CITY OF REDLANDS
2019 UTILITIES ADVISORY COMMITTEE
SPECIAL MEETING AGENDA

JOHN JAMES, CHAIR
RICHARD CORNEILLE
CHRISTINE ROQUE
MONTY DILL
JONATHON CORBRIDGE
ERNEST MARQUEZ, JR
RICH SMITH

This will be a teleconference meeting via Zoom.

Following public health recommendations to limit public gatherings during the COVID-19 pandemic, City Manager Charles M. Duggan, Jr., acting as the City of Redlands Emergency Services Director has directed that Commission/Board meetings be closed to the public until further notice or until the current local State of Emergency has been lifted.

All votes during the teleconferencing meeting via Zoom will be conducted by roll call.

HOW TO SUBMIT COMMENTS: In order to have your public comment read into the public record at the meeting, members of the public are asked to submit comments (250 words or less) by 12:00 p.m. (noon) on Wednesday, January 20, 2021 by email at eboehling@cityofredlands.org, or by telephone at 909-798-7527 x7.

Individuals with a disability, consistent with the Americans with Disabilities Act, who need assistance with public comment, may contact Goutam Dobey by telephone at 909-798-7584 x2 or by email at gdobey@cityofredlands.org at least two hours before the meeting to make alternate arrangements.

The following information comprises the agenda for a meeting of the 2019 Utilities Advisory Committee of the City of Redlands at the date and time noted below.

THURSDAY, JANUARY 21, 2021
6:00 P.M.

ZOOM MEETING INFORMATION:

Please click the link below to join the webinar or call the numbers listed:

https://cityofredlands.zoom.us/j/96673733994?pwd=TWJUUnZyem9yUnZSNG4zQ0JXQzhhUT09

Webinar ID: 966 7373 3994
Passcode: 730508

Or you may call any of the following numbers to join the meeting:
Toll-Free: (877) 853-5247 or (888) 788-0099
US locations: (669) 900-6833 | (253) 215-8782 | (346) (248)-7799
(301) 715-8592 | (312) 626-6799 | (929) 205-6099

CITY OF REDLANDS
2019 UTILITIES ADVISORY COMMITTEE
SPECIAL MEETING AGENDA

THURSDAY, JANUARY 21, 2021
6:00 P.M.

1. **ATTENDANCE**
   - **A. UAC Resignation – Jonathon Corbridge**

2. **CALL TO ORDER**

3. **PUBLIC COMMENT**

   Committee Liaison Liz Boehling will read all public comments, up to 250 words, into record if they are received in accordance with the submittal timeframe stated on the previous page.

   The Committee may not discuss or take any action on any public comment made, except that the Committee Members or staff may briefly respond to statements made or questions posed by members of the public. However, any matter that requires action will be referred to staff for a report and possible action at a subsequent meeting.

4. **APPROVAL OF MINUTES**
   - **A. December 17, 2020 Minutes (UAC)**

5. **MUED DIRECTOR'S REPORT & UPDATE (John Harris)**
   - **A. January 19, 2021 City Council Meeting Agenda Items**
   - **B. Utility Data**
   - **C. Financial Health**
   - **D. Utility Master Planning**
   - **E. Development Impact Fees (DIF)**
   - **F. WWTP Rehabilitation Project Update**

6. **NEW BUSINESS**
   - **A. ¾" vs. 1" Water Meter Replacements – Clarification (Ross Wittman)**
   - **B. NBS Rate Options (Dick Corneille)**

7. **CONTINUED BUSINESS**
   - **A. Presentation of Water, Wastewater and Non-Potable/Recycled Water Rate Models (MUED Staff & Consultant)**

8. **POSSIBLE AGENDA ITEMS FOR NEXT MEETING**

CITY OF REDLANDS
2019 UTILITIES ADVISORY COMMITTEE
SPECIAL MEETING AGENDA

9. ADJOURNMENT

ATTACHMENTS:

A. Draft Minutes of December 17, 2020 Meeting
B. Production/Collection Data Tables
C. 5-Year CIP
D. Utility Rate Sheet
E. Utility DIF Rate Sheet
F. Annual DIF Report
G. NBS Rates, Fees, & Charges Brochure

Utilities Advisory Committee

MEETING MINUTES (Meeting #9 on December 17, 2020)

I. Call to Order, and Roll Call

Chairperson James called the ninth 2019 Utilities Advisory Committee (UAC) meeting to order at 6:13 pm. Following a roll call the following UAC members were present: John James, Christine Roque, Richard Smith, Monty Dill and Ernest Marquez. Jonathon Corbridge and Richard Corneille were able to log into Zoom after the roll call was completed. City of Redlands staff City Manager Charlie Duggan, MUED Director John Harris, Senior Project Manager Ross Wittman, Utilities Operations Manager Kevin Watson, Civil Engineer Goutam Dobey, Administrative Analyst Elizabeth Boehling and Raftelis Financial consultants Sudhir Pardiwala, and Lauren Demine, were all in attendance.

II. Public Comment

MUED staff Liz Boehling received no public comment.

III. Approval of Special Meeting Minutes of December 3, 2020

During discussion of meeting minutes from December 3, 2020, Mrs. Roque asked that in section III, last line of motion, the count be changed to 4-1 abstain.

Mrs. Roque also requested in Item 8 the removal of her name asking for the discussion on Phase 2. Mrs. Roque was reading from the zoom chat box for Mr. Corbridge request's to discuss the Phase 2 in more detail at the next UAC meeting.

A motion was made by Committee Member Dill and second by Committee member Smith approving the meeting minutes with changes 5-0.

IV. New Business

A. MUED staff member Veronica Medina gave an update on Water, Wastewater and Non-Potable/Recycled Water Masterplans.
   - Water – Awarded to Michael Baker for $199,880. Expected completion date of September 2021.
   - Wastewater – Awarded to Dudek for $193,960. Expected completion date of July 2021.
   - Non-Potable/Recycled Water – Awarded to Michael Baker for $149,650. Expected completion date of September 2021.

B. Scope and schedule for remaining improvements for Wastewater treatment plant.
   - Phase 1A – Completed
   - Phase 1B – Currently in construction. Expected completion date at the end of 2021.

- Phase 2 – Design scheduled to start in July and will take approximately 18 months to complete. Cost of design is $4.4M. Construction will start after design process. Expected to take 3 years with a completion date of December 2025. Cost of construction $40M.

V. Continued Business

Sudhir and Lauren from Raftelis discussed progress on the Water, Wastewater, and Non-Potable/Recycled Water rate model. Staff from MUED, and Finance are working with Raftelis to complete the rate model for the January 21, 2021 meeting. Committee members asked questions regarding revenue, current rate fees, and the current status Covid-19 has had on the City. Both Raftelis and City staff were able to answer these questions.

VI. Possible Agenda Items for Next Meeting

All committee members requested that the rate model continue to be worked on for more firm numbers.

Mr. Corneille asked that the Wastewater proposal from Parsons be discussed.

Mr. Corneille asked for the amount of production in Non-potable/Recycled Water be discussed.

VII. Adjourn

The meeting was adjourned at 7:46 pm.

Elizabeth Boehling, Administrative Analyst

City of
REDLANDS
Incorporated 1888
Municipal Utilities & Engineering Department

JOHN R. HARRIS
Director

MEMORANDUM

TO: John James, Utilities Advisory Committee Chair

Cc: Utility Advisory Committee Members

FROM: John R. Harris, Municipal Utilities & Engineering Department Director

DATE: January 21, 2021

SUBJECT: Municipal Utilities & Engineering Department Director's Report

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Hello and thank you for serving the Redlands community as a Utility Advisory Committee (UAC) member! City of Redlands Municipal Code Chapter 2.70 establishes the responsibilities of the UAC as follows:

"The powers, duties and responsibilities of the committee are to review the water and wastewater rates, charges and revenue requirements of the city on a biannual basis. The primary goal of the committee shall be to recommend water and wastewater rates that provide revenue which recovers the costs reasonably borne by the city in providing water and wastewater services; are equitable to all customer classes; are in compliance with all state and federal law; and are easily explained to customers. The committee shall prepare and present its recommendations to the city council".

<u>January 19, 2021 City Council Meeting Agenda</u>

The MUED will not make recommendations or presentations during this meeting that directly relate to the UAC mission.

<u>Water Production & Distribution/Wastewater Treatment</u>

Potable water production, non-potable water production, wastewater treatment, and revenues collected for each of these operations throughout calendar year 2020 are similar to 2019 and 2018. Monthly production and treatment data, as well as comparisons to 2019 and 2018, are provided in Attachment "B".

<u>Financial Health Update (December 31, 2020)</u>

FUND	RESTRICTED RESERVE BALANCE	UNRESTRICTED RESERVE BALANCE
POTABLE WATER	$ 20,139,542	$ 33,436,465
NON-POTABLE WATER	$ 22,747	$ 3,146,152
WASTEWATER	$ 15,593,282*	$ 8,605,163

* $6.25M currently unencumbered

Water & Sewer Master Plans

As discussed during the December 2020 UAC meeting, the Water System and Sewer System Master Plans are being developed, and are expected to be complete in late-2021. Hydraulic modeling to identify deficiencies and potential improvements within each system is anticipated to consume a majority of the project completion timeframe. This modeling will likely expand the existing Capital Improvement Plan (CIP) project list, and may include recommendations to loop waterlines to improve pressures and flow rates, eliminate dead end water lines to improve water quality, and sanitary sewer collection system improvements to accommodate typical and seasonal peak demands as Redlands grows. These Master Plan recommendations will provide the foundation for future utility rate adjustment considerations.

The task at hand for this UAC is to consider rate adjustments necessary to recover costs for providing responsible utility services based on currently available information. During the last year, the MUED staff developed a multi-year CIP project list to address specific utility system operational needs, and provide the foundation for the utility rate adjustments currently being discussed. The key MUED staff members assigned to this task have more than a century of combined local professional engineering and utility system operation experience, and determined project costs based on recent actual local construction project costs. This CIP project list is provided in Attachment “C”.

The current Water and Wastewater Utility Rates, provided in Attachment “D”, became effective on July 1, 2018.

Development Impact Fee (DIF)

Development Impact Fees (DIF) are charged by local governments to defray all or a portion of the cost of public facilities related to development projects. In Redlands, DIF is collected at the time a building permit is issued for the purpose of mitigating the impacts caused by new development on the City’s infrastructure. Fees are used to finance the acquisition, construction, and improvement of public facilities needed as a result of this new development. The current MUED DIF became effective in February 2014, and is provided in Attachment “E”.

State law requires that the City prepare and make available a summary of DIF revenues and expenditures in a Development Impact Fee Report each fiscal year. The FY 2019/20 Annual DIF Report was presented to City Council on December 15, 2020, and is available for review and download here:

https://www.cityofredlands.org/sites/main/files/file-attachments/ab_1600_annual_report_fy_2019-20.pdf?1606610051

The report is also provided in Attachment "F".

WWTP Rehabilitation Update

During the December 2020 UAC meeting, the WWTP Rehabilitation Project status was discussed. Construction contracts have been awarded for Phase 1A (completed on November 18, 2020) and Phase 1B (November 2021 completion) of this project. Total project costs to date are approximately $13.26M, which includes costs for engineering, construction, permitting, and equipment purchases.

Parsons engineered both Phase 1A and Phase 1B, and submitted a proposal for engineering and project management for Phase 2 of the project on December 7, 2020. Phase 2 generally converts the WWTP from the current dual-treatment train, to a MBR (exclusively) facility with treatment capacity of 9.5 MGD. Phase 2 also rehabilitates several treatment process facilities within the WWTP. The Parsons engineering services fee for Phase 2 is approximately $4.4M. The Parsons Phase 2 construction cost estimate is approximately $39M.

In light of the early-2020 unanticipated Wastewater Fund expense to avoid a catastrophic failure of the WWTP, the MUED staff and Parsons discussed options for minimizing additional short-term impacts to the fund. The MUED staff strongly believes that conversion to an exclusive MBR treatment process is necessary and provides operational efficiencies and additional treatment capacity to maintain a reliable system for decades. Engineering of the Phase 2 WWTP improvements will take approximately eighteen (18) months. The MUED staff recommends including $4.4M for the Phase 2 engineering services in the current Wastewater Utility rate adjustment, and deferring Phase 2 construction cost recovery for a future rate adjustment. This allows adequate time to refine construction cost estimates and develop a responsible construction phasing plan. It is MUED's intent to reconvene the UAC just prior to completion of the Phase 2 engineering to discuss rate adjustments necessary to recover construction costs.

As always, feel free to contact me anytime to discuss MUED issues, programs, projects, or concerns.

John R. Harris
jharris@cityofredlands.org
(909) 725-1963

WATER PRODUCTION & SANITARY SEWER TREATMENT DATA & ANALYSIS

POTABLE WATER PRODUCTION			
MONTH	2018 (Acre-Feet)	2019 (Acre-Feet)	2020 (Acre-Feet)
JANUARY	1331.2	1082.2	1246.2
FEBRUARY	1383.8	743.0	1486.1
MARCH	1125.6	986.2	1084.2
APRIL	1858.8	1901.7	1230.1
MAY	2032.1	1702.2	2346.2
JUNE	2381.2	2315.1	2505.3
JULY	2824.0	2742.3	2834.2
AUGUST	2841.8	2837.5	2972.0
SEPTEMBER	2530.4	2613.1	2708.3
OCTOBER	2099.2	2329.2	2492.8
NOVEMBER	1834.7	1786.9	1848.1
DECEMBER	1199.0	935.7	0.0
TOTAL	23441.8	21975.1	22753.5

2020 vs 2019 108%
2020 vs 2018 102%
2020 vs (2019 & 2018 Average) 105%

NOTE: December Data Not Included

NOTE: 2020 Total Does Not Include December

NON-POTABLE WATER PRODUCTION			
MONTH	2018 (Acre-Feet)	2019 (Acre-Feet)	2020 (Acre-Feet)
JANUARY	77.9	44.5	55.0
FEBRUARY	100.1	58.7	72.8
MARCH	42.7	48.3	56.8
APRIL	178.4	131.6	63.3
MAY	197.4	114.0	167.8
JUNE	206.1	270.9	208.1
JULY	228.1	264.0	243.7
AUGUST	269.3	250.1	244.7
SEPTEMBER	275.1	250.6	214.9
OCTOBER	202.7	160.2	209.4
NOVEMBER	187.6	142.1	144.2
DECEMBER	52.3	24.8	137.2
TOTAL	2017.7	1759.8	1680.7

2020 vs 2019 97%
2020 vs 2018 86%
2020 vs (2019 & 2018 Average) 91%

NOTE: December Data Not Included

NOTE: 2020 Total Does Not Include December

SANITARY SEWER TREATMENT			
MONTH	2018 (MG)	2019 (MG)	2020 (MG)
JANUARY	180.39	189.94	180.03
FEBRUARY	157.42	175.27	168.89
MARCH	177.09	186.73	178.93
APRIL	159.91	175.39	166.30
MAY	164.76	179.86	186.78
JUNE	163.72	172.33	189.59
JULY	174.92	175.84	204.60
AUGUST	192.10	180.85	179.60
SEPTEMBER	178.02	177.91	181.18
OCTOBER	189.03	181.97	182.59
NOVEMBER	176.51	175.38	187.08
DECEMBER	180.63	183.54	50.99
TOTAL	2094.50	2155.01	2056.56

2020 vs 2019 102%
2020 vs 2018 105%
2020 vs (2019 & 2018 Average) 103%

NOTE: December Data Not Included

NOTE: December 2020 Through 12/08/2020

POTABLE WATER PRODUCTION			
MONTH	**2018** (Acre-Feet)	**2019** (Acre-Feet)	**2020** (Acre-Feet)
JANUARY	1331.2	1082.2	1246.2
FEBRUARY	1383.8	743.0	1486.1
MARCH	1125.6	986.2	1084.2
APRIL	1858.8	1901.7	1230.1
MAY	2032.1	1702.2	2346.2
JUNE	2381.2	2315.1	2505.3
JULY	2824.0	2742.3	2834.2
AUGUST	2841.8	2837.5	2972.0
SEPTEMBER	2530.4	2613.1	2708.3
OCTOBER	2099.2	2329.2	2492.8
NOVEMBER	1834.7	1786.9	1848.1
DECEMBER	1199.0	935.7	
TOTAL	23441.8	21975.1	22753.5

NOTE: 2020 Total Does Not Include December

2020 vs 2019	108%
2020 vs 2018	102%
2020 vs (2019 & 2018 Average)	105%

NOTE: December Data Not Included

NON-POTABLE WATER PRODUCTION			
MONTH	**2018** (Acre-Feet)	**2019** (Acre-Feet)	**2020** (Acre-Feet)
JANUARY	77.9	44.5	55.0
FEBRUARY	100.1	58.7	72.8
MARCH	42.7	48.3	56.8
APRIL	178.4	131.6	63.3
MAY	197.4	114.0	167.8
JUNE	206.1	270.9	208.1
JULY	228.1	264.0	243.7
AUGUST	269.3	250.1	244.7
SEPTEMBER	275.1	250.6	214.9
OCTOBER	202.7	160.2	209.4
NOVEMBER	187.6	142.1	144.2
DECEMBER	52.3	24.8	137.2
TOTAL	2017.7	1759.8	1817.9

NOTE: 2020 Total Does Not Include December

2020 vs 2019	105%
2020 vs 2018	92%
2020 vs (2019 & 2018 Average)	98%

NOTE: December Data Not Included

SANITARY SEWER TREATMENT			
MONTH	**2018** (MG)	**2019** (MG)	**2020** (MG)
JANUARY	180.39	189.94	180.03
FEBRUARY	157.42	175.27	168.89
MARCH	177.09	186.73	178.93
APRIL	159.91	175.39	166.30
MAY	164.76	179.86	186.78
JUNE	163.72	172.33	189.59
JULY	174.92	175.84	204.60
AUGUST	192.10	180.85	179.60
SEPTEMBER	178.02	177.91	181.18
OCTOBER	189.03	181.97	182.59
NOVEMBER	176.51	175.38	187.08
DECEMBER	180.63	183.54	50.99
TOTAL	2094.50	2155.01	2056.56

NOTE: December 2020 Through 12/08/2020

2020 vs 2019	102%
2020 vs 2018	105%
2020 vs (2019 & 2018 Average)	103%

NOTE: December Data Not Included

FISCAL YEAR 2022 POTABLE WATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		Airport #1 Well Rehabilitation	Five (5) year preventive maintenance						$ 120,000.00			$ 120,000.00		MUED Water Production Staff
2		Church Street Well Rehabilitation	Five (5) year preventive maintenance						$ 80,000.00			$ 80,000.00		MUED Water Production Staff
3		East Lugonia #3 Well Rehabilitation	Five (5) year preventive maintenance						$ 80,000.00			$ 80,000.00		MUED Water Production Staff
4		East Lugonia #6 Well Rehabilitation	Five (5) year preventive maintenance						$ 80,000.00			$ 80,000.00		MUED Water Production Staff
5		North Orange #1 Well Rehabilitation	Five (5) year preventive maintenance						$ 120,000.00			$ 120,000.00		MUED Water Production Staff
6		Tate WTP Transmission Line Replacement	Assessment and design for replacement of Tate WTP Transmission raw water line						$ 100,000.00			$ 100,000.00		MUED Water Production Staff
7		Water Infrastucture Seismic Assessment	Citywide water infrastructure seismic assessment						$ 1,500,000.00			$ 1,500,000.00		DDW
8		Hinckley WTP Sludge Press	Design & Installation of new press to dispose of byproducts from enhanced coagulation treatment						$ 300,000.00			$ 300,000.00		MUED Water Production Staff
9		Hinckley WTP Transmission Line Replacement	Assessment and design for replacement of Hinckley WTP Transmission raw water line						$ 100,000.00			$ 100,000.00		MUED Water Production Staff
10		Tank Mixer Installations	Install water quality reservoir mixers to resolve DDW Sanitary Survey deficiency - Margarity/Sand Canyon/Smiley/5th Avenue						$ 100,000.00			$ 100,000.00		DDW
11		Tate WTP Programmable Logic Controller (PLC) Replacement	End-of-life hardware replacement						$ 400,000.00			$ 400,000.00		MUED Water Production Staff
12		Annual Citywide Waterline Replacements	PMP 2020 Waterline replacements						$ 4,500,000.00	$ 4,500,000.00				MUED Water Distribution Staff
13		Sunset Reservoir Rehabilitation	Engineer replacement 3.0 MG steel storage tank						$ 1,200,000.00	$ 2,500,000.00				MUED Water Production Staff
14		Water System SCADA Integration - Phase 2	End-of-life hardware replacement at sixteen (16) sites						$ 3,900,000.00			$ 3,900,000.00		MUED Water Distribution Staff
15		Wellhead Perchlorate Treatment Evaluation - Church Street/Orange/Well #38/Well #39	Assessment & design of treatment process for Perchlorate reduction to achieve pending DDW reduction in MCL						$ 150,000.00			$ 150,000.00		DDW
16		Annual Citywide Potable Water Meter Replacements - Phase 1	Five (5) year project to replace under-performing meters identified in meter accuracy assessment project						$ 1,815,000.00			$ 1,815,000.00		MUED Water Distribution Staff
17		Agate #2 Well Liner Rehabilitation	Engineer & install replacement liner						$ 175,000.00			$ 175,000.00		MUED Water Production Staff
18		Booster #2131 Replacement	End-of-life hardware replacement						$ 50,000.00			$ 50,000.00		MUED Water Distribution Staff
19		Booster #2132 Replacement	End-of-life hardware replacement						$ 50,000.00			$ 50,000.00		MUED Water Distribution Staff
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								FY 2022 WATER FUND CIP TOTAL =	$ 14,820,000.00	$ 7,000,000.00	$ -	$ 9,120,000.00	$ -	

FISCAL YEAR 2022 NON-POTABLE WATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		Recycled Water Reservoirs	Design two (2) recycled water reservoirs to be constructed at WWTP						$ 180,000.00			$ 180,000.00		MUED Water Production Staff
2		Citywide Non-Potable Water Meter Replacements	Replace under-performing meters identified in meter accuracy assessment project						$ 93,000.00			$ 93,000.00		MUED Water Production Staff
3		Non-Potable Water Well #31A Rehabilitation	Five (5) year preventive maintenance						$ 250,000.00			$ 250,000.00		MUED Water Production Staff
4		Non-Potable Water Well #32 Rehabilitation	Five (5) year preventive maintenance						$ 100,000.00			$ 100,000.00		MUED Water Production Staff
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								FY 2022 NON-POTABLE WATER FUND CIP TOTAL =	**$ 623,000.00**	**$ -**	**$ -**	**$ 623,000.00**	**$ -**

FISCAL YEAR 2022 WASTEWATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
2		Annual Citywide Sanitary Sewer Collection Pipeline Replacements	PMP 2020 sanitary sewer collection line replacements						$ 1,000,000.00	$ 1,000,000.00				
3		WWTP Rehabilitation - Phase 2	Phase 2 WWTP Rehabilitation Engineering						$ 4,400,000.00			$ 4,400,000.00		
4		Alabama Septage Pond Remediation	Environmental impact mitigation assessment						$ 240,000.00	$ 250,000.00				
5		WWTP Drying bed lechate remediation	Environmental impact mitigation assessment						$ 250,000.00	$ 250,000.00				
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								FY 2022 WASTEWATER FUND CIP TOTAL =	**$ 5,890,000.00**	**$ 1,500,000.00**	**$ -**	**$ 4,400,000.00**	**$ -**	

FISCAL YEAR 2023 POTABLE WATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		1750 Blend Manifold Replacement	End-of-life hardware replacement						$ 100,000.00			$ 100,000.00		
2		Hinckley WTP Transmission Line Replacement - Phase 1	Replacement & Upsize of transmission line						$ 2,000,000.00			$ 2,000,000.00		
3		Hinckley WTP Paving	Replace and add pavement to the WTP						$ 150,000.00			$ 150,000.00		
4		Madeira Well Rehabilitation	Five (5) year preventive maintenance						$ 120,000.00			$ 120,000.00		
5		Mentone 2 Well Rehabilitation	Five (5) year preventive maintenance						$ 120,000.00			$ 120,000.00		
6		Redlands BLVD/New Jersey PRV Station Replacement	Engineer PRV station upgrade for fire protection and system redundancy						$ 100,000.00			$ 100,000.00		
7		Tate WTP Clarifier Recoating & Cover Installation	Preparation & Coating of clarifier tank & installation of new cover						$ 1,300,000.00			$ 1,300,000.00		
8		Texas Grove Reservoir Mixer	Design & installation of mixer						$ 75,000.00			$ 75,000.00		
9		Annual Citywide Waterline Replacements	PMP 2020 Waterline replacements						$ 4,500,000.00	$ 4,500,000.00				
10		Annual Citywide Potable Water Meter Replacements - Phase 2	Five (5) year project to replace under-performing meters identified in meter accuracy assessment project						$ 1,815,000.00			$ 1,815,000.00		
11		Well #38 Rehabilitation	Five (5) year preventive maintenance						$ 120,000.00			$ 120,000.00		
12		Well #39 Rehabilitation	Five (5) year preventive maintenance						$ 120,000.00			$ 120,000.00		
13		Wellhead Perchlorate Treatment Evaluation - Well #10/Well #13/Agate #1/Agate #2/Crafton	Evaluate & design treatment process for Perchlorate reduction to achieve pending DDW reduction in MCL						$ 150,000.00			$ 150,000.00		
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								FY 2023 WATER FUND CIP TOTAL =	$ 10,670,000.00	$ 4,500,000.00	$ -	$ 6,170,000.00	$ -	

FISCAL YEAR 2023 NON-POTABLE WATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		Crafton Hills & Property-One Reservoir	Design of 0.5 - 1.0 MG reservoir to eliminate non-potable water wasting						$ 100,000.00			$ 100,000.00		
2		Recycle Water Reservoir	Construction of one (1) recycled water reservoir at WWTP						$ 800,000.00			$ 800,000.00		
3		New York Well Rehabilitation	Five (5) year preventive maintenance						$ 100,000.00			$ 100,000.00		
4		Well #11 Rehabilitation	Five (5) year preventive maintenance						$ 100,000.00			$ 100,000.00		
5		Well #36 Rehabilitation	Five (5) year preventive maintenance						$ 100,000.00			$ 100,000.00		
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								FY 2023 NON-POTABLE WATER FUND CIP TOTAL =	**$ 1,200,000.00**	**$ -**	**$ -**	**$ 1,200,000.00**	**$ -**

FISCAL YEAR 2023 WASTEWATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		Annual Citywide Sanitary Sewer Collection Pipeline Replacements	PMP 2020 sanitary sewer collection line replacements						$ 3,000,000.00	$ 1,000,000.00			$ 2,000,000.00	
2		WWTP Rehabilitationon - Phase 2A	Construction of WWTP Rehabilitation - Phase 2A critical need elements						$ 11,300,000.00				$ 11,300,000.00	
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								FY 2023 WASTEWATER FUND CIP TOTAL =	**$ 14,300,000.00**	**$ 1,000,000.00**	**$ -**	**$ -**	**$ 13,300,000.00**	

FISCAL YEAR 2024 POTABLE WATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		Airport #2 Well Rehabilitation	Five (5) year preventive maintenance						$ 120,000.00			$ 120,000.00		
2		East Lugonia #3 Well Replacement	Engineer new well						$ 100,000.00			$ 100,000.00		
3		HAWC Booster Pump Rehabilitation	End-of-life hardware replacement						$ 500,000.00			$ 500,000.00		
4		Highline Waterline Replacement - Final Phase	Engineer Highline water pipeline replacement - Final Phase						$ 100,000.00			$ 100,000.00		
5		Hinckley WTP Transmission Line Replacement - Phase 2	Replacement & Upsize of transmission line						$ 2,000,000.00			$ 2,000,000.00		
6		Mill Creek #2A Well Rehabilitation	Five (5) year preventive maintenance						$ 80,000.00			$ 80,000.00		
7		Redlands BLVD/New Jersey PRV Station Replacement	Construct PRV station upgrade for fire protection and system redundancy						$ 250,000.00			$ 250,000.00		
8		Rees Well Rehabilitation	Five (5) year preventive maintenance						$ 120,000.00			$ 120,000.00		
9		S.B. Muni Well Rehabilitation	Five (5) year preventive maintenance						$ 60,000.00			$ 60,000.00		
10		Annual Citywide Waterline Replacements	PMP 2020 Waterline replacements						$ 4,500,000.00	$ 4,500,000.00				
11		Annual Citywide Potable Water Meter Replacements - Phase 3	Five (5) year project to replace under-performing meters identified in meter accuracy assessment project						$ 1,815,000.00			$ 1,815,000.00		
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								FY 2024 WATER FUND CIP TOTAL =	$ 9,645,000.00	$ 4,500,000.00	$ -	$ 5,145,000.00	$ -	

FISCAL YEAR 2024 NON-POTABLE WATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		Crafton Hills & Property-One Reservoir	Construct of 0.5 - 1.0 MG reservoir to eliminate non-potable water wasting						$ 850,000.00			$ 850,000.00		
2		Mill Creek #4 Rehabilitation	Five (5) year preventive maintenance						$ 100,000.00			$ 100,000.00		
3		Redlands Heights Well Rehabilitation	Five (5) year preventive maintenance						$ 100,000.00			$ 100,000.00		
4		WWTP Recycle Water Reservoir	Construction of one (1) recycled water reservoir at WWTP						$ 800,000.00			$ 800,000.00		
5		Texas Street Reservoir	Design of non-potable reservoir						$ 50,000.00	$ 1,800,000.00		$ 50,000.00		
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								FY 2024 NON-POTABLE WATER FUND CIP TOTAL =	**$ 1,900,000.00**	**$ 1,800,000.00**	**$ -**	**$ 1,900,000.00**	**$ -**

FISCAL YEAR 2024 WASTEWATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION	ESTIMATE	EXISTING	GRANT	RESERVES	RATE	
1		Annual Citywide Sanitary Sewer Collection Pipeline Replacements	PMP 2020 sanitary sewer collection line replacements						$ 3,000,000.00	$ 1,000,000.00			$ 2,000,000.00	
2		WWTP Rehabilitation - Phase 2B	Construct Phase 2B elements						$ 9,200,000.00				$ 9,200,000.00	
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								FY 2024 WASTEWATER FUND CIP TOTAL =	**$ 12,200,000.00**	**$ 1,000,000.00**	**$ -**	**$ -**	**$ 11,200,000.00**	

FISCAL YEAR 2025 POTABLE WATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		East Lugonia #3 Well Replacement	Construct new well						$ 2,500,000.00				$ 2,500,000.00	
2		Entrained Air Treatment System Assessment	Engineer solution for eliminating entrained air within wells						$ 500,000.00				$ 500,000.00	
3		Muguet #2 Well Rehabilitation	Five (5) year preventive maintenance						$ 50,000.00				$ 50,000.00	
4		Mill Creek #2 Well Rehabilitation	Five (5) year preventive maintenance						$ 80,000.00				$ 80,000.00	
5		Tate WTP Influent Static Mixer	Design & installation of an influent static mixer at Tate Water Treatment Plant.						$ 150,000.00				$ 150,000.00	
6		Annual Citywide Waterline Replacements	PMP 2020 Waterline replacements						$ 4,500,000.00	$ 4,500,000.00				
7		Well #10 Rehabilitation	Five (5) year preventive maintenance						$ 120,000.00				$ 120,000.00	
8		Well #13 Rehabilitation	Five (5) year preventive maintenance						$ 120,000.00				$ 120,000.00	
9		Annual Citywide Potable Water Meter Replacements - Phase 4	Five (5) year project to replace under-performing meters identified in meter accuracy assessment project						$ 1,815,000.00				$ 1,815,000.00	
10		Sunset Reservoir Rehabilitation	Construct replacement 3.0 MG steel storage tank						$ 6,000,000.00	$ 1,300,000.00			$ 4,700,000.00	
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								FY 2025 WATER FUND CIP TOTAL =	$ 15,835,000.00	$ 5,800,000.00	$ -	$ -	$ 10,035,000.00	

FISCAL YEAR 2025 NON-POTABLE WATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		California Street Well Rehabilitation	Five (5) year preventive maintenance						$ 100,000.00				$ 100,000.00	
2		Hog Canyon Well Rehabilitation	Five (5) year preventive maintenance						$ 100,000.00				$ 100,000.00	
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								FY 2025 NON-POTABLE WATER FUND CIP TOTAL =	$ 200,000.00	$ -	$ -	$ -	$ 200,000.00	

FISCAL YEAR 2025 WASTEWATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		Annual Citywide Sanitary Sewer Collection Pipeline Replacements	PMP 2020 sanitary sewer collection line replacements						$ 3,000,000.00	$ 1,000,000.00			$ 2,000,000.00	
2		WWTP Rehabilitation - Phase 2C	Construct Phase 2C elements						$ 13,700,000.00				$ 13,700,000.00	
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								FY 2025 WASTEWATER FUND CIP TOTAL =	$ 16,700,000.00	$ 1,000,000.00	$ -	$ -	$ 15,700,000.00	

FISCAL YEAR 2026 POTABLE WATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		Booster Stations & MCC Upgrade	Evaluate & Engineer end-of-life hardware replacements						$ 500,000.00				$ 500,000.00	
2		Annual Citywide Waterline Replacements	PMP 2020 Waterline replacements						$ 4,500,000.00	$ 4,500,000.00				
3		Highline Waterline Replacement - Final Phase	Construct Highline water pipeline replacement - Final Phase						$ 3,000,000.00				$ 3,000,000.00	
4		Annual Citywide Potable Water Meter Replacements - Phase 5	Five (5) year project to replace under-performing meters identified in meter accuracy assessment project						$ 1,815,000.00				$ 1,815,000.00	
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								FY 2026 WATER FUND CIP TOTAL =	$ 9,815,000.00	$ 4,500,000.00	$ -	$ -	$ 5,315,000.00	

FISCAL YEAR 2026 NON-POTABLE WATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		Chicken Hill Well Rehabilitatin	Five (5) year preventive maintenance						$ 100,000.00				$ 100,000.00	
2		Well #30A Rehabilitation	Five (5) year preventive maintenance						$ 100,000.00				$ 100,000.00	
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								FY 2026 NON-POTABLE WATER FUND CIP TOTAL =	$ 200,000.00	$ -	$ -	$ -	$ 200,000.00	

FISCAL YEAR 2026 WASTEWATER FUND CAPITAL IMPROVEMENT PROGRAM PROJECTS

ITEM	PROJECT NUMBER	PROJECT NAME	PROJECT SCOPE	PROJECT PHASE COMPLETION SCHEDULE					BUDGET ESTIMATE	FUNDING SOURCE				PROJECT ORIGINATOR
				PLANNING	ENGINEERING	ACQUISITION	PROCUREMENT	CONSTRUCTION		EXISTING	GRANT	RESERVES	RATE	
1		Annual Citywide Sanitary Sewer Collection Pipeline Replacements	PMP 2020 sanitary sewer collection line replacements						$ 3,000,000.00	$ 1,000,000.00			$ 2,000,000.00	
2		WWTP Rehabilitation - Phase 2	Construct Phase 2D elements						$ 4,900,000.00				$ 4,900,000.00	
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								FY 2026 WASTEWATER FUND CIP TOTAL =	$ 7,900,000.00	$ 1,000,000.00	$ -	$ -	$ 6,900,000.00	

CITY OF REDLANDS
MUNICIPAL UTILITIES & ENGINEERING DEPARTMENT

Water and Wastewater Service Rate Schedule

Effective July 1, 2018 (Rates and charges shown are bi-monthly)

Water Usage Rate

Building Water Usage & Rate:

First 16 units	$1.46/100 cubic feet
17 – 27 units	$1.78/100 cubic feet
Over 27 units	$2.69/100 cubic feet

Non-Building Water Usage & Rate:

First 27 units	$1.78/100 cubic feet
Over 27 units	$2.69/100 cubic feet

1 Unit = 100 cubic feet or 748 gallons

Water Service Charge

Meter Size & Charge:

5/8″ Meter	$ 32.10
3/4″ Meter	$ 43.17
1″ Meter	$ 64.67
1½″ Meter	$ 116.79
2″ Meter	$ 172.83
3″ Meter	$ 299.23
4″ Meter	$ 462.10
6″ Meter	$ 853.02
8″ Meter	$1256.97
10″ Meter	$2977.00
12″ Meter	$3915.20

** Prior agriculture irrigation rate customers are only charged the $4.59 customer service component of this charge.*

Fire Protection Water Usage Rate

Fire Protection or Fire Hydrant Water Usage & Rate:

All units $2.69/100 cubic feet

NOTE: Any use of fire protection water service for any purpose other than verified fire protection system testing or actual fire protection needs will be subject to a $40.00 charge, plus the full non-fire protection meter service charge and any applicable wastewater charges at the prevailing rate.

Fire Protection Water Service Charge

Meter Size & Charge:

2″ Meter	$ 10.19
3″ Meter	$ 18.10
4″ Meter	$ 31.75
6″ Meter	$ 80.73
8″ Meter	$165.22
10″ Meter	$292.32
12″ Meter	$468.46

Non-Potable Water Usage Rate

Non-Potable Water Usage Rate:
$ .99/100 cubic feet

Conversion Customer Water Usage Rate:
$.64/100 cubic feet

Non-Potable Water Service Charge

Meter Size & Charge:

3/4″ Meter	$ 13.81	3″ Meter	$ 95.50
1″ Meter	$ 20.65	4″ Meter	$147.45
1½″ Meter	$ 37.29	6″ Meter	$272.16
2″ Meter	$ 55.16	8″ Meter	$401.04

Wastewater (Sewer) Service Rate

Residential Rate: Single Family Dwelling Unit $50.05 Multiple-Family Dwelling Unit $37.59

Non-Residential Rate:

Minimum Charge	$37.59	Medium Strength II	$3.64/100 cubic feet
Low Strength I	$2.05/100 cubic feet	Medium Strength III	$4.11/100 cubic feet
Low Strength II	$2.16/100 cubic feet	High Strength I	$4.60/100 cubic feet
Low Strength III	$2.64/100 cubic feet	High Strength II	$5.00/100 cubic feet
Medium Strength I	$3.17/100 cubic feet	Large Volume User *	$2.76/100 cubic feet

School Rate: Elementary $119.36/100 ADA Secondary & High $198.94/100 ADA

** Large Volume Users are classified as users with greater than 25,000 gallons per day discharge.*

Fire Hydrant Construction Water Service Rate and Charges

Water Usage Rate:	2.69/100 cubic feet
Monthly Water Service Charge:	$ 73.60
Fire Hydrant Construction Meter Pre-Payment:	$1,200.00

- Minimum Meter Service Charge (if less than 30 days) will be $73.60
- Repairs to damaged fire hydrant construction meters will be charged at prevailing time and material rates to repair the meter.
- Lost or stolen fire hydrant construction meters will be charged a $1,200.00 replacement charge.

Unauthorized Fire Hydrant Connection Charge: $150.00
(Plus estimated water usage charged at the prevailing potable water rate)

Septage Tank Dumping Rate

Septage Tank Dumping:	$.11/gallon	$12.60 minimum

Miscellaneous Fees and Charges

Establish New Municipal Services Account Charge (Will appear on first billing)	$15.00
Request for Same Day Water Turn-On Service After 3:00 p.m.	$26.00
After-Hours Request for Water Turn-On Service (Stand-By Call)	$60.00
Meter Test Charge (Plus the cost to install a new meter based upon actual meter size— Charge waived if meter is over-registering per AWWA Standards)	$40.00
Failure to Notify Change of Ownership Charge	$35.00
Obstructed Water Meter Resulting in an Estimated Read or Re-Read Trip Charge	$15.00
Turn-off For Non-Payment of Municipal Services Account Charge	$46.00
Broken Angle Meter Stop Charge	$75.00
Broken Lock Charge	$15.00
Remove Meter After Illegal Turn-On Charge	$50.00
Remove Straight Connection Charge	$75.00
Jumper Fee (for use on buildings under construction (pre-landscape))	$50.00
Cut Service at the Main Charge	Time and Materials
Submittal to Collection Agency Charge	40% of Balance
Return Check or Electronic/Automatic Debit Charge	$35.00
Check-By-Phone Charge	$ 6.00

Late Charge – 10% of unpaid balance. Fee is calculated on each service component separately to arrive at a total charge.

Pre-Payment– Shall be three times the cost of the estimated monthly service or $70.00, whichever is greater. In the event your account is turned off for non-payment, a pre-payment may be required in order to re-establish your services. The pre-payment amount shall be applied as a credit to the applicant's account at the end of one year of satisfactory payment history (6 payments) or when the account is closed.

CITY OF REDLANDS
MUNICIPAL UTILITIES & ENGINEERING DEPARTMENT
WATER, NON-POTABLE, WASTEWATER AND SOLID WASTE DEVELOPMENT IMPACT FEES

The Municipal Utilities & Engineering Department's Capital Charges for Development for water, non-potable, sewer and solid waste are listed below and are effective February 2014.

WATER CAPITAL IMPROVEMENT CHARGE

Single Family Dwelling Unit:	
<11,000 sq.ft.	$4,350/dwelling unit
11,000 - 21,000 sq.ft.	$5,623/dwelling unit
>21,000 sq.ft. - 1 Acre	$6,896/dwelling unit
>1 Acre	$9,431/ dwelling unit
Multiple Family & Mobile Homes	$2,181/dwelling unit
Senior-restricted dwelling unit	$1,096/dwelling unit
Non-Residential	$188.00/100 cu.ft.est. flow per month

WATER SOURCE ACQUISITION CHARGE

Single Family Dwelling Unit:	
< 11,000 sq.ft.	$783/dwelling unit
11,000 - 21,000 sq.ft.	$1,023/dwelling unit
> 21,000 sq.ft. - 1 Acre	$1,242/dwelling unit
> 1 Acre	$1,701/ dwelling unit
Multiple Family & Mobile Homes	$397/dwelling unit
Senior-restricted dwelling unit	$167/dwelling unit
Non-Residential	$33.00/100 cu.ft. est. flow per month

NON-POTABLE WATER DEVELOPMENT IMPACT FEE

All Development	$162.00/100 cu.ft. est. flow per month

SEWER CAPITAL IMPROVEMENT CHARGE

Single Family Residential	$3,130/dwelling unit
Residential Dwelling Unit if Building Permit issued prior to November 1, 1961	$366/dwelling unit
Multiple Family & Mobile Homes	$2,295/dwelling unit
Senior-restricted dwelling unit	$1,774/dwelling unit
Non-Residential	$1,482/100 gpd est. flow

SOLID WASTE CAPITAL IMPROVEMENT CHARGE

Single Family Residential	$650/dwelling unit
Multiple Family	$325/dwelling unit
Non-Residential Development	$52/ppd estimated waste stream
Waste container/Residential	$70 each

FRONTAGE CHARGES

Non-Potable Water (6")	$23/front foot (each)
Water or Sewer (8")	$30/front foot (each)
Water (12")	$46/front foot

CITY OF REDLANDS
MUNICIPAL UTILITIES & ENGINEERING DEPARTMENT

POLICY FOR ACCEPTANCE OF PAYMENTS FROM DEVELOPERS

CHARGES	TIME OF ACCEPTANCE OF PAYMENTS	NOTES
WSAC (Water Source Acquisition Charge) **WFF** (Water Frontage Charge) **SFF** (Sewer Frontage Charge)	These charges shall be paid as a condition of **Final Approval** of the project. The amount of charges due shall be those in effect on the date of Final Approval.	Final approval for a development project is the approval received from the Planning Commission for CRA's and CUP's and from the City Council for subdivision.
SCIC (Sewer Capital Improvement Charge) **SWCIC** (Solid Waste Capital Improvement Charge)	These charges shall be paid as a condition of issuance of a **Building Permit**. The amount of charges due shall be those in effect on the date of the Building Permit is issued.	The SCIC is not collected at the grading permit stage. Grading permits are issued independently of Building Permits. An existing building switching from septic to sewer pays prior to a plumbing permit.
WCIC (Water Capital Improvement Charge) **NPWDIF** (Non-Potable Water Development Impact Fee)	These charges shall be paid as a condition of approval of an **Application for Water Connection**. The amount of charges due shall be those in effect on the date the Application for Water Connection is approved.	An Application for Water Connection is approved when the water main and service are tested and accepted by the Municipal Utilities Department, a water meter can be physically set and water accepted by the property.

NOTES:

1. Building Permit issuance or its equivalent also applies if development is under State or County jurisdiction.

2. Prepayment of Fees will not be accepted.

WATER METER INSTALLATION CHARGE

¾ inch	=	$175
1 inch	=	$225
1½ inch	=	$430
2 inch	=	$595

December 15, 2020
The Honorable Mayor, Members of the City Council and Residents of Redlands
Redlands, CA 92373

Subject: Annual Report of Development Impact Fees

Dear Mayor, Members of the City Council and Residents of Redlands,

Pursuant to the Mitigation Fee Act (the "Act") (Government Code section 66000 et seq.), and specifically section 66006 of the Act, the following report on the receipt, use and retention of development impact fees for Fiscal Year 2019-2020 is hereby presented to the City Council for review and approval. Development impact fees are charged by local governments to defray all or a portion of the cost of public facilities related to new development being constructed within the City. The requirements for enactment of a development impact fee program are set forth in the Act, which was enacted by the State Legislature as Assembly Bill No. 1600 and are commonly referred to as "AB 1600 requirements".

In Redlands, development impact fees may be collected at the time of issuance of a certificate of occupancy or date of final inspection, or earlier as permitted by Government Code section, for the purpose of mitigating the impacts caused by new development on the City's infrastructure. Fees are used to finance the acquisition, construction, and improvement of public facilities needed as a result of this new development. A separate funding structure has been established to account for the impact of new development on each of the following types of public facilities: Open Space, Parks, Public Facilities (including police, fire, community center, library and general government facilities), Transportation, Water, Non-Potable Water, Solid Waste, and Sewer.

Impact fees collected and spent during Fiscal Year 2019-2020 were set by Resolution No. 7951 as approved by the City Council on April 2, 2019, which rescinded Resolution No. 7907. The amount of corresponding fee types, currently established by Resolution No. 7951, is attached hereto. The Act requires the City to prepare an annual report for the City's development impact fees, summarizing the revenues, interest income, and expenditures for each category of funds during the fiscal year. This report was filed with the A. K. Smiley Public Library and available for public review on November 30, 2020.

Respectfully submitted,

Management Services / Finance Staff
City Manager's Office

(227) Open Space Fund – Redlands Municipal Code Chapter 3.32 establishes an Open Space and Park Development Impact Fee. Twenty-five percent (25%) of this fee is deposited into an Open Space Fund to be used solely for the purpose of acquisition, improvement, preservation and expansion of open space areas within the City in accordance with the provisions of the recreation, open space and conservation element of the City's General Plan. The General plan specifies the policy to preserve open space land in order to protect the visual character of the City, provide for public outdoor recreation, conserve natural resources, support groundwater recharge, and manage production of resources. In the General Plan, specific open space areas in the Planning Area include the "Emerald Necklace" concept, San Timoteo Canyon, the Santa Ana Wash, and Live Oak Canyon. Fee amounts are set by Resolution No. 7951.

The following table shows the balances, receipts and expenditures of the Open Space Fund for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	2,085,506	672,363	727,643	428,728	505,631	1,508,088
Receipts	90,710	55,826	49,392	78,399	1,003,881[1]	185,482
Expenditures	(1,503,853)	(546)	(348,306)	(1,496)	(1,424)	(71,249)
Ending Balance	672,363	727,643	428,728	505,631	1,508,088	1,622,321

[1]Includes non-DIF revenue of $785,000 deposit of land sale proceeds designated by the City Council for acquisition of open space and received from the sale of the City's Mullin grove property.

DIF Receipts include fees of $141,400 and investment income of $44,082.

Expenditures include $2,769 in administrative charges and $68,480 in reimbursed fees as part of a settlement and mutual general release agreement between the City and Diversified Pacific dated February 18, 2020, in part, in exchange for conveyance of certain grant deeds and other considerations. A copy of this agreement is attached for reference as Appendix A.

Over the past fifteen years, monies collected in the Open Space Fund, along with grant monies, have been spent on restoration and acquisition of open space within San Timoteo Canyon.

During Fiscal Year 2014-2015 the City acquired the Mistretta Property for $1,500,763 and spent $1,383 on title and taxes and $1,257 for administrative costs. During Fiscal Year 2016-2017, the City acquired the 12.3 acre Hudson Property that is adjacent to and provides a connection to the Riverside County natural preserve in San Timoteo Canyon. The property was acquired to be held and used for the purposes open space protection and preservation, restoration and management. The Hudson Property purchase price was $428,080 and was partially offset by a grant in the amount of $82,000 that the City received from the California Wildlife Conservation Board. The total percentage of the cost of the property acquisition that was funded with Open Space fees was approximately 81%.

At June 30, 2019, the outstanding loan owed to the Open Space Fund (227) from the Public Facilities Fund was fully repaid with interest. The original $130,000 loan was made in Fiscal Year 2010-2011 to the Public Facilities Fund (251) for a portion of annual debt service on the 2003 Lease Revenue Refunding Certificates of Participation attributed to Fund 251.

The current cash balance exceeds the cumulative fee collection over the past five years by $552,415, when adjusting for the $785,000 deposit of land sale proceeds as detailed above[1]. As a result, the City must make a "finding" in accordance with the requirements of Government Code Section 66006.

Findings:

Fees deposited into an Open Space Fund are to be used solely for the purpose of acquisition, improvement, preservation and expansion of open space areas within the City in accordance with the provisions of the recreation, open space and conservation element of the City's General Plan. Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for anticipated funding sources or amounts to complete the projects listed below. Monies collected into the Open Space Fund, including the existing excess cash, are expected to be used in accordance with the General Plan for the following projects over the next 3-5 years:

1. **Open Space/Citrus Acquisition –** the City is committed to retaining and improving the maximum feasible amount of open space property for recreational opportunities, conservation, agricultural uses and resource protection. In terms of agricultural open space, one of the City's goals is to increase City acreage of citrus groves to an approximate target of 200 acres. As of FY 2019-20, the City owned 164 acres.
2. **Emerald Necklace –** the Emerald Necklace is a conceptual framework for a series of green open space and park areas surrounding the City approximately 45 miles in length, joined together with a special scenic road and trails system. The City has identified gaps in the Emerald Necklace and is working collaboratively to prioritize land acquisition or other resource preservation strategies in those areas. Several sites and properties have been purchased under this framework. Additionally, as suitable properties become available for acquisition, the City will evaluate opportunities to purchase the same.
3. **Scenic Routes and Trails –** The City has several project priorities: develop a linear parkway/recreational corridor centered along San Timoteo Creek and extending throughout the canyon, coordinate with San Bernardino County and the Santa Ana River Conservancy on implementing the objectives of the Santa Ana River Trail Parkway and Open Space Plan, and to complete the Emerald Necklace system of scenic routes and trails, including the Zanja Trail, Santa Ana River Trail, San Timoteo Trail, and other trails linking parks, regional trails, and open space areas.

No refunds of fees, as a result of the cumulative cash balance in the Open Space fund, are required, and none have been made during Fiscal Year 2019-2020.

(250) Park Development Fund – Park development impact fees are levied for the purpose of acquiring and developing land for parks. The fees are established per the Redlands Municipal Code as noted above for Open Space. Fee amounts are set by Resolution No. 7951. Seventy-five percent (75%) of the Open Space and Parks fees are deposited into the Park Development Fund. The General Plan sets the policy on park development as one aimed towards creating and maintaining a high-quality, diversified park system that enhances Redlands' unique attributes. The General Plan prescribes the parkland standard of 5 acres per 1,000 residents and, based on that standard, 82 acres of new parkland would be required to meet the needs of the Planning Area.

The following table shows the balances, receipts and expenditures of the Park Development Fund for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	1,071,036	1,049,004	555,525	760,793	708,482	477,392
Receipts	285,038 (1)	102,732 (2)	614,052(3)	326,477(4)	1,020,460(5)	454,596
Expenditures	(307,070)	(596,211)	(408,784)	(378,788)	(1,251,551)	(322,674)
Ending Balance	1,049,004	555,525	760,793	708,482	477,392	609,313

(1) Represents receipts and expenditures of impact fee activity only; miscellaneous revenues/transfers of $86,180 were received from Nevada Palmetto Grove sales proceeds to reimburse expenditures for Heritage Park.

(2) Represents receipts and expenditures of impact fee activity only; miscellaneous revenues/transfers of $285,318 were received from Nevada Palmetto Grove sales proceeds as transfers for matching funds for both the Barton School House Project ($250,000) and Skate Park Project (35,318).

(3) Includes miscellaneous revenues/transfers of $465,912 that were received from Nevada Palmetto Grove sales proceeds to reimburse expenditures for both Heritage Park off-site improvements ($400,000) and Skate Park Project design costs (65,912).

(4) Includes miscellaneous revenues/transfers of $101,531 that were received from Nevada Palmetto Grove sales proceeds and community donations to reimburse expenditures for the Skate Park Project design & project-related costs ($16,850 to date).

(5) Includes miscellaneous revenues/transfers of $635,613 that were received from Nevada Palmetto Grove sales proceeds and community donations of $38,723 to fund construction of the Skate Park.

DIF Receipts consist of $16,284.50 in investment income, $438,311.50 in fees.

Disbursements during Fiscal Year 2019-2020 totaled $322,674. $1,930 in accrued wages payable represent accrued expenses. Other uses of the funds include a payment of $106,523 in principal, interest, and fees associated with the State I-Bank loan for the Sports Park. Park Development impact fees will represent approximately 35% of the total cost for the Sports Park design & construction once the debt service is fully satisfied. Other disbursements include $205,441 in reimbursed fees as part of a settlement and mutual general release agreement between the City and Diversified Pacific dated February 18, 2020, in part, in exchange for conveyance of certain grant deeds and other considerations. A copy of this agreement is attached for reference as Appendix A.

At June 30, 2019, the outstanding loan owed to the Park Development Fund (250) from the Public Facilities Fund was fully repaid with interest. The original $130,000 loan was made in Fiscal Year 2010-2011 to the Public Facilities Fund (251) for a portion of annual debt service on the 2003 Lease Revenue Refunding Certificates of Participation attributed to Fund 251.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

(251) Public Facilities Development Fund - Public Facilities Development Fees have been established per Redlands Municipal Code Chapter 3.60 with the purpose and intent of implementing the Redlands General Plan to ensure that public facilities and related improvements which satisfy City standards are available concurrent with the needs caused by new development within the City. Fee amounts are set by Resolution No. 7951. Fees are collected from applicants for development projects for the purpose of constructing, improving, providing and maintaining public facilities as identified in the City's public facilities program.

Police Facilities

The purpose of this fee is to provide a revenue source that will provide funds to acquire vehicles/equipment and facilities that will mitigate the impacts of new residential and non-residential development to the City's Police facilities. A complete listing of proposed facilities is contained within the City's Development Impact Fee Justification Study, dated January 9, 2017.

The following table shows the balances, receipts and expenditures of the Police Facilities Fee for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	129,397	316,188	349,293	422,566	428,533	440,922
Receipts	190,602	33,781	74,769	6,088	12,641	24,474
Expenditures	(3,812)	(676)	(1,495)	(122)	(253)	(489)
Ending Balance	316,187	349,293	422,566	428,532	440,922	464,906

Receipts consist of $24,474 in fees.

Disbursements include $489 in administrative charges.

The current cash balance exceeds the cumulative fee collection over the past five years by $147,025. As a result, the City must make a "finding" in accordance with the requirements of Government Code Section 66006.

Findings:

Fees deposited into the Public Facilities Fund – Police Facilities category are to be used solely for the purpose of costs related to police facilities, vehicles and equipment. The largest cost, by far, will be the

development of a new safety hall center. The current buildings that house police staff are aged, not ADA-compliant and represent barriers to effectively managing the department's resources. As a result, plans have been underway to conceptualize and fund a new Safety Hall. This project is estimated to cost somewhere between $40 and $60 million dollars, including construction, commissioning and furnishing. Impact fees will be used to help fund the project once it commences and their expenditure will reflect a portion of new development's share in the cost of the new facility. Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for anticipated funding sources or amounts, in total, that are needed to complete the Safety Hall project.

No refunds are required and none have been made during Fiscal Year 2019-2020.

Fire Facilities

The purpose of this fee to establish a revenue source that will provide funds to construct various Fire facilities, and acquire equipment and vehicles that will mitigate the impacts of new residential and non-residential development to the City's Fire facilities. A complete listing of proposed facilities is contained within the City's Development Impact Fee Justification Study, dated January 9, 2017.

In addition, these fees, as well as those collected for Library and General Government Facilities, have been collected and used to make contributions towards annual debt service of the 2003 Lease Revenue Refunding Certificates of Participation (COP), which matured in Fiscal Year 2017-2018. As noted, these loans occur when impact fee revenues are insufficient to cover the Fire Facilities category 6% share of debt service on the 2003 Lease Revenue Refunding COPs. The 2003 COPs refunded prior COPs that were used to finance Fire Station #3, as well as Library Facilities and the City Yard.

The following table shows the balances, receipts and expenditures, including loan activity, of the Fire Facilities Fee for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	-	82,144	-	13,700	69,271	315,622
Receipts	494,169	97,007	117,100	75,378	251,379	196,707
Expenditures	(412,025)	(179,151)	(103,399)	(19,807)	(5,028)	(3,934)
Ending Balance	82,144	-	13,700	69,271	315,622	508,395

Receipts consist $196,707 in fees.

Disbursements include $3,934 in administrative charges.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

Library Facilities

The library facility impact fees were established to provide a revenue source that will generate funds to acquire various library collection items and remodel/refurbish existing facilities that will mitigate the

impacts of new residential development to the City's Library facilities. Uses to which the fee is to be put include expansion of library collection items and remodel/refurbishment of existing facilities. Collection items include, but are not limited to, books, periodicals, newspapers, DVDs, e-books, etc.

Impact fees collected for Library Facilities were also used to make contributions towards annual debt service of the 2003 Lease Revenue Refunding Certificates of Participation (COP). The 2003 COPs refunded prior COPs that were used to finance these facilities. The past fees collected were earmarked to pay debt service on these bonds, which matured in Fiscal Year 2017-2018 and are now designated to repay outstanding loans from the General Fund, as well as loans that were provided by the Storm Drain Construction, and Water funds. Those loans were incurred during those fiscal years when library impact fee revenues were insufficient to meet the debt service requirements.

The following table shows the balances, receipts and expenditures, including loan activity, of the Library Facilities Fee for the current and last five fiscal years:

	2014-2015	**2015-2016**	**2016-2017**	**2017-2018**	**2018-2019**	**2019-2020**
Beg. Balance	-	-	-	-	-	0
Receipts	328,585	324,014	143,742	108,011	26,890	42,926
Expenditures	(328,585)	(324,014)	(143,742)	(108,011)	(26,890)	(42,926)
Ending Balance	-	-	-	-	-	0

Receipts consist of $42,926 in fees.

Disbursements include $4,933 in interest expense on its share of inter-fund loans noted above that were provided during Fiscal Year 2010-2011, $858 in administrative charges, and $37,135 repaid on outstanding loans from the Storm Drain and Water Funds.

As of June 30, 2019, outstanding loans total $3,914,192, with $3,711,846 owed to the General Fund, $74,042 to the Storm Drain Construction Fund, and $128,304 to the Water Fund. As noted, these loans occur when impact fee revenues are insufficient to cover the Library Facilities category 34% share of debt service on the 2003 Lease Revenue Refunding COPs. Historically, no specific term or interest rate has been established for loans owed to the General Fund, however when the City Council approved loans from the Storm Drain Construction Fund and Water Funds, they did so with the caveat that as sufficient impact fees become available, the non-General Fund loans would be repaid first, with interest set at the Local Agency Investment Fund (LAIF) annual interest rate. These interfund loans are now governed by Resolution No. 7354, the City's Policy on Interfund Loans. For fiscal year 2019-2020, the interest rate was 2.06%. Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which this loan will be repaid.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

General Government Facilities

Impact fees for General Government Facilities were first established with the completion of the impact fee study performed in Fiscal Year 2006-2007 and implemented in August, 2007 and the most recent fee justification study is the City's Development Impact Fee Justification Study dated January 9, 2017. The purpose of this fee is to establish a revenue source that will provide funds to purchase and install additional IT hardware and construct a government center/safety hall building and public parking facility that will mitigate the impacts of new residential and non-residential development to the City's general government facilities.

The following table shows the balances, receipts and expenditures, including loan activity, of the General Government Facilities Fee for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	-	-	-	-	-	535
Receipts	876,439	575,291	258,296	197,046	299,241	233,858
Expenditures	(876,439)	(575,291)	(258,296)	(197,046)	(299,241)	(234,392)
Ending Balance	-	-	-	-	-	(0)

Receipts consist of $233,858 in fees, and a residual cash balance adjustment of $535.

Disbursements include $5,507 in total interest expense on its share of inter-fund loans provided during Fiscal Year 2010-2011, $4,677 in administrative charges, and a loan repayment of $224,208 to the General Fund. For fiscal year 2019-2020, the interest rate was 2.06%.

As of June 30, 2019, the remaining outstanding loan totals $4,561,420 and is owed to the General Fund. Previous loans in place from the Open Space Fund (227) and Park Development Fund (250) have been repaid in full, including current year interest and all outstanding principal. As noted, these loans occur when impact fee revenues are insufficient to cover the General Government Facilities category 60% share of debt service on the 2003 Lease Revenue Refunding COPs. When the City Council approved loans from the Open Space and Park Development Funds, they did so with the caveat that as sufficient impact fees become available, the non-General Fund loans would be repaid first, with interest set at the annual Local Agency Investment Fund rate.

Although no specific term or interest rate has historically been established for General Fund loans, in Fiscal Year 2010-2011 when non-General fund loans were made and interest approved on these loans at the Local Agency Investment Fund rate, interest was also applied in the same manner to the General Fund loan made in that year. These interfund loans are now governed by Resolution No. 7354, the City's Policy on Interfund Loans. Since that time, $22,522 in interest has been added to the General Fund loan principal balance and an additional $5,507 has been added for fiscal year 2019-2020. For fiscal year 2019-2020, the Local Agency Investment Fund interest rate was 2.06%. Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which this loan from the General Fund will be repaid.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

Community Center Facilities

Community Center Facilities impact fees were established in Fiscal Year 2014-2015 and are collected using a replacement cost per capita for the City's existing community centers as the basis for the fees. The fees charged to future residential development are set at a level needed to maintain the existing level of service as the City grows. The purpose of these fees collected from future development is to approximately cover the cost of adding community center space while maintaining the current ratio of community center asset value to population. The most recent fee justification study is the City's Development Impact Fee Justification Study, dated January 9, 2017, which contains a complete listing of proposed community center facilities.

The following table shows the balances, receipts and expenditures of the Community Center Facilities Fee for the current and last four fiscal years, being that these fees were first established in Fiscal Year 2014-2015:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	-	32,506	47,081	67,644	68,208	68,208
Receipts	33,174	14,872	21,031	576	-	-
Expenditures	(664)	(297)	(468)	(12)	-	-
Ending Balance	32,510	47,081	67,644	68,208	68,208	68,208

There were no receipts or disbursements made from this category in fiscal year 2019-2020.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

At June 30, 2020 the Public Facilities Fund has Advances Payable (Interfund Loans) to Other Funds for loans received as follows:

Advance Payable To:		
General Fund		$ 8,273,266
Open Space Fund		-
Park and Open Space Fund		-
Storm Drain Construction Fund		74,042
Water Operating Fund		128,304
	Total	$ 8,475,612

As noted above, fees collected for Fire, Library and General Government Facilities have been collected and used to make contributions towards annual debt service of the 2003 Lease Revenue Refunding Certificates of Participation (COP), which matured during Fiscal Year 2017-2018. The 2003 COPs refunded prior COPs that were used to finance Fire Station #3 (6% of total debt service), as well as

Library Facilities (34% of total debt service) and the City Yard (60% of total debt service). In years when the revenue from these fee categories was insufficient to meet debt service obligations, the Public Facilities Fund was loaned amounts from the General Fund, Open Space, Park Development, Storm Drain Construction, and Water Funds. For fiscal year 2019-2020, the interest rate was 2.06%. Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which each loan will be repaid.

Transportation Fees

During Fiscal Year 2019-2020, Resolution No. 7951 prescribed the methodologies and amounts of Transportation fees. Impact fees in this category are intended to fund transportation improvements, including the following components: interchange improvements, railroad crossing improvements, improvements to regional arterials, and improvements to local streets. The first three components are intended to satisfy the requirement, pursuant to Measure I (2010-2041) and the San Bernardino County Transportation Authority (SBCTA) Congestion Management Plan, that the City assess new development for its fair share of the cost of those improvements. The local street component is based on data provided by the City that represents the full cost of local street improvement projects needed entirely to serve future development. Allocations are established based on a weighted average for each improvement type based on cost. The City's Development Impact Fee Study, dated January 9, 2017, estimated transportation improvement costs in each component category and allocated them according to the tables below.

Resolution No. 7701, DIF Study Jan. 2017		
Fund 252 -	Regional Arterial	43%
Fund 252 -	RR Crossings	1%
Fund 252 -	Local Streets	19%
Fund 253 -	Signals	4%
Fund 254 -	Interchanges	36%

These development fees are utilized in conjunction with revenue generated under the Measure "I" half cent sales tax to fund regional transportation projects. These fees establish a revenue source that will provide funds to construct various transportation projects that will mitigate the impacts of new development on the City's circulation system. The uses to which the fees are to be put to include the funding of new roadways within the City limits.

(252) Arterial Street Construction Fund – This fund includes development fees, as discussed above, for both the regional (SBCTA) and local transportation development fees which, in concert with the

Regional Measure "I" sales tax revenue, when needed, are used to construct transportation improvements. Both development and Measure "I" funds are required to construct the transportation improvement projects. A complete listing of proposed facilities is contained within the City's Development Impact Fee Justification Study, dated January 9, 2017.

The following table shows the balances, receipts and expenditures of the Arterial Street Construction Fund for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	1,782,833	1,788,988	2,310,315	3,015,544	3,141,989	3,721,696
Receipts	1,050,235	531,874	721,613	133,137	592,243	597,315
Expenditures	(1,044,080)	(10,547)	(16,384)	(6,692)	(12,536)	(364,193)
Ending Balance	1,788,988	2,310,315	3,015,544	3,141,989	3,721,696	3,954,816

Receipts consist of $489,239 in fees and $108,076 in investment income.

Disbursements consist of $9,785 in administrative charges, $221 of accrued wages payable and a payment of $354,187 in reimbursed fees as part of a settlement and mutual general release agreement between the City and Diversified Pacific dated February 18, 2020, in part, in exchange for conveyance of certain grant deeds and other considerations. A copy of this agreement is attached for reference as Appendix A.

The current cash balance exceeds the cumulative fee collection over the past five years by $1,137,042. As a result, the City must make "findings" in accordance with the requirements of Government Code Section 66006.

Findings:

Monies collected into the Arterial Street Construction Fund, including the existing excess cash, are based on a detailed breakdown of citywide transportation projects needed to mitigate the impacts of new development through the year 2035. These projects have been approved by the City Council for construction under this program, as a part of Resolution No. 7951 and the Development Impact Fee Study dated January 9, 2017. The project list includes improvements to regional and local arterials with a total estimated cost allocated to new development of $21,087,242.

A complete listing of proposed facilities is contained within the City's Development Impact Fee Justification Study, dated January 9, 2017.

Below is a partial listing from that study.

- Alabama Street from the northerly City limit to Palmetto Avenue
  - Estimated Cost - $10,653,000
  - New Development Fair Share – 23.1%
- Orange Street from Lugonia Avenue to Interstate 10 freeway

  - Estimated Cost - $2,960,000
  - New Development Fair Share – 23.1%
- San Bernardino Avenue from Church Street to Wabash Avenue
  - Estimated Cost - $2,744,000
  - New Development Fair Share – 23.1%
- Ford Street from 5th Avenue to Interstate 10 freeway
  - Estimated Cost - $2,058,000
  - New Development Fair Share – 23.1%

Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which project will be completed. At this time, no other sources of revenue are projected.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

(253) Traffic Signals Fund – This fund includes seven percent of the transportation development impact fees collected and is for the purpose of constructing traffic signals and signal improvements.

The following table shows the balances, receipts and expenditures of the Traffic Signals Fund for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	764,890	904,729	1,122,990	1,210,815	1,223,302	1,283,765
Receipts	153,723	222,690	89,357	16,708	72,366	99,412
Expenditures	(13,884)	(4,429)	(1,532)	(4,221)	(11,903)	(591)
Ending Balance	904,729	1,122,990	1,210,815	1,223,302	1,283,765	1,382,585

Receipts consist of $29,549 in fees, $32,578 in developer deposits, and $37,285 in investment income.

Disbursements consist of $591 in administrative charges.

The current cash balance exceeds the cumulative fee collection over the past five years by $1,092,725. As a result, the City must make “findings” in accordance with the requirements of Government Code Section 66006.

Findings:

Monies collected into the Traffic Signals Fund, including the existing excess cash, are based on a detailed breakdown of citywide transportation projects needed to mitigate the impacts of new development through the year 2035. These projects have been approved by the City Council for construction under this program, as a part of Resolution No. 7701 and the Development Impact Fee Study dated January 9, 2017. The project list includes local signal projects with a total estimated cost

allocated to new development of $4,996,610. A complete listing of proposed facilities is contained within the City's Development Impact Fee Justification Study, dated January 9, 2017.

Below is a partial listing from that study.

- Texas Street and Pioneer Avenue
  - Estimated Cost - $350,000
  - New Development Fair Share – 32.32%
- University Street and Brockton Avenue
  - Estimated Cost - $300,000
  - New Development Fair Share – 32.32%
- Intelligent Traffic Management System
  - Estimated Cost - $5,400,000
  - New Development Fair Share – 23.1%
- Automated Fire/Police Emergency Vehicle Preemption System
  - Estimated Cost - $150,000
  - New Development Fair Share – 32.32%

Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which project will be completed. At this time, no other sources of revenue are projected.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

(254) Freeway Interchange Fund – As discussed above, thirty-seven percent of the transportation fees collected are to meet the City's responsibility for the construction of major freeway interchange improvements on I-10 and one freeway interchange on the I-210 freeway. These projects are funded through the collection of multi-jurisdictional development fees and through the collection of regional Measure "I" revenue, under the 2010-2040 Measure "I" voter approved ½ cent sales tax transportation program. The City has been identified as the lead agency regarding the implementation of improvements associated with the University Avenue and Alabama Street I-10 Freeway Interchange Improvements. The purpose of the projects aim to widen westbound I-10 on ramps and the eastbound I-10 off ramps, restripe surrounding streets, improve traffic and pedestrian safety and reduce congestion.

On September 3, 2013, the City entered into a memorandum of understanding to commence the design of the University I-10 project. The initial estimate to design and construct the Project was estimated to cost $5.2 million. Pursuant to the Cooperative Agreement, the City is responsible for 17.9% ($912,900) of the total $5.1 million project cost, with the remaining 82.1% ($4,188,000) to be funded by SBCTA. The remaining $100,000 is for project management costs that is the sole responsibility of the City. In May 2019, SBCTA informed the City that an amendment to the Cooperative Agreement

would be needed as the total project cost for the Project had increased from $5.2 million to $5,812,935. Increases in costs were mainly attributable to planning & design stages, project management and additional paving requirements. Project planning and design has been completed, the construction work has been advertised and awarded as of September 2, 2020. Construction is anticipated to start in early 2021 and will take roughly eight (8) months to complete.

In addition to the University I-10 Interchange project, on February 16, 2016 the City entered into the City entered into a memorandum of understanding to commence the alternative Interstate 10 – Alabama Street Interchange project. When constructed, the Project will improve the Interstate 10 at Alabama Street Interchange between Orange Tree Lane and Industrial Park Avenue, with on and off ramp widening, addition of turning lanes, new pavement and striping. As part of the MOU, funding responsibilities for the development of the estimated $10.96 million Project were delineated for the parties. Per SBCTA's 10-Year Delivery Plan and SBCTA's Development Mitigation Nexus Study, the City, SBCTA and County of San Bernardino have funding responsibilities for the Project. Specifically, SBCTA has 49.5% of the Public Share of funding responsibilities (~$5.26m) for the Project and the City and County share the remaining 50.5% (~$5.70m) Development Share, with City responsible for 34.9% ~ ($1.99m) and County 65.1% (~$3.71m). In November 2016, City Council approved a Development Mitigation Cooperative Agreement with the County in order to memorialize the financial responsibilities between the City and County for their shared Development Share responsibilities.

In mid to late 2019, SBCTA approached City and County about cost increases identified during design with the Project. Total Project cost has risen from the original estimate of $10.96 million to a new estimate of $15.15 million, a rise of $4.19 million. With this new estimate, City costs for the Project have risen from $1,990,065 million to $2,506,921, an increase of ~$516,856. City has been in contact with both SBCTA and County and both entities have the funding necessary and desire to still move forward with the Project. SBCTA anticipates final design completion by the end of 2020, with construction to follow in spring 2021.

At this time, staff are unable to ascertain when all required funding amounts will be received by the City. This is due to the fact that the rate and pace of development is difficult to determine with respect to the deposit of impact fees by developers.

The following table shows the balances, receipts and expenditures of the Freeway Interchange Fund for the current and last five fiscal years:

	2014-2015	**2015-2016**	**2016-2017**	**2017-2018**	**2018-2019**	**2019-2020**
Beg. Balance	903,781	2,390,005	2,418,020	2,855,127	2,766,083	2,941,748
Receipts	1,520,288	372,614	491,600	156,368	559,907	1,293,437
Expenditures	(34,064)	(344,599)	(54,493)	(245,412)	(384,243)	(419,765)
Ending Balance	2,390,005	2,418,020	2,855,127	2,766,083	2,941,748	3,815,420

Receipts consist of $93,356 in investment income and $290,015 in fees.

$910,066 in cost recovery was received from the County of San Bernardino under a cooperative cost sharing agreement for expenditures paid by the City in connection with both the University I-10 Interchange project and the I-10 Alabama Street Interchange Project ($883,958 in the current year and $26,108 from prior year receivables).

Disbursements consist of $5,820 in administrative charges, and $413,945 in connection with the City's cooperative cost sharing agreement for the I-10 Alabama Street and University Avenue Interchange Project. This reflects a reduction of $74,817 for accounts payable in the current year and an increase of $6,822 for the prior year's accounts payable being recognized.

The expenditures detailed above for the I 10 Alabama Freeway Improvements Project brings total costs of the project to date to $855,083, representing approximately 43% of the City's estimated share of total project costs, estimated at $1,967,347. At this time, staff is unable to ascertain when all required funding amounts will be received by the City. The project is expected to be completed within calendar year 2021.

The expenditures detailed above for the I 10 University Freeway Improvements Project brings total costs of the project to date to $11,460, representing approximately 12% of the City's estimated share of total project costs, estimated at $897,078. At this time, staff is unable to ascertain when all required funding amounts will be received by the City. The project is expected to be completed within calendar year 2022.

During Fiscal Year 2018-2019, the current cash balance exceeds the cumulative fee collection over the past five years by $256,903. As a result, the City must make "findings" in accordance with the requirements of Government Code Section 66006.

Findings:

Monies collected into the Freeway Interchanges Fund, including the existing excess cash, are based on a detailed breakdown of citywide transportation projects needed to mitigate the impacts of new development through the year 2035. These projects have been approved by the City Council for construction under this program, as a part of Resolution No. 7701 and the Development Impact Fee Study dated January 9, 2017. The project list includes local signal projects with a total estimated cost allocated to new development of $6,029,266. A complete listing of proposed facilities is contained within the City's Development Impact Fee Justification Study, dated January 9, 2017.

Below is a partial listing from that study.

- I-10 at Mountain View:
    - Estimated Cost - $53,214,296
    - New Development Fair Share – $784,485 (3.9%)
- I-10 at California

  - Estimated Cost - $46,562,380
  - New Development Fair Share – $3,249,495 (14.6%)
- I-10 at Wabash
  - Estimated Cost - $41,822,810
  - New Development Fair Share – $1,871,571 (12.5%)
- I-10 at Live Oak
  - Estimated Cost - $19,478,974
  - New Development Fair Share – $72,072 (1%)
- I-10 at 5th Street
  - Estimated Cost - $8,364,562
  - New Development Fair Share – $51,643 (1.4%)

In addition to the above projects, the City ongoing freeway improvement projects being constructed under cooperative agreements with the County of San Bernardino also require additional sources of revenue in the short term.

Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which project will be completed. At this time, no other sources of revenue are projected.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

(405) Storm Drain Fund – New development generates additional storm water runoff by increasing the amount of land that is not penetrable to precipitation. Consequently, new development generates the need for, and benefits from, expanded storm drain facilities. Storm Drain Development Fees have been established per Redlands Municipal Code Chapter 3.56 with the purpose and intent of implementing the Redlands General Plan to ensure that storm drain facilities and improvements which satisfy City standards are available concurrent with the needs caused by new development within the City. This chapter establishes the methods of financing the construction of the required storm drain facilities. Fees are established by Resolution No. 7951.

The following table shows the balances, receipts and expenditures of the Storm Drain Fund for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	2,053,911	1,799,917	1,789,457	1,832,744	1,832,238	1,985,305
Receipts	44,228	186,788	94,186	112,404	206,098	227,799
Expenditures	(298,223)	(197,247)	(50,899)	(112,910)	(53,032)	(237,992)
Ending Balance	1,799,917	1,789,457	1,832,744	1,832,238	1,985,305	1,975,112

Receipts include $151,815 in fees, $56,869 in investment income. Also included is the net difference from the prior year of accounts receivable, $19,115.

Disbursements consist of $7,923 in administrative costs and the prior year's accrued wages payable expense of $1,567. Additional disbursements include a payment of $228,502 in reimbursed fees as part of a settlement and mutual general release agreement between the City and Diversified Pacific dated February 18, 2020, in part, in exchange for conveyance of certain grant deeds and other considerations. A copy of this agreement is attached for reference as Appendix A.

At June 30, 2019, a loan made from the Storm Drain Construction Fund in Fiscal Year 2010-2011 to the Public Facilities Fund for a portion of its half-share of annual debt service on the 2003 Lease Revenue Refunding Certificates of Participation remains outstanding at $74,042. Interest of $8,252 has been added to the principal over the last eight years, with $1,918 added in the current year. For fiscal year 2019-2020, the Local Agency Investment Fund (LAIF) interest rate was 2.06%. Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which the remaining principal of the loan will be repaid.

During Fiscal Year 2019-2020, the current cash balance exceeds the cumulative fee collection over the past five years by $1,467,504. As a result, the City must make "findings" in accordance with the requirements of Government Code Section 66006.

Findings:

New development generates additional storm water runoff by increasing the amount of land that is not penetrable to precipitation. Consequently, new development generates the need for, and benefits from, expanded storm drain facilities. Fees are to be used on the costs associated with construction of regional and local facilities, based on the amount estimated costs allocable to new development and new service population.

Storm drain construction is an ongoing effort. Projects are generally large in scope and require several years' worth of receipts. For the last two years, the City has been preparing to further develop the Opal basin project. However, recent investigation suggests a reprioritization of storm drain projects to better meet current conditions. Still, the Opal Basin remains a project under consideration. In 2014, the City adopted a Drainage Master Plan. The outlines scope and priority of various projects. Timelines for completing these projects is difficult to estimate due mainly to each project's significant costs and the unpredictability of the timing of adequate impact fee revenue.

The project list includes local and regional projects in terms of the City's share, with a total estimated cost allocated to new development of $10,724,400.

1. **Reservoir Canyon –** The Reservoir Canyon Channel is the second largest watershed area tributary to downtown. The total costs to fund new and upgrade existing storm drain facilities that would mitigate the flooding potential specific to this watershed have been estimated at $16,510,000; new Development Fair Share – 27%.

2. **Downtown Watershed** – The Downtown watershed consists of the local drainage systems in the downtown area. The total costs to fund new and upgrade existing storm drain facilities that would mitigate the flooding potential specific to this watershed have been estimated at $10,210,000 ; new Development Fair Share – 27%.
3. **Redlands Opal Basin** – This project addresses the Mission Zanja watershed (the largest watershed tributary) and consists of the construction of a retention basin and is one of two major facilities needed to protect the City during a 100 year storm event. When completed, the facility will retain up to 825 acre feet of water. Additional funds to complete the $13 million project will come from the Storm Drain Fund and other sources as they become available ; new Development Fair Share – 27%.

Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which project will be completed. At this time, no other sources of revenue are projected.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

(508) Water Source Acquisition Fund - The Water Source Acquisition Fund is established per Redlands Municipal Code Chapter 13.40.020 to implement the Redlands General Plan and finance acquisition of approved water stock and water rights to assist the City in maintaining an adequate supply of water to meet the needs of development requiring water service from the city. Water Source Acquisition charges are established per Section 13.40.040 of the Redlands Municipal Code. Fee amounts are set by Resolution No. 7951.

The following table shows the balances, receipts and expenditures of the Water Source Acquisition Fund for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	-	-	131,549	112,116	258,120	753,768
Receipts	300,332	132,333	232,384	146,004	495,649	144,333
Expenditures	(300,332)	(784)	(251,817)	-	-	-
Ending Balance	-	131,549	112,116	258,120	753,768	898,102

Receipts include $120,917 in fees and $23,416 in investment income.

There were no disbursements for fiscal year 2019-2020.

Full loan repayment to the Water Operating Fund (501) was completed in Fiscal Year 2016-2017, bringing the outstanding balance of the loan to $0. The intra-fund loan from the Water Fund (501) was for the purpose of purchasing 2,000 shares of Bear Valley Mutual Water Company Stock for $300,000, which was originally authorized as part of an agreement approved by the City Council on March 1, 2011. The cost to purchase water stock in the 508 Fund is allocated in proportion to benefit for new and existing users.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020

(509) Water Capital Improvement Fund – The Water Capital Improvement Fund is established per Redlands Municipal Code Chapter 3.48 to implement the Redlands General Plan and finance the construction of water capital facilities and improvements to provide new capacity required to serve new development requiring water service from the city. This chapter establishes the methods of collecting fees for financing construction of the water facilities. Fee amounts are set by Resolution No. 7951.

The following table shows the balances, receipts and expenditures of the Water Capital Improvement Fund for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	(0)	25,371	(0)	51,246	(0)	(0)
Receipts	897,374	468,987	604,149	654,396	2,191,906	1,132,991
Expenditures	(872,003)	(494,358)	(552,902)	(705,643)	(2,191,906)	(1,132,991)
Ending Balance	25,371	(0)	51,246	(0)	(0)	(0)

Receipts include $1,132,991 in fees.

Disbursements include a payment to the Water Debt Service Fund (506) in the amount of $41,473. This represents a 4% share of that fund's debt service, with the Water Operating Fund picking up the other 96% share of debt service. Projects financed through this debt service include the Agriculture Drainage Water Management Loan Program, used to finance the Texas Street Wellhead Treatment Project, and the Clean Water State Revolving Fund loan agreement that financed construction of the Hinckley water treatment plant upgrade. Additionally, a disbursement of $1,091,518 was made to the Water Operating fund to cover expenditures related to several capital improvement projects accounted for in Fund 503 – Water Projects. Capital Improvement Projects include: continuing work on the SCADA System Upgrade, including new instrumentation, equipment, and updating of the input/output points within the design plans and specifications currently in development; the 2019 CIP Projects, which will replace approximately 11 miles of water pipeline at various locations throughout the City; and the Meter Replacement Project that will replace over 400 water meters, primarily 3/4-inch and 1-inch, which have exceeded their useful life.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

(519) Solid Waste Capital Improvement Fund - The Solid Waste Capital Improvement Fund is established per the Redlands Municipal Code Chapter 3.70 to implement the Redlands General Plan and finance the cost of solid waste capital facilities and equipment to provide new capacity required to serve development requiring solid waste service from the city. Included are landfill, material recovery

and transfer station facilities, solid waste collection equipment, transfer equipment and other capital facilities equipment. Fee amounts are set by Resolution No. 7951.

The following table shows the balances, receipts and expenditures of the Solid Waste Capital Improvement Fund for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	2,357,372	3,526,448	3,924,397	4,152,887	4,259,811	4,556,559
Receipts	1,233,199	487,610	320,261	106,924	446,896	453,305
Expenditures	(64,123)	(89,661)	(91,771)	-	(150,148)	(557,340)
Ending Balance	3,526,448	3,924,397	4,152,887	4,259,811	4,556,559	4,452,524

Receipts include $318,520 in fees and $134,785 in investment income.

Disbursements include $557,340 towards the construction project to expand the Landfill into its next phase, representing 20% of the costs expended to date (approximately $2.9 million).

The current cash balance exceeds the cumulative fee collection over the past five years by $2,119,561. As a result, the City must make "findings" in accordance with the requirements of Government Code Section 66006.

Findings:

Monies collected into the Solid Waste Capital Improvements Fund, including the existing excess cash, are expected to be used for the developer paid portion of major capital improvements. The project list includes capital improvement projects as well as capital equipment replacement, with a total estimated cost allocated to new development of approximately $1,220,000.

1. **Phase IV landfill expansion** (FY 2022) – remaining costs estimated at approximately $2.8 million. New Development Fair Share – 20% ($560,000).
2. **Expansion of the leachate and landfill gas recovery systems** (FY 2022) is necessary to provide extraction and collection on landfill expansion areas as well as capital improvement to existing system layout in order to maintain regulatory compliance with State and Federal requirements. Estimated costs depend on the scope of the project and are estimated at $600,000 to $700,000 for construction and engineering. New Development Fair Share – 20% per project ($120,000 - $140,000).
3. **Landfill operation heavy equipment** (ongoing) the projected expense for capital replacement of landfill equipment ranges from $1.5 to $2.3 million dollars and covers off-road vehicles such as Loaders and Graders as well as on-road vehicles such as Fuel Trucks and Water Trucks. New Development Fair Share – 20% per project ($300,000 - $460,000).

Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which project will be completed. At this time, no other sources of revenue are projected.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

(529) Sewer Capital Improvement Fund - The Sewer Capital Improvement Fund is established per Redlands Municipal Code Chapter 3.44 to implement the Redlands General Plan and finance the construction of wastewater capital facilities to provide new capacity required to serve development requiring sewer service from the City. Included are wastewater treatment plant facilities, sewer trunk lines sized larger than the eight-inch local collection mains and appurtenances used to serve property frontage, and other capital facilities and appurtenances. Fee amounts are set by Resolution No. 7951.

The following table shows the balances, receipts and expenditures of the Sewer Capital Improvement Fund for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	1,632,906	2,513,523	2,624,406	2,633,256	2,846,876	5,041,145
Receipts	1,617,545	876,471	777,381	508,336	2,395,041	1,275,108
Expenditures	(736,927)	(765,588)	(768,532)	(294,716)	(200,771)	(200,771)
Ending Balance	2,513,523	2,624,406	2,633,256	2,846,876	5,041,145	6,115,482

Receipts consist of $1,115,869 in fees and $159,239 in investment income earned.

Disbursements include transfers of $200,771 to fund 526, representing a 55% share of that fund's debt service, with the Sewer Operating Fund picking up the other 45% share of debt service. The debt service in the 526 Fund is allocated in proportion to benefit for new and existing users. Projects financed through this debt service include the Recycled Water Project loan agreement with the California Water Resources Control Board for the construction of advanced wastewater treatment facilities at the existing treatment plant.

The current cash balance exceeds the cumulative fee collection over the past five years by $145,399. As a result, the City must make "findings" in accordance with the requirements of Government Code Section 66006.

Findings:

Monies collected into the Sewer Capital Improvements Fund are to be used to finance the construction of wastewater capital facilities to provide new capacity required to serve development requiring sewer service from the City. Included are wastewater treatment plant facilities, sewer trunk lines, sewage disposal facilities, outfall sewers, interceptor sewers, and other capital facilities and appurtenances over and above the eight inch (8") collection mains and appurtenances used to serve property frontage.

The 2019 Draft Water and Wastewater Rate Study provided for a list of Wastewater Capital Projects. New development is assumed to contribute 20% to replacement of capital infrastructure projects. The project list includes local and regional projects in terms of the City's share, with a total estimated cost allocated to new development of roughly $11,080,000.

1. **Wastewater Treatment Plan Modifications –** The City' membrane bioreactor filtration and disinfection system has exceeded its lifespan by roughly 8 years and must be replaced. Along with that, a major renovation of the WWTP as a whole is also necessary, to upgrade its design, build redundancy, and replace associated systems. Costs have been estimated at $46,000,000; new Development Fair Share – 20%.
2. **Collection Mains** – Periodic replacement of the City's approximately 250 miles of sewer main requires ongoing investment. The total costs to fund a comprehensive replacement program been estimated at $9,400,000 over the first 5 years; new Development Fair Share – 20%.

Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which project will be completed. At this time, no other sources of revenue are projected.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

(549) Nonpotable Capital Improvement Fund - The Nonpotable Capital Improvement Fund is established per the Redlands Municipal Code Chapter 3.53 to implement the Redlands General Plan and finance the construction of nonpotable capital facilities to provide new capacity required to serve development requiring nonpotable water service from the City. Included are mains and appurtenances used to serve property frontage, and other capital facilities and appurtenances. Fee amounts are set by Resolution No. 7951.

The following table shows the balances, receipts and expenditures of the Nonpotable Capital Improvement Fund for the current and last five fiscal years:

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Beg. Balance	517,943	710,277	852,751	1,117,268	1,150,025	1,254,427
Receipts	212,075	142,474	264,517	32,757	104,402	77,050
Expenditures	(19,741)	-	-	-	-	-
Ending Balance	710,277	852,751	1,117,268	1,150,025	1,254,427	1,331,477

Receipts consist of $41,147 in fees and $35,903 in investment income.

No disbursements were made in Fiscal Year 2019-2020.

The current cash balance exceeds the cumulative fee collection over the past five years by $640,362. As a result, the City must make "findings" in accordance with the requirements of Government Code Section 66006.

Findings:

Monies collected into the Nonpotable Capital Improvements Fund, including the existing excess cash, are expected to be used for a number of projects that will enhance and expand the nonpotable water distribution system pressure zones. Specifically, major projects under evaluation include:

1. Construction of a nonpotable reservoir, booster station and pipeline needed to operate Pressure Zones 1350 and 1570. These two pressure zones are the City's two lowest and, as such, are particularly sensitive to increases in demand from new growth and development. Cost estimates for the project total $4.8 million – new development's fair share is 20%.

Because development impact fee revenue fluctuates and is difficult to forecast, there is no estimate for the date on which project will be completed. At this time, no other sources of revenue are projected.

No refunds of fees are required and none have been made during Fiscal Year 2019-2020.

Appendix A - Settlement and General Mutual Release Agreement

SETTLEMENT AND MUTUAL GENERAL RELEASE AGREEMENT

This Settlement and Mutual General Release Agreement ("Agreement") is made this 18th day of February, 2020 ("Effective Date"), by and among Redlands 6120, LLC, a Delaware limited liability company and, Redlands Pennsylvania, LLC, a Delaware limited liability company and Redlands Pioneer, LLC, a Delaware limited liability company, all by their manager Diversified Pacific Communities, LLC, a Delaware limited liability company (collectively, "Diversified"), and the City of Redlands, a California municipal corporation and general law city ("City"). Diversified and City are sometimes individually referred to herein as a "Party" and, together, as the "Parties."

RECITALS

WHEREAS, Diversified is the owner and developer of the "Judson Ranch" (City of Redlands subdivision map nos. 16627 and 16465), "Redlands Pioneer" (City of Redlands subdivision map no. 18979), and "Redlands Pennsylvania" (City of Redlands subdivision map no. 19975) residential developments located in the city of Redlands (collectively, the "Projects"); and

WHEREAS, certain claims and controversies have arisen between the Parties relating to Diversified's payment of park and open space development impact fees for the Projects, City's acceptance of ownership of citrus grove lands developed by Diversified for the Projects and proposed for dedication to City (the "Dedicated Lands"), the provision of water service to the Dedicated Lands, and Diversified's construction of certain street and storm drain system improvements, within San Bernardino Avenue and adjacent to properties within the Projects (collectively, the "Disputes"); and

WHEREAS, during their discussion of the Disputes, City and Diversified agreed to defer City's collection of certain park, open space, storm water, and street improvement development impact fees that were otherwise due for payment to City by Diversified in connection with permits issued by City for Diversified's Projects ("Deferred Fees"), so that the Deferred Fees could also be included in any resolution of the Disputes; and

WHEREAS, a schedule of the Deferred Fees is attached hereto as Exhibit "A," which is incorporated herein by this reference; and

WHEREAS, it is the intention of the Parties to settle and dispose of, fully and completely, any and all claims, demands and cause or causes of action existing as of the Effective Date of this Agreement and arising out of, connected with, or incidental to, the Disputes between the Parties, including the Deferred Fees;

NOW, THEREFORE, in consideration of the mutual promises contained herein, and for such other good and valuable consideration, the receipt of which is acknowledged by the Parties, Diversified and City hereby agree as follows:

AGREEMENT

Section 1. Water Shares. Diversified shall cause the transfer and delivery to City, at Diversified's sole cost and expense, of forty eight (48) shares of Raught Mutual Water Company stock and three hundred eighty (380) shares of Bear Valley Mutual Water Company stock within ten (10) calendar days after the Effective Date of this Agreement (hereinafter, collectively, referred to herein as the "Shares") for purposes of the provision of water service to the Dedicated Lands.

Section 2. Conveyance of Property. Concurrent with its delivery of the Shares to City, Diversified shall convey to City, in fee simple absolute without any encumbrances to title except those agreed to in a separate written document from City's City Manager, that certain real property consisting of approximately 8.12 acres and identified as county of San Bernardino Assessor's Nos. 0168-891-21-0000 and 1212-451-62-0000 (together, the "Properties"). The Properties shall be conveyed pursuant to two grant deeds substantially in the form attached hereto as Exhibit "B" (together, the "Grant Deeds").

Section 3. Development Impact Fee Reimbursement. Concurrent with Diversified's delivery of the Shares and Grant Deeds to City, City shall pay to Diversified the following:

A. The sum of three hundred fifty four thousand one hundred eighty six and seventy two one-hundredths dollars ($354,186.72) from City's transportation fund development impact fee account number 252.

B. The sum of two hundred twenty eight thousand five hundred two and fifteen one-hundredths dollars ($228,502.15) from City's storm drain development impact fee account number 405.

C. The sum of two hundred five thousand four hundred forty one and four one-hundredths dollars ($205,441.04) from City's park and open space development impact fee account number 250.

D. The sum of sixty eight thousand four hundred eighty and thirty five one-hundredths ($68,480.35) from City's open space development impact fee account 227.

Section 4. Mutual General Release. In consideration of the mutual general releases contained herein, and for other good and valuable consideration, the receipt of which is acknowledged by each Party, the Parties promise, agree and generally release as follows:

4.1 Except as to such rights or claims as may be created by this Agreement, each Party hereby releases, remises and forever discharges the other Party from any and all claims, demands and cause or causes of action the Parties may have existing as of the Effective Date and arising out of, connected with, or incidental to, the Disputes, including the Deferred Fees.

4.2 Each Party specifically waives the benefit of provisions of Section 1542 of the Civil Code of the State of California, as follows:

"A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor."

Section 5. Representations and Warranties: Each Party represents and warrants to, and agrees with, the other Party, as follows:

5.1 Each Party has received independent legal advice from their respective attorneys with respect to the advisability of making the settlement provided for herein, with respect to the advisability of executing this Agreement, and with respect to the meaning of California Civil Code Section 1542.

5.2 No Party (nor any officer, agent, employee, representative, or attorney of or for any Party), has made any statement or representation or failed to make any statement or representation to the other Party regarding any fact relied upon in entering into this Agreement, and each Party does not rely upon any statement, representation, omission or promise of the other Party (or of any officer, agent, employee, representative, or attorney of or for any Party), in executing this Agreement, or in making the settlement provided for herein, except as expressly stated in this Agreement.

5.3 Each Party has made such investigation of the facts pertaining to this settlement and this Agreement, and all the matters pertaining thereto, as it deems necessary.

5.4 Each Party has read this Agreement and understands the contents hereof.

5.5 This Agreement is intended to be and is final and binding between the Parties, regardless of any claims of misrepresentation, promise made without the intention to perform, concealment of fact, mistake of fact or law, or of any other circumstance whatsoever.

5.6 Neither Party has heretofore assigned, transferred, or granted, nor purported to assign, transfer, or grant, any of the claims or demands related to the Disputes disposed of by this Agreement.

5.7 Each term of this Agreement is contractual and not merely a recital.

5.8 The Parties are aware that they may hereafter discover claims or facts in addition to or different from those they now know or believe to be true with respect to the Disputes. Nevertheless, it is the intention of the Parties to fully, finally and forever to settle and release all such Disputes, and all claims relative thereto, which now exist, may exist, or heretofore have existed between them. In furtherance of such intention, the releases given herein shall be and remain in effect as full and complete mutual releases of all such matters, notwithstanding the discovery of existence of any additional or different claims of facts relative thereto.

5.9 The Parties will execute all such further and additional documents as shall be reasonable, convenient, necessary or desirable to carry out the provisions of this Agreement.

Section 6. Settlement: This Agreement effects the settlement of claims which are denied and contested, and nothing contained herein shall be construed as an admission by either Party of any liability of any kind to the other Party. Each Party denies any liability in connection with any claim, and each Party intends hereby solely to avoid litigation and buy its peace.

Section 7. Notice. Any notice or other communication required, or which may be given, pursuant to this Agreement, shall be in writing. Any such notice shall be deemed delivered (i) on the date of delivery in person; (ii) five (5) days after deposit in first class registered mail, with return receipt requested; (iii) on the actual delivery date if deposited with an overnight courier; or (iv) on the date sent by facsimile, if confirmed with a copy sent contemporaneously by first class, certified, registered or express mail; in each case properly posted and fully prepaid to the appropriate address set forth below, or such other address as a Party may provide notice in accordance with this section:

City of Redlands
35 Cajon Street
P.O. Box 3005 (mailing)
Redlands, CA 92373
Attn: City Clerk
Phone: (909) 798-7531
Fax: (909) 798-7535
jdonaldson@cityofredlands.org

Diversified Pacific Development Group, LLC
10621 Civic Center Drive
Rancho Cucamonga, CA 91730
Attn: Matthew A. Jordan
Phone: (909) 481-1150 x242
Fax: (909) 481-1154
MJordan@diversifiedpacific.com

Section 8. Miscellaneous:

8.1 This Agreement shall be deemed to have been executed and delivered within the State of California and the rights and obligations of the Parties shall be construed and enforced in accordance with, and governed by, the laws of the State of California.

8.2 This Agreement is the entire agreement between the Parties with respect to the subject matter hereof, and supersedes all prior and contemporaneous oral and written agreements and discussions regarding the same. This Agreement may be amended only by an agreement in writing, signed by the Parties.

8.3 This Agreement is binding upon and shall inure to the benefit of the Parties, their respective elected and appointed officials, officers, directors, divisions, subsidiaries, affiliates, assigns, and successors in interest.

8.4 Each Party has cooperated in the drafting and preparation of this Agreement. Hence, in any construction to be made of this Agreement, the same shall not be construed against any Party.

8.5 In the event any action is commenced to enforce or interpret any of the terms or conditions of this Agreement the prevailing Party shall, in addition to any costs and other relief, be

entitled to the recovery of its reasonable attorneys' fees, including fees for the use of in-house counsel by a Party.

8.6 This Agreement is made and entered into as of its Effective Date in Redlands, California.

[SIGNATURE PAGE TO FOLLOW]

CITY OF REDLANDS

Paul W. Foster, Mayor

ATTEST:

Jeanne Donaldson, City Clerk

REDLANDS 6120, LLC, A DELAWARE LIMITED LIABILITY COMPANY

By: DIVERSIFIED PACIFIC COMMUNITIES, LLC, A DELAWARE LIMITED LIABILITY COMPANY
Its: Manager

Matthew A. Jordan, Co-Managing Member

REDLANDS PENNSYLVANIA, LLC, A DELAWARE LIMITED LIABILITY COMPANY

By: DIVERSIFIED PACIFIC COMMUNITIES, LLC, A DELAWARE LIMITED LIABILITY COMPANY
Its: Manager

Matthew A. Jordan, Co-Managing Member

REDLANDS PIONEER, LLC, A DELAWARE LIMITED LIABILITY COMPANY

By: DIVERSIFIED PACIFIC COMMUNITIES, LLC, A DELAWARE LIMITED LIABILITY COMPANY
Its: Manager

Matthew A. Jordan, Co-Managing Member

EXHIBIT "A"

Diversified Pacific
Development Impact Fees
San Bernardino Avenue Improvements

Request for Deferral of Payment on 23 Remaining Lots
May 31, 2019

Phase and Number of Lots	Remaining Lots	Tract	Estimated Building Permit Payment Date	Park and Open Space Fees	Transportation Fees	Storm Drain Fees	Requested Deferred Fees
6B - 5 Lots	Lots 18-22	Redlands Pennsylvania, LLC - TR19975	June 5, 2019	19,800	7,562	3,500	30,862
7B - 4 Lots	Lots 1, 2, 12, & 13	Redlands Pennsylvania, LLC - TR19975	July 8, 2019	15,840	6,049	2,800	24,689
8A - 4 Lots	Lots 3, 4, 10, & 11	Redlands Pennsylvania, LLC - TR19975	August 5, 2019	15,840	6,049	2,800	24,689
8B - 5 Lots	Lots 5-9	Redlands Pennsylvania, LLC - TR19975	September 9, 2019	19,800	7,562	3,500	30,862
7A - 4 Lots	Lots 64-67	Redlands Pennsylvania, LLC - TR19975	October 7, 2019	15,840	6,049	2,800	24,689
4D - 1 Lot	Lot 31	Redlands Pioneer, LLC - TR18979	October 7, 2019	3,960	1,512	700	6,172
			Grand Total	91,080	34,784	16,100	141,964

EXHIBIT "B"

GRANT DEEDS

RECORDING REQUESTED BY AND WHEN RECORDED MAIL TO:

_____

_____

_____

Attn: _____

MAIL FUTURE TAX STATEMENTS TO:
City of Redlands
35 Cajon Street, Suite 4
Redlands, California 92373
Attn: _____

APN: 0168-891-21-0000 (Space above this line is for recorder's use)

The undersigned declares the DOCUMENTARY TRANSFER TAX is $_____
_____ Computed on the consideration or value of property conveyed, OR
_____ Computed on the consideration or full value less liens and/or encumbrances remaining at time of sale.
_____ Unincorporated Area _____ City of San Bernardino

_____
Signature of Declarant

GRANT DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Redlands 6120, LLC, a Delaware limited liability company

does hereby GRANT to

City of Redlands, a California municipal corporation and general law city

that certain real property in the City of Redlands, County of San Bernardino, State of California, described on Exhibit "A", attached hereto and incorporated herein by reference.

Subject to all covenants, restrictions, conditions, easements and other encumbrances of record existing at the time of recordation of this Grant Deed.

Dated: _____

REDLANDS 6120, LLC, a Delaware limited liability company

By: Diversified Pacific Communities, LLC, a Delaware limited liability company

By: _____
Matthew A. Jordan, Co-Managing Member

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property being conveyed herein by Redlands 6120, LLC to the City of Redlands, is hereby accepted by the undersigned on behalf of the Grantee pursuant to the City of Redlands Municipal Code.

GRANTEE:

CITY OF REDLANDS, a California municipal corporation and general law city

By: _____

Title: _____
Authorized Representative

Date: _____

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of _____)

On _____, 2020, before me, _____,
(insert name of notary)
Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____ (Seal)

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of _____)

On _____, 2020, before me, _____,
(insert name of notary)
Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____ (Seal)

EXHIBIT "A"

DESCRIPTION OF PROPERTY

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

Lot 21 of Tract 16627, in the City of Redlands, County of San Bernardino, California, as per map recorded in Book 340, Page(s) 10 through 12, inclusive of Miscellaneous Maps, in the Office of the County Recorder of said County.

APN: 0168-891-21-0000

RECORDING REQUESTED BY AND WHEN RECORDED MAIL TO:

_____

_____

_____

Attn: _____

MAIL FUTURE TAX STATEMENTS TO:
City of Redlands
35 Cajon Street, Suite 4
Redlands, California 92373
Attn: _____

APN: 1212-451-62-0000

(Space above this line is for recorder's use)

The undersigned declares the DOCUMENTARY TRANSFER TAX is $_____
_____ Computed on the consideration or value of property conveyed, OR
_____ Computed on the consideration or full value less liens and/or encumbrances remaining at time of sale.
_____ Unincorporated Area _____ City of San Bernardino

_____
Signature of Declarant

GRANT DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Redlands 6120, LLC, a Delaware limited liability company

does hereby GRANT to

City of Redlands, a California municipal corporation and general law city

that certain real property in the City of Redlands, County of San Bernardino, State of California, described on Exhibit "A", attached hereto and incorporated herein by reference.

Subject to all covenants, restrictions, conditions, easements and other encumbrances of record existing at the time of recordation of this Grant Deed.

Dated: _____

REDLANDS 6120, LLC, a Delaware limited liability company

By: Diversified Pacific Communities, LLC, a Delaware limited liability company

By: _____
Matthew A. Jordan, Co-Managing Member

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property being conveyed herein by Redlands 6120, LLC to the City of Redlands, is hereby accepted by the undersigned on behalf of the Grantee pursuant to the City of Redlands Municipal Code.

GRANTEE:

CITY OF REDLANDS, a California municipal corporation and general law city

By: _____

Title: _____
Authorized Representative

Date: _____

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of _____)

On _____, 2020, before me, _____,
(insert name of notary)
Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____ (Seal)

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of _____)

On _____, 2020, before me, _____,
(insert name of notary)
Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature_____ (Seal)

EXHIBIT "A"

DESCRIPTION OF PROPERTY

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

Lot 62 of Tract 16465, in the City of Redlands, County of San Bernardino, California, as per map recorded in Book 341, Page(s) 70 through 73, inclusive of Miscellaneous Maps, in the Office of the County Recorder of said County.

APN: 1212-451-62-0000

RATES, FEES AND CHARGES

IN THE POST-PROPOSITION 13, 218 AND 26 ERA IN CALIFORNIA

A Compendium on Water, Wastewater, Recycled Water and Stormwater Rates, as well as User, Regulatory and Development Impact Fees

NBS

com·pen·di·um \kəm-ˈpen-dē-əm\
noun
plural noun: compendia; plural noun: compendiums
a collection of concise but detailed information about a particular subject.
Source: Oxford dictionary

RATES, FEES AND CHARGES IN THE POST-PROPOSITION 13, 218 AND 26 ERA IN CALIFORNIA
A Compendium on Water, Wastewater, Recycled Water and Stormwater Rates,
as well as User, Regulatory and Development Impact Fees

Written by: Greg Clumpner, Greta Davis, Nicole Kissam, Dan Schaaf (guest author) and Tim Seufert.
Designed by: Geralin Reyes
Published by NBS

This Compendium will cover most of the substantive puzzle pieces of rates, fees and charges, including development impact fees. Importantly, it will also discuss the underlying cost allocation process, and will demonstrate the inter-connectedness of these pieces and their relevant position within the financial puzzle.

This Compendium will not cover taxes, including property and sales or use taxes, nor bonding, leasing, and other financing techniques. Those are important tools of municipal finance but out of the purview of this publication. Please see our other NBS publications, including one entitled, *"Special Financing Districts: An Introduction to Special Assessments and Special Taxes,"* for a discussion of those financial tools.

The impact of Propositions 13, 218 and 26 have had, and will continue to have, a significant effect on such rates, fees and charges. This topic is complex, and covered extensively in other publications. We encourage anyone who is not familiar with these constitutional amendments to do so, and seek advice and counsel as needed.

A fiscally-literate municipality (this generally means a city, town, county, special district or municipal utility; for simplicity, we will often use the term "municipality" designation for all of these entities of local government, and we hope that no one is offended!) has to assemble many financial puzzle pieces into a cogent picture of financial sustainability. Aside from general and special taxes, the primary pieces of this financial puzzle are often summarized as "rates, fees and charges." These include everything from water and sewer rates to planning and inspection fees. It is important to note that these non-tax revenues will account for a significant portion of overall revenues for any municipality, ranging from 25% to over 50% of total revenues.

Among the many fiscally-challenging situations we have recently seen, the following stand out in this realm of rates, fees and charges:

- A sophisticated and savvy city is found to have no park-related development impact fees for new development. This means there are no funds for the acquisition of new parks and open spaces as development flourishes, and the population increases. The end result is a diminished standard of living for the new and existing residents, and a drain on overall resources. (A relatively-low park impact fee would have a similar, though less dramatic, impact.)

- A generally well-run municipal utility does not capture enough replacement costs in its rate structure, and finds itself with a daunting and very costly basic infrastructure problem.

- A flourishing county doesn't understand the specific and very long range fiscal impacts that cost allocation and cost recovery policies mean. Each year, millions of dollars are literally lost, forever.

If any of these stories have a familiar feel to them, please read on. The bottom line is that a fiscally-literate municipality should be solvent and well functioning, resulting in a desirable community.

Contrary to the scenarios just mentioned, here are a few enlightening case studies which apply to the points discussed within this Compendium:

CASE STUDY 1: Water rate re-structuring saves millions in interest costs

A water district has to navigate rough waters when it needs to improve its infrastructure. At the time, a large California irrigation district, which had a combination of suburban and historical agricultural customers, had not completed a rate study in more than 10 years. To help fund an important yet expensive capital improvement program, the district needed to re-fund its existing debt and issue new debt. Completing and adopting new, restructured water and sewer rates was a critical part of this refunding, and would save the district several million dollars per year in interest costs.

Working closely with district staff, a Cost-of-Service Committee, and board members over 18 months, an extensive cost-of-service rate study was completed. A key part of this study was developing 12 "Principles for Guiding the Rate-Setting Process" at the beginning of the study to establish answers to key policy issues. This included using "postage-stamp" rates – or rates that are uniformly applied throughout the service area rather than rates based on the facilities actually serving customers in various areas in the district. After numerous public workshops and a final public hearing, the board adopted re-structured, multi-tiered water rates, including landscape and agricultural rates, as well as new sewer and recycled water rates. The district successfully refunded its debt structure to effectively reduce annual interest costs by millions.

CASE STUDY 2: Robust community input for rate setting process

It's not uncommon for cities to ignore the need for rate increases, when the city council is concerned about a multitude of policy issues in addition to political issues, including getting re-elected. A moderate-sized city had not completed a comprehensive rate study for its water, sewer and solid waste agencies in more than 15 years. Current city staff had never participated in this type of process, but they knew it was necessary to update both ongoing rates as well as the capacity/connection/impact fees in order to accommodate the cost of new growth, as well as the necessary utility rate increases to maintain and operate the systems.

NBS completed an extensive and highly visible rate and capacity fee study for the water, sewer, and solid waste utilities. This study also established new policy guidelines and overall objectives in developing rate structure alternatives for the city to consider. A key part of this study was working with a city council appointed Citizens Advisory Group that reviewed rate alternatives and provided recommendations to the council. This group functioned as both a sounding board and community input vessel on behalf of the council and staff. The key tasks

included preparing financial/rate setting policies, financial plans, projecting net revenue requirements, cost-of-service analyses, and alternative rate designs.

The result was a well-vetted plan which the city council could feel good about approving.

CASE STUDY 3: Recession-affected city discovers cost recovery opportunities

Due to the national and State economy, State take-aways, and the end of the Redevelopment Agency, a moderate-sized California city had been substantially reducing its budget. This resulted in reduced expenditures, personnel layoffs, reduced services and staff shortages. The city was in need of a comprehensive citywide review and evaluation of all city revenues, including user fees and charges, excluding water, sewer and stormwater fees. The city wanted to determine that it was collecting all taxes, fees and charges legally entitled for collection. Fees included in the citywide analysis stemmed from the following broad categories: administration/governmental, building and safety, engineering, fire prevention, land development, planning and land use, and police. Key consulting tasks included development of a deliverable cost of service model justifying fully-burdened hourly rates and activity/service unit costs, a master fee schedule identifying the maximum fee amount justified, documentation of cost recovery and pricing objectives, and market comparison of all fees. In addition, NBS provided the city with a proactive approach for a number of new revenue options.

The analysis yielded interesting results. The city was not fairly recovering its costs in a number of areas, and notably many of which demanded full cost recovery. The adoption of new user fees for full cost recovery would yield over $1.7MM annually to the city's general fund. The recommendation was to selectively adopt up to full cost recovery, which yielded $1.3MM annually. In addition, NBS identified a number of revenue enhancement opportunities, including various special financing district options, totaling well over $1MM annually towards critical needs for public safety, stormwater, and general community facilities.

THIS BOOK INTENDS TO SERVE AS A COMPENDIUM

on cost allocations, rates, fees and charges

utility rates and charges (water/sewer/storm)

When water is priced appropriately, it will be put to use in the most valuable and efficient uses. "Sound rate making policy is a policy of reasonable compromise among partly conflicting objectives."

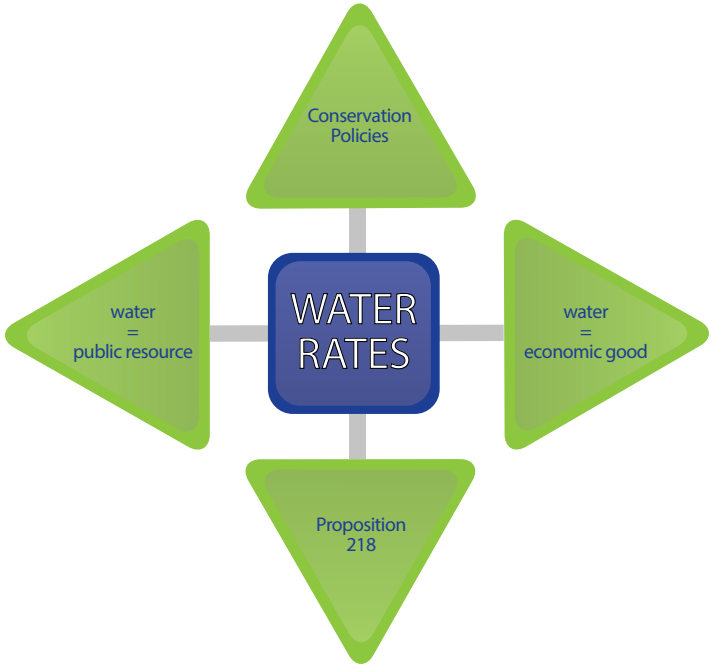
INTRODUCTION

It is important for a municipality's financing plans and resulting rate and fee strategies to be current. There are many topics critical to a utility's successful provision of real-time, on-demand, and perpetual service to its customers.

Rates must be set to achieve intergenerational equity, have well-defined and adopted fiscal policies and meet the agency's pricing policies. Above all, utility rates must be set within an overall public policy framework: Discussions are required which should lead to a very deliberate approach to the analysis.

For example, when setting water rates, there are a number of sometimes conflicting policy goals, "mandates" and realities to address, before commencing the technical analysis. As seen in Diagram 1 to the right, there are many dynamic forces to consider when setting these rates in California. Among many, there are discussions of the nature of water as a public resource and an economic good, as well as the "mandates" of Proposition 218 (the voter-approved California constitutional change from 1996 which deals with rates, fees, charges, etc.) and an overall statewide desire for water conservation.

Diagram 1. Water Rate Dynamics in California



WATER RATES: FAIRNESS, EQUITY AND "SOCIAL JUSTICE?"

Introduction

Numerous recent lawsuits concerning water rate designs underscore the importance of addressing "fairness and equity" in water rates. Unfortunately, these terms mean different things to different people. So, as a water utility manager, how can I be sure my new rates are on solid technical and legal grounds? Here are some concrete questions that you can and should focus on when considering rate increases, particularly when changing your rate design:

- Are my new rates defensible?
- Are my cost allocations reasonable?
- How do I balance revenue stability against conservation goals?
- Do my water rates reflect "social justice?"

Are my new rates defensible?

Regardless of the actual defensibility of the rates, legal experts have emphasized the importance of establishing an administrative record that supports the newly adopted rates. Assuming there is an adequate administrative record, other key action items to address include:

- **Follow industry standards –** three basic components of a rate study should be included, as documented in various publications, which are[1]:
  - o *Revenue requirements analysis* – This defines the annual revenue the utility needs to collect from ratepayers.
  - o *Cost-of-service analysis* – Results in equitable and fair allocations of revenue requirements to each customer class; this is a critical aspect of meeting Proposition 218 mandates for "proportionality."
  - o *Rate design analysis* – Defines the rate structure, or the means by which rate revenue is collected from each customer class.
- **Understand recent court rulings –** Proposition 218 has had numerous twists and turns in the legal system, and it continues to provide new guidelines for whether rates comply with the State Constitution and statutes.[2] These rulings often establish precedence for specific rate issues, and help you avoid making the same mistakes others have made.
- **Prepare a comprehensive rate study –** Proposition 218 requirements do not apply until an agency either adopts new rates or makes changes that result in some customers paying more than they currently pay. Therefore, changing rate structures, adopting rate increases, or changing how costs are allocated between customer classes should be accompanied by a well-documented and comprehensive rate study.

[1] Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices, M1, AWWA, sixth edition, 2012. Also see Principles of Public Utility Rates, James C. Bonbright; Albert L. Danielsen and David R. Kamerschen, (Arlington, VA: Public Utilities Report, Inc., Second Edition, 1988), p. 383-384.
[2] See City of Palmdale vs. Palmdale WD, SJC Taxpayers vs. San Juan Capistrano, and Yolo Ratepayers vs. City of Davis.

Are my cost allocations reasonable?

Three basic categories of cost allocations require examination:

- **Cost allocations between customer classes –** This process is intended to reflect the differences between customer classes, for example residential and commercial classes. Differences typically reflect their peaking requirements (i.e., their highest summer demand), total annual water consumption, and differences in their costs of billing, customer services and administrative expenses.

- **Cost allocations within customer classes –** While the "correct" amount of rate revenue may be collected from a customer class as a whole, the revenue collected from individual customers can and does differ dramatically. For example, consider the monthly bills paid by low-water vs. high-water users under 100% fixed charges (where they would both pay the same) compared to rates which are primarily volumetric.

- **Cost allocations between fixed and variable charges –** On one hand, cost-of-service principles should dictate the total percentage of rate revenue collected from fixed vs. volumetric charges. On the other hand, these allocations have dramatic impacts on a utility's revenue stability, conservation objectives, and customer bill impacts. Finding the "just right" allocation is the real challenge.

Other basic principles in allocating costs include:

- Charges cannot be more than the actual cost-of-serving each customer. Although Proposition 218 refers to "parcels" (not customers), recent court rulings have made it clear that cost-allocations and equity standards are applied on a customer class basis, not a parcel-by-parcel basis.[3]

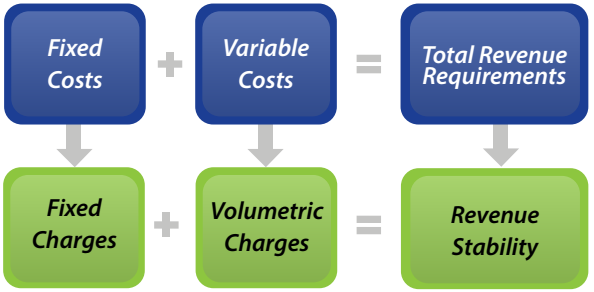
- Using a cost-basis that develops functional unit costs and determines how many of those "units" each customer class uses.

- Non-discriminatory rates mean there cannot be disproportional rates for customers or customer classes which are not supported by a cost-basis. This often applies more to subsidies between customer classes than customers within a class.

How do I balance revenue stability against conservation goals?

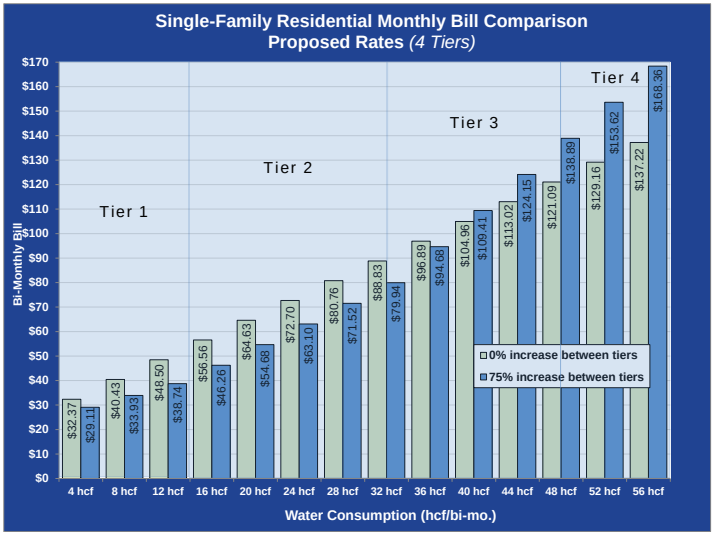
Let's compare a rate design that emphasizes revenue stability to one that emphasizes conservation goals:

Rate Design for Revenue Stability – As shown in the following figure, a rate structure with a high degree of revenue stability would collect fixed costs from fixed charges and variable costs from volumetric rates. This rate design should always generate the expected revenue so that the agency would be indifferent to whether they sell more or less than the projected amount of water.



Rate Design for Conservation – The more revenue collected from volumetric rates, the greater the conservation incentives. That is, a customer who uses a lot of water under this rate structure will have a significantly higher bill than under a "revenue stability" type rate design, thus increasing their price elasticity response to higher bills. The Figure on the following page illustrates the differences in monthly bills for a more aggressive rate design compared to one with "uniform" volumetric rates (i.e., where all customers pay the same rate per unit of water).

[3] This was a specific finding in Yolo Ratepayers for Affordable Public Utility Services and John Munn vs. City of Davis, California, January 22, 2014. Also see Griffith vs, Pajaro Valley Water Management Agency, 2013.



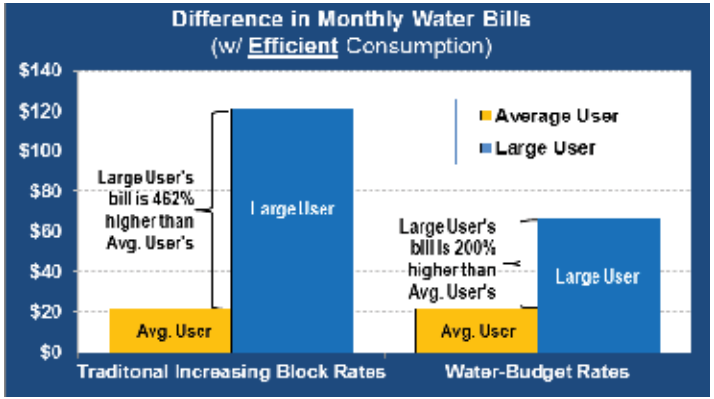
There is a counter-argument that a highly conservation-oriented rate structure (i.e., one with large increases from lowest to highest tiers) provides a **dis**incentive for low-water use customers. While this has theoretical merit, the greatest reductions are clearly going to come from high-water use customers. There are limited opportunities for conservation savings from low-consumption customers.

Do my water rates reflect "social justice"?

There has been an interesting concept of "social justice" creeping into the debate over the last few years about the fairness of water rates. Fairness and equity within cost-of-service principles are relatively well-established. However, it's not clear how proponents of social justice define this term, although it seems to imply a superior approach to fairness and equity. Unfortunately, it relies more heavily on "non-cost based" concepts rather than well-accepted cost-of-service principles.

The following two examples illustrate this social justice concept. Example #1 indicates there is a social justice component imbedded in water-budget based rates. Example #2 summarizes a social justice argument recently used in debating what constitutes the "fairest" rate structure.

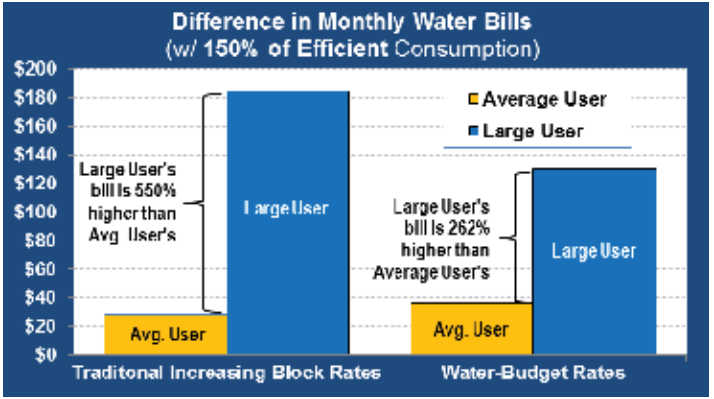
Example #1 – In this example, the following two figures compare similar residential customers under traditional tiered rates (i.e., all residential customers are subject to the same tier breakpoints and rates), vs. water budget rates (where tiers are adjusted to each customer based on their larger landscape watering needs). These two customers differ only in that one has an average-size yard (and average water demands) and the other has a larger-than-average yard (and therefore larger water demands).



This first figure highlights the differences in the respective monthly water bills under a traditional three-tiered vs. a water-budget rate design. A crucial factor in this figure is that both customers use water *efficiently* (i.e., they only use as much as needed to adequately water their yard).

As seen here, while the average user pays the same under both rate structures, the larger user pays significantly less under water budget rates. This is because he has a greater amount of consumption in the lower tiers (since his tier breakpoints are raised to supply his larger landscaping needs).

The second figure presents the same comparison except that both customers are assumed to use water *inefficiently* (defined as using 50% more than needed). Again, the larger user pays significantly less under water budget rates than traditional tiers.



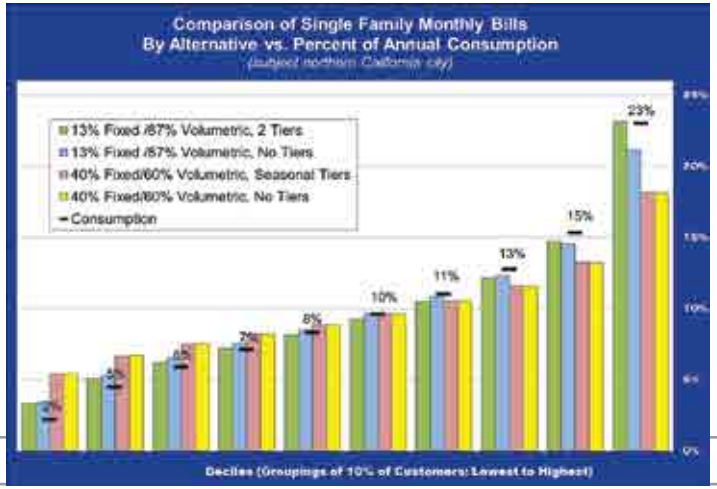
What are some takeaways from these two figures?

- Customers with larger than average consumption will have smaller bills under water budget rate structures than under traditional tiered rates.
- These larger consumers also pay a lower average price for their water than they would under traditional tiers (since more of their water is in lower tiers).

- Traditional tiers encourage reductions in total water use, regardless of whether you are using it efficiently or not, and are more punitive towards larger users than water budget rates.

- Proponents of water budget rates believe that "people should be provided sufficient water to meet their needs at reasonable prices (without penalties) as long as they are using it efficiently." This reflects a significant social justice component for how customers should pay for water.

Example #2 – This is a direct social justice argument: In a city in Northern California, during lengthy discussions of what water rate structure the city should adopt, the figure below was presented numerous times with the assumption that it serves as a measuring stick for social justice in water rates.



Proponents of a previously adopted consumption-based fixed rate (CBFR[4]) were promoting either a 100% volumetric rate or one that collected only 13% from fixed charges and 87% from volumetric rates. They argue that collecting revenue that most closely reflected their percentage of water consumption was inherently, maybe even obviously, more fair.

Despite statements from the rate consultant that there is a significant fixed cost of the city's water system[5], or a "readiness-to-serve" cost, the social justice argument was largely unchallenged. The critical underlying assumption in this social justice argument is that it assumes the most fair rate structure is one that is 100% volumetric. A few problems with this assumption include:

- It entirely ignores the massive fixed charges and sets up a substantial conflict with basic cost-of-service principles (i.e., the "fixed costs should be collected from fixed charges" principle noted above).

- It decreases revenue stability. Collecting 100% of rate revenue from volumetric rates has a greater degree of uncertainty (e.g., weather patterns, economic factors, and customer consumption patterns).

- While the courts have generally provided for a reasonable balance between cost-of-service and conservation goals, 100% volumetric rates may exceed the limits of reasonableness.

[4] This rate structure was previously adopted by the city and included a fixed charge of about 40% of residential rate revenue that was tied to a "six-month look-back", in which previous summer consumption are the basis for each customer's share of these fixed costs. Claiming this rate structure was unfair, it was successfully overturned by an initiative process.

[5] The city's cost-of-service rate study concluded that fixed costs, at least from an accounting perspective, were more than 80% of total annual costs, largely due to the significant annual debt service costs for the City's new treatment plant.

Conclusions

A few parting thoughts on this topic:

- **Basic guidelines –** In considering adoption of a new rate structure, the safest path is to follow generally accepted industry standards, particularly those that align with the principles cited in recent court rulings. This still allows substantial leeway for communities to incorporate other objectives: "…a utility may create cost-based rates that reflect distinct and unique characteristics of that utility and the values of the community."[6]

- **The importance of an administrative record –** Regardless of the type and characteristics of your rate structure, it is important to establish an administrative record which fully documents the cost-basis, underlying principles, and data used in developing that rate structure.

- **Tradeoffs in conservation vs. revenue stability –** There is an unavoidable tension between promoting water conservation through higher volumetric rates and cost-of-service principles. This tension is embedded in the State Constitution and statutes. Strict cost-of-service principles would, for most utilities, result in a relatively small percentage of rate revenue being collected through volumetric rates (e.g., 30 to 50%). Communities that collect an exceptionally high percentage of revenue from volumetric rates may risk legal challenge if a customer or customer class has the motivation and resources to initiate a legal challenge.

- **"Social justice": the new criteria? –** Many rate economists are uncomfortable establishing water rates based on something other than a cost-basis and fundamental economic and financial principles. Basing water rates on social justice criteria has, so far, proven to be both controversial and subjective. It will be interesting to see how this debate develops over the next few years, especially if the courts get involved through legal challenges.

There will very likely be continued upward pressure on water rates for the foreseeable future for a number of reasons: continuing drought-related supply shortages; costly capital improvements to meet more stringent water quality standards; and repair and replacement costs are just a few. In light of this, water agencies will need to keep up with both the technical and legal challenges involved in updating rates, such as those briefly summarized in this article. ■

Municipalities Need $300B in Sewer, Water Work
The Associated Press

"EPA found that the nation's 53,000 community water systems and 21,400 not-for-profit, non-community water systems will need to invest an estimated $334.8 billion between 2007 and 2027," stated the federal Drinking Water Infrastructure Needs Survey and Assessment, which is updated every four years. The National Association of Counties' 2008 report estimated the need for water and sewer upgrades at $300 billion to $450 billion nationwide and the federal stimulus project provided just a fraction of that as the recession reduced local governments' revenues.

[6] Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices, M1, AWWA, page 5, sixth edition, 2012.

THE CALIFORNIA CONUNDRUM: IS WATER A PUBLIC RESOURCE, AN ECONOMIC GOOD, OR A TAX?

Summary

Depending on the beholder's viewpoint, water has been called a public resource, defined as an economic good, and categorized as a "tax," subject to the rigors of California's electorate under the rules of Proposition 218. In a local government setting, are water rates set artificially low for short-term political gains in today's post tax revolt California? Or are they determined by sound analysis on a foundation of "good" public policy choices, such as addressing environmental concerns, fiscal prudence, and fairness?

The positive news from the results of my recent study is that it appears water rates are generally set by good public policy decisions. In addition, over half of the respondents had a water conservation-based rate structure. Fiscally prudent policies ranked highest in the survey, followed by fairness and environmental concerns. However, rate tension and political pressures were also present, especially when a conservation rate structure is in use. In addition, there is a concern that conservation mandates have had the unintended consequences of decreasing the public's sentiment for conservation, and its commensurate price tag, while undermining overall revenue stability for local water agencies.

Background and Discussion

Are local water rates set artificially low for short-term political gains? Or are they determined by sound technical analysis on a foundation of "good" public policy choices? This research study (a cross-sectional quantitative survey of local water agencies in California, augmented by qualitative interviews) sought to understand this timely question by performing background and literature research as well as directly surveying local public water suppliers in California. For the study, good public policy criteria were defined as addressing environmental concerns, fiscal concerns, and fairness.

Amidst these water policy discussions, the anti-tax movement must be considered. Local governments in California have been embroiled in the anti-tax movement since the 1970's. This was remarkably demonstrated by the voter-approved fiscal constraint measure known as Proposition 13 in 1978. In 1996, Proposition 218 was approved; this established further limitations on local governments' abilities to raise revenues. The anti-tax revolt became a significant problem for local water agencies in the most recent decade, as the California Supreme Court concluded in 2006 in the Bighorn-Desert View Water Agency vs. Verjil case that water rates were subject to the initiative powers granted, perhaps unintentionally, by Proposition 218.

Proposition 218 was in many ways a successor initiative to Proposition 13, with its express intent being to limit local governments' revenue abilities. Was the intent also aimed at the cost of water provision, given that water is an economic good subject to market pricing?

The Findings and Declarations of the so-called "Right to Vote on Taxes Act" states: "This measure protects taxpayers by limiting the methods by which local governments exact revenue from taxpayers without their consent."[1] The California Supreme Court appears to have taken the measure's language to the extreme.

General Background

The availability of water is a basic need in society. The pricing of water is a fundamental public policy issue in our quest for environmental sustainability, in California and in the rest of the World. As to potable water, it was not uncommon in the past to provide water at practically no cost to users. It was considered to be a cheap resource and a basic necessity. This is no longer the case today, and water pricing is an important management tool.

Water management is also an important tool. Water, which includes potable water, wastewater, recycled water, and storm water, should be viewed and managed in a holistic manner. Water is a "common pool item" and as such, "government's role is to develop policies to ensure their [its] continuance or sustainability."[2] This is especially true in California where water is precious, and increasingly in short supply. Unfortunately, the panoply of public and private agencies are not always in sync in terms of public policy and general management of the resource, and pricing thereof.

Previously thought of as a public good, water was declared an "economic good" in 1992 under the Dublin Water Principles[3] and in other forums, an economic good being subject to the market rigors of price and demand. The United Nations Agenda 21 incorporates sustainable development as a way to mitigate poverty and environmental degradation.[4] Water availability, efficiency, and pricing are seen as supportive of these global goals.

[1] California Legislative Analyst's Office. (1996) Understanding Proposition 218.
[2] Kraft, Michael E and Scott R. Furlong. (2007) Public Policy – Politics, Analysis and Alternatives. Third Edition. CQ Press: Washington DC.
[3] Rogers, Peter, de Silva, Radhika, and Bhatia, Ramesh. (2002) Water is an Economic Good: How to use prices to promote equity, efficiency, and sustainability. Water Policy 4, 1-17. Retrieved from Waterpolicy.net.
[4] ibid.

When water is priced appropriately, it will be put to use in the most valuable and efficient uses. "Sound rate making policy is a policy of reasonable compromise among partly conflicting objectives."[5] From a social perspective, equity is a consideration. With the consideration of equity, politics becomes a force to reckon with. To complicate matters, politicians always have two goals: a policy goal on whatever program they would like to see accomplished, and a political goal. The paradox is that in gaining or preserving their power, they may lose perspective on the policy decisions.[6]

Regardless of whether or not policy or political goals were paramount, in the early twentieth century days of public administration, public or municipal entities provided an increasing share of potable water, but not always correctly. As noted by Harry Baker in 1917, "there is probably no greater field of discrimination and unfair rates than among the municipally-owned utilities." There was clearly some room for improvement in rate discussions.

The California Environment

A variety of water rate structures are in use today by public water agencies in California for a host of economic, public policy, and practical reasons. These structures range from flat (or fixed) rates to metered rates to conservation-based tiered or block rates. More recently, water-budget rates (or customer-specific allocation based rates) have become technically feasible in California, and elsewhere. A water budget rate is "an increasing block rate structure in which the block definition is different for each customer based on an efficient level of water use by that customer."[7] In the recent past, water budget rates linked with an increasing block rate structure have been implemented successfully in more than 20 utilities.[8] However, detractors of water-budget rates have concerns about equity with such a rate scheme, and the motivational structures they can foster (to build a larger home, for example).

Type of Rate Structure	Description	Considerations
Flat/Fixed Rate	Flat or fixed charge.	Simplicity, no conservation incentive, often metered consumption.
Uniform Rates	Uniform volumetric charges.	Simplicity, minimally conservation oriented, must have water meters.
Inclining Block Rates	Rates increase with consumption.	Multi-tiered, conseravation oriented.
Declining Block Rates	Rates decrease with consumption.	Economic or business oriented; uncommon today.
Water-Budget Rates	Customer specific allotments, typically with inclining tiers.	Requires detailed monitoring and billing systems.

The current environment in the State of California reflects mandated water conservation and the passage and implementation of Proposition 218 and other law, which has had an effect on water rate implementation. There is also a continuation of the demand to maintain or reduce fees for such services, especially when provided by a local government. On top of this is the generally accepted premise that our collective water infrastructure is in a state of decline, and

[5] Bonbright, James Cummings. (1961) Principles of Public Utility Rates. Columbia University Press: New York..
[6] Stone, Deborah. Policy Paradox: The Art of Political Decision Making. In Classics of Public Administration. Edited by Jay Shafritz and Albert C. Hyde. Thomson Wadworth: Boston. 2007.
[7] Mayer, Peter W. (2008) Water Budgets and Rate Structures: Innovative Management Tools. American Water Works Association Research Foundation: Denver, Colorado.
[8] ibid.

it needs costly and significant repair and replacement.[9] Additionally, conservation rates bring up technical problems when viewed from the cost of service mindset. "Often such [conservation] rates raise questions about the need to maintain cost of service principles in rate design that avoid the subsidization of any customer by another customer."[10] The paradigm of conservation rates and the principles of cost of service may be difficult to reconcile.

The Public Policy Institute of California recently published a white paper entitled Water and the California Economy. This paper discussed a wide range of water-related issues at stake in California today. This included economic concerns, climate change, and many other perspectives. However, the number one priority listed for action was to modernize water measurement and pricing.[11]

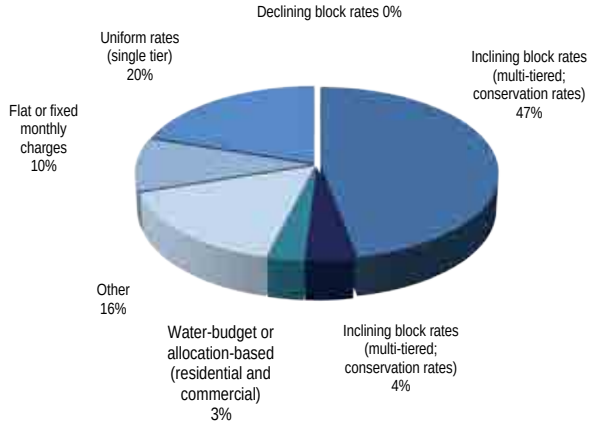
In general, calculating and implementing water rates has become more complicated and technically challenging within the California environment. In addition, Propositions 13 and 218 have added a level of politics and complexity. "Over the course of 34 years, California's law of local utility fees has been transformed. An earlier era of legislative discretion and deferential judicial review meant disputes over rates were more often resolved by political means than lawsuits."[12] Clearly, the environment of policy decision making on water rate structures has changed.

Moreover, the relationship with the public at large has changed significantly, requiring a whole new paradigm of public education and engagement. This was discussed at length at a recent nationwide forum of water leaders: "The inevitable raising of rates will require trust, clarity, and understanding. Consumers need to understand the full implications of not raising rates. They need to understand the drivers of rates and rate increases. For many utilities, effectively communicating these messages will require professional help."[13]

Study Results

Over half of the survey respondents had some type of conservation-oriented rate structure (inclining block or water-budget rates) in place. This would generally be expected given the conservation-minded goals and policies in use in California.

Table 2 – Types of Water Rate Structures



[9] American Society of Civil Engineers (ASCE). (2013) Failure to Act: The Impact of Current Infrastructure Investment on America's Economic Future.
[10] Corsmitt, C.W. Editor. (2010) Water Rates, Fees and the Legal Environment. American Water Works Association. Second edition.
[11] Hanak, Ellen. (2012) Water and the California Economy. Public Policy Institute of California.
[12] Colantuono, Michael G, Esq. (2012, May) A History of Rate-Setting Under California Law: Proposition 13 through Proposition 26. Presented at the Association of California Water Agencies, Monterey, CA.
[13] National Water Rates Summit. (2012) Declining Water Sales and Utility Revenues – A Framework for Understanding and Adapting. Alliance for Water Efficiency and The Johnson Foundation. Racine Wisconsin. August 2012.

Notably, it appears from the quantitative data that water rates are generally set by good public policies, most notably those policies classified as fiscally prudent. These top public policy motivations, as distinguished by level of importance (marked on a Likert scale as important, very important, or extremely important), were in the following ranked order:

1. Revenue stability.
2. Repair and maintenance.
3. Basic costs are covered.
4. Fairness/equity in rates.
5. Managing a finite supply.
6. Ease of implementation.
7. Conservation goals.
8. Political pressure/Proposition 218.

Goal numbers one through four above had importance scores in the 80-90 range, five and six in the 60-70 range, and seven and eight in the 50-60 range. Economic development and Intergenerational concerns (nine and 10 in the list) were mostly categorized as neutral.

However, palpable tension and political pressures were at work, especially when a conservation rate structure is in place – even more so at smaller water agencies. This was evidenced by Chi square and Gamma relationship statistical tests, which in particular showed a moderate relationship between political pressure and conservation and fiscal policy goals. In addition, concerns were raised that conservation mandates have had the unintended consequences of decreasing the public's sentiment for conservation while at the same time undermining revenue stability.

Conclusions

What this study means for local water districts is a continued and increased need for rate-making diligence, including the development perhaps of an entirely new form of rate structure or even a new paradigm of ways for charging for water. In addition, water providers should enhance the transparency in rate setting and enliven the public dialog on the needs for water conservation and relevant rate structures in order to sustain the effort to manage the aging water infrastructure assets for the long-term benefit of Californians.

In the future, developing a deeper understanding of water rate making policy decision criteria and the practical implications thereof should include a discussion of these areas:

- **Use of conservation rates:** It would be valuable to obtain a better understanding of the use of conservation rates and their relationship to overall water conservation. Given the advancement of many water efficiency fixtures and usage procedures, there has been a significant reduction in the use of water in many communities, so much so that revenue stability has emerged as an issue.

- **Evolution of water rates:** The types of water rate structures have evolved over the past 100 years, at least in most communities.

[14] American Water Works Association (AWWA). (2000) Principles of Water Rates, Fees, and Charges – Manual of Water Supply Practices, Manual M1. Fifth Edition.

However, further discussion and research and development into other manners of water rates would be interesting. In particular of course, conservation rates are an area to monitor. While water budget rates have become a more common fixture, they are not used widely, perhaps due to their complexity. Will fixed rates no longer be used? Will conservation rates stand the test of time?

- **Fixed vs. variable costs:** The relationship of fixed to variable costs in water purveyance is an issue to understand better. Although AWWA standards[14] and current procedures advocate assigning a large share of water rate revenue to variable costs in order to induce conservation, the largest share of the costs to run a water system and, importantly, provide for the maintenance and replacement of infrastructure are fixed type costs. How can this be reconciled?

- **Revenue stability:** The overlapping issues of fixed vs. variable costs, improved water conservation, and increased weather variability due ostensibly to global climate change have caused revenue instability for water providers. How can water providers maintain a fiscally-sound service given these challenges?

- **Engaging the public:** Lastly, the best practices of community engagement seem to be a critical component of the process of water purveyance and the pricing thereof. Further efforts on how to increase public participation and education on the issues and the evolution of practices would be a valuable endeavor. ■

Fiscal (fis•cal)
noun: 1. of or relating to taxation, public revenues, or public debt <fiscal policy>. 2. of or relating to financial matters.
Source: Merriam Webster dictionary

PRICING ALTERNATIVES FOR RECYCLED WATER

Introduction

As of 2014, California is entering its third straight year of drought conditions and facing severe statewide emergency water restrictions. This underscores the growing need for recycled water supplies and emphasizes the challenges facing water and wastewater agencies with existing water reuse systems. One of those challenges is how to appropriately price recycled water, particularly in light of recent court decisions that have effectively placed new restrictions on pricing alternatives.

This short paper is intended to provide a brief discussion and general guidance on pricing principles and mechanisms that water agencies may want to consider when establishing rates for recycled water customers. Two topics are addressed:

- **Industry Practices –** Recycled rate structures and pricing methodologies that other California agencies are currently using, and
- **General Principles –** An overview of pricing methodologies and practices.

Industry Practices: Rate Structures and Pricing Methodologies

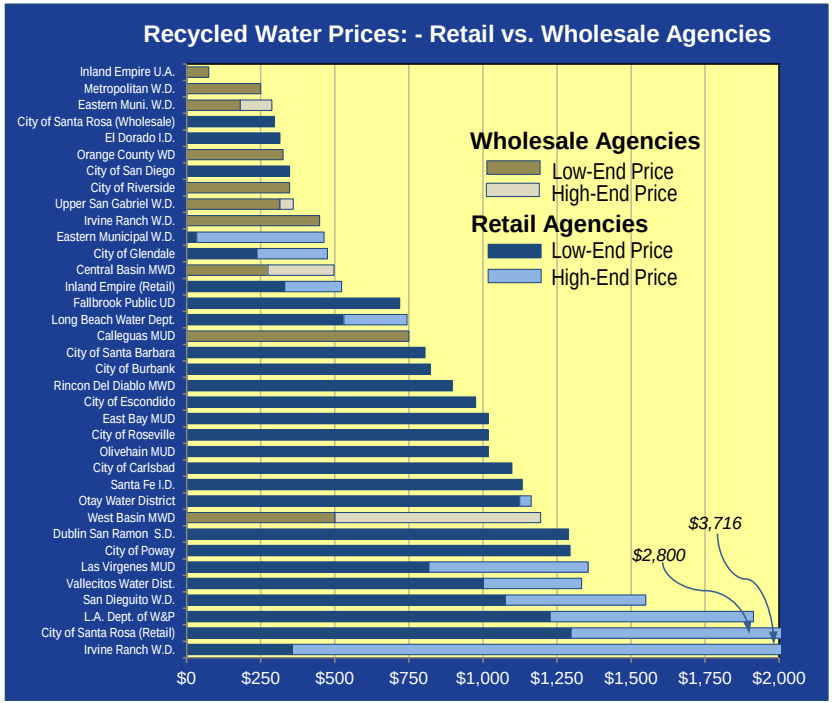
Understanding the recycled water pricing methodologies and approaches used by other agencies can provide a useful background and guidance on current industry standards and approaches to rate structures. These results are grouped into Southern and Northern California agencies. While this data is always being updated, it still provides an overview of market pricing.

Figure 1 and Tables 1 and 2 summarize some of the key recycled water characteristics of California agencies. Rates are organized by wholesale vs. retail agencies and by Northern vs. Southern state. The following are a few general observations about this data:

- **Retail vs. Wholesale Rates –** Retail rates are typically higher than wholesale, primarily because of the more extensive transmission and distribution costs and level of service that retail customers receive.
- **Northern vs. Southern California –** Recycled water rates for retail agencies are fairly similar in both Northern and Southern California.
- **Range of Costs –** Wholesale rates vary significantly, ranging from MWD's almost free rate to Upper San Gabriel Water District's highest tier rate of more than $1,551/acre foot, but are generally in the $300 to $500/acre foot range.

- **Tiered Recycled Rates –** Southern California retail recycled rates generally include more tiered rate structures. For example, Irvine Ranch Water District (IRWD) has a wholesale base rate of $449/AF compared to retail rates that exceed $3,700/AF[1] for a fifth tier.

Figure 1 – Summary of Recycled Water Pricing Data



[1] This fifth tier represents "wasteful" landscape irrigation based on IRWD's water budget rate structure.

Table 1 - Recycled Water Rate Data, Northern California Agencies (WHOLESALE and RETAIL)

Agency	Wholesale/ Retail	Managing Utility	Pricing Structure	Consumption Rates	Other Comments
Northern California				*notes*	
City of Roseville	Retail	Wastewater	50% of Potable water	$1,019/AF [1]	Full costs are not recovered through rates. Plan to go to 80-90% of potable rate.
City of Santa Rosa	Retail	Wastewater	Fixed mo. charge is by meter size. RW tiers based on water budgets.	Tier 1 = $1,298/AF [1] Tier 2 = $1,868/AF [1] Tier 3 = $2,800/AF [1]	RW costs are split 60/40 between sewer/water. Primary purpose for RW is ww discharge limits. Wholesale RW to City, retail to Rohnert Park.
City of Santa Rosa	Wholesale	Wastewater	Base rate	$297/AF [1,2]	Price includes 10% pass-through of SCWA costs.
Dublin San Ramon Services District	Retail	Water	90% of Potable water	$1,289/AF [1]	Philosophy of "Water is water". Resid Tier 1 is $1,307/AF. Purchase wholesale water at $900/AF. Their cost to produce RW is $700/AF. RW is treated to secondary level.
East Bay MUD	Retail	Water	Single tier, higher rate than for Tier 1 of residential.	$1,019/AF vs. potable Tier 1 rate of $937/AF [1]	Tertiary Treated RW used for Chevron cooling towers. Also used for commercial irrigation.
El Dorado Irrigation District	Retail	Wastewater	SFR fixed mo. charge is $21.00 w/3-tier rates, non-resid. fixed charge by meter size, w/uniform tier.	Resid. = $264-672/AF [2] Comm./Landscape = $361-429/AF	SFR tiers as % of potable rate is 90% (tier 3), 70% (tier 2) and 50% (tier 1).

RW = Recycled Water. SFR = Single-family residential.

[1] Information for these districts provided by El Dorado Irrigation District in 2011.

[2] EID website.

Table 2 - Recycled Water Rate Data, Southern California Agencies (WHOLESALE)

Agency	Wholesale/ Retail	Managing Utility	Pricing Structure	Consumption Rates	Other Comments
Southern California				*notes*	
Calleguas Municipal Water District	Wholesale	Water	Base rate	$750/AF [1]	
Central Basin Municipal Water District	Wholesale	Water	Tiered rates	Tier 1 = $275/AF [1] Tier 3 = $497/AF [1]	
Eastern Municipal Water District	Wholesale		Tiered rates	$181 to $288/AF [1]	Price depends on level of treatment and disinfection.
Inland Empire Utilities Agencies	Wholesale		Base rate	$75/AF [1]	
Irvine Ranch Water District	Wholesale	Wastewater	10% less than Potable	Base rate $449/AF [1]	
Metropolitan Water District	Wholesale		Tiered rates	$0 to $250/AF [1]	
Orange County Water District	Wholesale	Water	Base rate per AF	$326/AF [1]	
Upper San Gabriel Water District	Wholesale	Water	Various agreements with different customers	$315 to $360/AF [1]	
West Basin Municipal Water District	Wholesale	Water	Tiered rates	$501 to $1,195/AF [1]	

Indicates advanced treatment or outside vs. inside customers were considered in setting rates.

[1] Regional Recycled Water Program, Inland Empire Utilities Agency, January 2010 Update.

Table 2 - Recycled Water Rate Data, Southern California Agencies (RETAIL)

Agency	Wholesale/ Retail	Managing Utility	Pricing Structure	Consumption Rates	Other Comments
Southern California				*notes*	
City of Burbank	Retail		Base rate	$823/AF [1] $414/AF [1]	> Recycled Water Service > School Recycled Water Service
City of Carlsbad	Retail		Base rate	$1,098/AF [1]	
City of Escondido	Retail		Base rate	$976/AF [1]	
City of Glendale	Retail		Tiered rates	$238 to $475/AF [1]	
City of Poway	Retail		Base rate	$1,294/AF [1]	
City of Riverside	Retail			$348/AF [1] 4" meter charge $483/mo [1]	Outside customers have surcharge of 50%. RW supply is limited to availability.
City of San Diego	Retail		Base rate	$348/AF [1]	
City of Santa Barbara	Retail		Varies w/type of use (63% of Potable Tier 1 rate)[1]	$805/AF [1] $784/AF [2]	
Eastern Municipal Water District	Retail		Rates vary by meter size and treatment level.	$34 to $464/AF [1]	District provides secondary and tertiary treated RW.
Fallbrook Public Utility District	Retail		Base rate	$719/AF [1]	
Inland Empire Utilities Agencies	(Member agencies are Retail)		Member agency average cost is $250 / AF ($100 / AF for capital, $150 / AF for O&M)	Chino Hills* = $523/AF [1] Cucamonga Valley WD = $488/AF [1] Ontario* = $475/AF [1] Montclair Vista WD = $411/AF [1] Chino = $331/AF [1]	Rate stabilization and replacement reserves are being established. Property taxes are allocated to debt service. * Average of tiered rates.

Indicates advanced treatment or outside vs. inside customers were considered in setting rates.

[1] Regional Recycled Water Program, Inland Empire Utilities Agency, January 2010 Update.
[2] Agency websites.

Table 2 Continued - Recycled Water Rate Data, Southern California Agencies (RETAIL)

Agency	Wholesale/ Retail	Managing Utility	Pricing Structure	Consumption Rates	Other Comments
Southern California				*notes*	
Irvine Ranch Water District	Retail	Wastewater	5-Tier Water Budgets plus Fixed Mo. charge by Meter size (e.g., 1" meter = $19.45, 4" Compound = $342.20)	Non-Ag Landscape = $48 to $515/AF. [2] Comm / Ind. = $44 to $344/AF	RW developed for conservation and to reduce the District's wastewater discharge costs. Separate rates for irrigation, comm./indust., and "Toilets/Cooling Towers".
Los Angeles Dept. of Water and Power	Retail		Tiered rates	$1,227 to $1,913/AF [1]	
Las Virgenes Municipal Water District	Retail		Tiered rates	$818 to $1,355/AF [1] $510 to $1,446/AF [1]	> Las Virgenes Valley Zone > Western/Calabasas Zone
Long Beach Water Department	Retail		Non-peaking and peaking rates	$531 to $744/AF [1]	
Olivehain Municipal Water District	Retail		Base rate	$1,019/AF [1]	
Otay Water District	Retail		Three tiers. RW Tier 1 is 23% higher than the single-family potable Tier 1	Tier 1 = $1,124/AF [1] Tier 3 = $1,163/AF [1]	
Rincon Del Diablo Municipal Water District	Retail		Base rate	$897/AF [1]	
Santa Fe Irrigation District	Retail		Base rate	$1,133/AF [1]	
San Dieguito Water District	Retail		RW is 85% of Non-Residential Potable rates.	$1,076 to $1,550/AF (by customer type) [1]	RW rates are less than Tiers 2-4 of residential potable rates, but RW is single-tier.
Vallecitos Water District	Retail		3 Ag tiers, 80-90% of potable. No RW per se. Meter service charges are the same for all.	Tier 1 = $1,002/AF [2] Tier 2 = $1,176/AF [2] Tier 3 = $1,333/AF [1]	Water rates for potable and Ag water are the same; MWD and San Diego CWD rates provide the decrease in Ag rates.

[1] Regional Recycled Water Program, Inland Empire Utilities Agency, January 2010 Update.
[2] Agency websites.

These data illustrate the wide variety of pricing mechanisms and methodologies currently used today in California. We have also highlighted a few cases of interest with respect to advanced treatment and outside customer rates. General pricing concepts are discussed in more detail below.

General Principles: Overview of Recycled Water Pricing

Methodologies and Practices

Discussions with various water and wastewater agencies that provide recycled water indicate there is no consistent approach with regard to the rate philosophy, methodology, or actual pricing mechanisms used in California. The following discussion provides a brief overview of general concepts, historical pricing practices, American Water Works Association (AWWA) and other pricing methodologies, followed by a discussion of alternative recycled water rate structures.

General Concepts

Although public utilities are not allowed to "make a profit", recycled water rates should, at minimum, cover the costs for any new recycled water facilities. Ideally, this means recovering all fixed costs, thereby guaranteeing that non-recycled water customers will not be subsidizing recycled water customers. Additionally, all variable recycled water costs should be recovered through variable rates (i.e., volumetric charges). In other words, the recycled water agency should hypothetically be indifferent to how much recycled water it sells because (1) they will not lose money and (2) the fixed and variable recycled water prices are fully recovered. Ideally, the resulting recycled water rates are also agreeable to recycled water customers. As a matter of policy, an agency should give priority to customers within its service area. Any new recycled water project, particularly those serving outside customers, should not only be financially feasible, but should also provide long-term benefits to customers inside their service area. These benefits might be in the form of lower potable and/or recycled rates. Recycled water customers that are outside the service area can, and probably should be charged based on their willingness to pay and/or on a contractual basis, rather than strict cost-of-service principles.

Historical Recycled Water Pricing Practices

Many agencies initially developed recycled water systems as a means to either reduce wastewater disposal costs, particularly in light of increasing discharge standards and costs, or because they provide non-potable supplies for landscaping where potable supplies were limited. Other reasons for developing recycled water facilities include (1) meeting additional and/or seasonal water demand with lower-cost, non-potable supplies, and (2) delaying or eliminating additional costs of potable treatment, storage, and/or delivery costs.

Recycled water has also been used to offset the loss of potable supplies. For example, the City of Ripon lost several potable groundwater wells due to contamination and, rather than adding wellhead treatment or constructing new potable wells, they constructed new "non-potable" distribution lines for landscape irrigation as a means of offsetting the loss of potable water.

Recycled water rates have historically supported the initial capital cost of developing "backbone" transmission and pumping facilities, and this usually required an agreement, memorandum of understanding, or some form of contracting with larger customers such as golf courses or industrial and commercial users that required larger volumes, but did not require potable quality water. As a result, water and wastewater agencies have typically offered "discounts" to make recycled water more attractive as a long-term source.

There has also been increasing efforts to build "green" attributes into new residential projects in order to gain approval from city councils, planning commissions, and the public in general. As an example, a large residential development in El Dorado Hills (in the service area of El Dorado Irrigation District) constructed a recycled water system to provide landscape irrigation water for 3,900 dual-plumbed homes. This system, along with 165 commercial and recreational turf recycled customers, resulted in reduced wastewater disposal costs and avoided capital costs for additional potable water treatment capacity.

However, reduced and avoided potable water system costs are not always easy to incorporate into recycled water rates if agencies take a strict "cost-of-service" approach. Additionally, recycled water, along with conservation programs, has become a critically needed and favorable "new" water supply in recent years. Due to drought issues and greater scarcity of new potable supplies, one agency notes that recycled water is "the lowest cost of new water supply in California."[2]

Recycled Water Pricing Methodologies

Since there is no over-arching pricing methodology used by California agencies in establishing recycled water prices, in many cases recycled water pricing is market-based, similar to many wholesale potable contracts. That is, two parties agree to a certain price tied to predetermined stipulations (capacity, limits/guarantees on delivery, quality). However, the increasing scarcity of potable supplies has encouraged a general trend towards using a tiered pricing approach as well as developing a better cost basis and rationale for how recycled water is priced.

The following is a summary of pricing principles from (1) the AWWA regarding standards in water and wastewater rate setting, and (2) pricing concepts recommended by the Economic Regulation Authority in Western Australia, where a long-term drought has resulted in the accelerated development of recycled water as a major component in water supply portfolios.

AWWA Standards - AWWA Manual M1[3] and other AWWA publications are typically well accepted as some of the most definitive and reliable sources for cost-of-service rate analysis. Unfortunately, they have minimal information about recycled water rates other than providing a solid foundation for cost-of-service rate practices in general. This can be attributed to the relatively new field of pricing recycled water.

[2] Recycled Water Status Report and Proposed Rate Increase, FY 2010/2011, Inland Empire Utilities Agency, February 2010.
[3] Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices (M1), AWWA, Fifth Edition.

Most water and wastewater utilities consider the overall cost-benefit when they decided to develop recycled water supply systems. The primary concern typically is covering short-term costs. However, recycled water facilities can also be justified by their avoided costs of wastewater effluent disposal. For example, the City of Santa Rosa, which has severe restrictions on summertime "in-river" disposal of effluent, developed an extensive effluent conveyance system in order to inject recycled water into the geothermal energy fields at The Geysers Project. The City also evaluated other approaches such as reducing collection-system infiltration and inflows, re-injection wells, seasonal storage, and percolation ponds. Two of the City's more cost-effective alternatives included using recycled water for landscaping and agricultural irrigation. The City has continued to expand these over time.

In light of the lack of AWWA standards, most California utilities are still searching for rational policies and approaches to pricing their recycled water. As discussed below, the Australian government has developed recommendations for this purpose.

An Australian Approach - The Economic Regulation Authority in Western Australia (ERAWA) prepared a report that evaluated a number of recycled water principles in an attempt to establish a consistent approach to the development and pricing of recycled water supplies.[4]

Among other purposes for this report, the ERAWA wanted to promote conditions in which (1) resources for recycled water are distributed to those who value them the most, (2) there is "robust competition" between alternative providers, and (3) there are strong incentives to achieve least-cost provision of wastewater activities. This report recommended the inclusion of three cost components in pricing recycled water, as follows[5]:

1. *Incremental Delivery Costs* – There should be a charge associated with the cost of delivering recycled water to a customer, including incremental costs for achieving specific levels of treatment required by individual customers.

2. *Avoided Cost Discounts* – There should be a "negative adjustment" in the price to account for avoided costs that result from selling wastewater rather than disposing of it. However, this discount should not exceed the direct cost of the recycled project.

3. *Scarcity Premium* – If the amount of wastewater available for recycling is less than total demand, a premium should be added to reflect its relative scarcity. This premium should be determined by a neutral third party.

Another important concept included in this report's final recommendations is that recycled water pricing should not include contributions towards "joint costs" of wastewater

[4] Inquiry into Pricing of Recycled Water in Western Australia, Final Report, Economic Regulation Authority of Western Australia, February 6, 2009.
[5] Ibid, pages iv and v.

treatment. In other words, to the extent that recycled customers are willing to pay, wastewater entities typically seek to recover at least some wastewater facility costs. The basis for this recommendation is that recycled water customers should not have to pay for wastewater facilities which they did not cause to be constructed.

Pricing Concepts for "Inside" vs. "Outside" Customers - While the "cost-of-service" provides the basis for setting recycled water rates for customers inside the agency's service area, it should be considered the floor of recycled water prices for outside customers. That is, outside customers should never be charged less than the full cost-of-service. Additionally, inside customers should never incur financial risks for providing services to outside customers, at least not without a corresponding benefit, such as lower long-term rates for inside customers, whether they are potable, recycled, or wastewater customers.

In providing facilities and services to customers outside the service area, an agency should consider using a pricing philosophy more typical of a contract, and could include the three principles identified in the Australian approach noted above (covering incremental delivery costs, avoided-cost discounts, and incorporating a premium based on the relative scarcity of recycled water).

Alternative Recycled Water Rate Structures

When developing a recycled water rate structure, in general an agency should consider a broader range of financial factors than just the direct cost of facilities and operations. They should also consider how recycled water fits into the agency's broader mandates and objectives. Rate structures might consider the following options:

- *Base Rates* – This can refer to a single tier, or uniform rate, for volumetric charges, usually combined with some form of fixed charge. These fixed charges are often based on capacity requirements and therefore tied to meter sizes. Base rates can also be specific to customer classes (agriculture, commercial, landscape).

- *Tiered Rates* – This approach most logically goes hand-in-hand with some form of water budgets, which define the irrigation needs of large landscape customers (golf courses and parks), such as those used by IRWD. Other forms of tiered rates can be tied to meter sizes, such as those used by the Otay Water District.

- *Surcharges for Outside Customers* – Many agencies have a policy of adding a surcharge for service to potable and recycled water customers outside their service areas. This reflects the additional costs of serving customers farther from service centers, the lack of initial investment in capital facilities by outside customers, and the fact that outside customers do not carry the same liability and/or financial burden of debt service payments or other risks.

- *Contracted Services* – recycled water service to new customers, particularly those with larger volumetric demands, can be provided on a contractual basis whereby the agency and customer develop an agreement for the level of service, specified deliveries of recycled water, and payment of capital costs. This arrangement typically means that recycled water service is outside the normal constraints of the agency's obligations to serve municipal customers within its service area. These agreements are not typically subject to Proposition 218 requirements, since the agreement is voluntarily entered into by both parties.[6]

Proposition 218 and Recycled Water Rates

Although recycled systems are categorically different than potable systems, they are still subject to the same legal requirements as potable water rates, including Proposition 218. However, recent court rulings have raised concerns over pricing methodologies and rate structures.[7] In particular, the San Juan Capistrano decision specifically prohibited the City's practice of spreading recycled water costs to those not having immediate access to recycled water.

As shown in the tables above, many recycled water rate structures either use a tiered rate structure or are tied to a tiered potable rate. Unfortunately, this may be a much more limited option in the future. As a recent legal article commented, *"If the Court of Appeal agrees with the [San Juan Capistrano decision], then traditional tiered rate structures may be soon be a thing of the past."* [8]

This raises two immediate concerns for recycled water pricing mechanisms: (1) tiered recycled water rates would require very specific cost justification to support a tiered structure (as would potable tiered rates), and (2) recycled water rates must carry the full cost of their services, and can only be paid for by customers directly receiving or having immediate access to recycled water service.

Bearing the full costs of recycled facilities and operations can be a significant difficulty for many recycled water systems, since recycled costs don't always compare favorably with the costs of potable water as evidenced in cases where discounts are offered in an effort to sell the available supply of recycled water. This would be true even in cases where the overall costs paid by potable water customers would decrease as a result of the recycled water system, which is what the City argued in the San Juan Capistrano case.

Conclusions

As California's limited storage capacity and cyclical droughts continue to constrain water supplies, the growing need for recycled water will continue to offer new challenges for water and wastewater agencies providing recycled water.

In light of these challenges, determining the recycled water pricing mechanism and rate structure that best fits your utility is not an easy task. It will require a thorough understanding of the current and future role of both potable and recycled water, the future demands and types of customers they each serve, and a careful evaluation of an agency's recycled water policies.

[6] This is not intended to provide legal advice; each water agency should consult legal counsel.

[7] Capistrano Taxpayers Association v. City of San Juan Capistrano, County of Orange – Central Justice Center, August 6, 2013, and City of Palmdale v. Palmdale Water District, et. al., Los Angeles County Superior Court, 8/9/11.

[8] Upgrading Conservation Pricing, Proposition 218, Smart Meters and the Step Beyond Tiered Rates, Barnhart and Anderson Smith, California Water Law & Policy Reporter, p. 35, January 2014.

The key factors that will play important roles in shaping and defining recycled water pricing mechanisms will include:

- The feasibility of various pricing mechanisms.
- The limitations of those mechanisms.
- The relationship between the utility (supplier) and recycled customers.
- The political and legal forces affecting rate design and industry practices. ■

THE PENDING STORM IN MEETING AND FUNDING NPDES REQUIREMENTS

The proverbial bar in storm drain management is being raised – again. California communities, already burdened by aging systems and existing standards, are facing dramatically increased requirements for storm drainage efforts as required by the conditions of the National Pollutant Discharge Elimination System (NPDES) as administered by the State Regional Water Quality Control Boards.

The new requirements for eliminating trash and pollutants from the storm drain systems are arduous, and very expensive. Along with these water quality requirements, California's storm drain systems are aging, the population is increasing, the climate is changing, and the demands on our systems are higher than ever. A well vetted and technically appropriate storm drain master plan is needed.

Planning and Engineering: Storm drain management requires proactive planning, the right infrastructure, along with regular operations and maintenance. Developing, or updating, a storm drain master plan is a good place to start, and contemplate the needs, design requirements, and unique attributes of your community. For many years in many communities, storm drain management has been low on the priority list, until recently. With more population and increased impervious surface area due to development, storm drain management, with significantly increasing water quality standards, is moving up to high priority.

The requirements for the NPDES permit in the San Francisco Bay Area, for example, will require many communities to dramatically capture sediment, trash and metals in their storm drain system. By 2022, trash down to 5mm in size (roughly the diameter of a cigarette butt) will be required to be removed from storm water. This alone will require a lot of planning and maintenance effort.

Funding: After the technical issues have been addressed, it is necessary to formulate strategies to fund both capital improvements as well as ongoing maintenance and operations. The history of funding storm drain projects in the Western United States is technically complex, and politically charged. The State of California has many unique facets curbing the creation of storm drain utilities as is done in Washington and Oregon.

The passage of Proposition 218 is the greatest hurdle to communities in establishing storm drain funding sources. Proposition 26 does not appear to have effect in this context. A few bills have been introduced which would allow local governments to establish property related fees for storm drain costs, in the same manner (i.e., the fee can be approved as long as there is not a majority protest after notice has been provided) as currently allowed for water, sewer, and trash. However, this would be a constitutional amendment and it has yet to occur (as of mid 2014). It will require a vote of the people if it finally passes through the legislature.

Storm drain funding can be accomplished via a number of elements, including:

- *Development Impact Fees* – one time fees to fund capital only, no maintenance.
- *Regulatory Fees* – fees that can fund specific requirements.
- *Property-related Fees* – property owner or voter approved measure to fund capital or maintenance or both.
- *General Obligation Bonds* – voter-approved bonds to fund capital.
- *Special Taxes/CFD's* – voter-approved (or landowner approval in the case of undeveloped land) mechanism to fund capital or maintenance or both.
- *Assessment Districts* – property owner approved district/area to fund capital or maintenance or both.
- *Grants and Other Sources* – various sources.
- *The General Fund* – the last recourse when all of the above don't meet the need (a very challenged fund for many, and likely the current source of storm drain funding).

These are the funding alternatives that can be implemented to generate funds for storm system improvements, operation and maintenance in your community.

Summary

There are a handful of cities and counties that have a robust funding toolset, including those who have successfully passed storm drain fees. Others have failed. Establishing a multi-disciplined team, including staff, community leaders and specialists in engineering, financial and public outreach, is the key to success. Reaching out to the public early and often in the process and maintaining a focused approach can improve the chances of successfully creating a suite of funding tools that will allow your agency to get over the "raised bar." ■

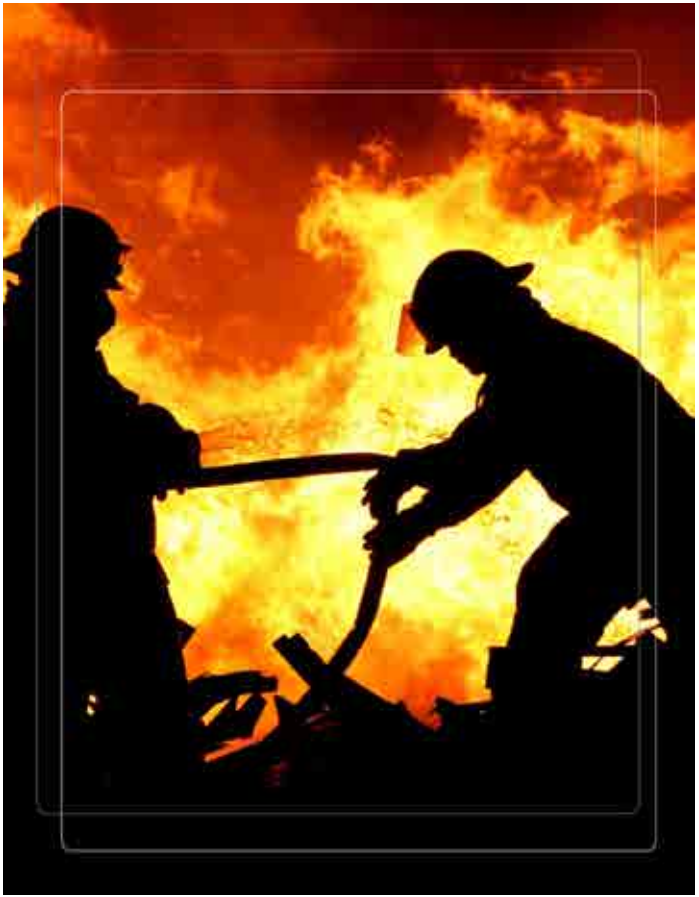
"Don't tax me, and don't tax thee;
tax that man behind the tree."
- Senator Russell Long
Source: *Mann, Robert T. (2003). Legacy to Power*

User fees are for the use of public goods and services, while regulatory fees are those fees paid to enforce certain powers of the public agency for the public good.

user fees and regulatory fees

INTRODUCTION

User fees are for the use of public goods and services, while regulatory fees are those fees paid to enforce certain powers of the public agency for the public good. It is important to have a strong overall understanding of an agency's cost structure before designing such fees, and then to have a dialogue about cost recovery for those fees. NBS guides public agencies through these processes with in-depth analysis and recommendations. Compiling all fees into a Master Fee Schedule is a good goal to have.



COST ALLOCATION PLANS FOR OVERHEAD COSTS

Effective cost recovery policies and procedures must come from an initial understanding of the true costs of providing services. Many local government agencies are aware that indirect administrative costs can be quantified and recovered from various funds, grants, fees, and charges. However, agency staff are often unsure of the best method of assigning these costs and, most importantly how to go about effectively recovering these costs, which can be substantial. In many cases, hundreds of thousands or even millions of dollars are "left on the table," annually, due to ineffective cost recovery.

An Overhead Cost Allocation Plan is an analysis, accompanied by supporting documentation, which distributes the indirect support services costs of an organization to the direct services and activities provided in a fair and equitable manner. In the words of the Office of Management and Budget (OMB):

> *"Indirect costs means those costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assigned to the cost objectives specifically benefitted, without effort disproportionate to the results achieved. To facilitate equitable distribution of indirect expenses to the cost objectives served, it may be necessary to establish a number of pools of indirect costs. Indirect cost pools should be distributed to benefitted cost objectives on bases that will produce an equitable result in consideration of relative benefits derived."* [1]

These costs are typically referred to as "overhead" costs. Most overhead costs are those expenditures that provide indirect support services, such as legislative, managerial, financial, administrative, legal, human resources, technology, facilities maintenance, and risk management activities.

Common uses for the results of a Cost Allocation Plan (CAP) are:

- Application in the cost basis for governmental fees and charges
- A component in the derivation of fully-burdened hourly rates for personnel
- Indirect cost recovery for support provided to Enterprise Fund, Utility Funds, Internal Service Funds or Other Special Revenue Indirect Cost Recovery from external funds such as grants or agreements with other agencies

Preparation of an overhead CAP encompasses a number of analytical steps, including the compilation of an organization's cost data, expression of costs according to the primary types of support services provided, and assignment of a statistical basis for allocating costs. The results of the CAP provide information on the total assigned indirect cost to each program, department, or direct service area of the organization. The assigned costs can be expressed as an annual dollar amount, or as an overhead rate.

Expenditure information is the most significant source of information affecting a CAP's results. Aside from accurately reflecting an organization's indirect costs, the most important step in preparing a CAP is the selection of allocation statistics. These

[1] Office of Management and Budget Code of Federal Regulations, Title 2, Part 200.

data sets should represent the quantified workload of the support service cost allocated or a reasonable and generally accepted means of apportioning benefit for that support service.

When preparing a CAP, either internally, or with a consultant, it is important to first identify and articulate the intended use of the Plan's results. There are two common versions of CAPs prepared by agencies and consulting firms, which are more or less restrictive in their application of important published federal and State guidelines regarding CAPs.

One version, commonly termed as an "OMB A-87" Cost Allocation Plan, complies with the stipulations of *Title 2, Code of Federal Regulations, Part 225, Cost Principles for State, Local, and Indian Tribal Governments* (formerly known as OMB A-87). The primary use of this type of CAP is to obtain reimbursement of overhead costs associated with State and federal grants. Only costs identified as recoverable by Title 2 are considered in the analysis, and the allocation statistics and mathematical method of apportioning costs adheres strictly to Title 2 requirements. Effective Fiscal Year ending December 31, 2015, the Title 2 document will be known as *Part 200 CFR – Code of Federal Regulations*.

A second version, commonly termed as a "Full" CAP, allocates all reasonably identifiable indirect costs to receivers of support services within an organization. All costs, whether acceptable for federal or State reimbursement purposes or not, are included in the results of this type of CAP. Organizations typically employ this type of CAP when its intended use is as an internal budgeting tool to identify full costs for municipal programs and services, for inter-fund indirect cost recovery, or as an application toward cost recovery in fully burdened hourly rates, fees and charges. A Full CAP however still closely follows the general guidelines provided by the published Federal and state documents for CAPs.

The following are important questions and considerations for any agency to address to ensure effectiveness and efficiency regarding overhead cost recovery:

- Does your agency have a current CAP? When was it last updated?
- Is the CAP prepared to identify the maximum indirect cost recovery potential?
- Is the right kind of Cost Allocation Plan in place for its intended use (OMB A-87 v. Full Cost version)?
- Does the Plan need to be prepared in accordance with Federal guidelines?
- Are there additional options for recovery of indirect costs that could be pursued to enhance revenue recovery?
- Are there unintentional subsidies provided to programs and services by not considering their indirect costs, thus causing undue burden on the general fund?

California State laws Proposition 218 and 26 state that local government agencies may not recover more than the "estimated reasonable cost" of providing services. The burden of proof is on the local government agency, so it is an imperative to know your full cost structure. ■

COST RECOVERY AND THE MASTER FEE SCHEDULE

User and regulatory fees represent cost recovery opportunities entirely within a local government agency's control. Fees can be implemented or modified upon public hearing, without further public process or approval. A Proposition 218 process is not required, nor are they covered by the strict guidelines of the Mitigation Fee Act.

There is a difference between a user fee and a regulatory fee. User fees are charges collected for a service provided or required due to the request or voluntary action of an individual/entity, while regulatory fees are those imposed to recover costs associated with a local government agency's power to govern certain activities. Examples of common types of fees charged include: development review; inspection, and approval (planning, engineering, and building); recreational classes and community sports programs; and public safety services, such as fingerprinting or a California Fire Code or hazardous materials permit. In most cases, the only legal limitation on the establishment of user and regulatory fees is that they may not exceed the *estimated* and *reasonable* costs incurred to provide the service for which the fee is charged.

To determine the maximum *estimated* and *reasonable* cost eligible for recovery as a fee, a thorough cost analysis is recommended, and arguably required. These efforts identify the full cost of service eligible for recovery from fees and translate those costs into a fee structure for various programs and services. Determination of the full cost of service is commonly an analytical exercise combining expenditure and organizational information with time-tracking data, time estimates, and/or workload information. The full cost of service should be derived for each service or activity, and include labor, services or supplies, and various types of operational overhead costs.

Additionally, fees should be structured for fairness and equitability in the amount charged to the fee payer. Examples of common fee structures include flat fees, where the fee amount is the same regardless of the size of the project or request; variable fees, where the fee amount is "tiered" or "scaled" according to the size of the project or request; and deposit-based fees where an initial amount is collected from the fee payer, and the amount of time and materials required to accomplish the request are expensed against the deposit. It is important to reflect an economy of scale in the fee amount as a project's size or service request increases. It is also critical that fee structures are properly designed to collect revenue in direct relationship to the cost of the service performed. State law prohibits the structuring of fees that would require one category of fee payers to pay more than their fair share to make up for a discount provided to another category of fee payers receiving the same service. Providing a subsidy to reduce a fee is allowed; however, an alternate revenue source to cover that subsidy must be identified, such as the general fund or grant funding.

Compiling all individual fees across multiple departments or service areas into a single Master Fee Schedule document is also recommended. In this way, all fees are reviewed at the same time,

and both staff and the public have a single point of reference for fee amounts.

In summary, the benefits of re-aligning user fees include:

- Reduction in general fund subsidies
- Realization of revenue for services that have been reduced or eliminated
- Ensuring departments are funded efficiently with adequate staffing
- Continued provision of necessary and basic municipal services

Structuring fees properly, and understanding the full cost of providing services helps management and policy makers allocate available financial resources effectively. Ensuring that fees are calibrated to the costs of providing service provides an opportunity for the municipality to optimize revenue sources, and ensures compliance with State law that requires fees to be set at the estimated and reasonable cost of providing each service. ■

EFFECTIVE COST RECOVERY POLICY FOR FEES

Translating costs of service into either new fee(s) or an updated fee structure often generates significant policy discussion for a municipality, particularly with respect to the optimal use of revenues available for public services. Setting cost recovery goals for fees should involve the discussion and/or development of a Cost Recovery Policy. Important considerations for policy development will include:

- Matching available funding sources to the public and private benefits achieved through an individual service. Public benefits are typically linked to use of general fund resources, while private benefits can be funded by fees charged to the individual requesting services.
- Broad public health and safety goals enhanced or impacted by an increase or decrease in fees for service.
- Cohesiveness or conflict with local government goals or priorities, such as economic development or community wellness.
- Compliance achievement with law, local regulations, and/or local government policy.
- Level of service, service access and affordability to resident citizens, groups, and businesses.

Often a municipality is aware that the full cost of providing a service is higher than the amount or "price" for the service that the local community can bear. Therefore, for the variety of reasons mentioned, municipalities sometimes adopt fee amounts at lower than the full cost amount eligible for recovery.

NBS routinely recommends that each municipality develop a formalized Cost Recovery Policy, unique to their operational and political environment. Such a policy document has a number of advantages, the greatest of which is an agency-specific benchmark for establishing, reviewing, and updating fee amounts in the future. Effective cost recovery policies are best organized by major service area. For example, the policy may indicate that building plan check and permit related services should try to recover 100% of their full cost of providing services (with a few minor exceptions), as property owners make their individual decisions and benefit directly therefrom. Another department, such as fire prevention inspections, might have a recovery goal of 50% to encourage best safety practices. A city may want to promote teen recreation services as a policy goal, and therefore may subsidize such services, or provide them at no user cost at all.

When considering how to "price" their services, decision makers often find it helpful to conduct a survey of fees and fee amounts charged by surrounding agencies. While this is a useful exercise in establishing the "market" or neighboring jurisdictions' rates for various services, comparative surveys can be misleading. Neighboring jurisdictions have varying cost recovery policies and potentially drastically different service delivery systems and practices. Such surveys are best complimented by an overhead cost allocation plan study and a full cost of service (fee) analysis, and should be understood from this perspective. There would be a significant difference between a comparison which looks at the full cost of providing various services across neighboring jurisdictions, to a comparison which compares

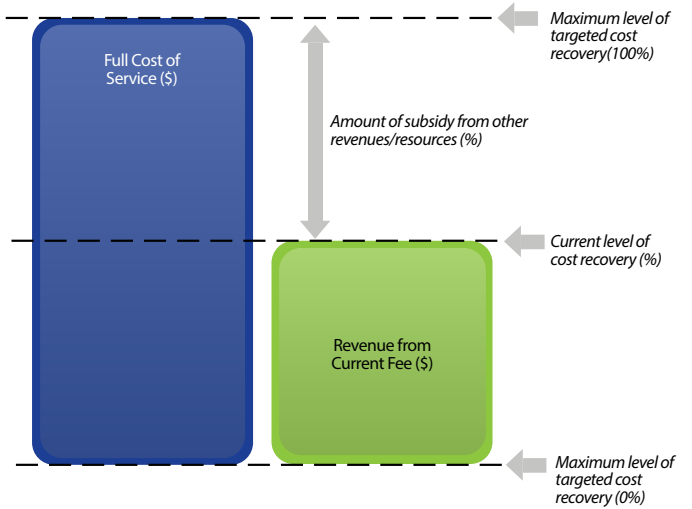
the "prices" set for services as shown on each publicly adopted fee schedule.

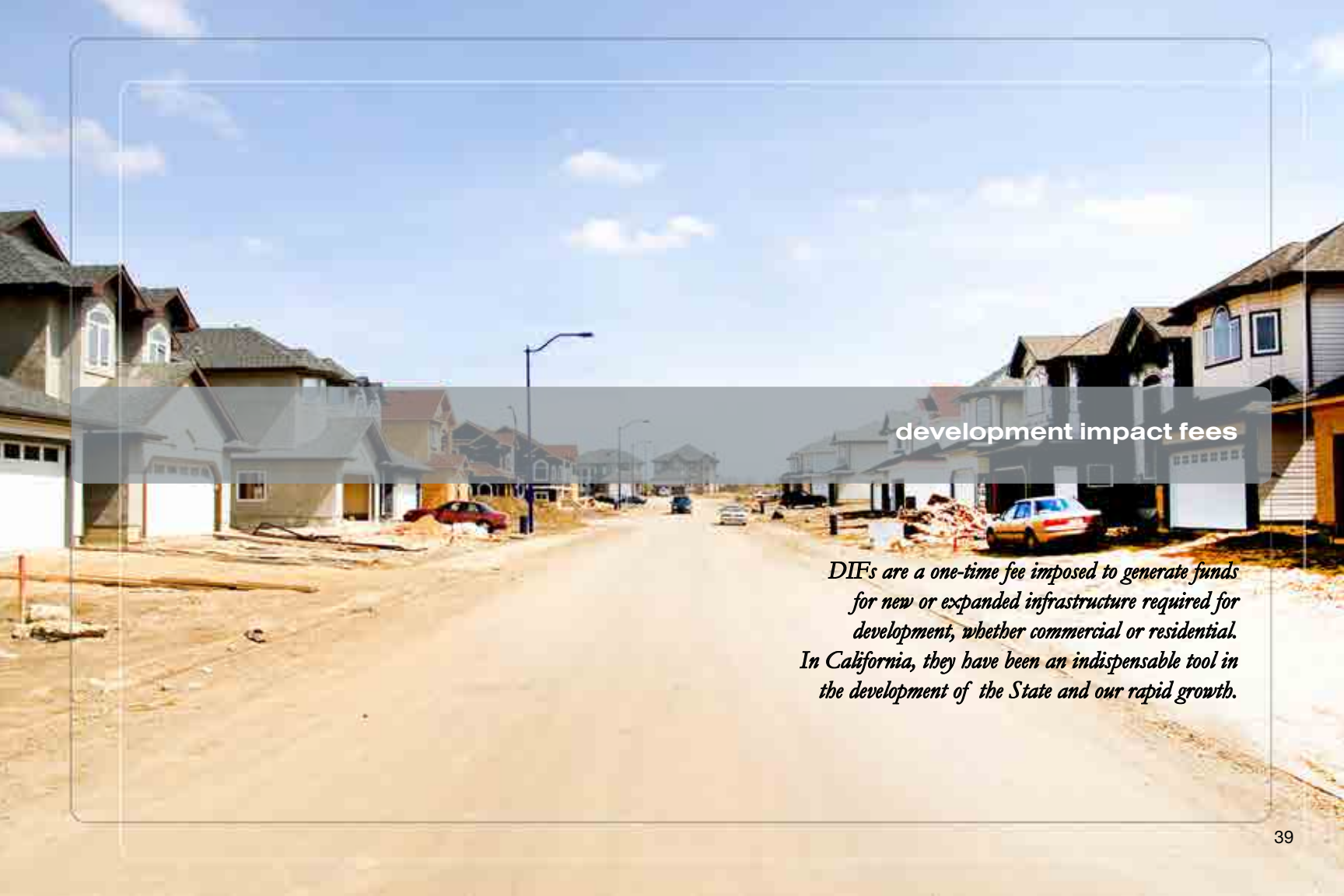
Development of a cost recovery policy is a fundamental component of a community's financial stability plan. While it may be useful to consider pricing for services in similar agencies, the discussion and decision by local policy makers regarding how, why, and to what degree any particular fee-related service should be subsidized is key.

Ultimately, it is important to quantify and communicate the impacts of cost recovery policy decisions when reviewing fees. As shown in Figure 1, when any fee amount is adopted at less than 100% of its full cost, a subsidy is provided by the municipality's other revenue sources. This can amount to a significant dollar amount, and recurs annually. In most cases, the primary impact falls on the general fund. Understanding the impacts of policy decisions can assist in making difficult choices when faced with limited financial resources.

A robust policy discussion of community goals and priorities, bolstered by the basic facts and figures of costs, fee structures, competitive fees, and the ultimate subsidies provided will translate into fully-informed decision making. Such decision making will lead to fiscally-sustainable actions, and hopefully a level of service and service delivery which aligns with the broader community and its desires. ■

Figure 1. Cost vs. Price: Illustration of Cost Recovery in Fee-Setting





development impact fees

DIFs are a one-time fee imposed to generate funds for new or expanded infrastructure required for development, whether commercial or residential. In California, they have been an indispensable tool in the development of the State and our rapid growth.

AN OVERVIEW OF DEVELOPMENT IMPACT FEES

Definition of Impact Fee: a charge to developers for the cost of off-site capital improvements needed to serve new development. Impact fees provide up-front financing for the expansion of public facilities, such as water and sewer treatment facilities or arterial roads, needed to serve a new development.[1]

Development Impact Fees (DIF) are a one-time fee, a type of exaction, imposed to generate funds for the new or expanded infrastructure required because of development, whether commercial or residential. They are generally not to be used for ongoing operations and maintenance needs.

Development impact fees have been a very useful fiscal tool throughout the United States. They are currently in use by local governments across the US, authorized by local police power to protect basic health, safety, and welfare. State-enabling legislation is also in place in 24 of the 50 States.[2] Moreover, their use has increased as exemplified by a survey showing 25% of cities using such impact fees in 2002 versus 39% in 2006.

In California, DIFs have been an indispensable tool in the development of the State and our rapid growth, and they are used extensively today. There are impact fees for a wide-range of items: The more "traditional" infrastructure items financed with impact fees include:

- Water provision facilities
- Sewer treatment facilities
- Storm drain systems
- Streets and arterials
- Parks, trails and open space areas

In addition, the law in California has allowed some more creative uses of DIFs, including:

- Child care facilities
- School facilities
- Public art
- Cemetery infrastructure
- Community centers
- Affordable housing

Note that a utility connection or capacity charge based on the voluntary act of a landowner to connect to a utility system is technically not a DIF, nor is it a tax.

The adoption of impact fees is both a policy and fiscal choice, and discussion and due diligence are required. Conceptually, development is a privilege, not a right, and with that privilege comes a cost. This cost can be paid with a DIF, and that DIF is not a tax. In 1971, the California Supreme Court upheld these general DIF concepts in the case of Associated Home Builders v. City of Walnut Creek. Of course there were other lawsuits and cases heard, but in the end we have the Mitigation Fee Act (Act): California Government Code Section 66000 – 66025.

[1] Robert L. Bland, Professor, University of North Texas.
[2] Larry L. Lawhon, Kansas State University.

This Act codifies some generally-accepted practices and uses of municipal police power in the world of DIF. The most important tenets of this Act are as follows:

- Must show nexus, or connection between impact and regulation
- Rough proportionality, in that costs must be documented and reasonably proportional
- Procedures for adopting and protesting impact fees
- Requires fee to be reasonable and have relationship between fee and actual impact

To establish and maintain a DIF program, a municipality must adhere to the Act's provisions as discussed above. DIF revenues must be strictly segregated and only used for the purposes allowed. An annual report must be filed by the municipality, detailing projects completed and beginning and ending fund balances.

PARKS: The Quimby Act has long been used by municipalities to develop parkland and recreational facilities, as a fee on landowners as a condition of public approval. In 2013, Assembly Bill 1359 loosened certain location requirements, generally allowing land acquisitions in areas other than the landowner's subdivision.

SCHOOLS: Education Code Section 17620 allows for a school district to levy a fee to mitigate the impacts on schools for both residential and commercial development. Government Code Section 65995 dictates a complicated process for levying such fees, which are indexed every two years. The most recent increase in January 2014 increased the Level I fees to $3.36 per square foot for residential and $0.54 for commercial square feet. This process was articulated in Senate Bill 50 back in 1998: The Bill limited the amount of school impact fees which may be charged and set procedures for adopting such fees.

The California Government Code, Section 66001 (excerpt), is as follows:

(a) In any action establishing, increasing, or imposing a fee as a condition of approval of a development project by a local agency, the local agency shall do all of the following:

(1) Identify the purpose of the fee.

(2) Identify the use to which the fee is to be put. If the use is financing public facilities, the facilities shall be identified. That identification may, but need not, be made by reference to a capital improvement plan as specified in Section 65403 or 66002, may be made in applicable general or specific plan requirements, or may be made in other public documents that identify the public facilities for which the fee is charged.

(3) Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.

(4) Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.

(b) In any action imposing a fee as a condition of approval of a development project by a local agency, the local agency shall determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.

(c) Upon receipt of a fee subject to this section, the local agency shall deposit, invest, account for, and expend the fees pursuant to Section 66006.

(d) (1) For the fifth fiscal year following the first deposit into the account or fund, and every five years thereafter, the local agency shall make all of the following findings with respect to that portion of the account or fund remaining unexpended, whether committed or uncommitted:

(A) Identify the purpose to which the fee is to be put.

(B) Demonstrate a reasonable relationship between the fee and the purpose for which it is charged.

(C) Identify all sources and amounts of funding anticipated to complete financing in incomplete improvements identified in paragraph (2) of subdivision (a).

(D) Designate the approximate dates on which the funding referred to in subparagraph (C) is expected to be deposited into the appropriate account or fund. ■

Tuning up a municipality's rates, fees and charges is a basic requirement.

conclusion

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Douglas Ayres, retired City Manager from Sedona, Arizona and author of the book *Consumer Government – via the Art of Full Disclosure*, recently stated in an article for the International City/County Management Association:

"It has become clear that greater diversification must be achieved to resuscitate government revenues. Otherwise, essential services will continue to be reduced and lesser-value activities all but eliminated. [Revitalizing] Old and new revenue streams could be the answer." [1]

It seems clear to us that tuning up a municipality's rates, fees, and charges is a basic requirement, and the addition of thoughtful new charges for desired community services and facilities is often a good idea. We hope that this Compendium will be been useful for your municipality. ■

[1] Ayres, Douglas. ICMA- Public Management. April 2014. "Shoring up Local Government Revenues. It's time to tap overlooked sources." Page 16.

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About NBS

NBS is a private and independent firm that provides consulting and services to local government agencies across California, as well as outside the Golden State. NBS has offices in Davis, Irvine, Temecula and San Francisco.

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