

# Pricing Objectives Exercise Worksheet

## 1. OVERVIEW

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Rate structures are best designed when built around meeting a utility's revenue requirements while also addressing its unique characteristics and the needs of its locale, customers, and other stakeholders. Pricing objectives are goals and objectives that support broad policies such as equity and conservation, and serve as discussion points when designing a rate structure.

Water Department staff worked with the consultant, Raftelis Financial Consultants (RFC), to develop a list of pricing objectives according to the Utility's specific characteristics and needs. In the following section, each pricing objective is explained in detail.

## 2. BACKGROUND

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The *policy* objectives below in Table 1 – Administration, Equity, Appropriate Funding Mechanisms, Rate Stability & Affordability, Promotes Water-Use Efficiency/Conservation – were developed by staff and RFC and help guide the rate design process. Each policy objective is followed by several supporting pricing objectives.

In order to inform the Council, each policy objective includes a policy statement, discussion notes and several rate-design principles. The nineteen listed rate-design pricing objectives were decided by Water Department staff as most relevant to the Utility's needs and characteristics.

The ranking of these policy objectives by the Council will be used to develop the most appropriate and technically defensible rate structure for the Water Department.

**Table 1: Policy Objectives and Associated Pricing Objectives for Water Rate Design**

Administration	Equity	Appropriate Funding Mechanisms	Rate Stability & Affordability	Promotes Efficiency / Conservation
<ul style="list-style-type: none"> <li>•Customer Understanding</li> <li>•Easy to Implement</li> <li>•Easy to Administer</li> </ul>	<ul style="list-style-type: none"> <li>•Equitable in Allocating CIP Cost</li> <li>•Perceived to be Fair to the Public</li> <li>•Align Supply &amp; Demand</li> </ul>	<ul style="list-style-type: none"> <li>•Revenue Stability</li> <li>•Revenue Sufficiency</li> <li>•Potential Funding Mechanism for Alt. Water Supply &amp; Conservation Programs</li> </ul>	<ul style="list-style-type: none"> <li>•Rate Stability</li> <li>•Mitigate Customer Impact</li> <li>•Affordability for Essential Use</li> </ul>	<ul style="list-style-type: none"> <li>•Promotes Conservation</li> <li>•Tool for Drought Management Action Plan</li> <li>•Promotes Efficiency</li> <li>•Rewards Past Conservation Effort</li> <li>•Economic Development</li> <li>•Based on Individual Needs</li> <li>•Scientific Method</li> </ul>

## Policy Objective 1 –Administration

**Policy Statement:** To recognize the advantages of designating a rate structure that is easily understood by department customers and can be implemented and administered by staff with the current billing software, which helps maintain costs at current levels.

**Discussion:** This principle highlights the importance of keeping rate structures and the process of administering them simple. Customer education and clarity of customer bills should be considered as part of this principle.

**Advantages of the Policy Objective:** Creating rates that are easy for customers to understand will minimize rate-related customer service issues. If customers understand the basis of their bills, they will have a greater ability to comprehend their billing, how usage will affect their bill, and conclude that it is fair.

**Disadvantage of the Policy Objective:** Simplifying the rate structure does not always provide a maximum degree of fairness and equity. However, from the customers' perspective, rates that are simple to understand may be more important than creating a complicated rate structure that achieves a higher degree of equity.

### Supporting Pricing Objectives:

- **Customer Understanding** – The ability for the rate structure to be explained in a manner that can be understood by customers and other stakeholders will have a positive impact on the

ability to build acceptance of rate adjustments. The degree of customer understanding can be measured through their understanding between the current and proposed rate structure.

- **Easy to Implement** – Implementing a new rate structure merits careful consideration, as rate structure implementation requires an upfront (one-time) costs such as data gathering or billing system changes.
- **Easy to Administer** – An easy-to-administer rate structure does not negatively impact the ongoing costs of administering the structure, made up predominately of additional staffing costs.

## Policy Objective 2 –Equity

**Policy Statement:** In compliance with the State Constitution (Article XIII D) and governing statutes of State Law, rates should be cost-based, fairly apportioned among customers, and account for the substantive provisions of law through a sound, technically defensible methodology.

**Discussion:** This principle highlights the importance of the customer’s perception of fairness and equity, while also recognizing that an absolute equity among all customers and customer classes may not be achieved. Rates should generally be perceived by the Department’s customers as fair, reasonable, and equitable for all customers.

**Advantages of the Policy Objective:** An advantage of this principle is that it reinforces the priority of treating all customers fairly. It also underscores the importance of system-wide fairness and equity as opposed to appeasing one customer class or stakeholder group. Also, it acknowledges the practical obstacles that may prevent perfect equity, such as, excessive administrative cost solely to achieve additional equity.

**Disadvantages of the Policy Objective:** This principle ultimately does not clearly define the terms “fair and equitable” and will still require the staff or Water Commission to apply its discretion and judgment.

### **Supporting Pricing Objectives:**

- **Equitable in Allocating CIP Cost** – This objective states that a rate structure achieves equity by allocating the cost of capital (infrastructure) improvements to each customer class based on each class’ consumption patterns and peaking characteristics.
- **Perceived as Fair to the Public** – This objective recognizes the relevance of the public’s perception of how equitable a rate structure is and that managing that perception sometimes calls for informing/educating the public and other stakeholders.
- **Align Supply & Demand** – This objective states that a rate structure achieves equity by aligning the allocation of water supply to individual customers based on the demand those customers place on the system.

## Policy Objective 3 –Appropriate Funding Mechanisms

**Policy Statement:** There are advantages to increased revenue sufficiency and stability that are supported by incorporating additional funding mechanisms or cost components into the rate structure.

**Discussion:** This principle highlights the importance of the utility to ensure adequate revenue generation for maintaining a self-sustaining enterprise. Revenues must be adequate to fund personnel costs, operations and maintenance, and new and existing capital needs. Revenue generation should also be predictable to maintain favorable credit ratings (borrowing terms for critical infrastructure).

**Advantages of the Policy Objective:** A good financial practice of ensuring revenue sufficiency and stability begets additional gains in financial health; better credit ratings result in lower interest expense associated with borrowing to cover capital infrastructure costs.

**Disadvantages of the Policy Objective:** While pursuing a rate structure that promotes revenue stability and allows sufficient funding of capital projects is advantageous, setting rates too high can be unfair to the current user base and may encourage the Utility to be less fiscally responsible with operating and capital programs. In addition, the public may perceive the need as unnecessary.

**Supporting Pricing Objectives:**

- **Revenue Stability** – The ability of the rate structure to generate stable and predictable revenues from year to year is an important consideration, particularly with regard to maintaining a good credit rating for borrowing money to address infrastructure needs, when needed and/or desired. It should be recognized that certain types of rate structures are more effective at maintaining revenue stability than others.
- **Revenue Sufficiency** – The objective aims to reasonably ensure that adequate revenues are generated through rates and charges to allow the utility to operate on a self-sustaining basis. Adequate revenues ensure, for example, that salaries can be established at a level to attract qualified personnel, operational costs are covered, and capital replacements and system expansions can be made in an effective manner. In particular, when a utility has issued debt to address capital needs, adequate revenues are required to ensure that debt payment requirements, including debt service coverage ratios, are addressed effectively.
- **Potential Funding Mechanism for Alternative Water Supply & Conservation Programs** – The rate structure should provide a funding mechanism to provide supplemental water supply, and in so doing, also determine the allocation of the program's costs among the Utility's customer classes.

## **Policy Objective 4 –Rate Stability & Affordability**

**Policy Statement:** It is important to establish rates that generate adequate revenues from year to year, regardless of weather or consumption characteristics. Large and unexpected rate changes impose financial hardships on customers and may negatively affect the public opinion of the department in terms of revenue management, fiscal responsibility, and rate equity.

**Discussion:** Predictable rates are typically preferred, which requires a balance between generating sufficient revenue for utility operations, funding capital improvements, and maintaining customer support for required rate adjustments.

**Advantages of the Policy Objective:** The principle attempts to stabilize the cash flow of the department and improve customer support to rate adjustments through proper revenue management.

**Disadvantages of the Policy Objective:** It is difficult to define “stable”, as this term has different meanings for different people. Customers may construe stable to mean no increases from year to year.

**Supporting Pricing Objectives:**

- **Rate Stability** – This objective aims to minimize fluctuations in rate increases. Careful capital and financial planning can ensure rate stability and avoid erratic changes in rates and charges from one year to the next. Also, a steady or consistent program of smaller annual rate adjustments is generally recognized as preferable to a significantly larger increase once every three or four years. *Note: This objective is not to be confused with Revenue Stability, detailed under Principle 3.*
- **Mitigate Customer Impacts** – Any new rate structure may result in different impacts to different customers. This objective recognizes these impacts and aim to minimize them.
- **Affordability for Essential Use** – This objective addresses the importance of maintaining the price of water for essential use – i.e. that which is used for health and safety – at the lowest cost possible while considering the needs of the utility, industry practice, and regulatory conditions.

## Policy Objective 5 – Promotes Efficiency/Conservation

**Policy Statement:** The value of water as a limited resource should be reflected in the rates, and the rate structure should discourage wasteful use and encourage efficient use of water resources.

**Discussion:** This principle is intended to recognize the limited resources of the department and the region, as well as the environmental impact of generating new water resources. Rather than discouraging the reasonable uses of water, the rates should encourage the efficient use of limited resources by pricing water as a commodity, roughly equal to its true cost.

**Advantages of the Policy Objective:** This principle recognizes the multiple uses of the natural resource and makes a positive statement to all customers and outside parties that the Department supports the efficient use of its limited resources.

**Disadvantages of the Policy Objective:** Typically, rate structure emphasizing efficiency and conservation poses increased costs in implementation – e.g. billing system upgrade – and administration – e.g. increased personnel allocation to customer service.

**Supporting Pricing Objectives:**

- **Promotes Conservation** – The objective of water conservation aims to reduce total water use through a focus on reducing individual accounts that consistently consume water at above-average levels.
- **Tool for Drought Management Action Plan** – This objective supports the current drought management plan. Commitment to the plan advocates a need for a mechanism to allocate both water and drought penalty rates during drought conditions.
- **Promotes Efficiency** – The objective of water efficiency includes development of benchmark standards associated with the appropriate amount of water use for indoor and outdoor water needs based on local characteristics of the Department's customers. Standards are set on an individual basis and on indoor and outdoor use parameters.
- **Reward Past Conservation Efforts** – This objective recognizes the value either of rewarding individuals for efficient use according to their needs or at minimum not penalizing those customers for their conservation efforts prior to a revised conservation rate structure.
- **Economic Development** – The degree to which the rate structure and pricing level is competitive with those of similar and adjacent communities and the availability and reliability of adequate water supply can have an important impact on existing and prospective commercial and industrial customers and thus the local economy.
- **Based on Individual Needs** – Depending on the need and characteristics of a water utility and the policy preferences of the utility's governing body, a conservation-based rate structure can more effectively promote efficiency by basing water supply allocations to each customer based on their individual needs.
- **Scientific Method** – The scientific method denotes the scientific and empirical data-based standards and guidelines that regulatory statements such as SB x7-7 are based on. The scientific method is specific to standards and guidelines for outdoor water use, such as the specific amount of water that is expected to be needed to sustain a given square footage of lawn.

### 3. PRICING OBJECTIVES EXERCISE



## City of Santa Cruz City Council Ranking of Pricing Objectives

Please rank each of the listed pricing objectives using the following scale  
(Most Important / Critical = 1 ; Very Important = 2 ; Important = 3 ; or Least Important = 4)  
See Appendix A for the definitions of each Pricing Objective

	Pricing Objectives	Ranking
Administration	Customer Understanding	
	Easy to Implement	
	Easy to Administer	
Equity	Equitable in Allocating CIP Cost	
	Perceived to be Fair to the Public	
	Align Supply & Demand	
Appropriate Funding Mechanisms	Revenue Stability	
	Revenue Sufficiency	
	Potential Funding Mechanism for Alt. Water Supply & Conservation Programs	
Rate Stability & Affordability	Rate Stability	
	Mitigate Customer Impact	
	Affordability for Essential Use	
Promotes Efficiency / Conservation	Promotes Conservation	
	Tool for Drought Management Action Plan	
	Promotes Efficiency	
	Rewards Past Conservation Effort	
	Economic Development	
	Based on Individual Needs	
	Scientific Method	

Participant's name \_\_\_\_\_

## APPENDIX A

### Supporting Pricing Objectives:

- **Affordability for Essential Use** – This objective addresses the importance of maintaining the price of water for essential use – i.e. that which is used for health and safety – at the lowest cost possible while considering the needs of the utility, industry practice, and regulatory conditions.
- **Align Supply & Demand** – This objective states that a rate structure achieves equity by aligning the allocation of water supply to individual customers based on the demand those customers place on the system.
- **Based on Individual Needs** – Depending on the need and characteristics of a water utility and the policy preferences of the utility's governing body, a conservation-based rate structure can more effectively promote efficiency by basing water supply allocations to each customer based on their individual needs.
- **Customer Understanding** – The ability for the rate structure to be explained in a manner that can be understood by customers and other stakeholders can have important impacts on the ability to build acceptance of rate adjustments. The degree of customer understanding can be measured through their understanding between current and a proposed new rate structure.
- **Easy to Administer** – An easy-to-administer rate structure does not negatively impact the ongoing costs of administering the structure, made up predominately of additional staffing costs.
- **Easy to Implement** – Implementing a new rate structure merits careful consideration, as rate structure implementation may require upfront (one-time) costs for data gathering or billing system changes.
- **Economic Development** – The degree to which the rate structure and pricing level is competitive with those of similar and adjacent communities and the availability and reliability of adequate water supply can have an important impact on existing and prospective commercial and industrial customers and thus the local economy.
- **Equitable in Allocating CIP Cost** – This objective states that a rate structure achieves equity by allocating the cost of capital (infrastructure) to each customer class based on each class' consumption patterns and peaking characteristics.
- **Mitigate Customer Impact** – Any new rate structure may result in different impacts to different customers. This objective recognizes these impacts and aim to minimize them.



- **Perceived as Fair to the Public** – This objective recognizes the relevance of the public’s perception of how equitable a rate structure is and that managing that perception sometimes calls for informing/educating the public and other stakeholders.
- **Potential Funding Mechanism for Alternative Water Supply & Conservation Programs** – The rate structure should provide a funding mechanism to provide supplemental water supply, and in so doing, also determine the allocation of the program’s costs among the Utility’s customer classes.
- **Promotes Conservation** – The objective of water conservation aims to reduce total water use through a focus on reducing individual accounts that use above-average water use (that are asked to reduce their water use).
- **Promotes Efficiency** – The objective of water efficiency includes development of benchmark standards associated with the appropriate amount of water use for indoor and outdoor water needs based on local characteristics of the department’s customers. Standards are set on an individual basis and on indoor and outdoor use parameters.
- **Rate Stability** – This objective aims to minimize fluctuations in rate increases. Careful capital and financial planning can ensure rate stability and avoid erratic changes in rates and charges from one year to the next. Also, a steady or consistent program of smaller annual rate adjustments is generally recognized as preferable to a significantly larger increase once every three or four years.
- **Revenue Stability** – The ability of the rate structure to generate stable and predictable revenues from year to year is an important consideration, particularly with regard to maintaining a good credit rating for borrowing money to address infrastructure needs, when needed and/or desired. It should be recognized that certain types of rate structures are more effective at maintaining revenue stability than others.
- **Revenue Sufficiency** – The objective aims to reasonably ensure that adequate revenues are generated through rates and charges to allow the utility to operate on a self-sustaining basis. Adequate revenues ensure, for example, that salaries can be established at a level to attract qualified personnel, operational costs are covered, and capital replacements and system expansions can be made in an effective manner. In particular, when a utility has issued debt to address capital needs, adequate revenues are required to ensure that debt payment requirements, including debt service coverage ratios, are addressed effectively.
- **Reward Past Conservation Effort** – This objective recognizes the value either of rewarding individuals for efficient use according to their needs or at minimum not penalizing those customers for their conservation efforts prior to a revised conservation rate structure.

- **Scientific Method** – The scientific method denotes the scientific and empirical data-based standards and guidelines that regulatory statements such as SB x7-7 are based on. The scientific method is specific to standards and guidelines for outdoor water use, such as the specific amount of water that is expected to be needed to sustain a given square footage of lawn.
- **Tool for Drought Management Action Plan** – This objective supports the current drought management plan. Commitment to the plan advocates a need for a mechanism to allocate both water and drought penalty rates during drought conditions.