturbine R & M	5,962	2,500	238.48%	3,220	5,000	64.40%	5,000	0.00%	5,175	3.50%
Pump Station Equipment	1,014	2,000	50.68%	29,364	8,000	367.05%	8,000	0.00%	8,000	0.00%
Collection Line Repairs	177,919	57,500	309.42%	14,318	30,000	47.73%	205,000	583.33%	110,000	-46.34%
Pump Station Repairs	6,748	10,200	66.16%	1,894	11,400	16.62%	7,200	-36.84%	1,800	-75.00%
Manhole Repairs	74,626	3,000	2487.52%	21,554	9,500	226.88%	24,000	152.63%	24,000	0.00%
Easement Cleaning	15,972	0	n/a	5,042	5,000	100.84%	5,200	4.00%	5,200	0.00%
Electric Motors	6,672	3,000	222.40%	0	6,000	0.00%	6,000	0.00%	6,210	3.50%
Centrifugal Pumps	3,969	500	793.80%	1,615	1,000	161.50%	1,500	50.00%	1,555	3.67%
Prog. Cav. Pumps	0	1,000	0.00%	0	2,000	0.00%	2,000	0.00%	2,070	3.50%
Standby Generator	29,238	2,000	1461.90%	6,895	4,000	172.38%	6,000	50.00%	6,210	3.50%
Control Panels	260	3,000	8.67%	223	6,000	3.72%	6,000	0.00%	6,210	3.50%
Instruments	3,869	3,000	128.97%	493	6,000	8.21%	5,000	-16.67%	5,175	3.50%
Boiler Repairs	420	1,000	42.00%	0	2,000	0.00%	2,000	0.00%	2,070	3.50%
Lab Equipment	12,716	1,500	847.73%	0	3,000	0.00%	3,000	0.00%	3,105	3.50%
Headworks - Primary	6,708	3,500	191.66%	3,857	7,000	55.10%	7,000	0.00%	7,245	3.50%
IPS/EPS/DAF	8,485	3,250	261.08%	3,050	6,500	46.92%	6,500	0.00%	6,730	3.54%
Chlorine/Dechlorinator	16,166	9,000	179.62%	19,740	10,000	197.40%	10,000	0.00%	10,350	3.50%
Dewatering/DIG	11,261	1,000	1126.10%	14,710	2,000	735.50%	10,000	400.00%	10,350	3.50%
Plant Pumps	63,448	4,000	1586.20%	10,480	8,000	131.00%	6,000	-25.00%	6,210	3.50%
Plant Valves	82,416	0	n/a	0	0	n/a	100,000	n/a	100,000	0.00%
Aeration - Secondary	51,173	4,500	1137.18%	13,375	9,000	148.61%	10,000	11.11%	10,350	3.50%
Demolition	17,216	0	n/a	18,760	50,000	37.52%	50,000	0.00%	35,000	-30.00%
Buildings	0	0	n/a	10,482	0	n/a	10,000	n/a	10,350	3.50%
Total Maint & Repairs	**712,246**	**381,900**	186.50%	**309,069**	**523,900**	58.99%	**781,400**	49.15%	**669,365**	-14.34%
Utilities										
Electricity	192,519	210,150	91.61%	222,423	219,920	101.14%	258,230	17.42%	248,550	-3.75%
Gas	29,095	20,070	144.97%	21,099	20,865	101.12%	20,365	-2.40%	21,310	4.64%
Propane	288	675	42.74%	300	650	46.15%	950	46.15%	970	2.11%

Carmel Area Wastewater District
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2015-16 Operating Expense Budget

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Cogen	352	5,000	7.04%	0	5,200	0.00%	0	-100.00%	0	n/a
Water	9,456	5,650	167.36%	11,124	8,930	124.57%	9,620	7.73%	11,050	14.86%
Trash Service	544	1,070	50.88%	570	1,050	54.29%	1,050	0.00%	1,075	2.38%
Cable television	0	0	n/a	600	0	n/a	600	n/a	650	8.33%
Total Utilities	**232,254**	**242,615**	95.73%	**256,116**	**256,615**	99.81%	**290,815**	13.33%	**283,605**	-2.48%
Telephone										
Fixed Costs	14,152	12,600	112.32%	20,328	15,500	131.15%	17,700	14.19%	17,800	0.56%
Long Distance	359	1,150	31.24%	0	650	0.00%	150	-76.92%	150	0.00%
Signal Equipment	3,139	3,300	95.12%	0	3,400	0.00%	3,400	0.00%	3,400	0.00%
Direct Line to Plant	(2)	400	-0.53%	0	600	0.00%	200	-66.67%	200	0.00%
Interplant Lines	540	0	n/a	0	0	n/a	0	n/a	0	n/a
Repair to Lines	0	1,000	0.00%	736	1,000	73.60%	1,000	0.00%	1,050	5.00%
Emergency Computer Lines	9	200	4.50%	0	200	0.00%	0	-100.00%	0	n/a
Cellular Phones	11,805	9,000	131.17%	6,490	11,800	55.00%	12,350	4.66%	12,550	1.62%
Online Services	0	0	n/a	0	2,000	0.00%	0	n/a	0	n/a
Fire Alarm	1,160	0	n/a	0	1,100	n/a	0	n/a	0	n/a
Total Telephone	**31,163**	**27,650**	112.70%	**27,554**	**36,250**	76.01%	**34,800**	-4.00%	**35,150**	1.01%
Travel & Meetings										
Employee Training	56,388	48,500	116.26%	35,527	52,000	68.32%	52,500	0.96%	52,000	-0.95%
Conferences	11,501	23,100	49.79%	20,134	25,500	78.96%	19,750	-22.55%	19,750	0.00%
Business Meetings	4,005	1,500	267.01%	3,890	1,600	243.13%	2,400	50.00%	2,400	0.00%
Auto Mileage	182	200	91.01%	0	200	0.00%	200	0.00%	200	0.00%
Total Travel & Meetings	**72,076**	**73,300**	98.33%	**59,551**	**79,300**	75.10%	**74,850**	-5.61%	**74,350**	-0.67%
Membership/Subscriptions										
Memberships	21,878	16,410	133.32%	26,716	22,040	121.22%	24,100	9.35%	24,770	2.78%
Subscriptions	1,652	1,360	121.45%	3,338	1,950	171.18%	1,950	0.00%	1,950	0.00%
Employee Certification	4,958	3,200	154.93%	4,958	3,960	125.20%	5,100	28.79%	5,100	0.00%
Total Membership/Subscrip.	**28,487**	**20,970**	135.85%	**35,012**	**27,950**	125.27%	**31,150**	11.45%	**31,820**	2.15%
Other Expenses										
MUAPCD Permits	2,420	2,450	98.78%	2,880	2,500	115.20%	3,000	20.00%	3,000	-16.67%
Environmental Health Permit	2,446	2,200	111.18%	580	2,200	26.36%	3,000	36.36%	2,250	-26.67%
Air Pollution Control	2,002	2,100	95.33%	1,540	2,100	n/a	2,100	n/a	2,200	0.00%
SWRCB Permits	1,550	1,550	100.00%	2,088	2,000	104.40%	2,300	15.00%	2,300	-13.04%
Treatment Plant Permits	16,426	26,500	61.98%	17,632	26,500	66.53%	20,000	-24.53%	20,000	32.50%
Lab Registration Fees	2,383	2,400	99.29%	2,359	2,400	98.29%	2,400	0.00%	2,450	0.00%
LAFCo Administration	11,333	11,333	100.00%	13,031	13,031	100.00%	13,350	2.45%	13,685	-2.39%
Legal Notices	1,039	3,500	29.68%	1,976	3,500	56.46%	3,500	0.00%	3,500	0.00%
Rate Payer Claims	0	2,000	0.00%	0	2,000	0.00%	2,000	0.00%	2,000	0.00%
Employee Awards Program	4,719	3,250	145.20%	4,272	4,150	102.94%	4,150	0.00%	4,150	0.00%
Recruitment	14,747	10,000	147.47%	11,377	5,300	214.66%	10,300	94.34%	5,550	-48.54%
CAWD Newsletter	23,923	24,000	99.68%	26,515	24,600	107.78%	26,000	5.69%	27,300	-5.38%
Miscellaneous Expense	2,381	40,000	5.95%	20,300	27,240	74.52%	278,590	922.72%	277,940	-90.22%
Total Other Expense	**85,369**	**131,283**	65.03%	**104,549**	**117,521**	88.96%	**370,690**	215.42%	**366,325**	-1.18%
CAWD Subtotal	**$5,013,032**	**$5,303,325**	94.53%	**$4,760,556**	**$5,493,249**	86.66%	**$6,125,595**	11.51%	**$5,973,172**	-2.49%
Reclamation Project	471,671	481,422	97.97%	507,918	516,945	98.25%	503,702	-2.56%	522,375	3.71%
Final Subtotal	5,484,702	5,784,747	94.81%	5,268,474	6,010,194	87.66%	6,629,296	10.30%	6,495,547	-2.02%
Depreciation Expense	2,437,836	2,555,100	95.41%	2,559,000	2,555,100	100.15%	2,559,000	0.15%	2,559,000	0.00%
Amortization Expense	4,858	4,860	99.97%	4,860	4,860	100.00%	4,860	0.00%	4,860	0.00%
Total Operating Expense	**7,927,397**	**8,344,707**	95.00%	**7,832,334**	**8,570,154**	91.39%	**9,193,156**	7.27%	**9,059,407**	-1.45%

Carmel Area Wastewater District
Collections Department: 2015 - 2016 Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr. Budget
Salaries	5010	335,318	355,815	94.24%	338,000	341,765	98.90%	358,750	4.97%	379,390	5.75%
Salaries - Overtime	5020	10,688	7,200	148.45%	5,620	7,200	78.06%	7,200	0.00%	7,200	0.00%
Salaries - Standby	5030	13,000	13,000	100.00%	14,560	14,560	100.00%	14,560	0.00%	14,560	0.00%
Total Salaries		**359,006**	**376,015**	95.48%	**358,180**	**363,525**	98.53%	**380,510**	4.67%	**401,150**	5.42%
Payroll Taxes	5150	25,102	28,850	87.01%	27,400	27,810	98.53%	29,110	4.67%	30,688	5.42%
Employee Benefits:											
Workers Compensation	5164	9,883	11,525	85.75%	10,090	11,300	89.29%	16,580	46.73%	17,601	6.16%
Retirement Plan - CalPERS ER	5.62	38,877	52,475	74.09%	57,310	43,950	130.40%	47,450	7.96%	51,895	9.37%
Retirement Plan - CalPERS EE		0	0	n/a	0	0	n/a	(12,450)	n/a	(16,415)	31.85%
Retirement Plan - CalPERS Unfunded		0	0	n/a	0	0	n/a	2,825	n/a	3,920	38.76%
Pension Contribution - SAM	5.63	23,421	59,160	39.59%	15,255	32,680	46.68%	9,171	-71.94%	9,171	0.00%
Medical Insurance - Premium	5165	44,798	72,585	61.72%	41,790	59,175	70.62%	70,310	18.82%	74,400	5.82%
Medical Claims/HSA	5166	9	5,000	0.17%	2,730	3,900	70.01%	0	-100.00%	1,655	n/a
Medical Acct Fees	5167	0	420	0.00%	845	420	201.19%	0	-100.00%	5,500	n/a
Life Insurance	5168	1,527	1,530	99.80%	1,530	1,655	92.46%	1,655	0.00%	1,495	-9.67%
PEHP	5169	3,619	3,670	98.62%	3,465	3,420	101.31%	0	-100.00%	0	n/a
Dental Insurance/Claims	5173	4,797	11,500	41.72%	6,320	6,500	97.22%	7,000	7.69%	7,000	0.00%
Vision Insurance	5174	1,314	1,590	82.61%	1,350	1,495	90.32%	1,495	0.00%	1,495	0.00%
HSA Contribution	5175	2,500	0	n/a	1,750	0	n/a	0	n/a	0	n/a
Long Term Disability Ins.	5176	2,599	3,220	80.72%	3,025	3,250	93.07%	3,300	1.54%	3,490	5.77%
FSA Contribution	5177	457	0	n/a	1,375	0	n/a	0	n/a	0	n/a
Unemployment Insurance	5178	0	0	n/a	0	0	n/a	0	n/a	0	n/a
Employee Assistance Program	5180	797	875	91.07%	800	825	96.97%	800	-3.03%	800	0.00%
Total Employee Benefits		**134,598**	**223,550**	60.21%	**147,634**	**168,570**	87.58%	**148,136**	-12.12%	**162,007**	9.36%
Property/Liability Insurance											
Property Insurance	5210	5,830	5,830	100.00%	7,040	7,040	100.00%	7,500	6.53%	7,990	6.54%
General Liability	5210	11,062	13,615	81.25%	11,835	11,540	102.55%	12,290	6.50%	13,090	6.51%
Total Insurance		**16,892**	**19,445**	86.87%	**18,875**	**18,580**	101.59%	**19,790**	6.51%	**21,080**	6.52%
Trucks & Autos											
Gasoline	5310	6,070	9,450	64.23%	7,000	9,000	77.78%	6,600	-26.67%	6,600	0.00%
Diesel	5311	12,770	22,400	57.01%	16,750	22,000	76.14%	24,000	9.09%	24,000	0.00%
Oil & Grease	5315	1,519	220	690.40%	605	1,000	60.50%	1,000	0.00%	1,000	0.00%
Tires, Batteries, Service	5320	3,881	9,700	40.01%	6,610	6,900	95.80%	7,600	10.14%	4,000	-47.37%
Repair Parts	5322	13,866	14,250	97.31%	16,190	14,500	111.66%	15,000	3.45%	15,500	3.33%
Paint, Coolant, Cleaner	5324	16	350	4.47%	3,832	300	1277.33%	750	150.00%	750	0.00%
Tools	5326	2,064	200	1032.21%	800	6,000	13.33%	6,000	0.00%	6,000	0.00%
Medical Exams/First Aid	5330	538	550	97.82%	402	500	80.32%	500	0.00%	500	0.00%
Waste Oil Disposal	5334	0	100	0.00%	50	100	50.00%	100	0.00%	100	0.00%
Smog Check - Vehicles	5336	170	350	48.57%	218	300	72.63%	350	16.67%	300	-14.29%

Carmel Area Wastewater District
Collections Department: 2015 - 2016 Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr. Budget
DMV fees	5337	108	0	n/a	0	50	n/a	0	-100.00%	0	n/a
DATCO Drug Testing	5338	717	650	110.37%	815	970	84.02%	970	0.00%	970	0.00%
Cleaning & detailing	5339	102	0	n/a	55	240	22.92%	240	0.00%	240	0.00%
Total Trucks & Autos		**41,822**	**58,220**	71.83%	**53,327**	**61,860**	86.21%	**63,110**	2.02%	**59,960**	-4.99%
Office Supplies & Service											
Postage	5341	11	100	11.00%	0	0	n/a	0	n/a	0	n/a
Stationery & Printing	5343	440	325	135.26%	749	425	176.12%	900	111.76%	900	0.00%
Data Processing Supplies	5344	5,339	7,400	72.15%	1,884	7,700	24.47%	7,000	-9.09%	7,000	0.00%
General Office Supplies	5345	928	700	132.54%	199	700	28.46%	3,700	428.57%	700	-81.08%
Data Processing Repairs	5346	0	300	0.00%	0	500	n/a	300	-40.00%	300	0.00%
Total Office Supplies & Svc.		**6,718**	**8,825**	76.12%	**2,832**	**9,325**	30.37%	**11,900**	27.61%	**8,900**	-25.21%
Operating Supplies											
Chemicals	5351	6,795	12,500	54.36%	0	0	n/a	0	n/a	0	n/a
Lubricants & Packing	5352	58	75	77.03%	0	0	n/a	0	n/a	0	n/a
Electrical Supplies	5353	98	100	97.93%	2,726	0	n/a	500	n/a	500	0.00%
Paint	5355	108	275	39.20%	4,000	150	2666.67%	2,000	1233.33%	2,000	0.00%
Janitorial Supplies	5357	33	300	10.91%	32	100	31.60%	100	0.00%	100	0.00%
Personnel Supplies	5359	3,125	2,500	125.00%	1,202	3,000	40.07%	3,000	0.00%	3,000	0.00%
Hand Tools	5361	865	500	173.01%	980	5,900	16.60%	5,400	-8.47%	5,000	-7.41%
Welding Supplies	5363	33	40	82.55%	0	0	n/a	0	n/a	0	n/a
General Operating Supplies	5365	24,815	22,000	112.79%	7,095	26,000	27.29%	25,000	-3.85%	25,000	0.00%
Safety & Training	5367	1,959	1,000	195.85%	0	2,000	0.00%	2,000	0.00%	2,000	0.00%
Burglary Replacement	5370	41,019	0	n/a	0	0	n/a	0	n/a	0	n/a
Total Operating Supplies		**78,906**	**39,290**	200.83%	**16,034**	**37,150**	43.16%	**38,000**	2.29%	**37,600**	-1.05%
Safey											
First Aid Supplies	5356	0	250	0.00%	3,523	200	1761.50%	1,800	800.00%	1,800	0.00%
Fire Extinguisher Service	5415	387	500	77.35%	157	400	39.26%	400	0.00%	400	0.00%
First Aid/Medical Services	5422	743	700	106.09%	300	300	100.00%	300	0.00%	300	0.00%
Laundry	5660	4,869	4,400	110.65%	4,233	5,100	83.00%	5,100	0.00%	5,200	1.96%
Total Safety Supplies/Svcs		**5,998**	**5,850**	102.53%	**8,213**	**6,000**	136.88%	**7,600**	26.67%	**7,700**	1.32%
Contractual Services											
Power Signal-CSD Standby	5403	195	1,300	15.03%	195	1,200	16.25%	1,200	0.00%	1,200	0.00%
TV Sewer Inspection	5404	94,206	0	n/a	0	0	n/a	0	n/a	0	n/a
Contractual Services	5406	19,520	105,000	18.59%	65,000	52,800	123.11%	53,000	n/a	53,000	0.00%
Instrumentation/Calibration		0	0	n/a	52,780	0	n/a	67,500	n/a	22,500	-66.67%
Grit & Screening Disposal	5407	0	200	0.00%	0	0	n/a	0	n/a	0	n/a
Calibration	5411	0	100	n/a	0	0	n/a	0	n/a	0	n/a
Pager Service	5420	13	190	7.02%	0	0	n/a	0	n/a	0	n/a
Network Administration	5423	11,182	7,000	159.74%	6,484	13,000	49.87%	13,000	0.00%	13,000	0.00%
Hazardous Waste Disposal	5430	508	400	126.92%	0	0	n/a	0	n/a	0	n/a

Carmel Area Wastewater District
Collections Department: 2015 - 2016 Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr. Budget
Underground Service Alert	5432	274	325	84.26%	274	350	78.38%	350	0.00%	350	0.00%
Pump Station Monitoring	5405	2,432	2,435	99.87%	2,435	2,500	97.40%	2,800	12.00%	2,800	0.00%
Fleet Management	5412	0	8,000	0.00%	0	0	n/a	0	n/a	0	n/a
Total Contractual Services		**128,330**	**124,950**	102.70%	**127,168**	**69,850**	182.06%	**137,850**	97.35%	**92,850**	-32.64%
Engineering Fees											
Consulting Fees	5440	0	35,000	n/a	1,040	35,000	2.97%	35,000	0.00%	35,000	0.00%
Total Engineering Fees		**0**	**35,000**	n/a	**1,040**	**35,000**	2.97%	**35,000**	0.00%	**35,000**	0.00%
Attorney Fees											
Legal Fees	5450	0	0	n/a	0	0	n/a	0	n/a	0	n/a
Total Attorney Fees		**0**	**0**	n/a	**0**	**0**	n/a	**0**	n/a	**0**	n/a
Repairs & Maintenance											
Easement clearing	5560	15,972	0	n/a	5,042	5,000	100.84%	5,200	4.00%	5,200	0.00%
Pump Station Equipment	5561	1,014	2,000	50.68%	29,364	8,000	367.05%	8,000	0.00%	8,000	0.00%
Collection Line Repairs	5562	177,919	57,500	309.42%	14,318	30,000	47.73%	205,000	583.33%	110,000	-46.34%
Manhole Repairs	5563	74,626	3,000	2487.52%	21,554	9,500	226.88%	24,000	152.63%	24,000	0.00%
Other Repairs	5564	18,366	1,500	n/a	5,950	2,500	237.99%	6,000	140.00%	6,000	0.00%
Pump Station Repairs:											
Monte Verde & 16th	5566	0	200	0.00%	0	300	0.00%	1,200	300.00%	300	-75.00%
Scenic & 8th	5567	0	400	0.00%	0	300	0.00%	1,200	300.00%	300	-75.00%
Bay & Scenic	5568	0	200	0.00%	1,894	9,800	19.33%	1,200	-87.76%	300	-75.00%
Hacienda Carmel	5569	1,998	1,000	199.84%	0	300	0.00%	1,200	300.00%	300	-75.00%
Calle La Cruz	5570	4,750	400	1187.50%	0	300	0.00%	1,200	300.00%	300	-75.00%
Highlands	5572	0	8,000	0.00%	0	400	0.00%	1,200	200.00%	300	-75.00%
Total Maint & Repairs		**294,645**	**74,200**	397.10%	**78,122**	**66,400**	117.65%	**255,400**	284.64%	**155,000**	-39.31%
Utilities											
Electricity											
8th Ave	5611	1,308	1,200	108.99%	1,200	1,400	85.71%	1,500	7.14%	1,500	0.00%
Bay & Scenic	5612	1,913	1,900	100.67%	1,750	2,200	79.55%	2,200	0.00%	2,250	2.27%
Monte Verde & 16th	5613	1,621	1,500	108.06%	1,700	2,000	85.00%	2,050	2.50%	2,100	2.44%
Calle La Cruz	5614	2,796	3,800	73.59%	2,750	3,900	70.51%	3,900	0.00%	3,950	1.28%
Hacienda	5616	1,091	1,500	72.71%	1,135	1,550	73.23%	1,500	-3.23%	1,550	3.33%
Highlands	5617	9,077	9,000	100.86%	9,200	10,000	92.00%	12,000	20.00%	12,500	4.17%
Total Electricity		**17,806**	**18,900**	94.21%	**17,735**	**21,050**	84.25%	**23,150**	9.98%	**23,850**	3.02%
Gas-	5620	386	570	67.70%	420	570	73.68%	570	0.00%	570	0.00%
Propane	5621	288	675	42.74%	0	650	0.00%	650	0.00%	650	0.00%
Water											
8th Ave	5631	270	200	134.96%	380	220	172.73%	280	27.27%	300	7.14%
Bay & Scenic	5632	272	200	135.82%	380	220	172.73%	280	27.27%	300	7.14%

Carmel Area Wastewater District
Collections Department: 2015 - 2016 Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr. Budget
Monte Verde & 16th	5633	269	200	134.51%	380	220	172.73%	280	27.27%	300	7.14%
Calle La Cruz	5634	276	200	137.84%	380	220	172.73%	280	27.27%	300	7.14%
Highlands	5635	317	275	115.37%	380	300	126.67%	500	66.67%	550	10.00%
Total Water		**1,404**	**1,075**	130.56%	**1,900**	**1,180**	161.02%	**1,620**	37.29%	**1,750**	8.02%
Garbage	5430	0	**500**	0.00%	0	**400**	0.00%	**400**	0.00%	**400**	0.00%
Telephone- No Increase											
Fixed Costs	5641	2,099	800	262.33%	4,828	2,500	193.12%	2,500	0.00%	2,500	0.00%
Long Distance	5642	0	100	0.00%	0	0	n/a	0	n/a	0	n/a
Signal Equipment	5643	3,139	3,300	95.12%	0	3,400	0.00%	3,400	0.00%	3,400	0.00%
Cellular Phones	5650	2,753	1,600	172.08%	640	3,450	18.55%	3,450	0.00%	3,450	0.00%
Total Telephone		**7,991**	**5,800**	137.78%	**5,468**	**9,350**	58.48%	**9,350**	0.00%	**9,350**	0.00%
Total Utilities		**27,875**	**27,520**	101.29%	**25,523**	**33,200**	76.88%	**35,740**	7.65%	**36,570**	2.32%
Travel & Meetings											
Employee Training	5671	10,376	10,000	103.76%	6,795	10,000	67.95%	8,500	-15.00%	8,500	0.00%
Conferences	5672	2,189	3,600	60.80%	4,579	6,000	76.32%	6,000	0.00%	6,000	0.00%
Business meetings	5673	400	0	n/a	738	100	738.00%	600	500.00%	600	0.00%
Total Travel & Meetings		**12,964**	**13,600**	95.32%	**12,112**	**16,100**	75.23%	**15,100**	-6.21%	**15,100**	0.00%
Membership/Subscriptions											
Memberships - CWEA/WEF	5711	843	680	123.97%	942	970	97.11%	970	0.00%	970	0.00%
Employee Certification	5712	661	600	110.15%	808	460	175.65%	600	30.43%	600	0.00%
Maint. Superintendent Assoc.	5715	0	60	0.00%	0	0	n/a	0	n/a	0	n/a
Total Membership/Subscrip.		**1,504**	**1,340**	112.23%	**1,750**	**1,430**	122.38%	**1,570**	9.79%	**1,570**	0.00%
Other Expenses											
SWRCB Permits	5850	1,550	1,550	100.00%	2,088	2,000	104.40%	2,300	15.00%	2,300	0.00%
MUAPCD Permits	5850	2,420	2,450	98.78%	2,880	2,500	115.20%	3,000	20.00%	3,000	0.00%
Recruitment/HR Consulting	5860	688	5,000	n/a	0	300	n/a	5,300	n/a	300	n/a
Total Other Expense		**4,658**	**9,000**	51.76%	**4,968**	**4,800**	103.50%	**10,600**	120.83%	**5,600**	-47.17%
Subtotal Operating Expense		**$1,139,018**	**1,045,655**	108.93%	**$883,177**	**919,600**	96.04%	**1,189,416**	29.34%	**1,070,775**	-9.97%
Depreciation Expense	5900	316,459	325,000	97.37%	325,000	325,000	100.00%	325,000	0.00%	325,000	0.00%
Total Operating Expense		**1,455,477**	**1,370,655**	106.19%	**1,208,177**	**1,244,600**	97.07%	**1,514,416**	21.68%	**1,395,775**	-7.83%

Carmel Area Wastewater District
Treatment and Disposal: 2015-16
Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr Budget
Salaries	5030.006	919,209	1,268,045	72.49%	981,960	1,373,950	71.47%	1,345,705	-2.06%	1,399,285	3.98%
Salaries - Overtime	5035.006	33,961	70,000	48.52%	30,190	70,000	43.13%	80,000	14.29%	80,000	0.00%
Salaries - Standby	5040.006	26,000	26,000	100.00%	29,575	29,120	101.56%	29,120	0.00%	29,120	0.00%
Allocation to MF\RO Operations			(285,000)			(285,000)	0.00%	(289,500)	1.58%	(289,500)	0.00%
Total Salaries		**979,170**	**1,079,045**	90.74%	**1,041,725**	**1,188,070**	87.68%	**1,165,325**	-1.91%	**1,218,905**	4.60%
Payroll Taxes	5045.006	95,611	103,210	92.64%	93,060	90,755	102.54%	111,295	22.63%	115,393	3.68%
Allocation to Reclamation			(21,805)	0.00%				(22,147)		(22,147)	
Total Payroll Taxes		**95,611**	**81,405**	117.45%	**93,060**	**90,755**	102.54%	**89,148**	-1.77%	**93,246**	4.60%
Employee Benefits:											
Medical Insurance - Premium	5070.006	117,293	156,600	74.90%	153,155	178,770	85.67%	193,000	7.96%	204,240	5.82%
Retirement Plan - CalPERS ER	5080.006	3,633	186,060	1.95%	200,185	184,123	108.72%	177,860	-3.40%	190,885	7.32%
Retirement Plan - CalPERS EE	5080.006	0	0	n/a	0	0	n/a	(51,080)	n/a	(63,455)	24.23%
Retirement Plan - CalPERS Unfund	5080.006	0	0	n/a	0	0	n/a	11,585	n/a	15,195	31.16%
Pension Contribution - SAM	5090.006	264,449	194,160	136.20%	173,320	136,895	126.61%	104,048	-23.99%	104,048	0.00%
Workers Compensation	5100.006	36,269	46,030	78.79%	44,955	44,125	101.88%	56,605	28.28%	58,937	4.12%
Life Insurance	5110.006	4,532	4,580	98.95%	4,780	4,580	104.37%	4,580	0.00%	4,580	0.00%
PEHP	5120.006	11,934	12,840	92.94%	12,790	14,200	90.07%	0	-100.00%	0	n/a
Dental Insurance/Claims	5130.006	16,367	23,000	71.16%	19,535	23,000	84.94%	22,500	-2.17%	22,500	0.00%
Vision Insurance	5140.006	4,028	4,560	88.33%	4,125	4,785	86.20%	4,495	-6.06%	4,495	0.00%
Long Term Disability	5150.006	9,820	11,450	85.76%	11,020	11,370	96.92%	12,110	6.51%	12,600	4.05%
Medical Claims/HSA/FSA	5160.006	19,605	26,000	75.40%	15,485	20,475	75.63%	0	-100.00%	0	n/a
Medical Acct Fees	5170.006	0	1,175	0.00%	800	800	100.00%	0	-100.00%	0	n/a
Unemployment Insurance	6178.000	0	0	n/a	0	0	n/a	0	n/a	0	n/a
Employee Assistance Program	5180.006	2,391	2,435	98.19%	2,390	2,470	96.76%	2,470	0.00%	2,470	0.00%
Tuition Reimbursement		0	0	n/a	0	0	n/a	0	n/a	0	n/a
Employee Awards	5185.006	1,669	0	n/a	1,275	900	141.67%	900	0.00%	900	0.00%
Allocate to Reclamation	5205.006	(150,065)	(120,695)	124.33%	(103,667)	(142,500)	72.75%	(144,750)	1.58%	(144,750)	0.00%
Total Employee Benefits		**341,925**	**548,195**	62.37%	**540,148**	**483,993**	111.60%	**394,323**	-18.53%	**412,645**	4.65%
Property/Liability Insurance											
Auto insurance	5450.006	0	0	n/a	1,230	0	n/a	1,350	n/a	1,485	10.00%
Property Insurance	5480.006	13,640	13,640	100.00%	13,640	13,640	100.00%	15,005	10.01%	16,505	10.00%
General Liability	5480.006	33,170	35,535	93.34%	33,890	35,535	95.37%	37,280	4.91%	41,010	10.01%
Total Insurance		**46,810**	**49,175**	95.19%	**48,760**	**49,175**	99.16%	**53,635**	9.07%	**59,000**	10.00%
Trucks & Autos											
Gasoline	5310.006	3,094	2,725	113.54%	3,055	4,600	66.41%	4,830	5.00%	5,070	4.97%
Diesel	5320.006	1,937	1,250	154.96%	2,300	1,250	184.00%	1,313	5.04%	1,375	4.72%
Oil & Grease	5330.006	863	200	431.50%	515	1,475	34.92%	1,475	0.00%	1,475	0.00%
Tires, Batteries, Service	5340.006	1,469	600	244.83%	975	1,000	97.50%	1,000	0.00%	1,050	5.00%

Carmel Area Wastewater District
Treatment and Disposal: 2015-16
Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr Budget
Outside Repair Parts	5345.006	0	0	n/a	8,955	0	n/a	9,000	n/a	9,250	2.78%
Repair Parts	5350.006	1,010	4,000	25.25%	1,300	4,000	32.50%	4,000	0.00%	4,500	12.50%
Tools	5355.006	444	250	177.60%	2,380	5,000	47.60%	5,000	0.00%	5,250	5.00%
Vehicle Accessories	5360.006	0	0	n/a	1,100	0	n/a	100	n/a	105	5.00%
Medical Exams - Drivers	5370.006	15	0	n/a	1,001	0	n/a	500	n/a	525	n/a
Radio Servicing	6332.000	0	0	n/a	0	0	n/a	250	n/a	260	n/a
Smog Check - Vehicles	5380.006	150	200	75.00%	0	250	0.00%	200	-20.00%	200	0.00%
DMV fees	5390.006	0	0	n/a	0	0	n/a	0	n/a	0	n/a
DATCO Drug Testing	5400.006	52	0	n/a	0	50	0.00%	100	n/a	105	5.00%
Cleaning & detailing	5410.006	132	0	n/a	33	500	6.60%	100	n/a	100	n/a
Paint, Coolant, Cleaner	5420.006	203	0	n/a	25	0	n/a	0	n/a	0	n/a
Waste oil & Coolant Disposal	5440.006	190	0	n/a	330	0	n/a	0	n/a	0	n/a
Total Trucks & Autos		**9,559**	**9,225**	103.62%	**21,969**	**18,125**	121.21%	**27,868**	53.75%	**29,265**	5.01%
Engineering Fees											
Consulting Fees	5500.006	126,832	150,000	84.55%	27,612	150,000	18.41%	125,000	-16.67%	125,000	0.00%
Total Engineering Fees		**126,832**	**150,000**	84.55%	**27,612**	**150,000**	18.41%	**125,000**	-16.67%	**125,000**	0.00%
Attorney Fees											
Legal Fees	5510.006	5,843	4,500	129.84%	18,320	6,000	305.33%	75,000	1150.00%	6,000	-92.00%
Total Attorney Fees		**5,843**	**4,500**	129.84%	**18,320**	**6,000**	305.33%	**75,000**	1150.00%	**6,000**	-92.00%
Office Supplies & Service											
Postage	5560.006	637	250	254.80%	115	500	23.00%	250	-50.00%	260	4.00%
Duplicating Supplies	6342.000	369	0	n/a	0	200	0.00%	200	0.00%	0	-100.00%
Stationery & Printing	5550.006	504	200	252.00%	1,150	600	191.67%	750	25.00%	780	4.00%
Data Processing Supplies	5540.006	35,349	15,000	235.66%	46,295	25,300	182.98%	25,000	-1.19%	25,875	3.50%
Other Office Supplies	5570.006	6,084	6,000	101.40%	3,035	2,000	151.75%	4,000	100.00%	4,140	3.50%
Furnishings & fixtures	5545.006	0	0	n/a	13,250	0	n/a	2,500	n/a	2,500	0.00%
Equipment rent/repairs	5580.006	88	7,500	1.17%	873	2,500	34.91%	1,000	-60.00%	1,035	3.50%
Total Office Supplies & Svc.		**43,031**	**28,950**	148.64%	**64,718**	**31,100**	208.10%	**33,700**	8.36%	**34,590**	2.64%
Operating Supplies											
Chemicals	6351.000	117,624	139,000	84.62%	0	140,000	0.00%	30,000	-78.57%	30,000	0.00%
Chlorine	5620.006	0	0	n/a	17,522	0	n/a	18,250	n/a	20,075	10.00%
Sodium bisulfite	5630.006	0	0	n/a	48,108	0	n/a	53,100	n/a	58,410	10.00%
Ferric chloride	5640.006	0	0	n/a	14,128	0	n/a	15,420	n/a	16,965	10.02%
Polymer	5650.006	0	0	n/a	26,635	0	n/a	21,500	n/a	23,650	10.00%
Acetic Acid	5660.006	0	0	n/a	653	0	n/a	1,040	n/a	1,145	10.10%
Iodine solution	5665.006	0	0	n/a	157	0	n/a	150	n/a	165	10.00%
Potassium iodate	5670.006	0	0	n/a	1,955	0	n/a	1,390	n/a	1,530	10.07%
Standby Generator Fuel	5675.006	0	1,000	0.00%	0	4,800	0.00%	1,000	-79.17%	1,035	3.50%
Seals & Packing	5680.006	1,538	1,500	102.53%	0	7,500	0.00%	5,000	-33.33%	5,175	3.50%

Carmel Area Wastewater District
Treatment and Disposal: 2015-16
Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr Budget
Microturbine parts/supplies	5685.006	0	3,400	0.00%	0	3,400	0.00%	3,400	0.00%	3,520	3.53%
Electrical Supplies	5690.006	3,721	10,000	37.21%	12,266	10,000	122.66%	12,000	20.00%	12,420	3.50%
Laboratory Supplies	5700.006	22,583	23,600	95.69%	25,345	25,600	99.00%	28,300	10.55%	41,000	44.88%
Fluids/Paint/Cleaner	5710.006	987	12,000	8.23%	5,520	12,000	46.00%	8,000	-33.33%	8,280	3.50%
Janitorial Supplies	5730.006	283	500	56.60%	333	600	55.50%	850	41.67%	880	3.53%
Personnel Supplies	5740.006	10,732	10,000	107.32%	4,845	8,500	57.00%	8,500	0.00%	8,800	3.53%
Welding Supplies	5750.006	509	400	127.25%	380	400	95.00%	500	25.00%	520	4.00%
Tools	5780.006	14,696	12,300	119.48%	9,805	8,500	115.35%	12,300	44.71%	12,735	3.54%
General Operating Supplies	5790.006	42,447	22,000	192.94%	14,450	25,000	57.80%	25,000	0.00%	25,875	3.50%
Source Control	5795.006	115	200	57.50%	5,948	200	2974.00%	1,250	525.00%	1,250	0.00%
Total Operating Supplies		**215,235**	**235,900**	91.24%	**188,050**	**246,500**	76.29%	**246,950**	0.18%	**273,430**	10.72%
Safety											
First Aid Supplies	6710.006	1,461	600	243.50%	700	500	140.00%	500	0.00%	520	4.00%
First Aid/Medical Services	6720.006	1,975	500	395.00%	0	500	0.00%	500	0.00%	520	4.00%
Fire Extinguisher Service	6730.006	549	1,000	54.90%	1,013	1,000	101.30%	1,000	0.00%	1,035	3.50%
Safety Supplies/Emerg Response	6735.006	18,102	8,040	225.15%	8,275	3,465	238.82%	3,465	0.00%	3,590	3.61%
Uniforms/Boots/Gear	6750.006	10,820	10,215	105.92%	1,955	0	n/a	1,500	n/a	1,555	3.67%
Laundry	5940.006	0	0	n/a	11,880	10,525	112.87%	11,000	4.51%	11,385	3.50%
Emergency Response Supplies	6740.006	0	0	n/a	3,530	3,955	89.25%	4,000	1.14%	4,140	3.50%
Safety Training	6760.006	0	0	n/a	3,134	6,865	45.65%	7,000	1.97%	7,250	3.57%
Total Safety Expenses		**32,907**	**20,355**	161.67%	**30,487**	**26,810**	113.72%	**28,965**	8.04%	**29,995**	3.56%
Contractual Services											
Sludge Haul/Disposal	5820.006	88,213	102,670	85.92%	88,782	102,670	86.47%	102,670	0.00%	106,775	4.00%
Network Adminstration	5830.006	32,100	26,000	123.46%	24,655	40,435	60.97%	40,435	0.00%	42,050	3.99%
Laboratory Analysis	5840.006	25,550	30,000	85.17%	29,780	30,000	99.27%	27,000	-10.00%	28,000	3.70%
Microturbine Service	5850.006	13,806	13,810	99.97%	0	14,000	0.00%	14,000	0.00%	14,560	4.00%
Plant Rehabilitation	5855.006	25,805	100,000	25.81%	69,975	100,000	69.98%	100,000	0.00%	104,000	4.00%
Alarm System	5880.006	866	1,500	57.73%	935	1,450	64.48%	1,000	-31.03%	1,500	50.00%
Equip rent - generator	6416.000	14,470	0	n/a	9,000	7,000	128.57%	10,000	42.86%	10,400	4.00%
Janitorial Service	5900.006	6,498	5,400	120.33%	6,960	6,600	105.45%	8,000	21.21%	8,000	0.00%
Copier Service	5910.006	1,040	1,600	65.00%	1,250	1,600	78.13%	1,600	0.00%	1,665	4.06%
Landscape Maintenance	5980.006	23,580	20,000	117.90%	8,500	15,000	56.67%	15,000	0.00%	15,600	4.00%
Hazard/Green Waste Disposal	5990.006	2,054	2,000	102.70%	480	1,000	48.00%	1,000	0.00%	1,040	4.00%
Grit & Screening Disposal	6000.006	11,153	7,500	148.71%	10,815	8,000	135.19%	10,000	25.00%	10,000	0.00%
Pest Control	6404.006	1,068	0	n/a	1,095	1,200	91.25%	1,200	0.00%	1,250	4.17%
Instrumentation Services	6020.006	456	6,250	7.30%	5,845	6,250	93.52%	27,500	340.00%	7,800	-71.64%
Hoist Certification	6030.006	0	1,000	0.00%	1,330	1,000	133.00%	1,500	50.00%	7,800	420.00%
Hazardous chemical disposal	6040.006	1,864	0	n/a	1,754	0	n/a	500	n/a	520	4.00%
Outfall Inspection	6045.006	8,636	0	n/a	0	0	n/a	10,000	n/a	10,400	4.00%
Ocean Monitoring Program	6050.006	8,782	23,000	38.18%	12,919	23,000	56.17%	23,000	0.00%	23,920	4.00%

Carmel Area Wastewater District
Treatment and Disposal: 2015-16
Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr Budget
Other Special Studies	6050.006	0	0	n/a	17,896	0	n/a	10,000	n/a	10,400	4.00%
Recycle Waste	6070.006	2,005	0	n/a	0	0	n/a	0	n/a	0	n/a
Calibration	6411.006	400	1,000	40.00%	0	1,000	0.00%	1,000	0.00%	1,000	n/a
Fleet Maintenance	6412.000	0	1,000	0.00%	0	0	n/a	0	n/a	0	n/a
Radio Servicing	6413.000	850	0	n/a	0	0	n/a	0	n/a	0	n/a
Pager Service	6420.000	547	350	156.29%	0	0	n/a	0	n/a	0	n/a
Plant Safety Officer	6425.000	790	0	n/a	0	0	n/a	0	n/a	0	n/a
Boiler Servicing	6436.000	0	1,000	0.00%	0	1,000	0.00%	1,000	0.00%	1,000	n/a
Plant tree trimming	6438.000	600	0	n/a	0	0		0	n/a	0	n/a
Total Contractual Services		**271,133**	**344,080**	78.80%	**291,971**	**361,205**	80.83%	**406,405**	12.51%	**407,680**	0.31%
Repairs & Maintenance											
General Repairs	6095.006	74,477	250,000	29.79%	123,705	325,000	38.06%	275,000	-15.38%	275,000	0.00%
Electric Motors	6150.006	6,672	3,000	222.40%	0	6,000	0.00%	6,000	0.00%	6,210	3.50%
Microturbine R & M	6160.006	5,962	2,500	238.48%	3,220	5,000	64.40%	5,000	0.00%	5,175	3.50%
Centrifugal Pumps	6170.006	3,969	500	793.80%	1,615	1,000	161.50%	1,500	50.00%	1,555	3.67%
Prog. Cav. Pumps	6180.006	0	1,000	0.00%	0	2,000	0.00%	2,000	0.00%	2,070	3.50%
Plant Pumps	6190.006	63,448	4,000	1586.20%	10,480	8,000	131.00%	6,000	-25.00%	6,210	3.50%
Standby Generator	6200.006	29,238	2,000	1461.90%	6,895	4,000	172.38%	6,000	50.00%	6,210	3.50%
Control Panels	6210.006	260	3,000	8.67%	223	6,000	3.72%	6,000	0.00%	6,210	3.50%
Instruments	6220.006	3,869	3,000	128.97%	493	6,000	8.21%	5,000	-16.67%	5,175	3.50%
Boiler Repairs	6230.006	420	1,000	42.00%	0	2,000	0.00%	2,000	0.00%	2,070	3.50%
Lab Equipment	6240.006	12,716	1,500	847.73%	0	3,000	0.00%	3,000	0.00%	3,105	3.50%
Headworks - Primary	6250.006	6,708	3,500	191.66%	3,857	7,000	55.10%	7,000	0.00%	7,245	3.50%
IPS/EPS/DAF	6260.006	8,485	3,250	261.08%	3,050	6,500	46.92%	6,500	0.00%	6,730	3.54%
Chlorine/Dechlorinator	6270.006	16,166	9,000	179.62%	19,740	10,000	197.40%	10,000	0.00%	10,350	3.50%
Dewatering/DIG	6280.006	11,261	1,000	1126.10%	14,710	2,000	735.50%	10,000	400.00%	10,350	3.50%
Plant Valves	6290.006	82,416	0	n/a	0	0	n/a	100,000	n/a	100,000	0.00%
Aeration - Secondary	6300.006	51,173	4,500	1137.18%	13,375	9,000	148.61%	10,000	11.11%	10,350	3.50%
Demolition	6310.006	17,216	0	n/a	18,760	50,000	37.52%	50,000	0.00%	35,000	-30.00%
Buildings	6320.006	0	0	n/a	10,482	0	n/a	10,000	n/a	10,350	3.50%
Total Maint & Repairs		**394,456**	**292,750**	134.74%	**230,604**	**452,500**	50.96%	**521,000**	15.14%	**509,365**	-2.23%
Utilities											
Electricity	6352.006	171,481	187,180	91.61%	201,438	194,670	103.48%	231,080	18.70%	220,500	-4.58%
less Secondary Costs attributable to Recl											
Gas	6360.006	27,377	17,590	155.64%	19,779	18,295	108.11%	18,295	0.00%	19,210	5.00%
Propane	6370.006	0	0	n/a	300	0	n/a	300	n/a	320	6.67%
Co-Gen	6621.000	352	5,000	7.04%	0	5,200	0.00%	0	-100.00%	0	n/a
Water	6380.006	6,190	3,145	196.82%	5,424	6,000	90.40%	6,000	0.00%	7,000	16.67%
Garbage	6385.006	0	0	n/a	0	0	n/a	0	n/a	0	n/a
Cable television	6390.006	0	0	n/a	600	0	n/a	600	n/a	650	8.33%
Total Utilities		**205,400**	**212,915**	96.47%	**227,541**	**224,165**	101.51%	**256,275**	14.32%	**247,680**	-3.35%

Carmel Area Wastewater District
Treatment and Disposal: 2015-16
Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr Budget
Telephone											
Fixed Costs	6392.006	6,516	5,000	130.32%	9,000	6,000	150.00%	8,000	33.33%	8,000	0.00%
Cellular Phones	6393.006	7,062	6,000	117.70%	4,000	6,500	61.54%	7,000	7.69%	7,150	2.14%
Repair to Lines	6394.006	0	1,000	0.00%	736	1,000	73.60%	1,000	0.00%	1,050	5.00%
Long Distance	6642.000	87	950	9.16%	0	500	0.00%	0	-100.00%	0	n/a
Direct Line to Plant	6644.000	(1)	400	-0.25%	0	400	0.00%	0	-100.00%	0	n/a
Interplant Lines	6645.000	540	0	n/a	0	0	n/a	0	n/a	0	n/a
Computer Emergency Lines	6647.000	9	200	4.50%	0	200	0.00%	0	-100.00%	0	n/a
Online Services	6649.000	0	0	n/a	0	2,000	n/a	0	n/a	0	n/a
Fire alarm	6650.000	1,160	0	n/a	0	1,100	n/a	0	n/a	0	n/a
Total Telephone		**15,373**	**13,550**	113.45%	**13,736**	**17,700**	77.60%	**16,000**	-9.60%	**16,200**	1.25%
Travel & Meetings											
Employee Training	6420.006	42,435	26,000	163.21%	21,961	29,500	74.44%	31,500	6.78%	33,500	6.35%
Conferences	6430.006	6,205	3,500	177.29%	7,959	3,500	227.40%	3,750	7%	3,750	0.00%
Business meetings	6440.006	1,068	0	n/a	1,153	0	n/a	300	n/a	300	0.00%
Total Travel & Meetings		**49,708**	**29,500**	168.50%	**31,073**	**33,000**	94.16%	**35,550**	7.73%	**37,550**	5.63%
Membership/Subscriptions											
Memberships	6560.006	1,316	1,000	131.60%	1,345	1,000	134.50%	1,300	30.00%	1,350	3.85%
Employee Certification	6550.006	4,297	2,600	165.27%	4,150	3,500	118.57%	4,500	28.57%	4,500	0.00%
Subscriptions/Publications	6640.006	0	700	0.00%	2,198	700	314.00%	700	0.00%	700	0.00%
Total Membership/Subscrip.		**5,613**	**4,300**	130.53%	**7,693**	**5,200**	147.94%	**6,500**	25.00%	**6,550**	0.77%
Other Expenses											
Treatment Plant Permits	6470.006	16,426	26,500	61.98%	17,632	26,500	66.53%	20,000	-24.53%	20,000	0.00%
Air Pollution Control Permit	6480.006	2,002	2,100	95.33%	1,540	2,100	73.33%	2,100	0.00%	2,200	4.76%
Environmental Health Permit	6490.006	2,446	2,200	111.18%	580	2,200	26.36%	3,000	36.36%	2,250	-25.00%
Lab Registration Fees	6510.006	2,383	2,400	99.29%	2,359	2,400	98.29%	2,400	0.00%	2,450	2.08%
Recruitment	8910.006	14,059	5,000	281.18%	11,377	5,000	227.54%	5,000	0.00%	5,250	5.00%
Total Other Expense		**37,316**	**38,200**	97.69%	**33,488**	**38,200**	87.66%	**32,500**	-14.92%	**32,150**	-1.08%
Subtotal Operating Expense		**2,875,922**	**3,142,045**	91.53%	**2,910,955**	**3,422,498**	85.05%	**3,514,144**	2.68%	**3,539,251**	0.71%
Depreciation Expense	6900.000	2,087,285	2,200,000	94.88%	2,200,000	2,200,000	100.00%	2,200,000	0.00%	2,200,000	0.00%
Total Operating Expense		**4,963,207**	**5,342,045**	92.91%	**5,110,955**	**5,622,498**	90.90%	**5,714,144**	1.63%	**5,739,251**	0.44%

Carmel Area Wastewater District
Administration: 2015-2016 Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr Budget
Salaries	7010	454,705	426,595	106.59%	461,148	476,454	96.79%	501,105	5.17%	518,040	3.38%
Temp Employee			25,760	0.00%			n/a	22,500			
Allocate to Reclamation O&M			(8,000)	0.00%			n/a	(22,150)	n/a	(22,150)	
Allocate to Reclamation Phase II											
Total Salaries		**454,705**	**444,355**	102.33%	**461,148**	**476,454**	96.79%	**501,455**	5.25%	**495,890**	-1.11%
Payroll Taxes	7150	31,930	34,605	92.27%	35,278	33,070	106.68%	34,040	2.93%	34,830	2.32%
Allocate to Reclamation			(615)	0.00%							
Total Payroll Taxes		**31,930**	**33,990**	93.94%	**35,278**	**33,070**	106.68%	**34,040**	2.93%	**34,830**	2.32%
Employee Benefits:											
Workers Compensation	7161	10,776	12,925	83.38%	11,814	14,815	79.75%	13,480	-9.01%	13,546	0.49%
Retirement Plan - CalPERS	7162	60,801	67,932	89.50%	69,395	63,316	109.60%	67,325	6.33%	71,635	6.40%
Retirement Plan - CalPERS EE		0	0	n/a	0	0	n/a	(14,735)	n/a	(20,325)	n/a
Retirement Plan - CalPERS Unfunded		0	0	n/a	0	0	n/a	3,345	n/a	4,855	n/a
Pension Contribution - SAM	7163	44,770	79,320	56.44%	26,700	46,840	57.00%	17,350	-62.96%	17,350	0.00%
Medical Insurance - Premium	7164	40,329	51,150	78.84%	45,175	55,315	81.67%	49,630	-10.28%	52,520	5.82%
Other Medical (i.e. FSA, HSA, flu, etc	7175	4,235	5,000	84.70%	5,553	6,000	92.55%	0	-100.00%	0	n/a
Medical Acct Fees		5,755	4,500	127.90%	0	0	n/a	0	n/a	0	n/a
Life Insurance	7168	1,351	1,220	110.76%	1,245	1,220	102.05%	1,220	0.00%	1,220	0.00%
Dental Insurance/Claims	7.72	8,498	9,500	89.45%	13,780	8,500	162.12%	11,000	29.41%	11,000	0.00%
Vision Insurance	7.74	1,182	1,215	97.25%	1,095	1,195	91.63%	1,200	0.42%	1,200	0.00%
Long Term Disability Insurance	7176	3,842	3,980	96.52%	3,920	3,920	100.00%	4,400	12.24%	4,490	2.05%
Employee Assistance Program	7180	638	875	72.86%	638	660	96.59%	660	0.00%	660	0.00%
PEHP	7169	4,441	4,385	101.28%	4,835	4,835	100.00%	0	-100.00%	0	n/a
Tuition Reimbursement		572	0	n/a	4,580	5,000	n/a	5,250	n/a	0	n/a
Allocate to Reclamation	7199	(9,446)	(3,385)	279.05%	(9,355)	(3,400)	275.15%	(3,750)	10.29%	(4,000)	6.67%
Total Employee Benefits		**177,745**	**238,617**	74.49%	**179,375**	**208,216**	86.15%	**156,375**	-24.90%	**154,151**	-1.42%
Directors Fees											
Regular Board Meetings	7201	7,900	8,800	89.77%	8,300	8,800	94.32%	8,800	0.00%	8,800	0.00%
Special Board Meetings	7202	2,500	2,600	96.15%	2,250	5,700	39.47%	5,700	0.00%	5,700	0.00%
CASA - Directors fees	7203	0	1,050	0.00%	2,337	750	311.62%	500	-33.33%	750	50.00%
PBCSD - Directors fees	7206	1,800	1,750	102.86%	1,750	1,750	100.00%	1,750	0.00%	1,750	0.00%
Committee Meetings	7208	1,400	800	175.00%	1,500	800	187.50%	800	0.00%	800	0.00%
Water Reuse Mtgs		0	600	0.00%	2,020	300	673.33%	300	0.00%	300	0.00%
Director's Dental Claims	7209	6,248	6,000	104.13%	7,345	6,000	122.42%	6,300	5.00%	6,300	0.00%
Total Directors Fees		**19,848**	**21,600**	91.89%	**25,502**	**24,100**	105.82%	**24,150**	0.21%	**24,400**	1.04%
Property/Liability Insurance											
Property Insurance	7210	1,100	1,100	100.00%	1,100	1,100	100.00%	1,200	9.09%	1,200	0.00%
General Liability	7210	2,663	14,000	19.02%	3,093	21,000	14.73%	14,000	-33.33%	14,000	0.00%

Carmel Area Wastewater District
Administration: 2015-2016 Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr Budget
Errors & Ommissions	7210	4,800	4,800	100.00%	4,800	4,800	100.00%	4,800	0.00%	4,800	0.00%
Commerical Crime Policy	7210	1,850	1,850	100.00%	1,850	1,850	100.00%	1,895	2.45%	1,945	2.61%
Total Insurance		**10,413**	**21,750**	47.87%	**10,843**	**28,750**	37.71%	**21,895**	-23.84%	**21,945**	0.23%
Trucks & Autos											
Gasoline	7310	25	200	12.57%	25	200	12.50%	150	-25.00%	150	0.00%
Oil & Grease	7315	0	0	n/a	0	0	n/a	0	n/a	0	n/a
Tires, Batteries, Service	7320	0	100	0.00%	0	100	0.00%	100	0.00%	100	0.00%
Repair Parts	7324	0	50	n/a	600	50	n/a	100	100.00%	100	0.00%
Smog Check - Vehicles	7336	0	0	n/a	0	0	n/a	0	n/a	0	n/a
Cleaning & Detailing	7339	26	0	n/a	40	50	n/a	50	0.00%	50	0.00%
Total Trucks & Autos		**51**	**350**	14.60%	**665**	**400**	166.23%	**400**	0.00%	**400**	0.00%
Office Supplies & Service											
Postage	7341	1,682	2,500	67.28%	1,724	2,000	86.20%	2,000	0.00%	2,000	0.00%
Duplicating Supplies	7342	337	150	n/a	625	200	n/a	200	0.00%	200	0.00%
Stationery & Printing	7343	1,263	3,000	42.10%	3,277	3,000	109.23%	3,600	20.00%	3,600	0.00%
Data Processing Supplies	7344	7,475	6,000	124.58%	2,635	16,500	15.97%	16,500	0.00%	16,500	0.00%
Other Office Supplies	7345	3,714	2,500	148.54%	2,818	2,750	102.47%	2,750	0.00%	2,750	0.00%
Total Office Supplies & Svc.		**14,470**	**14,150**	102.26%	**11,079**	**24,450**	45.31%	**25,050**	2.45%	**25,050**	0.00%
Operating Supplies											
Janitorial Supplies	7357	1,087	400	271.76%	200	400	50.00%	500	25.00%	600	20.00%
Personnel Supplies	7359	665	700	94.98%	500	700	71.43%	700	0.00%	700	0.00%
General Operating Supplies	7365	58	300	19.39%	42	300	14.02%	300	0.00%	300	0.00%
Total Operating Supplies		**1,810**	**1,400**	129.29%	**742**	**1,400**	53.00%	**1,500**	7.14%	**1,600**	6.67%
Contractual Services											
Alarm System	7403	1,118	1,200	93.16%	1,255	1,200	104.58%	1,250	4.17%	1,300	4.00%
Postage Meter Service	7413	176	195	90.20%	132	195	67.69%	195	0.00%	195	0.00%
Fire Extinguisher Service	7415	40	150	26.70%	59	150	39.27%	150	0.00%	150	0.00%
Payroll Processing	7421	5,835	6,350	91.89%	5,260	6,350	82.83%	6,495	2.28%	6,640	2.23%
Network Administration	7422	11,703	25,500	45.89%	10,715	25,500	42.02%	26,000	1.96%	26,000	0.00%
Data processing - County	7423	20,103	18,000	111.68%	19,929	18,000	110.72%	20,429	13.50%	20,940	2.50%
Janitorial Service	7424	2,080	2,500	83.20%	2,615	3,300	79.24%	3,300	0.00%	3,400	3.03%
Copier/Fax Service	7426	4,557	3,500	130.21%	3,488	3,500	99.66%	3,600	2.86%	3,690	2.50%
Actuarial Service	7429	16,290	17,000	95.82%	11,122	17,000	65.42%	27,000	58.82%	27,000	0.00%
Landscape Maintenance	7430	1,375	2,000	68.75%	2,700	4,000	67.50%	5,000	25.00%	2,000	-60.00%
Accounting Services	7432	3,000	3,800	78.95%	3,600	13,800	26.09%	3,800	-72.46%	3,800	0.00%
Post Office Box Rental	7433	128	125	102.40%	125	125	100.00%	130	4.00%	135	3.85%
Other Special Studies/Services	7435	22,579	20,000	112.89%	1,200	20,000	6.00%	20,000	0.00%	20,000	0.00%
Fleet Maintenance	7412	0	750	0.00%	0	750	0.00%	750	0.00%	750	0.00%
Total Contractual Services		**88,984**	**101,070**	88.04%	**62,200**	**113,870**	54.62%	**118,099**	3.71%	**116,000**	-1.78%

Carmel Area Wastewater District
Administration: 2015-2016 Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr Budget
Audit/Financial Expense	7445	19,000	21,500	88.37%	22,250	21,500	103.49%	21,500	0.00%	21,500	0.00%
Engineering Fees	7441	24,338	25,000	97.35%	17,875	35,000	0.00%	85,000	0.00%	35,000	-58.82%
Attorney Fees											
District Counsel	7451	42,880	30,000	142.93%	15,500	35,000	44.29%	35,000	0.00%	35,000	0.00%
CASA Conference Attendance	7452	1,505	1,000	150.50%	0	1,000	0.00%	1,000	0.00%	1,000	0.00%
Total Attorney Fees		**44,385**	**31,000**	143.18%	**15,500**	**36,000**	43.06%	**36,000**	0.00%	**36,000**	0.00%
Repairs & Maintenance	7511	23,145	14,950	154.82%	343	5,000	6.85%	5,000	0.00%	5,000	0.00%
Utilities											
Electricity	7610	3,232	4,070	79.41%	3,250	4,200	77.38%	4,000	-4.76%	4,200	5.00%
Gas	7620	1,332	1,910	69.73%	900	2,000	45.00%	1,500	-25.00%	1,530	2.00%
Water	7630	1,862	1,430	130.22%	3,800	1,750	217.14%	2,000	14.29%	2,300	15.00%
Refuse Collection	7632	544	570	95.52%	570	650	87.69%	650	0.00%	675	3.85%
Total Utilities		**6,970**	**7,980**	87.35%	**8,520**	**8,600**	99.07%	**8,150**	-5.23%	**8,705**	6.81%
Telephone											
Fixed Costs	7641	5,538	6,800	81.44%	6,500	7,000	92.86%	7,200	2.86%	7,300	1.39%
Long Distance	7642	272	100	272.28%	0	150	0.00%	150	0.00%	150	0.00%
Direct Line to Plant	7644	(1)	0	n/a	0	200	0.00%	200	0.00%	200	0.00%
Cellular Phones	7648	1,990	1,400	142.14%	1,850	1,850	100.00%	1,900	2.70%	1,950	2.63%
Total Telephone		**7,799**	**8,300**	93.96%	**8,350**	**9,200**	90.76%	**9,450**	2.72%	**9,600**	1.59%
Laundry	7661	0	0	n/a	0	0	n/a	0	n/a	0	n/a
Travel & Meetings											
Employee Training	7671	3,577	12,500	28.62%	6,771	12,500	54.17%	12,500	0.00%	10,000	-20.00%
Conferences	7672	3,107	16,000	19.42%	7,596	16,000	47.48%	10,000	-37.50%	10,000	0.00%
Business Meetings - Tri Tac	7673	2,538	1,500	169.18%	1,999	1,500	133.27%	1,500	0.00%	1,500	0.00%
Auto Mileage	7675	182	200	91.01%	0	200	0.00%	200	0.00%	200	0.00%
Total Travel & Meetings		**9,404**	**30,200**	31.14%	**16,366**	**30,200**	54.19%	**24,200**	-19.87%	**21,700**	-10.33%
Membership/Subscriptions											
Memberships											
CASA	7711	12,480	8,600	145.12%	12,600	12,600	100.00%	13,250	5.16%	13,750	3.77%
Water Environ. Federation	7712	527	285	184.91%	521	285	182.81%	525	84.21%	540	2.86%
Govt. Finance Officers Assn.	7719	310	170	182.35%	170	170	100.00%	170	0.00%	170	0.00%
WateReuse Association	7715	696	630	110.40%	700	700	100.00%	700	0.00%	700	0.00%
National Notary Assn	7717	0	45	0.00%	33	45	73.33%	45	0.00%	45	0.00%
Other - CSDA	7710	2,281	5,000	45.62%	5,691	3,000	189.70%	5,700	90.00%	5,800	1.75%

Carmel Area Wastewater District
Administration: 2015-2016 Operating Expense Budget

Description	Acct	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr Budget
ASCE	7714	0	0	n/a	270	170	158.82%	175	2.94%	180	2.86%
Mty Bay Employment Relations	7723	3,105	0	n/a	3,845	3,100	124.03%	665	-78.55%	665	0.00%
Misc Membership	7726	320	0	n/a	599	0	n/a	600	n/a	600	0.00%
Subscriptions/Publications	7725	1,652	600	275.29%	1,140	1,250	91.20%	1,250	0.00%	1,250	0.00%
Total Membership/Subscrip.		**21,370**	**15,330**	139.40%	**25,569**	**21,320**	119.93%	**23,080**	8.26%	**23,700**	2.69%
Other Expenses											
LAFCO Admin Fee	7812	11,333	11,333	100.00%	13,031	13,031	100.00%	13,350	2.45%	13,685	2.51%
Legal Notices	7831	1,039	3,500	29.68%	1,976	3,500	56.46%	3,500	0.00%	3,500	0.00%
Rate Payer Claims	7820	0	2,000	0.00%	0	2,000	0.00%	2,000	0.00%	2,000	0.00%
Employee Awards Program	7835	3,050	3,250	93.85%	2,997	3,250	92.21%	3,250	0.00%	3,250	0.00%
Recruitment	7860	0	0	n/a	0	0	n/a	0	n/a	0	n/a
CAWD Newsletter	7865	23,923	24,000	99.68%	26,515	24,600	107.78%	26,000	5.69%	27,300	5.00%
Miscellaneous Expense	7851	2,381	40,000	5.95%	20,300	27,240	74.52%	278,590	922.72%	277,940	-0.23%
Total Other Expense		**41,725**	**84,083**	49.62%	**64,819**	**73,621**	88.04%	**326,690**	343.75%	**327,675**	0.30%
Subtotal Operating Expense		**998,091**	**1,115,625**	89.46%	**966,423**	**1,151,151**	83.95%	**1,422,034**	23.53%	**1,363,146**	-4.14%
Depreciation Expense	7900	34,092	30,100	113.26%	34,000	30,100	112.96%	34,000	12.96%	34,000	0.00%
Amortization Expense	7910	4,858	4,860	99.97%	4,860	4,860	100.00%	4,860	0.00%	4,860	0.00%
Total Operating Expense		**1,037,042**	**1,150,585**	90.13%	**1,005,283**	**1,186,111**	84.75%	**1,460,894**	23.17%	**1,402,006**	-4.03%

Carmel Area Wastewater District

CAWD/PBCSD Reclamation Project

2015-16 Budget

Description	2013-14 Actual	2013-14 Budget	2013-14 % of Budget	Estimated 2014-15 Actual	Estimated 2014-15 Budget	Estimated 2014-15 % of Budget	Proposed 2015-16 Budget	% Chg. Prior Yr. Budget	Projected 2016-17 Budget	% Chg. Prior Yr Budget
Plant Salaries, Benefits & OH										
Plant Superintendent	6,602	2,500	264.10%	29,075	6,000	484.58%	22,935	282.25%	22,165	-3.36%
Laboratory Supervisor	22,173	23,500	94.35%	29,680	26,000	114.15%	28,085	8.02%	26,675	-5.02%
Laboratory Technician	69,290	68,200	101.60%	69,700	76,000	91.71%	72,000	-5.26%	77,975	8.30%
Plant Operators	174,718	179,800	97.17%	130,805	175,000	74.75%	150,046	-14.26%	153,947	2.60%
Maintenance Mechanics	6,963	6,000	116.04%	39,651	10,000	396.51%	24,835	148.35%	21,545	-13.25%
Differential	17,476	18,400	94.98%	12,337	17,000	72.57%	13,405	-21.15%	16,415	22.45%
Payroll Taxes, Benefits, & OH	146,225	149,200	98.01%	155,624	155,000	100.40%	155,653	0.42%	159,363	2.38%
subtotal	**443,446**	**447,600**	99.07%	**466,872**	**465,000**	100.40%	**466,959**	100.42%	**478,085**	2.38%
Administrative Salaries										
General Manager	1,969	1,030	191.14%	2,285	1,030	221.84%	1,560	51.46%	1,050	-32.69%
Project Accountant	9,776	10,720	91.20%	12,500	12,500	100.00%	12,395	-0.84%	13,160	6.17%
Engineering	241	590	40.84%	1,030	12,000	8.58%	1,510	-87.42%	6,155	307.62%
Admin. Svcs/Scanner	0	2,275	0.00%	4,008	1,100	364.36%	1,030	-6.36%	1,160	12.62%
Payroll Taxes, Benefits, & OH	5,993	7,307	82.02%	9,912	13,315	74.44%	8,248	-38.06%	10,765	30.52%
subtotal	**17,979**	**21,922**	82.01%	**29,735**	**39,945**	74.44%	**24,743**	61.94%	**32,290**	30.50%
Directors Fees	1,000	900	111.11%	900	1,000	90.00%	1,000	0.00%	1,000	0.00%
Operating Supplies/Services	1,027	10,000	10.27%	9,373	10,000	93.73%	10,000	0.00%	10,000	0.00%
Repairs & Maintenance	8,218	1,000	821.84%	1,038	1,000	103.79%	1,000	0.00%	1,000	0.00%
Total Reimbursable Reclamation Project Expenditures	**471,671**	**481,422**	97.97%	**507,918**	**516,945**	98.25%	**503,702**	-2.56%	**522,375**	3.71%

Carmel Area Wastewater District
Capital Budget Projected Summary 2015-16

	ITEM	ALLOCATION					Totals
		Admin	Collection	Treatment	PBCSD	Recla-mation	
1	**CIP Projects for Administration**	$12,000					$12,000
2	**CIP Projects for Collection System**		$1,267,428				$1,267,428
3	**CIP Projects for Treatment & Disposal**			$709,167	$354,583	$34,250	$1,098,000
4	**CIP Long Term Capital Plan for Treatment & Disposal**			$5,818,554	$2,909,277	$695,000	$9,422,831
	Total CIP	$12,000	$1,267,428	$6,527,721	$3,263,860	$729,250	$11,800,259
	Capital Outlay Items						
1	Replace Unit #5 Ford Hydro-Cleaning truck		$210,840				$210,840
2	Modeling Software			$50,025	$24,975		$75,000
3	Power Line Conditioning (50% Reclamation - Lab only)			$28,348	$14,153	$7,500	$50,000
4	Misc Portable Pumps			$18,676	$9,324		$28,000
5	Operations Radios			$5,403	$2,697		$8,100
6	Utility Cart			$5,003	$2,498		$7,500
	Total Capital Outlay	$0	$210,840	$107,454	$53,646	$7,500	$379,441
	Total CIP & Capital Outlay 15-16	**$12,000**	**$1,478,268**	**$6,635,175**	**$3,317,506**	**$736,750**	**$12,179,700**

Carmel Area Wastewater District
Capital Budget Summary 2016-17

	ITEM	ALLOCATION					Totals
		Admin	Collection	Treatment	PBCSD	Recla-mation	
1	**CIP Projects for Administration**	$0					$0
2	**CIP Projects for Collection System**		$650,201				$650,201
3	**CIP Projects for Treatment & Disposal**			$143,333	$83,333	$0	$226,666
4	**CIP Long Term Capital Plan for Treatment & Disposal**			$4,925,055	$2,462,527	$583,750	$7,971,332
	Total CIP	$0	$650,201	$5,068,388	$2,545,860	$583,750	$8,848,199
	Capital Outlay Items						
1	Replace Electrical Panel at 8th and Scenic PS		$35,000				$35,000
2	Bobcat tractor			$23,345	$11,655		$35,000
3	Steam cleaner			$12,006	$5,994	$4,500	$22,500
4	Truck conversion to boom truck			$43,333	$21,666		$65,000
5							$0
6							$0
	Total Capital Outlay	$0	$35,000	$78,684	$39,315	$4,500	$157,500
	Total CIP & Capital Outlay 16-17	**$0**	**$685,201**	**$5,147,072**	**$2,585,175**	**$588,250**	**$9,005,699**

CAWD Administration Dept

FY 2015/16 *thru* 2019/20

Project #	PROJECT	15/16	16/17	17/18	18/19	19/20	Unscheduled
CAPITAL PROJECTS							
1	AMBAG Ortho-Imagery Project	$12,000					
2	Network Virtual Server Project			$30,000			
3	Exterior Painting			$16,000			
4	Sewer Rate Study					$35,000	
5	Replace Administrative Office Carpeting						$20,000
6	Replace Administrative Office Furnaces						$6,500
CAPITAL PURCHASES							
1	Server Replacement			$7,000			
2	General Manager's Sedan						$30,000
3	Admin Copy Machine				$12,000		
	TREATMENT & DISPOSAL TOTAL	**$12,000**	**$0**	**$53,000**	**$12,000**	**$35,000**	**$56,500**
	RECLAMATION SHARE	$0	$0	$0	$0	$0	$0
	PBCSD SHARE	$0	$0	$0	$0	$0	$0
	CAWD COST	**$12,000**	**$0**	**$53,000**	**$12,000**	**$35,000**	**$56,500**

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**AMBAG Ortho-Imagery Project**	Unscheduled	Lander
Dept:	Admin	Type:	Administration
Total Cost:	$12,000	Useful Life:	5 years
CY Budget	$12,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Geographic Information System (GIS) is the most advanced tool for analyzing spatial information in an organized manner. Regional Analysis & Planning Services (RAPS), the non-profit branch of Association of Monterey Bay Governments (AMBAG) has taken a leadership role in developing a region-wide GIS. Many agencies in the Cental Coast region have not had the finances or technical expertise to develop their own GIS infrastructure. The cost of software and hardware to support GIS is significant. RAPS is in a unique position to be able to provide GIS support for agencies in an efficient an cost effective manner. Multipla local jurisdictions and Special Districts participated in 2003 and 2007 Ortho-Imagery Project managed by AMBAG. The 2007 imagery data has passed its shelf life. An updated project is planned for 2015.

Justification

The project will assist in the engineering and design of infrastructure projects. It will provide baseline data for potential grant projects. Joining with other local agencies makes this project more cost effective. AMBAG manages the project for all partnering agencies and Special Districts. Cost share overlap areas and multiple agencies will reduce the cost significantly.

AMBAG provides technical support via member services or RAPS

Note: CAWD did not participate in the 2003 or 2007 projects.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$12,000						$12,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Study	$ 12,000						$ 12,000
Total	$ 12,000	$ -	$ -	$ -	$ -	$ -	$ 12,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Network Virtual Server Project**	Unscheduled	Buikema
Dept:	Admin	Type:	Administration
Total Cost:	$30,000	Useful Life:	5 years
CY Budget	$0	Category:	Capital Equipment
Account:	2735	Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Server improvements are needed to keep pace with the ever improving technology. This project was implemented in 2013-14, and it is anticipated that server upgrades will be required within a 4 year period. The server installed in 2013-14 has been operating without any issues. A considerable reduction in physical space needed to house the servers has been realized already. The most visible benefits to the District by this continued implementation are:

1) reduced number of servers means less electricity used and less cooling requirements,
2) improved backup and recovery,
3) improved connectivity, and
4) improved performance metric.

Justification

Expected life span of servers 4 years - routine replacement

Current equipment installed in 2012-13

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
				$30,000				$30,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment			$ 30,000				$ 30,000
Total	$ -	$ -	$ 30,000	$ -	$ -	$ -	$ 30,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Exterior Painting**	Unscheduled	Lander
Dept:	Admin	Type:	Administration
Total Cost:	$16,000	Useful Life:	15 years
CY Budget	$0	Category:	Maintenance
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

The District had the outside of its administrative office painted in 2001 and was advised by the contractor at that time to repaint every 12 years. The work done in 2001 was after a 16 year period. After a thorough inspection of the exterior, staff concludes that the exterior stucco walls are in good shape and could last for another couple years. The same inspection also revealed that much of the exposed wood portions of the structure are in need of painting this year to prevent pest instrusion and to restore water resistance.

Justification

The exposed wood portions were painted in 2013-14. The exterior stucco should be painted after 15-16 years to ensure the bulding is sufficiently protected. Average lifespan in San Francisco Bay for exterior paint is 7-10 years.

Condition criteria for project includes impact of weather, sun exposure, fading, chipping, etc.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
				$16,000				$16,000

Funding Source

O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract			$16,000				$16,000
Total	$ -	$ -	$16,000	$ -	$ -	$ -	$16,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Sewer Rate Study**	Unscheduled	Buikema
Dept:	Admin	Type:	Administration
Total Cost:	$35,000	Useful Life:	10 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

The current sewer rate structure is based on the model provided by the State Water Resources Control Board. With the long term impacts of the drought staff would like to investigate changes in loadings by user category. The current structure consists of flat rates for residential customers (single family and multi-family units) and rates based on a combination of flow and sewage strength for commercial.

Potential Scope of Services:
1) Evaluate curernt rate classes, rate structure, and assess appropriateness: review potential alternatives.
2) Evaluate long term capital replacement projects and potential methods of phasing costs into rate model.
3) Determine monthly sewer service charges that fully support oeprations and maintenance, replacement cost, and potential debt service costs.

4) Determine sewer connection charges needed to cover plant and collection system capacity enhancement or expansion.
5) Evaluate funding options that includes recommended changes to rate model.
6) Prepare a report which presents the current rate information, recommended rates over the next five years, with methodology and supporting analysis, connection fee and rate comparisons.

Justification

The are two primary reasons to re-evaluate the District's sewer rate setting process:
1) The District follows the guidelines set by the State Water Resources Control Board (SWRCB)in calculating sewer user fees and connection fees. However, CAWD has also embarked on a substantial long term capital rehabilitation plan that has necessitated increasing rates. Examining our rate setting methodology is crucial to ensuring that we not only address revenue requirements, but also follow SWRCB and appropriate regulatory/legal practice.

2) The drought and conservation efforts have likely changed the wastewater loading allocation across customer categories.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
						$35,000		$35,000

Funding Source

O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Study					$ 35,000		$ 35,000
Total	$ -	$ -	$ -	$ -	$ 35,000	$ -	$ 35,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replace Administrative Office Carpeting**	Unscheduled	Lander
Dept:	Admin	Type:	Administration
Total Cost:	$20,000	Useful Life:	20 years
CY Budget	$0	Category:	Maintenance
Account:	2760	Urgency:	5 = Future
Inception date:		Carry Forward:	No

Description

It is anticipated that the adminstrative office building carpeting, which has never been replaced will need to be replace within the next 5 years. 400 square yards $35/SY. To prolong the carpet life staff proposes to include a maintenance item to professionally clean the carpets every six months. The proposed carpet replacement will remain an unscheduled expense and re-evaluated each year.

Justification

Original carpet is from 1990 when the building was constructed and is showing obvious signs of wear. We currently have carpets cleaned every six months and are hoping to stretch out wear as long as possible.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
							$20,000	$20,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract						$20,000	$ 20,000
Total	$ -	$ -	$ -	$ -	$ -	$20,000	$ 20,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replace Administrative Office Furnaces**	Unscheduled	Lander
Dept:	Admin	Type:	Rehab
Total Cost:	$6,500	Useful Life:	15 years
CY Budget	$0	Category:	Maintenance
Account:		Urgency:	5 = Future
Inception date:		Carry Forward:	No

Description

It is anticipated that the Administrative Office building furnaces will need to be replaced at some future date. There are a total of three furnaces in the building. We have had intermittent repairs to the system and replaced one unit in Jan 2009.

Justification

The furnaces are being allowed to "run to fail". We have the ability to replace the furnaces on relatively short notice and would make an effort to repair first and then replace as required.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
							$6,500	$6,500

Funding Source

O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equip/Service						$ 6,500	$ 6,500
Total	$ -	$ -	$ -	$ -	$ -	$ 6,500	$ 6,500

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Server Replacement**	Unscheduled	Pinkevich
Dept:	Admin	Type:	Lab
Total Cost:	$7,000	Useful Life:	15 years
CY Budget	$0	Category:	Maintenance
Account:		Urgency:	3 = Important
Inception date:	2015	Carry Forward:	No

Description

Assuming no changes in technology, the existing mail server will be four years old in 2017-18 and should be replaced. The estimate is for hardware and installation.

Justification

Replace in 2013-14 the server has a four year life span and is routinely replaced.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
				$7,000				$7,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment			$ 7,000				$ 7,000
Total	$ -	$ -	$ 7,000	$ -	$ -	$ -	$ 7,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**General Manager's Sedan**	Unscheduled	Buikema
Dept:	Admin	Type:	Administration
Total Cost:	$30,000	Useful Life:	15 years
CY Budget	$0	Category:	Capital Equipment
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

The current vehicle was purchased in 2005 and has less than 60,000 miles on the odometer. We estimate this car will last over 100,000 miles. Replacement is estimated, at minimum, by the end of this decade.

Note: The battery was replaced under warranty at roughly 4.5 years vehicle life. Because the battery is an expensive item (~$10K); our plan is to purchase a new vehicle if it fails again.

Justification

This vehicle is used by Admin staff to attend meetings as necessary and to drive back/forth to the treatment plant. In addition, Plant and Collection System staff use the vehicle to attend conferences/training rather than use their own vehicles or a District truck. This vehicle is safe and reliable -- and in good shape both externally and mechanically. We will continue to monitor its performance and when it reaches its tipping point (i.e. repairs>value of vehicle) we will move it from the "Unscheduled" budget column and purchase a new sedan-type vehicle for the District's use. Staff has expressed a desire for a mid-size sedan giving the reason that for some, the Honda is simply too small to be comfortable, and when we put 4 adults in the vehicle it is cramped.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
							$30,000	$30,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment						$30,000	$ 30,000
Total	$ -	$ -	$ -	$ -	$ -	$30,000	$ 30,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Admin Copy Machine**	Unscheduled	Buikema
Dept:	Admin	Type:	Administration
Total Cost:	$12,000	Useful Life:	10 years
CY Budget	$0	Category:	Capital Equipment
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

The current machine was purchased in July 2013 for $10,732. The technician advises that the typical lifespan is 5-7 years. We have budgeted for year 6 -- but will stretch out replacement purchase depending on the condition of the machine and parts availability.

Justification

The Admin copy machine receives considerable use every working day and is a critical piece of office equipment. While technology will certainly change over the next five years; based on current usage we are planning for its replacement with an upgraded machine.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
					$12,000			$12,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment				$ 12,000			$ 12,000
Total	$ -	$ -	$ -	$ 12,000	$ -	$ -	$ 12,000

CAWD Collections Dept

FY 2015/16 *thru* 2019/20

Project #	PROJECT	15/16	16/17	17/18	18/19	19/20	20/21	Unscheduled
1	Construction of new gravity sewer line for Carmel Meadows Gravity Easement (carry over)	$470,508						
2	Replacement of Annual Long Term CIP sewer lines	$428,920	$305,201	$207,122	$529,336			
3	Construction of Calle La Cruz force main replacement 6" (Outfall 18") (Collections to pay 1/3 of cost)	$200,000						
4	Construction of new power service drop to Bay & Scenic pump station	$100,000						
5	Condition assessment of Monte Verde and Bay & Scenic force mains	$30,000						
6	Remodel Collection Office	$20,000						
7	Construction Costs of Rio Park Bike Trail	$18,000						
8	Construction of additional lines for Rancho Canada Project		$345,000					
9	Design for plans and replacement of Calle la Cruz pump station			$100,000		$75,000	$700,000	
10	Design for plans and replacement of sea wall at Bay & Scenic pump station			$100,000		$75,000		$400,000
11	Replacement of the Collection system SCADA at all pump stations					$210,000		
	TREATMENT & DISPOSAL TOTAL	**$1,267,428**	**$650,201**	**$407,122**	**$529,336**	**$360,000**	**$700,000**	**$400,000**
	RECLAMATION SHARE	$0	$0	$0	$0	$0	$0	$0
	PBCSD SHARE	$0	$0	$0	$0	$0	$0	$0
	CAWD COST	**$1,267,428**	**$650,201**	**$407,122**	**$529,336**	**$360,000**	**$700,000**	**$400,000**

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Carmel Meadows Gravity Sewer**	Unscheduled	Lauer
Dept:	Collections	Type:	CIP
Total Cost:	$525,857	Useful Life:	50 years
CY Budget	$470,510	Category:	Capital Improvement
Account:		Urgency:	2 = Very Important
Inception date:		Carry Forward:	Yes

Description

Replacement of approximately 1,000 ft. of elevated, free standing ductil iron pipeline with re-engineered constrained pipe design, engineered foundation improvements for support scaffolding, and new scaffolding to support the pipeline. The pipeline is located on a District easement, on what is now State Parks land and is adjacent to the South Fork of the Carmel Lagoon.

Justification

The Collections Dept. staff noted that the number of staff hours required to avoid blockages and sewer line backup of the Carmel Meadows sewer line exceeds that of nearly all other lines in the Collections system. In prior budget allocations a number of $1M has been held over as an approximate cost for the replacement of this line. Due to the highly sensitive nature of the sewer line, staff has determined that the best management practice has been to assess the line, develop a construction plan for replacement, and then plan and budget accordingly. A condition assessment was performed by Kennedy/Jenks in 2013 which recognized any additional flow from the County's Hwy 1 Causeway Project could result in additional erosion in that ground portion has subsided over the years causing the pipe to bend and dip loosing its proper grade. Along with the supports, the Ductile Iron Pipe (DIP) is a bell and spigot style which is of great concern. In the event of more extreme hillside movement the pipes would come apart, discharging sewage directly into the Carmel Lagoon. Kenndy/Jenks recommended replacement of the manholes and replacement of the DIP with restrained joint DIP. Four alternatives for repair have been provided. Staff has reviewed the recommendations and have chosen recommendation #2, which is to replace portions of the line and the foundation supporting it. These improvements will effectively extend the useful service life of the pipeline to 35 years.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
	$55,347	$470,510						$525,857

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$470,508						$470,508
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Study							$ -
Total	$470,508	$ -	$ -	$ -	$ -	$ -	$470,508

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Annual long term CIP project**	Unscheduled	Lauer
Dept:	Collections	Type:	CIP
Total Cost:	$1,470,579	Useful Life:	50 years
CY Budget	$428,920	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

The District's Long Term CIP has been completed and these projects have been rated as the top four projects:

Year 15-16 the District has scheduled to replace 2,250 ft of damaged and undersized pipe and 7 manholes in an easement next to Pescadero Rd. Staff spends extra time keeping these free of blockages. This easement has had multiple Sanitary Sewer Overflow's in the past. Maps and cost breakdown is provided in the Appendices.

Year 16-17 the District has two projects. The first is the Morse Dr. easement project. This line segment has had structural failure in the past with the result of an SSO. Staff recommends the total replacement of 324 ft. or regrading for proper alignment. The hillside is sliding and will require reinforcement to stabilize the hill. The probability of future hillside movement will need to be addressed. The second project is the Pine Hills easement. This project consists of the replacement of 1,875 ft and four manholes due to severe root instrusion and misaligned pipe. This easement requires staff to spend extra time to ensure it will not overflow due to its location in an easement which is not accessible to vehicles. Maps and cost breakdown is provided in the Appendices.

Year 17-18 the District is scheduled to replace 1,474 ft. and 3 manholes in the High Meadows Easement. This easement is located behind the homes of Edgefield Dr. and is inaccessible to cleaning trucks. Staff requires extra time and equipment to keep these line segments free and clear of blockages. The District has had a past history of SSO's due to the grade of these line segments. The replacement of these segments will correct grade problems and thus require less cleaning for staff. Maps and cost breakdown is provided in the Appendices.

Year 18-19 the District is scheduled to replace 4,383 ft of pipe due to severe sags and grading issues. Staff broke this year into two phases with Phase One being the replacement of line segments on Rio Rd. and Oliver Dr. Phase Two will replace line segments on Allen Place, Martin Road, Hatton Road, Morse Drive, Flanders Drive and San Carlos & Second. Maps and cost breakdown is provided in the Appendices.

Justification

The condition assessment has been completed and the data is here for review. What was done is the complete assessment of all of CAWD's sewer lines using CCTV. This assessment was performed using the ICOM computer based management program. The first step was to perform a complete assessment using CCTV, this part is now complete. Now that we have the data the ICOM program rates all the sewer pipes using a severity index rating system of 1 - 5 with 1 being a pipe that has no defects and is in good shape and 5 being a line segment with one or more structural defects. Using ICOM we can address the worst pipes in the District and maintain the lines with a rating of 3 - 4 using more frequent cleaning or root foaming to prolong their lifespan until lines that are in the worst shape are repaired.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$428,920	$305,201	$207,122	$529,336			$1,470,579

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract	$428,920	$305,201	$207,122	$ 529,336			$ 1,470,579
Total	$428,920	$305,201	$207,122	$ 529,336	$ -	$ -	$ 1,470,579

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replacement of Calle la Cruz Force Main**	Unscheduled	Lauer
Dept:	Collections	Type:	CIP
Total Cost:	$280,000	Useful Life:	50 years
CY Budget	$200,000	Category:	Capital Improvement
Account:		Urgency:	1 = Critical
Inception date:		Carry Forward:	Yes

Description

Design and construct a permanent 6" HDPE replacement force main to cross the Carmel Lagoon, from Calle la Cruz pump station to connect with the existing force main. Approximately 400 feet of new piping. This project will "piggy-back" on the Treatment Plant CIP for replacement of the 24" outfall. This project assumes that a replacement pipe cannot be placed on the existing crossing, that the existing crossing will need to be reconstructed and that the sewer force main will either be constructed to attached to a new aerial corrsing, or that a new pipe will be placed underneath the lagoon in a joint trench with the new force main. For the purpose of this item Collections will assume the cost of only the design and construction of the line iteself and not the construction of a new crossing structure or the cost of the excavation. Due to the comfplexity of the environmental review required for the work in the Lagoon it is not anticipated that construction will begin until 15-16.

Justification

In August of 2013 staff discovered an emergency condition of imminent failure of the Calle la Cruz force main over the Carmel Lagoon. This prompted immediate action to replace 400 ft of the existing line with a durable HDPE pipe laid above grade. The emergency repair was an unbudgeted expense for 2013. Staff has worked with Kennedy/Jenks this year to develop the construction plans needed to permanently replace the temporary line. It is not anticipated that the line will require boring under the lagoon. If environmental concerns prohibit the more traditional pipe repair processes under consideration, the costs of the construction will increase substantially.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
	$80,000	$200,000						$280,000

Funding Source

Capital Reserve

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract	$200,000						$ 200,000
Total	$200,000	$ -	$ -	$ -	$ -	$ -	$ 200,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Power Service Drop Bay & Scenic**	Unscheduled	Lauer
Dept:	Collections	Type:	CIP
Total Cost:	$136,000	Useful Life:	50 years
CY Budget	$100,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Replace existing power service drop to Bay & Scenic to meet PG&E standards. This will require approximately 600 ft of new conduit, 3 pull boxes, and a new service drop installed by PG&E. The pump station will be put on standby power while the existing line is removed and a new line is placed deeper in the roadway and installed in accordance with current PG&E standards. The District will then dedicate this service line to PG&E for future management and maintenance.

This project was originally budgeted in 2014-15 for $90K. Staff engaged Kennedy /Jenks for $36K to do engineering and prepare bid documents. Kennedy/Jenks will make all contacts with PG&E.
Anticipate being able to bring to Board for permission to bid by end of 14-15.

Justification

In December 2013 a contractor cut through the power service that feeds Bay & Scenic pump station. The conduit was only 6 inches under the asphalt and was not marked as part of a Utility Service Alert because PG&E confirmed that the conduit was never accepted into the PG&E system. In this case CAWD owns the service feed to the station. Since the conduit was not originally installed under PG&E direction and no documentation was available as to the installation, PG&E will not accept it. The installation of a new conduit and pull boxes to the pump station from the power pole at the proper depth according to the specificiations from PG&E will allow them to take ownership of the service.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
	$36,000	$100,000						$136,000

Funding Source

Capital Reserve

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract	$ 100,000						$ 100,000
Total	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ 100,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Force Main Condition Assessment**	Contact:	Lauer
Dept:	Collections	Type:	Pump Stations
Total Cost:	$30,000	Useful Life:	15 years
CY Budget	$30,000	Category:	Capital Improvement
Account:	5562	Urgency:	2 = Very Important
Inception date:		Carry Forward:	Yes

Description

Condition assessment of the force mains for Monte Verde and Bay & Scenic pump stations. An outside contractor will be employed to locate, excavate down and remove a portion of the 4" DIP. Up to two locations per pipe will be located. Staff will perform a condition assessment of the removed pipe by CCTV inspection by inserting the camera at each location and inspecting the line as far as the camera equipment will allow.

Justification

The existing force mains have been in continuous use for more than 50 years with no prior visual inspection. The lines have worked well with little issue. However in November 2013 the Bay and Scenic pump station's force main had a partial blockage causing high run times. This development uncovered a weakness in staff knowledge of these lines and their remaining useful life. The recently developed SSMP calls for a working knowledge of the condition of the force mains from all pump stations that are in the CAWD service area. The distance of these force mains are of some concern because by-passing them in an emergency would be a large and very expensive project. This work is required to propoerly plan and budget any repairs, and it will allow staff to avoid costly emergency repair work in the future.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$30,000						$30,000

Funding Source

Carry forward from 2014-15 Budget - Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 28,000						$ 28,000
Parts & Supplies	$ 2,000						$ 2,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ 30,000	$ -	$ -	$ -	$ -	$ -	$ 30,000

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FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Remodel Collection Office**	Unscheduled	Lauer
Dept:	Collections	Type:	CIP
Total Cost:	$20,000	Useful Life:	20 years
CY Budget	$20,000	Category:	Capital Improvement
Account:	2760	Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

The Collections workers currently use the Collection space off the Vehicle Storage Bldg. as their changing room. With the addition of the new CAWD locker room facility, staff will move with Treatment plant staff into the facility. The Collection Superintendent will move from his trailer to the current staff location.

The current Collection Superintendent trailer will be repurposed for the Construction Manager

Justification

The remodel will include the moving of the restroom and several walls to make two offices - one for the Collection workers with workstations. Staff will reuse the current workstations. The other office will be for the Collection Superintendent. There will be room for a conference table from the current Collection trailer.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$20,000						$20,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$20,000						$ 20,000
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$20,000	$ -	$ -	$ -	$ -	$ -	$ 20,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Rio Park Bike Trail**	Unscheduled	Lander
Dept:	Collections	Type:	Rehab
Total Cost:	$18,000	Useful Life:	15 years
CY Budget	$18,000	Category:	Maintenance
Account:		Urgency:	5 = Future
Inception date:		Carry Forward:	No

Description

Improvements to District parcel through Rio Park for District access.

This project is designed to allow safe public pedestrian passage through the open space in the park that is adjacent to the neighboring school. Currently there is not a trail for public access. The proposed trailer will cross over our infrastructure in several locations.

Justification

The pedestrian recreation path construction is in the design phase and it has been determined that it will cross our infrastructure in two locations. Because the City of Carmel-by-the-Sea intends on building a bike path the District will need to clear and build a pathway for its own access. The District has already invested in the tree removal along the proposed pathway for access and potential tree root instrusion into the trunk mains that run through this site and upgraded to tamper resistant fiberglass reinforced polymer (FRP) manhole frame and lids.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$18,000						$18,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 18,000						$ 18,000
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equip/Service							$ -
Total	$ 18,000	$ -	$ -	$ -	$ -	$ -	$ 18,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Rancho Canada Project**	Unscheduled	Pinkevich
Dept:	Collections	Type:	Pipeline
Total Cost:	$345,000	Useful Life:	30 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Rancho Canada Subdivision Construction and Annexation

Rancho Canada has proposed converting one of its golf courses to a subdivision of Single Family Dwellings (SFD's). The design has plans to extend the trunk main that stops at MH S807, located in the driveway to the District main office, to a point near the current club house at the golf course.

Justification

It would be in the District's best interest to take advantage of the opportunity to piggy-back on this project to both upsize the pipeline with a pipe diameter of 24" (ID - Internal Dimensions) for future capacity demands, and to extend this pipeline at that diameter all the way to Via Mallorca. If more of the Carmel Valley area is annexed into our system, we will benefit from this upgrade now by not incurring the future costs of needing to upgrade later when it is realized the initial pipe capacity was insufficient to convey the potential wastewater generated. The District's extention would include roughly 1,900 ft of pipe replacement (1,900 x $150) and 6 manholes (6 x $10K).

The developer may pay for part of this project depending on the extent of their project.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
			$345,000					$345,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract		$ 345,000					$ 345,000
Total	$ -	$ 345,000	$ -	$ -	$ -	$ -	$ 345,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Calle la Cruz Pump Station**	Unscheduled	Lauer
Dept:	Collections	Type:	Pump Stations
Total Cost:	$875,000	Useful Life:	50 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Relocation of the Calle la Cruz pump station to the immediate West of the existing station. This would include a land swap with State Parks to locate the pump station adjacent to the current pump station and then decommission and remove the existing station and realignment of influent piping. New pump station to include: drywell pumps to be converted to wet well pumps, new "T-Lock" wet well with 10,000 gal capacity, control room for generater equipment.

Justification

The Calle la Cruz pump station was constructed as part of the 1960 subdivision of Carmel Meadows. Since that time the pump station has received a number of upgrades to the pumps, electronics and wet well resurfacing to extend its life. Recent evaluation and rehabilitation finds that the pump station is in relatively good condition. However staff anticipates that changes to the management of the Carmel Lagoon water level as well as the potential increase of debris and flood waters from the completion of Highway 1 Causeway will increase the risk of flooding and decrease the reliability of this asset. This pump station is adjacent to the southern finger of the Carmel Lagoon and staff anticipates that this equipment will need to be elevated to continue to function in this location. Also the introduction of influent from the Highlands Pump Sttion has increased the levels of hydrogen sulfide (H2S) in the wet well. The construction of a new wet well pump station would resolve these issues and provide another 50+ years lifespan for this asset. The Calle la Cruz pump station is a critical asset for the District as it serves all of the District customer connections sourth of the Carmel River. The pump station currently has a 10+ year life remaining so a new wet well will remain unscheduled until timelines for the highway causeway project

Expenditures:	Prior	15-16	16-17	17-18	19-20	20-21	Unsched.	Total
				$100,000	$75,000	$700,000		$875,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	19-20	20-21	Unsched.	Total
Labor			$100,000	$ 75,000	$ 700,000		$875,000
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ -	$ -	$100,000	$ 75,000	$ 700,000	$ -	$875,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replacement of Sea Wall at Bay & Scenic**	Unscheduled	Lauer
Dept:	Collections	Type:	CIP
Total Cost:	$575,000	Useful Life:	35 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

This project will be accomplished in three parts in order to plan and accomplish structural improvements to extend the life of the Bay & Scenic pump station. First, the design of the project (17-18). Second, the environmental review (19-20). And finally, construction (Unscheduled).

Justification

The Bay & Scenic pump station is a critical Collections Department asset serving more than 200 properties in the Carmel Point 7th Addition neighborhood. The pump station is located immediately adjacent to the Pacific Ocean underneath the public roadway. Due to existing topography, this pump station cannot be relocated or otherwise decommissioned. For several years staff has observed erosion and deterioration of the decorative Carmel stone facade that protects the pump station from ocean forces during high tides and storm surges. In 2008 the County performed harscaping (shot creating) of some of the banks to help protect the slopes and extend the life of the roadway. Since that time erosion of the sandstone has continued and is becoming a concern to staff. Since the pump station is in relatively good condition and has provided more than 50 years of continuous service, staff recommends repairing the exterior wall and sandstone which is begining to crack and fall off into the ocean. Due to the critical location of this pump station, all of the regulatory agencies with jurisdiction over the area (Coastal Commission, NMFS) and the anticipated expense to accomplish repairs, staff recommends the development of design plans to prolong the life of this asset and perform this maintenance within 4 years.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
				$100,000		$75,000	$400,000	$575,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor			$ 100,000		$ 75,000	$ 400,000	$ 575,000
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ -	$ -	$ 100,000	$ -	$ 75,000	$ 400,000	$ 575,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replacement of Collection System SCADA**	Unscheduled	Lauer
Dept:	Collections	Type:	Pump Stations
Total Cost:	$210,000	Useful Life:	15 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Replacement of SCADA (Supervisory Control & Data Acquisition) units at all District Pump Stations.

The SCADA systems used at the pump stations are programmable logic control interfaces. Once set up, they automate the pump station. Examples of controlled systems include the pumping process, wet well conditions, alrm notifications, reporting current state conditions.

Justification

These SCADA controls are outdated and many of the components are hard to find. The PLC-5 (Programmable Logic Controller) component is no longer made. Newer PLC models offer an easier to use and more clearly visible user interface. Our current systems make it difficult to see under certain conditions without being able to adjust the back lit screen properties. The Treatment plant will be upgradng their SCADA in the next few years and staff will save all of their old components to provide Collections SCADA with parts if needed over the next 5 years.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
						$210,000		$210,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies					$ 210,000		$ 210,000
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ -	$ -	$ -	$ -	$ 210,000	$ -	$ 210,000

CAWD Collections Dept - Capital Purchases

FY 2015/16 *thru* 2019/20

Project #	PROJECT	15/16	16/17	17/18	18/19	19/20	20/21	Unscheduled
1	Replace Unit #5 Ford Hydro-Cleaning truck	$210,840						
2	Replace Electrical Panel at 8th and Scenic PS		$35,000					
3	Replace Generator and Transfer switch at Hacienda pump station			$50,000				
4	Replace pumps at Highlands PS			$40,000				
5	Replace Collection Superintendent Truck (2009)				$40,000			
6	Replace Pumps at Monte Verde PS				$19,340			
7	Replace VacCon truck					$300,000		
8	Replace Pumps at Bay & Scenic PS						$19,340	
9	Replace Backhoe (Collection 50% - Operations 50%)							$75,000
10	Replace Unit #7 Kodiac dump truck (Collection 50% - Operations 50%)							$50,000
	TREATMENT & DISPOSAL TOTAL	**$210,840**	**$35,000**	**$90,000**	**$59,340**	**$300,000**	**$19,340**	**$125,000**
	RECLAMATION SHARE	$0	$0	$0	$0	$0	$0	$0
	PBCSD SHARE	$0	$0	$0	$0	$0	$0	$20,813
	CAWD COST	**$210,840**	**$35,000**	**$90,000**	**$59,340**	**$300,000**	**$19,340**	**$104,188**

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replace unit #5 Hydro-cleaning truck**	Unscheduled	Lauer
Dept:	Collections	Type:	Equipment
Total Cost:	$210,840	Useful Life:	15 years
CY Budget	$210,840	Category:	Capital Equipment
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Replacement of unit #5, 1998 Ford hydro-cleaning truck

Unit #5 currently serves as the secondary hydro-cleaning truck among the District's Collection assets. The Ford hydro-cleaning truck was purchased in 1998 and has been in service for 16 years and has 10,130 service hours. The truck has a 1600 gallon water tank with 600 ft. of 1 inch hose and is primarily used to clean the larger diameter sewer lines and flush low pipelines to prevent the build-up of odors that lead to complaints throughout our collection system. This vehicle is also used to shuttle water for the Vaccon (unit #4) from the plant to cleaning set ups in easements that require the use of the prowler, or where the water demand is more than the Vaccon alone can supply. With this vehicle's smaller profile, it is able to get to cleaning set ups that are in tighter places.

Justification

Being the unit #5 has reached the end of its service life, the longer the District goes without replacing this asset the more costly it becomes to keep it on the road. In the last several years it has had many component failures. Each incident of failure has cost money, but also left the District without a backup if something happened to our primary unit #4. Furthermore, the Air Pollution Control Board has indicated that the new Vehicle Emissions Regulations now require all vehicles to be in compliance with current smog regulations by 2015. The retrofit systemt to bring this truck to code would cost the District an estimated $30,000. Perhaps this truck could be retired as a hydro-cleaner due to the demands on it that duty calls for and be repurposed as a crane-boom truck. There are several places throughout the plant that a truck of that nature would be extremely useful, potentially ending the need to have Pebble Beach send out a similar truck capable of performing these essential functions. If the converted use of this truck is deemed unnecessary, the District could sell this asset to offset the cost of the replacement vehicle. Additionally, if a truck were purchased with similar hydro-cleaning characteristics, that vehicle could potentially become the primarily used unit for daily cleaning activities. With its added water capacity, it would almost double production. The Vaccon has half the water capacity so it needs to return to the plant to refill with reclaimed water more frequently, which also increases fuel consumption and cost of operation.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$210,840						$210,840

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies	$210,840						$210,840
Chemicals							$ -
Utility							$ -
Other - Study							$ -
Total	$210,840	$ -	$ -	$ -	$ -	$ -	$210,840

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replacement of electrical control panel at 8th & Scenic**	Unscheduled	Lauer
Dept:	Collections	Type:	Pump Stations
Total Cost:	$35,000	Useful Life:	30 years
CY Budget	$0	Category:	Capital Equipment
Account:	2735	Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Replacement of current electrical control panel at 8th and Scenic pump station with a new Tesco electrical control panel.

These panels process the supplied power from PG&E to run the pumping system at the station. They are equipped with overload protection (breakers), motor starters (relays), transformers to change the supply voltages to the needed voltages for single phase circuitry within the panel's control process, switching mechanisms for automatic, manual and off control modes, level sensing equipment (transducer and Hydro Ranger), and fault indicator lights for visual reference with reset buttons.

Justification

The current electrical control panel has been in service for over 30 years. Because of its proximity to the ocean, the humidity around and within the station has caused corrosion of the control components, interfering with the proper automated operation of the panel. The current panel's motor starters frequently send false "Excessive Starts" alarms to the Mission Alarm system due to motor starter chattering. The Tesco panel is equipped with all new components and hardware. This is the last station to have the panel updated. After replacement, all the stations will be uniform in control operation.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
			$35,000					$35,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies		$ 35,000					$ 35,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ -	$ 35,000	$ -	$ -	$ -	$ -	$ 35,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replacement of Generator, ATS and power service panel at Hacienda pump station**	Unscheduled Lauer	
Dept:	Collections	Type:	CIP
Total Cost:	$50,000	Useful Life:	20 years
CY Budget	$0	Category:	Capital Equipment
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Replacement of generator, automatic power transfer switch, and power service panel at the Hacienda pump station.

In the event that the utility power supply goes out, the generator creates the electricity and the transfer switch is responsible for controllng the flow of electricity when the utility is out and then restored. Without this, the generator and utility supplying power at the same time would damage the station. The station requires 240 volt AC, 60 Hz, 100 Amp, 35 kW, 3 phase power.

Justification

This generator, automatic transfer switch, and power service panel are 25 years old and at the end of their service life. Although still functional, it is recommended they are replaced for the benefit of peace of mind that the new service equipment will be capable of handling the current and foreseeable power demands of potential growth upstream of this station. The generator has been in service for many years and is starting to show signs of deterioration. The block heater has been plagued with issues, the exhaust is worn through the muffler. It is not a quiet generator which generates complaints from neighbors. Newer automatic transfer switchs (ATS) have the capability of switching over in the case of a "brown out," which is loss of one but not all phases of supplied electricity. The older one still in service is unable to distinguish this difference and therefore will allow the pumps to run without adequate power which in turn could damage them. The power service panel is very old and designed for a pump system equipemnt that is no longer active at this station. An update of this panel will align it more with our current system needs. Therefore the investment to replace these necessary components is strongly recommended to bring this system up to par with the systems that are already in service at our other pump stations.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
				$50,000				$50,000

Funding Source

Capital Reserve

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies			$50,000				$ 50,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ -	$ -	$50,000	$ -	$ -	$ -	$ 50,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**New pumps for Highlands pump station**	Unscheduled	Lauer
Dept:	Collections	Type:	Pump Stations
Total Cost:	$40,000	Useful Life:	25 years
CY Budget	$0	Category:	Capital Equipment
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Replace model 3152 Flygt pumps at Highlands pump station with the new model 3153 Flygt. The District is preparing for the possiblity of a catastrophic failure of the current pumps due to the amount of time that they have been rebuilt. The current pumps have been rebuilt several times due to a defect in the lower bearing seals. The problem of seal failure has been fixed but the number of times that they have been rebuilt has lowered the life expectancy.

Justification

The Flygt pump model 3152 was discontinued a few years ago. It is a recommendation by Flygt to switch to then new model 3153 high head pump. These pumps have been in service for over 10 years but have several rebuilds on each one of them. This is an estimated replacement date and staff will re-evaluate the performance yearly. These pumps run on the high end of the pump curve and the lifespan is reduced due to this. The possibility of new larger breakers and power service will be evaluated when a change to the larger model has been chosen.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
				$40,000				$40,000

Funding Source

Capital Reserve

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies			$40,000				$ 40,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ -	$ -	$40,000	$ -	$ -	$ -	$ 40,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Collection Superintendent Truck #17**	Unscheduled	Lauer
Dept:	Collections	Type:	Other
Total Cost:	$40,000	Useful Life:	10 years
CY Budget	$0	Category:	Capital Equipment
Account:	2760	Urgency:	4 = Less Important
Inception date:		Carry Forward:	No

Description

Replacement of Unit #17 the 2009 Chevy 4x4 with vehicle of like model or smaller. The District will look for repurpose possibilites of the truck for use in the Collection, Maintenance or Operation Department.

Justification

The replacement of the 2009 Chevy 4x4 (unit #17) which currently has 64,358 miles on it. This truck is the Collection Superintendent truck as well as the main vehicle for transportation for Collection staff to/from conferences and training. Historically the Superintendent vehicle is replaced every 10 years. The District will look at condition and performance closely at that time and extend if possible.

Additionally, the District will examine if a smaller vehicle would be more cost effective for the Superintendent.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
					$40,000			$40,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies				$ 40,000			$ 40,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ -	$ -	$ -	$ 40,000	$ -	$ -	$ 40,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replace pumps at Monte Verde and 16th pump station**	Unscheduled	Lauer
Dept:	Collections	Type:	Pump Stations
Total Cost:	$19,340	Useful Life:	25 years
CY Budget	$0	Category:	Maintenance
Account:		Urgency:	4 = Less Important
Inception date:		Carry Forward:	No

Description

Direct replacement of existing Flygt model 3127 pumps at Monte Verde and 16th.

These pumps are installed in the wet well at Monte Verde and lift the wastewater from the lower elevation to a higher elevation at which point the wastewater can then gravity flow its way to the plant.

Justification

These pumps are nearing the end of their life span and they are recommended for direct replacement with the same model Flygt pump. At the time of replacement the pumps will be almost 20 years old and will not be as efficient as new pumps leading to higher costs of operation. Over time, cavitation can cause pitting on the impellers that lead to vibration wear from no longer being balanced. Rocks and metals that find their way into the sewer causing these same effects as they crack, pit, and break the impellers and volutes.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
					$19,340			$19,340

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies				$ 19,340			$ 19,340
Chemicals							$ -
Utility							$ -
Other - Equip/Service							$ -
Total	$ -	$ -	$ -	$ 19,340	$ -	$ -	$ 19,340

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replace Unit #4**	Unscheduled	Lauer
Dept:	Collections	Type:	Equipment
Total Cost:	$300,000	Useful Life:	10 years
CY Budget	$0	Category:	Capital Equipment
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Replacement of unit #4, 2008 Vaccon Combination Hydro Cleaning - Vaccon truck

Unit #4 currently serves as the District's primary hydro cleaning and SSO response vehicle. It's 3/4 inch hose has a smaller diameter allowing a longer hose section to be used (800 ft), greatly increasing our reach into easements and is more agile than its 1 inch counterpart so it is ideal in most of our cleaning operations. The truck's ability to vacuum up areas affected by SSO's greatly increases our containment and mitigation efforts. The truck's vacuum and water pressure capabilities also allow us to use it as a hydro excavator. This process enables us to dig down to affected pipe lines to be repaired or for exploratory "potholes" to investigate the location of assets without damaging other known or unknown structures or utilities within the work zone. It has 800 gallons of usable water storage and 5 cubic yards of removed liquid and debris capacity with decanting capabilities.

Justification

At time of replacement, this vehicle will have over 10 years of service and approximately 10,000 hours of run time. This vehicle is a purpose built machine with lots of mechanical parts and computerized controls. With the frequent and heavy duty use it endures, it can be expected that the cost of servicing and repairing of this unit will continue to increase as it nears the end of its service life. It had the top end of the engine rebuilt in January 2015. Although that repair will keep it in service for the foreseeable near future, major repairs like this are potentially more likely. The auxiliary motor that supplies the water pressure for pipeline service, although operational, has experienced many issues over the last several years. For the District to be able to continue its level of community service and rapid response, approval of this valuable asset should be highly considered.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
						$300,000		$300,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies					$300,000		$ 300,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ -	$ -	$ -	$ -	$300,000	$ -	$ 300,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replace pumps at Bay & Scenic pumpt station**	Unscheduled	Lauer
Dept:	Collections	Type:	Pump Stations
Total Cost:	$19,340	Useful Life:	25 years
CY Budget	$0	Category:	Maintenance
Account:		Urgency:	4 = Less Important
Inception date:		Carry Forward:	No

Description

Replacement of existing Flygt model 2127 pumps at Bay & Scenic. The Bay & Scenic pump station will in year 2020-21 be the subject of a pump station remodel. The remodel will include the replacement of the 3127 pumps with the same model but installed inside the wet-well. Full description of the station remodel in the CIP section of budget.

Justification

These pumps are nearing the end of their life span and they are recommended for direct replacement with the same model Flygt pump. At the time of replacement the pumps will be almost 20 years old and will not be as efficient as new pumps leading to higher costs of operation. Over time, cavitation can cause pitting on the impellers that led to vibration wear from no longer being balanced. Rocks and metals that find their way into the sewer causing these same effects as they crack, pit, and break the impellers and volutes.

Expenditures:	Prior	15-16	16-17	17-18	19-20	20-21	Unsched.	Total
						$19,340		$19,340

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	19-20	20-21	Unsched.	Total
Labor							$ -
Parts & Supplies					$ 19,340		$ 19,340
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ -	$ -	$ -	$ -	$ 19,340	$ -	$ 19,340

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replacement of unit #11 1991 John Deer Backhoe/Loader**	Unscheduled Lauer	
Dept:	Collections	Type:	Equipment
Total Cost:	$75,000	Useful Life:	25 years
CY Budget	$0	Category:	Capital Equipment
Account:		Urgency:	5 = Future
Inception date:		Carry Forward:	No

Description

Replacement of unit #11 1991 John Deere Backhoe/Loader.

Unit #11 is a 1991 John Deer Backhoe/Loader. It is a diesel powered, wheeled machine with hydraulically controlled buckets for scooping and digging through a variety of materials. It features an enclosed cab to keep the operator safe from airborne particulates from the digging process and climate controlled for comfort. It features a multispeed transmission, automatic load leveling on the loader, telescoping backhoe arm for greater reach.

The District may consider a mini-excavator in lieu of a backhoe when it becomes time to make a final decision. A mini-excavator will do many of the same things as a backhoe and costs roughly $40K.

Justification

It is advised that budgeting for the replacement of unit #11 be considered but unscheduled. This piece of equipment is used by both the Collections and Treatment Departments for a variety of tasks. For Collections, we don't use it often, but when we need it, it is a valuable tool. Although we do not dig with the backhoe much since we can hydro excavate with the Vaccon, we still need it to load the material into the dump trucks for backfill of trenches. We also use it to refresh the pit area where we dump our spoils from the Vaccon after digging or cleaning wet wells. Furthermore, the Vaccon cannot dig in every location we need to access so this machine still allows you to get onsite and do the job quickly. It is coming up on 25 years of service so it is only natural that its dependability has lessened over time. It has recently been serviced so it should be able to perform its essential duties for the near future. The benefit of keeping this equipment budgeted for replacement or the current one in service at a cost, is that when you need it, there really is nothing like the mechanial and hydraulic forces that this machine can generate. One scoop can dig in seconds or minutes what could take personnel an hour or more, or even all day!

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
							$75,000	$75,000

Funding Source

Capital Reserves (50% Collection, 50% Treatment)

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies						$ 75,000	$ 75,000
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ -	$ -	$ -	$ -	$ -	$ 75,000	$ 75,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replace unit #7 1991 Chevy Kodiak 2.5 ton dump truck**	Unscheduled	Lauer
Dept:	Collections	Type:	CIP
Total Cost:	$50,000	Useful Life:	25 years
CY Budget	$0	Category:	Capital Equipment
Account:		Urgency:	4 = Less Important
Inception date:		Carry Forward:	No

Description

Replacement of unit #7 1991 Chevy Kodiak 2.5 ton dump truck. (50% Collection & 50% Treatment).

This truck is used by both the Collection and Treatment department. Collections uses it for transporting larger amounts of backfill and spoilage material after conducting field repairs. Treatment uses this truck to dispose of the spent filters from the treatment process. The truck should be replaced with a similar vehicle. Its current class does not require the operator .

Justification

This year unit #7 hits 25 years of service. It has about 1,000 miles on the odometer. Staff has reported some mechanical troubles with it; but over all it seems to still be in working condition. With proper maintenance it should still be of use to the District. The replacement is currently unscheduled, but it is advised that budgeting for replacement should commence.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
							$50,000	$50,000

Funding Source

Capital Reserves (50% Collection, 50% Treatment)

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies						$ 50,000	$ 50,000
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ -	$ -	$ -	$ -	$ -	$ 50,000	$ 50,000

CAWD Collections Dept - Maintenance

FY 2015/16 *thru* 2019/20

Project #	PROJECT	15/16	16/17	17/18	18/19	19/20	20/21	Unscheduled
1	Spot repair of 15 defects annually	$150,000	$75,000	$75,000	$75,000	$75,000	$75,000	
2	Root foaming	$53,000	$53,000	$53,000	$53,000	$53,000	$53,000	
3	Replacement of manhole frame & lids in Hatton Canyon	$24,000						
4	Repair or replace Air Relief Valves's for Highlands Force Main	$20,000						
5	Pump Station Generator Evaluation	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	
	TREATMENT & DISPOSAL TOTAL	**$253,000**	**$134,000**	**$134,000**	**$134,000**	**$134,000**	**$134,000**	**$0**
	RECLAMATION SHARE	$0	$0	$0	$0	$0	$0	$0
	PBCSD SHARE	$0	$0	$0	$0	$0	$0	$0
	CAWD COST	**$253,000**	**$134,000**	**$134,000**	**$134,000**	**$134,000**	**$134,000**	**$0**

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Spot Repair Program**	Unscheduled	Lauer
Dept:	Collections	Type:	Maintenance
Total Cost:	$450,000	Useful Life:	5 years
CY Budget	$150,000	Category:	Maintenance
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Staff will utilize closed circuit TV (CCTV) footage of the system lines and other annual inspections to develop a list of pipes that have localized dmage or defect (i.e. hole, break) and request RFPs annually from local contractors for the repair of these lines. Staff anticipates approximately 15 repairs per year will be required for the next 10 years. These repairs will be conducted on lines that are in otherwise good condition with a remaining life of 10 years or greater.

Justification

CCTV footage has revealed that many portions of the Collections System piping is in good condition with blockages being caused by roots and localized damage to pipes that has occurred over the years by settlement or private plumbers. Replacing lines can be expensive. But with the implementation of the root foaming process each year many of the existing lines can become fullly functional and allow the District to extend their useful life simply by repairing the larger localized damage between pipe joints where roots or rocks have entered the system. This work will be contracted out primariliy due to staffing constraints at this time. Delaying the repair of the pipes (identified as critical) will only cause more costly repairs in the future. If the majority of repairs are completed over the following ten years staff can keep up and it will extend the system's performance without the need of outside contracting.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$150,000	$75,000	$75,000	$75,000	$75,000		$450,000

Funding Source

O & M

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$130,000	$65,000	$65,000	$ 65,000	$65,000		$390,000
Parts & Supplies	$ 20,000	$10,000	$10,000	$ 10,000	$10,000		$ 60,000
Chemicals							$ -
Utility							$ -
Other - Study							$ -
Total	$150,000	$75,000	$75,000	$ 75,000	$75,000	$ -	$450,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Root Foaming**	Unscheduled	Lauer
Dept:	Collections	Type:	Maintenance
Total Cost:	$265,000	Useful Life:	10 years
CY Budget	$53,000	Category:	Maintenance
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Root control of the District's sewer mains using a foaming agent. Carmel's sewer system has historically had a problem with tree root intrusion because of the forest setting that surrounds it. Root foaming is a cost effective method of managing those roots. The root foaming program is integrated into ICOM as part of the Collection system preventative maintenance program. The root foaming agent is applied by an outside contractor. The cost of root foaming is $1.32/foot and the District is averaging 40,000 feet per year.

Justification

The condition assessment has shown that roots are the number one problem in the District's Collection system. Along with routine cleaning, root foaming will help combat our root problem and help reduce SSO due to roots.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$53,000	$53,000	$53,000	$53,000	$53,000		$265,000

Funding Source

O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals	$53,000	$53,000	$53,000	$53,000	$53,000		$ 265,000
Utility							$ -
Other - Contract							$ -
Total	$ 53,000	$ 53,000	$ 53,000	$ 53,000	$ 53,000	$ -	$ 265,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Replacement of manhole lid/frames in Hatton Canyon**	Unscheduled	Lauer
Dept:	Collections	Type:	CIP
Total Cost:	$24,000	Useful Life:	50 years
CY Budget	$24,000	Category:	Capital Improvement
Account:		Urgency:	1 = Critical
Inception date:		Carry Forward:	Yes

Description

Replacement of manhole frame and lids throughout Hatton Canyon.

These new manhole frame and lids are made from fiber reinforced polymer (FRP) material. They feature the ability to lock the lid to the frame for tamper resistance, they are light weight, have high corrosion resistance, and water resistant seals. A total of 30 frames and lids will be needed for replacement that encompass the Hatton Canyon easement. The replacement of these manhole frames and lids accessories will be conducted in-house by the Collection Department.

Justification

The replacement of these frames and lids is important to securing this section of the Collection system that is "out of sight, out of mind". In the past this area has been subject to vandalism which could have been a very unfortunate situation for the District. The current frames and lids were knocked off the base and subsequently allowed the perpetrators access to dump rocks and debris into the Collection system. This could have caused major blockages on this part of the system that has heavy flows. Some of these manholes sit low and could be the source for inflow and infiltration during wet months. The lids are water resistant, meaning they are not as permeable as our current style in the field. Therefore limiiting the Inflow/Infiltration at that source point. Furthermore, the lids are light-weight which makes it easier for personnel to be able to safely remove them with less possibility of injury.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$24,000						$24,000

Funding Source

O & M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies	$ 24,000						$ 24,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ 24,000	$ -	$ -	$ -	$ -	$ -	$ 24,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Repair/Replace ARV's for Highlands Force Main**	Unscheduled	Lauer
Dept:	Collections	Type:	Pump Stations
Total Cost:	$20,000	Useful Life:	10 years
CY Budget	$20,000	Category:	Maintenance
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Replacement of Air Release Valves (ARV) on the Highlands Force Main. Staff is looking at ways to combat the H2S problem at the Calle la Cruz pump station. One of these ways is looking at the cause of the H2S which is being generated in the Highlands Force Main. The District has sent the auto-cad drawings to a force main specialist to see if the current location of ARV's are correct. The information that has been received is that there are ARV's in current locations that are ineffective and there are locations that need ARV's installed

Currently half of the ARV's are cast iron and have significant rust. The other half are stainless that has become pitted and will eventually burst.

Justification

There are currently four different kinds of ARVs that are on the force main. It is recommended that one uniform ARV for the current eight ARV's and the addition of eleven more ARV's at locations along the force main. Staff, along with a consultant from AIR Engineering, are reviewing the result. The District will continue to work with the consultant to ensure the locations of the additonal ARV's are needed. The ARV's that are being considered are made of a heavy duty plastic and will resist damage from H2S gases. Note: the District is also considering engaging Kennedy/Jenks to analyze the force main.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$20,000						$20,000

Funding Source

O & M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies	$ 20,000						$ 20,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ 20,000	$ -	$ -	$ -	$ -	$ -	$ 20,000

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Pump Station Generator Evaluation**	Unscheduled	Lauer
Dept:	Collections	Type:	Pump Stations
Total Cost:	$30,000	Useful Life:	1 year
CY Budget	$6,000	Category:	Maintenance
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Annual Pump Station Generator Evaluations

The generator evaluations are performed by a qualified independent contractor who brings a load bank tester to hook up to the station generators and the portable generators in the Collections Dept. This test puts a simulated pre-determined load to cause the generator to have to work harder to keep up with demand. Successful testing verifies the power generation equipment is capable of handling emergency demands.

Justification

Annual Pump Station Generator Evaluations put a load on the generator system to test for proper operation. It is recommended that the testing continue at an annual interval. Upon 3 successful annual tests, the testing schedule maybe set to every other year. In the event that a generator would fail, it would be preferrable that it do so in the testing phase so that the District has an opportunity to repair or replace it -- not during an emergency situation where it would be difficult, at best, to keep the pump stations supplied with power.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$6,000	$6,000	$6,000	$6,000	$6,000		$30,000

Funding Source

O & M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000		$ 30,000
Total	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ -	$ 30,000

CAWD TREATMENT PLANT CAPITAL IMPROVEMENT PROJECTS
FY 2015/16 *thru* 2019/20

CIP #	Project	15/16	16/17	17/18	18/19	19/20	Unsched
1	Perimeter Fence	$165,000					
2	Rehab Inlet/Interconnect gates in Influent wet Well *(Recl 15%)*	$ 80,000					
3	Repair Secondary Clarifier drive gearbox	$ 75,000	$ 75,000				
4	Rehabilitate Maintenance Shop Exterior	$ 35,000					
5	Effluent Pumps VFD	$ 35,000					
6	Aeration Basin #4 flowmeter	$ 35,000					
7	Influent Pump Control system	$ 28,000					
8	Physical Testing of Plant Structures/Equipment	$ 25,000	$ 25,000	$ 25,000	$ 25,000		
9	Laboratory Modifications *(50% Reclamation)*	$ 25,000					
10	Structural Load Evaluation - Shop Mezzanine	$ 20,000	$ 40,000				
11	Handrail repair/replacement	$ 20,000	$ 20,000	$ 15,000	$ 15,000	$ 7,500	
12	Pipe Storage Area *(20% Reclamation)*	$ 20,000					
13	Road Improvements & Drainage Repairs	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	
14	Effluent Bldg. Wetwell Level Monitoring Upgrade *(50% Reclamation)*	$ 11,500					
15	Webinar Capabilities in Operation Library	$ 8,500					
16	Outfall Project - Lagoon	$500,000					
17	Co-Gen Feasibility Evaluation		$ 40,000				
18	Digester Cleaning #1			$195,000			
19	Demo Bridge across Carmel River						$210,000
20	Maintenance shop expansion					$165,000	
21							
TREATMENT & DISPOSAL TOTAL		**$1,098,000**	**$215,000**	**$250,000**	**$55,000**	**$187,500**	**$210,000**
RECLAMATION SHARE (1)		$34,250	$0	$0	$0	$0	$0
PBCSD SHARE (2)		$354,583	$71,667	$83,333	$18,333	$62,500	$70,000
CAWD COST		**$709,167**	**$143,333**	**$166,667**	**$36,667**	**$125,000**	**$140,000**

(1) PBCSD to pay 1/3 of costs. (After Reclamation portion deducted, if applicable) unless otherwise noted. *Projects in italics are not funded directly by PBCSD*

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Perimeter Fence**	Contact:	Pinkevich
Dept:	Treatment	Type:	Landscaping
Total Cost:	$165,000	Useful Life:	30 years
CY Budget	$165,000	Category:	Capital Improvement
Account:	2159	Urgency:	2 = Very Important
Inception date:	2014	Carry Forward:	Yes

Description

Replacement of current perimeter chain link security fence around the facility and all gates. The plant is rougly 8 acres in size. Fence will be replaced with an eight foot tall, PVC coated, chain link (2") fence with no barbed wire at this time. Project will include the removal of the existing perimeter fence, installation of new posts, erection of new chain-link fence with five perimeter personnel access gates and a new sliding entrance gate. Fence post material specification includes PVC coating of posts and a wall thickness of piping that will provide a minimum 30year life in the harsh marine environment.

Board approval to bid May 29, 2014 Resolution #2014-19

Justification

This Budget item was added to the Treatment Plant budget in 2014 in response to an earlier burglary at the Plant. The existing fence and posts have reached the end of their usable life and require replacement. The perimeter fence serves as a security fence to protect the public as well as to ensure wild animals do not enter the Treatment Plant. It is a critical part of plant security. The decision to construct an 8 foot fence over a shorter fence and barbewire was made to prevent access from deer and curious individuals. Research into fence hights concluded that a taller fence even without barbed wire provides better security. Plans and specifications for this project have been prepared and are ready to bid. Staff has postponed the fence replacement until June of 2015 so that it is completed immediately after the completion of construction of the new locker room. A portion of the fence will require removal during construction and the contractor requested that the new fence not be installed in that corner until they are complete.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$165,000						$165,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract	$ 165,000						$ 165,000
Total	$ 165,000	$ -	$ -	$ -	$ -	$ -	$ 165,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Rehab Influent Inlet Gates & Interconnect Gates**	Contact:	Pinkevich
Dept:	Treatment	Type:	CIP
Total Cost:	$80,000	Useful Life:	15 years
CY Budget	$80,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	Yes

Description

Located in the wet well are three gates - two on the west side of the sump and one on the east which enable staff to isolate portions of the sump as needed for maintenance, etc. While the gates are currently operational, their reliability is questionable.

Justification

All three of the gates are nearing or are at the end of their useable life span The dependability of these gates is of the utmost importance due to the criticality they play in the Plant's operation. Staff's ability to operate the gates to re-direct flow in emergency circumstances and the extremely dangerous circumstances that would occur as the result of any one of these gates failing while being utilized make it necessary to address them now.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$80,000						$80,000

Funding Source

Capital Reserves - 15% Reclamation

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies	$ 80,000						$ 80,000
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ 80,000	$ -	$ -	$ -	$ -	$ -	$ 80,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Rehabilitate Secondary Clarifiers**	Contact:	Pinkevich
Dept:	Treatment	Type:	CIP
Total Cost:	$150,000	Useful Life:	30 years
CY Budget	$75,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Rehabilitate the Secondary Clarifier center drive for #2 in 2015-16 and #1 in 2016-17.

Justification

The Secondary Clarifiers are 40 years old which is the average useful life for this type of structure. Currently Secondary Clarifier #2 is out of service because of the failure of the drive gear box. This project estimates cost of both equipment and installation for replaceing drive gear box each year.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$75,000	$75,000					$150,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment	$ 75,000	$ 75,000					$ 150,000
Total	$ 75,000	$ 75,000	$ -	$ -	$ -	$ -	$ 150,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Rehabilitate Maintenance Shop Exterior**	Contact:	Pinkevich
Dept:	Treatment	Type:	Buildings
Total Cost:	$35,000	Useful Life:	15 years
CY Budget	$35,000	Category:	Capital Improvement
Account:	2159	Urgency:	3 = Important
Inception date:	2012	Carry Forward:	No

Description

The maintenance shop is a metal-sided building and is in need of the typical maintenance seen with metal buildings. This building like many others in the plant shows signs that the challenging central coast environment will cause. Date of orignal installation of maintenance shop is unknown. A 30 ft extension was built in July-Aug 1999 for $67,736. The mezzanine structure was built in 2001-02 for $25,924 (see CIP #7).

The current structure exterior needs repair where it has been damaged (most clearly visible is Bay #1 where the backhoe hit the structure, but also at various other minor points). It is also in need of having the exterior re-coated as the elements and time have taken their toll.

Justification

This project will bring the shop to a functional and presentable state. Staff acknowledges that the entire facility is in need of a face-lift. The Metal Shop adjacent to Digester #1 was completed 14 months ago successfully - it is very similar construction to the Maintenance Shop so we've shown that we can rehab this type of structure.

The Maintenance Shop was selected as the next project because of the Long Term Capital Project that will be taking place at the same time. The Maintenance Shop is set back from the other areas of the plant that will be under construction and can undergo rehabilitation without interferring with that construction effort.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$35,000						$35,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment	$ 35,000						$ 35,000
Total	$ 35,000	$ -	$ -	$ -	$ -	$ -	$ 35,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Effluent Pumps VFD**	Contact:	Pinkevich
Dept:	Treatment	Type:	Effluent
Total Cost:	$35,000	Useful Life:	15 years
CY Budget	$35,000	Category:	Capital Equipment
Account:	2163	Urgency:	3 = Important
Inception date:	2014	Carry Forward:	No

Description

A Variable frequency drive (VFD) is an electronic controller that provides continuous control matching motor speed to the specific demands of the work being performed. In wastewater facilities the greatest energy draws comes from pumping and aeration – applications that are particularly suited to VFDs. VFD's enable the pumps to accommodate fluctuating demand, running pumps at lower speeds and drawing less energy while still meeting pumping needs. VFDs offer a "soft start" capability, gradually ramping up a motor to operating speed. This lessens mechanical and electrical stress on the motor system and can reduce maintenance and repair costs and extend motor life.

Justification

The plant effluent pumps VFD drives are in need of replacement due to age. When the expected life of VFD's reach their end they can become unreliable. In many cases older VFD's and other electronic devices are no longer supported and finding repair parts can be a major challenge.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$35,000						$35,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 10,000						$ 10,000
Parts & Supplies	$ 25,000						$ 25,000
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ 35,000	$ -	$ -	$ -	$ -	$ -	$ 35,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Aeration Basin #4 flowmeter**	Contact:	Pinkevich
Dept:	Treatment	Type:	Aeration
Total Cost:	$ 35,000	Useful Life:	15 years
CY Budget	$ 35,000	Category:	Capital Improvement
Account:		Urgency:	2 = Very Important
Inception date:		Carry Forward:	No

Description

Install a flowmeter on the discharge of #4 aeration basin. Of our three aeration basins (#4-5-6) this is the only one that has the potential to measure discharge flow.

Justification

Currently we do not measure the individual flows to our three aeration basins. We are capable of measuring the total flow in and out of aeration. Installing this flow meter will help us to regulate and balace the flows to the aeration basins and assist us in process control. Knowing these flows will better help us stabilize the F/M ratio (Food to Microorganism).

There currently is no way of dividing influent flow for Biochemical Oxygen Demand (BOD) loadings split between the tanks. The O2 demand to each tank is an estimate. A flowmeter installation would make this more accurate.

An ultrasonic ranging over the top of the basins would not be possible - it would require a weir (v-notch); however there is no place to locate a "clean" weir.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$35,000						$35,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 14,500						$ 14,500
Parts & Supplies	$ 20,500						$ 20,500
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ 35,000	$ -	$ -	$ -	$ -	$ -	$ 35,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Influent Pump Control System**	Contact:	Pinkevich
Dept:	Treatment	Type:	CIP
Total Cost:	$28,000	Useful Life:	15 years
CY Budget	$28,000	Category:	Capital Improvement
Account:	6511	Urgency:	3 = Important
Inception date:		Carry Forward:	Yes

Description

This project will address the shortcomings of the control system associated with the influent pumps. We propose to install a stand-alone Programmable Logic Controller (PLC) that will have the ability to sense pump failures and automatically place the lag pumps in service. this PLC will integrate with our future SCADA improvements.

Justification

Currently, if there is a failure with our influent pumps an operator would be required to monitor and manually control the pumps and adjust them according to the influent flow. The current system is outdated and replacement parts are difficult to obtain.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$28,000						$28,000

Funding Source

Capital Reserves

Budget Impact/Other

	Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
	Labor							$ -
Capital Reserve	Parts & Supplies							$ -
	Chemicals							$ -
	Utility							$ -
	Other - Equipment	$ 28,000						$ 28,000
	Total	$ 28,000	$ -	$ -	$ -	$ -	$ -	$ 28,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Physical Testing of Plant Structures/Equipment**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$ 100,000	Useful Life:	30 years
CY Budget	$ 25,000	Category:	Capital Improvement
Account:	6511	Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Rental of equipment or contracting as needed with companies who have specialties in equipment and structure materials testing. Examples of proposed testing is soil corrosively and pipeline cathodic test station evaluation. Also sonic imaging of internal concrete conditions, detailed heat imaging of electrical panels or vibration analysis of pumps and motors and video inspection. This is an on going budget item until all equipment has been evaluated and confidently placed into an on going maintenance program.

Justification

As part of efforts to improve the long term Asset Management Plan specific physical tests to further establish condition for key assets are needed to refine life expectancy of equipment and infrastructure. This testing is required to evaluate existing conditions of equipment, structures and piping as part of CAWD's ongoing refinement of the CIP. The initial Kennedy/Jenks CIP completed in 2012 recognized that much of the plant infrastructure condition assessment and grading was based on life expectancy of the equipment and not on detailed inspection. Much evaluation has occurred in the past 2 years, however; currently Engineering feels that 40% of the critical plant infrastructure remains to be properly tested and inspected to accurately place these items in the appropriate risk coordinate.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$25,000	$25,000	$25,000	$25,000			$100,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment	$ 25,000	$ 25,000	$ 25,000	$ 25,000			$ 100,000
Total	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ -	$ -	$ 100,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Laboratory modifications**	Contact:	Pinkevich
Dept:	Treatment	Type:	Lab
Total Cost:	$25,000	Useful Life:	20 years
CY Budget	$25,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

The CAWD LAB will be redesigned with improved workstations. The work stations will be given power, vacuum, air, feed lines, a new stationary compressor and a new safety barrier where needed for a more efficient work space. This work will be completed in-house.

Justification

The CAWD LAB work stations are in need of an upgrade to conform with present and upcoming OSHA standards. At the present time, the Lab has barrier and safety issues that must be addressed.

To conform with 29 CFR 1910.1450 for Laboratory Safety.

To conform with 29 CFR 1910.37 to conform with walkway standards.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$25,000						$25,000

Funding Source

Capital Reserves - 50% Reclamation

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies	$ 25,000						$ 25,000
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -

Capital Reserves	Total	$ 25,000	$ -	$ -	$ -	$ -	$ -	$ 25,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Structural Load Evaluation - Shop Mezzanine**	Contact:	Pinkevich
Dept:	Treatment	Type:	Buildings
Total Cost:	$60,000	Useful Life:	30 years
CY Budget	$20,000	Category:	Capital Improvement
Account:	2159	Urgency:	3 = Important
Inception date:	2013	Carry Forward:	No

Description

Hire consulting structural engineer to provide a comprehensive review of the modifications made to the maintenance storage Mezzanine in 2001-02. Structural analysis will be utilized to post load rating advisory signs at loading areas. If analysis reveals that the area will not support the loads anticipated by Maintenance staff, then modifications to under supports will be made to provide additional support. Engineering staff will assist in the evaluation and design and if needed funding in 16/17 has been provided to address any deficiencies.

Justification

This Mezzanine serves as the main storage area for the Maintenance department and is utilized for the storage of parts and equipment needed to maintain the treatment plant. Storage is limited at the treatment plant, so in order to maximize this space the California Sanitation Risk Management Authority (CSRMA) advised that the upper storage area is required to have a load rating posted at loading areas to prevent overloading. The initial construction drawings and permit information provided a load rating for the upper storage area. However when the storage area was modified to allow for additional space underneath, documentation was not provided confirming the as-builts conform to the original design intent. Engineering staff will assist. Load rating will ensure saftey in the event of an earthquake or to prevent static failure.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$20,000	$40,000					$60,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 20,000						$ 20,000
Parts & Supplies		$ 40,000					$ 40,000
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ 20,000	$ 40,000	$ -	$ -	$ -	$ -	$ 60,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Handrail repair/replacement**	Contact:	Pinkevich
Dept:	Treatment	Type:	Safety
Total Cost:	$77,500	Useful Life:	20 years
CY Budget	$20,000	Category:	Capital Improvement
Account:	2159	Urgency:	3 = Important
		Carry Forward:	No

Description

The plant currently has three types of handrails: aluminum, steel and stainless steel. Over the years the steel has degraded and is in need of repair or replacement. The stainless steel is in good condition, but is in need of a coating. Moving forward we will follow these guidelines: 1. New installations will utilize aluminum 2. Repairs to the current steel and stainless will be performed whenever possible. These metals will then be painted to match the aluminum rails.

Justification

Again, rails are in need of repair. Because of our plants proximity to the ocean we are highly suscptible to rust. The rails are a necessary safety component for our facility.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$20,000	$20,000	$15,000	$15,000	$7,500		$77,500

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 10,000	$ 10,000	$ 7,500	$ 7,500	$ 3,750		$ 38,750
Parts & Supplies	$ 10,000	$ 10,000	$ 7,500	$ 7,500	$ 3,750		$ 38,750
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ 20,000	$ 20,000	$ 15,000	$ 15,000	$ 7,500	$ -	$ 77,500

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Pipe Storage Area**	Contact:	Pinkevich
Dept:	Treatment	Type:	Buildings
Total Cost:	$20,000	Useful Life:	15 years
CY Budget	$20,000	Category:	Capital Improvement
Account:	2159	Urgency:	3 = Important
Inception date:	2013	Carry Forward:	No

Description

Install an overhang, gutters and a pipe rack on the side of the Treatment Plant storage building at the Treatment Plant.

Justification

The overhang on the storage building will protect the pipe from sun damage. The gutters will help to prevent the storage building from water build up which has been causing the building to rust. The shed area needs to have debris removed and the pipe storage area needs to be paved to allow forklift access. Currently, the proposed site of the new pipe storage consists of an uneven, unpaved plot on the south side of the above mentioned storage shed.

20% of costs are Reclamation - i.e. piping for ClearLogx, etc

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$20,000						$20,000

Funding Source

Capital Reserves (20% Reclamation)

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 5,000						$ 5,000
Parts & Supplies	$ 15,000						$ 15,000
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ 20,000	$ -	$ -	$ -	$ -	$ -	$ 20,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Road Improvements & Drainage Repairs**	Contact:	Pinkevich
Dept:	Treatment	Type:	Landscaping
Total Cost:	$60,000	Useful Life:	15 years
CY Budget	$15,000	Category:	Capital Improvement
Account:	2750	Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

As we progress through our CIP's and long term capital projects we will rehabilitate or replace roadways as needed. We continue to have areas in need of repair from water damage and we anticipate the construction vehicles will only accelerate wear on the asphalt surfaces.

Justification

Our plant has a small footprint and we will need to ensure that we keep our roads accessable to ensure safety. We receive numerous deliveries throughout the week and the plant can easily become congested.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$15,000	$15,000	$15,000	$15,000			$60,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000		$ 75,000
Total	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ -	$ 75,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Effluent building wetwell level monitoring upgrade**	Contact:	Pinkevich
Dept:	Treatment	Type:	Effluent
Total Cost:	$11,500	Useful Life:	15 years
CY Budget	$11,500	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

This project will address two major isses with the current wetwell level monitoring sysem:
1) The bubbler level control system is outdated and has exceeded its useful life. We propose installing two Siemens Ultasonic controllers with transducers. One to replace the existing bubbler system and a redundent system that will also be tied in to our SCADA system for monitoring and have remote access if needed.
2) This building has only one wetwell level monitoring system. Because of this it is a single point of failure which would have major impacts to plant staffing and proper operation of the treament plant.

Justification

The current wetwell level monitoring system was installed in 1980's. It is outdated and replacement parts are difficult to obtain. This system has also lived well beyond it expected useful life which has increased its probability for a failure. Monitoring system is used to control all three ocean discharge effluent pump thru SCADA so in the event of a failure the wetwell level control would require 24 hour staffing for manual pump control to ensure proper plant operation and permit compliance. The additional redundent level monitoring unit SCADA tie-in would allow ability to select the alternate level control unit if the primary were to malfunction causing uninterupted operation.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$11,500						$11,500

Funding Source

Capital Reserves - 50% Reclamation

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment	$ 11,500						$ 11,500
Total	$ 11,500	$ -	$ -	$ -	$ -	$ -	$ 11,500

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Webinar Capabilities in Operation Library**	Contact:	Pinkevich
Dept:	Treatment	Type:	Communications
Total Cost:	$8,500	Useful Life:	15 years
CY Budget	$8,500	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Purchase and install proper equipment needed to make the operations library/conference room suitable for webinars and webcasting. Equipment to be purchased includes: face-to-face camera, audio, center console microphone, 4G light bar.

Justification

Webinars are not only educational but many can be used to keep our employees compliant with their educational requirements needed for their various certifications. There continues to be a boom in the number of webinars offered and this fits in well with our goal to continue educating staff.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$8,500						$8,500

Funding Source

O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 3,000						$ 3,000
Parts & Supplies	$ 5,500						$ 5,500
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Capital Reserves Total	$ 8,500	$ -	$ -	$ -	$ -	$ -	$ 8,500

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Outfall Project - Lagoon**	Contact:	Lander
Dept:	Treatment	Type:	Outfall
Total Cost:	$592,908	Useful Life:	40 years
CY Budget	$500,000	Category:	Capital Improvement
Account:		Urgency:	2 = Very Important
Inception date:		Carry Forward:	Yes

Description

Complete the engineering design, environmental evaluation/studies, and construction of a new crossing for the outfall pipe currently crossing the South finger of the Carmel Lagoon. Current design direction includes the replacement of approximately 200 feet of the existing outfall pipe by excavating and burying the pipe under the South finger of the lagoon. This project requires the coordination of several State, Federal and local regulatory agencies. Due to the complexities of the lagoon habitat staff has contracted with an environmental consultant to prepare environmental review and assist with the permitting of this project. K/J Consultants have also been brought in to prepare engineering specifications for the crossing. Current design is at 20% and will require much more design before a bid package will be ready. Staff will maintain a course to complete design and build this crossing before September 2016, including restoring the disturbed areas. (Note: This project is part of Collections CIP: Replacement of Calle La Cruz Force Main. The force main is currently strapped to the outfall and will be replaced at the same time)

Justification

A visual inspection of the outfall crossing early on in 2014 revealed severe corrosion and structural failure of the existing piles is imminent if replacement is not undertaken in the next couple of years. The Hwy 1 Causeway Project proposed by Monterey County will further exacerbate this issue as it is the design intent of the Causeway Project to re-direct 60% of the river overbank flow into the South finger of the lagoon. This will increase not only the quantity of water but it will increase velocity of the water and the amount of woody debris that would pass that direction. Although the District has been in favor of the Causeway project, staff has recognized that the crossing must be repaired and completed before the County begins construction to ensure storm flows do not rip this critical asset off its foundation. $82,908 has been spent to date on project design. $10,000 has been spent on environmental work. This is a carry forward from the 14/15 budget year.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
	$ 92,908	$500,000						$592,908

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment	$ 500,000						$ 500,000
Total	$ 500,000	$ -	$ -	$ -	$ -	$ -	$ 500,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Co-Gen Feasibility Evaluation**	Contact:	Pinkevich
Dept:	Treatment	Type:	Study
Total Cost:	$40,000	Useful Life:	
CY Budget	$0	Category:	
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Develop a long term co-generation plan for power self-sufficiency of the treatment plant. Evaluation will include: 1) The timing and costs associated with replacing the existing Capstone turbines with replacements or alternative technology. 2) Present and Future cost analysis for replacement of the existing microturbines with natural gas power generators to run as a power supply for "on peak" power loads and to reduce the purchase of PG&E power. 3) Feasibility and practicality of other technologies applicable in a Coastal environment.

Justification

Currently the treatment plant utilizes nearly all of the methane produced at the anaerobic digester for the production of electricity and to meet the heating requirements of the digester. The reduction in power purchase is minor at this time but staff feels that there is a greater potential for the District to become more energy independent through the production of more digester gas (by receiving more grease) and through the purchase of less expensive natural gas to generate electrical power on District property. The existing Capstone generators have a finite life expectancy and will require replacement or rehabilitation within 10 years. Do to the rising cost of electrical power and the long term projections that natural gas will remain relatively stable. Staff feels it would be in the best interest of the District to lay out a long term plan for energy independence as well as understand the staffing needs and costs associated with each technology. This plan will be implemented as excising equipment is scheduled for replacement or as directed by the Board of Directors.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
			$40,000					$40,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Study		$ 40,000					$ 40,000
Total	$ -	$ 40,000	$ -	$ -	$ -	$ -	$ 40,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Digester Cleaning #1**	Contact:	Pinkevich
Dept:	Treatment	Type:	Digester
Total Cost:	$195,000	Useful Life:	15 years
CY Budget	$0	Category:	Maintenance
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

Last cleaned/inspected in 1998. Staff contracted cleaning services for Digester #1 as part of periodic maintenance. We have carried this project forward from 2012-13 because of questions about the reliability of Digester #1. Board approved purchase of equipment to improve reliability and defer cleaning until installation of equipment. Objective is to remove inert material and high concentrations of bio-solids from digester tanks. Benefits of digester cleaning include: a) increase detention time of bio-solids tank, b) reduce fuel costs to heat solids, c) increase digestion, and d) increase life of sludge pumps. This project will not happen until new digester planned for construction as part of Long Term Capital Project is in service.

Justification

This digester has dual mixers and has only been operating with a single mixer due to failure on the north mixer over two years ago. We have rehabilitated the failed mixer but are hesitant to reinstall until the digester has been cleaned. If we were to change the mixing dynamics in this digester at this point we risk lifting the accumulated grit and debris that has settled on the floor and potentially upsetting this digester by fouling the auxiliary equipment need to operate this digester. Because this digester receives grease it is imperative that we create and establish a healthy and well mixed digester. The cost estimate is based upon consultations with cleaning contractors and represents the worst case scenario with respect to the amount of grit settled in the tank (which cannot be determined w/o a dewatered tank inspection).

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
				$195,000				$195,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment			$ 195,000				$ 195,000
Total	$ -	$ -	$ 195,000	$ -	$ -	$ -	$ 195,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Demo Bridge across Carmel River**	Contact:	Pinkevich
Dept:	Treatment	Type:	Demo
Total Cost:	$210,000	Useful Life:	
CY Budget	$0	Category:	
Account:		Urgency:	4 = Less Important
Inception date:		Carry Forward:	No

Description

This project inlcudes the contracting with a profesional demolition service to completely remove this structure and footings from over the Carmel River. Minor bank restoration is proposed. This project may dovetail with a project to expand the trail system through Carmel so that it continues down the coast. We may be able to move the cost of demolition onto any rehab project.

Justification

Structural evaluation in 2011 confirmed that the crossing is not adequate for any use at this time and to minimize liability and risk to the District staff has proposed the demolition of the bridge. The same report also noted that "...we believe that the existing pipe trestle structure is not imminently subject to collapse under its own weight with empty utility pipes. Pedestrian live load should not be allowed on the structure (with the exception of one or two maintenance personnel at a time) as the structure is both structurally and functionally deficient for pedestrians." This budget item has been moved to unscheduled as the time frame for the future of this bridge is uncertain. Other public entities have expressed some interest in the bridge location as an "existing condition" for a new structure to access future hiking trails on the South side of the river. If the District was to remove the bridge now the benifits of the "exisitng condition" would be lost. It may be possible through local transportation agency, parks, and City of Carmel to donate the bridge and fund demolition and replacement costs through grant funding.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
							$210,000	$210,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment						$ 210,000	$ 210,000
Total	$ -	$ -	$ -	$ -	$ -	$ 210,000	$ 210,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Maintenance shop expansion**	Contact:	Pinkevich
Dept:	Treatment	Type:	Buildings
Total Cost:	$165,000	Useful Life:	25 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:		Carry Forward:	No

Description

To make the Maintenance Shop more useful and efficient, we will add and additional 1000 square feet of work area with a 30 foot roof-line, 20 foot overhead doors front to back and a new truck lift. At the time we demo the existing lunch room, it may be feasible to push out the Maintenance Shop to the north. Going forward CAWD is attempting to shift focus to increased maintenance.

Justification

The CAWD Maintenance shop is undersized to perform basic maintenance and larger repairs on fleet vehicles. It is underutilized due to its current layout, door set-up and truck-lift size.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
				$165,000				$165,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contractor			$ 165,000				$ 165,000
Total	$ -	$ -	$ 165,000	$ -	$ -	$ -	$ 165,000

CARMEL AREA WASTEWATER DISTRICT TREATMENT PLANT
LONG TERM CAPITAL PROJECTS - FY 2014/15 - 28/29

	PROJECT	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
1	Studies		$88,000			$50,000		$35,000		$50,000			$25,000			
2	Influent Conveyance & Screening		$60,000		$77,000	$200,000	$300,000			$60,000						
3	Influent Manhole Replace/Retrofit		$36,000		$162,000	$162,000										
4	Standby Blower Replacement		$450,000	$273,750												
5	Standby & Main Power Integration		$1,652,000	$1,432,375	$667,000											
6	Hypo/SBS (*Reclamation 40%*)		$800,000	$615,625												
7	Effluent Building *(Reclamation $20K)*				$200,000	$400,000					$400,000					
8	#3 Water System Improvements		$250,000	$172,500			$30,000									
9	Portable RAS Pumping							$35,000						$45,000		
10	Dewatering		$850,000	$796,250				$400,000								
11	Interim Digester Improvements(COMPLETED)															
12	Aeration Valve/Gate & Instrument Rehab				$41,000	$367,000										
13	RAS Building Rehab		$245,000	$240,000												
14	Primary Clarifier Rehab							$266,000	$1,293,000							
15	Secondary Clarifier Rehab							$242,000	$1,079,000							
16	Digester Firm Capacity Improvements	$347,000	$1,733,000	$1,811,250												
17	#1 Water Improvements		$352,000													
18	Storm Water Improvements	$56,000	$325,000	$347,750												
19	Demo Project									$525,000						
20	Headworks										$850,000					
21	50% Recl Thickener (*Reclamation 50%*)		$750,000	$675,000			$600,000									
22	Chlorine Contact (*Reclamation 25%*)									$1,511,000						
23	Ops Building Improvements		$50,000									$579,000				
24	Misc Yard Piping Rehab	$89,000	$89,000	$89,000	$89,000	$89,000	$89,000	$89,000	$89,000	$89,000	$89,000	$89,000	$89,000			
25	Septage/grease Receiving Station										$600,000					
26	Flare - Replace & Relocate		$550,000	$325,000												
27	Co-Gen Project												$775,000			
28	Aeration Basin Rehabilitation												$740,000			
29	Replace Standby Generators											$400,000	$400,000			
30	Treatment Plant Administraton Bldg													$3,000,000		
31	Gas Conditioning System								$325,000							
32	Lunch Room/Meeting Room Replacment						$175,000	$510,000								
33	CM contract for Phase 1 Construction		$997,831	$997,832												
34	CM contract for Phase 2 Construction					$300,000	$300,000									
35	Sea Level Rise Analysis & Planning		$50,000	$50,000	$50,000											
36	Digester Rehabiliation				$425,000	$575,000										
37	PLC Programming (CalCon)		$95,000	$95,000												
38	Arc Flash Study (Beecher Eng)			$50,000												
39	WWTP O&M Manual				$250,000											
40	SCADA Network - Phase II						$932,000									
41	Chlorine Building										$150,000					
42	Blower Building							$500,000								
43	Influent Pump Station						$600,000									
44																
	TREATMENT & DISPOSAL TOTAL	**$492,000**	**$9,422,831**	**$7,971,332**	**$1,961,000**	**$2,143,000**	**$3,026,000**	**$2,077,000**	**$2,786,000**	**$2,235,000**	**$2,089,000**	**$1,068,000**	**$2,029,000**	**$3,045,000**	**$0**	**$0**
	RECLAMATION SHARE (1)	$20,000	$695,000	$583,750	$20,000	$0	$300,000	$0	$0	$377,750	$0	$0	$0	$0	$0	$0
	PBCSD SHARE	$157,333	$2,909,277	$2,462,527	$647,000	$714,333	$908,667	$692,333	$928,667	$619,083	$696,333	$356,000	$676,333	$1,015,000	$0	$0
	CAWD COST	**$314,667**	**$5,818,554**	**$4,925,055**	**$1,294,000**	**$1,428,667**	**$1,817,333**	**$1,384,667**	**$1,857,333**	**$1,238,167**	**$1,392,667**	**$712,000**	**$1,352,667**	**$2,030,000**	**$0**	**$0**

(1) PBCSD to pay 1/3 of costs. (After Reclamation portion deducted, if applicable) unless otherwise noted. *Projects in italics are not funded directly by PBCSD*

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Studies**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$248,000	Useful Life:	5 years
CY Budget	$88,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2013	Carry Forward:	No

Description

Planned Engineering Studies - These studies are to review, analyze and to provide supporting technical information for future capital projects. Some examples of studies completed during the 2014-2015 budget year include the Power feed study and also the primary vs. secondary metering analysis. Also completed was the Flood modeling/Stormwaer reliability improvement study. Information gained as a function of these studies were utilized to make decisions on future improvements.

Studies by Year:

15/16 - $88,000 to be allocated to additional process related evaluations and equipment performance studies for planning of Phase 2 Capital Improvements as well as complete Floodplain documentation and reports for the new Plant improvements made in the floodplain (required by Title 44 CFR). Additional Air quality reports may be needed by local regulatory agencies to support plant equipment improvements.

18/19 - $50,000 to be used to further study process for Phase 2 CIP. Also to update flood mapping as needed.

20/21 - $35,000 to review Energy usage and power generation possibilities and to audit how Phase 1 Capital Improvements have improved process and

22/23 - $50,000 Current NPDES permit requires a technical evaluation be completed regarding the Plant effluent effects on the Carmel Bay in 10 years. These funds shall be utilized to hire an outside independent firm to perform this evaluation as directed by the State Water Quality Control Board (SWQCB).

25/26 - $25,000 Independent plant operations and process audit to evaluate improvements made to the Plant during First 10 years of CIP program.

Justification

Studies are an integral part of the Capital Improvement planning process. These technical evaluations are a tool to obtain required data upon which engineering and planning decisions can be refined. Studies are also required to provide documentation to support operational decisions.

Expenditures:	Prior	15-16	18-19	20-21	22-23	25-26	Unsched.	Total
		$88,000	$50,000	$35,000	$50,000	$25,000		$248,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Influent Conveyance & Screening**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$697,000	Useful Life:	20 years
CY Budget	$60,000	Category:	Capital Improvement
Account:		Urgency:	4 = Less Important
Inception date:	2013	Carry Forward:	No

Description

This project originated as part of the K/J capital infrastructure evaluation completed in 2012. This project was originally described as improvements to the influent pumps to restore capacity and evaluate condition, and to reduce "ragging" of the Influent pumping system by conditioning or screening influent. Since the inception of this project staff has undertaken several improvements on an emergency basis to restore capacity to the pumps. This work is completed and is reflected in the adjustment of project cost projection. To date Staff has performed or had performed the replacement of all pump volutes and impellers. All pumps have been serviced and are mechanically sound. Influent pump motors will require major routine service within the next seven years.

Function: The Influent Pumps transfer variable influent flow from the Influent wet well to the Influent Manhole which is at a higher elevation to allow gravity flow through the primary and secondary treatment processes. The Influent wet well provides removal of grease and settling of heavy objects before the influent pumps and provides storage volume to keep influent pumps from cycling on and off. The 14-15 year budget included the replacement of the check valves and wetwell gates which is scheduled to occur before the end of the fiscal year. Full asset inspection will also occur before the end of this fiscal year which will provide Engineering with the information needed to further refine this budget item.

Failure Modes Addressed:
1. The influent pumps often bind up due to rags and debris in the wastewater stream. This requires frequent staff intervention and has brought to the attention of Staff concerns that pumps may not function properly during off hour times when staff is not at the plant. This could cause significant overflows.
2. The influent pump station and piping is subjected to hydrogen sulfide gases and friction wear that can cause piping and concrete to begin to leak or crack.

Justification

The Influent system conveys up to 10 MGD flows during wet weather and would be subject to significant untreated wastewater spills if a failure of the conveyance system was to occur. Several improvements have been made to the Influent pump station by staff this year to improve reliability, including replacement of all three of the pump volutes and pump motor inspections. This work was required to be completed prior to any evaluation of the influent manhole. Due to staffing constraints Staff has not been able to bypass the Influent pump station piping to allow for the appropriate inspection. This work has now been scheduled and is included in the current year Maintenance budget. Lighting and roof repairs to the building have been addressed or have been placed in other budgeted item tasks. In addition to this work staff has been given the opportunity to test 2 new chopper pumps in the influent wetwell to mix and condition the influent. These pumps have just recently been installed so some time will be required to know if they significantly reduce influent pump ragging. If they do, then an influent screening design project may not be needed. Funds budgeted for this year are to cover the cost of these two pumps if they indeed work. If they do not perform as expected staff can return them to the manufacturer at no cost.
If the planned $60,000 is spent this year then a considerable reduction in future years proposed spending will occur. Additional inspection is required to fully evaluate this asset and this will occur as part of the scheduled Maintenance project this year.

Expenditures:	Prior	15-16	17-18	18-19	19-20	22-23	Unsched.	Total
		$60,000	$77,000	$200,000	$300,000	$60,000		$697,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Influent Manhole Replace/Retrofit**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$360,000	Useful Life:	30 years
CY Budget	$36,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2013	Carry Forward:	No

Description

This project originated as part of the K/J capital infrastructure evaluation completed in 2012. It is directly associated with the Influent Conveyance project. This project aims to improve condition of the Influent Manhole, the sluice gates and to inspect/rehabilitate buried influent piping as needed because not inspection has been completed prior. The Influent Piping and valves in the Influent Building are scheduled to be replaced this year at which time this system will be fully inspected to further refine this project.
This project was originally described as improvements to restore hydraulic capacity of the influent manhole. Hydraulic concerns related to the Influent Manhole capacity coupled with unknown corrosion of influent piping systems makes the Influent Manhole and Influent Piping a high risk group of assets.

Function: The Influent Manhole which is at the highest elevation in the Plant, allows gravity flow through the primary and secondary treatment processes.

Failure Modes Addressed:
1. Pipe and concrete failure due to age and abrasion.
2. Rust and corrosion of metal gates and piping.

Justification

The Influent Building needs repairs to the roof and influent wet well equipment and lighting.. The condition inside buried and exposed influent piping is unknown and therefore piping should be inspected and an allowance budgeted for improvements to piping to mitigate against possible corrosion related failure of influent pump piping. This inspection is scheduled for completion prior to the end of this fiscal year. This year while the influent pump station is planned to be bypassed (in order to complete maintenance to the check valves and piping) Engineering staff will coordinate with Operations staff to fully evacuate the Influent Manhole, inspect the piping and prepare documents to properly repair any damage noted. Until this comprehensive internal inspection is completed staff has relied on external visual evaluation to conclude that the infrastructure is in need of significant maintenance however there is no indication that the structure is in imminent danger of failure. Recently the December 2014 storms pushed the hydraulic capacity of this equipment and staff found that although some volume is restricted the system was able to pass the anticipated 10MGD inflow. Staff has moved this project out two years until additional information becomes available to more accurately evaluated this project. Maintenance cleaning is scheduled to occur this year during inspection. This project is not yet a carry forward because the project was not yet planned to begin.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$36,000		$162,000	$162,000			$360,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Standby Blower Replacement**
Dept:	Treatment
Total Cost:	$723,750
CY Budget	$450,000
Account:	
Inception date:	2013

Contact:	Lander
Type:	Other
Useful Life:	30 years
Category:	Capital Improvement
Urgency:	2 = Very Important
Carry Forward:	Yes

Description

This project has been designed and included as part of the WWTP Rehabilitation Project to be installed over the next two fiscal years. Replace existing standby blower with a properly sized blower to provide a backup blower for the only reliable blower. Include energy saving modifications to the existing blowers such as inlet throttling or variable speed drives if financially efficient (i.e. acceptable payback on energy savings investment). Other improvements to the air piping and upgrades to blower electrical systems may be included in the project.

Justification

Currently we operate one centrifugal blower that is in use 24 hours a day 7 days a week. This blower supplies the oxygen needed for the microorganisms in the aeration basins to survive. This blower was installed in 1998 when it was determined that the existing blower installed in 1994 was oversized and energy cost was excessive. The two existing blowers from 1994 are not dependable and are in need of costly repairs to refurbish to give us a redundant/backup system.

Function: The blowers provide air to the aeration basins to maintain sufficient dissolved oxygen levels.

Failure Modes Addressed:
1. The existing standby blowers have bent drive shafts and vibrate excessively when operated. The standby blowers with bent shafts are the only backups to a single reliable blower.
2. Redundancy/reliability of the blower system. Dissolved oxygen in the aeration basins is critical for reducing BOD in the treatment process. Currently there is only one reliable blower. For a critical system such as the blowers there should be a redundant blower.
3. The blowers use the most energy of any other process in the treatment plant. Investments in more energy efficient controls could reduce the overall life cycle cost of the blower system.

Expenditures:	Prior	15-16	16-17	Unsched.	Total
		$450,000	$273,750		$723,750

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Standby Main Power Integration**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$3,751,375	Useful Life:	30 years
CY Budget	$1,652,000	Category:	Capital Improvement
Account:		Urgency:	
Inception date:	2013	Carry Forward:	Yes

Description

This project has been designed and included as part of the WWTP Rehabilitation Project to be installed over the next three fiscal years, although it is heavily front loaded due to equipment costs. Upgrade switchgear and main power feeders. Relocated updated electrical equipment to optimize space in the Operations Building and to make space in the electrical room for a future SCADA control and monitoring station.

Justification

The main power feed into the plant provides electricity for plant operations. Existing equipment is antiquated and prone to failures. When equipment fails there are no off the shelf replacement parts due to age of equipment. Much of the infrastructure has not been cleaned over the years and corrosion is present.

Failure Modes Addressed:
1. Lack of integration of electrical systems makes it difficult to maintain reliability of electrical systems
2. The main power feed equipment is approximately 40 years old.

Expenditures:	Prior	15-16	16-17	17-18	Unsched.	Total
		$1,652,000	$1,432,375	$667,000		$3,751,375

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Hypo/SBS (Reclamation 25%)**
Dept:	Treatment
Total Cost:	$1,415,625
CY Budget	$800,000
Account:	
Inception date:	2013

Contact: Lander
Type: Other
Useful Life: 30 years
Category: Capital Improvement
Urgency: 1 = Critical
Carry Forward: Yes

Description

This project has been designed and included as part of the WWTP Rehabilitation Project to be installed over the next two fiscal years. Convert the existing chlorine gas disinfection system to a bulk 12.5% liquid sodium hypochlorite disinfection system. A new tank storage double containment pad would be built with multiple polyethylene storage tanks to store sodium hypochlorite chemical. Chemical feed pumps would be located on the double containment pad and would pump sodium hypochlorite upstream of the chlorine contact channels for disinfection. A feed would also be provided for disinfection of the recycled water upstream of the recycled water chlorine contact channels. Construct an additional sodium bisulfite (SBS) storage tank to provide a redundant SBS storage tank to increase reliability of the de-chlorination system.

Justification

The level of service of the chlorination and de-chlorination chemical systems is to dose and disperse chlorine upstream of the chlorine contact channel and does SBS downstream of the chlorine contact channel. The Chlorine gas system has been very effective, but it does pose certain risks and dangers to the surrounding community. The system is nearing its useful life expectancy and it is time to over-haul the system. The District has decided to improve overall public safety by applying a liquid disinfectant which can be handled with a much lesser public risk.

Failure Modes Addressed:
1. The existing chlorine gas cylinder room is used for both storage of standby chlorine gas cylinders and for use of cylinders. Because the chlorine gas cylinder room is used for storage of cylinders a chlorine scrubber is required per California Fire Code (CFC) Section 3704.2.2.7 Exception 2. The gas storage room is currently not equipped with a scrubber.
2. There have been minor valve failures in the chlorine gas system in the past which calls for upgrades and rehabilitation of the existing gas feed system piping.

Expenditures:	Prior	15-16	16-17	17-18	Unsched.	Total
		$800,000	$615,625	$0		$1,415,625

Funding Source

Long Term Capital - 40% Reclamation

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Effluent Building & Equipment**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$1,000,000	Useful Life:	30 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	4 = Less Important
Inception date:	2013	Carry Forward:	No

Description

This project will remain unchanged from the 14/15 budget at this time however a couple of improvements affecting this building will be undertaken this year as Treatment plant CIP and maintenance. The roof is still scheduled for repair, unused #3W pumps will be demolished (all equipment no longer in service), the check valves will be replaced and the motors will be removed for inspection and rebuilt as needed. Electrical upgrades (New MCC, etc.) are proposed to be moved out to 17-18 and 18-19 fiscal years because internal inspections have concluded the equipment is functioning relatively well for its age and condition and based on this review the cost of replacement pumps may be able to be moved back to FY2023/24. Other building clean up will be undertaken by staff. In 23-24 the VFD controllers will need to be upgraded along with rehabilitation to the Cathodic protection system on the outfall pipe.

Rehabilitate the existing effluent pump system with new/rebuilt effluent pumps, paint all equipment and upgrade aging electrical systems in the effluent building.

Justification

The effluent pumping system is essential to the function of the treatment plant. The pumps have operated reliably for many years with little to no maintenance. Staff has recently inspected and performed maintenance on these pumps and found that due to the minor use they receive during periods of dry weather the pumps are in relatively good shape now that they have been cleaned up. The electrical system is still very old and requires upgrades however staff feels it appropriate to postpone this work while we undertake the WWTP Rehabilitation.

The existing MCC-ESM equipment is well beyond its useful service life and new replacement parts are no longer commercially available. Additionally, the MCC-ESM main circuit breakers are in need of replacement. To enhance power system reliability, the existing main power feeders to MCC-ESM, which are nearly 40 years old, need to be replaced with new conductors. The existing PLC-6 hardware is no longer supported by Allen-Bradley and is beyond its useful service life. The existing main power feeder conduits enter the structure via the basement. During wet weather, there is significant water intrusion into the basement level via the electrical conduits. To mitigate this problem, the existing underground ductbank runs would be modified to turn the "up" above grade and enter the building at the ground level. The existing bubbler level system is beyond its useful service life and will require significant long-term maintenance. This level measurement system would be replaced with a modem ultrasonic level measurement system.

Expenditures:	Prior	15-16	16-17	17-18	18-19	23-24	Unsched.	Total
				$200,000	$400,000	$400,000		$1,000,000

Funding Source

Long Term Capital - Reclamation $20K

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name: **#3 Water System Improvements**
Dept: Treatment
Total Cost: $452,500
CY Budget: $250,000
Account:
Inception date: 2013

Contact: Lander
Type: Other
Useful Life: 30 years
Urgency: 2 = Very Important
Carry Forward: Yes

Description

K/J has proposed refurbishing the present #3W system by replacing the strainers, automating the pressure release valve and repairing the pressure tank. This project was pushed from 13-14 and has been combined with the larger bid package for the Rehabilitation plant improvements. This will reduce this cost. Design is complete and has been included into the bid package to begin in 15-16.

Construction of replacement equipment to rehab the existing 30 year old #3 Water System hydro pneumatic tank. Replacement of #3 strainer and replacement of electrical controls and instrumentation systems. These are old pumps and have reached the end of their useful life.

Justification

The #3 water system is the in-house recycled water supply. It was placed into service in the late 1980's and is located at the Chlor/De-chlor building (CDC). It consists of three vertical turbine pumps that pull from Chlorine contact channel #2.
#3 water is pumped through 6" steel pipe through a motorized strainer and is discharged to a pressurized hydro-pneumatic tank. This system has lacked the proper attention and is now restricting flow to the hydro-pneumatic tank and the strainer has failed and been out of service for several years. In addition to issues with the strainers and potentially the pressurized water tank, there are five critical gate valves associated with this system that are in need of attention.
The #3 water provides cooling to a number of key assets throughout the facility such as:

- ☐ Influent Pumps (packing)
- ☐ Effluent Pumps (packing)
- ☐ Emergency Generator (Cooling system)
- ☐ Waste Activated Sludge Pumps (packing)
- ☐ Return Activated Sludge Pumps (packing)

The system also supplies cooling and injector water for chlorination system for microfiltration and reverse osmosis system. This injector system is also one of three ways to chlorinate the secondary effluent. This water is also used to flush lines and hose tanks throughout the plant.

This system supplies reclaimed water throughout the WWTP for pump seal water, spray-water for secondary clarifier scum collection, belt filter press spray water, and various wash-down and flushing uses.

Failure Modes Addressed: The existing #3 Water System has reached the end of its useful life and major components such as the hydro pneumatic tank could fail resulting in a loss of service, the highest consequences of failure could be related to loss of process pump seal water.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$250,000	$172,500			$30,000		$452,500

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Portable RAS Pumping**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$80,000	Useful Life:	30 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	4 = Less Important
Inception date:	2013	Carry Forward:	No

Description

This item has been combined with item #13. Staff preformed maintenance to the existing pumps which returned some redundancy to the system and also purchased hose sections that allowed staff to utilize existing equipment to bypass the pump system if needed. Therefore the portable Return Activated Sludge (RAS) pumps were not purchased. K/J has modified some of the design this year as further investigation influenced the design.

Justification

Full rehabilitation of this system will occur as part of the WWTP Rehabilitation beginning this coming year and future portable pump replacements are placed in the future as needed.
Portable pumps dedicated to this system are not needed at this time because staff has developed a equally effective redundancy plan in the interim while the new pumps are constructed.

Expenditures:	Prior	20-21	26-27	Unsched.	Total
		$35,000	$45,000		$80,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Sludge Dewatering Improvements**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$2,046,250	Useful Life:	30 years
CY Budget	$850,000	Category:	Capital Improvement
Account:		Urgency:	2 = Very Important
Inception date:	2013	Carry Forward:	Yes

Description

Removal of antiquated equipment was accomplished this year. The original belt press was removed as well as all polymer mixing machines that were in the basement. None of that equipment had been used for more than a decade. The District currently has no redundancy to the existing belt press. A new screw press with associated piping, electrical and SCADA improvements have become part of the WWTP Rehabilitation project to be performed over the next two fiscal years.

Work required includes Construction of a backup dewatering skid adjacent to the existing belt filter press (BFP). Required demolition of the current non-operational BFP which was accomplished this year. Recommended dewatering equipment includes a screw press, which has a smaller footprint than a BFP and will permit future maintenance of the existing BFP. A screw press has been piloted last year and has been proven to be successful. Construction should be sequenced to allow temporary dewatering activities with the new skid outside of the BFP building while demolition and maintenance activities commence inside the building. The project would also address miscellaneous mechanical, electrical systems and controls upgrades to replace assets which are near the end of their useful life. The existing belt press will continue to be utilized as the redundant equipment until 20-21 when a second screw press will be purchased.

Justification

The proposed improvements will occur as part of the WWTP Rehabilitation beginning this coming year. The dewatering equipment dewaters digested sludge to reduce the volume of sludge that needs to be transported for disposal (approximately 85% reduction in sludge volume). This equipment is now needed because the District no longer utilizes drying beds to reduce sludge volume.

Failure Modes Addressed:
1. Lack of reliability/redundancy of existing dewatering equipment. There is currently only one operable BFP therefore if the BFP breaks down there would be no means of dewatering sludge requiring costly liquid hauling and/or emergency dewatering services.
2. Lack of maintainability of the existing BFP. The existing BFP cannot be rebuilt due to the adjacent non-operational BFP and lack of space adjacent to the unit.
3. The existing operational BFP was installed in 1998 and is need of repairs for reliable operations.
4. Other miscellaneous assets in the BFP building (e.g. filtrate return pumps, electrical and PLC equipment) are at the end of their useful life and should be replaced as part of this project for economies of scale.

The existing Input/Output (I/O) panel hardware is no longer supported by Allen-Bradley and is beyond its useful service life. This panel currently houses the remote pump station radio communication equpment, which would need to be relocated to a separate location once the remote I/O panel is eliminated. The new motore control center equipment being provided as part of the current Phase I Rehabilitation Project contains adequate space for the addition of a second screw press.

Expenditures:	Prior	15-16	16-17	20-21	Unsched.	Total
		$850,000	$796,250	$400,000		$2,046,250

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Interim Digester Improvements**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$0	Useful Life:	30 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	
Inception date:	2013	Carry Forward:	No

Description

Digester heating improvements have been completed within budget. By: Blocka Construction Inc.

Justification

Expenditures:	Prior	15-16	16-17	Unsched.	Total
					$0

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Aeration Valve/Gate & Instrument Rehab**
Dept:	Treatment
Total Cost:	$408,000
CY Budget	$0
Account:	
Inception date:	2013

Contact:	Lander
Type:	Other
Useful Life:	30 years
Category:	Capital Improvement
Urgency:	4 = Less Important
Carry Forward:	No

Description

Rehabilitate exposed process piping and valves in the area of the Aeration Basins. Replace failed Aeration Basin effluent sluice gates. Conduits, wiring and miscellaneous instrumentation will need to be rehabilitated. Budget in 17-18 is for design and replacement parts needing to be ordered with long lead times to complete the rehabiliation.

Justification

The Aeration Basin converts BOD to biomass. Piping conveys return activated sludge and mixed liquor to support the process and instrumentation provides monitoring for reporting and control of the process.

Failure Modes Addressed:
1. Exposed piping and valves in and around the aeration basins are in a corrosive environment and will need to be rehabilitated or replaced. PVC piping will need to be replaced due to exposure to ultraviolet (UV) light.
2. Sluice gates for the aeration basins effluent are corroded and are no longer operable. Sluice gates will need to be rehabilitated or replaced due to corrosion.
3. Instrumentation and associated electrical controls will need to be replaced at the end of their useful life as part of other rehab work in this project. Instrumentation is exposed to sunlight which reduces the life of panels and gauges.

Expenditures:	Prior	15-16	16-17	17-18	18-19	Unsched.	Total
		$0	$0	$41,000	$367,000		$408,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**RAS Building Rehab**
Dept:	Treatment
Total Cost:	$485,000
CY Budget	$245,000
Account:	
Inception date:	2013

Contact:	Lander
Type:	Other
Useful Life:	30 years
Category:	Capital Improvement
Urgency:	2 = Very Important
Carry Forward:	Yes

Description

These improvements have been included in the WWTP Rehabilitation project to be completed over the following two years.
Repair or replace electrical equipment (wiring, breakers) in the RAS Pump Building. Install new dedicated sludge wasting pumps and an ultrasonic level sensor in the RAS wet well. Mechanical improvements include installing permanent connections for portable pumps to the RAS wet well for emergency RAS pumping in the event of a failure of the RAS pumps, piping or valves. Rehabilitation/Replacement of existing pump valves.

Justification

After inspection of the existing electrical equipment in the RAS building staff determined that failure was imminent and that replacement of this equipment was due. Staff has put together an emergency plan for bypass if required, however appropriately fixing this issue prior to failure is the best outcome. Equipment in the RAS Pump Building has reached the end of its useful life. Several repairs have been made to this system this year just to keep the equipment functioning and without providing additional redundancy.

Failure Modes Addressed:
1. Existing electrical wiring has been severely compromised due to corrosion. Electrical equipment (wiring, breakers, etc.) are 40 years old which is beyond the average useful life of electrical equipment.
2. Existing mechanical (valves and piping) equipment is aged and will need to be rehabilitated or replaced.
3. Safety. In addition to the condition and age of electrical equipment, electrical equipment in the RAS Pump Building is in close quarters to working areas which increase hazards if work needs to be done to repair electrical equipment in the event of an electrical failure.
4. Sludge wasting pumps to replace the current practice of flow control valves may improve efficiency of the sludge process by reducing loading on solids treatment equipment.

Expenditures:	Prior	15-16	16-17	17-18	18-19	Unsched.	Total
		$245,000	$240,000	$0	$0		$485,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Primary Clarifier Rehab**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$1,559,000	Useful Life:	30 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2013	Carry Forward:	No

Description

Rehabilitate the Primary Clarifier structures (by internal lining or concrete repair). Rehabilitate effluent launders (coating). Replace sludge collector mechanisms.

Justification

The Primary Clarifiers remove settleable solids from the liquid treatment process. and are a required part of the treatment process. Currently full inspections have not occured on these structures so they remain in the future as a project that will be required. Inspection is expected to occur in the next 6 months to allow staff to better understand the exisiting condition, design and plan for repairs. Currently age is the only factor for condition that has been used to evaluate this equipment.

Failure Modes Addressed:
1. The Primary Clarifier structures are over 40 years old which is the average useful life for this type of structure. There are signs of degradation of the concrete structure both on the exterior of the tanks (cracks with efflorescence) and inside the effluent and scum boxes (concrete biogenic sulfide corrosion).
2. The Primary Clarifier Sludge Collectors are beyond their useful life and will need to be replaced.

Expenditures:	Prior	20-21	21-22	Unsched.	Total
		$266,000	$1,293,000		$1,559,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Secondary Clarifier Rehab**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$1,321,000	Useful Life:	30 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2013	Carry Forward:	No

Description

Rehabilitate Secondary Clarifier structures after detailed seismic review and materials testing of the structure. Rehabilitate effluent launders (coating). Replace sludge collector mechanisms.

Justification

The Secondary Clarifiers remove suspended and floatable biomass from the mixed liquor coming from the Aeration Basins. One of the two clarifiers where taken out of service this year to be inspected. The inspection revealed that the structure is in fairly good shape. Some coating repair will be needed and an overall rehab is approaching. However there was nothing noted that was imminent failure. This project will remain as scheduled at this time.

Failure Modes Addressed:
1. The secondary Clarifier Structures are 40 years old (Clarifier #1) and 30 years old (Clarifier #2) which is about the average useful life for this type of structure. Because they are nearing the end of their useful life the structures should be evaluated and repaired to extend the useful life.
2. The Secondary Clarifier Sludge Collectors are beyond their useful life and will need to be replaced.

Expenditures:	Prior	20-21	21-22	Unsched.	Total
		$242,000	$1,079,000		$1,321,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Digester Firm Capacity Improvements**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$3,891,250	Useful Life:	30 years
CY Budget	$1,733,000	Category:	Capital Improvement
Account:		Urgency:	1 = Critical
Inception date:	2013	Carry Forward:	Yes

Description

This project has been designed and included as part of the WWTP Rehabilitation Project to be installed over the next two fiscal years. The remaining budget will be carried forward. Design of the new Digester system is complete. Some funds have been allocated for the remainder of FY2014/15 to pay for mobilization to begin construction in the Summer of 2015. This budget remains on track. Staff has increased the digester volume to 400,000 gal to conform to the permit capacity of the plant.

Improvements include construction of a new approximately 360,000 gallon digester complete with ancillary equipment (mixing system, digester gas equipment, sludge heating equipment, etc.). The new digester would be integrated with Digester #1. New equipment is to be constructed adjacent to the new digester inside the Digester Control Building.

Justification

The digesters provide solids retention time of over 15 days for anaerobic digestion. Equipment level of service is to heat and mix the digester sludge to facilitate mesophilic conditions and pathogen removal in order to meet Class B bio solids regulation.

Failure Modes Addressed:
1. Capacity failure. The existing digestion system does not have adequate capacity to digest sludge with Digester #1 out of service (i.e. firm capacity with largest unit out of service).
2. Digesters #2 and #3 are both in poor condition and exhibit signs of structural degradation.
3. Digester #2 and #3 gas piping is in poor condition.
4. Digester #2 Mixer is losing a quart of oil every week which may be an indication of a pending failure.

Expenditures:	Prior	14-15	15-16	16-17	Unsched.	Total
		$347,000	$1,733,000	$1,811,250		$3,891,250

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name: **#1 Water Improvements**
Dept: Treatment
Total Cost: $352,000
CY Budget $352,000
Account:
Inception date: 2013

Contact: Lander
Type: Other
Useful Life: 25 years
Category: Capital Improvement
Urgency: 2 = Very Important
Carry Forward: Yes

Description

These improvements have been included in the WWTP Rehabilitation project to be completed over the following two years.
Construction of a new #1 Water Feed System (storage tank, distribution system pressurization pumps, and hydropneumatic tank). New #1 Water System feed system is to be located outside of the Operations building. Replacement of #1 Water distribution piping not included (see Misc Yard Piping Rehab and Replacement Project).

Justification

Supply potable water throughout the plant for use in restrooms, sinks, lab, pump seal water, and emergency eyewash showers.

Failure Modes Addressed: The existing #1 Water System has reached the end of its useful life and major components such as the storage tank could fail resulting in a loss of service.

Expenditures:	Prior	14-15	15-16	16-17	Unsched.	Total
		$0	$352,000	$0		$352,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Stormwater Improvements**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$728,750	Useful Life:	30 years
CY Budget	$325,000	Category:	Capital Improvement
Account:		Urgency:	2 = Very Important
Inception date:	2013	Carry Forward:	Yes

Description

These improvements have been included in the WWTP Rehabilitation project to be completed over the following two years.
The Stormwater pump station has been designed to self contain the drainage of the 7.39 acres inside the treatment plant fence line. All storm drains will run to a central wet well where any drainage from inside the plant will be returned to the head of the plant for treatment via two submersible pumps. The system is designed to return all drainage up to a plant flood event. This project includes the installation of a wet well, electrical and SCADA servicing the two numerable pumps and the in ground piping required to return the plant drainage to the head of the plant. This pipeline will also be tied into the lines allowing the District to fill an empty digester with storm water for storage if needed. This will be one of the first projects to start the Rehabilitation project, so it is expected that some funds will be spent prior to the end of this current fiscal year.

Justification

The current storm drain system is completely inadequate for protecting the riparian habitat surrounding the facility. Currently our storm water collection system has no reliable means of capturing the water leaving the plant if it proved necessary, i.e. hazardous chemicals being accidently spilled into a storm drain.

This project will create an in-house pump station for the plant's drainage system. This pump station would automatically return the collected liquid to the beginning of the treatment process, as opposed to discharging to the Lagoon. We will replace the current catch basin that is manually operated with a pump station equipped with an overflow system in the event that the pump station was to fail. Additionally, we will conduct an evaluation of the piping network that feeds the system.

Our recent (Feb 2013) audit by the EPA called us out on the inlet protection at each drain. We will solve this problem by installing barriers at each drain location to prevent soil and debris or other material from entering the storm drain drop inlets.

Failure Modes Addressed: The Plant storm water system should be self-contained and all water/spills returned to the head of the plant for processing. Anything less opens the door to potentially sending pollutants out into the habitat area surrounding the facility.

Expenditures:	Prior	14-15	15-16	16-17	Unsched.	Total
		$56,000	$325,000	$347,750		$728,750

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Demo Project**
Dept:	Treatment
Total Cost:	$525,000
CY Budget	$0
Account:	
Inception date:	2013

Contact:	Lander
Type:	Other
Useful Life:	
Category:	Capital Improvement
Urgency:	2 = Very Important
Carry Forward:	No

Description

This project includes the removal of the digesters currently known as #2, #3, #4. This project will include the cleaning of the tanks, and the removal of all three including any equipment servicing them and electrical. In 1938 Digester 3 and Sludge Holding Tank 4 were built, in 1960 Digester 2 was built, and in 1976 Digester 1 and the Digester Control Building were built.

Justification

The age of the three original digester tanks ranges from 77 to 39 years. Today these structures do not conform to the safety standards required by regulatory agencies for fluid filled tanks. The equipment servicing these tanks has also reached the end of its life and will be disposed of. Demo will take the tanks flat to the existing ground level. Work is to be competed after the Phase 1 improvements are done and operational. (Reference Kennedy/Jenks Tech Memo No. 4 dated December 20, 2012 "Digestion System Improvements Pre-Design".

Demolition of the Lunch Room is currently under consideration. Regardless of this decision, the existing motor control center equipment located in this building is well beyond its useful service life. There are very few loads connected to this motor control center equipment, most of which are related to the building itself. Thus, this motor control center can be eliminated with no additional requirements should it be decided to demolish the entire building.

Expenditures:	Prior	22-23	Unsched.	Total
		$525,000		$525,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Head Works Project**
Dept:	Treatment
Total Cost:	$525,000
CY Budget	$0
Account:	
Inception date:	2013

Contact:	Lander
Type:	Other
Useful Life:	25 years
Category:	Capital Improvement
Urgency:	3 = Important
Carry Forward:	Yes

Description

Rehabilitate equipment, piping and electrical assets in the headworks area. The assets that should be rehabilitated range from the channel grinder equipment, sludge piping, and electrical system to meet arc flash requirements. The arc flash study proposed in 2016-17 will analyze and evaluate risk. Only qualified persons are allowed to work on electrical systems.

Justification

The Headworks process removes rags and grit from the liquid treatment process. Also in the Headworks structure is primary clarifier sludge and scum pumps which convey sludge and scum to the digesters. The grit removal system functioning today has had numerous mechanical issues over the past 3 years. Also there are several newer technologies that would greatly improve the process if implemented. As staff continues to inspect and develop this project over the next couple years there will be better detail.

Failure Modes Addressed:
1. The Headworks was originally built about 40 years ago. Improvements in 2001 addressed repairs to some equipment but other equipment has not been rehabilitated and is beyond the average useful life.
2. Existing electrical equipment is obsolete and therefore difficult to maintain.

The existing MCC-HM and MCC-HSM equipment is well beyond its useful service life. As part of the current Phase I Plant Rehabilitation Project, space provisions have been included at the Operations Building for the expansion of new motor control center equipment designed to serve all of the Headworks loads. To facilitate these connections, a new underground electrical ductbank will be required between the Headworks and Operations Building.

Expenditures:	Prior	23-34	Unsched.	Total
		$850,000		$850,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**DAFT Rehabilitation**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$2,025,000	Useful Life:	30 years
CY Budget	$750,000	Category:	Capital Improvement
Account:		Urgency:	2 = Very Important
Inception date:	2013	Carry Forward:	Yes

Description

This project has been designed and included as part of the WWTP Rehabilitation Project to be installed over the next two fiscal years. This design incudes the rehabilitation of our existing DAFT tank and air flotation system.
Rehabilitate the existing Dissolved Air Flotation (DAF) thickener by replacing the Launder and drive motor, replace recirculation pump with Nikunni Pump, remove air compressor and mixing tank, remove excising equipment cover. Construct Flood proofing for new equipment and piping. An automated control system minimizes operator requirements and provides the ability to monitor operation from the SCADA system.

Justification

Staff has confirmed that all side stream flows, including filter backwash from the Reclamation equipment, mixed and processed through the DAFT has resulted in better performance of the DAFT with higher solids removal than previously processing them individually. In addition staff has successfully piloted a modified aeration system using a Nikunni pump and made continuing progress reducing particulates. As a result of testing the Nikunni Recirculation pumping system over the past several months staff directed K/J to change the DAFT design to utilize the Nikunni because even higher solids capture was achieved with much less power usage and fewer pieces of equipment requiring maintenance. Redundancy for this DAFT will be provided through a package system that is scheduled for purchase in FY2019/20.

Expenditures:	Prior	15-16	16-17	19-20	Unsched.	Total
		$750,000	$675,000	$600,000		$2,025,000

Funding Source

Long Term Capital - 50% Reclamation

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Chlorine Contact (25% Reclamation)**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$1,511,000	Useful Life:	25 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	4 = Less Important
Inception date:	2013	Carry Forward:	No

Description

Rehabilitate the Chlorine Contact structures after detailed seismic review and materials testing of the structure. Rehabilitate large diameter piping and potentially strengthen piers underneath the Chlor/Dechlor Building. Replace steel covers on top of the Chlorine Contact Pipe Gallery which leak and allow rainwater into the pipe gallery.

Justification

The Chlorine Contact Channels provide contact time for chlorine to sufficiently remove or inactivate pathogens.

Failure Modes Addressed:
1. The Chlorine Contact structure will be 40 years old at the time of this project and assessing the need for repairs will extend the useful life of this structure.
2. Piping in the pipe gallery should be recoated to avoid further corrosion of the pipes occurring where the coating has failed.

Expenditures:	Prior	22-23	Unsched.	Total
		$1,511,000		$1,511,000

Funding Source

Long Term Capital - 25% Reclamation

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Operations Building Improvements**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$629,000	Useful Life:	15 years
CY Budget	$50,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2013	Carry Forward:	Yes

Description

Renovate the Ops Building interior including restrooms, office spaces, building mechanical, and redesigning the upstairs electrical room to facilitate a central SCADA monitoring and control station. Replacement of the HVAC unit on the roof serving this building. The HVAC unit replacement is an important item that needs to be addressed. The next budget needed for long term capital is planed for FY24-25 when the building will need additional upgrades to keep up with technology and to maintain this aging building. The building continues to service the treatment plant well and is in good condition for being 40 years old.

Justification

The Ops building is the center of operations and control of the WWTP. This year staff completed an upgrade of the upstairs and downstairs office areas. The work completed thus far has brought additional utility to the room and better comfort. by adding new windows, electrical outlets flooring and lighting.
Currently the Operations Building is a multi-purpose building with office space, computer stations, restrooms/locker rooms, electrical and MCC equipment room, and plant library. To meet the strategic WWTP levels of service of Reliability and Regulatory Compliance, the Operations Building is becoming the central Supervisory Control and Data Acquisition (SCADA) interface location where the plant processes can be effectively monitored and controlled.

Failure Modes Addressed:
1. Level of Service: To meet the strategic WWTP levels of service of Reliability and Regulatory Compliance, the Operations Building should serve as the central Supervisory Control and Data Acquisition (SCADA) interface location where the plant processes can be effectively monitored and controlled. The Ops building SCADA control and monitoring system will need improvements to continue to effectively monitor and control the plant's processes. Furthermore, currently during maintenance of SCADA, operations has had difficulty maintaining the interface.
2. Physical Mortality: The restroom single restroom to remain after the electrical upgrades will be in need of renovation in several years.
3. Physical Mortality: Building mechanical systems are in poor condition and need to be replaced with newer and more efficient systems. This will be accomplished in this coming fiscal year.

The Operations Building has been in service since 1970 without any major improvements. Electrical improvements are planned for the plant's main power feed which terminates in the Ops Building as part of a separate project. This project would follow those electrical improvements to improve the functionality of the space and SCADA accessibility. Building mechanical systems should also be replaced with more efficient equipment to improve energy efficiency. (The roof will be repaired in a separate project.)

Expenditures:	Prior	15-16	24-25	Unsched.	Total
		$50,000	$579,000		$629,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Misc Yard Piping Rehab**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$1,068,000	Useful Life:	30 years
CY Budget	$89,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2013	Carry Forward:	No

Description

After inspections of select buried piping segments that have a high consequence of failure, it may be found that the buried pipeline should be rehabilitated. An allowance is estimated for rehabilitation of buried piping in the WWTP.

Buried piping with a high consequence of failure and selected for possible rehabilitation include:
#1 Water Distribution Piping, #3 Water Distribution Piping, Natural Gas Piping, Fire Water Piping, Influent Piping, Carmel Meadows Influent Pipeline, Digester #1 Sludge Piping, Digester #1 Gas Piping, Digester Gas Piping to Flare, Gas Pit, Digesters Supernatant Piping, Secondary Clarifier #1 Effluent Piping, Piping between the Headworks and Primary Clarifiers

Justification

Piping level of service to carry fluids, gas or chemicals without leaks or breaks. Leaks and breaks should be proactively mitigated to avoid spills to the environment.

Failure Modes Addressed:
1. Lack of proactive failure mitigation and condition assessment of buried piping.
2. The condition of buried piping is unknown however due to the prevalent corrosion that can occur in wastewater process piping it is likely that condition issues exist in some buried piping.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$89,000	$89,000	$89,000	$89,000	$89,000		$445,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Septage/Grease Receiving Station**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$600,000	Useful Life:	30 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	4 = Less Important
Inception date:	2013	Carry Forward:	No

Description

Construction of a new Septage/Grease receiving station to be located adjacent to new Digester. Station will be able to receive up to 10,000gal/day of material and will be injected directly into the Digester through pump and piping system to be installed.

Justification

Preliminary design by K/J of a combined receiver has concluded that the pay back at this time would be up to 10 years. Although staff feels that this service would be a good source of revenue, this length of payback does not justify the installation of this new facility at this time until other more critical improvements are made. This facility is not critical to the operation of the treatment plant or improving reliability. The existing grease receiving station can be utilized better and this improvement can be re-evaluated every couple of years to see if the value to the District improves.

Expenditures:	Prior	23-24	Unsched.	Total
		$600,000		$600,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Flare - Replace and Relocate Waste Gas Burner**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$875,000	Useful Life:	40 years
CY Budget	$550,000	Category:	Capital Improvement
Account:		Urgency:	2 = Very Important
Inception date:	2013	Carry Forward:	Yes

Description

These improvements have been included in the WWTP Rehabilitation project to be completed over the following two years. Replace the existing methane flare with a new technology consistent with current State Air Board regulations and the associated piping.

Justification

The flare is used to burn off excess waste methane prior to releasing it into the atmosphere. It is the intent of staff to install appropriate equipment to use all available methane however there are times when it is necessary to burn off the excess methane. The current asset does not meet current air quality standards and has excessive oxidation. Staff agrees that as part of the new digester construction a replacement flare should be relocated near the new digester with replacement piping and equipment. This would be more cost effective than relocating it at a later time, and will be an environmental benefit.

When the microturbines are in operation the District does not have any excess gas, it is all utilized to run the digesters – and the flare is not lit at all. However, a flare for waste gas is a requirement for all wastewater facilities with anarobic digestion. Once constructed the new flare will be maintained anually and serve the District 40 years.

Expenditures:	Prior	15-16	16-17	Unsched.	Total
		$550,000	$325,000		$875,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Co-Generation Project**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$775,000	Useful Life:	15 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2013	Carry Forward:	No

Description

Install new co-generation equipment to replace the existing Capstone turbines. In general turbines have a useful life of 80,000 hrs.

Justification

This equipment provides a useful life of 10 years. With proper care and bearing replacement staff intends to extend these assets out as far as possible. The turbines were inspected in 2013 by Capstone and determined to be in excellent condition. This inspection became the base line for the expected life. Since this equipment is not critical to the operation of the facility, and the new boiler installed this year has the capability to use digester gas, it will not be critical for the District to replace this equipment prior to failure. It is important however to replace this equipment with similar power generation equipment in order to continue to utilize all available methane.
Further research and study will be conducted by staff to best recommend replacement equipment.

Electrical provisions have been included as part of the current Phase I Plant Rehabilitation Project to transfer all electrical loads from existing MCC-SM to the new motor control center equipment being provided at the new Digester Control Building No. 2. At this time, however, the existing microturbine units are connected "through" the existing MCC-SM equipment. Even though the existing MCC-SM equipment is well beyond its useful service life, it is being retained until the microturbines reach the end of their useful service life. At the end of this service life, the existing MCC-SM equipment will be demolished and the exisiting loads transferred to the new motor control center equipment at Digester Control Building No. 2.

Expenditures:	Prior	25-26	Unsched.	Total
		$775,000		$775,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Aeration Basin Rehabilitaiton**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$740,000	Useful Life:	25 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	4 = Less Important
Inception date:	2013	Carry Forward:	No

Description

Rehabilitate the existing aeration basin by recoating the inside of the tanks, replacement of the air diffusers, slide gates and associated piping.

Justification

The aeration basin is critical to the processing of wastewater at the treatment plant. All treated water passes through these tanks as biological organisms digest organic waste.

Failure modes Addressed: Concrete deterioration on the walls and base of the tank.

Expenditures:	Prior	25-26	Unsched.	Total
		$740,000		$740,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Replace Standby Generators**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$800,000	Useful Life:	25 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	4 = Less Important
Inception date:	2013	Carry Forward:	No

Description

Replacement of the two standby generators.

Justification

Each generator recieved detailed service in 2014 and determined to have a remaining life of around 10 years. This equipment is critical to the emergency operation of the district and they will be monitored closely for the next 10 years so that proper planning and design can begin prior to the failure of this equipment. Replacment of this equipment will also be coordinated with the long term energy planning needs of the District.

Expenditures:	Prior	24-25	25-26	Unsched.	Total
		$400,000	$400,000		$800,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name: **Treatment Plant Administration Building**
Dept: Treatment
Total Cost: $3,000,000
CY Budget $0
Account:
Inception date: 2014

Contact: Lander
Type: Other
Useful Life: 45 year
Category: Capital Improvement
Urgency: 4 = Less Important
Carry Forward: No

Description

Construction of a new Administration building to serve as the offices, break room, and conference room for staff at the treatment plant.

The coming improvements at the treatment plant will displace staff from office and locker room areas. The existing break room/conference room is more than 70years old and these facilities will need to be replaced in the future. The locker room building will be completed in FY14/15 by June 30th. Staff has recommended consolidation of District buildings into an Administration building on the treatment plant grounds. This item has been moved to Unscheduled until a future time when value of the existing Admin building property is such that there is economic incentive to pursue.

Expenditures:	Prior	26-27	Total
		$3,000,000	$3,000,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Methane Gas Conditioning System**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$325,000	Useful Life:	20 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2014	Carry Forward:	No

Description

Replacement of the methane Hydrogen sulfide scrubbers with new tanks or replacement technology.

Justification

The District has two tanks filled with H2S removing media which takes out all H2S from the digester sludge gas and allows the gas to be used in the Co-Generation equipment. This equipment is critical to the operation of the con-generation equipment, and also helps to prolong the life of the boiler if it is operated on digester gas. This system is not critical to the operation of the plant but it will need to be monitored and replaced at the end of its life. The tanks have recently been rehabilitated, but it was found that the tanks which are almost 40yrs old will only be safely rehabilitated one more time. This means that a maximum extended life of 12 years would be expected.

Expenditures:	Prior	21-22	Unsched.	Total
		$325,000		$325,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Lunch Room/Meeting Room Replacement**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$685,000	Useful Life:	40 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	4 = Less Important
Inception date:	2013	Carry Forward:	Yes

Description

Replace the existing lunch room, conference room and outside lunch area with a new 2000 sqft manufactured building and elevated deck. The District hired Congleton Architects to assist with the plant layout and design of both the locker room, a new area for staff, and for treatment plant meetings. This plan is being implemented in 2 phases. Phase 1 is the construction of the locker room building currently under construction. Phase 2 will be a new building as illustrated on the site plant prepared by Congleton Architects. The full design of the building has not been completed so design will occur in FY19-20 with construction to follow.

Justification

The existing building used as the lunch room and meeting facility for plant related meetings is nearing 80 years old. This building has been repurposed several times over the decades and is nearing its useful life in its current configuration. A new facility would be designed to better serve the staff and provide a location to hold larger meetings indoors, as the current meeting room only holds 15 persons.

Due to the timing of the construction of the new Operations Shower Building in relation to the current Phase I Plant Rehabilitation Project, interim power provisions are being implemented to provide power to the new Operations Shower Building. Once the main switchgear is operational, a permanent, new main power feed will be provided from the Operations Building to the Operations Shower Building via a new underground ductbank.

Expenditures:	Prior	19-20	20-21	Unsched.	Total
		$175,000	$510,000		$685,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**CM Contract for WWTP Phase 1 Construction**
Dept:	Treatment
Total Cost:	$1,995,663
CY Budget	$997,831
Account:	
Inception date:	2013

Contact:	Lander
Type:	Other
Useful Life:	
Category:	Capital Improvement
Urgency:	2 = Very Important
Carry Forward:	No

Description

Contract with K/J Consultants to provide Construction Management and Engineering services over the duration of the Phase 1 Treatment Plant improvements currently out to bid and expected to constructed over a two year period.

Justification

The Phase 1 improvements are estimated to cost $15,000,000 for construction. A project of this size requires constant oversight and management of both documents as well as good communicaiton with the Contractor. The engineering submittals for review will be in the hundreds and there are a number of technical specialties that will be required for both inspection as well as document review. K/J Consultants have proven to be very responsive to the District and they have provided a very competitive price to perform these services together. The Construction managment job will be full time position that will also require additinal technical expertice. K/J has the ability to provide all of those services during construciton.

Expenditures:	Prior	15-16	16-17	Unsched.	Total
		$997,831	$997,832		$1,995,663

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**CM Contract for WWTP Phase 2 Construction**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$600,000	Useful Life:	
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2013	Carry Forward:	No

Description

Planning ahead for Phase 2 improvements, this budget item is included to anticipate the cost of additional Construction Management services for the WWTP Phase 2 project. This item will include the services of a Construction Manager to manage several construction projects or to manage one bid package of several projects as was done with the Phase 1 construction.
Currently a number of the Phase 2 projects are shaping up to be projects individually bid and completed. However there is approximately $7,000,000 in projects that may become one bid package. A project of that size would require Construction Management services.

Justification

The District does not have enough staffing to perform all tasks required during the construction of milt disciplined projects. The Principal engineer will need to rely on a Construction manager to ensure good document control and to make sure contractors stay on task.

Expenditures:	Prior	18-19	19-20	Unsched.	Total
		$300,000	$300,000		$600,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Sea Level Rise Analysis and Planning**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$150,000	Useful Life:	
CY Budget	$50,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2013	Carry Forward:	No

Description

This project will be a multi-year effort to provide draft guidance for incorporating sea level rise (SLR) into capital planning for the CAWD. The intent is to enable CAWD to better understand and prioritize projects with reference to sea level rise and to encourage the collaboration among all departments on this effort. The responsibility for assessment and adaptation will be the responsibility of each department (Treatment, Collection, & Engineering) and will be returned to Budget Committee and full Board for consideration. These funds will allow staff to pursue consultants with expertise in planning for SLR and to allow staff to purchase software or contract with firms to run hydraulic models to better understand the future impacts to the Treatment plant and Collections system infrastructure.

Justification

During renewal of District's NPDES permit we were informed that an analysis of sea level rise and impact upon facilites would be a requirement of any future renewal. Activities will include: a) benchmarking other jurisdictions: local, state, and national b) Survey of CAWD activites and SLR nexus c) In-depth review of the science d) Survey of regulatory context

The ultimate goal will be a long range planning document that considers both likely and extreme scenarios; yet reflects the best available science.

Initial elements of planning focus as follows

1. SLR Science Review - what does the science tell us today?
   SLR estimates - Storm surge & waves - SLR scenario selection - SLR inundation mapping
2. Vulnerability Assessment - which assets are vulnerable to sea level rise?
   Exposure - Sensitivity - Resilience
3. Risk Assessment - which vulnerable assets are at greatest risk?
   Likelihood - Consequence
4. Adaptation Planning - for those assets at risk, what will we do to increase their resilience to SLR?
   Building on previous steps to create resilience - Adaptive capacity & management
5. Permitting and Regulatory Considerations
   SWRCB - Coastal Commission

Expenditures:	Prior	15-16	16-17	17-18	Unsched.	Total
		$50,000	$50,000	$50,000		$150,000

Note: This project will be allocated between Treatment & Collections upon its completion.

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Digester Rehabilitation**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$1,000,000	Useful Life:	40 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	2 = Very Important
Inception date:	2013	Carry Forward:	No

Description

Work is proposed on Digester #1 which is currently the primary digester for the Treatment plant. The digester will be opened and cleaned, inspected for damage and corrosion. It is anticipated that this digester will require a spray on lining and possibly some structural repair. The roof dome is steel and will most likely required some significant maintenance. The roof may need to be removed and repaired or replaced with an alternative roof. This digester currently is mixed with draft tube mixers. These mixers will required maintenance, and possibly coating and staff will investigate an improved mixing process.

Justification

The Digester is an essential process of the Treatment Plant facility. This piece of equipment is usually scheduled for maintenance every 8 to 10 years and it was scheduled for cleaning in 2013 at which point 12 years had already passed since the last inspection of the Digester. However do to some mechanical failures at the treatment plant, staff could not isolate this tank an allow it to be taken out of service. Since the treatment plant does not have another reliable digester, staff has added a new digester tank to the Phase 1 WWTP Rehabilitation project commencing this year. When this digester is brought on line staff will be able to turn off the current tank and allow for it to be cleaned and inspected. This work is planned to commence as soon as possible after the new digester is constructed but it is not fully known what the condition of the Digester is, or will be, when opened. Therefore, staff must plan for the worst case scenario.

Expenditures:	Prior	17-18	18-19	Unsched.	Total
		$425,000	$575,000		$1,000,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**PLC Programming**	Contact:	Lander
Dept:	Treatment	Type:	Other
Total Cost:	$190,000	Useful Life:	25 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	2 = Very Important
Inception date:	2015	Carry Forward:	No

Description

The Long Term Capital Project includes an upgrade of multiple Programmable Logic Controllers throughout the plant. To place these PLCs into service will require specialized professional services. We have contracted with CalCon to initiate this work and would like to have them continue. We are looking at CalCon not only on a one time basis to assist with installation of project; but over the long haul to assist and give customer support to SCADA and PLC issues. Please NOTE: this is a projected change from current vendor TESCO

Justification

CalCon Systems is a full-service process control, instrumentation and automation firm specializing in turn-key design/build system integration and support services. The company has completed thousands of process control system projects since they were founded in 1987. Their technical staff is experienced in a wide range of industrial processes including wastewater. From design, build, and installation to maintenance, operation, upgrades, instrument calibrations and emergency service support they provide value with customer service and expertise in industrial processes.

Expenditures:	Prior	15/16	16/17	17/18	18/19	19/20	Unsched.	Total
		$95,000	$95,000					$190,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Arc Flash Study**
Dept:	Treatment
Total Cost:	$50,000
CY Budget	$0
Account:	
Inception date:	2016

Contact:	Pinkevich
Type:	Other
Useful Life:	20 years
Category:	Capital Improvement
Urgency:	2 = Very Important
Carry Forward:	No

Description

NFPA 70E (National Fire Protection Association) requirements for safe work practices to protect personnel by reducing exposure to major electrical hazards. Originally developed at OSHA's request, NFPA 70E helps companies and employees avoid workplace injuries and fatalities due to shock, electrocution, arch flash, arc blast, and assists in complying with OSHA 1910 Subpart S and OSHA 1926 Subpart K.
NFPA 70E is the heart of U.S. arc flash regulations. It outlines the specific practices and standards to be followed in protecting a workplace from arc flash and other electrical hazards. The primary focus of NFPA 70E is the establishment of an electrically safe work condition, meaning that equipment is fully de-energized and cannot be re-energized while work is being performed. This project includes training from a third party in best practices.

Justification

OSHA regulations state an employer must identify and assess the electrical hazards for employees and protect them from those hazards. This includes arc flash and shock. OSHA defers to NFPA 70E for how to comply with this requlation. Therefore NFPA 70E serves as a bridge between OSHA regulations and compliance. Staff recommends that Beecher Electrical Engineering perform ARC Flash Analysis while they are on site for the LTC upgrade doing other electrical work. Note: The District has purchased arc flash equipment and uniforms. Markings/signage on the floor, etc. will be done for NEW equipment.

Expenditures:	Prior	15/16	16/17	17/18	18/19	19/20	Unsched.	Total
			$50,000					$50,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**WWTP O&M Manual**
Dept:	Treatment
Total Cost:	$250,000
CY Budget	$0
Account:	
Inception date:	2017

Contact:	Pinkevich
Type:	Other
Useful Life:	15 years
Category:	Capital Improvement
Urgency:	2 = Very Important
Carry Forward:	No

Description

CAWD is required to maintain an O&M Manual to provide the plant and regulatory personnel with a source of information describing all equipment, recommended operational strategies, process control monitoring, and maintenance activities. To remain useful and relevant, the O&M manual must be kept updated to reflect significant changes in treatment facility equipment and operational practicies. The O&M Manual should be maintained in a usable condition and be available for reference and use by all relevant personnel and Regional Water Board staff.

Justification

Updating the O&M Manual is one more task that the District has allowed to fall behind. Because this is a significant undertaking, staff is suggesting that professional services be engaged to assist with this task. Additionally, the O&M Manual should be completed in a digital format that easily allows sections to be updated as necessary.

Expenditures:	Prior	15/16	16/17	17/18	18/19	19/20	Unsched.	Total
				$250,000				$250,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**SCADA Network**
Dept:	Treatment
Total Cost:	$932,000
CY Budget	$0
Account:	
Inception date:	2019

Contact:	Pinkevich
Type:	Other
Useful Life:	20 years
Category:	Capital Improvement
Urgency:	2 = Very Important
Carry Forward:	No

Description

As part of the general upgrade of plant facilities the District needs to also upgrade its SCADA (Supervisory Control and Data Acquisition) system. SCADA systems are widely used in wastewater to assist operators by automating certain operating, trouble shooting and data logging functions. CAWD's existing SCADA system has evolved in piecemeal fashion over the years. The system now consists of various programmable logic controllers and other devices that have been cobbled together resulting in a functional but inefficient amalgamation of equipment and interfacings that only minimally integrate older components. Some of those components are no longer able to be replaced in the marketplace - they have simply aged out of service. Because of this, there is a need for a state-of-the-art SCADA network for operating the Districts facilities.

Justification

We have engaged CalCon Systems, Beecher Electrical, and Kennedy/Jenks to evaluate our existing PLC/SCADA Network Architecture and assist us in the next phase of Plant upgrades as it relates to SCADA. The goal of our work to date has been to develop a general plan of future improvements to the PLC and SCADA, while at the same time ensuring that any near term modifications will be coordinated with the planned future work. The existing Tesco drawings of the networkwere incomplete and did not document the fiber network connections and cabling between the PLCs and remote I/O racks. Our consultants were forced to rely on field investigations.

Reliability: Portions of the network are connected in a daisy chain arrangement, therefore a failure of single connection could cause the loss of multiple processes. The remainder of the network has a "star" topology which means that a failure will cause the loss of SCADA monitoring for a process and may cause loss of automoted control for control processes that receive control signals over the network. Allen Bradley (PLC manufacturer) has indicated that our PLC-5 controllers will no longer be supported -- this means parts and service may not be readily available.

Redundancy: There is little or no redundancy in the existing PLC network. This means that the consequence of failure could be quite serious and force staff to monitor plant processes manually and staff 24/7. The real concern is if a failure occurs during off-shift hours when a process or equipment failure could go unnoticed and cause an upset or permit violation. The network should be designed to minimize failure of any single component.

Expenditures:	Prior	15/16	16/17	17/18	18/19	19/20	Unsched.	Total
						932,000		$932,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Chlorine Bldg**	Contact:	Lander
Dept:	Treatment	Type:	Chlor/Dechlor
Total Cost:	$150,000	Useful Life:	20 years
CY Budget	$0	Category:	Capital Improvement
Account:		Urgency:	2 = Very Important
Inception date:	2015	Carry Forward:	No

Description

1. Re-purpose building due to the elmination of the chlorine system
2. Eliminate existing motor control center MCC-CSM
3. Provide a new Allen-Bradley ControlLogix PLC to replace the existing remote I/O panel

The existing MCC-CSM equipment is beyond its useful service life. Additionally, due to the elimination of the chlorine system in this area, a motor control center is no longer required. The motor control center would be replaced with smaller panelboards to serve existing building lighting, receptacle and small process equipment loads. The existing remote I/O panel hardware is no longer supported by Allen-Bradley and is beyond its useful service life.

Expenditures:	Prior	15/16	16/17	17/18	18/19	23/24	Unsched.	Total
						150,000		$150,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Blower Bldg**
Dept:	Treatment
Total Cost:	$500,000
CY Budget	$0
Account:	
Inception date:	2015

Contact:	Lander
Type:	Blowers
Useful Life:	20 years
Category:	Capital Improvement
Urgency:	2 = Very Important
Carry Forward:	No

Description

Replacement of the existing power distribution equipment within this area should be performed within the next 10-year time frame. As part of this electrical equipment replacement effort, the existing "stand alone" PG&E service feed to this building can be eliminated. Provisions for this elimination have already been "built in" to the new main switchgear being provided as part of the current Phase I Plant Rehabilitation Project.

Justification

After 10 years, the motor control center equipment at this location will be approaching the end of its useful service life and should be replaced to retain process reliability and avoid replacement part obsolescence issues. Elimination of the "stand alone" PG&E service feed to this building will further simplify the plant power distribution system configuration, thus making system operation more efficient.

Expenditures:	Prior	15/16	16/17	17/18	18/19	20/21	Unsched.	Total
						500,000		$500,000

Funding Source

Long Term Capital

FY 2015-16 Budget
Carmel Area Wastewater District

LONG TERM CAPTITAL PLAN - TREATMENT FACILITY

Project Name:	**Influent Pump Station**
Dept:	Treatment
Total Cost:	$600,000
CY Budget	$0
Account:	
Inception date:	2015

Contact:	Lander
Type:	Influent
Useful Life:	20 years
Category:	Capital Improvement
Urgency:	2 = Very Important
Carry Forward:	No

Description

1. Replacement of existing motor control center MCC-ISM
2. Replacement of existing Influent Pump variable frequency drives

Justification

Both the existing MCC-ISM and Influent Pump variable frequency drive equipment are beyond their useful service life. All of this equipment needs to be replaced in kind, modified as required should process pumping equipment be replaced.

Expenditures:	Prior	15/16	16/17	17/18	18/19	19/20	Unsched.	Total
						600,000		$600,000

Funding Source

Long Term Capital

CAWD TREATMENT PLANT CAPITAL PURCHASES
FY 2015/16 *thru* 2019/20

Purchase #	PURCHASE ITEM	15/16	16/17	17/18	18/19	19/20	Unsched
A	Modeling software	$ 75,000					
B	Power Line Conditioning (50% Reclamation - lab only)	$ 50,000					
C	Misc Portable Pumps	$ 28,000					
D	Operations Radios	$ 8,100					
E	Utility Cart	$ 7,500					
F	Bobcat tractor		$ 35,000				
G	Steam Cleaner (20% Reclamation)		$ 22,500				
H	Plant truck			$ 25,000			
I	Server Replacement				$ 8,000		
J	Lab - Autoclave (50% Reclamation)					$ 16,000	
K	Lab - Industrial Dishwasher (50% Reclamation)					$ 11,000	
L	Lab - Ion Chromatograph (100% Reclamation)						$ 150,000
M			$65,000				
N							
O							
P							
Q							
R							
S							
SUBTOTALS		**$168,600**	**$122,500**	**$25,000**	**$8,000**	**$27,000**	**$150,000**
RECLAMATION SHARE		$7,500	$4,500	$0	$0	$13,500	$150,000
PBCSD SHARE		$53,646	$39,294	$8,325	$2,664	$4,496	$0
COST TO CAWD		**$107,454**	**$78,706**	**$16,675**	**$5,336**	**$9,005**	**$0**

(1) PBCSD to pay 1/3 of costs. (After Reclamation portion deducted, if applicable) unless otherwise noted. *Projects in italics are not funded directly by PBCSD*

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Modeling software**	Contact:	Pinkevich
Dept:	Treatment	Type:	Other
Total Cost:	$ 75,000	Useful Life:	10 years
CY Budget	$ -	Category:	Capital Improvement
Account:		Urgency:	3 = Important
		Carry Forward:	No

Description

Modeling software and calibration can assist operations and the lab with process control by predicting results based upon our plant and its behaviors. Modeling can predict such results as: 1)Effluent, MLSS, Solids Production, O2 Demand, Gas production 2) Simulation of Biological N and P Removal 3) Best site specific BNR strategy 4) Dynamic Simulations/Various Flow/Load/Temperature Combinations 5) Recycle Stream Impacts and Control Strategies 6) DO Control Strategies 7) Energy Reduction 8) Solids Treatment 9) Risk/Reliability

Justification

As our plant continues to be rehabilitated it is important for us to continually revisit our operating strategies. Modeling software alleviates the need to conduct live testing if the model finds potential issues. We have initiated discussions with Hazen & Sawyer regarding process modeling for our facility. Process models are essential tools for understanding wastewater treatment system behavior. Wastewater process simulators can provide insights for plant upgrades, new plant designs, and improved operational controls. Wastewater process modeling can enhance projects involving an entire range of wastewater treatment processes, including physical-chemical; biological, such as activated sludge; and solids, such as thickening, digestion, and dewatering.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$75,000						$75,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Engineering service:	$ 75,000						$ 75,000
Total	$ 75,000	$ -	$ -	$ -	$ -	$ -	$ 75,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Power Line Conditioning**	Contact:	Pinkevich
Dept:	Treatment	Type:	Lab
Total Cost:	$ 50,000	Useful Life:	20 years
CY Budget	$ -	Category:	Capital Improvement
Account:		Urgency:	3 = Important
		Carry Forward:	No

Description

A power conditioner is a device intended to improve the quality of the power that is delivered to electrical load equipment. The term most often refers to a device that acts in one or more ways to deliver a voltage of the proper level and characteristics to enable load equipment to function properly. Conditioners specifially work to smooth the sinusoidal A.C. wave form and maintain a constant voltage over varying loads. CAWD's labratory has many delicate instruments that require a good quality of power that would limit voltage sags or spikes that could damage sensitive devices. An A/C power conditioner would provide "clean" A/C power to all sensitive electronic equipment. This unit would protect against: (1) Voltage swells; (2) Voltage Dips or sags; (3) Under and Over Voltage; (4) Variations in Frequency; (5) Harmonies; (6) Surges and Spikes.

Justification

At the present time our Service Contracts do not protect CAWD for Repair and/or replacement of units that have failed due to a power issue. During storms our treatment plant experiences brown-outs and/or loss of power throughout the facility.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$50,000						$50,000

Funding Source

Capital Reserves - 50% Reclamation for Lab only

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies	$ 50,000						$ 50,000
Chemicals							$ -
Utility							$ -
Other - Equipment							$ -
Total	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ 50,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Misc Portable Pumps**	Contact:	Pinkevich
Dept:	Treatment	Type:	Equipment
Total Cost:	$ 28,000	Useful Life:	15 years
CY Budget	$ 28,000	Category:	Capital Equipment
Account:	2159	Urgency:	3 = Important
		Carry Forward:	No

Description

Four inch pump used by staff to dewater tanks, wet wells and sumps. Equipped with level sensor for unattended operations.

Justification

As we progress through the CIP during the next ten years it is important we have the capabilities to perform planned and emergency bypass operations. This pump will be utilized throughout the plant during upgrade activities.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$28,000						$28,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment	$ 28,000						$ 28,000
Total	$ 28,000	$ -	$ -	$ -	$ -	$ -	$ 28,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Operations Radios**	Contact:	Pinkevich
Dept:	Treatment	Type:	Communications
Total Cost:	$ 8,100	Useful Life:	10 years
CY Budget	$ 8,100	Category:	Capital Equipment
Account:		Urgency:	3 = Important
		Carry Forward:	No

Description

Staff is proposing to replace the remaining Kenwood hand held radio's because of dependability issues. The Motorola's have better quailty and have updated communication abilities for clearer communication. Staff will also purchase three extra radio's for contractors working at the plant during the treatment plant rehabilitation. In total this project proposes 12 radios and two chargers - anticipated life of 5 years.

Justification

During the past few years we have been replacing the Kenwood hand held radios as they have failed. These radios have been failing after only a few years of service and are not reliable enough for our application. These radio are used for daily communication with-in the treatment plant and are vital during any emergency events making them extremely important. The replacement radios have been Motorola's which have proven to be much more reliable. These radios have the ability to transmit in digital format which improves their ability to communicate in difficult areas, i.e. building basements. Also with this feature the communication quailty is improved allowing for better clarity. We are purchasing three extra radios for contractors to be used during the treatment plant rehabilitation. In the event of an emergency all contractors and their crews can be evacated safely.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$8,100						$8,100

Funding Source

O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment	$ 8,100						$ 8,100
Total	$ 8,100	$ -	$ -	$ -	$ -	$ -	$ 8,100

FY 2015-16 Budget
Carmel Area Wastewater District

Project Name:	**Utility Cart**	Contact:	Pinkevich
Dept:	Treatment	Type:	Other
Total Cost:	$ 7,500	Useful Life:	15 years
CY Budget	$ -	Category:	Capital Equipment
Account:		Urgency:	4 = Less Important
		Carry Forward:	No

Description

The purchase of a solar powered cart for CAWD staff to transport personnel and equipment around the plant for operational and maintenance issues. The battery life for a solar cart has approximately 50% greater longevity than in a traditional battery cart. Cost of charge is roughly $.70 - $.90 a day to charge - one charge lasts 1-3 days depending on the age of the battery. Anticipate battey life of 4 to 6 years ($115 ea x 6 = $690)

Justification

A solar powered cart would be beneficial to CAWD by reducing our carbon footprint and reducing overall electrical cost. It could give CAWD a possible tax credit reducing the overall cost of the cart. It has been know to outlive standard vehicles in its class, is lightweight and has reduced overall maintenance.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$7,500						$7,500

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Purchase	$ 7,500						$ 7,500
Total	$ 7,500	$ -	$ -	$ -	$ -	$ -	$ 7,500

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Bobcat tractor**	Contact:	Pinkevich
Dept:	Treatment	Type:	Equipment
Total Cost:	$ 35,000	Useful Life:	20 years
CY Budget	$ -	Category:	Capital Equipment
Account:	2720	Urgency:	4 = Less Important
		Carry Forward:	No

Description

A skid steer compact loader, commonly referred to as a "bobcat", is a small loader, approximately six feet long, five feet tall and five feet wide. Skid steer loaders generally have a loader style bucket for moving material such as dirt or sand but also can be converted to serve in capacities such as brush cutter, hydraulic jack hammer, manhole cutter, lawn mower, tree trimmer, or road grader in addition to many other functions. Converting a a skid steer to serve another function is accomplished by removing the bucket and installing an attachment. These attachments are designed to be easily changed in a relatively short time and can be rented locally on an as needed basis.

Justification

Due to its size, a skid steer could be placed on a trailer and towed throughout the District. Currently CAWD owns a full size loader which cannot be transported and cannot fit on easements. While the District's current loader works well for large scale projects, a compact skid steer would enable the Collections Department to utilize it to maintain easements, a task currently completed by hand (time consuming and exposes crew to poison oak). A skid steer could also be used in place of the current compact hydraulic hose reel used by Collections to access remote manholes. In addition, a skid steer could be used on a daily basis around the Treatment facility by maintenance and operations staff to transport material or in other configurations such as a small backhoe, tree trimmer, street sweeper, or grass cutter. The proposed skid steer will be equipped with tracks rather than wheels to give it increased traction and a "tear 4" engine in order to meet emission standards.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
			$35,000					$35,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment		$ 35,000					$ 35,000
Total	$ -	$ 35,000	$ -	$ -	$ -	$ -	$ 35,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Steam Cleaner**	Contact:	Pinkevich
Dept:	Treatment	Type:	Maintenance
Total Cost:	$22,500	Useful Life:	15 years
CY Budget	$ -	Category:	Capital Equipment
Account:	2159	Urgency:	4 = Less Important
		Carry Forward:	No

Description

Mobile steam cleaner used by staff on location to clean structures and equipment that have been subjected to harsh conditions at plant.

Justification

Original unit purchased in 1996 - expected life 15 years.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
			$22,500					$22,500

Funding Source

Capital Reserves - 20% Reclamation

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment		$ 22,500					$ 22,500
Total	$ -	$ 22,500	$ -	$ -	$ -	$ -	

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Plant truck**	Contact:	Pinkevich
Dept:	Treatment	Type:	Other
Total Cost:	$ 25,000	Useful Life:	15 years
CY Budget	$ -	Category:	Capital Equipment
Account:	2720	Urgency:	4 = Less Important
		Carry Forward:	No

Description

2007 Chevy Silverado - will be 10 years old in 2017-18. At that time the District will make a decision regarding its replacement. The existing vehicle will be moved to the plant. The Plant Superintendent will either purchase a smaller truck (i.e. Toyota Tacoma, etc) or perhaps utilize the District Honda.

Justification

Propose moving this truck to the Operations Department and utilizing it as a spare around the plant -- thereby extending life beyond 10 years

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
				$25,000				$25,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Purchase			$ 25,000				$ 25,000
Total	$ -	$ -	$ 25,000	$ -	$ -	$ -	$ 25,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Server Replacement**	Contact:	Pinkevich
Dept:	Treatment	Type:	Communications
Total Cost:	$ 8,000	Useful Life:	5 years
CY Budget	$ -	Category:	Capital Equipment
Account:	2735	Urgency:	1 = Critical
		Carry Forward:	No

Description

The servers are replaced every four years.

Justification

The District's computer network is a critical component of operations. We replace the servers every four years to ensure reliability and limit the potential for down time.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
					$8,000			$8,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment				$ 8,000			$ 8,000
Total	$ -	$ -	$ -	$ 8,000	$ -	$ -	$ 8,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Lab - Autoclave**	Contact:	Pinkevich
Dept:	Treatment	Type:	Other
Total Cost:	$ 16,000	Useful Life:	10 years
CY Budget	$ -	Category:	Capital Improvement
Account:		Urgency:	3 = Important
		Carry Forward:	No

Description

The autoclave is used to conduct NPDES permit coliform tests and to destroy samples which test positive prior to disposal. It is essential to complete permit required analysis and maintain compliance with EPA and ELAP (Environmental Laboratory Accreditation Program) requirements.

Justification

Originally purchased in 2005 it has outlived its useful life.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
						$16,000		$16,000

Funding Source

Capital Reserves - 50% Reclamation

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment					$ 16,000		$ 16,000
Total	$ -	$ -	$ -	$ -	$ 16,000	$ -	$ 16,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Lab - Industrial Dishwasher**	Contact:	Pinkevich
Dept:	Treatment	Type:	Other
Total Cost:	$ 11,000	Useful Life:	15 years
CY Budget	$ -	Category:	Capital Improvement
Account:		Urgency:	3 = Important
		Carry Forward:	No

Description

The dishwasher in the lab is used to clean and sanitize all lab glassware. It is required to maintain compliance with EPA and ELAP (Environmental Laboratory Accreditation Program) requirements.

Justification

Purchased in 2008 it has outlived its useful life.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
						$11,000		$11,000

Funding Source

Capital Reserves - 50% Reclamation

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment					$ 11,000		$ 11,000
Total	$ -	$ -	$ -	$ -	$ 11,000	$ -	$ 11,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Lab - Ion Chromatograph**	Contact:	Pinkevich
Dept:		Type:	Lab
Total Cost:	$ 150,000	Useful Life:	10 years
CY Budget	$ -	Category:	Capital Equipment
Account:	2158	Urgency:	2 = Very Important
		Carry Forward:	No

Description

Current ion chromatograph is still in good condition and the parts for repair are still available. The technology is dated, but staff is comfortable with staying with the current machine.

Justification

This is entered into "Unscheduled" because it will likely require CAWD to enter into a lease agreement (as it did with the current machine). CAWD is legally responsible for the lease payments & the Reclamation Project makes reimbursement to CAWD.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
							$150,000	$150,000

Funding Source

Capital Reserves - 100% Reclamation

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment						$ 150,000	$ 150,000
Total	$ -	$ -	$ -	$ -	$ -	$ 150,000	$ 150,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Conversion of Dump Truck to Boom Lift**	Contact:	Pinkevich
Dept:	Treatment	Type:	Equipment
Total Cost:	$ 65,000	Useful Life:	10 years
CY Budget	$ -	Category:	Capital Equipment
Account:	2158	Urgency:	2 = Very Important
		Carry Forward:	No

Description

1991 22 ton Kodiak Chevrolet dump truck was used to haul asphalt, dirt, etc. by Collections crew. It is no longer used on the road but the engine body is still in good shape.

Justification

Conversion of dump truck into a boom truck would provide the Treatment Plant with the flexibility to lift heavy loads without calling PBCSD for their boom lift truck or arranging for a rental lift. The existing truck engine is still in good shape and staff feels they could do the retrofit and get many more years of service.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
			$65,000					$65,000

Funding Source

Capital Reserves

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Equipment		$ 65,000					$ 65,000
Total	$ -	$ 65,000	$ -	$ -	$ -	$ -	$ 65,000

CAWD TREATMENT PLANT MAINTENANCE PROJECTS
FY 2015/16 *thru* 2019/20

Project #	PROJECT	15/16	16/17	17/18	18/19	19/20
1	Replacement of valves and piping	$75,000	$75,000	$75,000	$50,000	$50,000
2	Various roof repair/replace	$70,000	$85,000			
3	Walkway rehabilitation	$30,000	$25,000	$25,000		
4	Building doors, louvers and vents. Repair/Replace	$30,000	$20,000	$20,000	$10,000	$10,000
5	Concrete spot repairs	$25,000	$25,000	$25,000	$25,000	
6	Process sample stations. Rehabilitate/ Replace.	$20,000	$20,000	$15,000	$15,000	$10,000
7	Grating repair and replacement	$15,000	$15,000	$10,000	$5,000	
8	SCADA modifications	$10,000	$10,000	$10,000	$10,000	$10,000
	TREATMENT & DISPOSAL TOTAL	**$275,000**	**$275,000**	**$180,000**	**$115,000**	**$80,000**
	RECLAMATION SHARE (1)	$0	$0	$0	$0	$0
	PBCSD SHARE	$91,667	$91,667	$60,000	$38,333	$26,667
	CAWD COST	**$183,333**	**$183,333**	**$120,000**	**$76,667**	**$53,333**

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Valve and Piping replacement and modification**	Contact:	Pinkevich
Dept:	Treatment	Type:	Maintenance
Total Cost:	$325,000	Useful Life:	35 years
CY Budget	$75,000	Category:	Maintenance
Account:		Urgency:	2 = Very Important
Inception date:	2012	Carry Forward:	No

Description

These funds will be utilized to rehabilitate or replace valves as we progress with projects. In many cases projects cannot proceed or will be delayed until the proper valving and bypass valving systems are in place and determined to be reliable. Staff believes the best approach is to allocate yearly for the next five years so that the entire plant can be rehabilitated.

Justification

Numerous valves are inoperable throughout the plant.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$75,000	$75,000	$75,000	$50,000	$50,000		$325,000

Funding Source

O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 10,000	$ 10,000	$ 10,000	$ 5,000	$ 5,000		$ 40,000
Parts & Supplies	$ 65,000	$ 65,000	$ 65,000	$ 45,000	$ 45,000		$ 285,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ 75,000	$ 75,000	$ 75,000	$ 50,000	$ 50,000	$ -	$ 325,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Roof Repairs and Maintenance**	Contact:	Pinkevich
Dept:	Treatment	Type:	Buildings
Total Cost:	$155,000	Useful Life:	30 years
CY Budget	$70,000	Category:	Maintenance
Account:	6511	Urgency:	2 = Very Important
Inception date:		Carry Forward:	Yes

Description

Various areas around the plant are in need of either patch roof repair or replacement.
Preliminary estimates as follows:

Influent Building	$25K
Ops Building	$25K
Boiler Building	$35K
Solids Handling Building	$25K
Lab	$20K
Effluent Building	$25K

The estimate includes skylight repair and fall protection

Justification

Basic repair and/or replacement is required to protect structural integrity of various facilities.
Repair work will be expensed. Replacement work will be capitalized.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$70,000	$85,000					$155,000

Funding Source

Replace = Capital Reserves

Repair = O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract	$ 70,000	$ 85,000					$ 155,000
Total	$ 70,000	$ 85,000	$ -	$ -	$ -	$ -	$ 155,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Walkway Rehabilitation**	Contact:	Pinkevich
Dept:	Treatment	Type:	Rehab
Total Cost:	$80,000	Useful Life:	40 years
CY Budget	$30,000	Category:	Maintenance
Account:	5855.006	Urgency:	3 = Important
Inception date:	2015	Carry Forward:	No

Description

There are numerous walkways throughout the plant that connect plant processes and buildings.

Justification

These walkways are in need of rehabilitation. Thee is concrete spalling, uneven walkways, and cracks.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$30,000	$25,000	$25,000				$80,000

Funding Source

Contractual Services - Plant Rehabilitation

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract	$ 30,000	$ 25,000	$ 25,000				$ 80,000
Total	$ 30,000	$ 25,000	$ 25,000	$ -	$ -	$ -	$ 80,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Building doors, Louvers and Vent Rehab/Replace**	Contact:	Pinkevich
Dept:	Treatment	Type:	CIP
Total Cost:	$90,000	Useful Life:	20 years
CY Budget	$30,000	Category:	Maintenance
Account:		Urgency:	3 = Important
Inception date:	2015	Carry Forward:	No

Description

Building doors, louvers and vents provide safety, security and ventilation on plant buildings.

Justification

Plant doors, louvers and vents are in need of replacement as years of weathering has taken its toll.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$30,000	$20,000	$20,000	$10,000	$10,000		$90,000

Funding Source

O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 5,000	$ 5,000	$ 5,000	$ 2,000	$ 2,000		$ 19,000
Parts & Supplies	$ 25,000	$ 15,000	$ 15,000	$ 8,000	$ 8,000		$ 71,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ 30,000	$ 20,000	$ 20,000	$ 10,000	$ 10,000	$ -	$ 90,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Concrete spot repair**	Contact:	Pinkevich
Dept:	Treatment	Type:	Rehab
Total Cost:	$100,000	Useful Life:	40 years
CY Budget	$25,000	Category:	Maintenance
Account:	5855.006	Urgency:	2 = Very Important
Inception date:	2015	Carry Forward:	No

Description

Repair of plant concrete around buildings, walls, floors ands outside walkways.

Justification

Concrete spalling is occurring in various areas throughout the plant. Exposing of rebar and continued spalling will degrade concrete in such a way that major repairs will be necessary.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$25,000	$25,000	$25,000	$25,000			$100,000

Funding Source

Contractual Services - Plant Rehabilitation
O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 20,000	$ 20,000	$ 20,000	$ 20,000			$ 80,000
Parts & Supplies	$ 5,000	$ 5,000	$ 5,000	$ 5,000			$ 20,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ -	$ -	$ 100,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Process Sample Station Rehab or Replacement**	Contact:	Pinkevich
Dept:	Treatment	Type:	Lab
Total Cost:	$80,000	Useful Life:	15 years
CY Budget	$20,000	Category:	Maintenance
Account:		Urgency:	3 = Important
Inception date:	2015	Carry Forward:	No

Description

Many of the processes in the plant have automated samplers that are needed to gather samples for the lab. The data from these samples are used for process control.

Justification

Our current samplers are aging and are located in harsh environment. In many instances these samplers are located outside. Moving forward we will locate these samplers inside when possible

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$20,000	$20,000	$15,000	$15,000	$10,000		$80,000

Funding Source

O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 5,000	$ 5,000	$ 3,000	$ 3,000	$ 2,000		$ 18,000
Parts & Supplies	$ 15,000	$ 15,000	$ 12,000	$ 12,000	$ 8,000		$ 62,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ 20,000	$ 20,000	$ 15,000	$ 15,000	$ 10,000	$ -	$ 80,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**Grating repair and replacement**	Contact:	Pinkevich
Dept:	Treatment	Type:	Maintenance
Total Cost:	$45,000	Useful Life:	25 years
CY Budget	$15,000	Category:	Maintenance
Account:	5855.006	Urgency:	3 = Important
Inception date:	2015	Carry Forward:	No

Description

Grating serves as walkways over open channels throughout the plant.

Justification

Steel grating has deteriorated over time due the harsh plant environment along with weathering. Newer grating is a composite based grating that will withstand these environments. Furthermore these gratings are much lighter and easier to remove when needed mitigating potential safety hazards (i.e. back and hand injuries).

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$15,000	$15,000	$10,000	$5,000			$45,000

Funding Source

O&M Budget

Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor							$ -
Parts & Supplies	$ 15,000	$ 15,000	$ 10,000	$ 5,000			$ 45,000
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ 15,000	$ 15,000	$ 10,000	$ 5,000	$ -	$ -	$ 45,000

FY 2015-16 Budget

Carmel Area Wastewater District

Project Name:	**SCADA Modifications**	Contact:	Pinkevich
Dept:	Treatment	Type:	SCADA
Total Cost:	$50,000	Useful Life:	
CY Budget	$10,000	Category:	Capital Improvement
Account:		Urgency:	3 = Important
Inception date:	2015	Carry Forward:	No

Description

SCADA (Supervisory Control and Data Acquisition) is the computer and database system utilized to make process changes and gather data.

Justification

Until we replace our current SCADA system we will make necessary changes as needed in order to keep the system operational.

Expenditures:	Prior	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
		$10,000	$10,000	$10,000	$10,000	$10,000		$50,000

Funding Source

O&M Budget

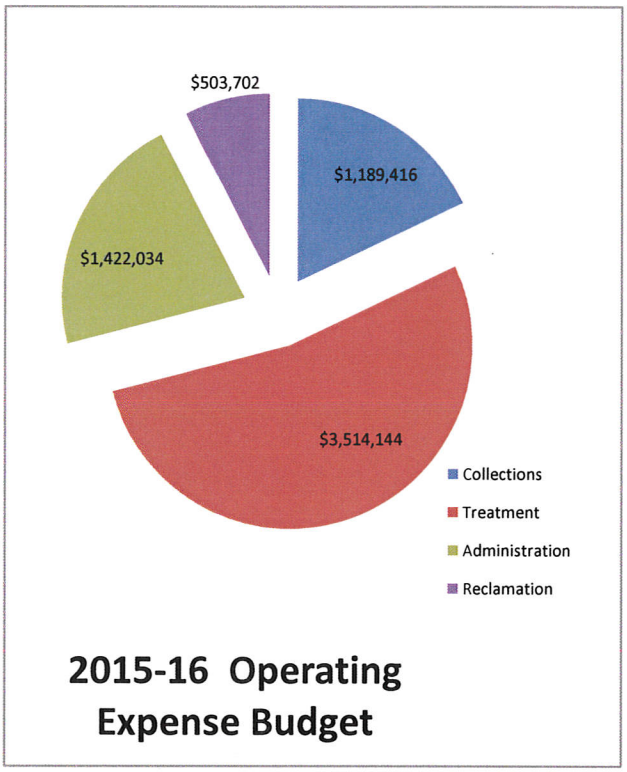
Budget Impact/Other

Budget Items	15-16	16-17	17-18	18-19	19-20	Unsched.	Total
Labor	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000		$ 50,000
Parts & Supplies							$ -
Chemicals							$ -
Utility							$ -
Other - Contract							$ -
Total	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ -	$ 50,000

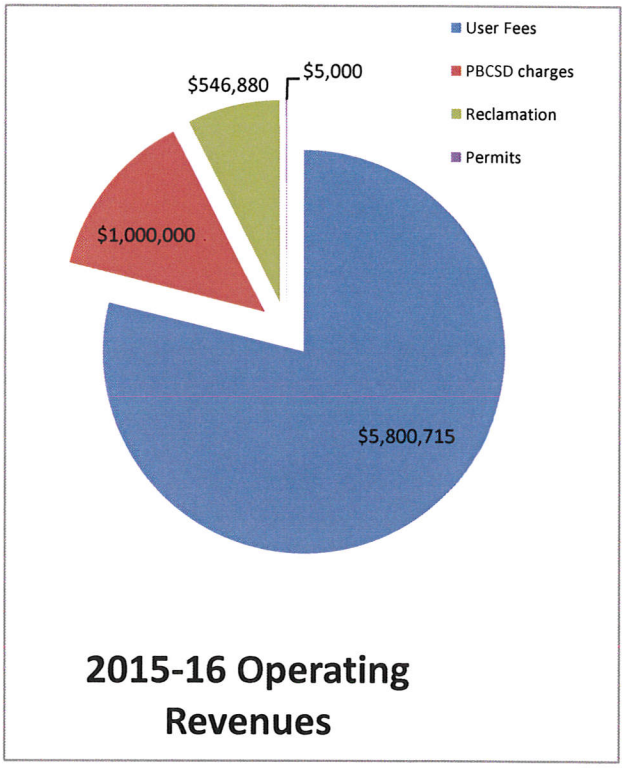
CAWD/PBCSD Reclamation Project

FY 2015/16 *thru* 2019/20

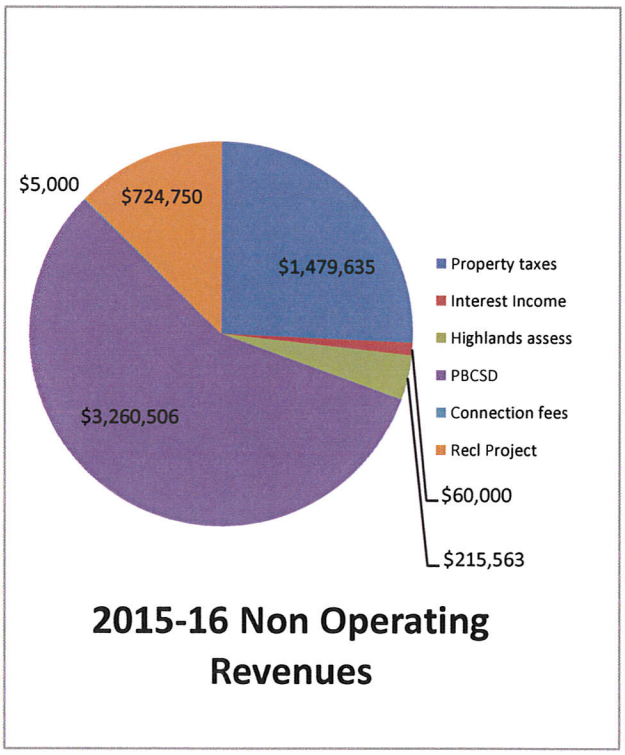
Project #	PROJECT	15/16	16/17	17/18	18/19	19/20	Unscheduled
CAPITAL PROJECTS							
1	Laboratory Modifications (50% Reclamation)	$25,000					
2	Pipe Storage Area (20% Reclamation)	$20,000					
3	Effluent Bldg. Wetwell Level Monitoring Upgrade (50% Reclamation)	$11,500					
4	MFRO Siding (100% Reclamation)	$50,000					
5	Rehab/Install Inlet & Influent Gates	$80,000					
LONG TERM CAPITAL							
1	Hypo/SBS (40% Reclamation)	$800,000	$615,625				
2	Thickener/DAFT (50% Reclamation)	$750,000	$675,000			$600,000	
3	Chlorine Contact (25% Reclamation)						$1,511,000
CAPITAL PURCHASES							
1	Power Line Conditioning (50% Reclamation - Lab Only)	$50,000					
2	Tertiary pH Adjustment System (100$ Reclamation)	$30,000					
3	Lighting Project (16 fixtures)(100% Reclamation)	$25,000					
4	FEB Baffle (100% Reclamation)	$12,000					
5	Steam Cleaner (20% Reclamation)		$22,500				
6	Lab - Autoclave (50% Reclamation)					$16,000	
7	Lab - Industrial Dishwasher (50% Reclamation)					$11,000	
8	Lab - Ion Chromatograph						$150,000
	TREATMENT & DISPOSAL TOTAL	**$1,853,500**	**$1,313,125**	**$0**	**$0**	**$627,000**	**$1,661,000**
	RECLAMATION SHARE	$871,250	$588,250	$0	$0	$313,500	$527,750
	PBCSD SHARE	$327,089	$241,383	$0	$0	$104,396	$377,372
	CAWD COST	**$655,161**	**$483,492**	**$0**	**$0**	**$209,105**	**$755,878**



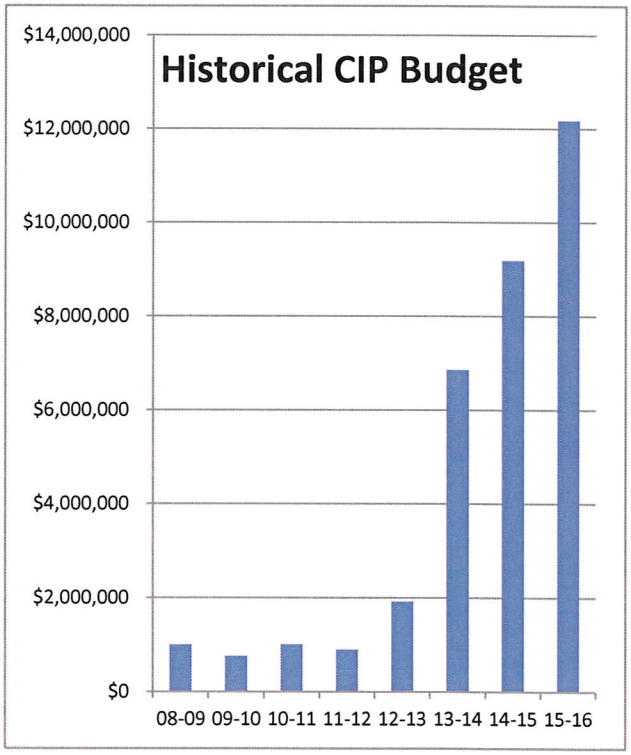
2015-16 Operating Expense Budget



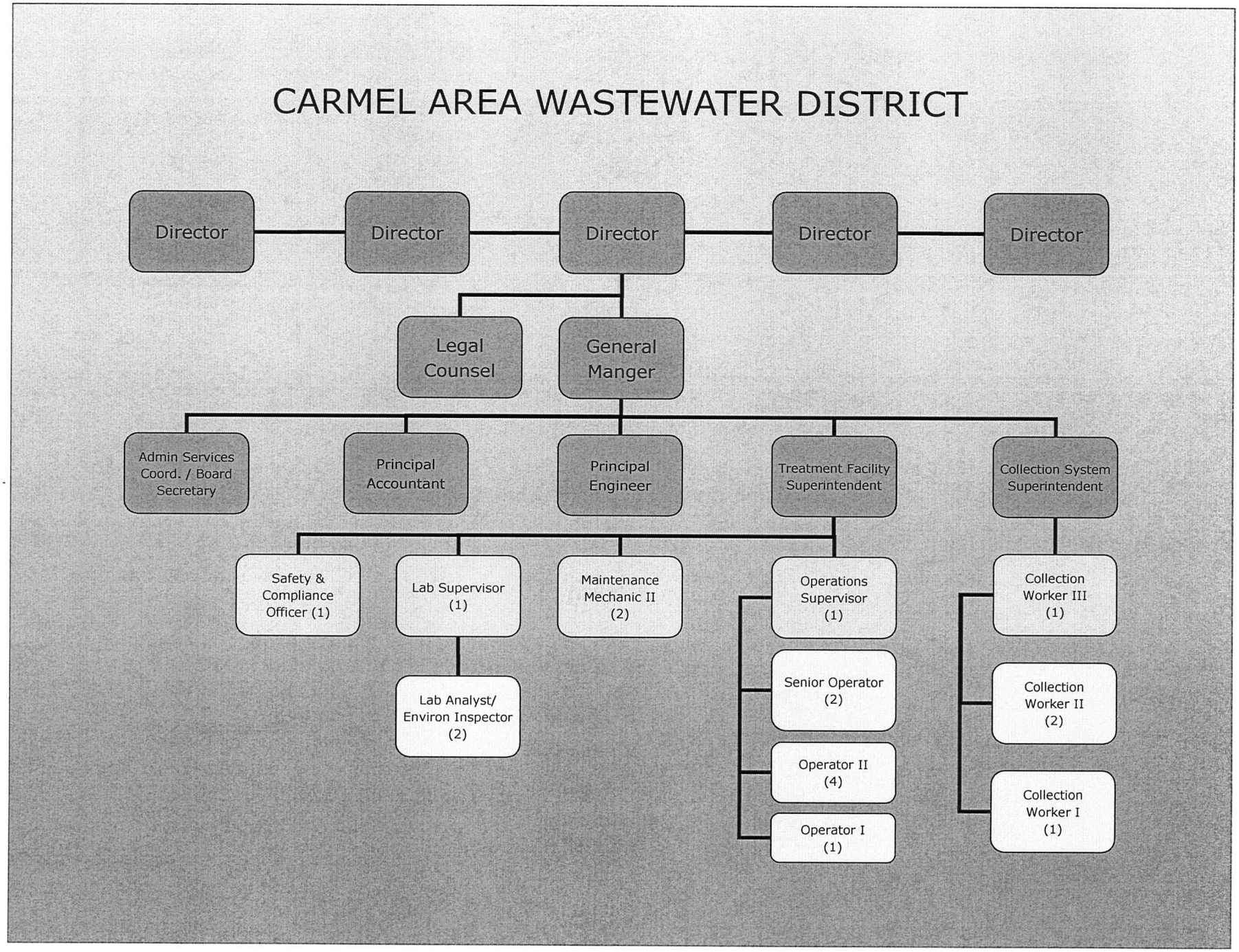
2015-16 Operating Revenues



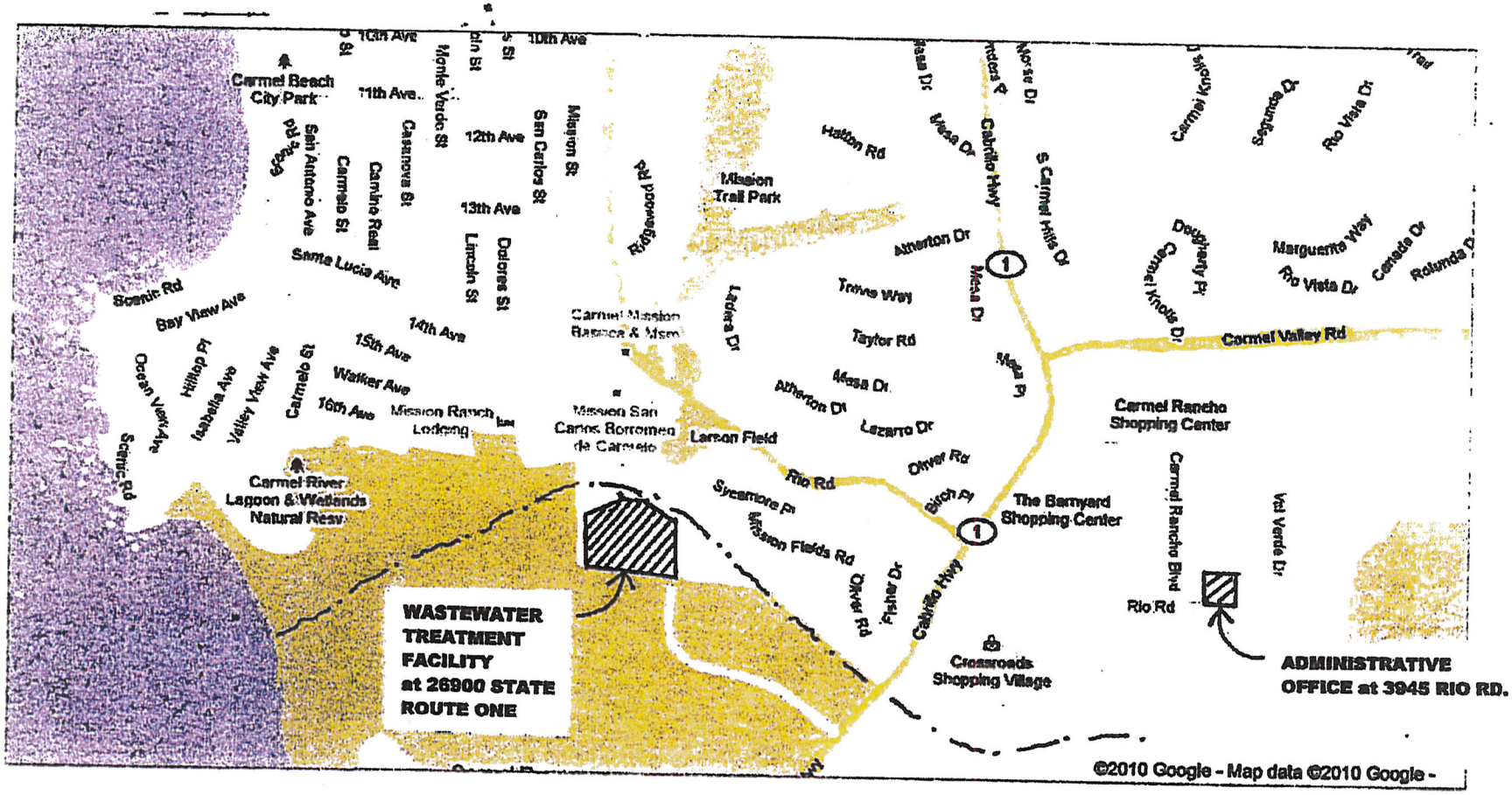
2015-16 Non Operating Revenues

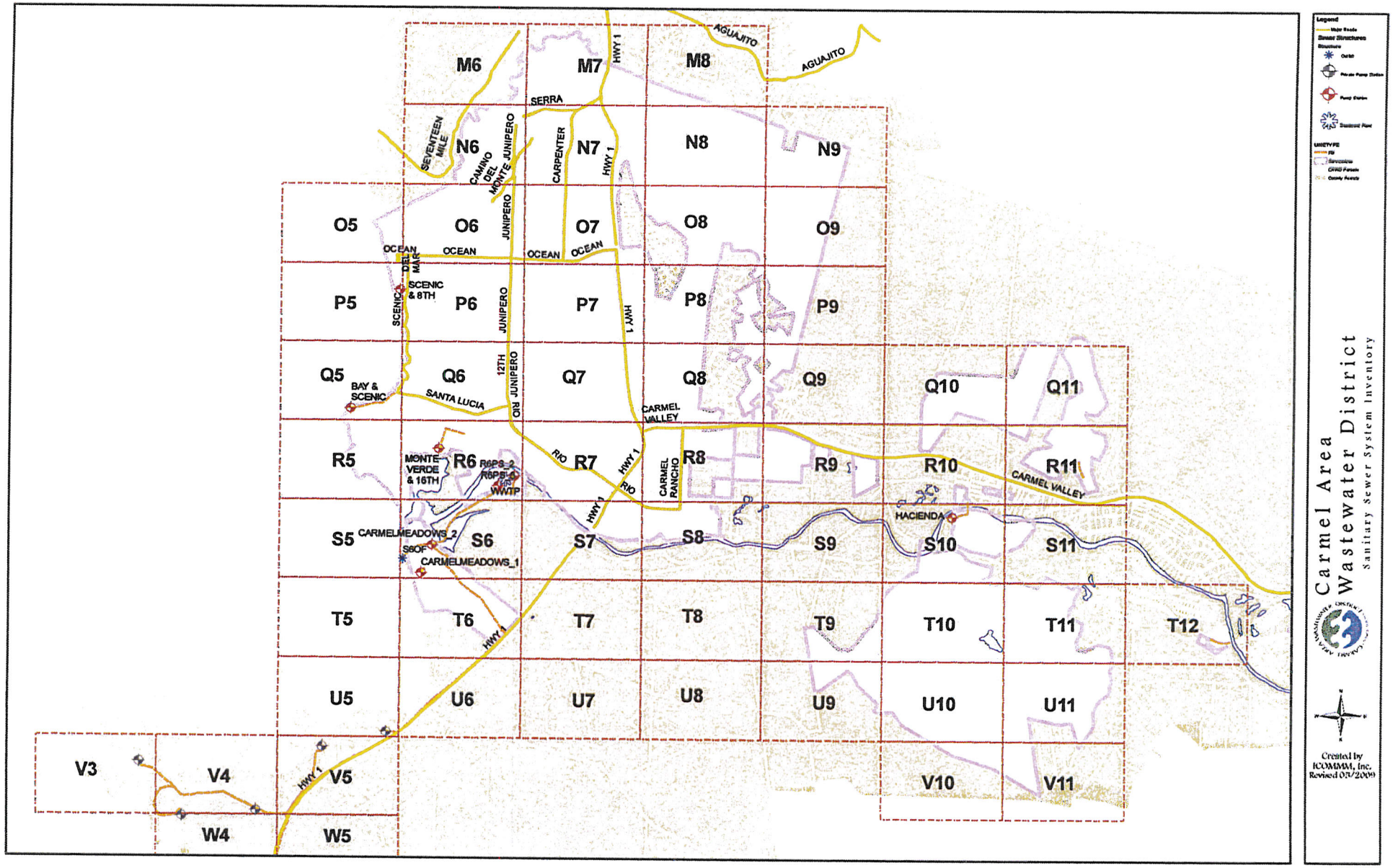


CARMEL AREA WASTEWATER DISTRICT



The Wastewater Treatment Facility is located South of the City of Carmel at 26900 State Route One. Heading South on State Route One, take an immediate right turn after crossing the Carmel River bridge. The Facility is approximately 1/3 mile West of State Route One.

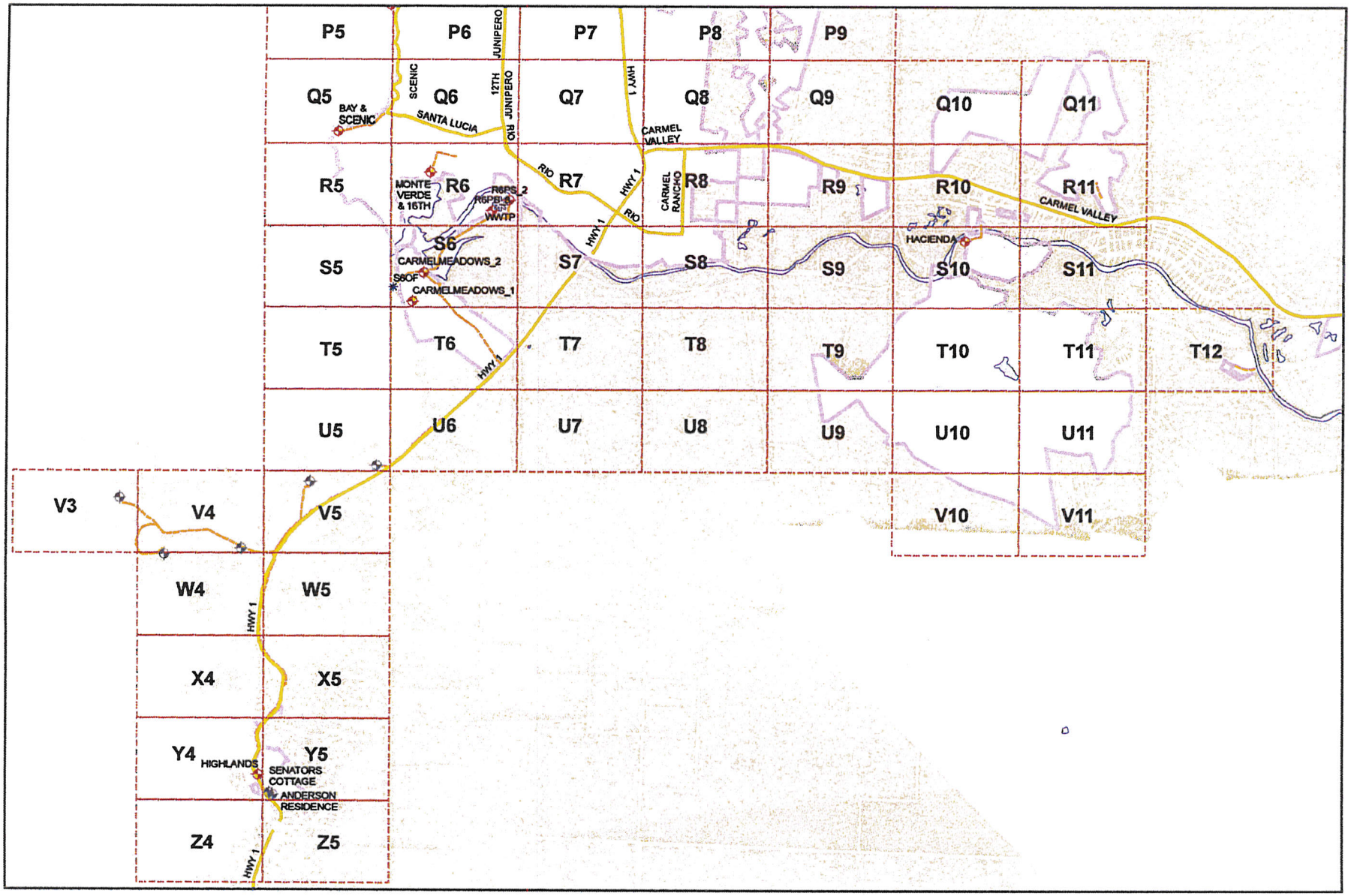




Carmel Area Wastewater District

Sanitary Sewer System Inventory

Created by ICOMMM, Inc.
Revised 03/2009


P5
P6
P7
P8
P9
Q5
Q6
Q7
Q8
Q9
Q10
Q11
R5
R6
R7
R8
R9
R10
R11
S5
S6
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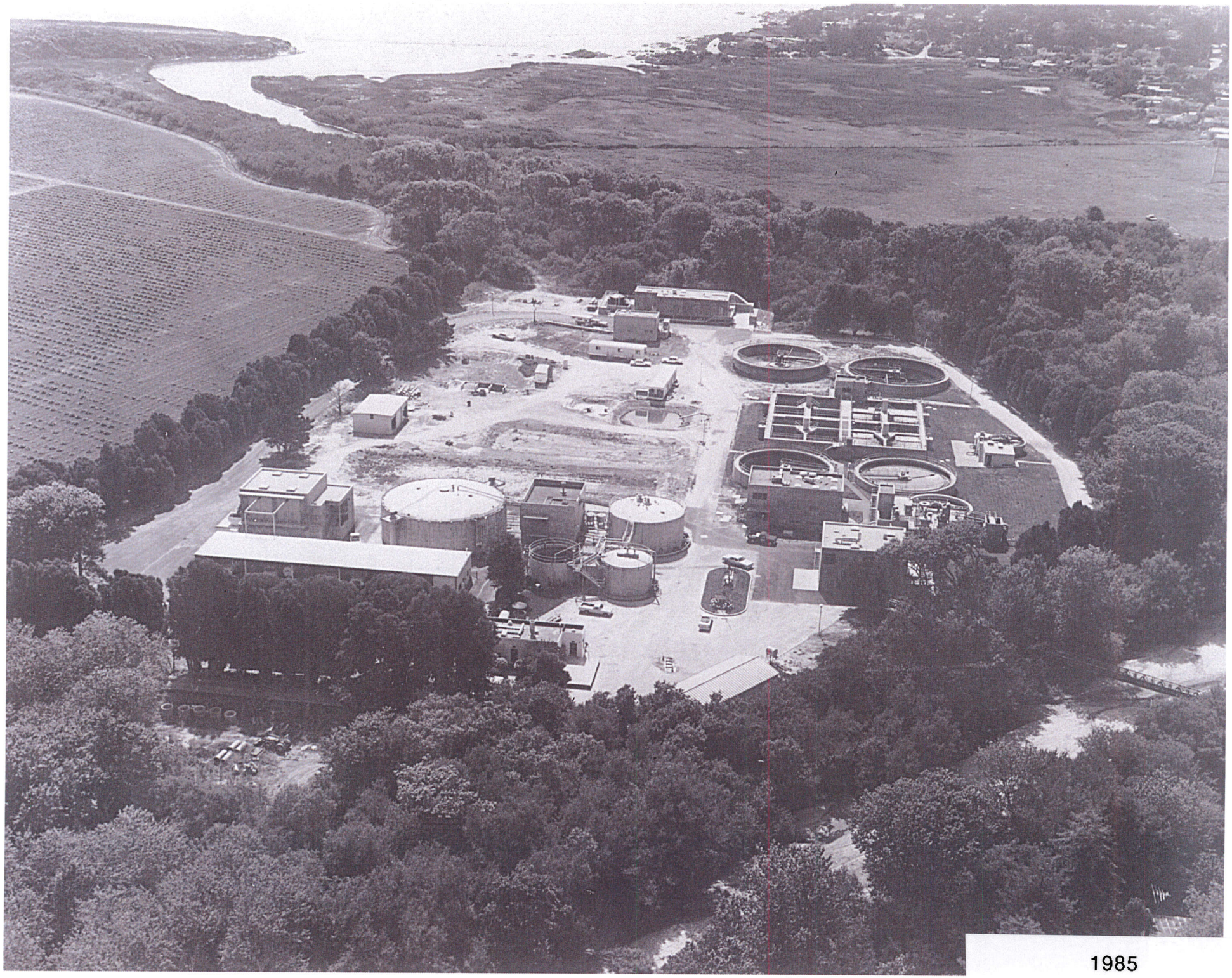
T12
U5
U6
U7
U8
U9
U10
U11
V3
V4
V5
V10
V11
W4
W5
X4
X5
Y4
Y5
Z4
Z5
JUNIPERO
SCENIC
12TH
BAY & SCENIC
SANTA LUCIA
CARMEL VALLEY
HWY 1
RIO
MONTE VERDE & 16TH
R6PS_2
R6PS_1
WWTP
CARMEL RANCHO
HACIENDA
CARMELMEADOWS_2
S6OF
CARMELMEADOWS_1
HIGHLANDS
SENATORS COTTAGE
ANDERSON RESIDENCE
Legend
Major Roads
Sewer Structures
Structure
Gates
Private Pump Station
Pump Station
Treatment Plant
LINETYPE
FID
Connectors
CAWD Parcels
County Parcels
Carmel Area Wastewater District
Sanitary Sewer System Inventory
Created by ICOMM, Inc.
Revised 05/2009

1939

1955

1973



1985

2011

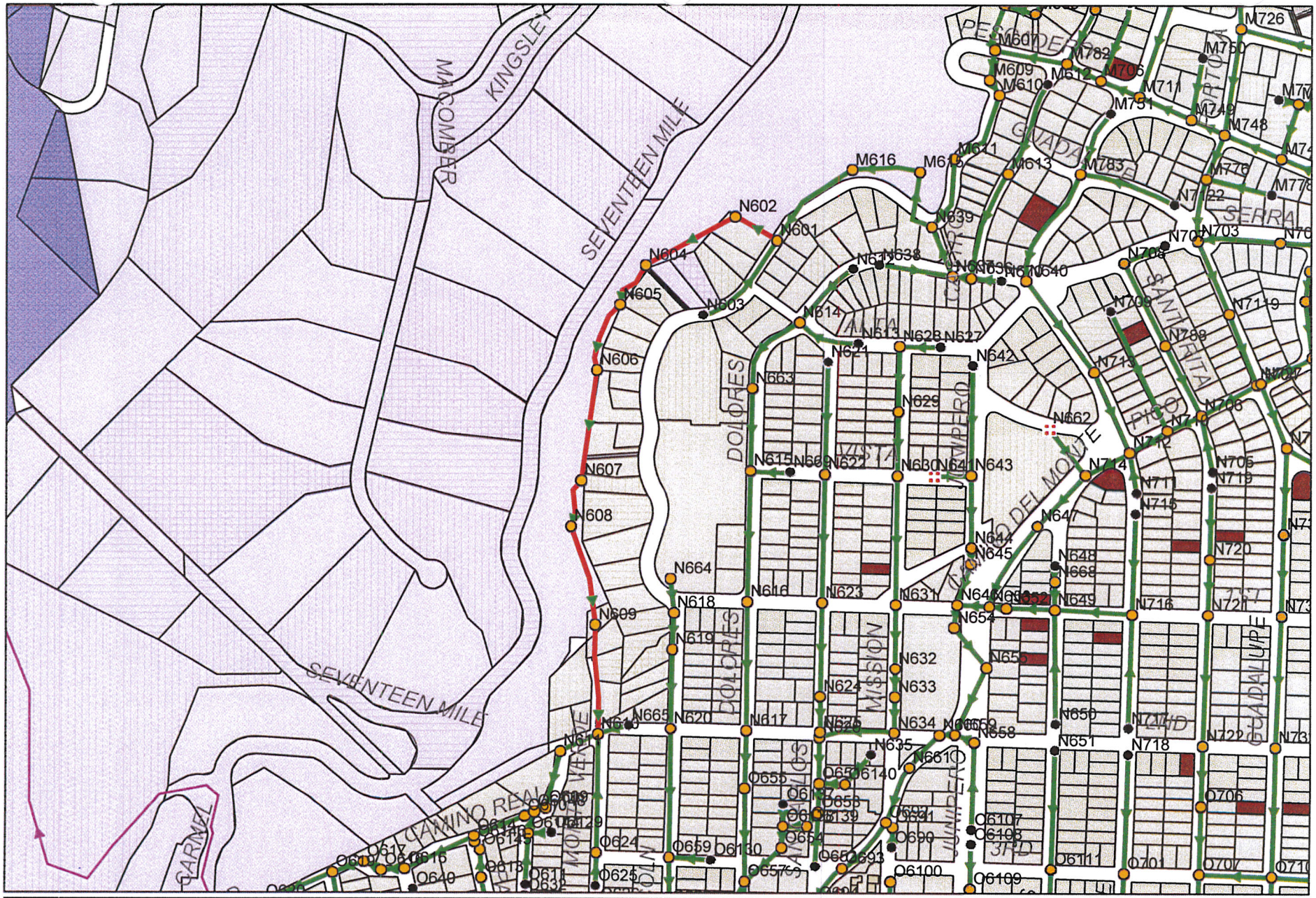

2011

Some of our neighbors!

APPENDICES

2015-16 Pescadero

Replacement Project



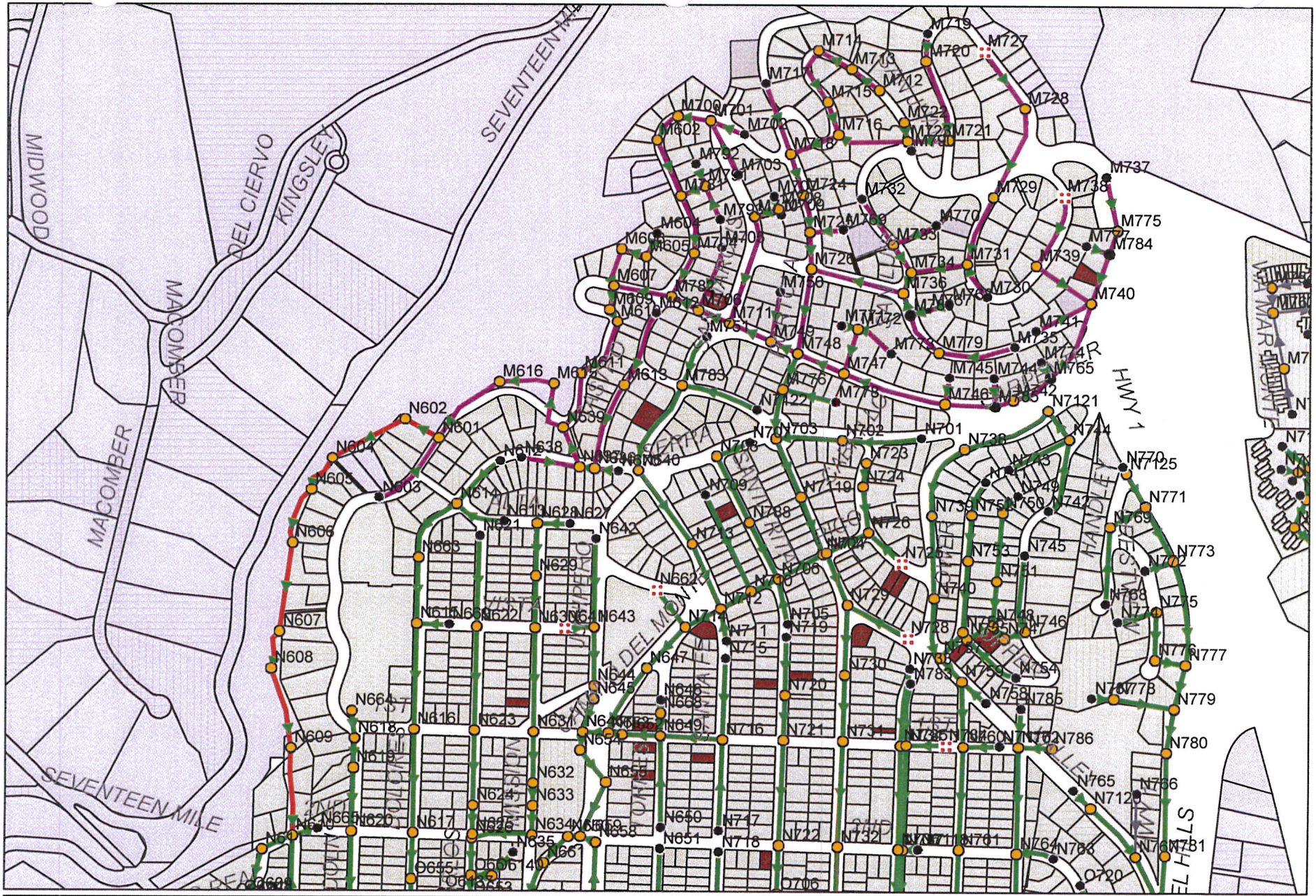
ICOMMM
9/8/2014

PESCADERO EASEMENT REPLACEMENT PROJECT 2015/2016

N

Pescadero Canyon Easment Replacement	Length	Pipe Size	Laterals per line segment	Manholes to be replaced
N604-N605	174.1	6	3	N602
N601-N602	165.5	6	1	N604
N602-N604	352.5	6	5	N605
N605-N606	256.9	6	4	N606
N606-N607	387	6	6	N607
N607-N608	171.3	6	2	N608
N608-N609	354.5	6	4	N609
N609-N610	378.5	6	5	
	TOTAL		TOTAL	TOTAL
	2240.3		30	7
	COST		COST	COST
	$120 PER FOOT		$2000 PER LATERAL	$10,000 PER MANHOLE
	2241' X $120 = $268,920		$2000 X 30 = $60,000	$10,000 X 7 = 70,000
	$268,920		$60,000	$70,000
TOTAL COST OF PROJECT	$398,920			

Staff is recomending replacement of the Pescadero Easment sewer lines and manholes.Staff recomends using pipebusting on most of the replacement and open cut on one segment to correct grade. Staff has used the CCTV rating system of PACP which is a NASSCO nation wide standard.
The contractor will increase the pipe size from 6 inch to 8 inch. There will district easment work that will need to addressed pryor construction.
Staff will be using a scale of 1-5 on rating the prioriy on which line segment to replace first with 5 being a high priority. These segments rated a 5 due to location, condition and pryor SSO history.



ICOMMM
9/8/2014

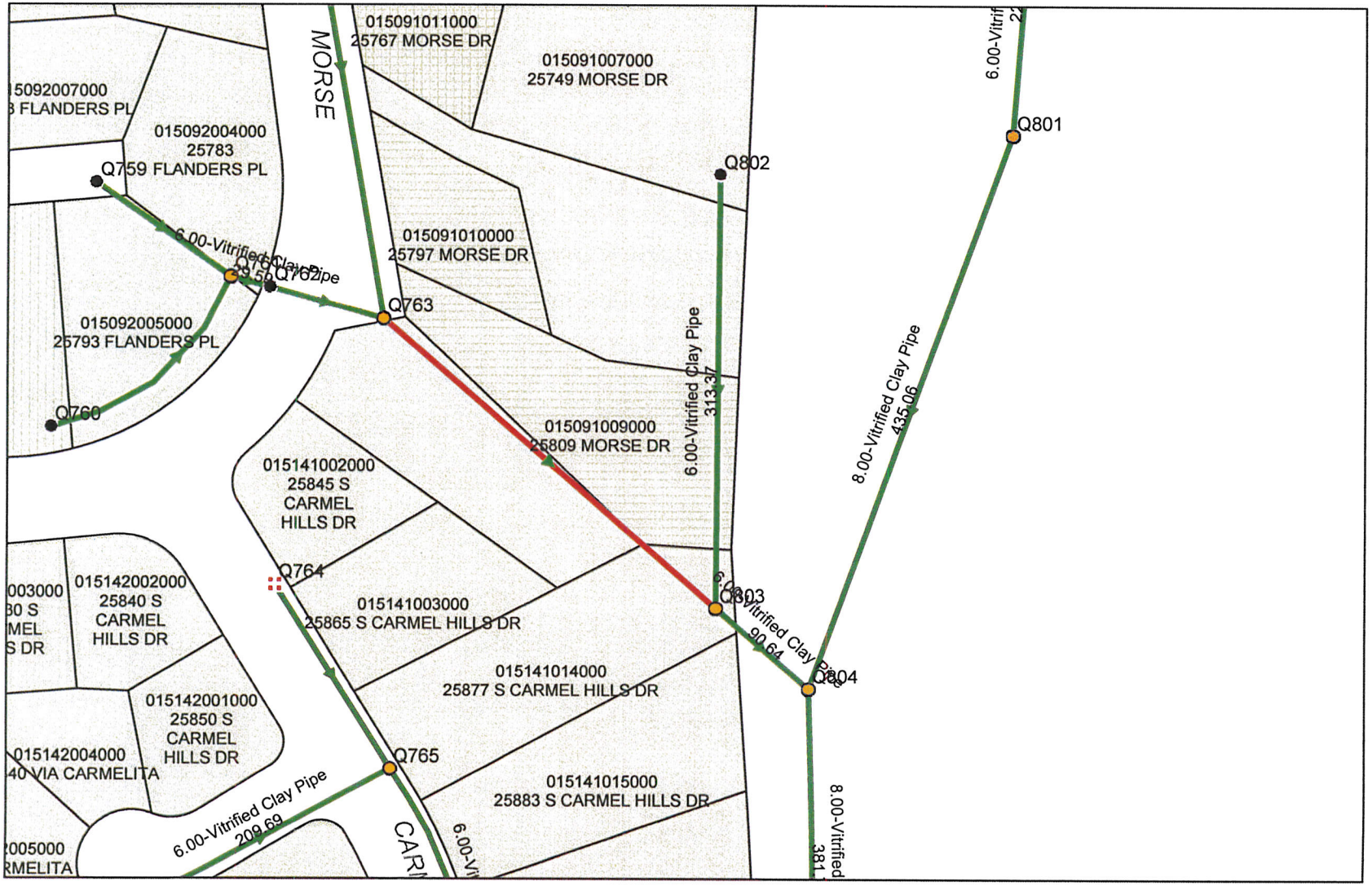
THE PURPLE LINES REPERSENT FLOWS THAT FEED THE PESCADERO EASMENT

N

2016-17 Morse Dr. &

Pine Hills

Replacement Project



RedZone ROBOTICS

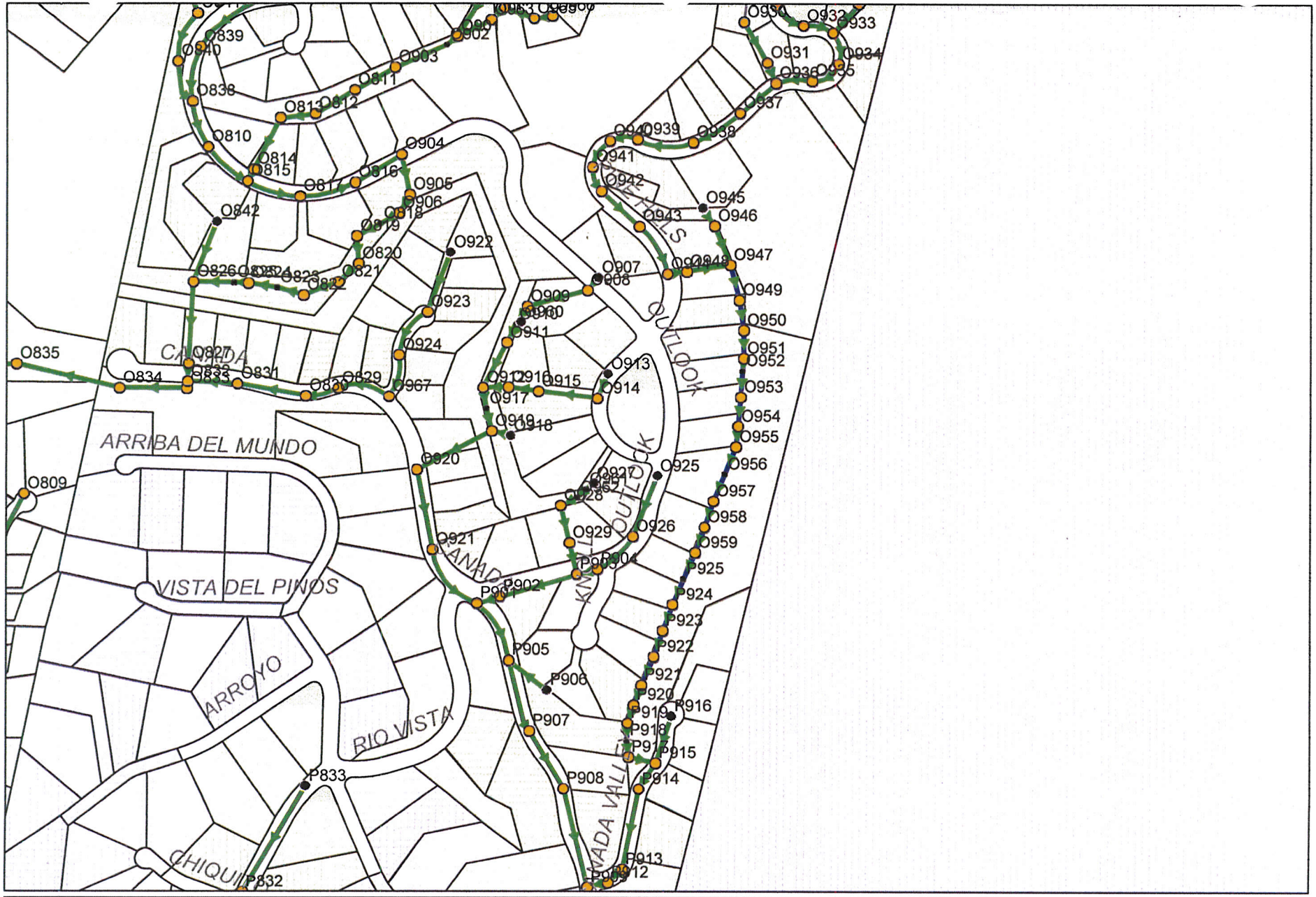
10/8/2014

MORSE DR. EASMENT

N

Morse Dr. Easment	Length	Size
Q763-Q803	323.9	6
	COST	
	$150 X 323.9 = $48,585	
TOTAL COST OF PROJECT	$48,585	

This Project or line segment has had structial failure in the past with the result of an SSO. Staff recomends this line segment be either replaced or regraded for proper alinement. The hillside is sliding and will require renforcement to stablize the hill. The probility of future hillside movement will need to be addressed.



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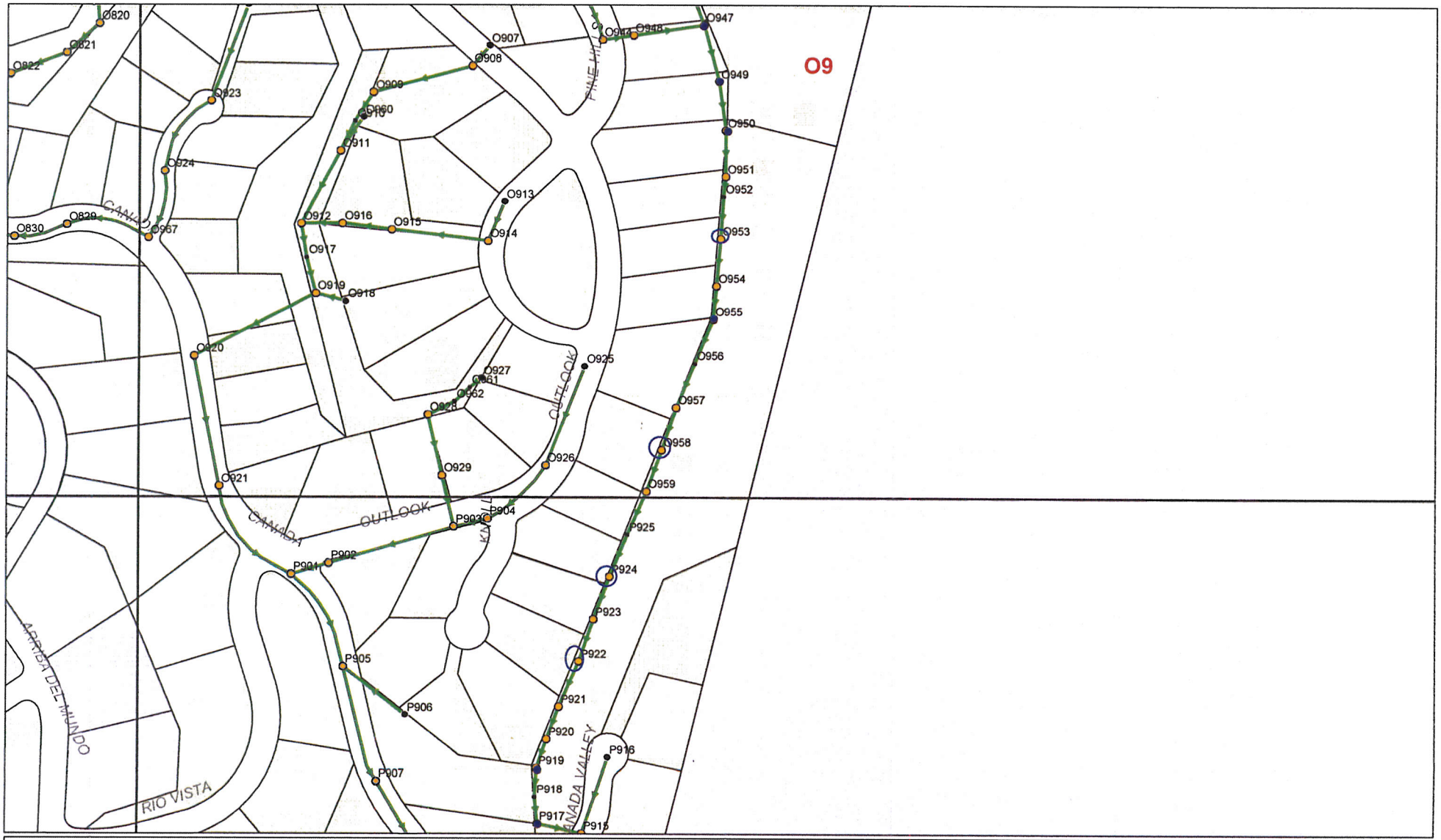
9/8/2014

PINE HILLS EASEMENT



ICOMMM
9/24/2014

PINE HILLS EASEMENT MANHOLES TO BE REPLACED OR ADDED

N

Pine Hills Easment Replacement	Length	Pipe Size	Laterals per line segment	Manhole to be replaced
P923-P922	100.1	6		
O947-O949	131.2	6	1	
O949-O950	114.8	6	1	
O950-O951	102.4	6	1	
O951-O952	44.5	6		
O952-O953	95.6	6	1	O953
O953-O954	107.3	6	1	
O954-O955	75	6	1	
O955-O956	107.7	6		
O956-O957	107.7	6	1	
O957-O958	100.3	6		O958
O958-O959	98.9	6	1	
O959-P925	105	6	1	
P918-P917	60.3	6		
P919-P918	63.7	6	1	
P920-P919	68	6		
P921-P920	77.6	6	1	
P922-P921	110.6	6		P922
P924-P923	101.2	6	2	
P925-P924	102.4	6	1	P924
	TOTAL		TOTAL	TOTAL
	1874.3		14	4
	COST		COST	COST
	$120 PER FOOT		$50 PER LATERAL	$10,000 PER MANHOLE
	1874.3' X $120 = $224,916		$50 X 14 = $700	$10,000 x 4 = $40,000
	$224,916		$700	$40,000
TOTAL COST OF PROJECT	$265,616			

Staff is recomending replacement of the Pine Hills easment sewer lines and manholes.Staff recomends using the open cut method for replacement Staff has used the CCTV rating system of PACP which is a NASSCO nation wide standard. The contractor will increase the pipe size from 6 inch to 8 inch. There will district easment work that will need to addressed pryor construction. Staff will be using a scale of 1-5 on rating the priority on which line segment to replace first with 5 being a high priority. These segments rated a 5 due to location, condition and pryor SSO history.

2017-18 High Meadows

Replacement Project

ICOMMM
9/24/2014

HIGH MEADOWS EASEMENT PROJECT

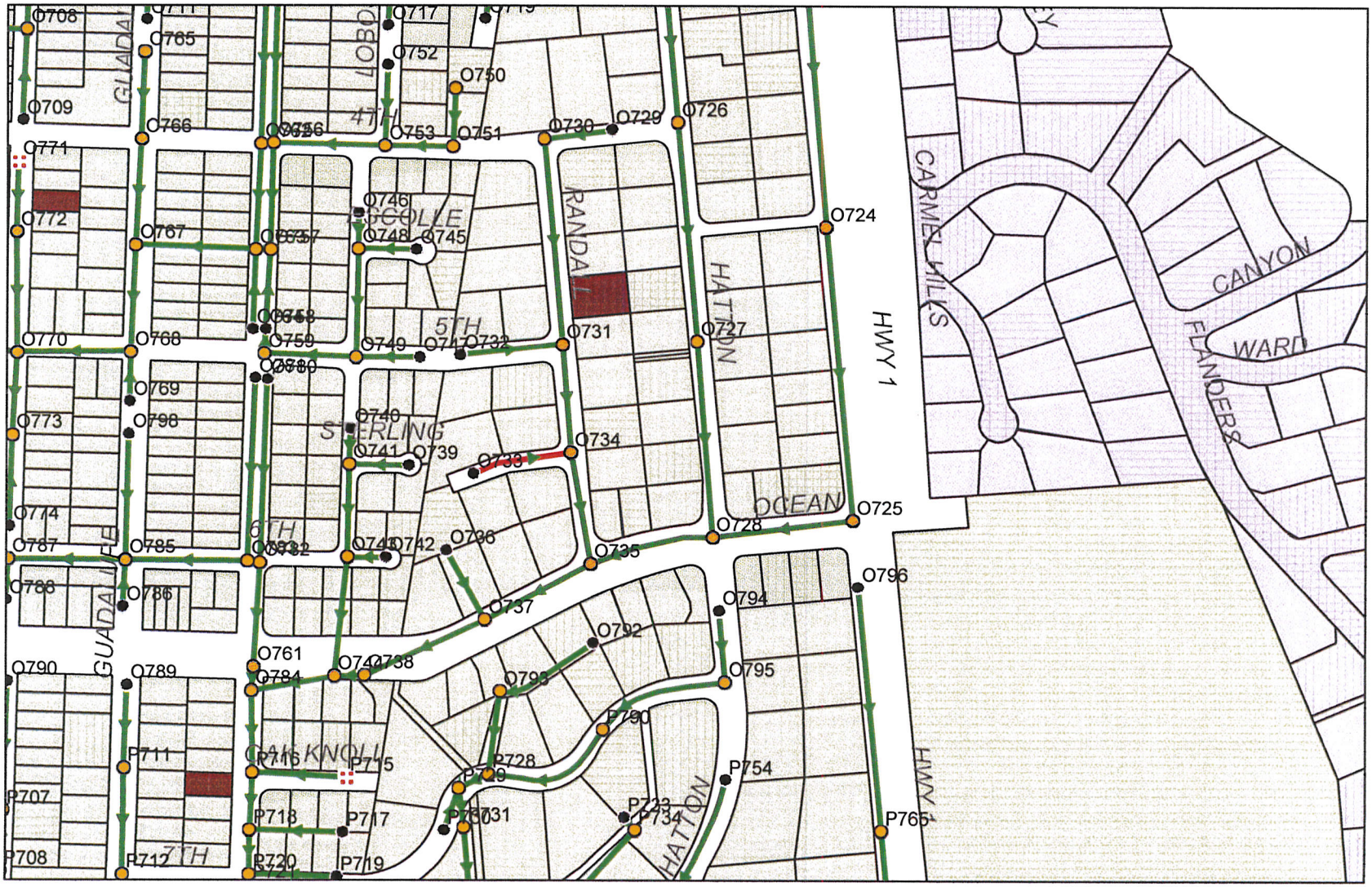
High Meadows Easment	Length	Size	Laterals per line segment	Manholes to be Replaced
N7107-N827	283.7	8	3	
N7100-N7101	90.2	8		N7-100
N7101-N7102	91	8		
N7102-N7103	92.8	8		
N7103-N7104	92.9	8		
N7104-N7105	92.7	8	2	N7-104
N7105-N7106	83	8		
N7106-N7107	106.2	8	2	N7-107
N791-N795	67.6	8		
N795-N796	58.6	8		
N796-N797	114.2	8		
N797-N798	104	8		
N798-N799	92.2	8		
N799-N7100	104	8		
	TOTAL		TOTAL	TOTAL
	1473.1		7	3
	COST		COST	COST
	$120 PER FOOT		$50 PER LATERAL	$10,000 PER MANHOLE
	1473.1 X $120 = $176,772		$50 X 7 = $350	$10,000 X 3 = $30,000
	$176,772		$350	$30,000
TOTAL COST OF PROJECT	$207,122			

Staff is recomending replacement of the High Meadows easment sewer lines and manholes.Staff recomends using the open cut method for replacement Staff has used the CCTV rating system of PACP which is a NASSCO nation wide standard. The contractor will replace the existing 8 inch. There will district easment work that will need to addressed pryor construction. Staff will be using a scale of 1-5 on rating the priority on which line segment to replace first with 5 being a high priority. These segments rated a 5 due to location, condition and pryor SSO history.

2018-19 Rio Road

& Other Locations

Replacement Project



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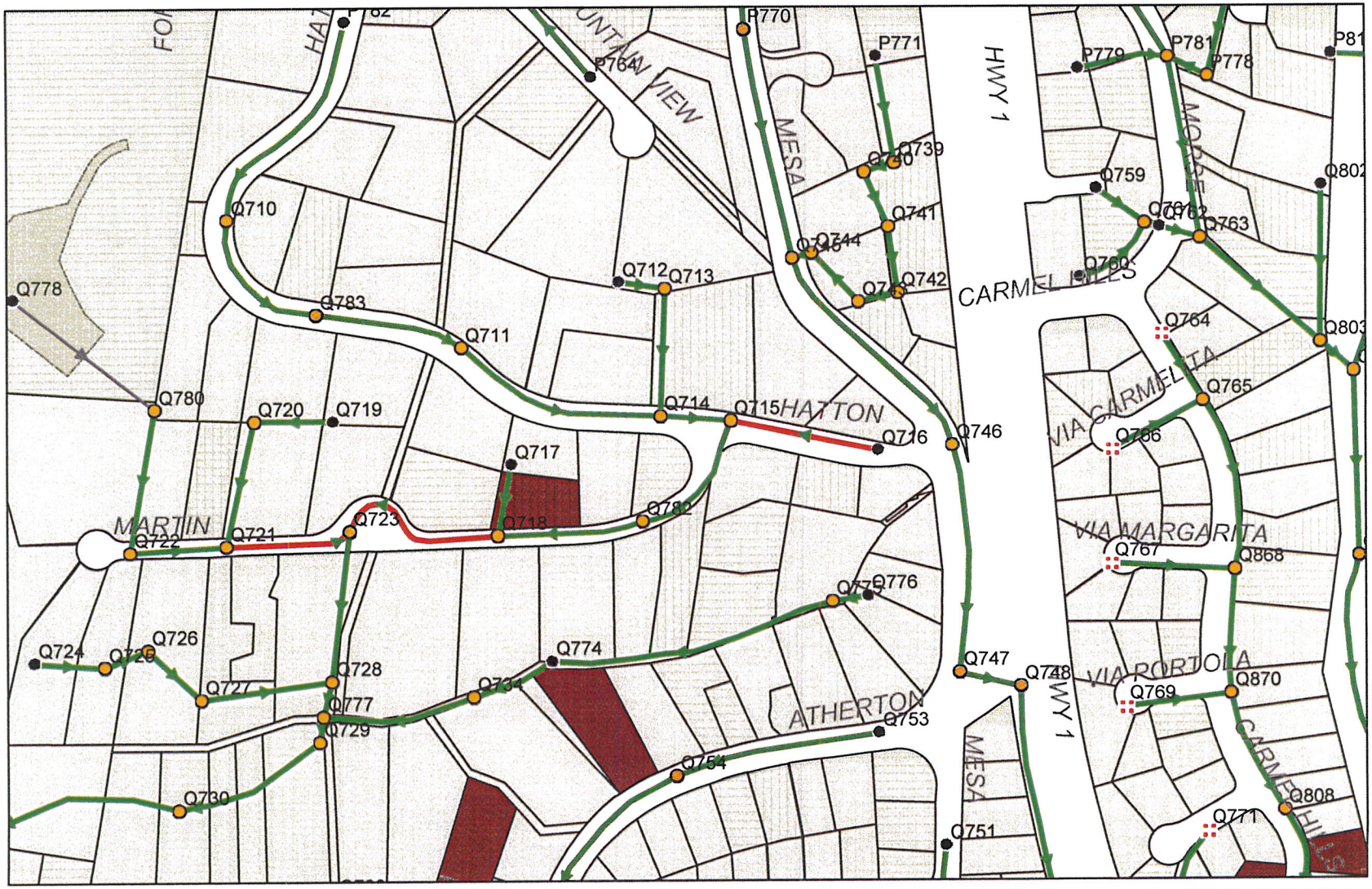
10/3/2014

ALLEN PLACE REPLACEMENT PROJECT

N



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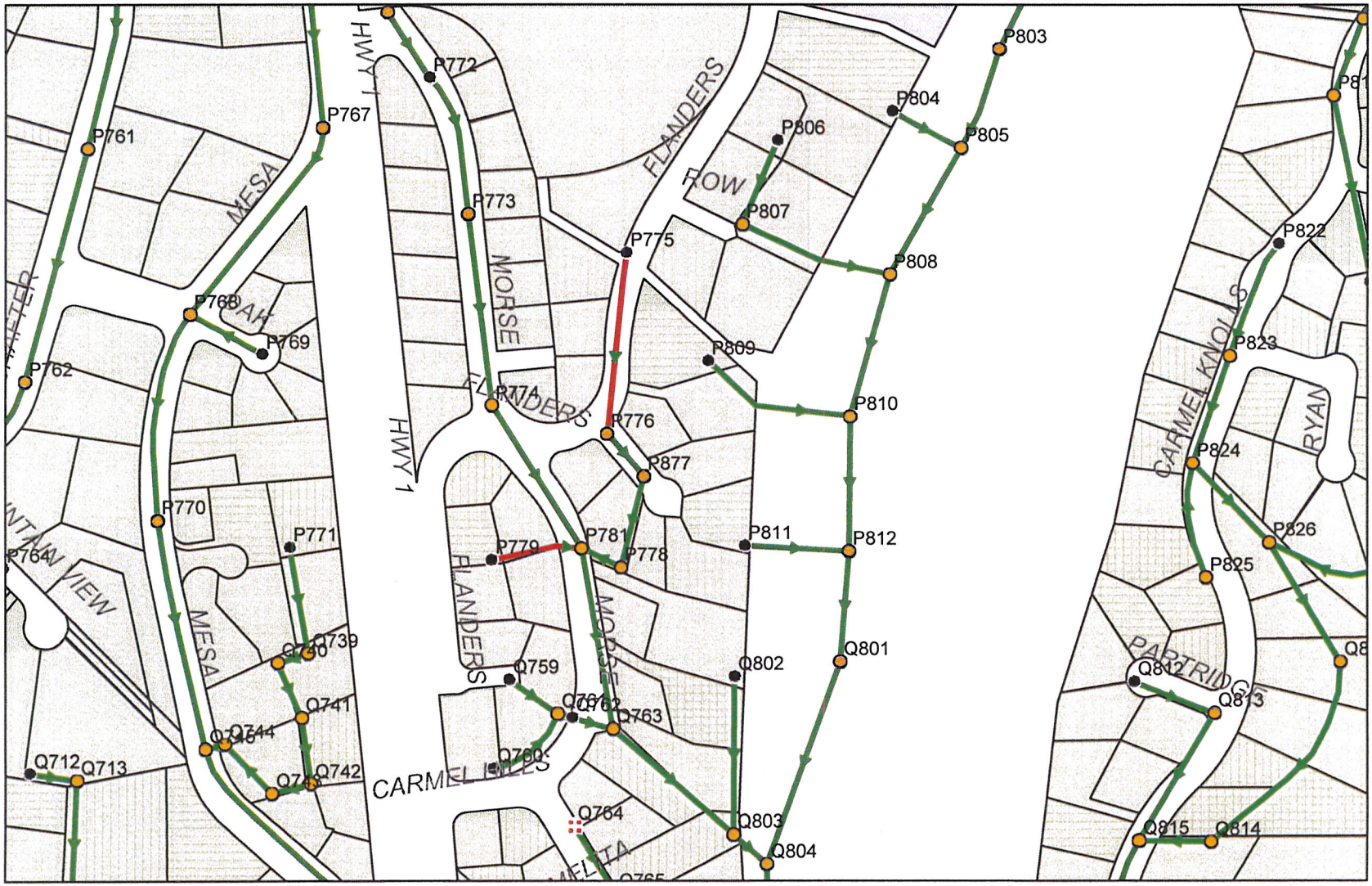
10/3/2014

MARTIN RD. & HATTON RD. REPLACEMENT PROJECT

N



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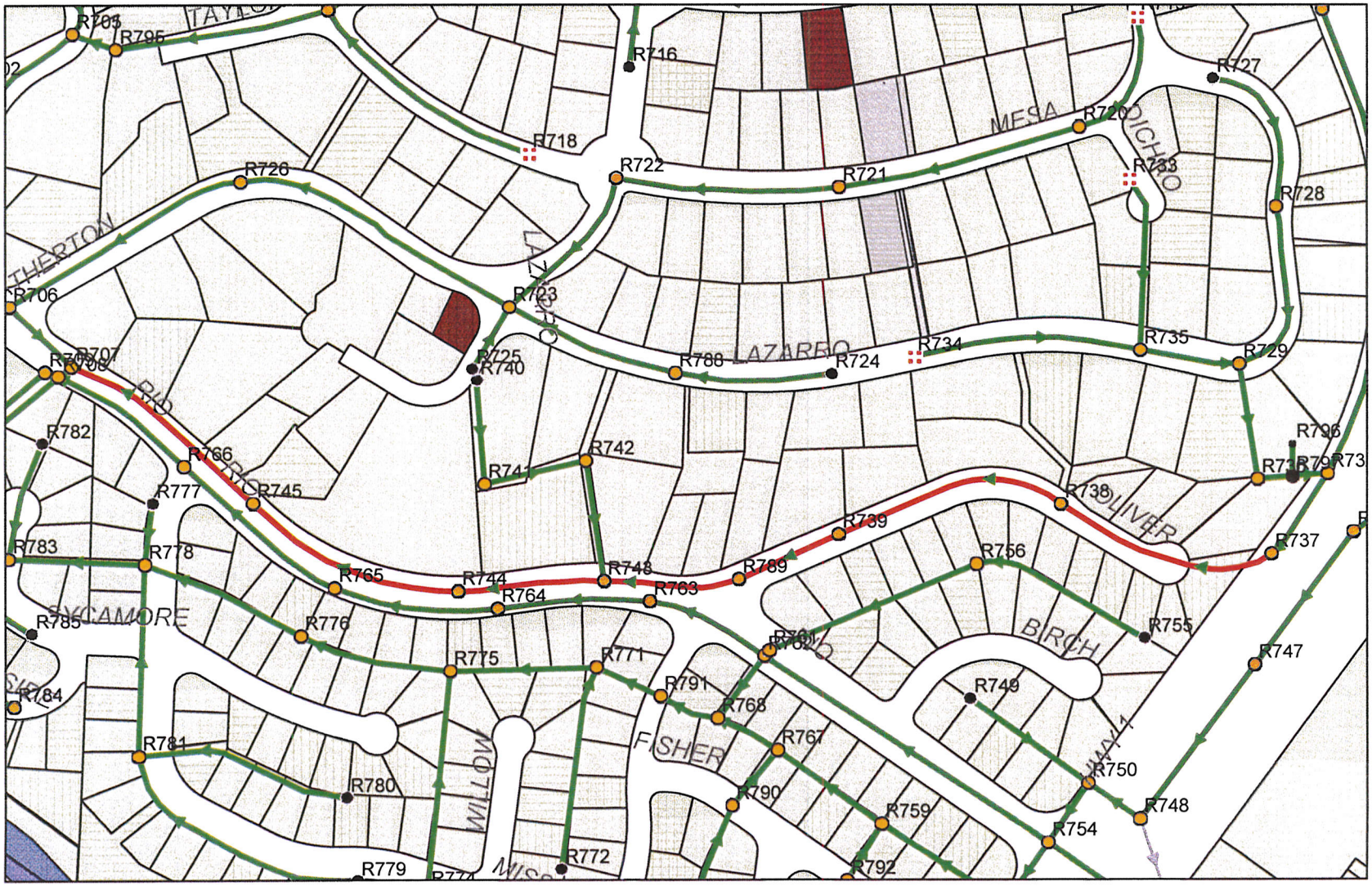
10/3/2014

MORSE DR. & FLANDERS REPLACEMENT PROJECT

N



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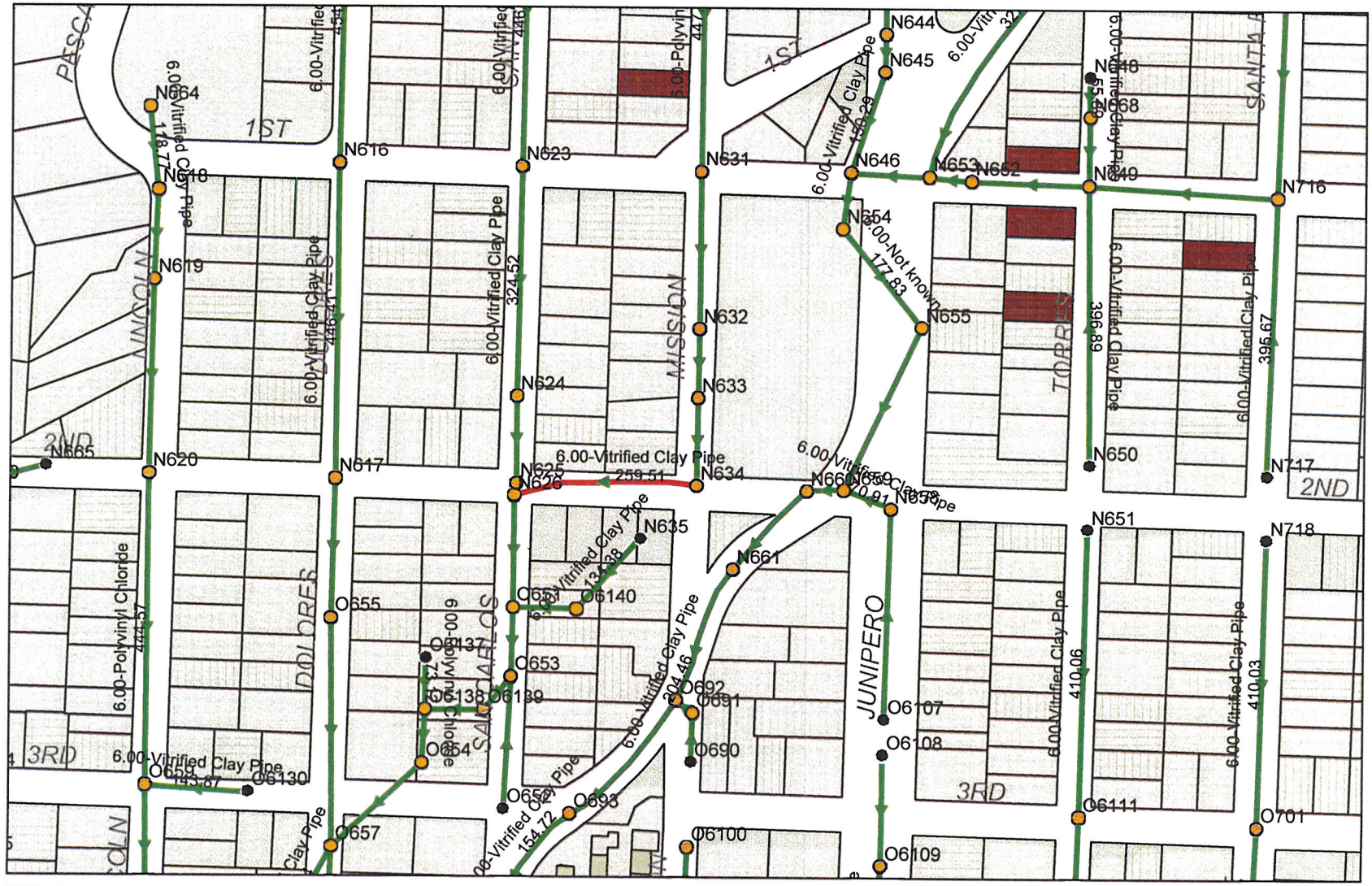
10/3/2014

RIO DR. & OLIVER REPLACEMENT PROJECT

N

Rio Regrading	Length	Size	Laterals per line segment
R737-R738	421.9	6	7
R738-R739	438.5	6	7
R739-R789	202.3	6	5
R743-R744	269.7	6	2
R744-R745	423.2	6	4
R745-R707	422.9	6	8
R789-R743	251.4	6	4
Regrading Phase 2			
N634-N626	259.5	6	2
O733-O734	214.2	6	5
P775-P776	370.7	6	10
P779-P781	185	6	2
Q716-Q715	304	6	6
Q718-Q723	364.3	6	3
Q721-Q723	255.2	6	3
	TOTAL		TOTAL
	4382.8		68
	COST		COST
	$120 PER FOOT		$50 PER LATERAL
	4382.8' X $120 = $525,936		$50 X 68 = $3400
	$525,936		$3,400
TOTAL COST OF PROJECT	$529,336		

Staff is recomending replacement of the Rio Rd. sewer lines and various line in phase two.Staff recomends using the open cut method for replacement because all line segments listed have grade issues.Staff has used the CCTV rating system of PACP which is a NASSCO nation wide standard Staff will be using a scale of 1-5 on rating the priority on which line segment to replace first with 5 being a high priority. These segments rated a 5 due to sever grade, condition and pryor SSO history.



RedZone ROBOTICS

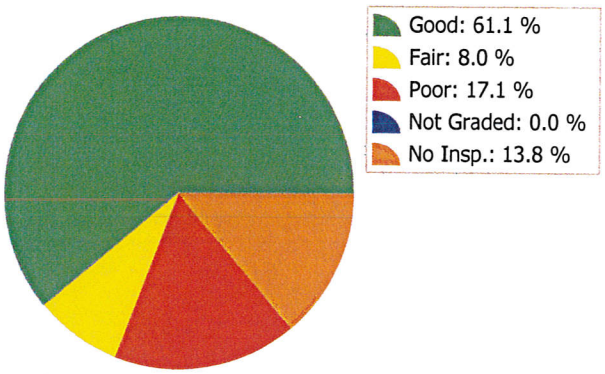
10/3/2014

SAN CARLOS & SECOND REPLACEMENT PROJECT

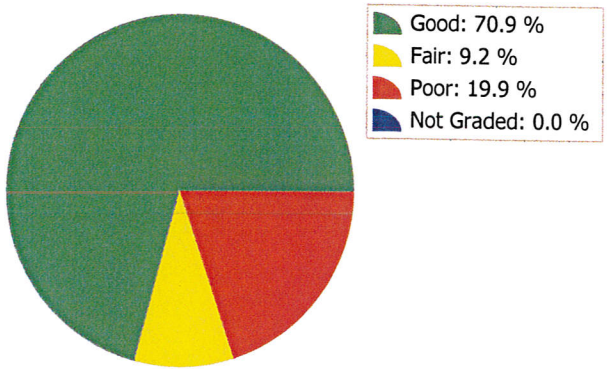
Structural Condition Summary

Structural Grade (1-5)	Assets (Count)	Length	% of System
1-2 (Good)	1,257	269,542	61.1%
3 (Fair)	151	35,180	8.0%
4-5 (Poor)	278	75,635	17.1%
Not Graded	0	0	0%
No Inspection (Unknown)	258	60,880	13.8%
Total	1,944	441,236	100%

Structural Condition Summary



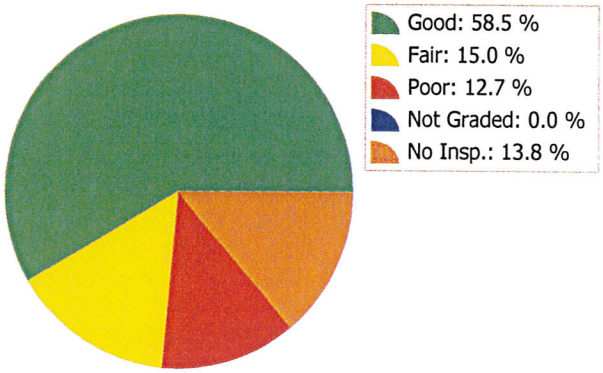
Inspected Asset Structural Condition



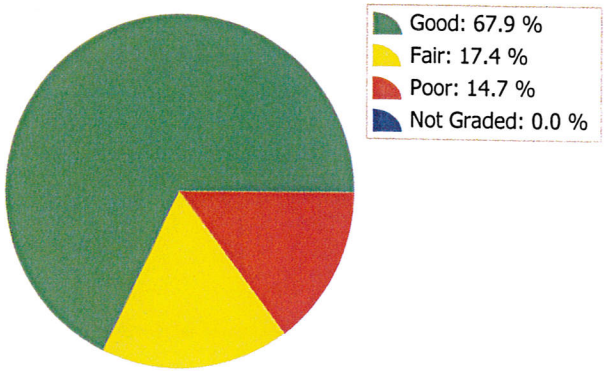
Operation and Maintenance Condition Summary

O&M Grade (1-5)	Assets (Count)	Length	% of System
1-2 (Good)	1,207	258,103	58.5%
3 (Fair)	280	66,248	15.0%
4-5 (Poor)	199	56,005	12.7%
Not Graded	0	0	0%
No Inspection (Unknown)	258	60,880	13.8%
Total	1,944	441,236	100%

Structural Condition Summary

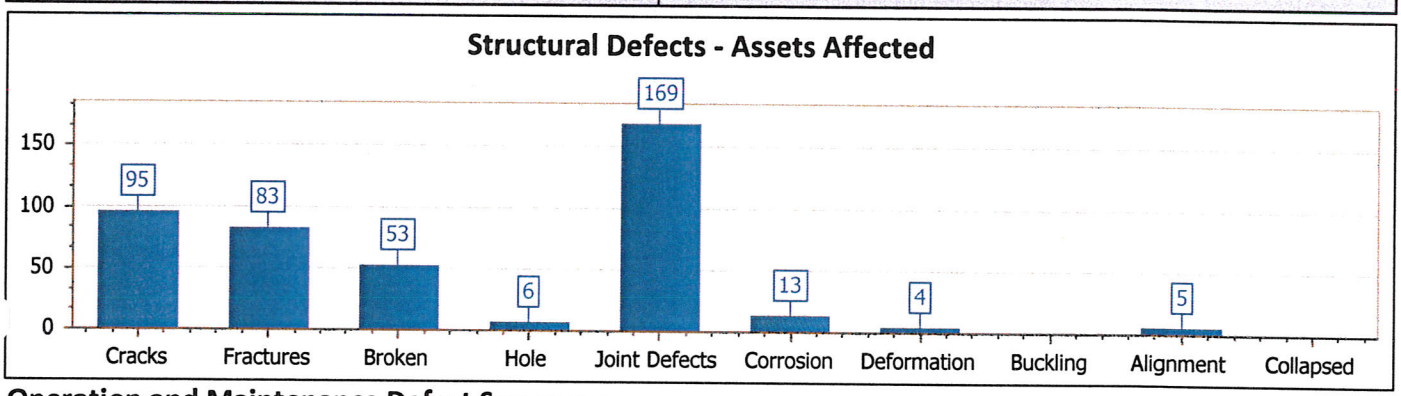


Inspected Asset Structural Condition



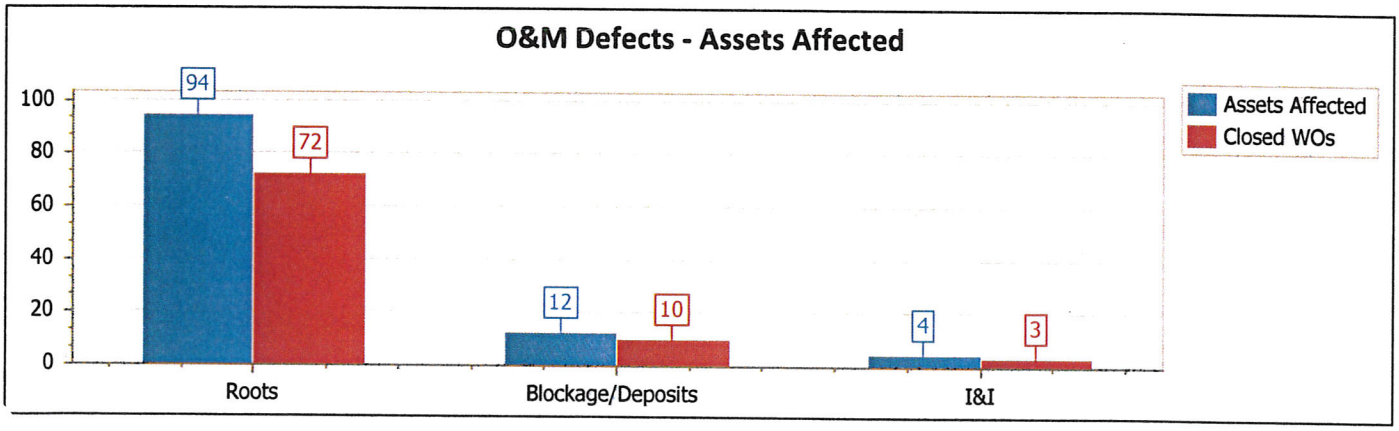
Structural Defect Summary

Structural Defect Type	Assets Affected (Count)
Cracks	95
Fractures	83
Broken	53
Hole	6
Joint Defects	169
Corrosion Indications	13
Deformation	4
Buckling	0
Alignment	5
Collapsed	0
UNINSPECTED	258



Operation and Maintenance Defect Summary

O&M Defect Type	Assets Affected (Count)	Work Order Closed Against Asset
Roots	94	72
Deposits/Blockage	12	10
Infiltration and Inflow	4	3
UNINSPECTED	258	



List of Common Acronyms

ACWA	Association of California Water Agencies
AF	Acre-feet (326,000 gallons)
AMSA	Association of Metropolitan Sewerage Agencies
ANPRM	Advanced Notice of Proposed Rulemaking
APWA	American Public Works Association
ATCM	Airborne Toxic Control Measure
AWWA	American Water Works Association
BACWA	Bay Area Clean Water Agencies
BADA	Bay Area Dischargers Association
BOD	Biochemical Oxygen Demand
CAAOS	California Ambient Air Quality Standard
CalARP	California Accidental Release Prevention Program
CalPERS	California Public Employees Retirement System
CARB	California Air Resources Board
CASA	California Association of Sanitation Agencies
CCAMP	Central Coast Ambient Monitoring Program
CCLEAN	Central Coast Long-Term Environmental Assessment Network
CCTV	Closed-Circuit Television
CDFA	California Department of Food & Agriculture
CDO	Cease and Desist Order
CECs	Constituents of Engineering Concern
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CIP	Capital Improvement Project
CMOM	Capacity, Management, Operation and Maintenance
CMMS	Computerized Maintenance Management Software
CIWMB	California Integrated Waste Management Board
CL2	Chlorine
CPUC	California Public Utilities Commission
CRWQCB	California Regional Water Quality Control Board
CSO	Combined Sewer Overflow
CTR	California Toxics Rule
CTR/SIP	California Toxics Rule/Statewide Water Quality Implementation Plan
CVCWA	Central Valley Clean Water Association
CWA	Clean Water Act
CWAP	Clean Water Action Plan
CWARA	Clean Water Authority Restoration Act
CWEA	California Water Environment Association
DAF	Dissolved Air Floatation
DHS	Department of Health Services
DO	Dissolved Oxygen
DSOD	Division of Safety of Dams
DTSC	Department of Toxic Substances Control
EBEP	Enclosed Bays and Estuaries Plan
EDW	Effluent Dominated Waterbody
EFF	Effluent
EFT	Electronic Funds Transfer
EIS/EIR	Environmental Impact Statement/Report
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
ERAF	Educational Reserve Augmentation Fund
ESMP	Electronic Self-Monitoring Report
FEB	Flow Equalization Basin
FEMA	Federal Emergency Management Agency
FOG	Fats, Oils and Grease
GASB	Government Accounting Standards Board
GPD	Gallons per Day
GPM	Gallons per Minute
HAP	Hazardous Air Pollutant
HVAC	Heating,Ventilation & Air Cond.
IRWUG	Independent Reclaimed Water Users Group
ISWP	Inland Surface Waters Plan
JPA	Joint Powers Authority
LA	Loan Allocation (non-point sources)
LAFCO	Local Agency Formation Commission
LIMS	Laboratory Information Management Software
LOCC	League of California Cities
LHC	Little Hoover Commission
MACT	Maximum Achievable Control Technology (Air controls)
MCL	Maximum Contaminant Level
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MF/RO	Microfiltration/Reverse Osmosis
MGD	Million Gallons per Day
MMP	Mandatory Minimum Penalty
MOU	Memorandum of Understanding
MPWMD	Monterey Peninsula Water Management District
MRWPCA	Monterey Regional Water Pollution Control Agency
MUN	Municipal Drinking Water Use
NACWA	National Association of Clean Water Agencies
NAS	National Academy of Sciences'
NGOs	Non Governmental Organizations
NOAA	National Oceanic & Atmospheric Administration
NOP	Notice of Preparation
NOX	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPS	Non-point Source
NRDC	National Resources Defense Council
NTR	National Toxics Rule
O & M	Operations and Maintenance
OMB	Office of Management and Budget
ONRW	Outstanding National Resource Water
PAG	Public Advisory Group
PAHs	Polynuclear Aromatic Hydrocarbons
PBCSD	Pebble Beach Community Services District
PBC	Pebble Beach Company
PCBs	PolyChlorinated Biphenyls
PEHP	Post Employment Health Plan
POTWs	Publicly Owned Treatment Works
PPCPs	Pharmaceutical and Personal Care Products
PS	Pump Station
PSSEP	Partnership for Sound Science in Environmental Policy
QA/QC	Quality Assurance/Quality Control
RAS	Return Activated Sludge
Region IX	Western Region of EPA (CA, AZ, NV & HI)
RFO	Request for Qualifications
RFP	Request for Proposals
RMP	Risk Management Program
RO	Reverse Osmosis
RWQCB	Regional Water Quality Control Board
SAR	Sodium Adsorption Ratio
SBS	Sodium Bisulfite
SCADA	Supervisory Control and Data Acquisition
SCAP	Southern California Association of POTWs
SEP	Supplementary Environmental Projects
SERTs	Soluble or Extractable Regulatory Thresholds
SIP	State Implementation Policy (CTR criteria)
SLAPP	Strategic Lawsuit Against Public Participation
SRF	State Revolving Fund
SRV	Sewer Relief Valve
SS	Suspended Solids
SSO	Sanitary Sewer Overflow
SSMP	Sewer System Management Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TCLP	Fed. Toxicity Characteristics Leaching
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
Tri-TAC	Technical Advisory Committee consisting of representatives from CASA, CWEA and League of California Cities
TSD	Total Solids Dissolved
TSO	Time Schedule Order
TSS	Total Suspended Solids
UPCCAA	Uniform Public Construction Cost Accounting Act
UV	Ultraviolet Treatment
VFD	Variable Frequency Drive
VOCs	Volatile Organic Compounds
WAS	Waste Activated Sludge
WDR	Waste Discharge Requirements
WEF	Water Environment Federation
WERF	Water Environment Research Foundation
WET	Whole Effluent Toxicity or Waste Extraction Test
WESTCAS	Western Coalition of Arid States
WIN	Water Infrastructure Network
WLA	Waste Loan Allocation (point sources)
WMI	Watershed Management Initiative
WRFP	Water Recycling Funding Program
WRDA	Water Resource Development Act
WTP	Wastewater Treatment Plant
WWTP	Wastewater Treatment Plant
WQBEL	Water Quality Based Effluent Limitations
WQS	Water Quality Standards
WWWIFA	Water and Wastewater Infrastructure Financing Agency