

## **Comprehensive** Water Rate Study



## North Beach Water District Public Hearing

December 11, 2014 Angie Sanchez Virnoche, Principal





 Rate study completed as part of Comprehensive Water System Planning Process

 Detailed work Session held with Board on November 26 to review results and incorporate feedback



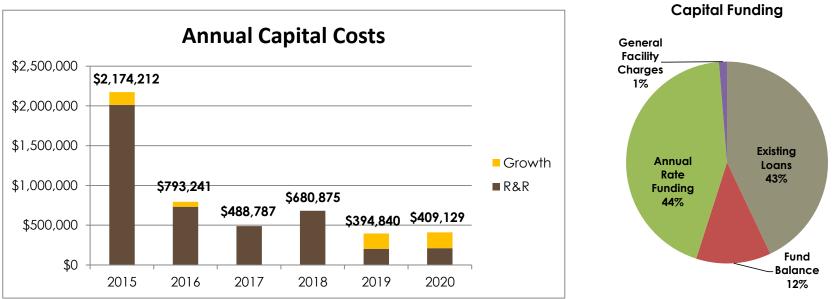
- Rate study evaluates the sufficiency of revenue to meet all utility financial obligations
- Includes operating expenses, debt service, capital costs and financial targets
- Results in a rate strategy that balances financial needs and customer impacts
- Develops rates that collects the necessary level of revenue





- Financial plan/rate forecast developed for 20-years (2015 2034)
  - Focus is on 3 6 years for rate setting (2015 2020)
- The District's 2015 proposed budget is used as the basis
- Annual escalation factors
  - Growth rate average annual 0.26% from water system plan
  - General expenses use 2.39% (10-year average CPI)
  - Labor expenses 2.86% (10-year average ECI)
  - State Excise Tax 5.029%; Business &Occupation Tax 1.50%
- Existing debt service ~ \$449,000 \$546,000/year
- Fund balance minimum \$450,000

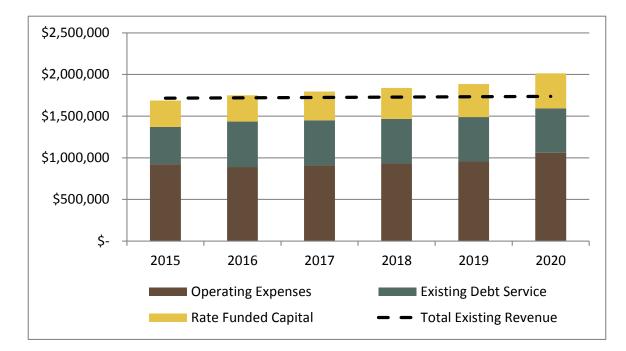




## Capital costs based on current Water System Plan in progress

- \$4.9 million 2015 2020
- Costs escalated to year of construction
- No new debt existing resources and rate revenue are funding capital





|          | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  |
|----------|-------|-------|-------|-------|-------|-------|
| Annual   | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% |
| Increase | 2.30% | 2.30% | 2.30% | 2.30% | 2.30% | 2.30% |



- One rate schedule applied to all customers
- Fixed monthly charge by meter size + all water use billed
- 85% revenue recovery from fixed charge, 15% variable

|                        | Exist | ing Rate |
|------------------------|-------|----------|
| Monthly Charge         |       |          |
| Residential/Commercial |       |          |
| 3/4 Inch               | \$    | 39.73    |
| 1 Inch                 | \$    | 66.33    |
| 1 1/2 Inch             | \$    | 132.34   |
| 2 Inch                 | \$    | 202.56   |
| 3 Inch                 | \$    | 230.78   |
| 4 Inch                 | \$    | 348.69   |
| 6 Inch                 | \$    | 677.23   |
| Fire Flow              |       |          |
| 6 Inch                 | \$    | 77.56    |
| 8 Inch                 | \$    | 101.57   |
| Volume Charge          |       |          |
| All Water Use          | \$    | 2.19     |



- Two rate options presented to the Board
- Board recommended a modified rate option
- Proposed rate structure changes phased in over 6 years
  - Phase in fire charges to cost of service
  - Recalibrate rates so approx. 20% of revenue is generated from water meter charge



| Phased-In Rates          | C  | urrent | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         |
|--------------------------|----|--------|--------------|--------------|--------------|--------------|--------------|--------------|
| Monthly Base Rate        |    |        |              |              |              |              |              |              |
| Residential              |    |        |              |              |              |              |              |              |
| 3/4 Inch                 | \$ | 39.73  | \$<br>39.73  | \$<br>39.73  | \$<br>40.16  | \$<br>41.09  | \$<br>42.04  | \$<br>43.02  |
| 1 Inch                   | \$ | 66.33  | \$<br>66.33  | \$<br>66.33  | \$<br>67.06  | \$<br>68.62  | \$<br>70.21  | \$<br>71.85  |
| Commercial               |    |        |              |              |              |              |              |              |
| 3/4 Inch                 | \$ | 39.73  | \$<br>39.73  | \$<br>39.73  | \$<br>40.16  | \$<br>41.09  | \$<br>42.04  | \$<br>43.02  |
| 1 Inch                   | \$ | 66.33  | \$<br>66.33  | \$<br>66.33  | \$<br>67.06  | \$<br>68.62  | \$<br>70.21  | \$<br>71.85  |
| 1 1/2 Inch               | \$ | 132.34 | \$<br>132.34 | \$<br>132.34 | \$<br>133.72 | \$<br>136.82 | \$<br>140.00 | \$<br>143.26 |
| 2 Inch                   | \$ | 202.56 | \$<br>202.56 | \$<br>202.56 | \$<br>204.80 | \$<br>209.54 | \$<br>214.41 | \$<br>219.41 |
| 3 Inch                   | \$ | 230.78 | \$<br>230.78 | \$<br>230.78 | \$<br>233.31 | \$<br>238.71 | \$<br>244.26 | \$<br>249.95 |
| 4 Inch                   | \$ | 348.69 | \$<br>348.69 | \$<br>348.69 | \$<br>352.58 | \$<br>360.74 | \$<br>369.12 | \$<br>377.73 |
| 6 Inch                   | \$ | 677.23 | \$<br>677.23 | \$<br>677.23 | \$<br>684.68 | \$<br>700.53 | \$<br>716.81 | \$<br>733.51 |
| Fire Flow                |    |        |              |              |              |              |              |              |
| 6 Inch                   | \$ | 77.56  | \$<br>107.90 | \$<br>138.25 | \$<br>168.59 | \$<br>198.93 | \$<br>229.28 | \$<br>259.62 |
| 8 Inch                   | \$ | 101.57 | \$<br>153.88 | \$<br>206.18 | \$<br>258.49 | \$<br>310.80 | \$<br>363.10 | \$<br>415.41 |
| Metered Water Rate       | \$ | 2.19   | \$<br>2.53   | \$<br>2.89   | \$<br>3.13   | \$<br>3.22   | \$<br>3.31   | \$<br>3.41   |
| Percent Fixed Revenue    |    | 84.7%  | 82.8%        | 81.0%        | 80.0%        | 80.0%        | 80.0%        | 80.0%        |
| Percent Variable Revenue |    | 15.3%  | 17.2%        | <br>19.0%    | <br>20.0%    | <br>20.0%    | <br>20.0%    | <br>20.0%    |

- Phases in fire cost-of-service charges
- Variable revenue at 20% beginning in 2017



| Average Customers |    | sting Bill | Pro | oposed<br>Bill | Difference |      |
|-------------------|----|------------|-----|----------------|------------|------|
| Residential 3/4"  |    |            |     |                |            |      |
| Low (2.1 ccf)     | \$ | 44.33      | \$  | 45.04          | \$         | 0.71 |
| Medium (3.5 ccf)  | \$ | 47.40      | \$  | 48.59          | \$         | 1.19 |
| High (7 ccf)      | \$ | 55.06      | \$  | 57.44          | \$         | 2.38 |
| Commercial 3/4"   |    |            |     |                |            |      |
| Low (3.7 ccf)     | \$ | 47.83      | \$  | 49.09          | \$         | 1.26 |
| Medium (5.9 ccf)  | \$ | 52.65      | \$  | 54.66          | \$         | 2.01 |
| High (17.5 ccf)   | \$ | 78.06      | \$  | 84.01          | \$         | 5.95 |



- Questions
- Rate Approval December 22

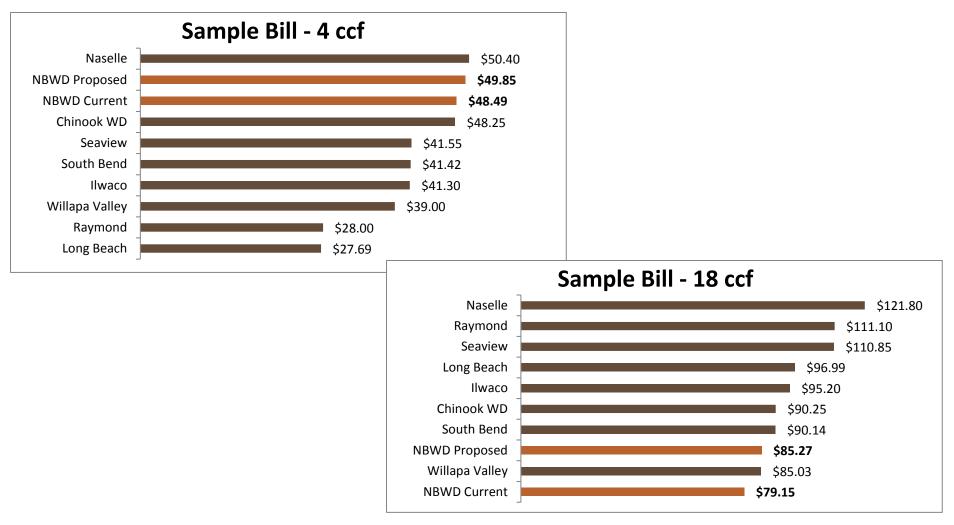
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FCS GROUP



| Average Monthly Bills for Commercial<br>Customers with Fire Meters | Fire Meter<br>Size | Comm.<br>Meter #1 | Comm.<br>Meter #2 | Average<br>Usage | Existing Bill |        | Proposed<br>Bill | Difference |  |
|--|--------------------|-------------------|-------------------|------------------|---------------|--------|------------------|------------|--|
| 2924 SUNSET VIEW RESORT**  | 8-inch             | 2.0-inch          |                   | 27.00            | \$            | 363.26 | \$ 424.85        | \$ 61.59   |  |
| 3155 REGENCY LONG BEACH LLC**                                      | 6-inch             | 3.0-inch          |                   | 128.25           | \$            | 589.21 | \$ 663.65        | \$ 74.44   |  |
| 4168 OMAN & SON**  | 6-inch             | 3/4-inch          | 3/4-inch          | 15.50            | \$            | 190.97 | \$ 226.64        | \$ 35.67   |  |
| 4510 OB SCHOOL DISTRICT 101**                                      | 6-inch             | 2.0-inch          | 3/4-inch          | 22.25            | \$            | 368.58 | \$ 406.57        | \$ 37.99   |  |



| 2015 Customer Data Combined |    | ccount    | MCE Factors | MC |        | Monthly Fixed<br>Charge (d) |           |  |
|-----------------------------|----|-----------|-------------|----|--------|-----------------------------|-----------|--|
| Res/Comm                    |    | arges (a) | (b)         |    | (c)    |                             | laige (a) |  |
| 3/4 Inch                    | \$ | 27.74     | 1.00        | \$ | 11.34  | \$                          | 39.08     |  |
| 1 Inch                      | \$ | 27.74     | 1.67        | \$ |        | \$                          | 46.68     |  |
| 1 1/2 Inch                  | \$ | 27.74     | 3.33        | \$ |        | Ŝ                           | 65.51     |  |
| 2 Inch                      | \$ | 27.74     | 5.33        | \$ |        | \$                          | 88.19     |  |
| 3 Inch                      | \$ | 27.74     | 10.67       | \$ | 121.01 | \$                          | 148.75    |  |
| 4 Inch                      | \$ | 27.74     | 16.67       | \$ | 189.06 | \$                          | 216.80    |  |
| 6 Inch                      | \$ | 27.74     | 33.33       | \$ | 378.00 | \$                          | 405.74    |  |
| Fire Flow                   |    |           |             |    |        |                             |           |  |
| 6 Inch                      | \$ | -         | 33.33       | \$ | 229.47 | \$                          | 229.47    |  |
| 8 Inch                      | \$ | -         | 53.33       | \$ | 367.16 | \$                          | 367.16    |  |

(a) Account charges = (total customer, peak, and fire costs) ÷ total accounts

- (b) Meter capacity equivalent (MCE) factors from AWWA
- (c) MCE charges = MCE cost x MCE factor where MCE cost = (meter & service costs ÷ total MCEs) + (a portion of base costs ÷ total MCEs less fire)
- (d) Monthly fixed charge = a + c