

Board Questions – March 2021

Director Siegfried

- p. 8 iv. Why include owners' names and addresses? They may change, and the information is redundant to the APN.

This is our initial baseline list of parcels in the Public Sewage Facilities service area. Not only does it tell us the APN, but it also provides us an accurate mailing list for notification purposes. As owners' names/address change we will update our information.

- p. 9 B, last two lines: I am wondering whether CAWD should adopt a policy of gender-neutral pronouns, e.g [https://en.wikipedia.org/wiki/Hen_\(pronoun\)](https://en.wikipedia.org/wiki/Hen_(pronoun))

“Hen” might work if you are Swedish?? In English, the use of *they*, *their*, *them*, and *themselves* as pronouns of indefinite gender and indefinite number is established in speech and writing. In recent years, these pronouns have also been adopted by individuals whose gender identity is nonbinary. I do not believe nonbinary is the direction we should be going. However, the Board may decide to use *they*, *their*, *them*, and *themselves*. Or, wait until U.S. English has a gender-neutral pronoun in wide and general use.

- p. 10 4. Why 2/3?

For our board, 2/3 equates to 3 votes. We require at least three affirmative votes for any ordinance, resolution, or motion to pass.

- p. 12 A, If CAWD OK's a reimbursement fee and the fee is later found to be poorly arrived at, why would CAWD persist in the error rather than true up, or at least support the entity that constructed the PSF?

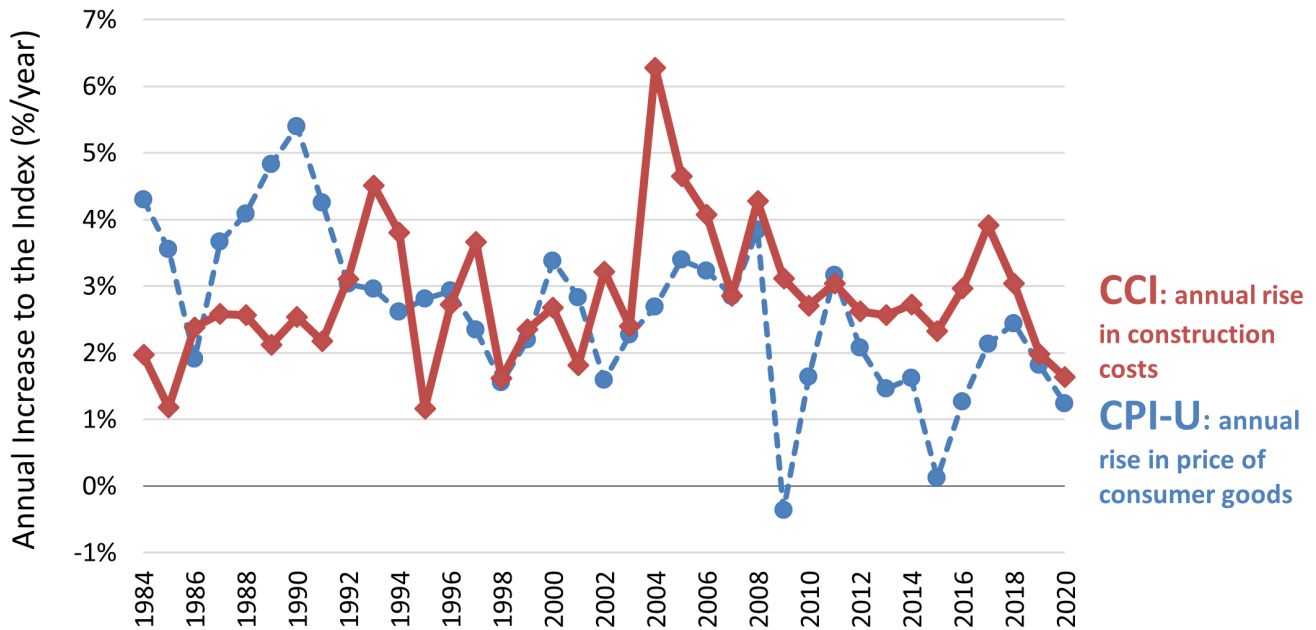
We would not persist in an error. Section #12 allows the District “at any time” to “recalculate the reimbursement fees”. The section also excuses the District from any responsibility for collecting or refunding from previous connectors.

B, What is the historical relation of the Engineering News Index to the CPI?

Since 2002 construction costs have generally risen faster than the rate of inflation of consumer goods prices. Between 2016-20 the construction cost index averaged 2.7%/year while CPI inflation averaged 1.8%/year. Even during economic down turns the construction cost index is generally higher than the CPI and to be more conservative in capital planning it is generally utilized.

The Construction Cost Index (CCI) has been rising faster than the Consumer Price Index-Urban (CPI-U) in recent years.

Construction costs (CCI) rose on average of **2.7%/year** in the last five years, while consumer goods (CPI-U) only rose an average of **1.8%/year** in the same period.



Data graphed by the Environmental Finance Center at the University of North Carolina, Chapel Hill.
 Data sources: Bureau of Labor Statistics (CPI-U), Engineering News-Record ENR.com (CCI), InflationData.com (CPI-U), USDA Natural Resources Conservation Services (spreadsheet containing CCI and CPI-U).

14, Why the arbitrary twenty year expiration?

It is not arbitrary – Ordinance 2018-02 (Dec 2018) amended Ordinance #44 (March 1968) from ten years to twenty years. At that time, both Highlands and the Carmel Valley Manor argued that ten years is an insufficient amount of time to recover their investment in infrastructure and requested an extension to twenty years. Both staff and legal were unable to find any legal or regulatory requirement limiting the refund term. Staff is hesitant to extend beyond twenty years because of staff turnover. Rather, staff would prefer to use the twenty year limit and then on a case-by-case basis re-evaluate at the end of twenty years and extend if the Board deems there to be sufficient reason.

p. 59 Cleanout locating: Is it possible to run a camera up a lateral from a main line? If not, is camera equipment on the market that will facilitate such gymnastics?

The minimum size of a private lateral is 4". There are 4" cameras on the market, but CAWD would need to purchase a "lateral launch" camera that can be shot off the side of our regular main camera equipment and up into a lateral. There are advantages and disadvantages to this – the lateral launch would have the advantage of a camera head that could pivot and get a panoramic view of the lateral. However, it cannot make it over a joint offset. That is why we recommend a plumber use a push camera – the camera head does not pivot but it can be forced over any joint offsets.

p. 63 Can the microfiltration basins be plumbed for sulfuric acid addition?

Per Patrick Treanor: Yes, they can be plumbed and the permanent installation will happen in Project #18-26 - RO Pretreatment Acid Tanks and Containment. This project includes a new pump and piping for MF Clean Sulfuric Acid injection. The original system was not designed for Sulfuric Acid and the original system cannot get the pH low enough without Sulfuric Acid to meet MF membrane manufacturer cleaning specs.

Per Ed Waggoner: Originally staff used Phosphoric Acid to achieve the low pH of 2 for cleaning modules. Upon Trussell Technologies recommendation Phosphoric Acid is no longer used to achieve that pH level 2 to reduce the amount of phosphorus going to the reverse osmosis membranes. Citric Acid was used in other cleaning operations but could not reach the Microfiltration (MF) Modules manufacture pH levels for cleaning the modules. Staff could not use the existing pumps or piping due to compatibility issues between the Phosphoric and Sulfuric Acids.

Project 18-26 - RO Pretreatment Acid Tanks and Containment system was planned two years ago; but held up by the Coastal Commission. Staff after multiple discussions decided to manually transfer the small amount of Sulfuric Acid by hand which is 2,000 ml per Clean-in-Place (CIP) which is once per month (times 3) for the number of MF Cells, rather than purchase and install a temporary acid feed system knowing that a permanent solution was in the works.

100 feet of the acid piping is roughly \$1,500.00 not including fittings, valves and secondary containment and a Sulfuric Acid pumping skid is close to \$10,000.00 or higher depending on supplier. Then there would have been design, electrical work, and mechanical work to meet safety standards for the new piping and pumping system. Staff then would have needed to go back to the Technical Advisory Committee that just approved the go ahead for Project 18-26 - RO Pretreatment Acid Tanks and Containment for additional Capital Monies to do a Capital Project the Coastal Commission would not have approved at the time.

p. 94 To where do we plan to move the Bay & Scenic pump station when its present location is judged to be endangered?

When the pump station at Bay & Scenic needs to move further inland due to global warming, so will the road and homes. We are moving the important parts away from the surf zone as part of this project. We will have to consider re-routing laterals and sewer lines in the future if the pump station is at risk.

The preliminary budget is amended frequently, resulting in additions to the final budget. The adopted budget is augmented occasionally during the year by transferring money from reserves. What is the five year average of the annual sum of these modifications?

What would the proposed 2021 - 22 rate model look like if this average is added to it?

#1 Differences between Preliminary & Final Budget

Fiscal Year	Operating	Capital	Total
16-17	\$0	\$245,000	\$245,000
17-18	\$25,345	\$230,000	\$255,345
18-19	\$9,252	\$744,333	\$753,585
19-20	\$366,961	\$1,844,369	\$2,211,330
20-21	<\$21,600>	\$662,000	\$640,400
Average	\$75,991	\$745,140	\$821,132

#2 Budget Amendments Per Year

Fiscal Year	
16-17	\$197,135
17-18	\$266,988
18-19	\$192,710
19-20	\$219,625
20-21 (YTD)	\$830,221
Average	\$341.335

Please see Attachment #1 – Add changes from Avg Preliminary to Final

Attachment #2 – Add changes from Avg Amended Budget

Attachment #3 – Add changes from Avg Preliminary to Final PLUS Amended Budget

Board Questions – March 2021

Director D’Ambrosio

p. 5 Reimbursement Agreement – Excess Sewer Capacity

The proposed ordinance on PSFs is silent about insurance liability protection when proposing and implementing a project. Is there any exposure to the district that would require coverage?

In addition to the Access Easement Agreement and Easement Deed final redlines I sent you and Rachel late last week, you will recall that there is a third document, a Sewer Installation Agreement between CVM and District, that includes comprehensive indemnity and insurance provisions required of CVM, its contractor, and subcontractors, covering District for construction events. I believe this is the sort of coverage Mr. D'Ambrosio asks about.

The ordinance on the agenda provides a mechanism for reimbursement to CVM from additional users later connecting to the CVM-constructed and paid for line. As with any other agreement whereby a user connects to a District line, District (per Plumbing Ordinance) requires insurance coverage for connecting construction, as well as plan approval, inspection etc.

George Thacher

Questions on Warrants:

#1177 Rain LLC \$24,762.64

The result of a data entry error in the rate submission process. We have refunded the customer appropriately.

#1230 Bryan Mailey Electric \$5,714.63

Standby Power Reliability Project #18-08	\$2,450
CDC Storage Room backup lighting	\$1,260
EQ Basin pump alarm. VFD blew line filter on back of unit	\$280
CDC new pump wiring	\$840
CDC pump replacement	\$843

#1233 GHA Technologies \$3,908.13

Two outdoor cameras plus software license. Upgrade to plant security system. Current camera system at the plant is at the end of its lifespan.

#1237 Monterey Bay Air Resources District \$1,618.00

Portable generator permit – was included in current year budget

#1239 Quinn Company \$31,056.00

Retention on Standby Power Project

#1253 Del Monte Gardeners \$1,000.00

Removed trees from Pescadero & Carmel Knolls

Mr. D'Ambrosio inquired about debris left at Willow Trail and Mission Park – we think the branches were most likely cut by our staff working in the canyon to allow passage of the jet truck and camera van. The cut branches were removed. Staff has been advised to please carry out all debris.

P. 47 What are Other Assets?

Includes Prepaid Expenses and Accounts Receivable trade & affiliates

P. 49 What is the spike in August 20-21

Year end re-allocation of reserve accounts. Accounting books are not closed until roughly August, hence the delay.

P. 53 Where is the list of Budget Resolutions

See Attachment #4

P. 57 Where are the 4 interceptors in the City of Carmel-by-the-Sea?

8th & Scenic, approximately 50 ft NE of our pump station
4th & San Antonio, around 40 ft east of the intersection
11th & Torres, within 30 ft north of the gate to Mission Trail Park
Del Mar & Ocean, about 80 ft SW of the public restrooms

- p. 59 The Collection Superintendent's report shows 2 power outages at Hacienda. Why?
- a. The first alarm, on 2-4-21, was a power bump. Sometimes there is a hiccup in the service and the transfer switch knows to protect the equipment by quickly switching to the backup supply with good power. The on-call staff were not there very long indicating it was likely just a power bump. When staff is there for a significant amount of time, it is likely a lasting outage. In this case, the generator did run, verified by the changes on the hour meter.
 - b. The second alarm is labeled power fail because that is what the alarm was initially. However, the reason for that alarm was actually a relay at the station that governs the transfer switch that has a variable set point. A simple adjustment of that relay set point brought it back to nominal range. The new SCADA system has a tighter tolerance than the old one, so it was a little finicky till readjusted. After the adjustment, there have been no more nuisance alarms for that station. In this case the generator did not run, as indicated by no change to the hour meter.
- p. 59 Are the number of USA locates high? Low?
Average. They can range from -0- to 30 on any given day.
- p. 84 Bay & Scenic rehabilitation – will this be a final solution?
See p. 94 question from Director Siegfried above

Board Questions – March 2021

Director Rachel

P. 27 and 28. I would like to see the Project Numbers where applicable on all Capital Disbursements. I assume the payments to Quinn, Bryan Mailey and MB Air Resources District are for the new generator as 18-08, and the payment to Frisch Engineering is for 18-05.

Yes, you are correct. I will reiterate this to staff, again.

P. 58 and 59. Is there more to add or learn from the power failures at the Hacienda pump station on Feb. 4 and 7?

Yes, please see p. 59 above for Director D'Ambrosio

P. 63. Can Mark provide more detail about the new SOP and enhanced safety precautions concerning the carrying and pouring of the 95% sulfuric acid? I appreciate his recognition of this being an improved, careful step-by-step process rather than a "routine" task, and taking action with the new SOP.

Please see Attachment #5. This was developed with input from the operators and underwent two reviews by the Supervisor. Mr. Dias does great work!

P. 140 and the DRAFT of the next issue of CAWD Connections. How about a more personal touch with additional Employee photos and their names - given their achievements during the pandemic? I agree – it is always nice to put a face on things. Nice for our constituents and I believe nice for employees too. Sometimes when an employee has their picture in the newsletter they will come and ask for extra copies so they can give it to their family. A little pride in one's work goes a long way!

Summary Rate Model History

Add Change Prelim to Final

3/25/21

User Group	Count	Units	Actual 2010-11	Actual 2011-12	Actual 2012-13	Actual 2014-15	Actual 2015-16	Actual 2016-17	Actual 2017-18	Actual 2018-19	Actual 2019-20	Actual 2020-21	% Change	Model 21-22			Proposed Rates				
														Rates	% Change	Annual Est. Revenue	Annual Rates	Monthly Rate	% Change 2021-22	Annual Est. Revenue	
Veterinary Offices	3	each	693.50	724.00	776.80	1,242.32	1,406.20	1,496.16	1,621.48	1,748.92	1,892.64	1,938.78	2.44%	2,241.96	15.64%	6,725.89	2,241.97	186.83	15.64%	6,725.92	
Animal Hosp & Board	1	each	1,676.00	1,750.00	1,876.00	3,549.50	4,017.72	4,277.74	4,636.04	5,000.44	5,411.36	5,543.28	2.44%	6,153.71	11.01%	6,153.71	6,153.73	512.81	11.01%	6,153.73	
Bakery	4	each	1,123.00	1,170.00	1,255.00	2,198.30	2,369.08	2,487.40	2,726.44	3,002.30	3,163.94	3,339.10	5.54%	3,646.91	9.22%	14,587.64	3,646.91	303.91	9.22%	14,587.64	
Bar	28	each	588.00	605.82	650.50	864.82	981.04	1,049.60	1,136.96	1,225.20	1,327.44	1,358.00	2.30%	1,508.61	11.09%	42,241.17	1,508.62	125.72	11.09%	42,241.45	
Beauty Salon	32	each	430.00	452.00	486.00	717.46	819.78	867.32	937.98	1,012.12	1,100.86	1,121.26	1.85%	1,248.57	11.35%	39,954.37	1,248.58	104.05	11.36%	39,954.69	
Business/Govt/Retail	935	per 10 employees	219.40	230.42	247.70	311.50	355.02	391.92	424.10	456.10	495.42	505.36	2.01%	562.28	11.26%	525,735.99	562.29	46.86	11.27%	525,745.34	
Camera/Photo	2	each	308.00	318.92	343.00	456.96	515.96	540.98	586.62	633.34	684.52	702.20	2.58%	778.68	10.89%	1,557.35	778.69	64.89	10.89%	1,557.37	
Church/Synagogue/Mosque	33	ERU = 150	313.00	330.00	355.80	478.50	546.72	582.88	630.36	677.20	736.58	750.24	1.85%	835.39	11.35%	27,567.74	835.40	69.62	11.35%	27,568.07	
Conv. Hospital	9	beds	174.90	182.26	196.00	260.20	295.10	309.56	335.34	361.40	391.50	400.58	2.32%	445.00	11.09%	4,005.01	445.00	37.08	11.09%	4,005.01	
Dental Office	15	each Dentist	350.00	350.00	367.16	485.80	561.02	588.36	634.78	678.92	742.66	751.60	1.20%	840.02	11.76%	12,600.32	840.03	70.00	11.77%	12,600.47	
Gym/Health Spa	3	each	415.00	431.12	462.00	612.82	699.50	752.92	814.44	875.36	951.58	969.84	1.92%	1,079.63	11.32%	3,238.89	1,079.64	89.97	11.32%	3,238.92	
Hotel/Motel	1,256	room	188.00	194.78	209.40	260.68	295.60	320.50	347.20	381.48	413.22	422.82	2.32%	469.75	11.10%	590,008.53	469.77	39.15	11.10%	590,033.65	
Laundromats	29	per machine	319.50	334.60	360.00	587.30	676.40	727.10	784.92	840.48	918.06	930.62	1.37%	1,039.14	11.66%	30,135.09	1,039.16	86.60	11.66%	30,135.67	
Laundry	3	each	1,482.00	1,553.00	1,666.66	2,262.74	2,514.96	2,691.76	2,929.36	3,183.98	3,411.96	3,533.92	3.57%	3,899.33	10.34%	11,697.99	3,899.34	324.94	10.34%	11,698.02	
Market	19	each	544.10	571.32	614.00	1,053.90	1,143.46	1,200.06	1,313.28	1,442.00	1,525.26	1,603.04	5.10%	1,754.41	9.44%	33,333.75	1,754.43	146.20	9.44%	33,334.13	
Medical Office	21	each Physician	190.00	196.00	202.00	247.18	283.18	299.62	318.16	334.26	364.94	364.94	0.00%	392.90	7.66%	8,250.90	392.91	32.74	7.66%	8,251.11	
Residential	7,113	each	370.50	388.00	417.10	514.32	575.46	647.14	703.18	767.84	825.78	851.84	3.16%	960.73	12.78%	6,833,678.60	960.73	80.06	12.78%	6,833,678.60	
Restaurants	14,400	Seat/Meal	26.22	27.54	28.90	43.36	46.98	49.36	54.02	59.36	62.74	65.98	5.16%	72.22	9.45%	1,039,938.44	72.23	6.02	9.47%	1,040,082.44	
Schools	2,500	Population	14.32	14.90	15.94	20.76	23.88	26.84	28.98	31.04	33.90	34.36	1.36%	38.35	11.62%	95,884.87	38.37	3.20	11.68%	95,934.87	
Service Stations	26	per pump	1,186.00	1,256.94	1,346.20	1,619.06	1,830.54	1,940.98	2,104.06	2,270.46	2,455.60	2,517.14	2.51%	2,792.75	10.95%	72,611.54	2,792.76	232.73	10.95%	72,611.80	
Supermarkets	2	each	1,451.08	12,013.78	12,918.34	14,152.08	15,350.08	16,915.86	18,513.28	20,330.52	21,500.58	21,601.64	0.47%	24,733.77	14.50%	49,467.53	24,733.78	2061.15	14.50%	49,467.55	
SPECIAL	57	ERU=150	325.60	338.02	363.50	480.32	548.60	594.48	642.96	690.84	751.26	765.36	1.88%	852.15	11.34%	48,572.82	852.15	71.01	11.34%	48,572.82	
TOTALS															\$9,497,948.15			\$9,498,179.28			

Proposed vs. Model 231.13

	Model	Proposed
\$ Change	12.78%	12.78%
Monthly Charge	\$80.06	\$80.06
\$ increase	\$9.07	\$9.07

Summary Rate Model History

Add Avg Amended Budget Changes

3/25/21

User Group	Count	Units	Actual 2010-11	Actual 2011-12	Actual 2012-13	Actual 2014-15	Actual 2015-16	Actual 2016-17	Actual 2017-18	Actual 2018-19	Actual 2019-20	Actual 2020-21	% Change	Model 21-22			Proposed Rates					
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Animal Hosp & Board	1	each	1,676.00	1,750.00	1,876.00	3,549.50	4,017.72	4,277.74	4,636.04	5,000.44	5,411.36	5,543.28	2.44%	5,835.02	5.26%	5,835.02	5,835.04	486.25	5.26%	5,835.04		
Bakery	4	each	1,123.00	1,170.00	1,255.00	2,198.30	2,369.08	2,487.40	2,726.44	3,002.30	3,163.94	3,339.10	5.54%	3,474.73	4.06%	13,898.93	3,474.73	289.56	4.06%	13,898.93		
Bar	28	each	588.00	605.82	650.50	864.82	981.04	1,049.60	1,136.96	1,225.20	1,327.44	1,358.00	2.30%	1,430.18	5.31%	40,044.94	1,430.19	119.18	5.32%	40,045.22		
Beauty Salon	32	each	430.00	452.00	486.00	717.46	819.78	867.32	937.98	1,012.12	1,100.86	1,121.26	1.85%	1,182.82	5.49%	37,850.13	1,182.83	98.57	5.49%	37,850.45		
Business/Govt/Retail	935	per 10 employees	219.40	230.42	247.70	311.50	355.02	391.92	424.10	456.10	495.42	505.36	2.01%	532.80	5.43%	498,171.68	532.81	44.40	5.43%	498,181.03		
Camera/Photo	2	each	308.00	318.92	343.00	456.96	515.96	540.98	586.62	633.34	684.52	702.20	2.58%	738.52	5.17%	1,477.04	738.53	61.54	5.17%	1,477.06		
Church/Synagogue/Mosque	33	ERU = 150	313.00	330.00	355.80	478.50	546.72	582.88	630.36	677.20	736.58	750.24	1.85%	791.39	5.49%	26,115.93	791.40	65.95	5.49%	26,116.26		
Conv. Hospital	9	beds	174.90	182.26	196.00	260.20	295.10	309.56	335.34	361.40	391.50	400.58	2.32%	421.88	5.32%	3,796.88	421.88	35.16	5.32%	3,796.88		
Dental Office	15	each Dentist	350.00	350.00	367.16	485.80	561.02	588.36	634.78	678.92	742.66	751.60	1.20%	794.96	5.77%	11,924.35	794.97	66.25	5.77%	11,924.50		
Gym/Health Spa	3	each	415.00	431.12	462.00	612.82	699.50	752.92	814.44	875.36	951.58	969.84	1.92%	1,022.88	5.47%	3,068.63	1,022.89	85.24	5.47%	3,068.66		
Hotel/Motel	1,256	room	188.00	194.78	209.40	260.68	295.60	320.50	347.20	381.48	413.22	422.82	2.32%	445.35	5.33%	559,357.55	445.37	37.11	5.33%	559,382.67		
Laundromats	29	per machine	319.50	334.60	360.00	587.30	676.40	727.10	784.92	840.48	918.06	930.62	1.37%	983.66	5.70%	28,526.06	983.68	81.97	5.70%	28,526.64		
Laundry	3	each	1,482.00	1,553.00	1,666.66	2,262.74	2,514.96	2,691.76	2,929.36	3,183.98	3,411.96	3,533.92	3.57%	3,703.99	4.81%	11,111.97	3,704.00	308.67	4.81%	11,112.00		
Market	19	each	544.10	571.32	614.00	1,053.90	1,143.46	1,200.06	1,313.28	1,442.00	1,525.26	1,603.04	5.10%	1,670.46	4.21%	31,738.79	1,670.48	139.21	4.21%	31,739.17		
Medical Office	21	each Physician	190.00	196.00	202.00	247.18	283.18	299.62	318.16	334.26	364.94	364.94	0.00%	373.53	2.35%	7,844.07	373.54	31.13	2.36%	7,844.28		
Residential	7,113	each	370.50	388.00	417.10	514.32	575.46	647.14	703.18	767.84	825.78	851.84	3.16%	912.14	7.08%	6,488,045.21	912.14	76.01	7.08%	6,488,045.21		
Restaurants	14,400	Seat/Meal	26.22	27.54	28.90	43.36	46.98	49.36	54.02	59.36	62.74	65.98	5.16%	68.77	4.23%	990,303.97	68.78	5.73	4.25%	990,447.97		
Schools	2,500	Population	14.32	14.90	15.94	20.76	23.88	26.84	28.98	31.04	33.90	34.36	1.36%	36.31	5.67%	90,773.43	36.33	3.03	5.73%	90,823.43		
Service Stations	26	per pump	1,186.00	1,256.94	1,346.20	1,619.06	1,830.54	1,940.98	2,104.06	2,270.46	2,455.60	2,517.14	2.51%	2,648.40	5.21%	68,858.29	2,648.41	220.70	5.21%	68,858.55		
Supermarkets	2	each	11,451.08	12,013.78	12,918.34	14,152.08	15,350.08	16,915.86	18,513.28	20,330.52	21,500.58	21,601.64	0.47%	23,551.03	9.02%	47,102.06	23,551.04	1,962.59	9.02%	47,102.08		
SPECIAL	57	ERU=150	325.60	338.02	363.50	480.32	548.60	594.48	642.96	690.84	751.26	765.36	1.88%	807.31	5.48%	46,016.40	807.31	67.28	5.48%	46,016.40		
TOTALS															\$9,018,238.88			\$9,018,470.01				

Proposed vs. Model 231.13

	Model	Proposed
\$ Change	7.08%	7.08%
Monthly Charge	\$76.01	\$76.01
\$ increase	\$5.02	\$5.02

Summary Rate Model History



User Group	Count	Units	Actual 2010-11	Actual 2011-12	Actual 2012-13	Actual 2014-15	Actual 2015-16	Actual 2016-17	Actual 2017-18	Actual 2018-19	Actual 2019-20	Actual 2020-21	% Change	Model 21-22			Proposed Rates				
														Rates	% Change	Annual Est. Revenue	Annual Rates	Monthly Rate	% Change 2021-22	Annual Est. Revenue	
Veterinary Offices	3	each	693.50	724.00	776.80	1,242.32	1,406.20	1,496.16	1,621.48	1,748.92	1,892.64	1,938.78	2.44%	2,323.89	19.86%	6,971.67	2,323.90	193.66	19.86%	6,971.70	
Animal Hosp & Board	1	each	1,676.00	1,750.00	1,876.00	3,549.50	4,017.72	4,277.74	4,636.04	5,000.44	5,411.36	5,543.28	2.44%	6,378.59	15.07%	6,378.59	6,378.61	531.55	15.07%	6,378.61	
Bakery	4	each	1,123.00	1,170.00	1,255.00	2,198.30	2,369.08	2,487.40	2,726.44	3,002.30	3,163.94	3,339.10	5.54%	3,772.23	12.97%	15,088.92	3,772.23	314.35	12.97%	15,088.92	
Bar	28	each	588.00	605.82	650.50	864.82	981.04	1,049.60	1,136.96	1,225.20	1,327.44	1,358.00	2.30%	1,563.89	15.16%	43,788.86	1,563.90	130.32	15.16%	43,789.14	
Beauty Salon	32	each	430.00	452.00	486.00	717.46	819.78	867.32	937.98	1,012.12	1,100.86	1,121.26	1.85%	1,294.72	15.47%	41,431.09	1,294.73	107.89	15.47%	41,431.41	
Business/Govt/Retail	935	per 10 employees	219.40	230.42	247.70	311.50	355.02	391.92	424.10	456.10	495.42	505.36	2.01%	583.00	15.36%	545,108.12	583.01	48.58	15.37%	545,117.47	
Camera/Photo	2	each	308.00	318.92	343.00	456.96	515.96	540.98	586.62	633.34	684.52	702.20	2.58%	807.05	14.93%	1,614.10	807.06	67.26	14.93%	1,614.12	
Church/Synagogue/Mosque	33	ERU = 150	313.00	330.00	355.80	478.50	546.72	582.88	630.36	677.20	736.58	750.24	1.85%	866.26	15.46%	28,586.61	866.27	72.19	15.47%	28,586.94	
Conv. Hospital	9	beds	174.90	182.26	196.00	260.20	295.10	309.56	335.34	361.40	391.50	400.58	2.32%	461.30	15.16%	4,151.71	461.30	38.44	15.16%	4,151.71	
Dental Office	15	each Dentist	350.00	350.00	367.16	485.80	561.02	588.36	634.78	678.92	742.66	751.60	1.20%	871.46	15.95%	13,071.91	871.47	72.62	15.95%	13,072.06	
Gym/Health Spa	3	each	415.00	431.12	462.00	612.82	699.50	752.92	814.44	875.36	951.58	969.84	1.92%	1,119.48	15.43%	3,358.45	1,119.49	93.29	15.43%	3,358.48	
Hotel/Motel	1,256	room	188.00	194.78	209.40	260.68	295.60	320.50	347.20	381.48	413.22	422.82	2.32%	486.95	15.17%	611,614.18	486.97	40.58	15.17%	611,639.30	
Laundromats	29	per machine	319.50	334.60	360.00	587.30	676.40	727.10	784.92	840.48	918.06	930.62	1.37%	1,077.91	15.83%	31,259.33	1,077.93	89.83	15.83%	31,259.91	
Laundry	3	each	1,482.00	1,553.00	1,666.66	2,262.74	2,514.96	2,691.76	2,929.36	3,183.98	3,411.96	3,533.92	3.57%	4,038.68	14.28%	12,116.03	4,038.69	336.56	14.28%	12,116.06	
Market	19	each	544.10	571.32	614.00	1,053.90	1,143.46	1,200.06	1,313.28	1,442.00	1,525.26	1,603.04	5.10%	1,815.23	13.24%	34,489.31	1,815.25	151.27	13.24%	34,489.69	
Medical Office	21	each Physician	190.00	196.00	202.00	247.18	283.18	299.62	318.16	334.26	364.94	364.94	0.00%	406.23	11.31%	8,530.77	406.24	33.85	11.32%	8,530.98	
Residential	7,113	each	370.50	388.00	417.10	514.32	575.46	647.14	703.18	767.84	825.78	851.84	3.16%	995.28	16.84%	7,079,459.01	995.28	82.94	16.84%	7,079,459.01	
Restaurants	14,400	Seat/Meal	26.22	27.54	28.90	43.36	46.98	49.36	54.02	59.36	62.74	65.98	5.16%	74.72	13.24%	1,075,930.23	74.73	6.23	13.26%	1,076,074.23	
Schools	2,500	Population	14.32	14.90	15.94	20.76	23.88	26.84	28.98	31.04	33.90	34.36	1.36%	39.78	15.78%	99,458.09	39.80	3.32	15.84%	99,508.09	
Service Stations	26	per pump	1,186.00	1,256.94	1,346.20	1,619.06	1,830.54	1,940.98	2,104.06	2,270.46	2,455.60	2,517.14	2.51%	2,894.67	15.00%	75,261.52	2,894.68	241.22	15.00%	75,261.78	
Supermarkets	2	each	11,451.08	12,013.78	12,918.34	14,152.08	15,350.08	16,915.86	18,513.28	20,330.52	21,500.58	21,601.64	0.47%	25,590.86	18.47%	51,181.71	25,590.87	2,132.57	18.47%	51,181.73	
SPECIAL	57	ERU=150	325.60	338.02	363.50	480.32	548.60	594.48	642.96	690.84	751.26	765.36	1.88%	883.64	15.45%	50,367.25	883.64	73.64	15.45%	50,367.25	
TOTALS															\$9,839,217.47			\$9,839,448.60			

Proposed vs. Model 231.13

	Model	Proposed
\$ Change	16.84%	16.84%
Monthly Charge	\$82.94	\$82.94
\$ increase	\$11.95	\$11.95

**Carmel Area Wastewater District
2020-21 Resolutions Amending the Budget**

Resolution #	Description	Budgeted	Amendment	Spent To Date
2020-47	A Resolution Approving the Contract Amendment for an Amount not to exceed \$22,900 for the Annexation Services Contract with Denise Duffy & Associates, Inc. to include extra work performed during the environmental review and Local Agency Formation Commission (LAFCO) application services for the 2020 Sphere of Influence and Annexation Project & Authorize the General Manager to sign the Contract Amendment #19-09	\$ 49,800	\$ 22,900	\$ 51,741
2020-49	A Resolution approving the payment of CalPERS Classic Unfunded Accrued Liability in an amount not to exceed \$725,000 and CALPERS Public Employees' Pension Reform Act (PEPRA) Unfunded Accrued Liability in an Amount not to exceed \$56,674 with funds from District Reserves	\$ -	\$ 725,000	\$ 725,000
		\$ -	\$ 56,674	\$ 56,674
2020-60	A Resolution Authorizing the General Manager to enter into a contract with Downtown Ford for the purchase of a Ford F350 Utility truck with a box mount crane in the amount not to exceed \$82,507.30	\$ 80,000	\$ 2,507	\$ -
2020-73	A Resolution ratifying the amended contract amount and approving the actions of the General Manager in approving said amendment with Graniterock in an amount not to exceed \$23,139.82 for additional work completed during wetland basin grading for the Hatton Canyon Pipeline Replacement Project #18-17	\$ 29,879	\$ 23,140	\$ 53,019
Total To Date		<u>\$ 159,679</u>	<u>\$ 830,221</u>	<u>\$ 886,434</u>
Contingencies		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

		<h2 style="margin: 0;">CARMEL AREA WASTEWATER DISTRICT</h2>			
Date Approved:	02/12/2021	MANUAL TRANSFERS OF SULFURIC ACID FOR TERTIARY PROCESSES		Author:	M. Dias
SOP No:	21-1			Approved By:	C. Foley; K Young
Revision No.	--				

SUMMARY: The routine need to manually fill, transport and pour portable carboys containing 93% sulfuric acid creates a potential hazard from sulfuric acid spills and splashes

PERSONNEL: All Operations staff

SAFETY: This is a Safety SOP. 93% sulfuric acid has a pH of less than 1, is highly corrosive and is reactive with water and other chemicals on the Pad

EQUIPMENT: Face shield, apron, chemical gloves (no nitrile gloves)

STEP	ACTION	NOTES
1	<p>PREP:</p> <ul style="list-style-type: none"> • Walk and clear pathways between the fill point at acid skid and the pour point. Note any trip, slip or snag hazards. • Note any strong winds and direction • Note closest eye-wash station 	Situational Awareness
2	<p>KNOW KEY HAZARDS of sulfuric acid:</p> <ul style="list-style-type: none"> ○ Extremely low pH (less than 1) ○ Can be confused with water (odorless, clear) ○ Expect severe eye damage ○ Skin damage ○ Takes a lot of water to remove ○ Water does not neutralize it – water only dilutes it 	Eye damage!
3	<p>USE CORRECT PPE and EQUIPMENT:</p> <ul style="list-style-type: none"> • Don required PPE (chemical gloves; face shield and apron) • Use only dedicated, labeled sulfuric acid containers • Replace acid neutralizing pads in spill tray if they have turned purple and cannot neutralize new drips (The pink pads do <u>not</u> neutralize, they only absorb) 	Nitrile gloves not approved

DISPENSING:

4

- Assume the container is contaminated including; the cap, the handle and the bottom
- Assume all surfaces at the skid are contaminated including; the dispensing valves, the dispensing tube and the pump controls
- Insert fill tube at proper angle to avoid pulling over container
- Observe fill -- do not walk away during fill
- Let fill hose drain/empty into carboy before removing to reduce drips into tray

Assume the container and all surfaces at skid are already contaminated



5	<p>SPOTTING:</p> <ul style="list-style-type: none"> ○ Call for a spotter ○ Spotter must be present to observe transport and pour ○ Spotter must pre-plan to assist with any response or exposure 	Required
(Opt.)	<p>IF EXCESS ACID WAS DISPENSED AND NEEDS TO BE RETURNED:</p> <ul style="list-style-type: none"> • Any excess acid should be poured back into the most easily accessible new tote • Clean any spills on the new tote/cap -- coworkers may assume that new totes are safe to touch 	Do not climb up on the connected (on-line) tote to return excess acid
6	<p>TRANSPORT and POUR:</p> <ul style="list-style-type: none"> • Screw cap onto carboy • Only carry the acid container – do not carry other items -- keep your second hand free • Pour carefully to avoid splashing on any surfaces. Hose down MF racks and any splashed surfaces. • Replace cap 	Do not carry any other items
7	<p>DECON</p> <ul style="list-style-type: none"> • If there are any drips onto container, rinse exterior only • If your gloves became contaminated, determine any surfaces that you touched. If decon is needed, first change gloves to prevent further cross-contamination of even more surfaces like cabinets, faucets, hoses, stairwell railings, etc. • Do not rinse inside of container. Water + Sulfuric = Heat 	Do NOT rinse interior of carboy
Ops	<p><i>NOTE: To reduce corrosion of metals and valves at bottom of MF cells, it is recommended the wash cycle be started as soon as possible after adding acid</i></p>	H2SO4 acid is dense (SG 1.85) and quickly collects at bottom of tank