

# Tapping into the Price of Water: Regional Perspective



**ANDREW NISHIHARA**

---

**Background**

---

**Pacific Northwest Rate Snapshot**

---

**Water Rate Analysis**

---

**Summary & Conclusions**

---

**Questions**

---

# Agenda

**Purpose &  
Introduction**

**What's in a Rate?**

# Background

# Purpose & Introduction

- Why water rates?
- Water rate inequity exists
- Information gap
- Determining if there is a trend to water rates:
  - Quantity – Customers, Demand?
  - Location – Source, Accessibility?
  - Quality – Treatment Required?
  - System Age – Infrastructure?

***Could assist with CIP planning and/or Public Outreach***

# What's in a Rate?

## *Customers' Bill*

| Charge Item                            | Qty.           | Comments   |
|--|----------------|--|
| Volume Usage                           | ccf/gal        | Some providers use a tiered approach for higher usage  |
| Base Connection Fee*                   | Per connection | Few providers do not have a base connection fee, some have different flat fees based on meter size   |
| Capital Improvement Project (CIP) Fee* | Per connection | Flat fee used by some providers to help fund planned projects  |
| Credits/Taxes/Misc. Fees               | Variable       | Savings for bi-monthly/quarterly billing, conservation, and/or economic disadvantaged. Taxes/fees levied for distribution and/or SW/Sewer/etc. |

***Variability in providers' rate structure may lead to poor correlation***

# What's in a Rate?

## *Providers' Expenditures*

|               | Power       | Labor     | Treatment | Distribution | O&M       | Capital Improvements |
|---------------|-------------|-----------|-----------|--------------|-----------|----------------------|
| Surface Water | \$-\$\$\$   | \$-\$\$\$ | \$-\$\$\$ | \$-\$\$\$    | \$-\$\$\$ | N/A - \$\$\$         |
| Groundwater   | \$\$-\$\$\$ | \$-\$\$   | \$-\$\$   | \$-\$\$\$    | \$-\$\$\$ | N/A - \$\$\$         |

*Variability in each provider's situation may lead to poor correlation*

# Pacific Northwest Rate Snapshot

**Methodology**

**Population**

**OR/WA/ID**

**Source Type**

# Methodology

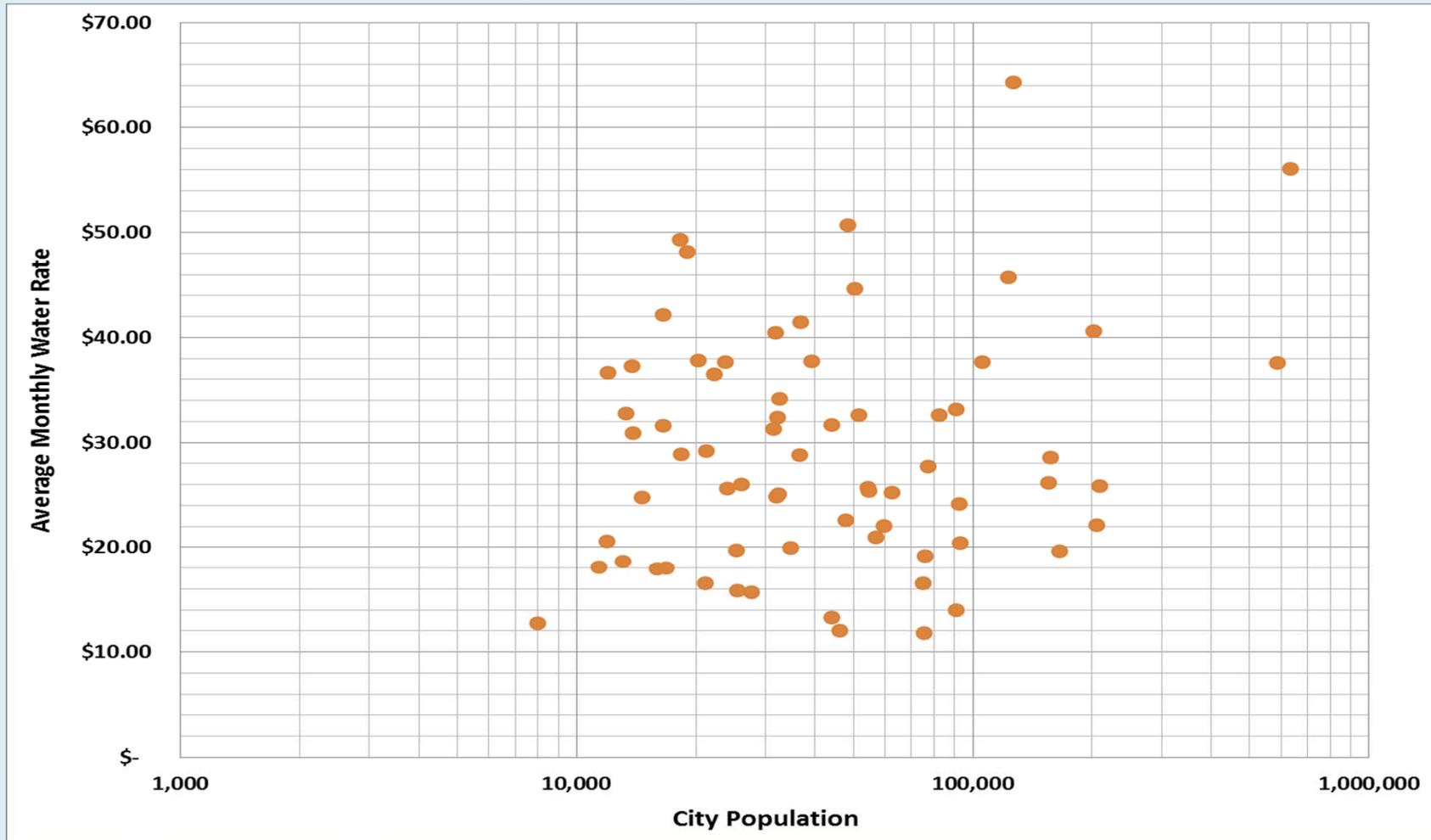
## Normalizing the data

- Data obtained for 58 cities (16-ID; 24-WA; 28 OR)
- 6,000 gal/month (8 ccf)
  - Estimates vary from 50-100 gal/person-day
  - Winter usage less than summer usage
  - Averaged providers who use different seasonal billing rates
  - Some base rates applied bi-monthly; adjustments made
- Assumed 3/4" meter for customers
- Removed non-water fees
  - Stormwater/sewer/garbage
- Single-family Residential, in service area rates



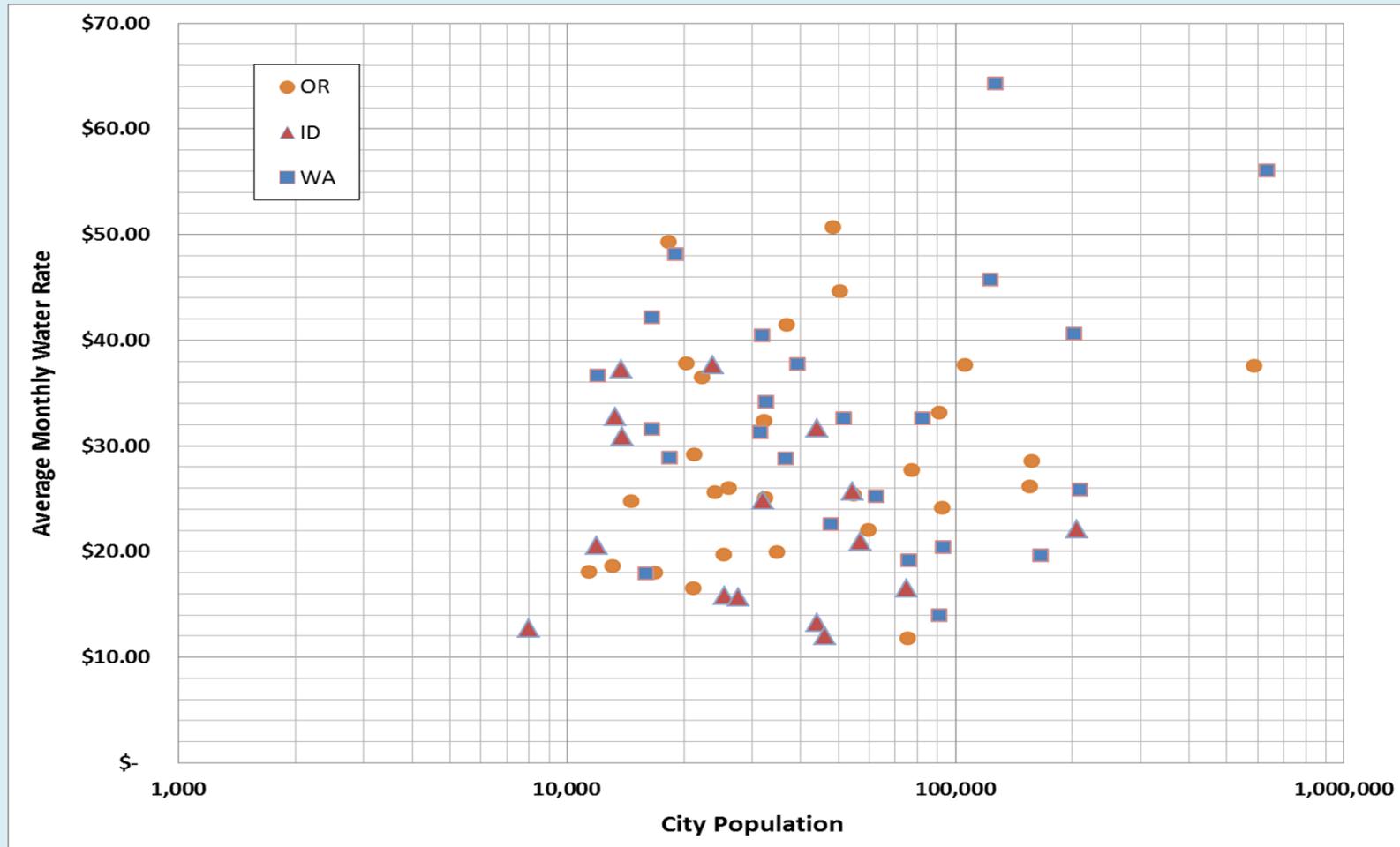
***Single-family rate collection may not reflect majority of providers' revenue***

# Water Rates by Population



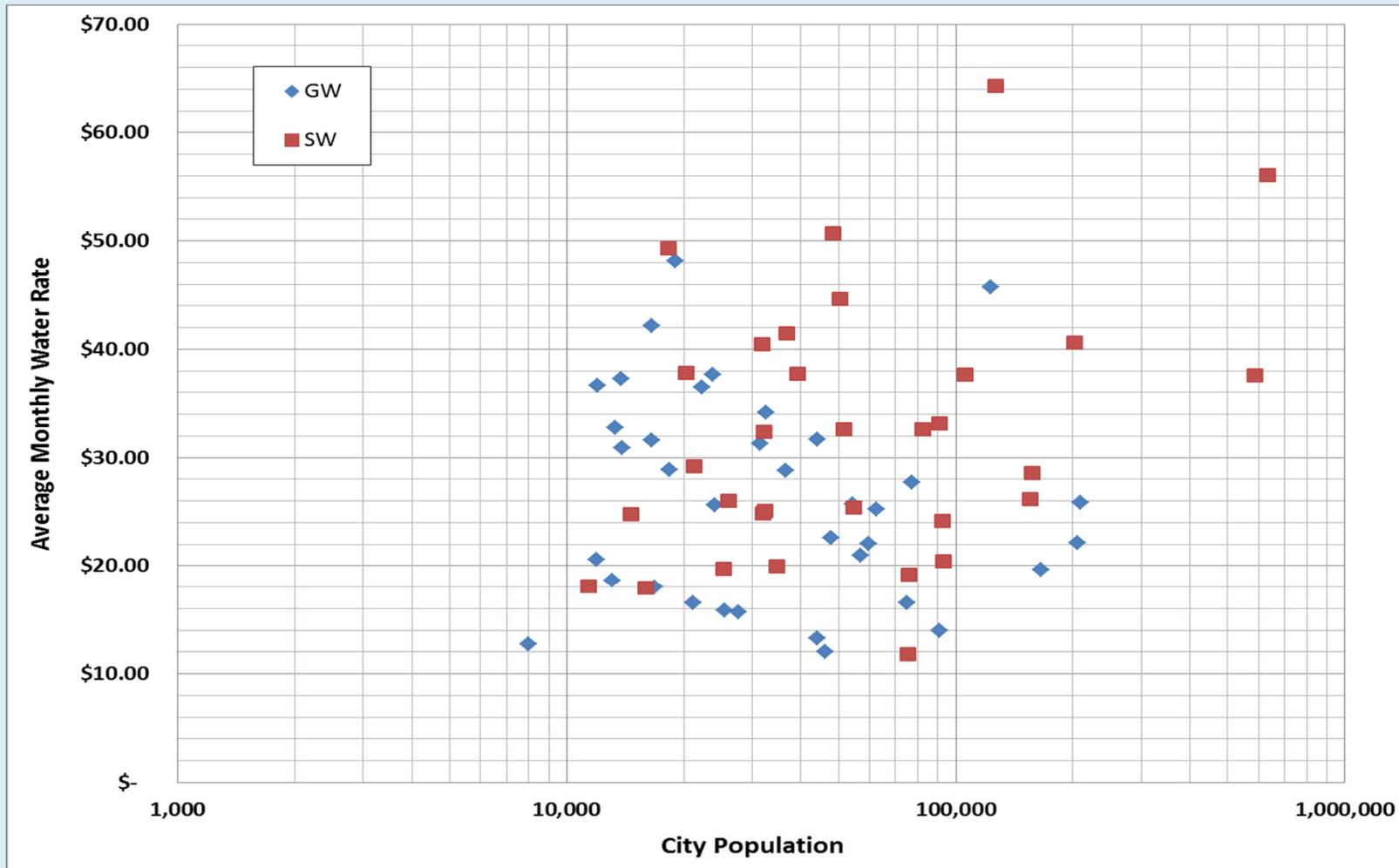
*Economy of scale for population?*

# Oregon, Washington, Idaho



*High variability State to State*

# Water Rates by Source Type



*Providers relying on groundwater typically have lower rates*

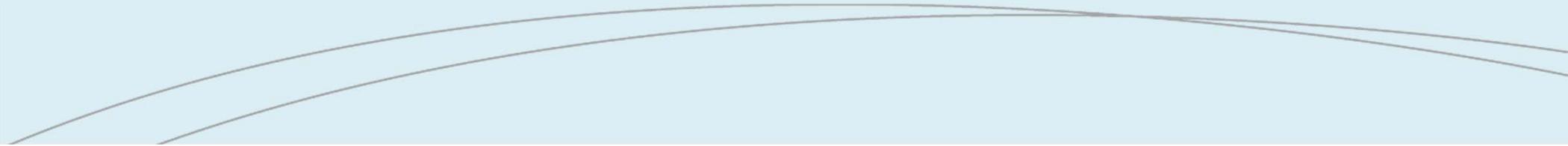
# Water Rate Analysis

**Factors Impacting  
Rates**

**Additional  
Considerations**

**Summary &  
Conclusions**

# Factors impacting rates regionally

- Accessibility to inexpensive power
    - Some providers operate power plant(s)
  - Source water generally requires more treatment
    - Labor, Chemicals, O&M, etc.
  - Deferred Capital Improvements or Recent Capital Improvements Implemented
    - Infrastructure age, regulatory driven
  - Limited flexibility for rate increases/adjustments
- 

# Additional Considerations



- Impact of Conservation Programs
  - Decreased demand can delay or eliminate need for CIPs
  - Decreased demand can cause higher unit operating costs
- Secure Source of Supply
- Unforeseen Circumstances
  - Oregon Resilience Plan's seismic vulnerability findings
  - Upcoming regulatory changes

## The Oregon Resilience Plan

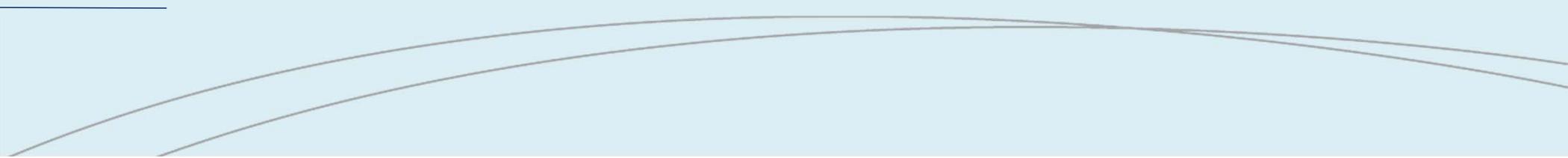
Reducing Risk and Improving Recovery  
for the Next Cascadia Earthquake and Tsunami

Report to the  
77<sup>th</sup> Legislative Assembly

from  
Oregon Seismic Safety Policy  
Advisory Commission (OSSPAC)



## Summary & Conclusions:

- Variability in water rates should be expected
  - No strong correlation based on source, state, or population
  - In addition to source & distribution related differences, deferred and/or regulatory-driven CIPs also play a large role in variability
- 

Questions?

