



Public Works Commission Meeting

**Water Supply Exaction Fee
(WSEF)**

July 14, 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
- To achieve 25% independence goal, the 2015 Water Enterprise Plan (WEP) recommended:
 - Development of three (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 in the WEP
 - However as new development/redevelopment occurs, increased demands would produce the need for additional groundwater supplies beyond those anticipated in the WEP; to cover existing system demands
- The proposed Water Supply Exaction Fee (WSEF) is in addition to the City's current WCC to fund new facilities not included in the determination of the current WCC



Background (continued)

- The proposed WSEF would pay for additional groundwater supply to provide a proportionate share of the total cost of the following new facilities:
- 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: \$10,173,469
- Estimated cost per acre-ft: $\frac{\$10,173,469}{700 \text{ Acre-ft}} = \$14,534 / \text{AF}$



Background (Continued)

- Build Coldwater Canyon Groundwater Project (CCGWP)
- Project is expected to produce 263 AFY
- Estimated cost of CCGWP is: \$3,950,000
- Estimated cost per acre-ft: $\frac{\$3,950,000}{263 \text{ Acre-ft}} = \$15,019 / \text{AF}$



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 \$14,666 (one acre-foot per year for local supply)

Details of this calculation are shown below:

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DETERMINATION OF THE WSEF

The combined cost to develop a local groundwater source in the La Brea Subarea of the Unadjudicated Central Basin and to develop a local non-potable water source in the Coldwater Canyon for irrigation of City parks, which will free up potable water to meet the water supply demands of new development, is **\$14,123,469**. The cost to utilize local water supplies to meet a portion of the water demand of new development is **\$14,666 per acre-foot per year**

Table 3. Combined Estimated Cost and Water Supply

Combined Total Projected Cost	\$14,123,469
Combined Additional Water Supply for New Development (AFY)	963
Combined Projected Cost per AFY	\$14,666



Cost of High Capacity Well

DESCRIPTION	COST
Land Acquisition (Land Val)	\$4,500,000
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	\$112,350
Permitting	\$56,175
Construction Management and Inspection	\$421,313
Subtotal Project Cost	\$8,138,775
Contingency (25%)	\$2,034,694
Subtotal Project Cost with Land	\$10,173,469
Estimated Production of New Well (AFY)	700
Projected Cost per AF	\$14,534



COST OF COLDWATER CANYON PROJECT

Description	Cost
Land Acquisition (Land Value)	\$0
Design and Construction Management	\$450,000
Relining of Cabrillo Reservoir 3B	\$550,000
Water Treatment	\$200,000
Pipeline (3B Res. to Intersection of N. Beverly and N. Rexford – Approx. 3,500 feet)	\$700,000
Pipeline (N. Beverly and N. Rexford to Intersection of N. Rexford and Santa Monica Boulevard) – Approx. 6,300 feet	\$1,260,000
Total Projected Construction Cost (excludes Design and Construction Management)	\$2,710,000
Environmental Documentation – CEQA	\$0
Permitting	\$0
Subtotal Project Cost (includes Design and Construction Management)	\$3,160,000
Contingency (25%)	\$790,000
Estimated Project Cost	\$3,950,000
Estimated Irrigation Usage (AFY)	263
Total Projected Cost with Land (per AFY)	\$15,019



WSEF By Meter Size

Meter Size	Meter Capacity Factor	Previous Fee	New Fee
3/4"	0.60	\$1,319	\$8,800
1"	1	\$2,199	\$14,666
1.5"	2	\$4,397	\$29,332
2"	3.2	\$7,036	\$46,932
3"	6	\$13,192	\$87,997
4"	10	\$21,987	\$146,661
6"	20	\$43,975	\$293,322



WSEF for Redevelopment

WSEF for Redevelopment or Expansion

Avg AFY for SFR	Indoor Use AFY (50%)	Cost per AFY	Fee
1.0	0.50	\$14,666	\$7,333
Average SFR Size (square feet)			5,000
Fee for Redevelopment or Expansion per SF			\$1.47

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: $\$29,332 - \$14,666 = \$14,666$

- (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 1,000 SF

- Fee is \$1.47 per square foot
- Addition of 1,500 SF: $1,500 \text{ SF} \times \$1.47 = \$2,205$



WSEF Calculation Examples

Non-Residential Fee Calculation Examples

- \$14,666 per AF = \$16.43 per GPD
- Local water supply goal: 100%
- 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 Previous	Total Fees New
Auditorium/Community Ctr	4.4	per seat	\$72	\$90	\$101	\$162
Bank	167	per 1,000 sf	\$2,744	\$3,380	\$3,791	\$6,124
Gymnasium	278	per 1,000 sf	\$4,567	\$5,633	\$6,318	\$10,200
Health Spa	667	per 1,000 sf	\$10,958	\$13,519	\$15,162	\$24,477
Hotel, per room	144	per room	\$2,366	\$2,929	\$3,284	\$5,295
Medical Office	278	per 1,000 sf	\$4,567	\$5,633	\$6,318	\$10,200
Office Building	167	per 1,000 sf	\$2,744	\$3,380	\$3,791	\$6,124
Shopping Center	167	per 1,000 sf	\$2,744	\$3,380	\$3,791	\$6,124
Coffee House	333	per 1,000 sf	\$5,471	\$6,759	\$7,579	\$12,230
Restaurant-Full Service	33	per seat	\$542	\$676	\$757	\$1,218
Retail Store	89	per 1,000 sf	\$1,462	\$1,803	\$2,022	\$3,265
School-Private	222	per 1,000 sf	\$3,647	\$4,506	\$5,053	\$8,153
Supermarket	167	per 1,000 sf	\$2,744	\$3,380	\$3,791	\$6,124



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: $\$542 \times 30 \text{ seats} = \$16,260$



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
Fee = \$5,471 - \$1,462 = \$4,009



Recommendations

- Adopt ordinance to establish WSEF
- Establish separate accounting for WSEF collections (required)
- WSEF Annual Report 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 to include future Auxiliary Projects and Updated Cost Data for the Well, Transmission Main & Coldwater Canyon Project



Schedule of Adoption

Dates	Description
July 2016	Public Works Liaison Meeting
August 2016	Newspaper Publication
August 2016	Public Hearing 1 st Reading of Ordinance
September 2016	Regular Council Meeting 2 nd Reading of Ordinance (Effective 30 days after adoption)
October 2016	Ordinance becomes effective



Questions & Discussion

Thank you

Any Questions?



High Capacity Well Cost Comparison

DESCRIPTION (OLD)	COST
Land Acquisition (Land Value)	\$1,500,000
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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

DESCRIPTION (NEW)	COST
Land Acquisition (Land Val)	\$4,500,000
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