RATE POLICY SUMMARY

Special Workshop of Board of Directors July 18, 2018

Prepared for:

Durham Irrigation District PO Box 89 Durham, CA 95938

Prepared by:



111 Mission Ranch Blvd. Ste. 100 Chico, CA 95926

July 2018

Rate Policy Summary Special Workshop of Board of Directors July 18, 2018

The following represents a summary of rate policy decisions deemed necessary to maintain consistency and fairness of rates within the District:

1. Flat Rate Services - Commercial

There are currently 11 services being charged at a "commercial" rate of \$23.96. Other commercial properties are being charged at the "single-family" flat rate of \$39.93. Both of these service designations (commercial and single-family) are equivalent in size to a ¾" service. The 11 services are:

Tim Dempsey, Dempsey Trust

Albert Amator Trust

9329 Midway

2397 Campbell St. Apt. B

APN 040-224-005

APN 040-223-006

Steven Abshier 2336 Faber Street APN 040-224-006

The policy decision is to eliminate the "commercial" flat rate and to begin charging these properties the "single-family" flat rate of \$39.93. These properties have the option of installing a metered service, at their expense (current monthly rate of \$21.96 plus metered water consumption at \$0.50 per CCF).

Budget Impact: Annual revenue increase of approximately \$575.

These four units are being served by a single 1" meter, are considered one parcel, but are being charged individual flat commercial rates:

Robert Mckee

Robert Mckee

2500 Durham Dayton Hwy #1

2500 Durham Dayton Hwy #4

APN 039-450-002

APN 039-450-002

Robert Mckee

Robert Mckee

2500 Durham Dayton Hwy #2

2500 Durham Dayton Hwy #5

APN 039-450-002

APN 039-450-002

These four units are being served by a single 1" meter, are considered one parcel, but are being charged individual flat commercial rates:

Robert Mckee

Robert Mckee

2500 Durham Dayton Hwy #6

2500 Durham Dayton Hwy #8

APN 039-450-002

APN 039-450-002

Robert Mckee

Robert Mckee

2500 Durham Dayton Hwy #7

2500 Durham Dayton Hwy #9

APN 039-450-002

APN 039-450-002

The first policy decision is to allow multiple services to an individual commercial parcel, to maintain the current service, and to only charge each of these properties for a single flat rate service fee instead of four flat rate service fees. The second policy decision is to

eliminate the "commercial" flat rate and to begin charging each of these properties the "duplex" flat rate of \$49.91 for a 1" service. These properties have the option of installing a metered service, at their expense (current monthly rate of \$27.95 for a 1" service plus metered water consumption at \$0.50 per CCF).

Budget Impact: Annual revenue decrease of approximately \$1,100.

Note, service to a single commercial property is at the discretion of the property owner. A single service to a commercial property with multiple tenants is acceptable and the service will be sized according to the demand calculated by the property owner. If individual tenant services are requested, then each service must be treated the same as any other equivalent service within the District.

2. Flat Rate Services - Single-Family

There are currently 109 services being charged at a "single-family" flat rate of \$39.93. To generate more consistency with metered rates the policy decision is to rename this as the "3/4" Service" flat rate.

Budget Impact: None

3. Flat Rate Services - Multi-Family

There are currently 6 services being charged at various multi-family flat rates Duplex (0), Triplex (4), 4-plex (0), and 5-plex (2). The 6 properties are:

Rosemary Bennett Trust	Abshier Trust
2379 Florida Ln.	2346 Goodspeed
APN 040-240-006	APN 040-224-007
McLaughlin Trust	Nick Tzugaris Trust
9420 Midway	2360 Durham St.
APN 040-210-006	APN 040-215-019
Jack Lapant	Mid Valley Realty
2365 Brown St.	2391 Campbell St.
APN 040-233-033	APN 040-223-007

The policy decision is to rename these as follows:

Existing Designation	ignation Proposed Designation	
Duplex	1"	
Triplex	1-1/2"	
4-Plex	2"	
5-plex	2"	

The current flat rate for a 4-plex is \$99.83 and for a 5-plex is \$124.78. The policy decision is to set the flat rate for a 2" Multi-family service at \$99.83. This rate is proportionally equivalent to a typical metered 2" service with average water consumption. These properties have the option of installing a metered service, at their expense (current monthly rate of \$39.93 plus metered water consumption at \$0.50 per CCF).

Budget Impact: Annual revenue decrease of approximately \$600.

4. Existing Non-Conforming Properties - "Free" Services

There are currently three properties within the District being provided free water service, all are churches. The properties are:

Durham Community United Methodist Church

2404 Durham-Dayton Hwy

APN 040-212-003 & 004

Mid Valley Baptist Church

2584 Durham-Dayton Hwy APN 039-520-040

St. James Catholic Church

2416 Faber Street

APN 040-223-019

This may be deemed to improperly promote religion. The policy decision is to begin charging these properties the minimum monthly flat rate fee for an equivalent ¾" service of \$39.93. These properties have the option of installing a metered service, at their expense (current monthly rate of \$21.96 plus metered water consumption at \$0.50 per CCF). No later than January 1, 2025, they will have to convert to and install a meter at their expense.

Budget Impact: Annual revenue increase of approximately \$1,440.

Note, there is another church that is currently on a metered service:

Assemblies of God Templo 2369 Faber Street

APN 040-231-011

5. Existing Non-Conforming Properties - "Public" Services

There are currently 7 properties within the District identified as "public" facilities. These services are currently being billed at different rates, as follows:

Durham Unified School District (No meter charge, just usage)

Durham Recreation and Park District (No meter charge, just usage)

Veteran's Hall (Flat Rate \$39.93)

Mosquito Abatement (Flat Rate \$39.93)

Post Office (Flat Rate \$39.93)

Library (Metered)

Butte County Fire Department (Metered)

The policy decision is to maintain the status quo. The two properties on flat rate service have the option of installing a metered service, at their expense (current monthly rate of \$21.96 plus metered water consumption at \$0.50 per CCF). No later than January 1, 2025, they will have to convert to and install a meter at their expense.

Budget Impact: None

6. Flat Rate Services - Development

There is currently 1 service being charged at "development" flat rate of \$678.81 (Gorrill Lane). This property consists of 17 single-family homes in a planned development project.

The current rate for flat rate service to a single-family residence is \$39.93. If these were served separately the fee would still be \$678.81.

Cortes Family Trust 9196 Trades Way APN 040-240-077

Cortes Family Trust 2382 Gorrill Ln. APN 040-560-001

Cortes Family Trust 9192 Trades Way APN 040-240-078

Cortes Family Trust 2378 Gorrill Ln. APN 040-560-002 Cortes Family Trust 2370 Gorrill Ln. APN 040-560-003

Cortes Family Trust 2378 Epperson Way APN 040-240-080

> Cortes Family Trust 2366 Gorrill Ln. APN 040-560-004

Shirley Spain Trust 2354 Gorrill Ln. APN 040-540-001

> Cortes Family Trust 2383 Gorrill Ln. APN 040-560-005

Cindy Rice 235 Gorrill Ln. APN 040-540-002

> Adriana Covarrubias 2379 Gorrill Ln. APN 040-560-006

Sky Campbell 2362 Gorrill Ln. APN 040-540-003

> James Wood 9204 Trades Way APN 040-560-007

Maria Montante 2355 Gorrill Ln. APN 040-540-004

> Deborah Neves 2367 Gorrill Ln. APN 040-560-008

Sergio Garcia 2359 Gorrill Ln. APN 040-540-005

Leslie Roberts 2363 Gorrill Ln. APN 040-540-006

There is an eighteenth property located within this private development (xxxxxxxxxx) that is currently being served by an individual water meter. This meter should be removed, and this property should be included with the other seventeen units with the rate adjusted accordingly.

The water system within this private development does not meet DID standards for a public water main.

The policy decision is as follows:

1. Remove the water meter serving xxxxxxxxx and include this property with the other seventeen within this private development.

2. Install a 6" water meter at District expense and commence billing at the metered rate for water use plus Base Rate. Note, the Base Rate for a 6" meter is \$376.94 per month.

Budget Impact: Unknown at this time as it is dependent on actual water use.

7. Flat Rate Services - Multiple Parcels/Multiple Meters

There are currently 5 commercial parcels (Walters) being served by one flat rate (\$39.93) service. And there is one parcel (DID Office Building) being charged at a Triplex Flat Rate of \$74.87. It appears that in all other cases commercial properties are one service per property, either flat rate or metered.

7a. Walters

9379 Midway APN 040-215-017 9387 Midway APN 040-215-020

9383 Midway APN 040-215-016 9389 Midway APN 040-215-013

9385 Midway APN 040-215-018

The policy decision is to maintain the current service but to require individual metered service for any parcel or parcels upon transfer ownership but no later than January 1, 2025, at property owner expense.

Budget Impact: None

7b. DID Office

McLaughlin Living Trust 9420 Midway APN 040-210-006

The Triplex Flat Rate is equivalent to a 1-1/2" service size. This commercial property is currently served by a single 1" service line. *The policy decision is to reclassify this property as a Duplex (1") service and charge accordingly.* This property has the option of installing a metered service or services, at their expense. No later than January 1, 2025, they will have to convert to and install a meter at their expense.

Budget Impact: Annual revenue decrease of approximately \$300.

8. Fire Sprinkler Services

There are currently 2 properties that have fire sprinkler service connections with no fee. These are:

Westgate Hardwoods 9296 Midway APN 040-200-006

Mid Valley Baptist Church 2584 Durham-Dayton Hwy APN 039-520-040

The policy decision is to implement a monthly service charge equal to a metered ¾" service, currently \$21.96. In addition, installation of an metered assembly, similar to PID, will be required on all fire sprinkler services.

Budget Impact: Annual revenue increase of approximately \$530.

9. Vacant Parcels with Water Main Adjacent

Currently this only applies to the Ed McLaughlin subdivision. There are currently 7 undeveloped lots in this subdivision plus an undeveloped remainder parcel of approximately 4.3 acres.

The policy decision is...Mark Adams is going to talk to Ed and get his thoughts on being charged a connection fee. If there is some old "deal" then we need to get it documented.

Budget Impact: Unknown at this time

10. Properties on Non-payment Lock-out

The policy decision is to charge and accrue the normal monthly service charge for metered services (OR metered equivalent for flat rate services) during the lock-out period.

Budget Impact: None

11. Service Size Upgrade

The Faber Street Triplex is an example of a Service Size Upgrade. The property was served by a ¾" service. Now, due to current development, the service size must be upgraded, in this case to a 1-1/2" service as requested by the owner. The policy decision is to charge the difference between the Connection Fee for the current service size and the Connection Fee for the proposed service size.

Budget Impact: Unknown

12. Using Equivalency Factors (EF)

There are several ways to apply EF to water rates and connection fees and there are various EF ratios that can be used. The District first applied EF to connection fees in the 2011 rate increase. The EF ratios used were similar to those used by some other districts for these smaller service sizes, as follows:

Service Size	<u>EF</u>
3/4"	1.0
1"	1.3
$1-\frac{1}{2}$	1.6
2"	2.6

When looking to extend the EF to services larger than 2" it became evident that a different set of ratios would be necessary. It also became evident that different EF would be applied to water rates and connection fees.

Connection Fees

Connection Fees are related to system capacity. Research led to ratios adopted by the American Water Works Association that are based on actual hydraulic capacity of the related pipe sizes, as follows:

Service Size	EF
3/4"	1.00
1"	1.67
1-1/2"	3.33
2"	5.33
3"	10.00
4"	16.67
6"	33.33

The policy decision is to adopt the American Water Works Association Equivalency Factors that are based on hydraulic capacity for computing the System Assets Buy-in portion of the Connection Fee.

Water Rates

The Base Rate portion of the water rate is relative to operational costs not including those listed under Distribution. Approximately 50% of those costs are Administrative in nature and 50% are Capacity related. The Administrative costs are equal to each size of water service while the Capacity are related to service size. The result is EF ratios that are 50% of the ones adopted above for Connection Fees, as follows:

Service Size	<u>EF</u>
3/4"	1.00
1"	1.335
1-1/2"	2.165
2"	3.165
3"	5.50
4"	8.835
6"	17.165

The policy decision is to adopt Equivalency Factors that are based on an approximation of the percentage of total expenses related to system capacity for computing the Base Rate portion of monthly fees.

13. Connection Fees Using Equivalency Factors

Connection Fees consist of three components, Cost of System Assets Buy-in, Cost of System Capacity Buy-in, and Cost of Actual Reimbursable Expenses. The Cost of Systems Assets Buy-in and the Cost of System Capacity Buy-in are both directly proportional to the impact on the system as related to water demand potential. We account for this by using Equivalency Factors. In 2011 the DID Board adopted Connection Fees based on the 2009 value of system assets and using the first set of EF ratios listed above. Also, at that time the Cost of System Capacity Buy-in was set at \$5,000 for a 34" service. The policy decision is to amend the current Board adopted Connection Fee structure using:

- 1. The updated Cost of System Assets Buy-in based on the 2016 Statement of Net Assets
- 2. The AWWA Equivalency Factors.

3. Adjust the Cost of System Capacity Buy-in for a ¾" service from \$5,000 to \$4,000, with all other service sizes adjusted accordingly.

In addition, the Connection Fee schedule will be extended to include fees for 3", 4" and 6" service sizes. See attached Connection Fee Analysis.

Budget Impact: Unknown at this time

14. Rates Using Equivalency Factors

The policy decision is to implement the equivalency factors identified above and apply them to our flat and metered rates, phasing them in at 25% per year for four years during any adopted rate increases. See attached Rate Comparison Using Equivalency Factors.

In addition, the Rate Schedule will be extended to include fees for 3", 4" and 6" service sizes.

Budget Impact: If implemented now there would be an annual revenue <u>increase</u> of approximately \$8,000 from metered customers and \$1,200 from flat rate customers.

15. Conversion from Flat Rate Service to Metered Service

The policy decision is to maintain the current practice of requiring Conversion to Metered Service at time of ownership change, cost to be borne by the property owner. Additional policy may be implemented at a future date.

Budget Impact: None

Exhibits

Exhibit A: Connection Fee Analysis July 18, 2018

Exhibit B: Current Rate Comparison Using Base Rate Equivalency Factors July 18, 2018

DURHAM IRRIGATION DISTRICT RATE POLICY SUMMARY - EXHIBIT A

CONNECTION FEE ANALYSIS July 18, 2018

	DURHAM IRRIGATION DISTRICT			
Meter Size	Reimbursable Costs	Cost of System Assets Buy-in	Cost of System Capacity Buy-in	Total Connection Fee
3/4"	\$500	\$1,310	\$4,000	\$5,810
1"	\$750	\$2,187	\$6,680	\$9,617
1-1/2"	\$1,500	\$4,361	\$13,320	\$19,181
2"	\$2,500	\$6,980	\$21,320	\$30,800
3"	\$3,500	\$13,096	\$40,000	\$56,596
4"	\$4,500	\$21,831	\$66,680	\$93,011
6"	\$6,500	\$43,649	\$133,320	\$183,469

\$863,032 = Total Assets from 2016 Statement of Net Assets

659 = Current Equivalent Customers

\$1,310 = Average Net Equity to Determine Cost of System Buy-in

	Current Equivalent Customer Analysis			
Connection Size	Number of Connections	Equivalency Factor *	Equivalent Customers	
3/4"	286	1.00	286	
1"	138	1.67	230	
1-1/2"	22	3.33	73	
2"	13	5.33	69	
3"	0	10.00	0	
4**	0	16.67	0	
6"	0	33.33	0	
	Total =		659.0	

^{*} American Water Works Association hydraulic capacity factors.

RATE COMPARISON				
Meter Size	Thermalito	Paradise	DID CURRENT	DID PROPOSED
3/4"	\$8,872.78	\$4,376.00	\$6,723	\$5,810
1"	\$12,211.01	\$7,293.00	\$8,840	\$9,617
1-1/2"	\$18,027.83	\$14,587.00	\$13,857	\$19,181
2"	\$38,730.83	\$23,339.00	\$32,720	\$30,800
3"	\$61,889.46	\$43,760.00		\$56,596
4"	\$94,205.09	\$72,993.00		\$93,011
6"	\$158.157.43			\$183,469

DURHAM IRRIGATION DISTRICT RATE POLICY SUMMARY - EXHIBIT B

Current Rate Comparison Using Base Rate Equivalency Factors July 18, 2018

	METERE	D SERVICES	
Meter Size	Current Rate	Equivalency Factor	Proposed Rate
3/4"	\$21.96	1.000	\$21.96
1"	\$27.95	1.335	\$29.32
1-1/2"	\$33.94	2.165	\$47.54
2"	\$39.93	3.165	\$69.50
3"		5.500	\$120.78
4 ^a	8.558.	8.835	\$194.02
6"		17.165	\$376.94
	FLAT RA	TE SERVICES	
Meter Size	Current Rate	Equivalency Factor	Proposed Rate
Commercial	\$23.96	1.000	\$39.93
Single-Family	\$39.93	1.000	\$39.93
Duplex	\$49.91	1.335	\$53.31
Triplex	\$74.87	2.165	\$86.45
4-Plex	\$99.83	3.165	\$126.38
5-Plex	\$124.78	3.165	\$126.38