# UTILITY RATES IN FOREST GROVE

City of Forest Grove
Annual Town Hall Meeting
January 31, 2015

# Utilities – Pay Their Own Way

- City Utilities - Light & Power, Water, Sewer, and Surface Water Management (SWM)
- They are self-supporting businesses that are fully supported by the revenue from rates and any other revenue raised by that utility.
- **No property tax dollars are used to pay for the costs of operating these utilities**
- In fact, these utilities pay the General Fund for engineering, billing, administrative support and franchise fees.

RETURN THIS PORTION WITH PAYMENT

city of forest grove

UTILITY BILLING OFFICE
1924 COUNCIL STREET
PO BOX 326
FOREST GROVE, OR 97116-0326

OFFICE HOURS: MON – FRI 9:00 AM – 5:00 PM
(503) 992-3221
PAY ONLINE AT: www.forestgrove-or.gov

PETER TRUAX

FOREST GROVE OR 97116-1012

## AMOUNT DUE

| | |
|---|---|
| BALANCE FORWARD: | 0.00 |
| CURRENT CHARGES: | 223.99 |
| AMOUNT DUE: | 223.99 |
| CURRENT BILL DUE DATE: | 01/08/2015 |

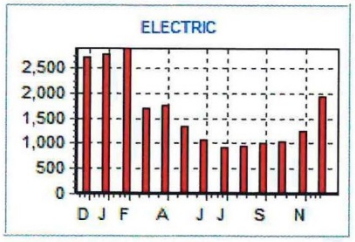
## ACCOUNT INFORMATION

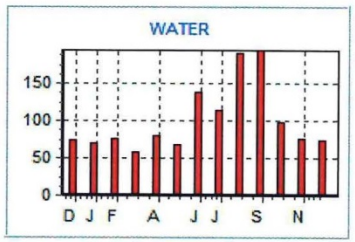
| | |
|---|---|
| BILLING DATE: | 12/22/2014 |
| ACCOUNT NUMBER: | |
| SERVICE ADDRESS: | |
| SERVICE PERIOD: | 11/10/2014 - 12/11/2014 |
| PREVIOUS BALANCE: | 182.62 |
| PAYMENTS RECEIVED: | 182.62- |
| LAST PAYMENT DATE: | 12/01/2014 |
| ADJUSTMENTS: | 0.00 |
| BALANCE FORWARD: | 0.00 |
| CURRENT CHARGES: | 223.99 |
| NEW ACCOUNT BALANCE: | 223.99 |

## SPECIAL MESSAGE

The Forest Grove Library Foundation invites the community to the Annual "Books and Buns" Lasagna Dinner Fundraiser on Thursday, Feb 5, at United Church of Christ, 2031 College Way 5 to 8 p.m. Limited number of tickets sold; available at City Library, 2114 Pacific Ave, 503.992.3246. Takeout is also available. Cost: $12 Adults, $6 Children 12 and under. All proceeds benefit FG Library Foundation's ongoing capital project for furnishings and artwork. Lasagna dinner donated by Maggie's Buns and coffee donated by BJ's Coffee Co.

## YOUR MONTHLY USAGE




## CURRENT CHARGES

### ELECTRIC CHARGES

| Meter # | Previous | Current | Usage | Amount |
|---|---|---|---|---|
| K2424 | 68125 | 70051 | 1926 | 123.37 |

### WATER CHARGES

| Meter # | Previous | Current | Usage | Amount |
|---|---|---|---|---|
| 36261493 | 4943 | 5016 | 73 | 34.30 |

### OTHER CHARGES

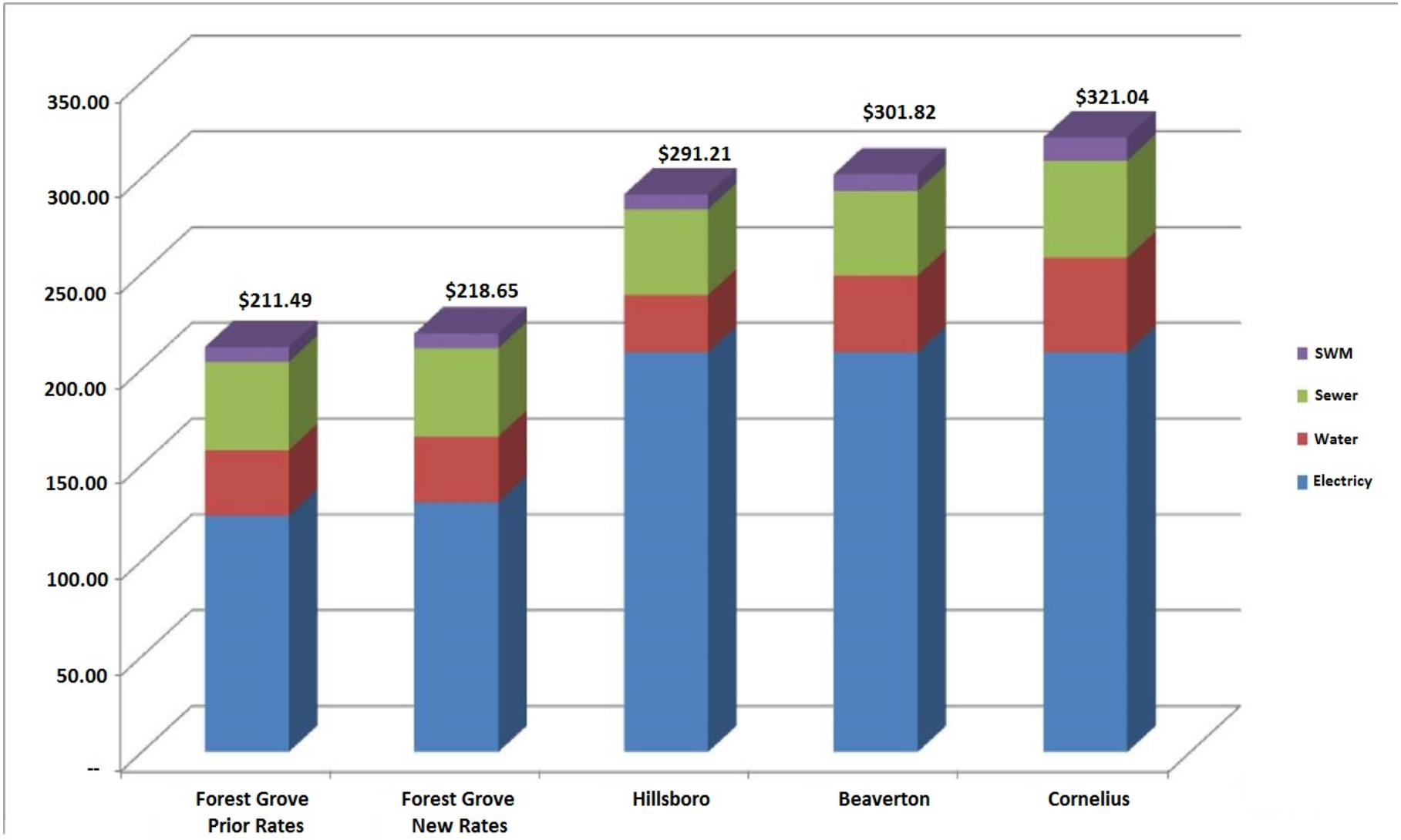
| Description | Amount |
|---|---|
| SANITARY SEWER | 46.07 |
| SURFACE WATER | 7.75 |
| CAPITAL IMPROVEMENTS | 3.00 |
| GREEN POWER UNITS | 8.00 |
| STREETLIGHTS | 1.50 |

# Monthly Residential Rates

| Water | Light & Power (major) |
| --- | --- |
| Two Components:<br>Monthly Fixed Rate $21.29<br><br>Usage Rate per 1,000 gallons<br>0-7,000 gal. - $1.71<br>7,000 – 15,000 gal - $3.47<br>15000+ gal. - $5.04 | Two Components:<br>Customer Charge (fixed) $16.00<br><br>Energy Charge (Usage)<br>0-1000 kWh at 5.48 cents/kWh<br>1001+ kWh at 6.45 cents/kWh |

| Mayor Truax's December 2014 Bill | | | | | | |
|---|---|---|---|---|---|---|
| Compare to Other Cities Using Mayor's December Usage | | | | | | |
| | **Usage** | **Forest Grove** (Prior) | **Forest Grove** (New) | **Hillsboro** | **Beaverton** | **Cornelius** |
| **Electricity** | | | | | | |
| Customer Charge | | 13.26 | 16.00 | 10.00 | 10.00 | 10.00 |
| Usage Charge | 1926 | 110.11 | 114.53 | 198.80 | 198.80 | 198.80 |
| **Total Electricity** | | **123.37** | **130.53** | **208.80** | **208.80** | **208.80** |
| | | | | | | |
| **Water** | | | | | | |
| Customer Charge | | 21.29 | 21.29 | 12.93 | 12.00 | 23.72 |
| Usage Charge | 73 | 13.01 | 13.01 | 16.97 | 28.01 | 25.71 |
| **Total Water** | | **34.30** | **34.30** | **29.90** | **40.01** | **49.43** |
| | | | | | | |
| **Sewer** | | | | | | |
| CWS Charge | | 42.26 | 42.26 | 42.26 | 42.26 | 42.26 |
| City Charge | | 3.81 | 3.81 | 2.50 | 2.00 | 8.40 |
| **Total Sewer** | | **46.07** | **46.07** | **44.76** | **44.26** | **50.66** |
| | | | | | | |
| **SWM** | | | | | | |
| CWS Charge | | 6.75 | 6.75 | 6.75 | 6.75 | 6.75 |
| City Charge | | 1.00 | 1.00 | 1.00 | 2.00 | 5.40 |
| **Total SWM** | | **7.75** | **7.75** | **7.75** | **8.75** | **12.15** |
| | | | | | | |
| **Total Utility Charges** | | **211.49** | **218.65** | **291.21** | **301.82** | **321.04** |

# Utility Bill Comparisons – Mayor's Usage



# Residential Electric Rate Comparisons


- Notes: Assumes 1,100 average monthly kWh usage.

# Utilities Billed by the City

## City Keeps 100% of the Revenue Received

- Electric - rates established by the City Council.

  Rate Revenue FYE 6/30/14 - $15,556,000

- Water - rates established by the City Council.

  Rate Revenue FYE 6/30/14 - $3,844,000

# Utilities Billed by City (Cont.)

## Revenue Divided by Clean Water Services and City

- Sewer – Rates established by Clean Water Services. The City adds a surcharge set by the City Council to the sewer rates set by CWS.

  Rate Revenue FYE 6/30/14 - $4,902,000

  City Share of Revenue - $1,497,000

- Surface Water Management - Rates established by Clean Water Services. The City adds a surcharge set by the City Council to the surface water management rates set by CWS.

  Rate Revenue FYE 6/30/14 - $1,083,000

  City's Share of Revenue - $860,000

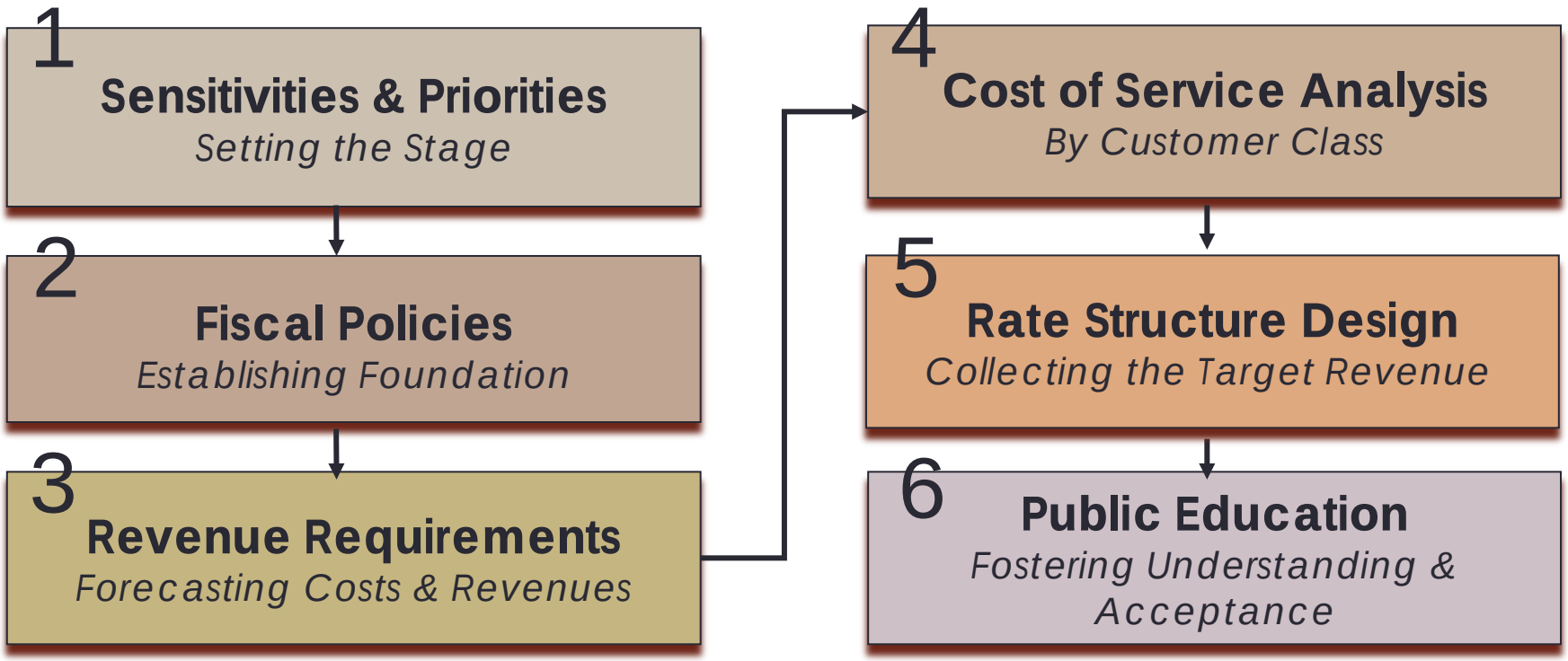
# What Should Rates Do?

- Generate sufficient revenues to sustain the utility system
- Charge for services provided
- Recover costs equitably by customer class
- Achieve City objectives
  - ✓ Conservation
  - ✓ Revenue stability
  - ✓ Maintain minimum fund balances
    - ✓ Operating Reserve
    - ✓ Capital Reserves

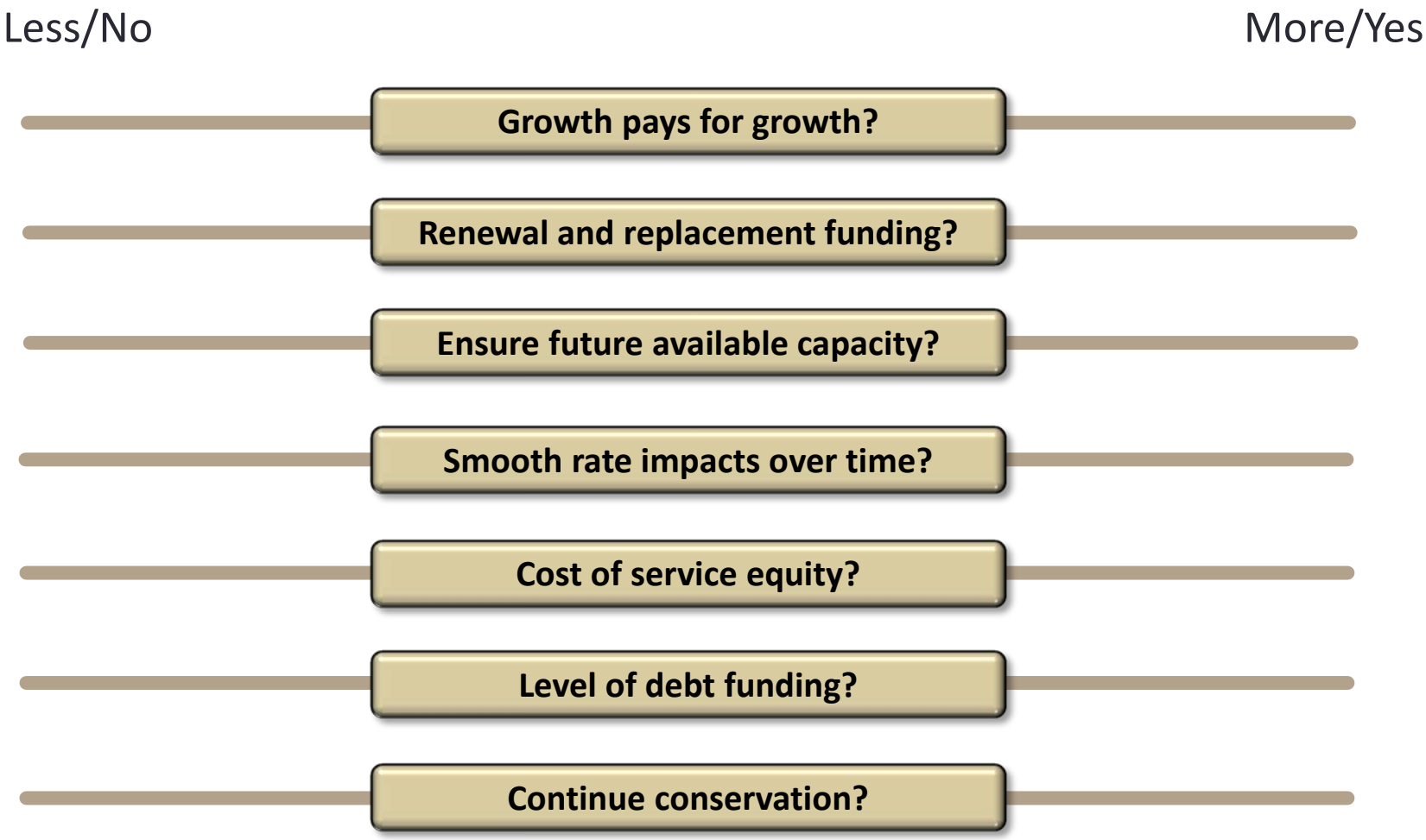
# Customer Classes

| Water | Light & Power (major) |
| --- | --- |
| • Single-family Residential<br>• Multi-family Residential<br>• Commercial<br>• Industrial<br>• Fire Service<br>• Fire Hydrant Water (permit required) | • Residential Service<br>• General Service<br>• Large Commercial & Industrial Service<br>• Industrial Service – Special Contract<br>• Street Lighting<br>• Rental Lights |

# Steps to Set Rates



# Establishing Sensitivities and Priorities



# Role of Financial Policies

- Basis for financial performance and budgeting
- Plan for weathering financial disruptions
- Foundation for consistent financial/rate decisions
- Sample Policies could include:
  - Operating Reserve – funds available to meet unexpected shortfalls in revenue
  - Capital Contingency Reserve – funds available to meet emergency repairs and unanticipated capital needs.
  - Capital Replacement Funding – funds available for ongoing replacement of aging infrastructure to maintain system integrity

# Revenue Requirements

- **Simply means how much yearly revenue from all sources does the utility need to fund all future financial obligations on an ongoing basis including:**
  - Operating costs (e.g. personnel costs, treatment or power costs)
  - Capital costs not covered by system development charges
  - Payment of existing and any new debt service needed
  - Reserves and contingencies (savings accounts)
  - Remove revenue from other sources before determine revenue needed from rates
- Purpose is to determine if current rates are able to meet future requirements or are rate increases needed. Usually project rates and costs over a five-year period.

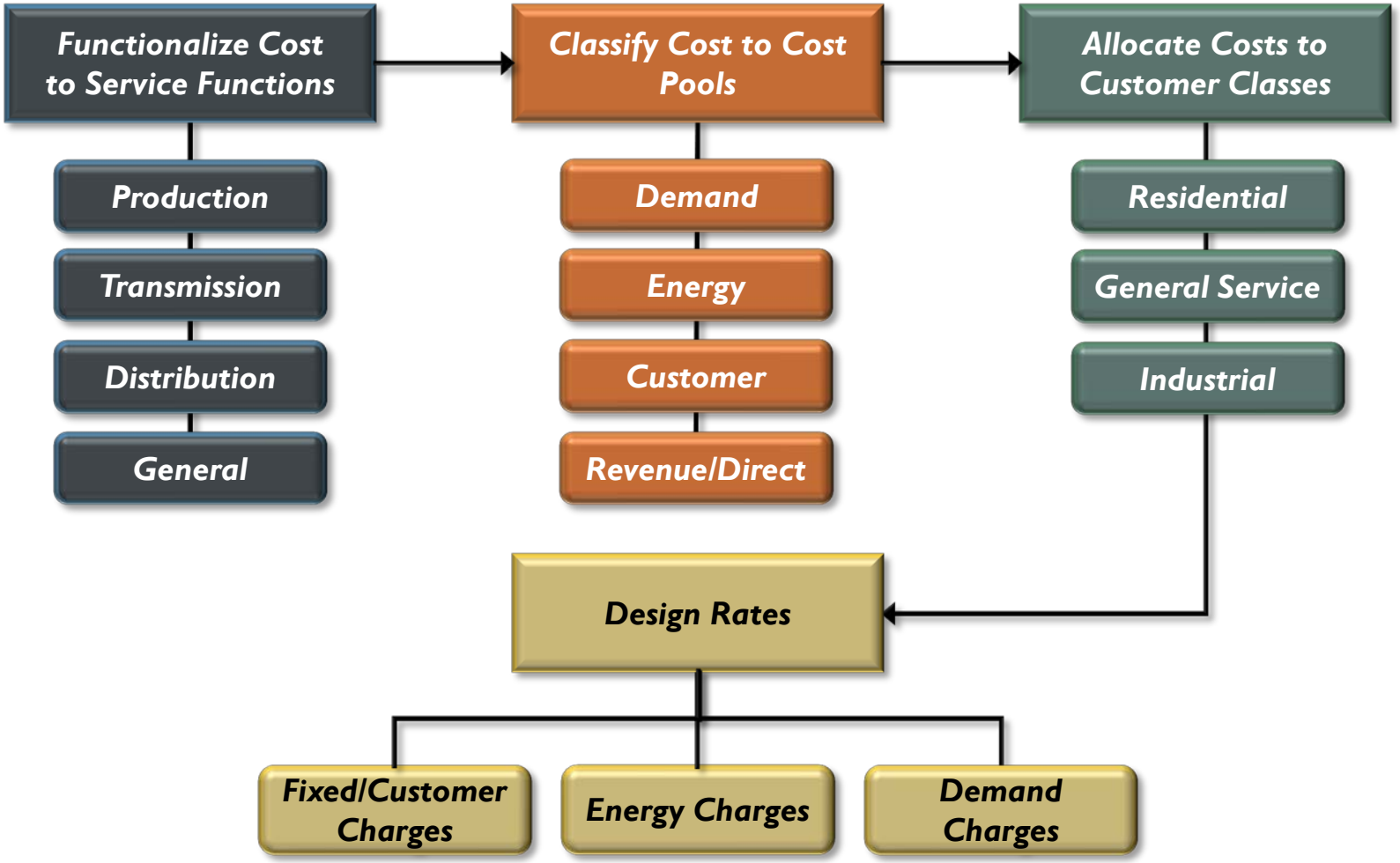
# Capital Cost Considerations

- Funding Philosophy
  - Cash (pay-as-you-go)- Higher Near Term Rates
    - Existing customers pay 100% of initial costs
  - Debt Financing – Lowest near-term Rates
    - Softens immediate rate impacts of costly capital projects
    - More closely matches costs to useful life of asset
    - Spreads costs between existing and future ratepayers
    - How much debt you can have may be an issue
  - Hybrid
    - Define a reasonable basis for cash/rate funding
    - Evaluate need for debt (large, long life projects)
    - Aligns funding with nature of capital project

# Cost of Service Analysis

- Different types of customers generate different costs
  - Example - residential summer usage (peaking) causes overall system size to need to be larger than would be necessary for industrial and commercial customers that have consistent usage during the year
- Cost of services tries to allocate the utility's costs to the different customer classes
- Try to set rates based on cost of service results
- Complex calculation to perform

# Overview of Cost of Service Process



# Rate Design = Revenue Collection

- Creation of rate structures by customer class that recover the revenue requirements
- In Forest Grove, composed of fixed and variable charges

  Fixed – set customer or meter charge

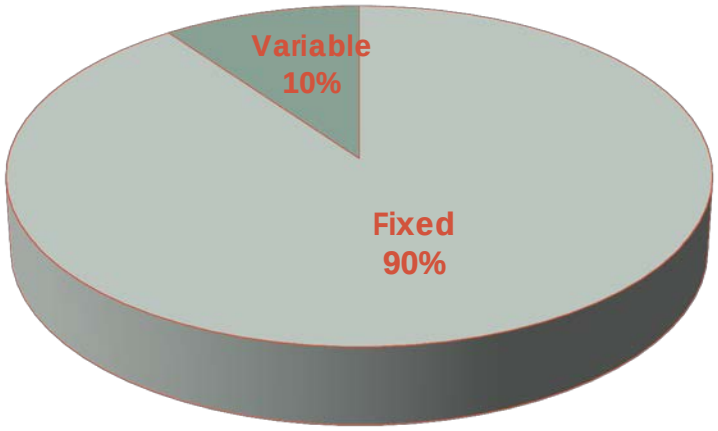
  Variable – charge based on usage

- Considerations:
  - Equity of rates between customer classes
  - Complexity of rates (understandable & implementable)
  - Rate Impacts
  - Revenue stability and predictability
  - Social objectives (affordability, economic development, conservation, etc.)

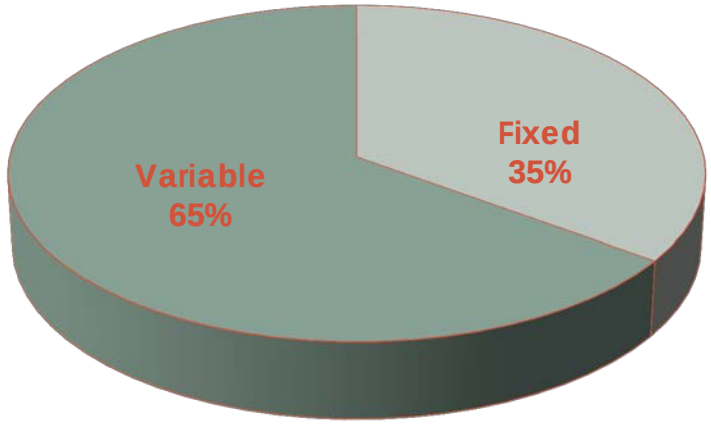
# Revenue Stability Issues - Water

- Align costs and revenues

**Sample Breakdown of Costs**




**Sample Breakdown of Revenues**




***In general, a utility's revenues are more volatile than its costs. Actual usage during a year can have a significant impact on the expected revenue.***

# Recent Rate Increase History

| Water | Light & Power |
| --- | --- |
| • July 1, 2010 – 6%<br>• July 1, 2011 – Average 8%, increased fixed charge more and usage charge less<br>• July 1, 2012 – 8%<br>• July 1, 2013 – 8%<br>• July 1, 2014 – 8%<br>• Future Increases Projected:<br>  • Annual Increases of 8% projected for next several years. Increases reviewed annually by Council.<br>• City currently starting rate and SDC study to see if projected rate increases are necessary. | • January 1, 2010 – 5%<br>• October 1, 2011 – 5.25%<br>• October 15, 2013 – 3.79% on energy charge only, customer charge left unchanged<br>• January 15, 2014 – Average 7% for residential, average 5% for other major customer classes. Increased fixed charge by more than average increase and energy charge less than the average increase<br>• Future Increases Projected:<br>  • Average 6% Increases on October 1, 2015, 2016, and 2017. Increases are reviewed annually by Council. |

# Why Do Water Rates Keep Increasing

- **Primary Reasons:**
  - Building Cash Reserves for New Capital Projects
    - Rates with funds set aside for capital projects
    - Net timber harvest revenue after debt service payment
    - System Development Charges on new construction
  - Maintenance and Replacement of Aging System
    - Unexpected Repairs – repairing leak at City's WTP and break in Raw Water Pipeline cost approximately $630,000
- **Secondary Factors:**
  - Operations and Maintenance costs are increasing

# Building Cash Reserves for Future Projects

| Water Fund<br>Beginning Fund Balances (Accumulated Savings) | | | |
|---|---|---|---|
| | Water Fund | Water SDC Fund | Total Water Fund Balances |
| July 1, 2010 | $ 2,297,000 | $ 1,170,000 | $ 3,467,000 |
| July 1, 2011 | $ 2,290,000 | $ 1,536,000 | $ 3,826,000 |
| July 1, 2012 | $ 2,580,000 | $ 1,902,000 | $ 4,482,000 |
| July 1, 2013 | $ 3,509,305 | $ 2,594,000 | $ 6,103,305 |
| July 1, 2014 | $ 3,968,000 | $ 3,170,000 | $ 7,138,000 |

Notes:

Water Fund includes operating and capital reserves.

Water SDC Fund can only be spent on system expansion projects.

# Planned Water Projects – Next Five Years

**PROPOSED 2015-20 WATER CIP PROJECT SUMMARY**

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | **Total Option 1** | **Total Option 2** |
|---|---|---|---|---|---|---|---|
| Forest Grove Water System Improvement Projects | $ 825,000 | $ 1,263,350 | $ 1,378,250 | $ 545,600 | $ 881,691 | $ 4,893,891 | $ 4,893,891 |
| JWC Water Treatment Plant Improvement Projects | $ 514,263 | $ 321,327 | $ 323,066 | $ 731,261 | $ 11,895 | $ 1,901,812 | $ 1,901,812 |
| JWC Water Treatment Plant Expansion Project | $ 30,407 | $ 45,709 | $ 195,386 | $ 1,704,797 | $ 1,190 | | $ 1,977,488 |
| | | | | | **Total Proposed Water System CIP** | **$ 6,795,703** | **$ 8,773,192** |
| | | | | | Total JWC Water System Ownership | 11.76% | 12.94% |

# FG Water System Projects to 2020

| PROPOSED 2015-20 WATER CIP PROJECT BREAKDOWN | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 5yr Total | SDC Eligible |
| **FOREST GROVE WATER SYSTEM IMPROVEMENT PROJECTS** | | | | | | | |
| Distribution Main Improvements | $ - | $ - | $ - | $ 200,000 | $ 100,000 | $ 300,000 | |
| Line Oversizing Participation | $ 50,000 | $ - | $ 50,000 | $ 50,000 | $ 50,000 | $ 200,000 | X |
| FG WTP - West Filter Repair | $ 150,000 | $ - | $ - | $ - | $ - | $ 150,000 | |
| FG WTP - Air Scour | $ - | $ - | $ - | $ - | $ 350,000 | $ 350,000 | X |
| FG WTP - Rebuild Repair BW Pump | $ 38,000 | $ - | $ - | $ - | $ - | $ 38,000 | |
| FG WTP - Valve Actuators | $ - | $ - | $ 10,000 | $ 10,000 | $ 10,000 | $ 30,000 | |
| FG WTP - Chlorine/Fluoride Analyzer | $ 8,000 | $ - | $ - | $ - | $ - | $ 8,000 | |
| FG WTP - Mower Replacement | $ - | $ 18,000 | $ - | $ - | $ - | $ 18,000 | |
| FG WTP - Removal of Surge Tank | $ - | $ - | $ - | $ - | $ 10,000 | $ 10,000 | |
| FG WTP - Reservoir Drain Pipe Repair | $ 10,000 | $ - | $ - | $ - | $ - | $ 10,000 | |
| FG WTP - Annual repair/replacement allocation | $ - | $ - | $ 17,300 | $ 17,300 | $ 17,300 | $ 51,900 | |
| FG WTP - Annual Misc. Equip allocation | $ - | $ - | $ 5,500 | $ 5,500 | $ 5,500 | $ 16,500 | |
| FG WTP - Stream & Current Analyzer | $ 8,000 | $ - | $ - | $ - | $ - | $ 8,000 | |
| FG WTP - Turbidity Meter | $ 3,000 | $ - | $ - | $ - | $ - | $ 3,000 | |
| Watershed Road Improvements | $ - | $ 20,000 | $ 250,000 | $ 20,000 | $ - | $ 290,000 | |
| Emergency Interie | $ - | $ 432,100 | $ - | $ - | $ - | $ 432,100 | X |
| David Hill Road Waterline | $ - | $ 414,800 | $ - | $ - | $ - | $ 414,800 | X |
| Finished Water Storage | $ - | $ 194,450 | $ 583,350 | $ - | $ - | $ 777,800 | X |
| Asset Management Program | $ - | $ - | $ - | $ 172,800 | $ - | $ 172,800 | |
| Large Meter Replacement | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 50,000 | $ 250,000 | |
| Meter Radio Reads | $ 100,000 | $ 100,000 | $ 100,000 | $ - | $ - | $ 300,000 | |
| Emergency Water Bladder Dispenser | $ - | $ - | $ - | $ 20,000 | $ - | $ 20,000 | |
| 10th Street PRV Station Meter Replacement | $ - | $ - | $ - | $ - | $ 100,000 | $ 100,000 | |
| WTP Vulnerability Analysis | $ 200,000 | $ - | $ - | $ - | $ - | $ 200,000 | |
| WTP - Mechanical Sludge & Residuals Collection | $ - | $ - | $ - | $ - | $ 173,891 | $ 173,891 | X |
| Water Master Plan (Every 6 Years) | $ - | $ - | $ 216,100 | $ - | $ - | $ 216,100 | X |
| Flow Improvements to Oak Crest Dr. Replace Pipe. | $ 208,000 | $ - | $ - | $ - | $ - | $ 208,000 | X |
| Looping C St. to D St. on 19th Ave | $ - | $ 34,000 | $ 96,000 | $ - | $ - | $ 130,000 | X |
| Water Rights Strategic Plan | $ - | $ - | $ - | $ - | $ 15,000 | $ 15,000 | X |
| **Sub Total - Forest Grove Water System Improvement Projects** | **$ 825,000** | **$ 1,263,350** | **$ 1,378,250** | **$ 545,600** | **$ 881,691** | **$ 4,893,891** | |

# JWC Capital Projects to 2020

| PROPOSED 2015-20 WATER CIP PROJECT BREAKDOWN | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 5yr Total | SDC Eligible |
| **JWC WATER TREATMENT PLANT IMPROVEMENT PROJECTS** | | | | | | | |
| JWC WTP Upgrade to 75 MGD | $ 47,463 | $ 14,239 | $ 52,209 | $ 317,289 | $ - | $ 431,200 | X |
| Seismic 1-2-3-4 Near Term | $ 24,723 | $ 35,671 | $ 186,950 | $ 272,891 | $ - | $ 520,235 | |
| JWC Capital Improvement Maintenance Projects | $ 279,347 | $ 271,417 | $ 83,907 | $ 141,081 | $ 11,895 | $ 787,647 | |
| Re-Roof Operations | $ 6,665 | | | | | $ 6,665 | |
| Emergency Back-Up Power | $ 82,750 | | | | | $ 82,750 | |
| Demo Soda Ash Silo | $ 6,665 | | | | | $ 6,665 | |
| Install Flow Meters | $ 66,650 | | | | | $ 66,650 | |
| **Sub Total - JWC WTP Improvement Projects** | **$ 514,263** | **$ 321,327** | **$ 323,066** | **$ 731,261** | **$ 11,895** | **$ 1,901,812** | |
| | | | | | | | |
| **JWC WATER TREATMENT PLANT EXPANSION PROJECTS** | | | | | | | |
| JWC WTP Expansion to 85 MGD | $ - | $ 15,000 | $ 168,300 | $ 1,663,400 | $ - | $ 1,846,700 | X |
| Seismic 1-2-3-4 Near Term | $ 2,472 | $ 3,567 | $ 18,695 | $ 27,289 | $ - | $ 52,024 | |
| JWC Capital Improvement Maintenance Projects | $ 27,935 | $ 27,142 | $ 8,391 | $ 14,108 | $ 1,190 | $ 78,765 | |
| **Sub Total - JWC WTP Expansion Projects** | **$ 30,407** | **$ 45,709** | **$ 195,386** | **$ 1,704,797** | **$ 1,190** | **$ 1,977,488** | |

# Potential Water Projects Past 2020

FUTURE WATER SYSTEM PROJECTS

| | 2014 Cost |
|---|---|
| Treatment Plant Plate Settlers | 1,209,900 |
| Barney Reservoir Buy-In | 2,592,600 |
| Watercrest Road Pump Station Upgrade | 129,600 |
| Scoggins Seismic Retrofit | 8,469,200 |
| Water Storage 0.30 MG Upper Reservoir #2 | 604,900 |
| Water Storage 2.25 MG Lower Reservoir | 3,681,500 |
| Water Storage 1.0 MG David Hill Reservoir | 1,642,000 |
| David Hill URA Pump Station | 604,900 |
| David Hill URA PRV | 345,700 |
| FG Water System Seismic Improvements | 2,000,000 |
| Parallel Transmission Line JWC Supply | 6,100,000 |
| JWC WTP Seismic Improvements | 3,235,000 |
| Watershed Land Acquisition | 500,000 |
| TOTAL: | $ 31,115,300.00 |

# Why Do L&P Rates Keep Increasing

- BPA electric wholesale power and transmission rates increase every two years. On October 1, 2015, wholesale power and transmission rates are projected to increase by 8.7% and 6.1 %, respectively. Power and transmission costs represent 57% of annual revenue requirement.
- Replacement of aging infrastructure – principally three aging substation transformers (43 – 55 years old) and rebuilding two substations.
- Other costs such as wages and benefits continue to increase
- City needs to maintain a prudent level of reserves (savings) and will be using reserves over the short-term

# Capital Plan

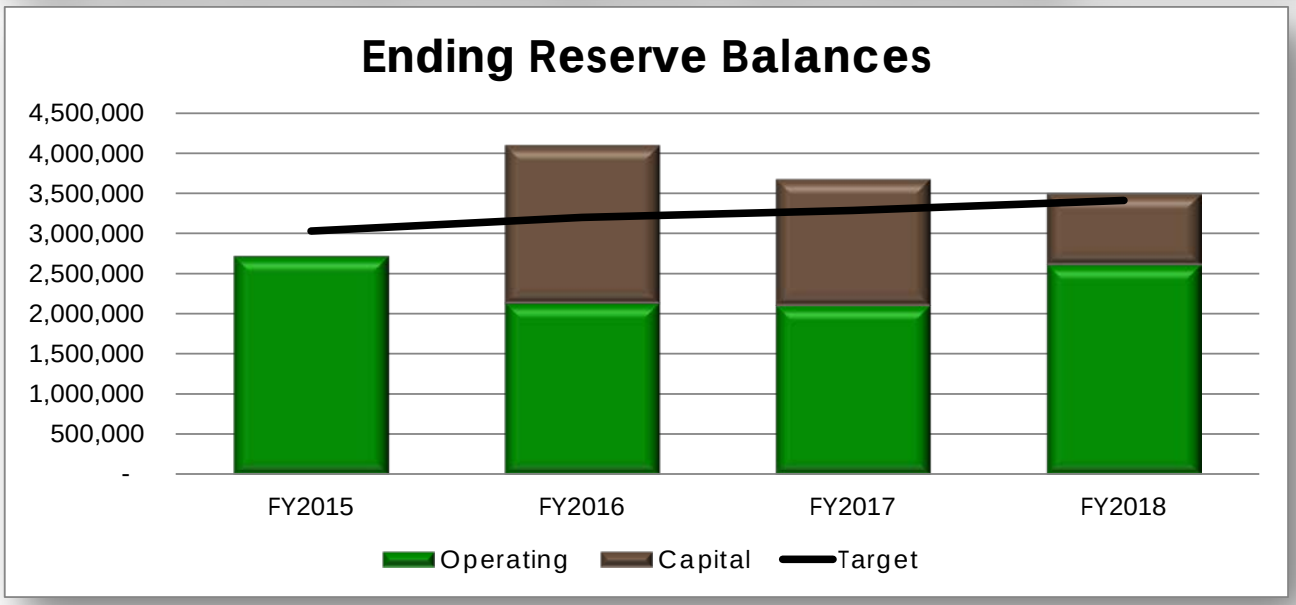
| Projects | FY2015 | FY2016 | FY2017 | FY2018 | Total |
|---|---|---|---|---|---|
| Major Tools and Equipment | $ 50,000 | $ 20,563 | $ 21,141 | $ 21,736 | $ 113,440 |
| Substation Upgrades | 2,063,500 | 1,399,500 | 177,000 | 152,154 | 3,792,154 |
| Property improvements & Office Building | 183,000 | 10,281 | 10,571 | 10,868 | 214,720 |
| L&P Vehicle Replacement Program | 175,000 | 205,628 | 137,419 | 407,554 | 925,600 |
| L&P Specialized Equipment | 145,000 | - | - | 53,254 | 198,254 |
| Distribution System Additions and Upgrades | 125,000 | 51,407 | 52,853 | 54,341 | 283,601 |
| **Total** | **$ 2,741,500** | **$ 1,687,379** | **$ 398,984** | **$ 699,906** | **$ 5,527,769** |

- Total capital costs of $5.5 million through FY 2018
- Capital funding plan
  - Use existing reserves
  - New debt issue - $3.6 million in FY 2016

# Revenue Requirements Summary – L&P

| Revenue Requirement | FY2015 | FY2016 | FY2017 | FY2018 |
|---|---|---|---|---|
| Proposed Increases | 6.00% | 6.00% | 6.00% | 6.00% |
| O&M Share | 2.22% | 2.25% | 2.40% | 2.33% |
| Power Share | 2.93% | 3.14% | 3.38% | 3.37% |
| Capital Share | 0.85% | 0.61% | 0.22% | 0.30% |

**Notes**: Assumes January FY2015 increase followed by October increases thereafter.




- Proposed scenario minimizes rate impacts over time
  - Ending reserve target met by FY2018

# Wrap Up

- Rates depend on the goals and objectives for each utility
- Current rate payers have benefitted from investments in the utilities made decades ago
- Large capital projects to replace aging infrastructure are needed to maintain the reliability of the City's utility systems
- Operational costs continue to increase- e.g., labor costs and wholesale electric and transmission rates from BPA