



Wastewater Rates

Public Works Commission Meeting
September 8, 2022



Examples of Rate Structure Approaches

| Agency | Sewered Flow Factor [a] | Flow Factor Winter Period | Billed Flow | Single Family Cap |
|--|-------------------------|------------------------------------|--------------------|---------------------|
| I. ONGOING WATER USE WITH NO FLOW FACTOR ADJUSTMENT | | | | |
| East Bay MUD (7/1/2021) | 100% | None | Ongoing | 9 HCF |
| City of Pasadena (5/1/2021) | 100% | None | Ongoing | 43 HCF/mo [d] |
| City of Santa Rosa (7/1/2021) | 100% | None | Ongoing | 5-mo winter average |
| City of Ventura (7/2021) | 100% | None | Ongoing | 12 HCF/mo [a] |
| City of Santa Barbara 7/1/2022) | 100% | None | Ongoing | 10 HCF/mo |
| II. ONGOING WATER USE WITH FLOW FACTOR ADJUSTMENT | | | | |
| City of San Francisco (7/1/2021) | 90% | Not specified | Ongoing | None |
| City of Santa Monica (7/1/2021) | 85% | Lowest 4 consecutive months [c] | Ongoing | None |
| City of Los Angeles (7/1/2020) | 76% [b] | 5-month winter average (Nov - Mar) | Ongoing | None |
| City of Beverly Hills (alternative 1) | 66% [d] | 3-month winter average (Jan - Mar) | Ongoing | None |
| City of Beverly Hills (alternative 2) | 52% [d] | Lowest winter month | Ongoing | None |
| City of Beverly Hills (alternative 3) | 24% - 30% | Mass balance | Ongoing | None |
| III. FIXED CHARGE PER BILL BASED ON EACH CUSTOMER'S WINTER FLOW | | | | |
| City of San Diego (1/1/2022) | 95% | 5-month winter period | 2 winter bills [e] | 20 HCF/mo |
| City of Glendale (7/1/2021) | 100% | None | Feb or Mar [e] | None |
| IV. EQUAL FIXED CHARGE PER BILLING PERIOD FOR ALL ACCOUNTS | | | | |
| City of West Hollywood | None | None | N/A | None |
| City of Palo Alto | None | None | N/A | None |
| City of Mountain View | None | None | N/A | None |

[a] Sewered Flow Factor as a percent of ongoing metered water use.

[b] Los Angeles - 93% factor for commercial; recalculated annually.

[c] Santa Monica: Multi-family discharge factor increases from 90% to 99% depending the number of units.

[d] Beverly Hills: average of two years.

[e] San Diego and Glendale: Flow is used to bill customers for the next year (no variation from bill to bill) updated annually.



Annualized Winter Sewered Flow – 3 Month

| Customer Class | Annual Flow [1] hcf | Sewered Flow [2] hcf | Return to Sewer |
|-------------------------------|------------------------|-------------------------|--------------------|
| | a | b | c = b/a |
| Single Family Residential | | | |
| Without Irrigation meter | 2,017,021 | 1,339,931 | 66.4% |
| With Irrigation meter | | | 100.0% |
| Irrigation meter | | | 0.0% |
| Multiple Family Residences | 572,457 | 551,726 | 96.4% |
| Low Strength Non Residential | | | |
| Commercial | 547,737 | 517,779 | 94.5% |
| Municipal | 41,207 | 27,252 | 66.1% |
| | <hr/> | <hr/> | |
| | 588,944 | 545,031 | |
| High Strength Non Residential | | | |
| Commercial | 186,436 | 176,239 | 94.5% |
| Municipal | 1,844 | 1,219 | 66.1% |
| | <hr/> | <hr/> | |
| | 188,279 | 177,458 | |
| | <hr/> | <hr/> | |
| | 3,366,701 | 2,614,145 | 77.6% |

1. Average of CY 2017 & 2018 annual metered flow

2. Average of lowest three winter months



Annualized Winter Sewered Flow – 1 Month

| Customer Class | Annual Flow [1] hcf | Sewered Flow [2] hcf | Return to Sewer |
|-------------------------------|------------------------|-------------------------|--------------------|
| | a | b | c = b/a |
| Single Family Residential | | | |
| Without Irrigation meter | 2,017,021 | 1,049,980 | 52% |
| With Irrigation meter | | | 100% |
| Irrigation meter | | | 0% |
| Multiple Family Residence | 572,457 | 512,609 | 90% |
| Low Strength Non Residential | | | |
| Commercial | 547,737 | 455,544 | 83% |
| Municipal | 41,207 | 20,523 | 50% |
| | <hr/> | <hr/> | |
| | 588,944 | 476,067 | |
| High Strength Non Residential | | | |
| Commercial | 186,436 | 155,056 | 83% |
| Municipal | 1,844 | 918 | 50% |
| | <hr/> | <hr/> | |
| | 188,279 | 155,974 | |
| | <hr/> | <hr/> | |
| | 3,366,701 | 2,194,630 | 65% |

1. Average of CYs 2017, 2018, 2019 annual metered flow

2. Average of lowest month for each year



Comparison of Cost-of-Service Allocations

Annualized Winter Water Use Approach – 3 Month

| | Current Revenue | Cost-of-Service | Difference |
|------------------------------|---------------------|---------------------|---------------|
| Single Family Residential | \$3,187,622 | \$6,242,658 | \$3,055,035 |
| Multi Family Residential | \$5,304,141 | \$3,246,030 | (\$2,058,111) |
| Commercial Domestic Strength | \$2,739,728 | \$1,941,207 | (\$798,522) |
| Commercial Excess Strength | \$1,277,538 | \$1,079,135 | (\$198,403) |
| Total | \$12,509,029 | \$12,509,029 | \$0 |

Annualized Winter Water Use Approach – 1 Month

| | Current Revenue | Cost-of-Service | Difference |
|------------------------------|---------------------|---------------------|---------------|
| Single Family Residential | \$3,187,622 | \$5,881,504 | \$2,693,882 |
| Multi Family Residential | \$5,304,141 | \$3,505,726 | (\$1,798,415) |
| Commercial Domestic Strength | \$2,739,728 | \$2,002,049 | (\$737,680) |
| Commercial Excess Strength | \$1,277,538 | \$1,119,750 | (\$157,788) |
| Total | \$12,509,029 | \$12,509,029 | \$0 |



Comparison of Rates

Annualized Winter Water Use – 3 Month

| Customer Class | Current Bi-Monthly | Cost of Service |
|--|--------------------|-----------------|
| Single Family | | |
| Service Charge per dwelling unit | \$87.38 | \$60.36 |
| Quantity Charge | n/a | \$3.02 |
| Multi Family | | |
| Service Charge per dwelling unit | \$87.38 | \$26.08 |
| Quantity Charge | n/a | \$3.02 |
| Commercial/Municipal | | |
| Service Charge per account | \$34.20 | \$60.36 |
| Quantity Charges (option 1 - existing classes) | | |
| Domestic Strength | \$4.74 | \$3.02 |
| Excess Strength | \$7.08 | \$5.87 |
| Quantity Charges (option 2 - proposed classes) | | |
| Low Strength | n/a | \$3.02 |
| Med Strength | n/a | \$4.42 |
| High Strength | n/a | \$5.87 |

Annualized Winter Water Use – 1 Month

| Customer Class | Current Bi-Monthly | Cost of Service |
|--|--------------------|-----------------|
| Single Family | | |
| Service Charge per dwelling unit | \$87.38 | \$58.16 |
| Quantity Charge | n/a | \$3.58 |
| Multi Family | | |
| Service Charge per dwelling unit | \$87.38 | \$27.51 |
| Quantity Charge | n/a | \$3.58 |
| Commercial/Municipal | | |
| Service Charge per account | \$34.20 | \$58.16 |
| Quantity Charges (option 1 - existing classes) | | |
| Domestic Strength | \$4.74 | \$3.58 |
| Excess Strength | \$7.08 | \$6.95 |
| Quantity Charges (option 2 - proposed classes) | | |
| Low Strength | n/a | \$3.58 |
| Med Strength | n/a | \$5.24 |
| High Strength | n/a | \$6.95 |



Annualized Winter Bill Comparison - 3 Month

| Average Bi-Monthly Bill by Class | | | | |
|---------------------------------------|-----------------|----------------|-------------------------|------------------------|
| | Single Family | Multi Family | Commercial Domestic/Low | Commercial Excess/High |
| Sample Bills at Current Rates | | | | |
| Bi-Monthly Service Charge | \$87.38 | \$87.38 | \$34.20 | \$34.20 |
| Quantity Charge per hcf | | | | |
| Metered water use | | | 112 | 303 |
| Rate per hcf | | | \$4.74 | \$7.08 |
| Total Quantity Charge | n/a | n/a | \$530.03 | \$2,145.24 |
| Current Bi-Monthly Bill | \$87.38 | \$87.38 | \$564.23 | \$2,179.44 |
| Sample Bills at Proposed Rates | | | | |
| Bi-Monthly Service Charge | \$60.36 | \$26.08 | \$60.36 | \$60.36 |
| Quantity Charge per hcf | | | | |
| Metered water use | 56 | 9 | 112 | 303 |
| Return to sewer factor | 66% | 96% | 95% | 95% |
| Sewered flow | 37 | 9 | 106 | 286 |
| Rate per hcf | \$3.02 | \$3.02 | \$3.02 | \$5.87 |
| Total Quantity Charge | \$111.77 | \$26.00 | \$319.23 | \$1,681.33 |
| Proposed Bi-Monthly Bill | \$172.13 | \$52.08 | \$379.59 | \$1,741.69 |
| Difference | | | | |
| Dollar Difference | \$84.75 | (\$35.30) | (\$184.64) | (\$437.75) |

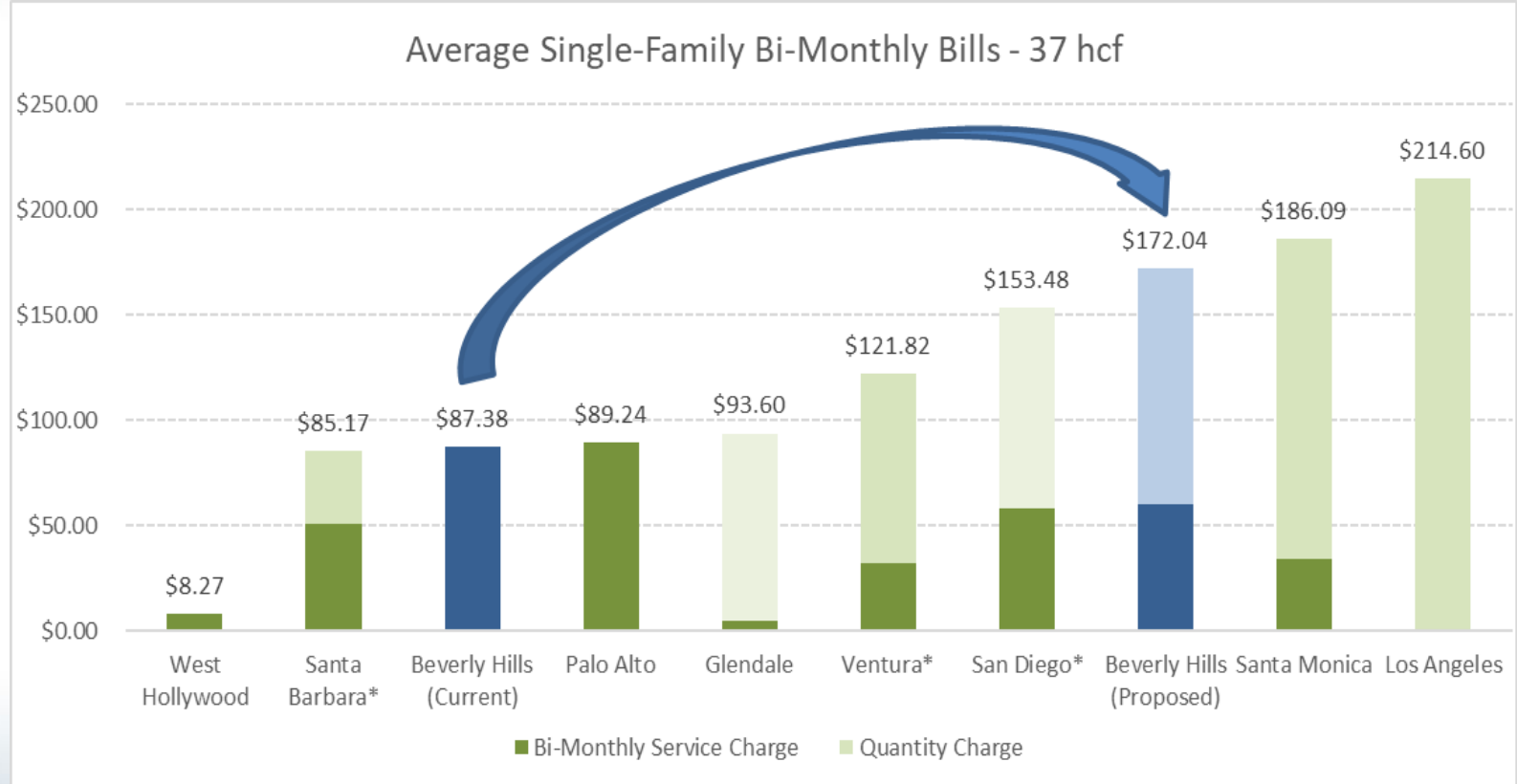


Annualized Winter Bill Comparison - 1 Month

| Average Bi-Monthly Bill by Class | | | | |
|---------------------------------------|-----------------|----------------|-------------------------|------------------------|
| | Single Family | Multi Family | Commercial Domestic/Low | Commercial Excess/High |
| Sample Bills at Current Rates | | | | |
| Bi-Monthly Service Charge | \$87.38 | \$87.38 | \$34.20 | \$34.20 |
| Quantity Charge per hcf | | | | |
| Metered water use | | | 112 | 303 |
| Rate per hcf | | | \$4.74 | \$7.08 |
| Total Quantity Charge | n/a | n/a | \$530.03 | \$2,145.24 |
| Current Bi-Monthly Bill | \$87.38 | \$87.38 | \$564.23 | \$2,179.44 |
| Sample Bills at Proposed Rates | | | | |
| Bi-Monthly Service Charge | \$58.16 | \$27.51 | \$58.16 | \$58.16 |
| Quantity Charge per hcf | | | | |
| Metered water use | 56 | 9 | 112 | 303 |
| Return to sewer factor | 52% | 90% | 83% | 83% |
| Sewered flow | 29 | 8 | 93 | 252 |
| Rate per hcf | \$3.58 | \$3.58 | \$3.58 | \$6.95 |
| Total Quantity Charge | \$103.85 | \$28.65 | \$333.02 | \$1,751.06 |
| Proposed Bi-Monthly Bill | \$162.00 | \$56.16 | \$391.18 | \$1,809.22 |
| Difference | | | | |
| Dollar Difference | \$74.62 | (\$31.22) | (\$173.05) | (\$370.22) |



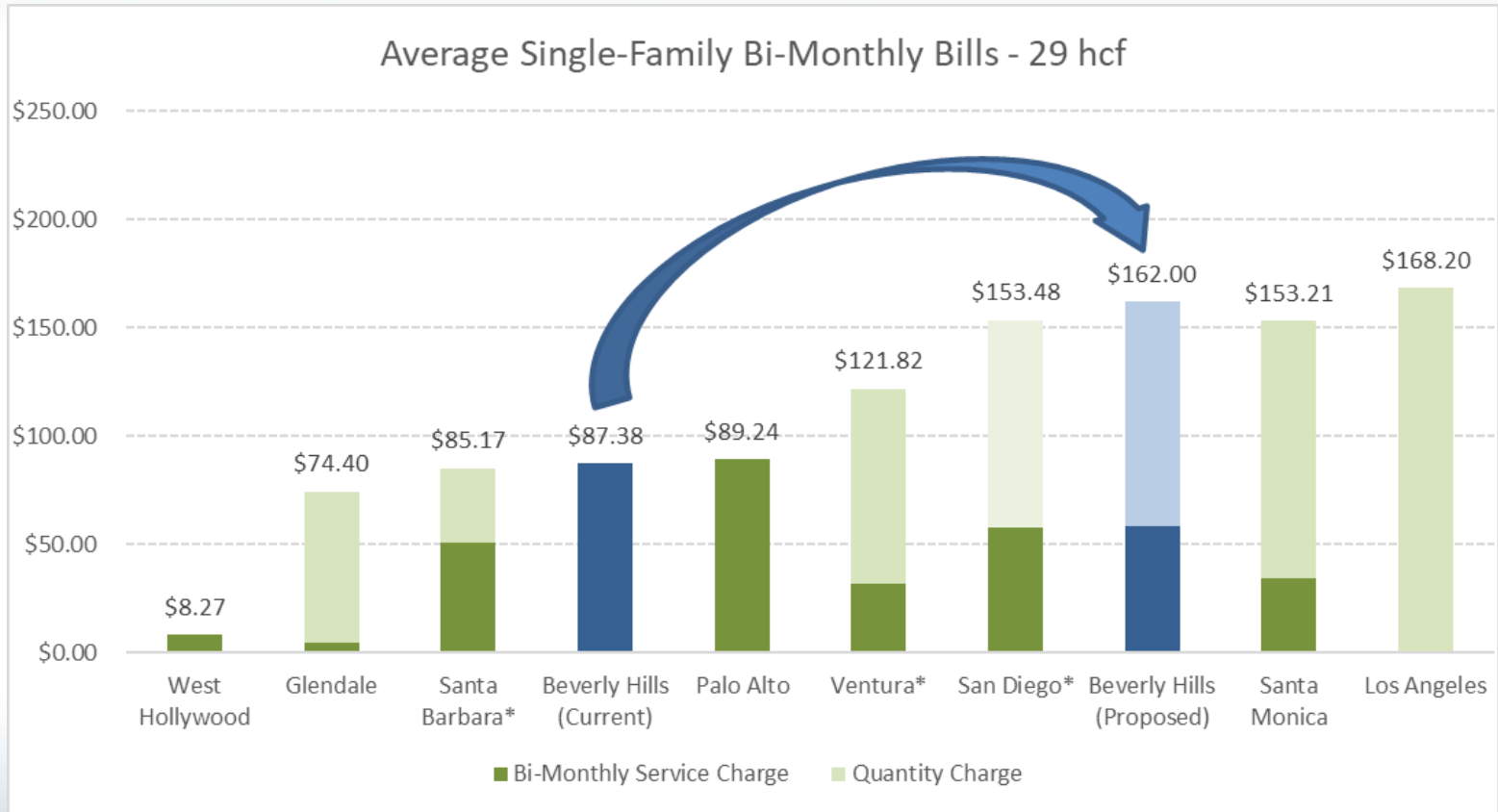
Single Family Bills – 3 Month



*Caps water consumption for wastewater billing purposes



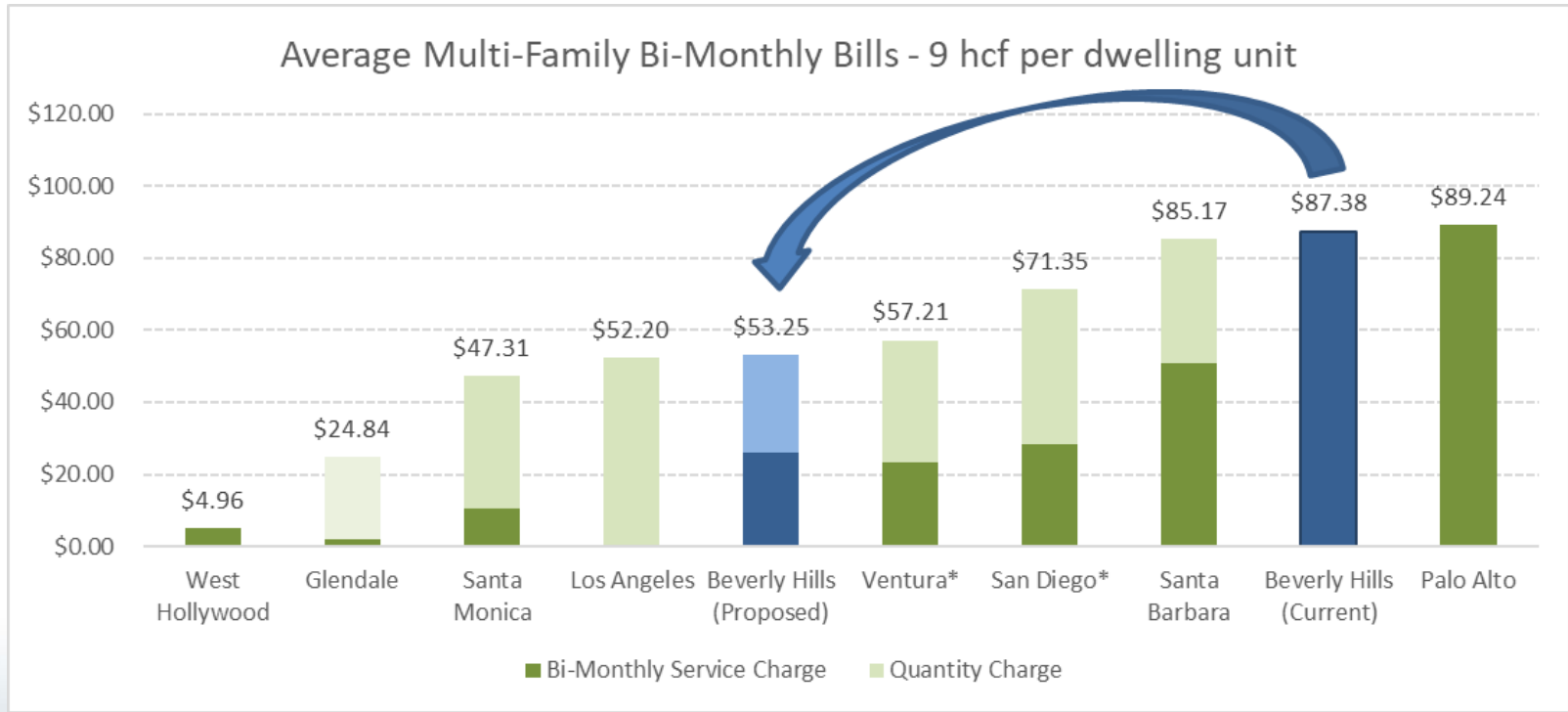
Single Family Bills – 1 Month



*Caps water consumption for wastewater billing purposes



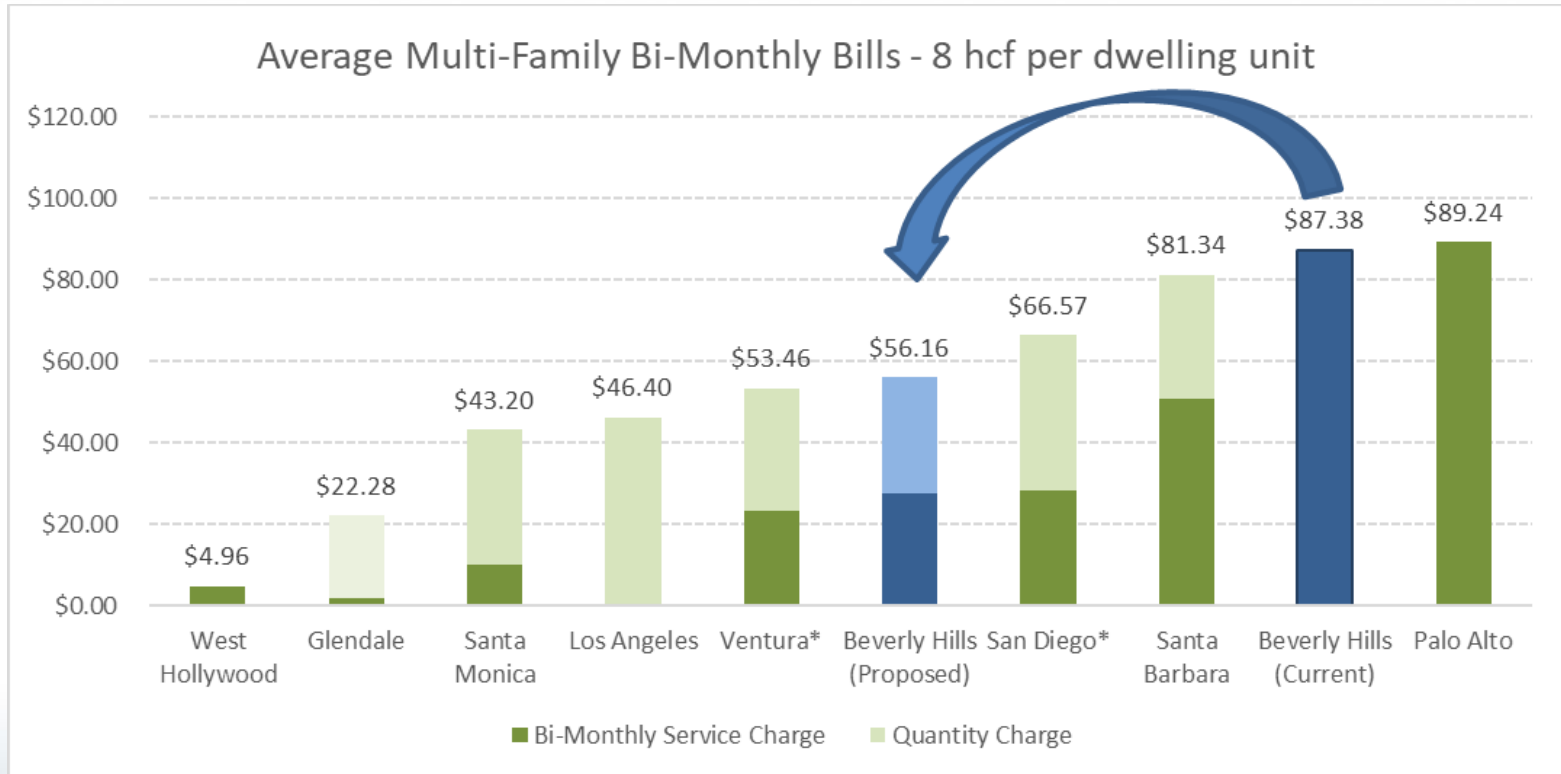
Multi Family Bill Comparison – 3 Month



*Caps water consumption for wastewater billing purposes



Multi Family Bill Comparison – 1 Month



*Caps water consumption for wastewater billing purposes



END OF PRESENTATION