

What is a Reasonable Water Rate?

Nevada Water Resources Association Conference
February 2nd, 2011

Presented by: **Hansford Economic Consulting**

Presentation Outline

- What is the Issue?
 - Rising Cost of Water and Unwillingness to Charge Customers Full Cost of Service
- Nevada Board for Financing Water Projects (BFWP)
Definition of Reasonable Water Rate
 - Balance Financial Viability/Sustainability and Customer Affordability
 - How do Nevada Water Utilities Stack Up?
- Discussion of Financial Viability/Sustainability (objective) and Affordability (subjective)
- Key Findings and Conclusions

What is the Issue?

- General expectation in water industry that utility bills will constitute increasingly greater proportion of monthly household costs
 - Utility costs outpacing CPI
 - Rising poverty levels
 - Political pressure not to raise rates
- *“More and more communities are struggling to maintain a financially healthy water enterprise without imposing excessive hardships on their financially struggling customers”*

Jeff Hughes, Director of Environmental Finance Center, UNC Chapel Hill

Nevada Board for Financing Water Projects – Reasonable Water Rates Policy 9/14/2010

- **PURPOSE:** *ENSURE WATER SYSTEM IS FINANCIALLY VIABLE and that GRANT (TAX PAYER) FUNDING IS DISTRIBUTED TO THE MOST NEEDY*

- **ACTIONS:**
 - Change in Policy to be More Rigorous / Condition of Grant Funding September 14, 2010. Rates must be reasonable BEFORE applying for a grant (previously prior to award of bids for construction)
 - Language revisions to recognize that other fees / charges should be considered in addition to rates to determine reasonable cost burden to customers

- AB198 point system to determine % of Project Grant-funded. Meeting the Board's reasonable water rate adds 20 points, having metered community with financially responsible metered rates an additional 10 points (30 out of 165 points is significant)

Reasonable Water Rates

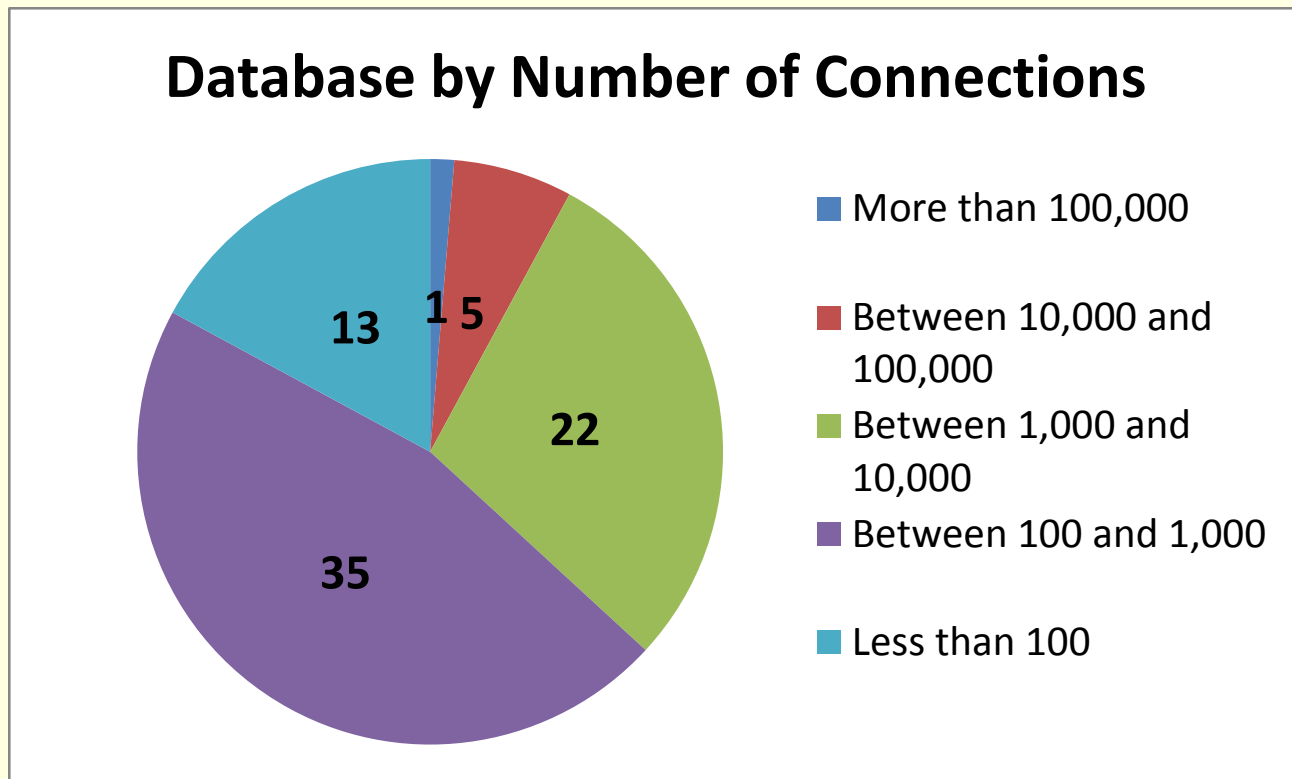
- Definition of Reasonable by BFWP*:
 - 1) Where MHI is \Rightarrow State MHI (most recent Census)
 - Avg. monthly customer cost for 15,000 galls \Rightarrow 2% of MHI
 - 2) Where MHI is $<$ State MHI (most recent Census)**
 - Avg. monthly customer cost for 15,000 galls \Rightarrow 1.5% of MHI

**POLICY, NOT REQUIREMENT. THE BOARD MAY DETERMINE HIGHER OR LOWER RATES ARE REASONABLE DEPENDING ON AGENCY CIRCUMSTANCES*

*** CONSISTENT WITH USDA FOR GRANT FUNDING PROJECTS*

Database for Analysis of Nevada Water Systems

- NDEP – 221 Active community water systems in NV
- Database – 76 systems (about 1/3rd of systems)



How do Nevada Water Utilities Stack Up?

- Of total 76 utilities in database:
 - 21 (28%) meet BFWP's definition of Reasonable Water Rates
 - 55 (72%) DO NOT
 - 40 have received grant funding
 - 32 construction projects, 8 feasibility projects
 - Of the 32 construction projects awarded to 27 non-irrigation utilities
 - 19 (70%) of water purveyors DO NOT meet the Reasonable Water Rate requirement

Financial Viability/Sustainability and Customer Affordability

Finding a Balance:

- Financial Viability/Sustainability
 - *Objective* - sustain the water system meeting public health requirements with no subsidies

- Affordable Water Rates
 - *Subjective* – how much can customers afford to pay / should they pay

Financial Viability

- Enterprise Fund* Revenue Requirement
 - Operations and Maintenance to meet all health and safety regulations. Example cost categories:
 - Salaries & Benefits
 - Power, Chemicals & Wholesale Water Costs
 - Fleet and Fuel Costs
 - Debt Service
 - Facilities Repair (routine)
 - Major Capital Improvements for aging facilities
 - Adequate Reserves and/or Rate Stabilization Fund for emergencies, drought periods, bond coverage ratios

**(self-supporting fund with no General Fund / other subsidy)*

What is Affordable?

- How to define? No universal definition in the water industry.
- Typically on a customer bill-to-income ratio. Other indicators may be:
 - Bill Delinquency Rate
 - Bill Comparison with Other Similar-sized Water Utilities
- EPA Guideline:
 - Low Burden (<1% MHI)
 - Mid-range Burden (1-2% MHI)
 - High Burden (>2%)

Other Affordability Indicators

- Community Financial Strength:
 - Bond Ratings
 - Unemployment Rate
 - Median Household Income
 - Property Tax Collection Rate
 - Community Debt as Percentage of Real Property Value
 - Property Tax Revenue as Percentage of Real Property Value

Factors Affecting Cost of Service and Total Cost Burden per Customer

- Age of System
- Debt
- Number of Customers
- Water Supply (Source)
- Water Quality
- Size of service territory

Policies and Programs for Affordability

- Policies and Programs:
 - Cost Containment (upkeep of infrastructure, minimum staffing etc)
 - **Rate Design**
 - Customer Assistance and Education (payment plans, leak-repair assistance, free conservation devices)
 - Qualified Customer Discounts (seniors, veteran, low-income and so forth)

Rate Design

- Balance for Decision Makers
 - Revenue Sufficiency
 - Equity and Affordability
 - Administratively Feasible
 - Understandable
 - Supportive of Economic Goals

Affordability Goals

- Indicators that the Cost of Service is More Affordable to the Customer Base as a Result of Implementing Policies / Programs:
 - Lower Delinquency Rate
 - Measured Improved Customer Relations
 - More Predictable / Accurate Revenue Projections

Key Findings

- Database of 1/3rd of Nevada Active Community Water Systems indicates that the majority of public water purveyors are not charging reasonable water rates
- Lack of willingness to charge full cost of service ultimately dis-service to customers, and Nevada citizens should not be grant funding those water purveyors

Conclusions

- Water purveyors can:
 - 1) Determine appropriate economic indicators for assessing their community's financial strength,
 - 2) Calculate customer cost burden at full cost of service,
 - 3) Assess current cost burden to customers by comparing against the appropriate economic indicators / customer base's ability to pay,
 - 4) Implement policies and programs to ensure financial viability of water system while striving to meet affordability goals

Questions?

Contact

- Catherine Hansford, Principal
- Hansford Economic Consulting
- www.hansfordecon.com

catherine@hansfordecon.com

(530) 412-3676