



Public Works Commission Meeting

Water Supply Exaction Fee
(WSEF)

April 18, 2016



Background

- Evaluate options for developing additional groundwater supplies
 - Discussion of methodology – WSEF vs water rights acquisition
 - Current City water supply ratio – 90% MWD/10% local supply
 - Water supply ratio goal – 75% MWD/25% local supply
- To achieve 25% independence goal, 2015 Water Enterprise Plan (WEP) recommended:
 - Development of 3 new groundwater wells in the unadjudicated Central Basin
 - Construction of related transmission mains
 - Improvements to the Reverse Osmosis Treatment Plant



Background (continued)

- The City has adopted a Water Capacity Charge (WCC) to achieve the goal ratio
 - As new development/redevelopment occurs, increased demand would decrease share of the water supply from groundwater supplies unless groundwater supplies beyond those anticipated in the Water Enterprise Plan (WEP) are developed
 - To maintain the goal ratio, additional groundwater production needs to be developed
- The proposed Water Supply Exaction Fee (WSEF) is in addition to the City's current WCC to fund facilities not included in the determination of the current WCC



Background (continued)

- The proposed WSEF would pay for additional groundwater supply to maintain the goal ratio of 75% MWD/25% local supplies
- Build additional high capacity well in the La Brea Subarea (LBSA)
- This well is estimated to produce 700 AFY
- This well is in addition to the 3 wells recommended in the WEP
- Estimated cost of this high capacity well: \$6,156,450
- Estimated cost per acre-ft: $\frac{\$6,156,450}{700 \text{ Acre-ft}} = \$8,795 / \text{AF}$



Determination of the WSEF

- The City uses the following standards for a single family residence:
 - A typical SFR uses 925.7 gpd, which is approximately 1 acre-foot per year
 - A typical SFR is 5,000 square feet with a one-inch meter
 - A typical SFR uses 50% of total water use for indoor use
- The WSEF for a new SFR with a 1" meter is \$2,199 (one acre-foot per year x 25% for local supply and \$8,795 per acre-foot per year)
- Details of this calculation are shown in the following table



Cost of High Capacity Well

DESCRIPTION	COST
Land Acquisition (Land Value)	\$1,500,000
Well Drilling Design	\$51,188
Well Drilling Contract	\$1,023,750
Well Equipping and Transmission Main Design	\$157,500
Well Equipping and Transmission Main Contract	\$1,575,000
Water Treatment Design	\$31,500
Water Treatment Construction	\$210,000
Environmental Documentation - CEQA	\$103,950
Permitting	\$56,175
Construction Management and Inspection	\$421,313
Subtotal Project Cost	\$5,130,375
Contingency (20%)	\$1,026,075
Subtotal Project Cost with Land	\$6,156,450
Estimated Production of New Well (AFY)	700
Projected Cost per AF	\$8,795
Groundwater Supply Goal as Percent of Total Water Supply	25%
Projected Cost per AF with Land Value (25% x \$8,795)	\$2,199



WSEF By Meter Size

Meter Size	Meter Capacity Factor	Fee
3/4"	0.60	\$1,319
1"	1	\$2,199
1.5"	2	\$4,397
2"	3.2	\$7,036
3"	6	\$13,192
4"	10	\$21,987
6"	20	\$43,975



WSEF for Redevelopment

WSEF for Redevelopment or Expansion

Avg AFY for SFR	Indoor Use AFY (50%)	Local Water Supply (25%)	Cost per AFY	Fee
1.0	0.50	0.125	\$8,795	\$1,100
Average SFR Size (square feet)				5,000
Fee for Redevelopment or Expansion per SF				\$0.22

The proposed WSEF adheres to the existing practice of the City to exempt redevelopment or expansion of less than 1,000 SF of additional space.



WSEF Calculation Examples

Residential Fee Calculation Examples

(1) Residential account requiring meter upgrade

- Difference between fee for new meter and current meter
 - Upgrade from 1" to 1.5" meter: $\$4,397 - \$2,199 = \$2,198$

(2) Remodel or redevelopment < 1,000 SF

- Not charged because it is less than 1,000 SF



WSEF Calculation Examples

Residential Fee Calculation Examples (cont'd)

(3) Remodel or redevelopment \geq 1,000 SF

- Fee is \$0.22 per square foot
- Addition of 1,500 SF: $1,500 \text{ SF} \times \$0.22 = \$330$



WSEF Calculation Examples

Non-Residential Fee Calculation Examples

- \$8,795 per AF = \$9.85 per GPD
- Local water supply goal: 25%
- Therefore, fee is \$2.46 per GPD (25% x \$9.85)
- Service Unit is used to convert non-residential

WSEF



WSEF Calculation Examples

Non-Residential Service Units

Customer Class	Estimated GPD	Service Unit	Proposed WSEF	Existing Water WCC	Total Fees
Auditorium/Community Ctr	4.4	per seat	\$11	\$90	\$101
Bank	167	per 1,000 sf	\$411	\$3,380	\$3,791
Gymnasium	278	per 1,000 sf	\$685	\$5,633	\$6,318
Health Spa	667	per 1,000 sf	\$1,643	\$13,519	\$15,162
Hotel, per room	144	per room	\$355	\$2,929	\$3,284
Medical Office	278	per 1,000 sf	\$685	\$5,633	\$6,318
Office Building	167	per 1,000 sf	\$411	\$3,380	\$3,791
Shopping Center	167	per 1,000 sf	\$411	\$3,380	\$3,791
Coffee House	333	per 1,000 sf	\$820	\$6,759	\$7,579
Restaurant-Full Service	33	per seat	\$81	\$676	\$757
Retail Store	89	per 1,000 sf	\$219	\$1,803	\$2,022
School-Private	222	per 1,000 sf	\$547	\$4,506	\$5,053
Supermarket	167	per 1,000 sf	\$411	\$3,380	\$3,791



WSEF Calculation Examples

Non-Residential Fee Calculation Examples

(1) Commercial account with service unit increase (no meter upgrade)

- Pays difference in GPD per Service Unit multiplied by the increased number of Service Units and total GPD; essentially, it is equivalent to additional GPD multiplied by cost per GPD
- Example: Restaurant adds 30 seats
 - Fee: $\$81 \times 30 \text{ seats} = \$2,430$



WSEF Calculation Examples

Non-Residential Fee Calculation Examples

(2) Commercial change in use

- Difference between previous use and current use
- Example: 1,000 sf Retail Space converted to 1,000 sf Coffee House

$$\text{Fee} = \$820 - \$219 = \$601$$



Recommendations

- Adopt ordinance to establish WSEF
- Establish separate accounting for WSEF collections (required)
- WSEF due at the same time and in the same manner as the WCC
- Determine adequacy of WSEF when periodic review of capital expenses is conducted



Schedule of Adoption

Dates	Description
May 3 rd and May 10 th	Newspaper Publication
May 17 th	Public Hearing 1 st Reading of Ordinance
June 6 th	Regular Council Meeting 2 nd Reading of Ordinance (Effective 30 days after adoption)
July 6 th	Ordinance becomes effective



Questions & Discussion

Thank you

Any Questions?