

City Council Water Committee

Meeting Agenda

Tuesday, September 15, 2015

COUNCIL CHAMBERS, CITY HALL, 2ND FLOOR

5:30-6:30 pm

- I. Call to Order
- II. Roll Call
- III. Approval of Agenda
- IV. Public Comments on Items Not on the Agenda
- V. Tap Fees (Presentation with supporting materials)
 - General
 - Live / Work
- VI. Superior Interconnect Construction/IGA Discussion
 - IGA Discussion (Proposed City Council Information Attached)
 - Construction Cost/Schedule Discussion (Proposed City Council Information Attached)
- VII. Eldorado Intake Reconstruction Update (Discussion only, no documentation)
- VIII. Agenda Items and Date for Next Meeting
- IX. Adjourn 6:30 pm

Live Work Tap Fee Discussion

Presented by Public Works & Utilities
Water Committee, September 15, 2015



Recent years have been a Tap Fee Evolution

- 2012 Struggles with Expectations Surrounding Tap Fee Costs (Many confused customers)
- 2013 Review of Tap Fee Equivalents, Multifamily with and without Separate Irrigation, Internal Multifamily, Townhouse, and Senior Living Units. (Attached Memo)
- 2013 Restructuring of Tap Fee Form. (Attached)
- 2013 Development of Tap Fee Spreadsheets for Water and Sewer to better track Components. (Attached)
- 2013/2014 Bring Clarity to Tap Credits around reuse of existing taps in redevelopment.
- 2015 Live Work, Possible Increases for Water based upon CBT and Wastewater based upon actual new WWTP Construction Costs.

Tap Fee Handout (Up to 2013)

Water

NOTICE

TAP FEE TABLE ESTABLISHED BY THE CITY MANAGER IN ACCORDANCE WITH SECTION 13 OF THE LOUISVILLE MUNICIPAL CODE

Pursuant to Section 13.12.020 of the Louisville Municipal Code delegating to the City Manager the authority to establish City water tap fees on a quarterly basis, effective, July 1, 2010 the table of tap fees shall be as follows:

<u>Fee Calculations</u> <u>Deman (gpm)</u>	<u>Tap Size</u>	<u>Tap Fee</u>
0-22	¾"	\$24,140
23-45	1"	\$42,910
46-80	1 ½ "	\$96,540
81-140	2"	\$171,630
141-280	3"	\$386,160
281-500	4"	\$693,400

For taps larger than 4 inches, the tap fee and other terms and conditions of the issuance of the tap shall be established by written agreement approved by the City Council.

A single-family sewer tap fee for residential properties is \$3221.00.

The posted table of city water tap fees is to be paid for the 3rd calendar quarter of 2010.

Sewer

NOTICE

TAP FEE ESTABLISHED BY THE CITY MANAGER IN ACCORDANCE WITH SECTION 13 OF THE LOUISVILLE MUNICIPAL CODE

Pursuant to Section 13.24.030 of the Louisville Municipal Code delegating the City Manager the authority to establish tap fees on a quarterly basis, effective April 1, 2011 the tap fees shall be as follows:

A single-family sewer tap fee for residential properties is \$3280.00.

The above tap fee for single-family dwelling, including mobile homes is to be paid for the _____ calendar quarter of 2011.

Tap Fee Handout (2013 - Present)

City of Louisville
TAP FEE CALCULATION FORM
 WATER, SEWER, AND IRRIGATION TAP FEES ESTABLISHED PURSUANT TO THE LOUISVILLE MUNICIPAL CODE, DELEGATING AUTHORITY TO THE CITY MANAGER TO ESTABLISH TAP FEES ON A QUARTERLY BASIS. EFFECTIVE JUNE 26, 2014.

Utilize this form to determine Water, Sewer, and Irrigation Tap Fees by completing the shaded cells. For Multifamily, Non-Residential, and Other Uses, please fill out a separate sheet for each premises (separate building). Additional information on Tap Fees may be found in the Louisville Municipal Code. For taps larger than 4 inches, the tap fee and other terms and conditions of the issuance of the tap shall be established by written agreement approved by the Louisville City Council.

Project Location: _____ Submission: _____ Filing: _____ Block: _____ Lot: _____
 Property Owner: _____ Owner's Address (if different): _____
 Owner's Email Address: _____ Owner's Phone #: _____
 Use Contact Name (if different): _____ Contact Phone #: _____

WATER TAP FEES

1) Single-Family Residential Tap Fee (single-family, duplexes and mobile homes)
INSTRUCTIONS: Utilize this section to determine the water tap fee for the proposed residential development. Insert the number of single-family, duplex and/or mobile home units in the appropriate meter size category to determine the tap fee. Each unit of a duplex and each mobile home is considered to be equivalent to a single-family unit.

3/4" meter: _____ units X \$25,900 = \$ _____
 1" meter: _____ units X \$46,200 = \$ _____

5 or more Duplex Units: separate irrigation tap required, provide Plumbing Permit number for the separate irrigation tap: _____
 No. of Units: _____ X \$1,885 = \$ _____ (per irrigation credit)
 Duplex premises with five or more units are required to obtain a separate irrigation tap. The separate irrigation tap allows for a credit to be applied to the per unit tap fee. The irrigation credit is calculated as the total number of units multiplied by the credit.

Total Single-Family Tap Fee = \$ _____ Total Single-Family Tap Fee = Total Cost minus total irrigation credit

2) Multifamily Residential Tap Fee (townhouses, multifamily and senior independent living, as defined in Louisville Municipal Code)
INSTRUCTIONS: Provide future count and meter size from Building Safety Division Form. Utilize this section to determine the water tap fee for the proposed residential development. Insert the number of Townhouses, Multifamily or Senior Independent Units and multiply the number of units by the associated tap fee to determine the total tap fee.

Future Count: _____ Meter Size: _____
 Townhouse: _____ units X \$20,700 = \$ _____
 Multifamily: _____ units X \$15,040 = \$ _____
 Senior: _____ units X \$ 7,770 = \$ _____
 Total Cost = \$ _____
 Sum the total for each unit type, which will be the total tap fee for these units.

5 or more Townhouse or Multifamily Units: separate irrigation tap required, provide Plumbing Permit number for the separate irrigation tap: _____
 No. of Units: _____ X \$1,885 = \$ _____ (per irrigation credit)
 Townhouse and Multifamily premises with five or more units are required to obtain a separate irrigation tap. The separate irrigation tap allows for a credit to be applied to the per unit tap fee. The irrigation credit is calculated as the total number of units multiplied by the credit. Senior Independent Living Units are not eligible for the irrigation credit.

Total Multifamily Tap Fee = \$ _____ Total Multifamily Tap Fee = Total Cost minus total irrigation credit

CONTINUE ON THE OTHER SIDE

2) Non-Residential and Other Use Tap Fee (Non-Residential and Other Uses include: commercial, industrial, hotel, institutional, pools, spas, water features)

INSTRUCTIONS: Note 1: If irrigation is served by the same tap, provide irrigation design showing instantaneous demand for each zone. Insert maximum instantaneous demand into "Irrigation Demand" cell.

Intermittent Demand (gpm) _____
 Irrigation Demand (gpm) (Note 1) _____
 Total Demand (gpm) (larger of intermittent or irrigation demand) _____
 Water flow (gpm) (from Table 1) (smaller of total demand or water flow) _____

INSTRUCTIONS: Note 1: If irrigation is served by the same tap, provide irrigation design showing instantaneous demand for each zone. Insert maximum instantaneous demand into "Irrigation Demand" cell.

Appliances to provide annual indoor and other usage demand, if applicable, calculated by a licensed engineer or architect. Base Tap Fee (line 6) corresponds to the tap associated with the Demand Budget that satisfies the majority of Total Demand. Additional Tap Fee is calculated by dividing the difference between Total Demand and the selected Demand Budget by 17,000, then multiplying by \$25,900. Add the Base Tap Fee and Additional Tap Fee to derive the Total Tap Fee.

Table 1

Meter Size	Area (sq ft)	Rate
3/4"	0-1,000	\$25,900
1"	1,001-2,000	\$46,200
1 1/2"	2,001-3,000	\$71,500
2"	3,001-4,000	\$96,800
2 1/2"	4,001-5,000	\$122,100
3"	5,001-6,000	\$147,400
3 1/2"	6,001-7,000	\$172,700
4"	7,001-8,000	\$198,000
4 1/2"	8,001-9,000	\$223,300
5"	9,001-10,000	\$248,600

Table 2

Demand (gallons)	Rate (\$)
0-1,000	\$25,900
1,001-2,000	\$46,200
2,001-3,000	\$71,500
3,001-4,000	\$96,800
4,001-5,000	\$122,100
5,001-6,000	\$147,400
6,001-7,000	\$172,700
7,001-8,000	\$198,000
8,001-9,000	\$223,300
9,001-10,000	\$248,600

INSTRUCTIONS: Note 1: If irrigation is served by the same tap, provide irrigation design showing instantaneous demand for each zone. Insert maximum instantaneous demand into "Irrigation Demand" cell.

Total Irrigated Area (sq ft) _____ Irrigation Demand (gallons/year) _____ Irrigation Tap Fee _____
 X 18 gallons/sq ft = _____
 Total Non-Residential and Other Use Tap Fee = \$ _____ (sum of Indoor Tap Fee and Irrigation Tap Fee)

IRRIGATION TAP FEES

3) Irrigation Tap Fee (for separate irrigation taps)

INSTRUCTIONS: Note 1: Provide irrigation design showing instantaneous demand for each zone. Insert maximum instantaneous demand for "Irrigation Demand".

This section is to be used for Duplex, Multifamily, Townhouse, and Non-Residential developments that are utilizing a separate tap for irrigation. Total irrigation Tap Fee is equal to the tap fee associated with Total Irrigation Demand and Drop Taps. A drop irrigation tap is allowed for isolated locations, such as a roadway median. A drop tap requires a separate 3/4" meter, must serve a low area less than 4,000 square feet or a demand of 5 gallons per minute or less. Any area irrigated with a drop irrigation tap shall not be included in the Total Irrigated Area.

Demand (gpm) (Note 1) _____
 Meter Size (from Table 1) _____
 Total Irrigated Area (sq ft) _____
 Irrigation Demand (gallons/year) _____
 Irrigation Tap Fee _____
 Total Irrigation Tap Fee = \$ _____ (sum of Irrigation Tap Fee and Drop Tap Fee)

Number of Drop Taps _____ X \$6,475 = \$ _____
 Drop Tap Fee _____

SEWER TAP FEES

4) Sewer Tap Fee

INSTRUCTIONS: Utilize this section to determine the sewer tap fee for the proposed development. Insert the number of Single-Family, Townhouse, Multifamily, or Senior Independent Units and multiply the number of units by the associated tap fee to determine the total tap fee. Single-Family category includes each mobile home and each unit in a duplex. Commercial tap fees are charged based on water meter size.

Single-Family: _____ units X \$4,500 = \$ _____
 Townhouse: _____ units X \$3,600 = \$ _____
 Multifamily: _____ units X \$5,600 = \$ _____
 Senior: _____ units X \$ 2,700 = \$ _____

Commercial Sewer Tap Fees

3/4" Meter: _____ X \$4,400 = \$ _____
 1" Meter: _____ X \$7,800 = \$ _____
 1 1/2" Meter: _____ X \$17,600 = \$ _____
 2" Meter: _____ X \$31,300 = \$ _____
 3" Meter: _____ X \$70,400 = \$ _____
 4" Meter: _____ X \$125,000 = \$ _____

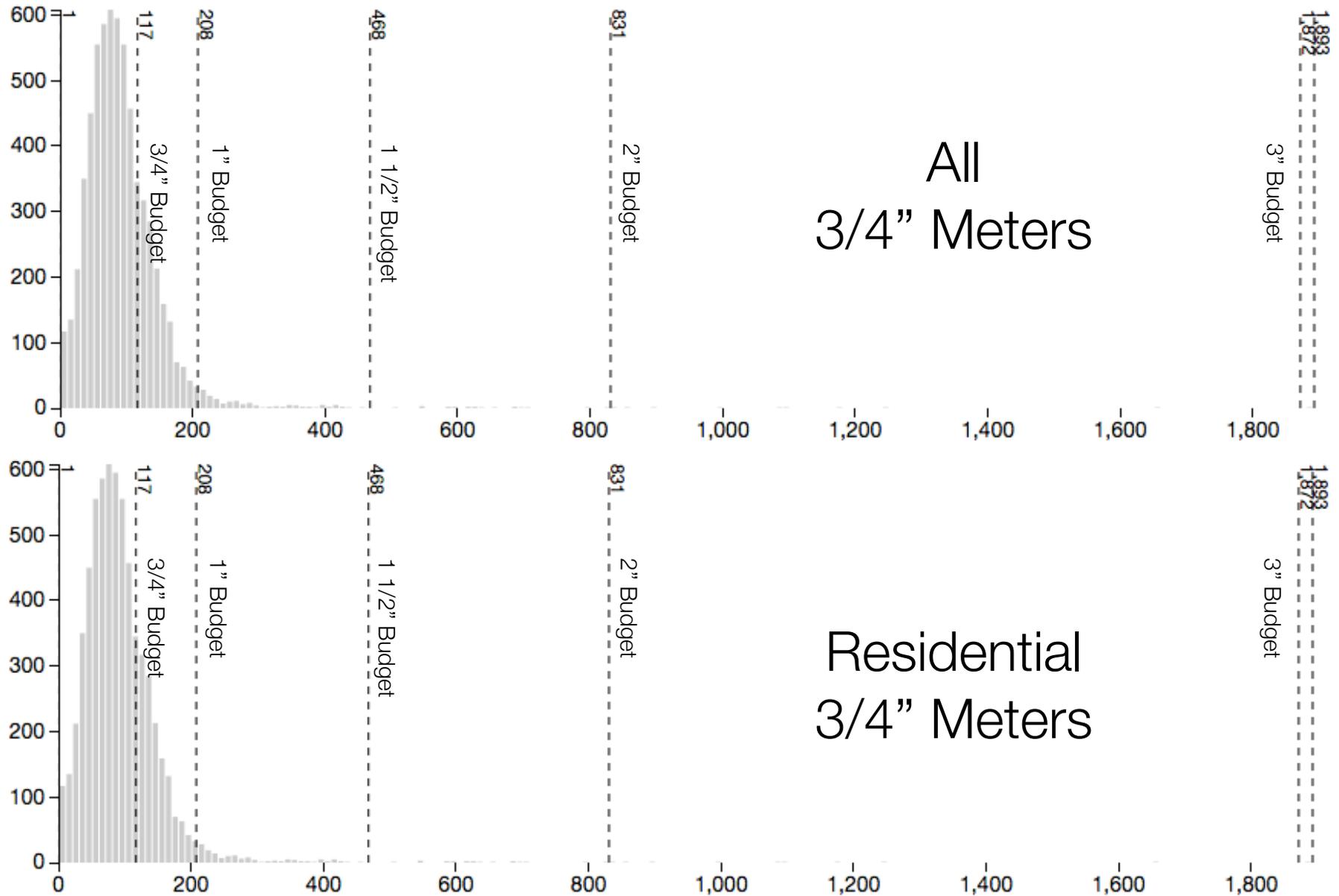
Total Sewer Tap Fee = \$ _____

CITY OF LOUISVILLE BOARD OF WATER AND SEWER SERVICES

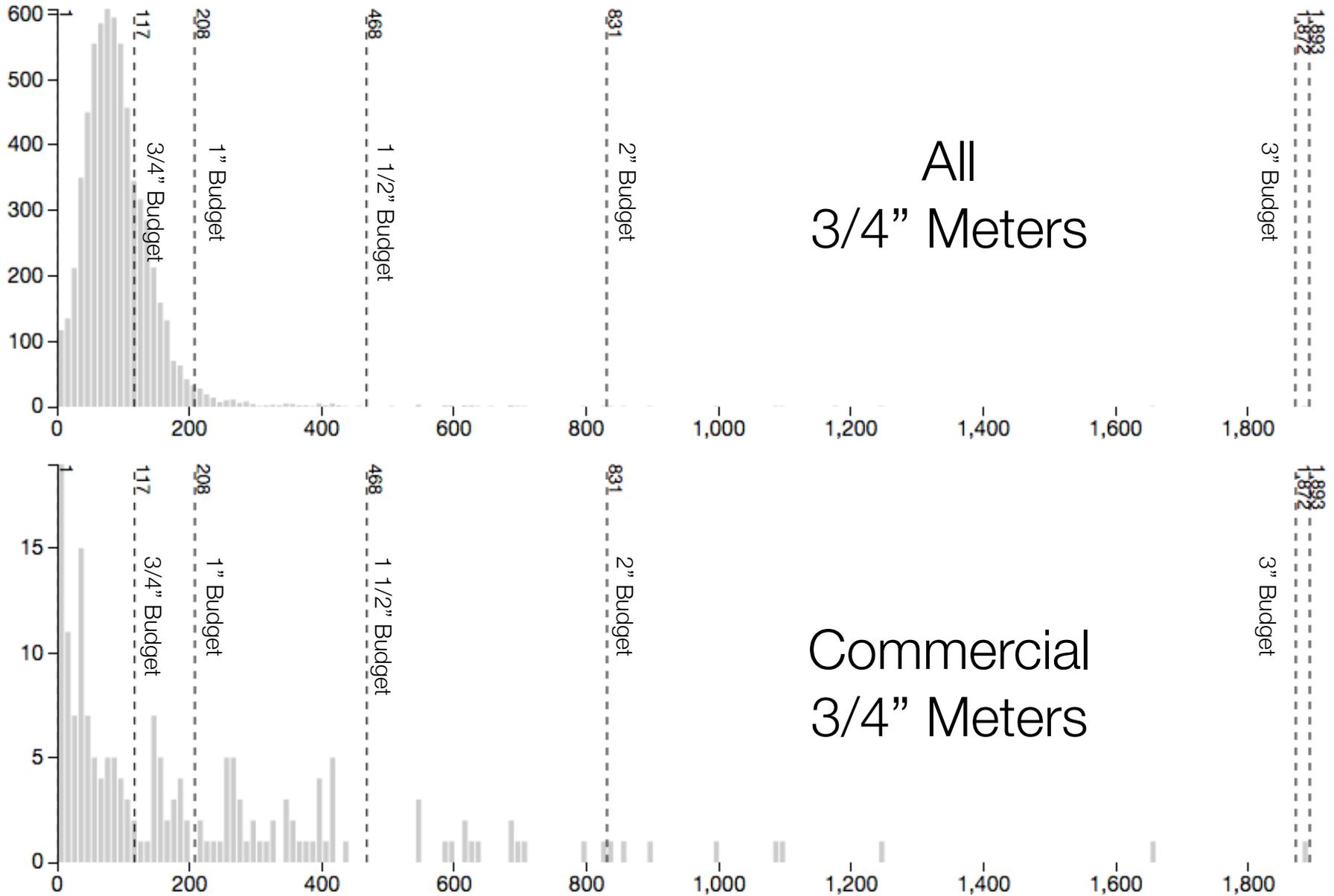
Form Reviewed By: _____ Date: _____
 Payment Received by: _____ Date: _____

* Actual form to be handed out at meeting

3/4" Meter Usage (All Meters vs Residential)

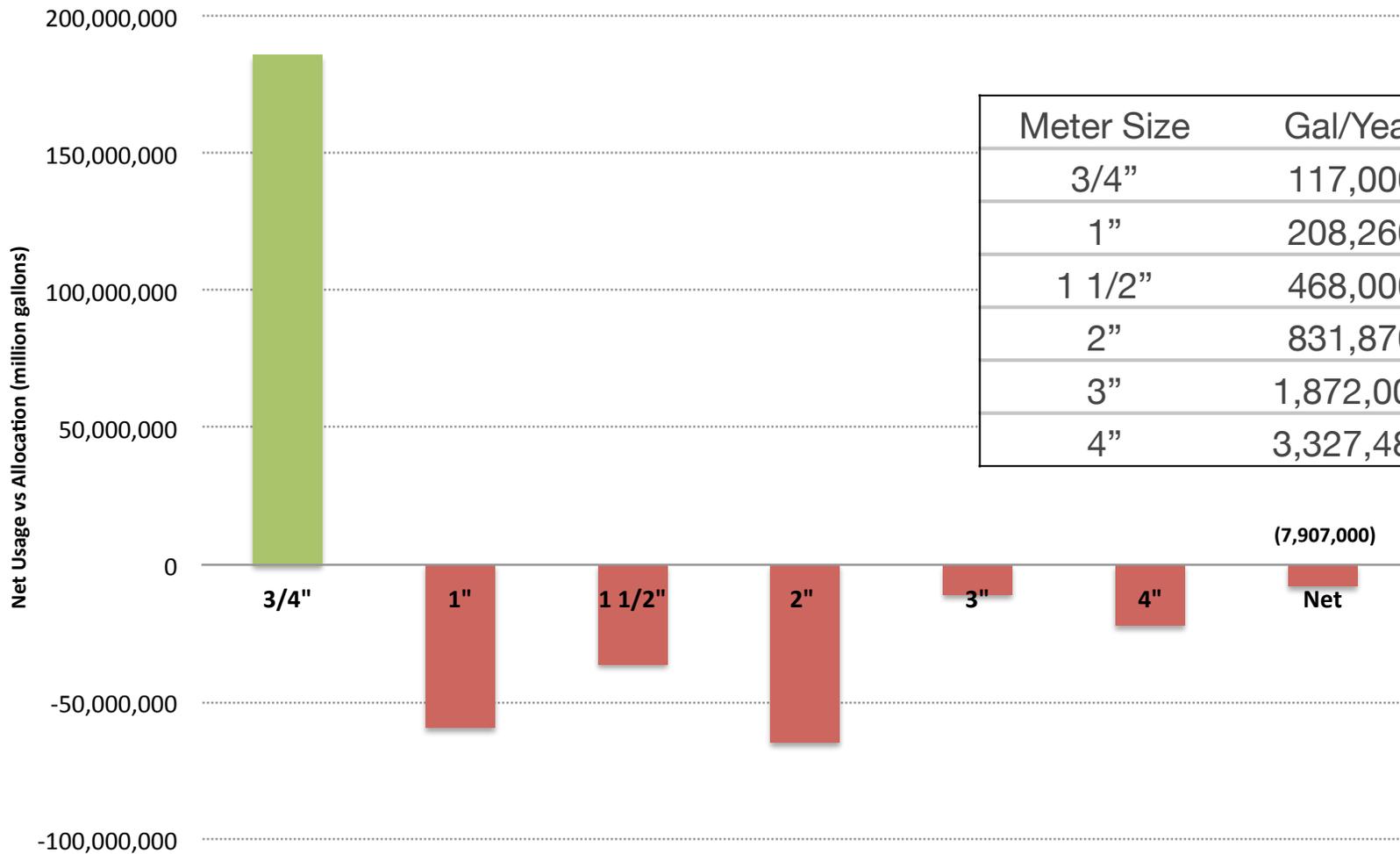


3/4" Meter Usage (All Meters vs Commercial)



A Sample Year Actual Usage vs Tap Allocation

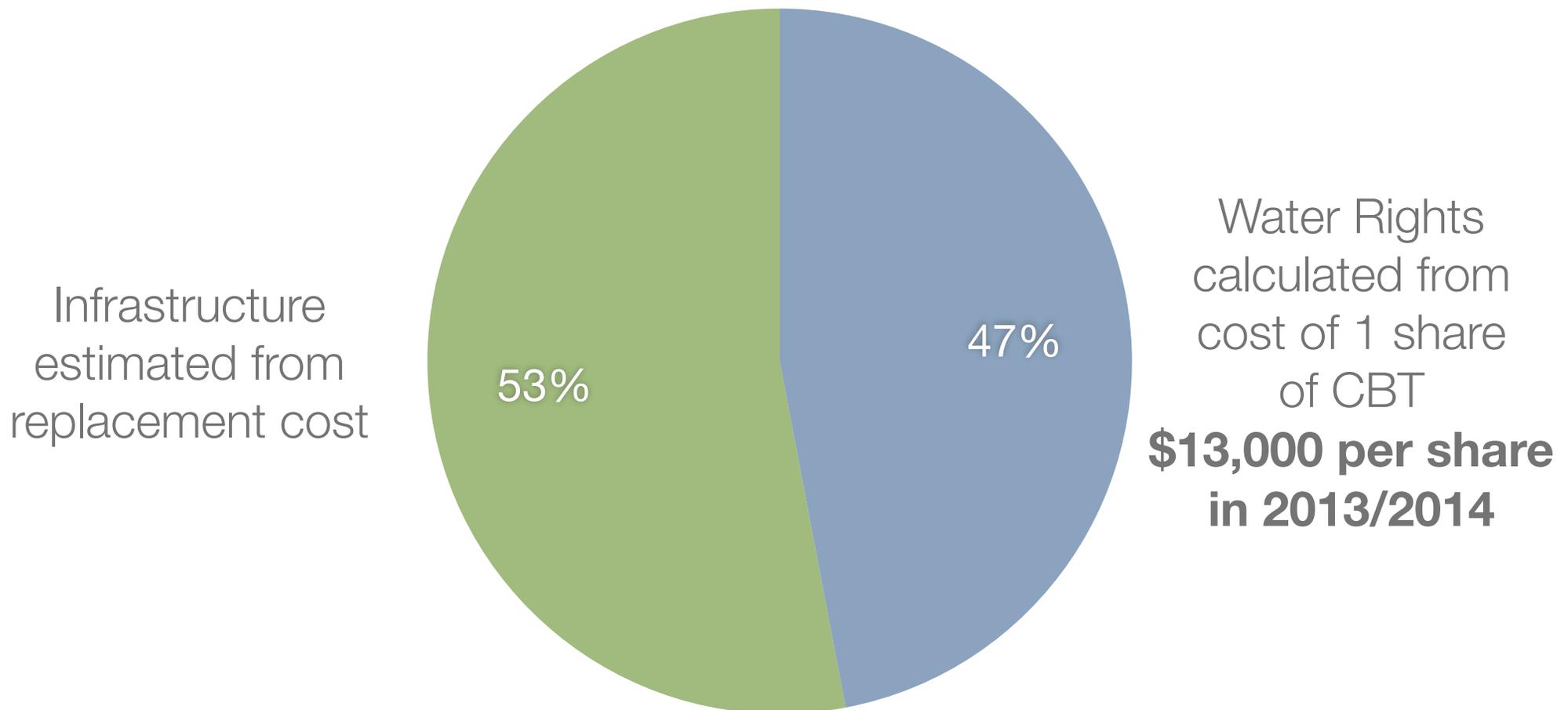
**Allocated Tap Usage vs Actual
(million gallons)**



\$25,900 Water Tap Fee Cost Breakout

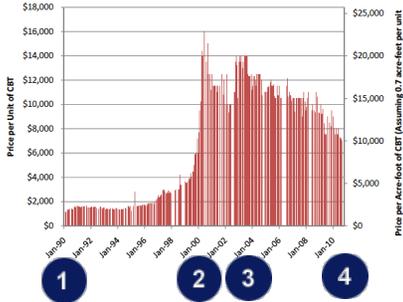
● Water Rights

● Infrastructure

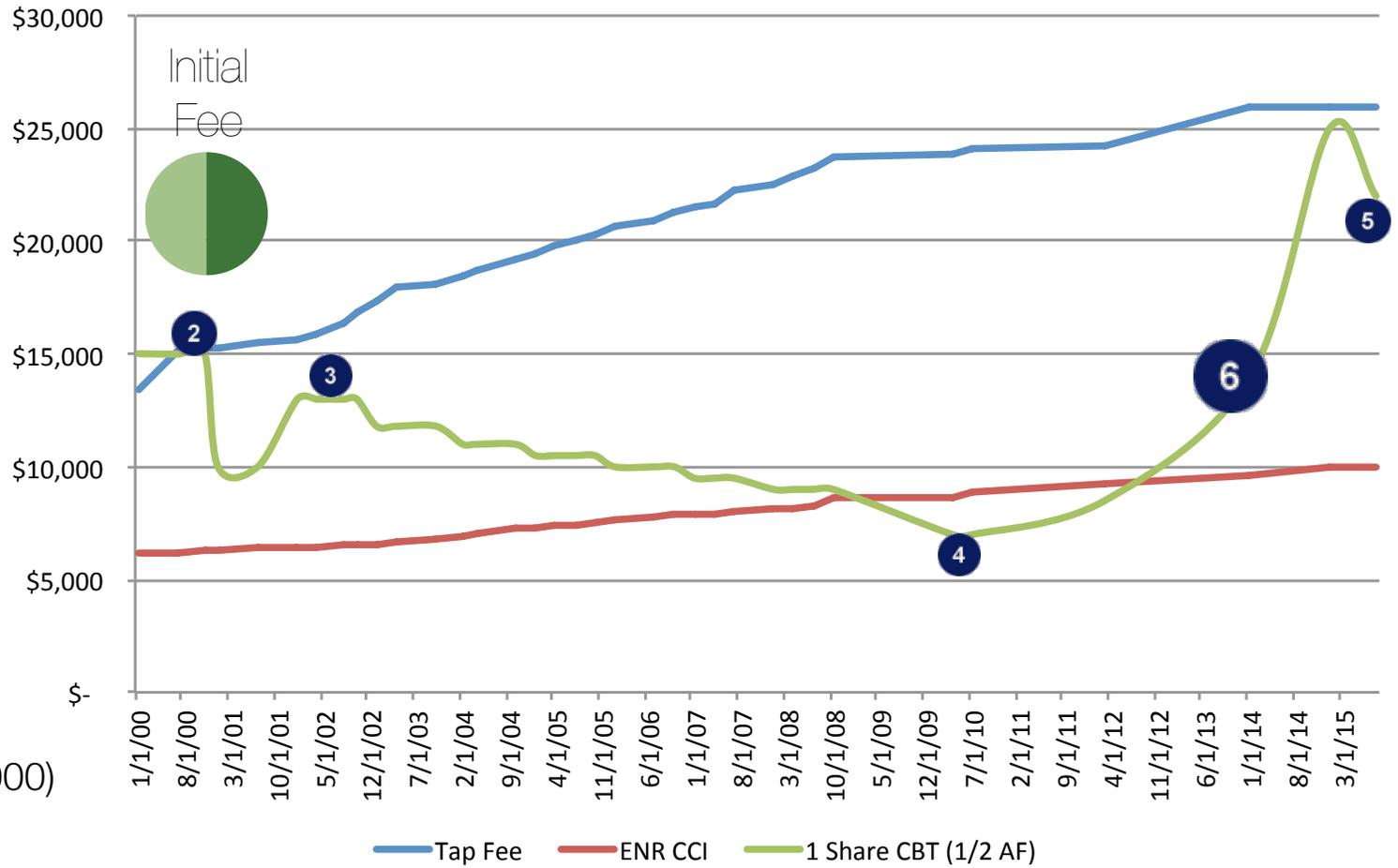


Historical Tap Fee Infrastructure Cost History

Historical Price of Colorado Big Thompson (CBT) Units



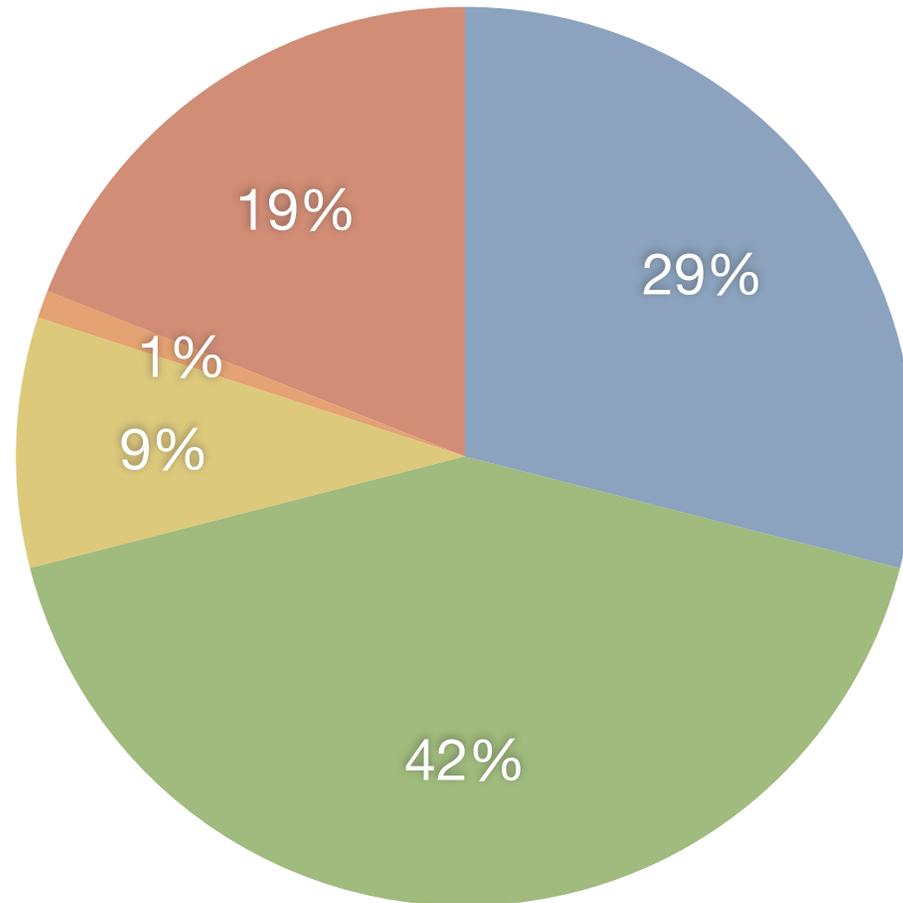
	Year	\$/Share
1	1990	\$1,600
2	2000	\$16,000
3	2003	\$14,000
4	2010	\$7,000
5	2015	\$22,000
6	Tap Fee Basis (~\$13,000)	



— Tap Fee — ENR CCI — 1 Share CBT (1/2 AF)

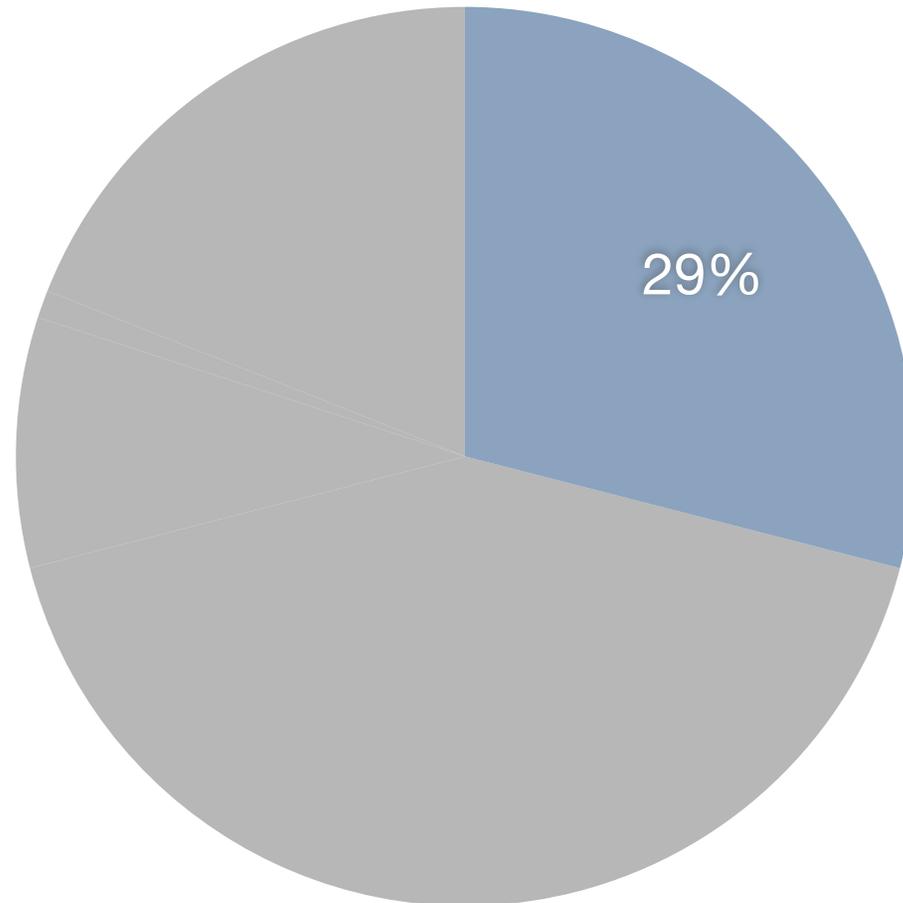
Tap Fee Infrastructure Cost Breakout

- Distribution Pipes
- WTP's
- Distribution Storage
- Distribution Pumping
- Raw Water Infrastructure



Geographical Tap Fee Infrastructure Differences

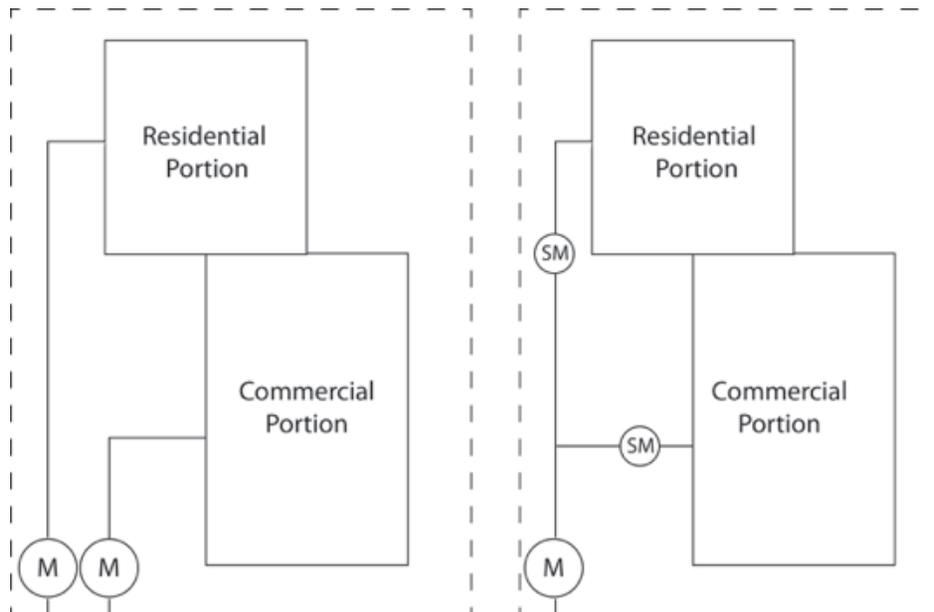
- Distribution Pipes
- WTP's
- Distribution Storage
- Distribution Pumping
- Raw Water Infrastructure



Scenario Discussion

Live Work Scenarios	New 3/4"	New 1"	New Sewer	Service Lines	Total	Difference
Existing Location 3/4" Tap w/o Live Work Tap	\$ 25,900	\$ -	\$ 4,500	\$ 21,000	\$ 51,400	
Existing Location 3/4" Tap w/ Live Work Tap	\$ 25,900	\$ -	\$ 4,500	\$ 9,000	\$ 39,400	\$ 12,000
Existing Location 1" Tap w/o Live Work Tap	\$ 25,900	\$ -	\$ 4,500	\$ 21,000	\$ 51,400	
Existing Location 1" Tap w/ Live Work Tap	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51,400
New Location w/o Live Work Tap	\$ 51,800	\$ -	\$ 9,000	\$ 42,000	\$102,800	
New Location w/ Live Work Tap	\$ -	\$ 46,200	\$ 7,900	\$ 21,000	\$ 75,100	\$ 27,700

Note: By Ordinance existing locations receive a credit for existing taps in the amount of the original tap cash purchase.



Tap Size	Allocated Water Budget (gallons)	Cost of Distribution Pipes in Tap Fee
3/4"	117,000	\$3,718
1"	208,260	\$6,619
2 x 3/4"	234,000	\$7,436

* This discussion is specific to one time tap fees. Monthly Billing is proposed to be Residential and Commercial not a new distinct customer class.

To: Water Committee
CC: Malcolm Fleming, City Manager
From: Kurt Kowar, P.E., Director of Public Works
Date: 3/7/13
Re: Multifamily and Landscape Tap Fee Analysis

Background

The City of Louisville charges a Water Tap Fee under Municipal Code, Section 13.12.040.A.3, that is intended for the growth related capital expansion costs for water resources, water supply, water storage, transmission, treatment and distribution facilities, related costs and factors. The Water Tap Fee is established by and different customer classes are compared to the use of a single-family detached residential home or Single Family Equivalent (SFE). The current SFE or ¾" sized meter water tap fee is \$24,140.

The water tap fee was last updated in 2010 and is by code to be reviewed quarterly. A utility rate study currently in the early initiation stages and scheduled for completion in the 4th quarter of 2013 will thoroughly review the tap fee cost components and update existing tap fees as necessary.

During the 2011 and 2012 calendar year, inquiries were received from various developers working within the City regarding multifamily tap fees and the cost associated with this type of development within the City. Multifamily tap fees are charged 100% percent (\$24,140) for the first unit and then a minimum of 60% (\$14,484) for each apartment unit thereafter.

In November of 2011 (RMCS) and February of 2012 (Confluence) letters were submitted to City Staff with cost comparisons for multifamily development between Louisville and various other Front Range municipalities. These letters were reviewed by Staff and it was determined that regardless of the cost differences, the letters were not all inclusive in their cost comparisons for various water fee components or had selected municipalities with significantly different cost structures and water resources than Louisville. Neither submission nor associate inquiry was deemed to provide enough due diligence or specific analysis to support a change in the City's tap fee methodology.



In April of 2012, RMCS submitted a letter and background information requesting consideration to reduce the equivalent of a multifamily unit (MFU) from 0.60 SFE to 0.30 SFE. The substantiation for this request was that Louisville did not have a residential housing component that catered to young professional dual income families and senior or empty nester families. In addition, it was also stated that multifamily units do not have outdoor uses such as turf areas, pressure washing, and typical maintenance that may be associated with a single family residential home. Given this additional specific data, City Staff performed additional research to validate or disprove the new information.

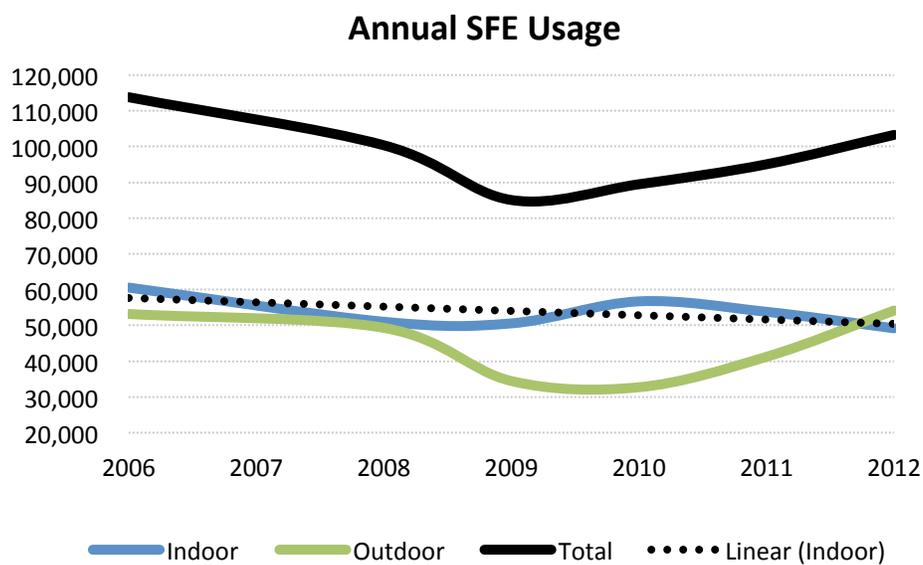
Analysis

In an effort to understand each class of customer (MFU and SFE) and the components of usage of that customer, Staff compared multifamily and single family residential indoor and outdoor water consumption. Analysis was based upon actual meter data from the City’s utility billing system, US 2011 Census estimation of 2.43 people per household for Louisville, and the National Multi Housing Council estimation of 1.9 people per multifamily unit. Data from the utility billing system was for the years 2006 – 2012, excluding 2007 due to incomplete data.

Overall Consumption Review

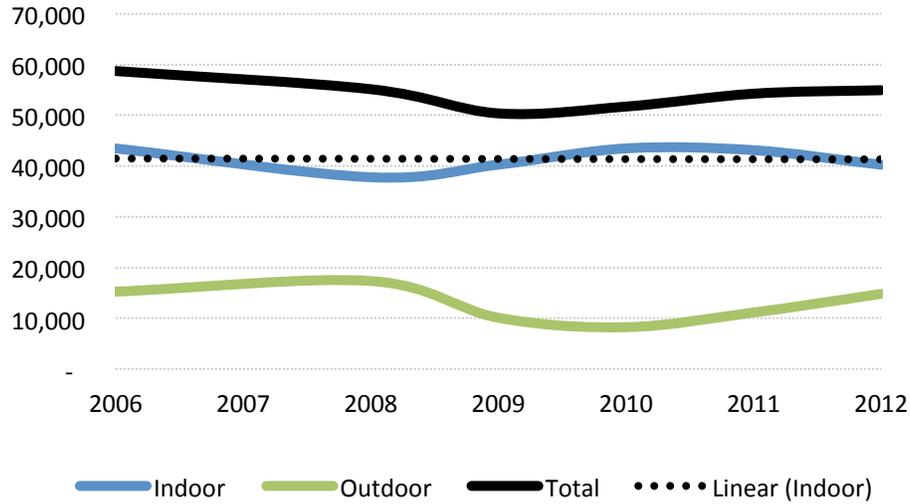
Indoor, outdoor, and total usage for the study period are shown for both SFE and MFU customer classes as a basis for comparison. Both sets of data show slight usage spikes in 2010 for indoor usage. The City undertook a meter replacement program during this time period and it is believed that the increase in usage is a reflection of the new meters reading with increased accuracy.

SFE Usage per Unit	2012	2011	2010	2009	2008	2006	6 yr Avg	Maximum
Indoor	49,198	53,800	56,735	50,584	51,024	60,576	53,653	60,576
Outdoor	54,093	41,249	32,730	34,460	49,321	53,200	44,175	54,093
Total	103,290	95,049	89,466	85,044	100,345	113,776	97,828	114,669



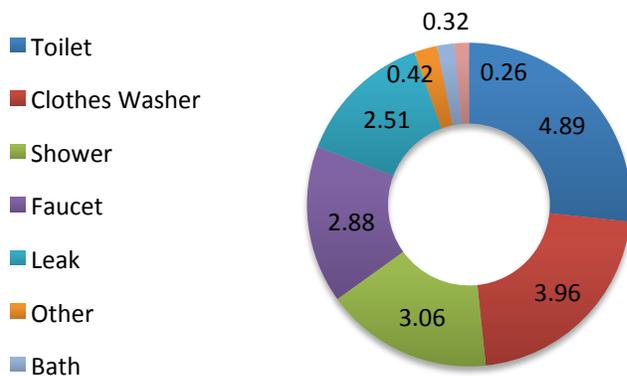
MFU Usage per Unit	2012	2011	2010	2009	2008	2006	6 yr Avg	Maximum
Indoor	40,218	43,130	43,484	40,290	37,801	43,475	41,400	43,484
Outdoor	14,778	11,142	8,248	10,095	17,347	15,255	12,811	17,347
Total	54,997	54,272	51,732	50,385	55,148	58,730	54,211	60,831

Annual MFU Usage



Indoor Consumption Comparison (GPCPD and Unit Comparison)

Indoor Uses (Gallons per Capita per Day)



Indoor water consumption was reviewed to determine the base demands of multifamily and single family residential upon the water system. The base demand represents indoor usage only and does not include outdoor irrigation. Base demand is extrapolated for the whole year based upon meter readings from November through February for each year when irrigation is not a factor. Indoor usage can be characterized by day-to-day needs such as showering, flushing toilets, washing clothes,

and using faucets.

Specific to indoor water consumption, it was determined that regardless of multifamily or single family classification, demographics, or unit size that indoor usage in gallons per capita per day (GPCPD) was approximately the same with an overall indoor average for both customer classes of 60 gallons per capita per day. On a per unit basis, apartments tended to use on average 77% of the indoor use of an SFE indoor use and 42% of the total usage of an SFE. The comparison of

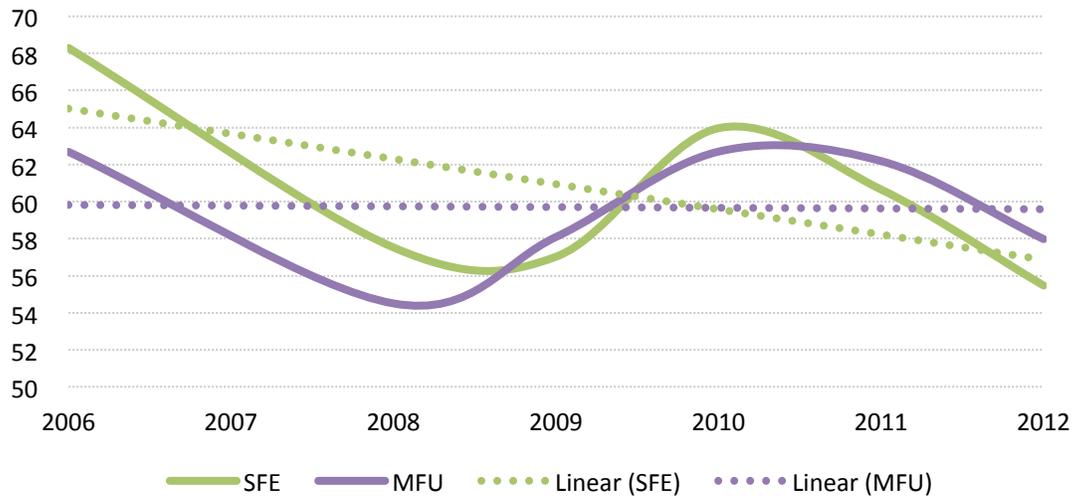


the indoor usages at 77% matches well with the population per unit comparison of 1.90 people per MFU to 2.43 people per SFE or 78% and provides a basis for validation of the methodology.

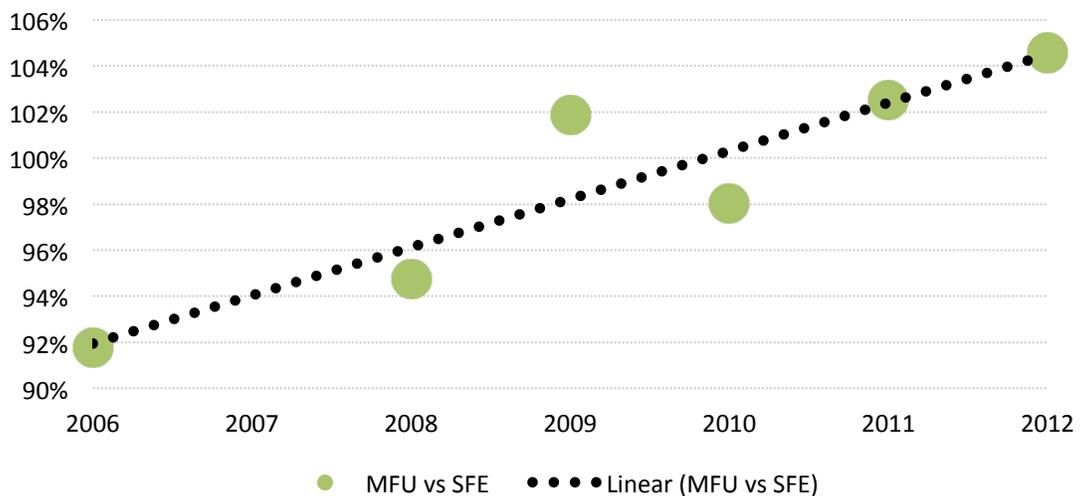
Overall, indoor use for an SFE appears to be trending down and is most likely a function of ongoing replacement of inefficient water appliances or fixtures with new high efficiency appliances and fixtures.

Indoor GPCPD	2012	2011	2010	2009	2008	2006	6 yr Avg	Maximum
SFE	55.47	60.66	63.97	57.03	57.53	68.30	60.49	68.30
MFU	57.99	62.19	62.70	58.10	54.51	62.69	59.70	62.70
MFU vs SFE	105%	103%	98%	102%	95%	92%	99%	92%

SFE and MFU Indoor GPCPD

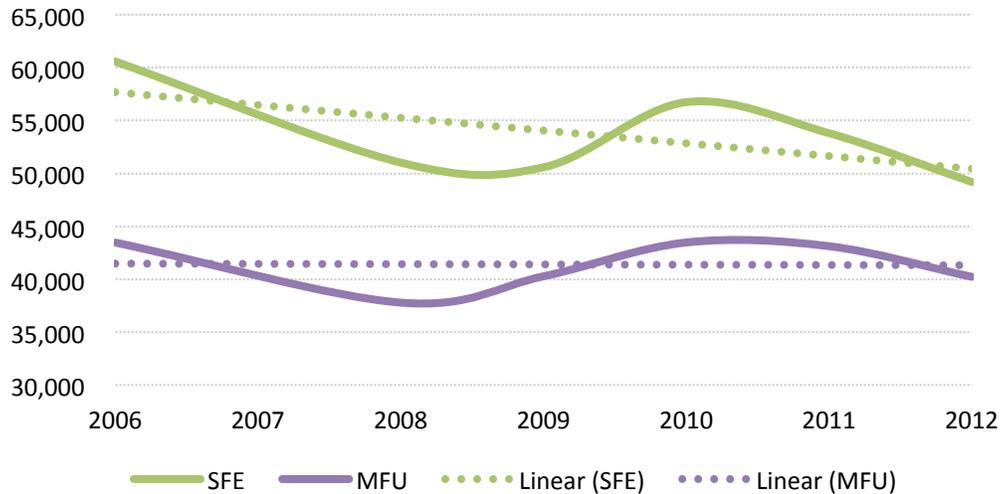


MFU Indoor GPCPD Equivalent

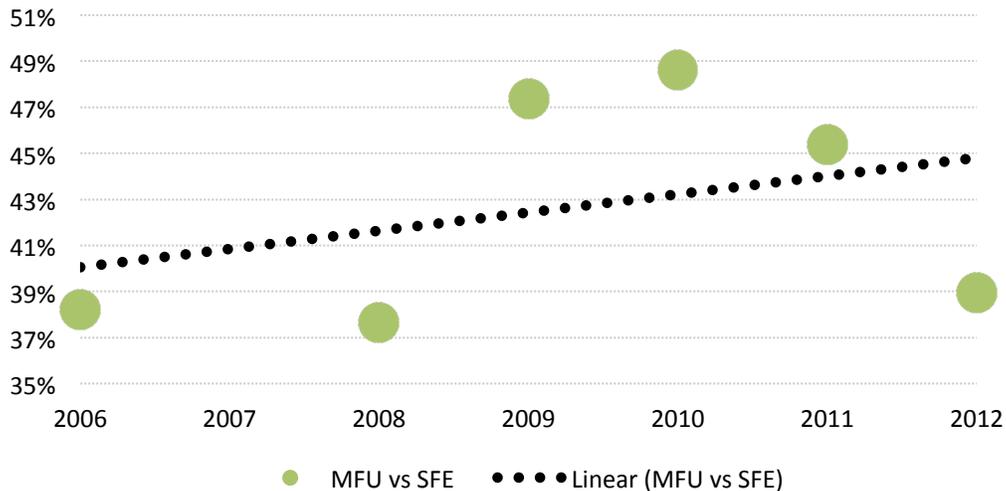


Annual Indoor Usage per Unit	2012	2011	2010	2009	2008	2006	6 yr Avg	Maximum
SFE	49,198	53,800	56,735	50,584	51,024	60,576	53,653	60,576
MFU	40,218	43,130	43,484	40,290	37,801	43,475	41,400	43,484
MFU vs SFE	82%	80%	77%	80%	74%	72%	77%	72%
MFU vs Total SFE	39%	45%	49%	47%	38%	38%	42%	38%

SFE and MFU Annual Indoor Usage per Unit



MFU Annual Indoor Usage per Unit Equivalent



Based upon the data reviewed, indoors use between residential MFU and SFE customer classes is similar per capita and dependent upon the average residents per unit.

Comparison of indoor MFU against total SFE provides for a 6-year average of 0.42 equivalents.

It appears that the indoor component of the 0.60 SFE could be represented as 0.45 equivalents.



Outdoor Consumption Comparison (GPCPD and Unit Comparison)

Outdoors water consumption can be mainly characterized by irrigation of landscaping and is variable from year to year dependent upon seasonal effects.

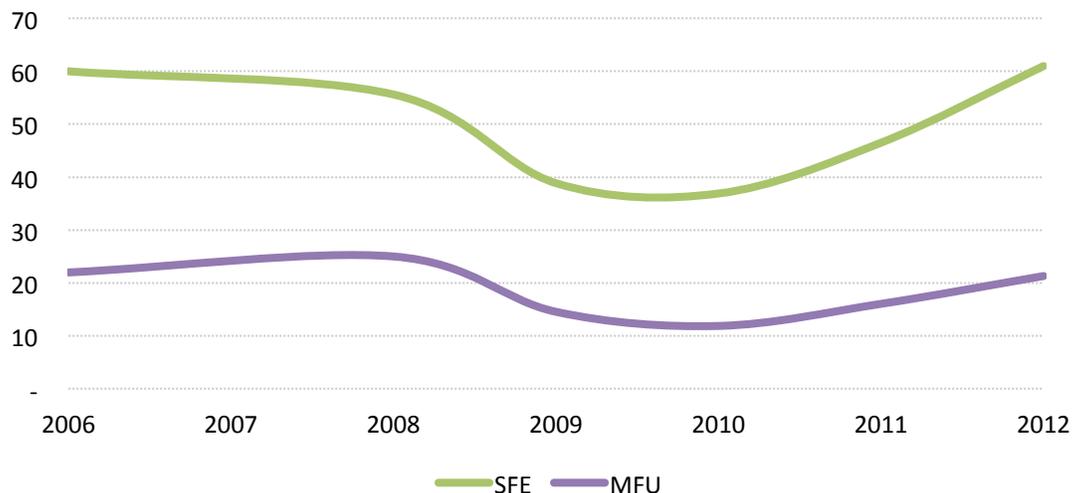
Both MFU and SFE residential customers have an irrigation component to their use. The difference however, is that an SFE manages it's irrigation practices while an MFU has common landscaping areas operated by a management company.

The common multifamily irrigation component places a demand on the water system and should be accounted back to an MFU in order to properly compare customers in an equitable manner.

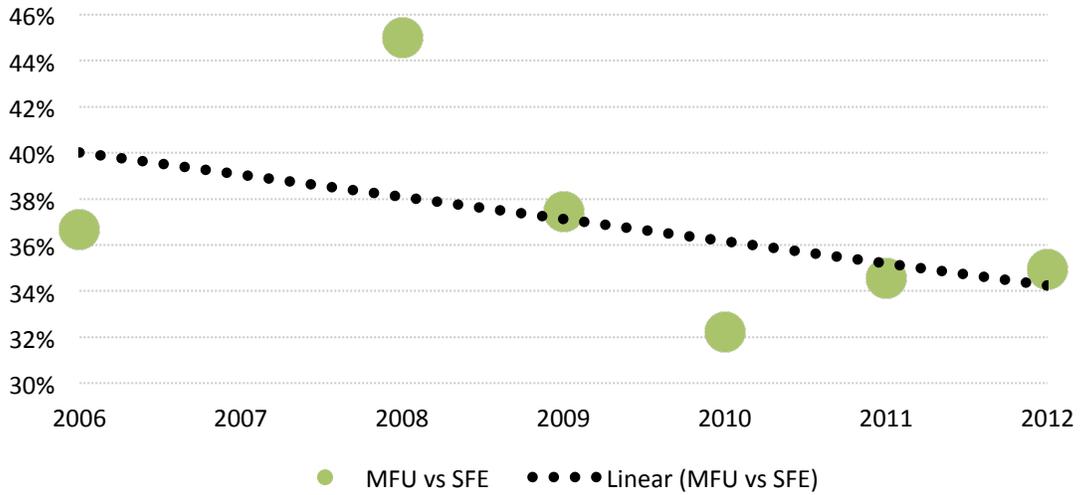
From a billing perspective, outdoor use by an SFE is more easily controlled through rate increases, as the cost is directly passed on to the customer. In the case of MFU outdoor watering, costs are typically distributed into the overhead of the management company or distributed amongst the MFU's within a complex. There is not as significant of a cost disincentive for the MFU population to save water. This was most relevant in review of 2002 post drought water conservation reductions by customer class. During the 2002 drought, single family residential was able to reduce system demands by 15% while multifamily only provided a 2% reduction.

Outdoor GPCPD	2012	2011	2010	2009	2008	2006	6 yr Avg	Maximum
SFE	60.99	46.51	36.90	38.85	55.61	59.98	49.81	60.99
MFU	21.31	16.07	11.89	14.56	25.01	22.00	18.47	25.01
MFU vs SFE	35%	35%	32%	37%	45%	37%	37%	41%

SFE and MFU Outdoor GPCPD

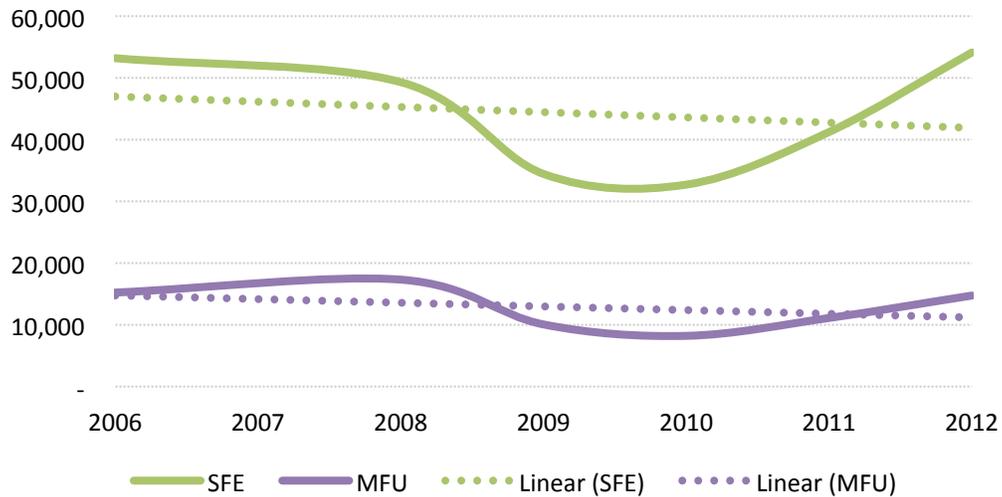


MFU Outdoor GPCPD Equivalent

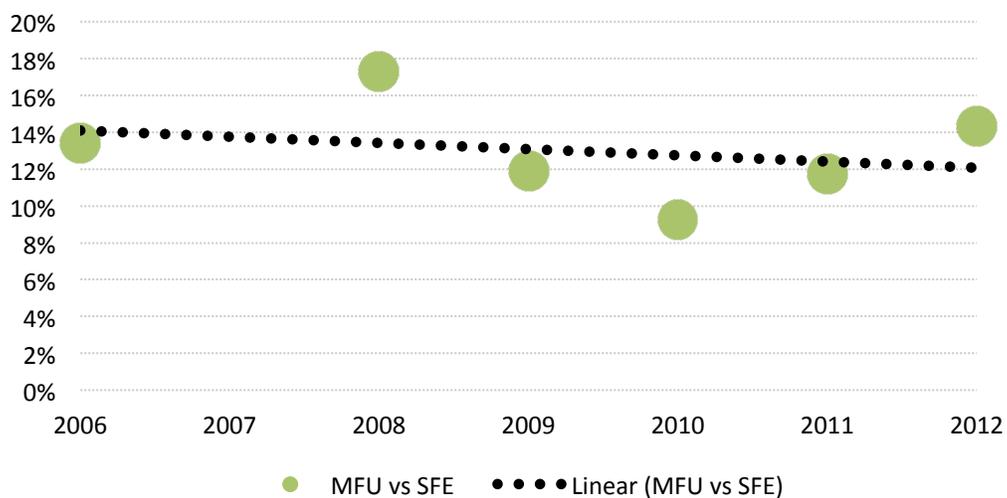


Annual Outdoor Usage per Unit	2012	2011	2010	2009	2008	2006	6 yr Avg	Maximum
SFE	54,093	41,249	32,730	34,460	49,321	53,200	44,175	54,093
MFU	14,778	11,142	8,248	10,095	17,347	15,255	12,811	17,347
MFU vs SFE	27%	27%	25%	29%	35%	29%	29%	32%
MFU vs Total SFE	14%	12%	9%	12%	17%	13%	13%	15%

SFE and MFU Annual Outdoor Usage per Unit



MFU Annual Outdoor Usage per Unit Equivalent



Based upon the data reviewed, outdoors use is fairly stable for MFU per capita, variable by season for SFE per capita, and dependent upon the average residents per unit.

Comparison of outdoor MFU against total SFE provides for a 6-year average of 0.13 equivalents.

It appears that the outdoor component of the 0.60 SFE could be represented as 0.15 equivalents.

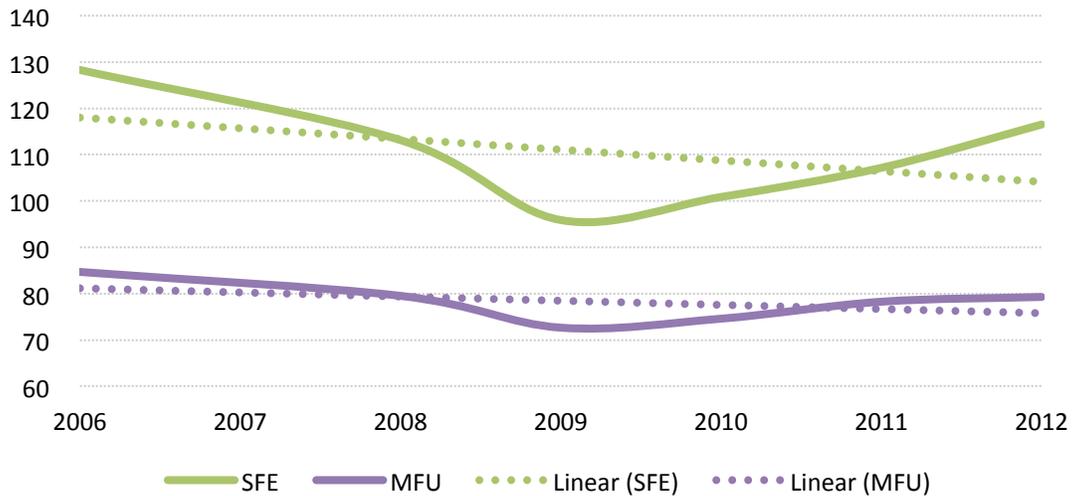


Total Consumption Comparison (GPCPD and Unit Comparison)

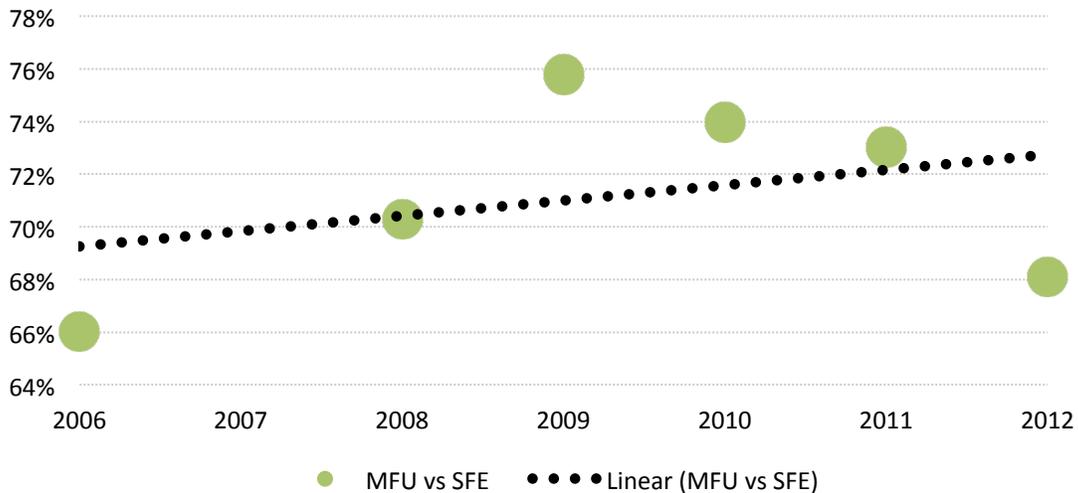
Review of each individual component is useful to determine how indoor and outdoor uses influence the overall demand on the water system and their breakdown within a utility fee cost structure. Overall, planning and administrative level functions revolve around a total impact to the water system. This total impact relative to a single-family home is the basis of the current cost structure for multifamily tap fees.

Total GPCPD	2012	2011	2010	2009	2008	2006	6 yr Avg	Maximum
SFE	116.46	107.16	100.87	95.88	113.13	128.28	110.30	128.28
MFU	79.30	78.26	74.60	72.65	79.52	84.69	78.17	84.69
MFU vs SFE	68%	73%	74%	76%	70%	66%	71%	66%

SFE and MFU Total GPCPD

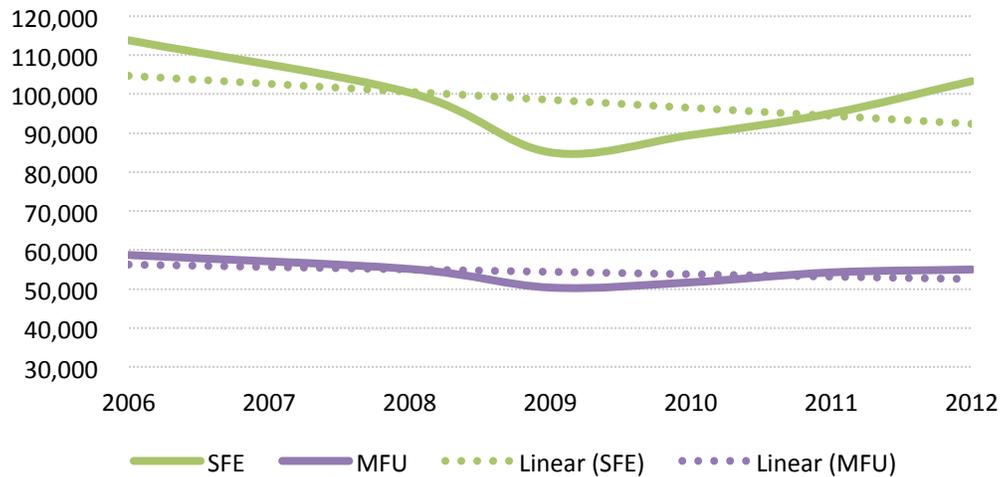


SFE vs MFU Total GPCPD

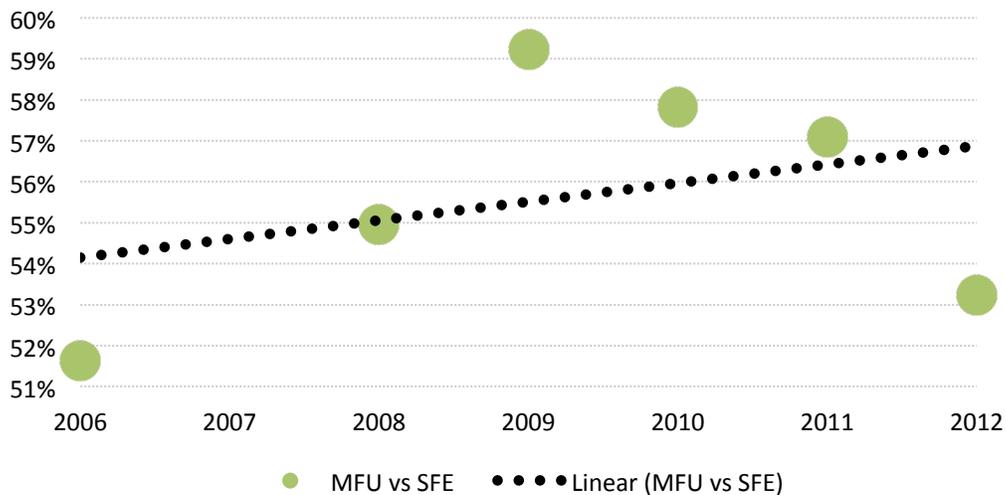


Annual Usage per Unit	2012	2011	2010	2009	2008	2006	6 yr Avg	Maximum
SFE	103,290	95,049	89,466	85,044	100,345	113,776	97,828	113,776
MFU	54,997	54,272	51,732	50,385	55,148	58,730	54,211	58,730
MFU vs SFE	53%	57%	58%	59%	55%	52%	55%	52%

SFE and MFU Annual Usage per Unit



MFU Annual Usage per Unit Equivalent



Based upon the data reviewed, total use is fairly stable for MFU per capita, variable by season for SFE per capita, and dependent upon the average residents per unit.

Comparison of total MFU against total SFE provides for a 6-year average of 0.55 equivalents.

It appears that the total component of the 0.60 SFE is equitable if interpreted in a manner that provides for both indoor and outdoor use to be included.



Studio or 1 Bedroom MFU vs. 2+ Bedroom MFU

Developers have proposed in discussions that a studio or 1 bedroom MFU should be charged a different tap fee than a 2 or more bedroom MFU under the premise that one person uses less than two or more people. While on the surface this may appear true, to create a fee structure that is based upon the assumption that a 1 bedroom or studio MFU will always only be populated with one person would be false. The residential population for these units could fall anywhere between 1 to 3 persons per unit.

It has also been observed that developers will attempt to “game” the structure of the system. A bedroom is defined as a room that has a closet. Designs can be proposed that include a bedroom and an office (a room without a closet). Often then, the office becomes inhabited as a second bedroom.

For the reasons stated above and as previously discussed with members of the Water Committee, it is not recommended that a tap fee be considered in any specificity beyond the traditional multifamily unit that currently exists.

Irrigation Tap Fees

Historically, the City has charged multifamily developments for 0.60 SFE per apartment unit with the landscape water supply provided as a connection that is installed after the meter that serves a multifamily building. Review of data has shown that this approach using a 0.60 SFE equivalent per apartment appears equitable for both the City and the Developer.

With the evolution of irrigation systems, accounting software, and better management practices, modern multifamily developers have proposed installation of separate landscape irrigation meters from the building meters. This allows better management of irrigation costs and accurate billing of indoor use. Such a structure is also advantageous to the City in periods of water conservation given the ability to apply a separate rate structure to an irrigation meter.

The Municipal Code does not clearly indicate what components are included for a 0.60 SFE multifamily apartment unit and goes on to indicate that all irrigation taps will be charged a full tap fee. If interpreted and billed as the Municipal Code currently exists, Developers may be overcharged for water resources dependent upon the size and nature of the various building and irrigation meters.

A byproduct of the multifamily tap fee research was review of how irrigation tap fees are currently charged. Traditionally, the City has charged for an irrigation tap on the basis of meter size. The meter size is calculated based upon the maximum instantaneous flow of water through the meter. Meter sizes are charged in accordance with the ratio of their size to the ¾” SFE meter cost. In almost all customer classes, the meter size cost methodology provides equitable cost recovery for the Utility. However, in cases of specialized industrial processes or irrigation, the meter size will not always be reflective of the total amount of water used.



Therefore, in these cases it is important to use both instantaneous demand and total annual demand to determine accurate costs for recovery when charging tap fees.

Cursory review of historical irrigation meter usage and associated tap fees indicates that the City has undercharged for water resources related to irrigation meters using the meter size cost basis methodology.

An actual ¾" irrigation meter scenario analysis is provided for context and review:

Projected Usage (gallons)		301,923
2012 Actual Usage (gallons)		496,000
2012 SFE Avg		103,000
Projected SFE		2.93
Actual SFE		4.82
SFE ¾" Tap Fee	\$	24,140
Actual Tap Fee Paid (¾" Irrig Meter)	\$	24,190
Projected Cost	\$	70,761
Actual Cost	\$	116,247
Irrigated Area (acre)		0.79

Staff will be recommending revisions to the Municipal Code to clarify costs for how separate landscape meters will be charged.

In review of the multifamily data, it does appear there is a consistent irrigation component to MFU use in the amount of 0.15 SFE per unit. Given this, it is feasible to consider one of the following options:

- **Do nothing and maintain a 0.60 SFE per multifamily unit with irrigation supplied from the buildings.**
- **Update the Municipal Code to maintain a 0.60 SFE per multifamily unit with a separate irrigation meter included.**
- **Update the Municipal Code to require a separate irrigation meter charged in full and reduce the existing 0.60 SFE to 0.45 SFE per multifamily unit.**



Wastewater Tap Fees

A second byproduct of the multifamily tap fee research was review of how wastewater tap fees are currently charged. Traditionally, the City has charged multifamily wastewater tap fees 100% percent (\$3,221) for the first unit and then 60% (\$1,932.60) for each apartment unit thereafter.

The data reviewed for the indoor component of MFU and SFU use indicates the City may be currently undercharging based upon a 0.60 SFE per apartment unit tap fee. The 6-year average of indoor MFU usage to SFE usage is 77%.

It appears that the wastewater component of the 0.60 SFE is inequitable to the City and would be more adequately represented as 0.80 SFE per multifamily unit.

Summary

Through 2011 to present, the development community as voiced concerns over the expense or inequity of tap fees specific to multifamily residential developments.

City Staff performed an internal review of multifamily residential and single-family residential indoor, outdoor, and total water usage per dwelling unit.

This review found that the current practice of charging 0.60 single-family equivalents per multifamily apartment unit appears equitable for water when landscaping is included. However, there are contradictions and exclusions within the Municipal Code that preclude the ability to provide for separate building and irrigation tap fees in an equitable manner for both the City and a Developer. It appeared that 0.15 of the 0.60 single-family equivalents per multifamily unit were reflective of irrigation usage and could validate a reduction to 0.45 single-family equivalents per multifamily unit if a separate irrigation meter was provided and paid in full. This essentially recognizes that as unit density increases the cost of irrigation per unit decreases and therefore charges for indoor and outdoor components are respective to their actual equivalents as demonstrated from actual real world data.

Additionally, it was determined that the current practice of charging 0.60 single-family equivalents per multifamily apartment unit for wastewater is inequitable to the City. It appears that the equitable charge would be 0.80 single-family equivalents per multifamily apartment unit for wastewater.

Finally, it was also determined that the current practice of charging based upon meter size for irrigation meters does not provide full cost recovery of water resources to the City. A new cost structure based upon the total annual water required per year for irrigation based upon a single-family equivalent should be put into place.



In efforts to summarize the substantial changes, an example multifamily development is provided to illustrate the impacts upon each component.

	Current Fee Structure	Data Supported Fee Structure
Water Equivalent	60%	45%
Units	227	227
SFE Water Tap Fee	\$ 24,140	\$ 24,140
Calculated MF Water Tap Fee	\$ 3,297,524	\$ 2,479,178
Irrigation Tap Fee	\$ 96,540	\$ 201,167
Calculated Total Water Tap Fee	\$ 3,394,064	\$ 2,680,345
SFE Equivalents	136.60	102.70
Irrig Equivalents	8.33	8.33
Total Water Equivalents	144.93	111.03
Wastewater Equivalent	60%	80%
SFE Wastewater Tap Fee	3,221.00	3,221.00
Calculated MF Wastewater Tap Fee	\$ 439,989	\$ 585,578
Total Water and Wastewater	\$ 3,834,053	\$ 3,265,922

Data supported fee structures will require revisions to the Municipal Code in order to implement and administrate the new tap fees.





TAP FEE CALCULATION FORM

WATER, SEWER, AND IRRIGATION TAP FEES ESTABLISHED PURSUANT TO THE LOUISVILLE MUNICIPAL CODE, DELEGATING AUTHORITY TO THE CITY MANAGER TO ESTABLISH TAP FEES ON A QUARTERLY BASIS EFFECTIVE JUNE 25, 2014.

Utilize this form to determine Water, Sewer, and Irrigation Tap Fees by completing the shaded cells. For Multifamily, Non-Residential, and Other Uses, please fill out a separate sheet for each premises (separate building). Additional information on Tap Fees may be found in the Louisville Municipal Code. For taps larger than 4 inches, the tap fee and other terms and conditions of the issuance of the tap shall be established by written agreement approved by the Louisville City Council.

Project Location: _____ Subdivision: _____ Filing: _____ Block: _____ Lot: _____

Property Owner: _____ Owner's Address (if different): _____

Owner's Email Address: _____ Owner's Phone # _____

Job Contact Name (if different): _____ Contact Phone # _____

WATER TAP FEES

1) Single-Family Residential Tap Fee (single-family, duplexes and mobile homes)

3/4" meter X _____ units X \$25,900 = \$ _____

1" meter X _____ units X \$46,200 = \$ _____

INSTRUCTIONS:

Utilize this section to determine the water tap fee for the proposed residential development. Insert the number of single-family, duplex and/or mobile home units in the appropriate meter size category to determine the tap fee. Each unit of a duplex and each mobile home is considered to be equivalent to a single-family unit.

5 or more Duplex Units: separate irrigation tap required, provide Plumbing Permit number for the separate irrigation tap: _____

No. of Units _____ X \$3,885 = \$ _____

(from above) (credit) (total irrigation credit)

Duplex premises with five or more units are required to obtain a separate irrigation tap. The separate irrigation tap allows for a credit to be applied to the per unit tap fee. The irrigation credit is calculated as the total number of units multiplied by the credit.

Total Single-Family Tap Fee = \$ _____

Total Single-Family Tap Fee = Total Cost minus total irrigation credit

Complete this section for each separately metered premises (separate building) and/or other use and/or irrigated area.

2) Multifamily Residential Tap Fee (townhouse, multifamily and senior independent living, as defined in Louisville Municipal Code)

Fixture Count _____ Meter Size _____

Townhouse _____ X \$20,720 = \$ _____

units

Multifamily _____ X \$15,540 = \$ _____

units

Senior _____ X \$ 7,770 = \$ _____

units

Total Cost = \$ _____

INSTRUCTIONS:

Provide fixture count and meter size from Building Safety Division Form

Utilize this section to determine the water tap fee for the proposed residential development. Insert the number of Townhouses, Multifamily or Senior Independent units and multiply the number of units by the associated tap fee to determine the total tap fee.

Sum the total for each unit type, which will be the total tap fee for those units.

5 or more Townhouse or Multifamily Units: separate irrigation tap required, provide Plumbing Permit number for the separate irrigation tap: _____

No. of Units _____ X \$3,885 = \$ _____

(from above) (credit) (total irrigation credit)

Townhouse and Multifamily premises with five or more units are required to obtain a separate irrigation tap. The separate irrigation tap allows for a credit to be applied to the per unit tap fee. The irrigation credit is calculated as the total number of units multiplied by the credit. Senior Independent Living Units are not eligible for the irrigation credit.

Total Multifamily Tap Fee = \$ _____

Total Multifamily Tap Fee = Total Cost minus total irrigation credit

CONTINUE ON THE OTHER SIDE

3) Non-Residential and Other Use Tap Fee (Non-Residential and Other Uses include; commercial, industrial, retail, institutional, pools, spas, water features)

1) Meter Size
 Instantaneous Demand _____ gpm
 (from Building Safety Division Form)
 Irrigation Demand _____ gpm (Note 1)
 (if supplied from same tap)
 Total Demand _____ gpm
 (larger of indoor or irrigation demand)
 Meter Size _____ (from Table 1)
 (based on Total Demand)

2) Annual Indoor Demand
 Indoor _____ gal/yr
 Other Usage _____ gal/yr
 Total Demand _____ gal/yr

3) Indoor Tap Fee
 Indoor Tap Fee = \$ _____

INSTRUCTIONS:

Note 1: If irrigation is served by the same tap, provide irrigation design showing instantaneous demand for each zone. Insert maximum instantaneous demand into "Irrigation Demand" cell.

Applicant to provide annual Indoor and Other Usage demand, if applicable, calculated by a licensed engineer or architect. Base Tap Fee (Table 2) corresponds to the fee associated with the Demand Budget that satisfies the majority of Total Demand. Additional Tap Fee is calculated by dividing the difference between Total Demand and the selected Demand Budget by 117,000, then multiplying by \$25,900. Add the Base Tap Fee and Additional Tap Fee to derive the Total Tap Fee.

*****Example:** For a 250,000 gal/yr demand, the next lowest budget is 208,260 gallons, which corresponds to a fee of \$46,200. 250,000 - 208,260 = 41,740; 41,740 / 117,000 * \$25,900 = \$9,239.88. Total Tap Fee \$46,200 + \$9,239.88 = \$55,439.88***

Table 1

Meter Flow Range (gpm)	Meter Size (inch)
0-22	3/4
23-45	1
46-80	1-1/2
81-140	2
141-280	3
281-500	4

Table 2

Demand Budget (gallons)	Base Tap Fee (\$)
117,000	\$25,900
208,260	\$46,200
468,000	\$103,600
831,870	\$184,300
1,872,000	\$414,400
3,327,480	\$736,700

4) Irrigation Demand & Tap Fee (if irrigation and indoor demand are served by the same tap)

Total Irrigated Area (sq.ft) _____ Irrigation Demand (gallons/year) _____ Irrigation Tap Fee _____

_____ X 15 gallons/sq.ft. = _____ / 117,000 x \$25,900 = \$ _____

Total Non-Residential and Other Use Tap Fee = \$ _____ (sum of Indoor Tap Fee and Irrigation Tap Fee)

IRRIGATION TAP FEES

4) Irrigation Tap Fee (for separate irrigation taps)

Demand _____ gpm (Note 1)
 Meter Size _____ (from Table 1)

Total Irrigated Area (sq.ft) _____ Irrigation Demand (gallons/year) _____

_____ X 15 gallons/sq.ft. = _____

Irrigation Demand (gallons/year) _____ Irrigation Tap Fee _____

_____ / 117,000 x \$25,900 = \$ _____

INSTRUCTIONS:

Note 1: Provide irrigation design showing instantaneous demand for each zone. Insert maximum instantaneous demand for "Irrigation Demand".

This section is to be used for Duplex, Multifamily, Townhouse, and Non-Residential developments that are utilizing a separate tap for irrigation. Total Irrigation Tap Fee is equal to the tap fees associated with Total Irrigation Demand and Drip Taps. A drip irrigation tap is allowed for isolated locations, such as a roadway median. A drip tap requires a separate 3/4" meter, must serve a total area less than 4,000 square feet at a demand of 5 gallons per minute or less. Any area irrigated with a drip irrigation tap shall not be included in the Total Irrigated Area.

Number of Drip Taps _____ X \$6,475 = \$ _____

Total Irrigation Tap Fee = \$ _____ (sum of Irrigation Tap Fee and Drip Tap Fee)

SEWER TAP FEES

5) Sewer Tap Fee

Residential Sewer Tap Fee

Single-Family _____ X \$4,500 = \$ _____

Townhouse _____ X \$3,600 = \$ _____
 units

Multifamily _____ X \$3,600 = \$ _____
 units

Senior _____ X \$2,700 = \$ _____
 units

INSTRUCTIONS:

Utilize this sections to determine the sewer tap fee for the proposed development. Insert the number of Single-Family, Townhouse, Multifamily, or Senior Independent units and multiply the number of units by the associated tap fee to determine the total tap fee. Single-Family category includes each mobile home and each unit in a duplex. Commercial tap fees are charged based on water meter size.

Commercial Sewer Tap Fees

3/4" Meter _____ X \$4,400 = \$ _____ 2" Meter _____ X \$31,300 = \$ _____

1" Meter _____ X \$7,900 = \$ _____ 3" Meter _____ X \$70,400 = \$ _____

1 1/2" Meter _____ X \$17,600 = \$ _____ 4" Meter _____ X \$125,200 = \$ _____

Total Sewer Tap Fee = \$ _____

 CITY USE ONLY BELOW DASHED LINE

Form Reviewed By: _____

Date: _____

Payment Received by: _____

Date: _____

Appendix E

Water System Development Charge Tables

Report Prepared By:

Table WSDC - 1

**Water Utility
Development of 2014 Facilities System Development Charge**

Treated Water Mains			
Diameter (in.)	Inventory of Mains <i>linear feet</i>	Current Construction	
		Cost per Staff <i>per linear foot</i>	Current Cost
Non-Backbone			
4	29,523		
6	123,783		
8	308,847		
Total	462,153	NA	NA
Backbone			
12	150,197	\$171.00	\$25,684,000
14	1,830	\$174.00	318,000
16	17,212	\$177.00	3,047,000
18	9,114	\$180.00	1,641,000
24	21,733	\$186.00	4,042,000
30	935	\$189.00	177,000
36	5,770	\$192.00	1,108,000
Total	206,791		\$36,017,000

Water Treatment Plant			
	Max Day Capacity <i>gallons per day</i>	Current Construction	
		Cost per Staff <i>per gpd</i>	Current Cost
Total Water Treatment Plant	13,000,000	\$4.00	\$52,000,000

Treated Water Storage			
	Volume <i>gallons</i>	Current Construction	
		Cost per Staff <i>per gallon</i>	Current Cost
Total Treated Water Storage	8,500,000	\$1.25	\$10,625,000

Treated Water Pumping		Current Construction
		Cost per Staff
Pump Station		\$900,000
Pump Station		450,000
Total Treated Water Pumping		\$1,350,000

Raw Water Infrastructure		Current Construction
		Cost per Staff
NCWCD Pipeline (Carter Lake to Broomfield)		\$4,739,000
NCWCD Superior Louisville Pump Station		2,288,000
Louisville NWTP & NCWCD Connecting Line		5,900,000
Eldorado Intake Buildings & Dam		850,000
Harper Lake Pump Station		900,000
Louisville Pipeline Interconnect		929,000
Louisville Pipeline (16-in)		4,013,000
Louisville Lateral (open ditch)		143,000
Cherry Street Pipeline		594,000
Louisville Reservoir		697,000
Harper Lake		2,374,000
Total Raw Water Infrastructure		\$23,427,000

Fee Calculation		
Total Facilities Current Cost	\$	123,419,000
Less Principal on Outstanding Debt	\$	(8,005,000)
Water System Equity	\$	115,414,000
No. of Equivalents (a)		9,058
Water SDC, per equivalent	\$	12,742

(a) One equivalent represents the water service characteristics of a typical single family residential customer. One multifamily unit equals 0.8 equivalents. Nonresidential customer equivalents are based on 3/4-inch meter capacity ratios.

TABLE WSDC-2

Water Utility Development of Proposed Water Resource System Development Charge

Line No.

1	Average annual SFE usage, gallons	120,000 gallons
2	Estimated water losses in City system (a)	15%
3	Average annual production needed to serve an SFE, gallons	141,180 gallons
4	Gallons per acre-foot	325,850 gallons
5	SFE per acre-foot	2.308 SFE
6	Estimated C-BT current cost per acre-foot	\$26,000 per acre-foot
7	Current C-BT cost per SFE	\$11,260 per SFE

(a) Includes 15% local distribution system water losses.

TABLE WSDC-3

Water Utility Schedule of Water System Development Charges

Meter Size	Existing	Proposed SDC		
		Facilities	Water Resource	Total
3/4	\$ 24,140	\$ 12,800	\$ 11,300	\$ 24,100
1	\$ 42,910	\$ 22,800	\$ 20,200	\$ 43,000
1 1/2	\$ 96,540	\$ 51,200	\$ 45,200	\$ 96,400
2	\$ 171,630	\$ 91,100	\$ 80,400	\$ 171,500
3	\$ 386,160	\$ 204,800	\$ 180,800	\$ 385,600
4	\$ 693,400	\$ 364,100	\$ 321,400	\$ 685,500



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Appendix F

Wastewater System Development Charge Tables

Report Prepared By:



Table SSDC - 1
Wastewater Utility
Development of 2014 System Development Charge

Wastewater Mains				
Diameter (in.)	Inventory of Mains	Current Construction Cost per Staff	Current Cost	
	<i>linear feet</i>	<i>per linear foot</i>		
Non-Backbone				
4	9,616			
6	26,414			
8	350,433			
10	15,131			
	Total		NA	NA
Backbone				
12	24,218	\$220	\$	5,328,000
15	19,200	\$244	\$	4,685,000
18	6,743	\$260	\$	1,753,000
21	5,386	\$276	\$	1,487,000
24	941	\$292	\$	275,000
	Total		\$	13,528,000

Treatment Plant			
	Capacity	Current Construction Cost per Staff	Current Cost
	<i>gallons per day</i>	<i>per gpd</i>	
Total Water Treatment Plant	2,530,000	\$10.00	\$ 25,300,000

Fee Calculation	
Total Facilities Current Cost	\$ 38,828,000
Less Principal on Outstanding Debt	\$ -
Wastewater System Equity	\$ 38,828,000
No. of Equivalent (a)	8,964
Wastewater SDC per equivalent	\$ 4,332

(a) One equivalent represents the water service characteristics of a typical single family residential customer. One multifamily unit equals 0.8 equivalents. Nonresidential customer equivalents are based on 3/4-inch meter capacity ratios.

Table SSDC - 2

Wastewater Utility Schedule of 2014 System Development Charges

<u>Type of Customer</u>	<u>Existing SDC</u>	<u>Proposed SDC</u>	
		<u>Equivalent Ratio</u>	<u>Proposed</u>
Single Family, per unit	\$ 3,221		\$ 4,400
Multifamily, per unit	\$ 2,577		\$ 3,600
Nonresidential			
<u>Meter Size</u>			
inch			
3/4	(a)	1.00	\$ 4,400
1	(a)	1.78	\$ 7,900
1-1/2	(a)	4.00	\$ 17,600
2	(a)	7.11	\$ 31,300
3	(a)	16.00	\$ 70,400
4	(a)	28.44	\$ 125,200

(a) Existing fee based on 50% of water tap fee.

SUBJECT: RESOLUTION NO. ____, SERIES 2015 – A RESOLUTION APPROVING AN AGREEMENT WITH THE TOWN OF SUPERIOR FOR THE EMERGENCY POTABLE WATER INTERCONNECT

DATE: OCTOBER 6, 2015

PRESENTED BY: KURT KOWAR, PUBLIC WORKS DEPARTMENT

SUMMARY:

The potable water interconnect between the City of Louisville and the Town of Superior was conceptualized in 2013 to provide both municipalities with a redundant treated water supply. Louisville and Superior have the same raw water sources, increasing operational flexibility and the value of this interconnect. In addition, pressures in each system are conducive to each municipality being able to supply the other without pumping. This is desirable since complex pumping systems can become unreliable due to the anticipated infrequency of operations. The interconnect would also allow either municipality to take their respective water treatment plant offline for maintenance or future capital projects. This option has the potential as a cost saving measure and reducing the predictable difficulties in construction while trying to maintain operations.

If future joint services are desired by both municipalities, minor improvements to the interconnect would enable Superior's Water Treatment Plant to provide Louisville with water to meet peak day demands. Meeting these demands would delay or eliminate the need to expand the Howard Barry Water Treatment Plant which has a significant capital expense.

In 2014, Louisville's City Manager and Town of Superior's Town Manager executed a letter of understanding for sharing design expenses associated with the interconnect. The attached Intergovernmental Agreement describes the operation, maintenance, and improvement responsibilities between the two municipalities. The proposed interconnect would be Louisville's second potable water interconnect, with the first being with the City of Lafayette. The project would result in Superior's only emergency water supply.

RECOMMENDATION:

Staff recommends City Council pass Resolution No. ____, Series 2015 authorizing the Mayor to sign the attached Agreement on behalf of the City.

ATTACHMENT(S):

1. Resolution
2. Agreement

**INTERGOVERNMENTAL AGREEMENT
POTABLE WATER INTERCONNECT**

THIS INTERGOVERNMENTAL AGREEMENT (the "Agreement") is made and entered into this ___ day of _____ 2015 (the "Effective Date"), by and between **THE CITY OF LOUISVILLE**, a Colorado municipal corporation ("Louisville"), and **SUPERIOR METROPOLITAN DISTRICT NO. 1** ("SMD1"), a Colorado special district. Louisville and SMD1 are hereafter referred to from time to time individually as the "Party" or collectively as the "Parties."

WITNESSETH

WHEREAS, the Parties own and operate independent municipal potable water distribution systems;

WHEREAS, the Parties wish to design and construct an interconnect between the two distribution systems located in the approximate vicinity of Marshall Road and the Howard Berry Water Treatment Plant, to allow each Party to provide water to the other in certain circumstances (the "Interconnect");

WHEREAS, in this Agreement, the Party providing the water through the Interconnect shall be referred to as the "Seller" and the Party consuming the water shall be referred to as the "Buyer"; and

WHEREAS, the Parties are authorized by Article XIV, § 18 of the Colorado Constitution and C.R.S. § 29-1-201, *et seq.*, to enter into this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Cost Share. The cost to design, construct, and maintain the Interconnect shall be shared as follows: 50% by SMD1 and 50% by Louisville.

2. Design Phase Lead Agency. SMD1 shall be the lead agency for the design phase and shall contract with an engineering consultant for design of the Interconnect, which consultant shall be agreed upon by both Parties. Design meetings shall be held only if representatives from the engineering consultant, Louisville, and Superior are present. SMD1 shall provide Louisville with the design plans and specifications for the Interconnect for Louisville's review, comment and approval, which approval shall not be unreasonably withheld. Louisville shall reimburse SMD1 for 50% of the total design costs within 30 days of receipt of an itemized invoice from SMD1.

3. Construction Phase Lead Agency. Louisville shall be the lead agency for the construction phase and shall enter into an agreement with a contractor for construction of the Interconnect, which contractor shall be agreed upon by both Parties. Construction progress meetings shall be held only if representatives from the engineering consultant, Louisville, and Superior are present and, if applicable, contractor representatives. Superior shall reimburse

Louisville for 50% of the total construction costs within 30 days of receipt of an itemized invoice from Louisville.

4. Interconnect Capacity. The Interconnect shall be able to transmit 2 million gallons per day to either Party without pumping.

5. Interconnect Ownership; Maintenance. The Interconnect shall be jointly owned and maintained by the Parties on an equal share basis. A maintenance schedule for the Interconnect shall be drafted prior to the Interconnect's construction completion, which schedule shall be mutually agreed upon by the Parties. Because location of the Interconnect is at Louisville's Howard Berry Water Treatment Plant, Louisville expressly grants SMD1 and its employees and contractors a right of access to enter the Howard Berry Water Treatment Plant for the purpose of inspecting, maintaining and repairing the Interconnect at any time, upon 48 hours prior notice to Louisville. All repairs other than routine maintenance and replacement shall first be approved by both Parties. Costs for repair and replacement shall be borne equally by both Parties. The Party undertaking any maintenance shall provide an itemized invoice to the other Party, which shall reimburse the first Party for 50% of the total costs for the maintenance activities within 30 days of receipt of the itemized invoice.

6. Use Request. The Buyer shall request use of water from the Seller at least 24 hours in advance. The 24-hour notification period may be waived by the Seller's Director of Public Works or designee. The Seller's approval of the provision of emergency or supplementary water to the Buyer shall not be unreasonably withheld. The Interconnect shall be used for provision of emergency or supplementary water supply with the water quantity limited by the amount needed to complete specified tasks. "Emergency water" means that water necessary to alleviate a shortage that is occurring or will imminently occur for one Party that would, if the Interconnect is not activated, result in an imminent threat to the public health, welfare, or safety of that Party. "Supplementary water" means a shortage of untreated (raw) water, inadequate capacity for treatment, or water that is needed by a Party for maintenance of its water treatment plant. The Seller, in its reasonable discretion, shall have the right to limit the flow rate, volume, the time of day water is provided, the day of the week water is provided and overall duration of water sale.

7. Interconnect Startup Fees. No startup fees for initiating use of the Interconnect shall be charged by either Party.

8. Water Quality. Treated water quality shall meet requirements set forth by the Colorado Department of Public Health and Environment ("CDPHE"). It is the responsibility of the Seller to supply water quality meeting CDPHE standards. It is the responsibility of the Buyer to notify its customers of water quality issues, if required.

9. Metering and Rates. The Interconnect shall be designed so as to record the flow of water in either direction. The water flowing through the Interconnect shall be billed at a flat rate which shall be the average of the construction water rates charged by the Parties. As of the Effective Date, the average of the Parties' construction water rates was \$5.83 per 1,000 gallons (\$7.67 per 1,000 gallons, Louisville + 3.98 per 1,000 gallons, Superior / 2 = \$5.83 per 1,000 gallons).

10. Billing and Payment. The Seller shall read the water meter and invoice the Buyer within 30 days after the use has stopped. If the water sale continues longer than a month, monthly invoices shall be provided. The Buyer shall pay each invoice within 30 days of receipt.

11. Term and Termination. This Agreement shall be in effect until terminated by either Party in writing served upon the other party no later than 180 days prior to the expected date of termination. Termination of the Agreement shall not release either Party's obligations to pay for design, construction, or maintenance costs previously incurred or water previously used. Upon termination of this Agreement, the Parties shall in good faith negotiate a termination agreement addressing the disposition of the Interconnect.

12. Notice. All notices, demands, requests, consents, approvals, offers, statements, and other instruments or communication required or permitted to be given hereunder shall be in writing and shall be deemed to be effective upon electronic delivery, hand delivery or 72 hours after mailing by registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

If to Louisville: City Manager
 City of Louisville
 749 Main Street
 Louisville, CO 80027

If to SMD1: Town Manager
 Town of Superior
 124 East Coal Creek Drive
 Superior, CO 80027

13. No Waiver. Delays in enforcement or the waiver of any one or more defaults or breaches of this Agreement by either Party shall not constitute a waiver of any of the other terms or obligation of this Agreement.

14. Integration. This Agreement constitutes the entire agreement between the Parties, superseding all prior oral or written communications.

15. Third Parties. There are no intended third-party beneficiaries to this Agreement.

16. Governing Law and Venue. This Agreement shall be governed by the laws of the State of Colorado, and any legal action concerning the provisions hereof shall be brought in Boulder County, Colorado.

17. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, and all of which shall constitute one and the same agreement.

18. Severability. If any provision of this Agreement is found by a court of competent jurisdiction to be unlawful or unenforceable for any reason, the remaining provisions hereof shall remain in full force and effect.

19. Assignment. Neither this Agreement nor any of the rights or obligations of the Parties shall be assigned by either Party without the written consent of the other.

20. Subject to Annual Appropriation. Consistent with Article X, § 20 of the Colorado Constitution, any financial obligation of each Party not performed during the current fiscal year is subject to annual appropriation, shall extend only to monies currently appropriated, and shall not constitute a mandatory charge, requirement, debt or liability beyond the current fiscal year.

21. No Joint Venture or Partnership. Nothing contained in this Agreement is intended to create a partnership or joint venture between the Parties and any implication to the contrary is hereby expressly disavowed. It is understood and agreed that this Agreement does not provide for the joint exercise by the Parties of any activity, function, or service nor does it create a joint enterprise, nor does it authorize either Party to act as an agent of the other Party for any purpose whatsoever.

22. Responsibility for Legal Proceedings. Louisville shall be responsible for defending itself in any civil action brought against Louisville by any person claiming injury and damages as a result of the performance of this Agreement. Likewise, SMD1 shall be responsible for defending itself in any civil action brought against SMD1 by any person claiming injury and damages as a result of the performance of this Agreement. SMD1, its officers, contractors and employees shall not be deemed to assume any liability for acts, errors, or omissions of Louisville or any officer or employee thereof arising out of the performance of this Agreement. Likewise, Louisville, its officers, contractors and employees shall not be deemed to assume any liability for acts, errors, or omissions of SMD1 or any officer, contractor or employee thereof arising out of the performance of this Agreement.

23. Governmental Immunity. The Parties and their officers, attorneys and employees are relying on, and do not waive or intend to waive by any provision of this Agreement, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, *et seq.*, as amended, or otherwise available to the Parties and their officers, attorneys or employees.

24. Modification. This Agreement may only be modified upon written agreement of the Parties.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

**SUPERIOR METROPOLITAN
DISTRICT NO. 1**

Clint Folsom, President

ATTEST:

Phyllis L. Hardin, Secretary

CITY OF LOUISVILLE, COLORADO

Robert P. Muckle, Mayor

ATTEST:

Nancy Varra, Town Clerk

**SUBJECT: AWARD BID FOR THE WATER SYSTEM TIE-IN WITH
SUPERIOR WATER INTERCONNECT CONSTRUCTION**

DATE: OCTOBER 6, 2015

PRESENTED BY: KURT KOWAR, PUBLIC WORKS

SUMMARY:

In 2013, The City of Louisville and the Town of Superior conducted a joint study to evaluate the potential benefits of a potable water interconnect between the water distribution systems. The results of this analysis concluded that the proposed interconnect would be beneficial to each entity. A RFP for design services was initiated in 2014 with JVA Consulting Engineering being the successful recipient. In July 2015, JVA completed the design phase of the project and presented final drawings to both Louisville and Superior.

The interconnect project includes the installation of approximately 3,200 linear feet of 12" PVC pipe along Marshall Road between the Louisville's and Superior's potable water systems. A concrete vault, valving and the necessary controls will be included in the project and located at the Howard Berry Water Treatment Plant. The new interconnect will provide redundancy and emergency water supply for both municipalities, with all project costs split evenly between the two participants.

On August 19, 2015 bids for the construction of the interconnect were received from 8 contractors. Bids were reviewed by staff and JVA. Based on bid amount and qualifications it is recommended to award to Redpoint. A summary of bid results are listed below:

Contractor	Total
Nelson Pipeline	\$757,757
Sun Construction	\$546,900
Conroy Excavating	\$657,618
Defalco Construction	\$760,556
Concrete Works of Colorado	\$685,000
Iron Woman Construction	\$745,754
Redpoint	\$536,435
ESCO Construction	\$765,500

SUBJECT: AWARD BID FOR THE WATER SYSTEM TIE-IN WITH SUPERIOR WATER INTERCONNECT CONSTRUCTION

DATE: SEPTEMBER 15, 2015

PAGE 2 OF 2

FISCAL IMPACT:

The breakdown of the estimated project cost is outlined below:

Construction (Redpoint)	\$536,435
Construction Contingency (12%)	\$63,565
<u>Total Construction</u>	<u>\$600,000</u>

Town of Superior contribution	\$300,000
Louisville's portion	\$300,000

The 2015 approved Capital Improvement Plan provided for funding from account 051-499-55810-15, Water System Tie-In with Superior, in the amount of \$450,000.

RECOMMENDATION AND BUDGET AMENDMENT:

Staff recommends City Council award the 2015 Water System Tie-in with Superior to Redpoint per their Bid in the amount of \$536,435, authorize staff to execute change orders for additional work, a 12% project contingency of \$63,565.00, and authorize the Mayor, Public Works Director and City Clerk to sign and execute contract documents on behalf of the City.

ATTACHMENT(S):

1. Agreement
2. JVA Recommendation