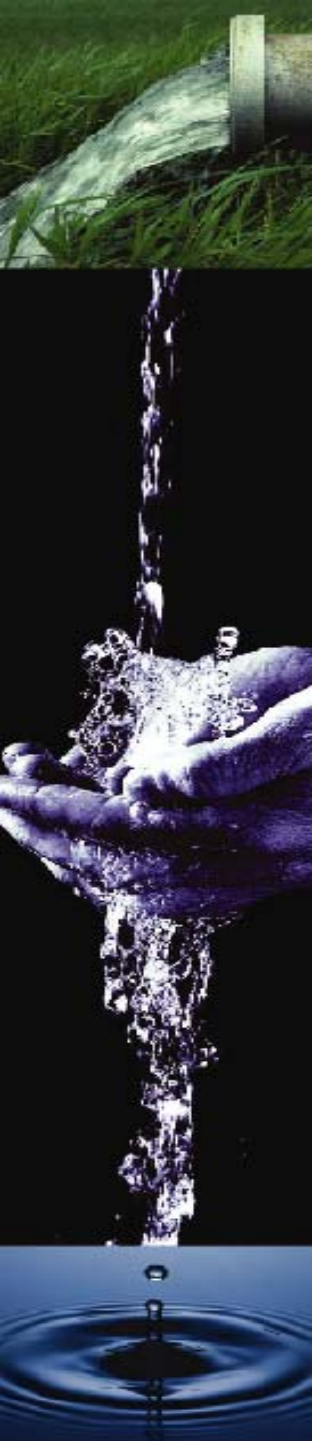


San Antonio Water System

Conceptual Design Workshop

Rates Advisory Committee

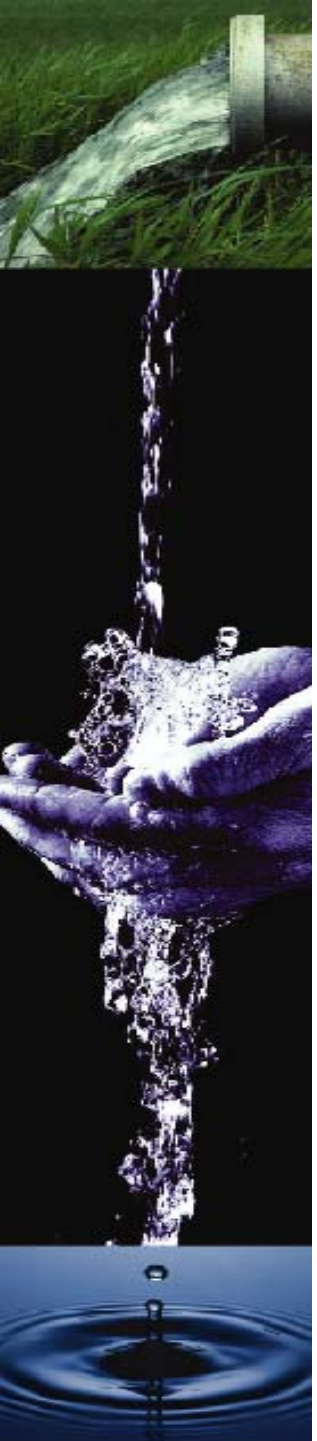
April 30, 2009

Presented by:

Harold Smith
Peiffer Brandt
Raftelis Financial Consultants, Inc.

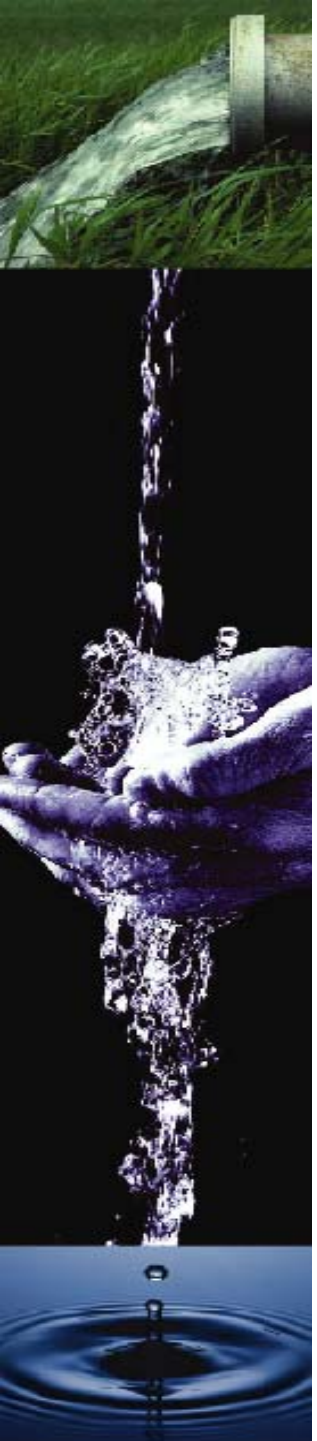
RFC
RAFTELIS FINANCIAL CONSULTANTS, INC.

PRO-OPS, INC.
Professional Operations, Inc.



Outline

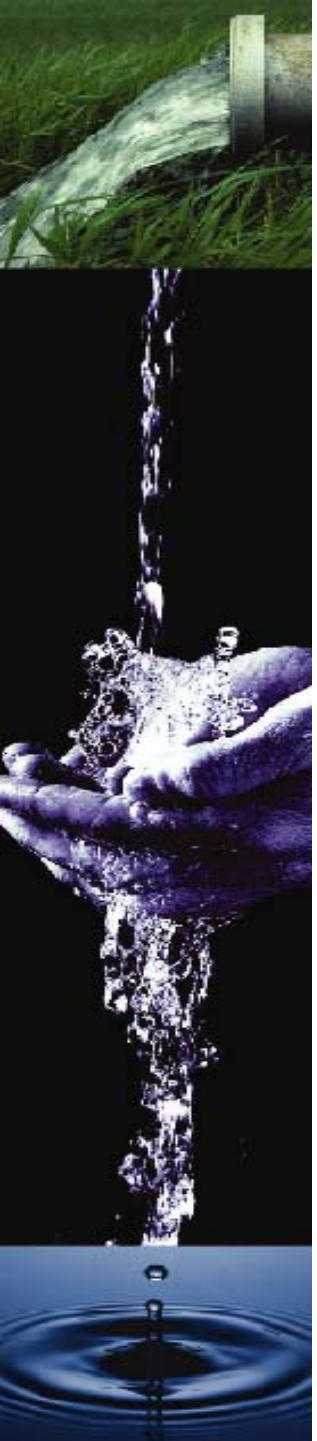
1. **Rate Structure Conceptual Design**
   - ❑ **Water Delivery**
   - ❑ **Water Supply**
   - ❑ **Wastewater**
2. **Other System-Wide Rate Structure Issues**



SAWS Rate Study Goals

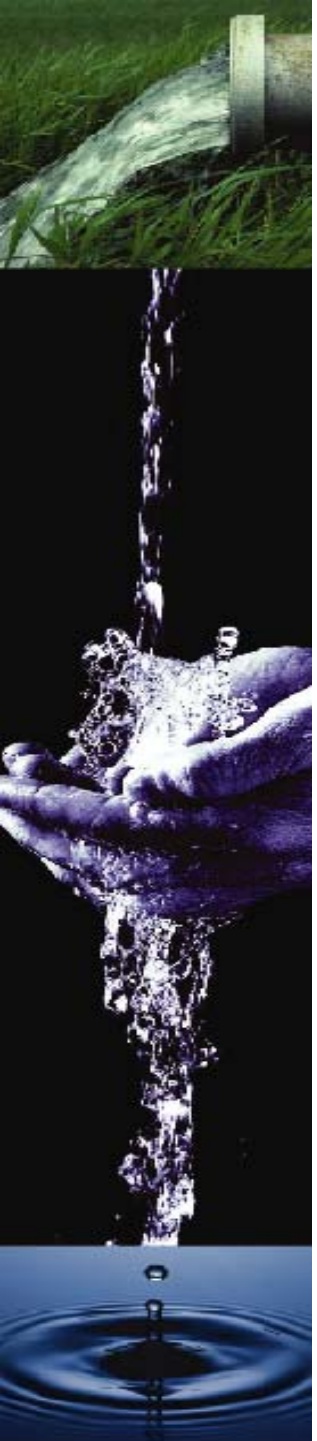
Rate Structure :

- ❑ **Based on cost of service principles**
- ❑ **Supportive of conservation initiatives in 2009 Proposed Water Management Plan**
- ❑ **Targets discretionary usage**



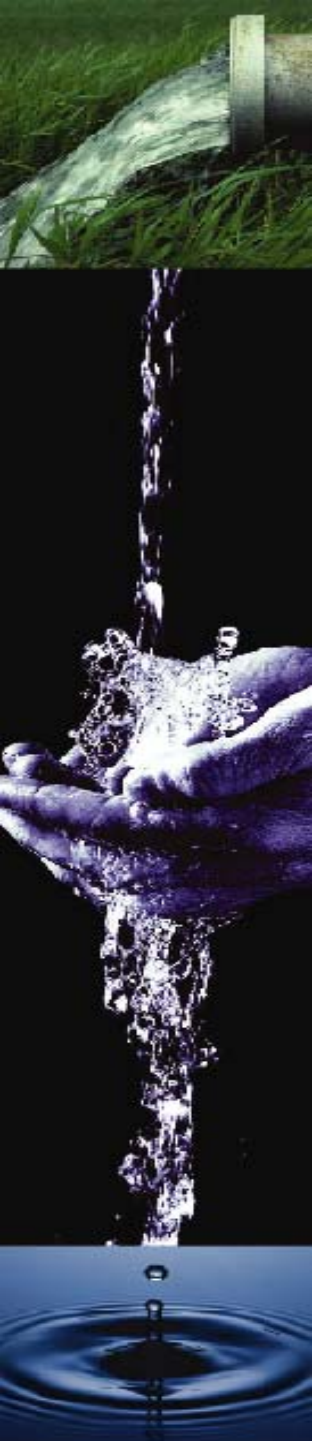
Results of Ranking of Pricing Objectives

Classification	Rank	Objective
Essential	1	Conservation/Demand Management
	2	Financial Sufficiency
	3	Rate Stability
Very Important	4	Revenue Stability
	5	Equitable Contributions from New Customers
	5	Affordability to Disadvantaged Customers
Important	7	Cost of Service Based Allocations
	8	Minimization of Customer Impacts
	9	Simple to Understand and Update
Least Important	10	Legality
	10	Ease of Implementation
	12	Economic Development

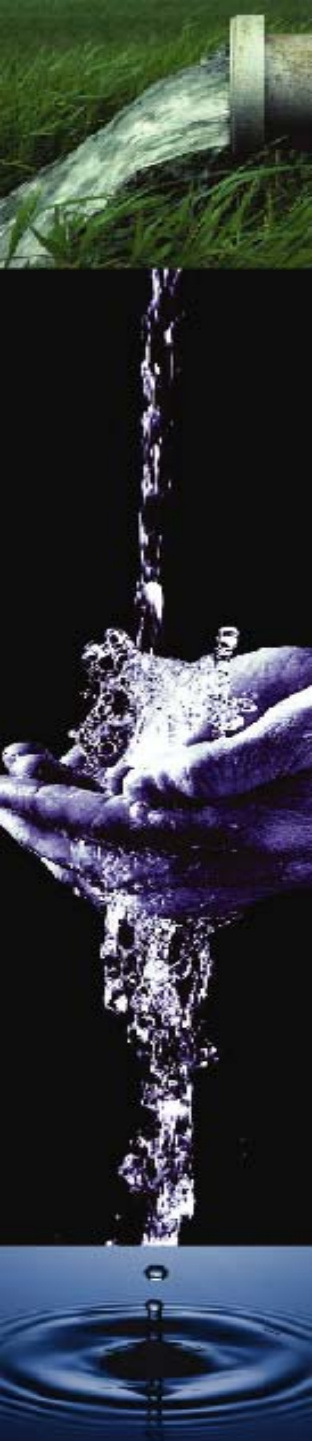


Goal of Meeting

To determine which rate structure options to pursue in an effort to be responsive to pricing objectives



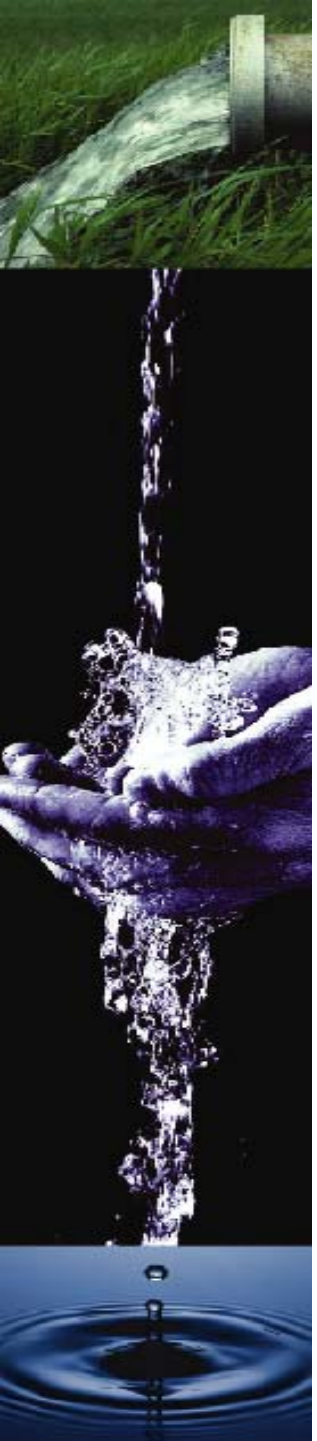
Water Delivery



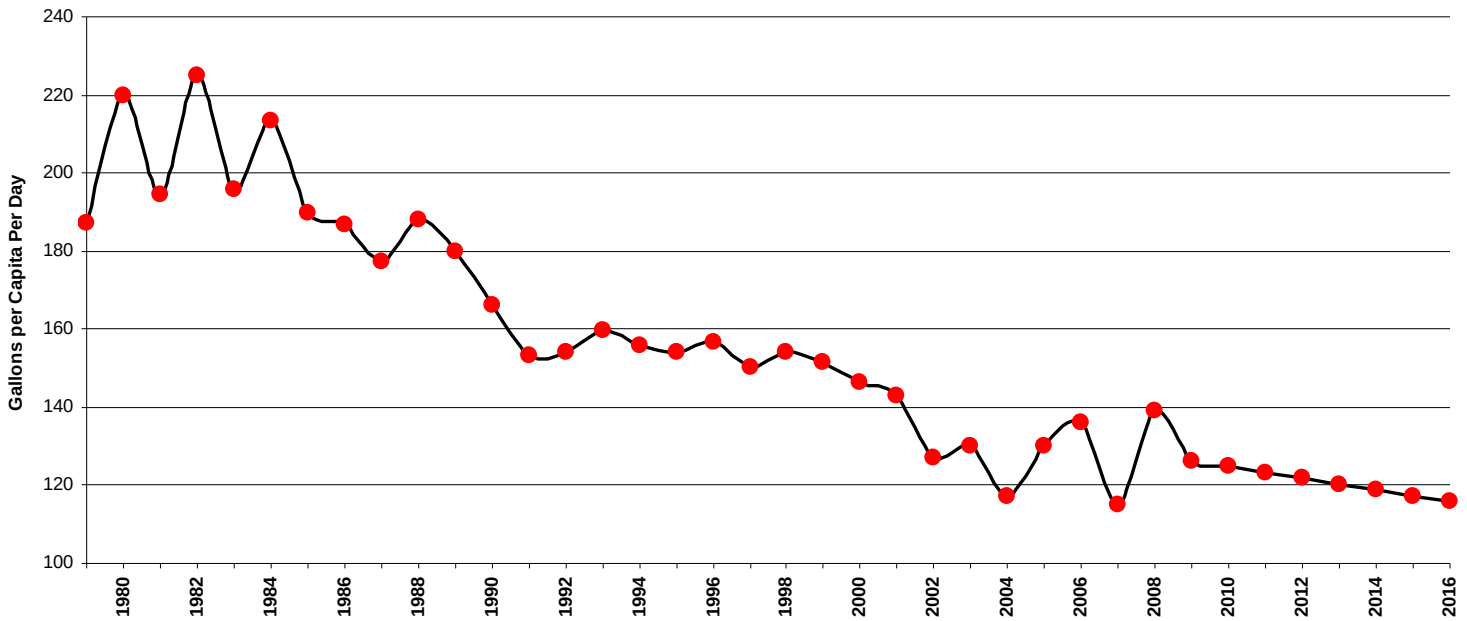
Purpose of Existing Water Delivery Rate Structure

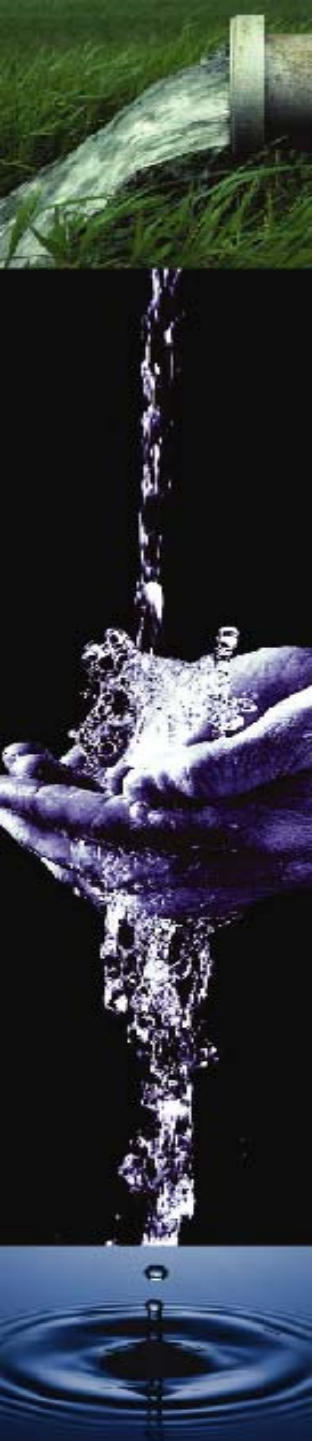
1. **Aggressively Promote Conservation**

- Residential Class
  - Increasing Block Rate Structure – Targets discretionary usage
  - Seasonal Rates – Reduce summer peaks
- General Class
  - Individualized Rate Structure – Recognize different water needs while targeting discretionary use and peaks
- Separate Irrigation Class – Target excessive discretionary usage



Conservation Successes and Goals

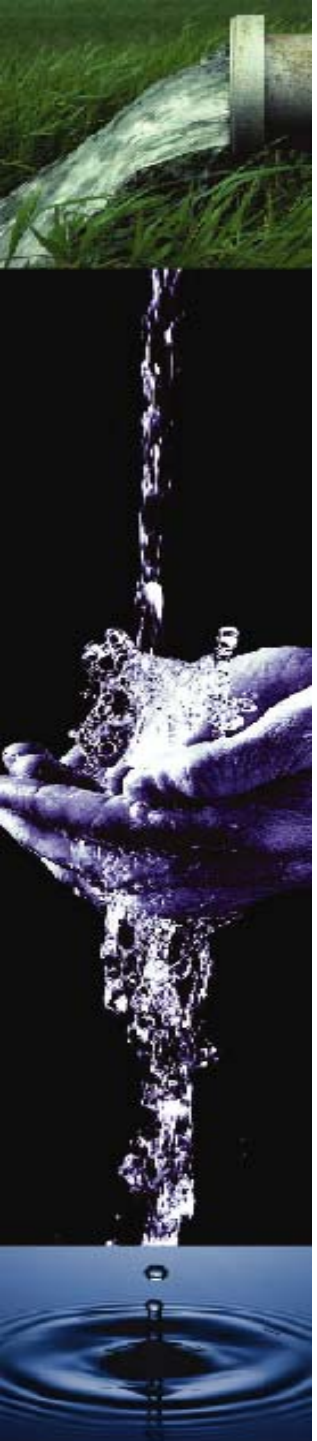




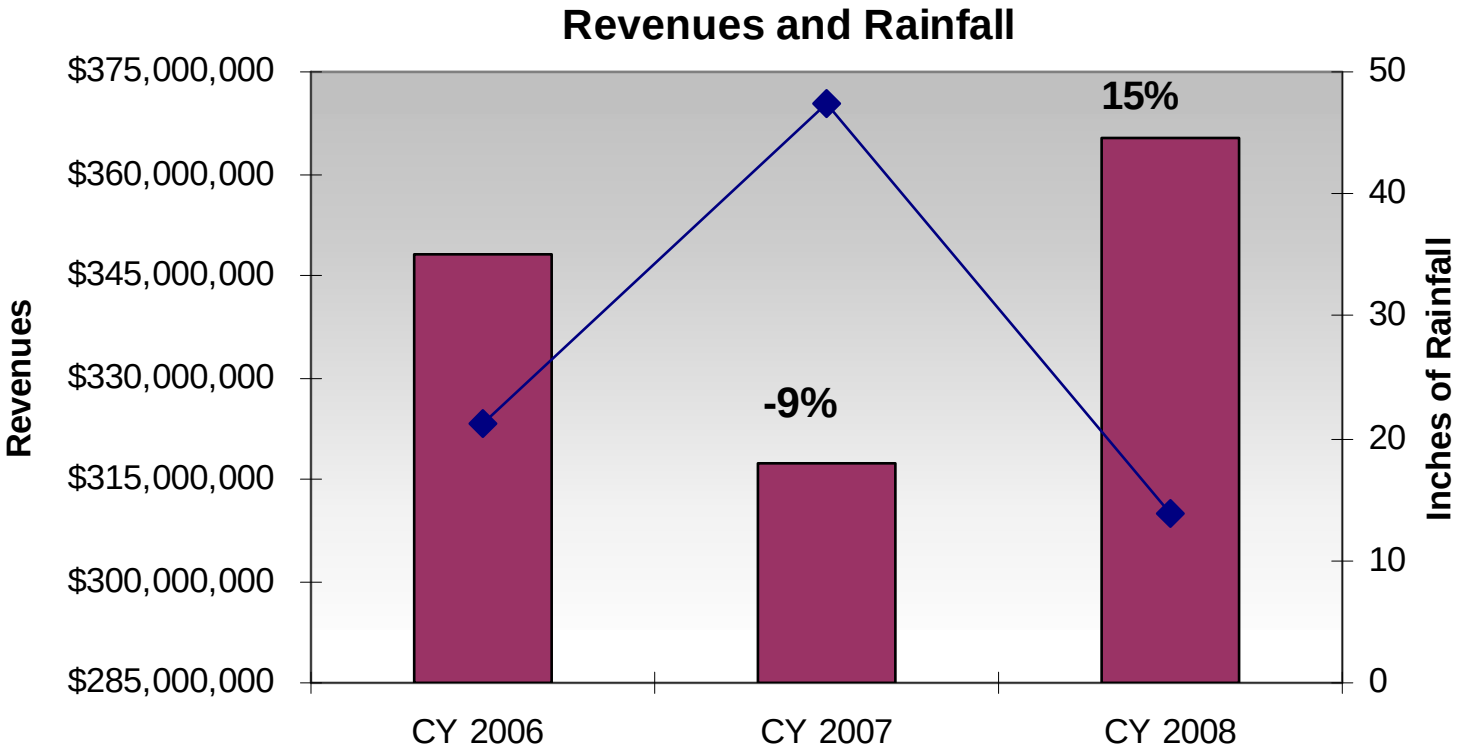
Purpose of Water Delivery Rate Structure

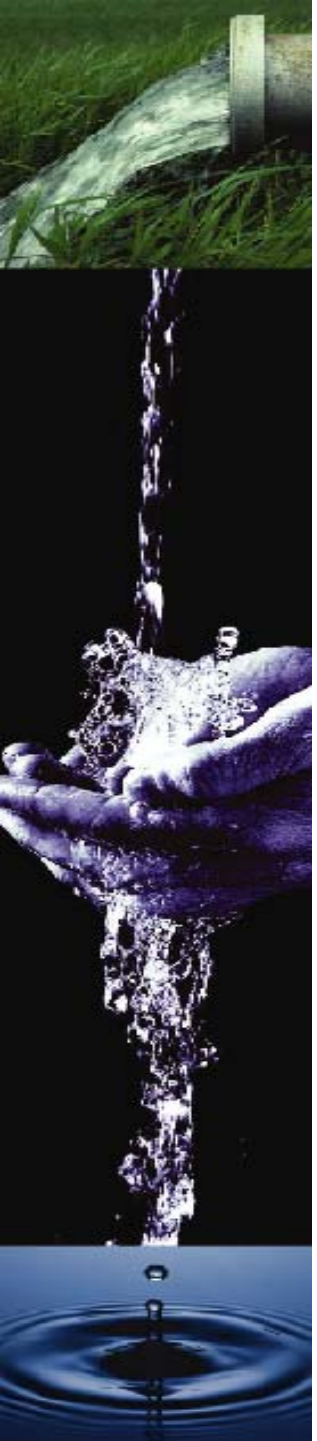
2. Revenue Stability

- Fixed monthly component that mitigates variability in revenues due to weather/drought



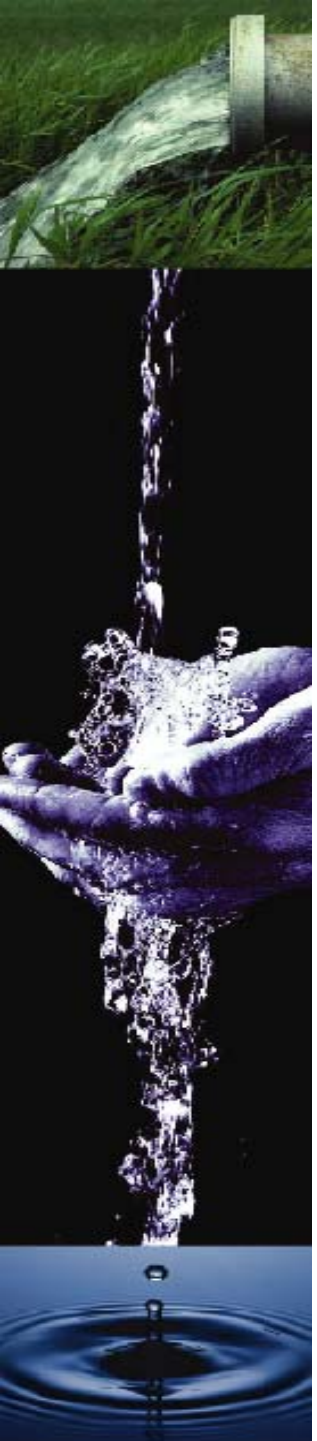
Impact of Weather/Drought on Revenue Stability





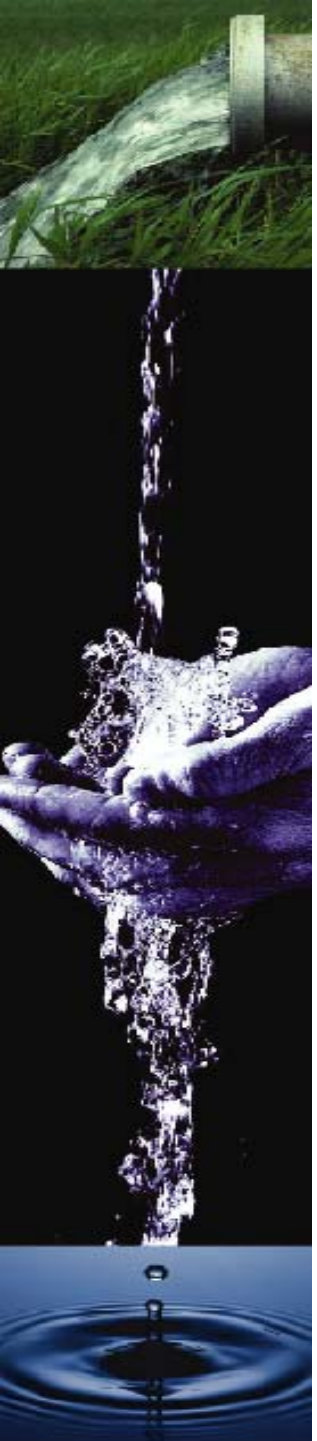
Opportunities for Improvement

- Conservation
  - Provide incentive to meet conservation target of 116 gpcd by 2016
- Revenue Stability
  - Mitigate revenue fluctuations due to weather and conservation



Water Delivery Options

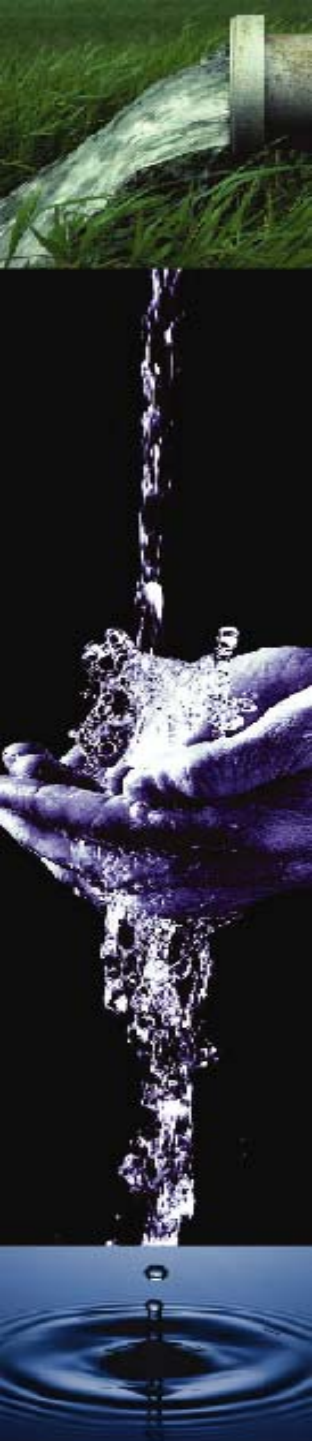
- ❑ **Modify number of blocks**
- ❑ **Modify block cut-offs**
- ❑ **Increase rate differentials between blocks**
- ❑ **Increase rate differentials between seasonal vs non-seasonal rates**
- ❑ **Expand “season” and apply seasonal rates to irrigation class**
- ❑ **Increase allocation to fixed component**



RFC's Recommendation

RESIDENTIAL

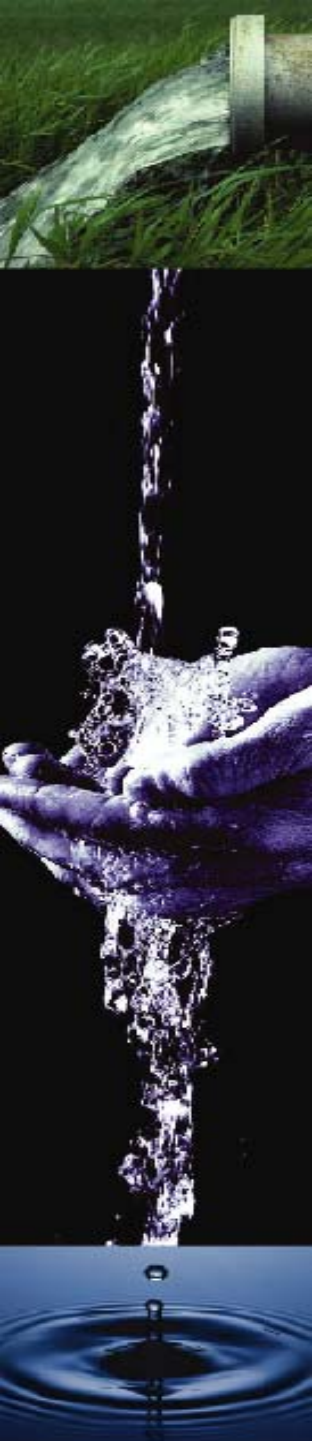
1. **Modify block cut-offs**
   - ❑ **Promote conservation among all users**
   - ❑ **Emphasis on reducing discretionary consumption**
   - ❑ **Focus on reducing consumption by "super-users" – top 5% of users**



Modify Block Cut-offs

	Description	Rationale
Block 1	Non-Discretionary indoor usage	Median Usage in Lowest Month*
Block 2	Non-Discretionary indoor and outdoor usage	Outdoor Usage 7,000 to 8,000 gallons per month
Block 3	Discretionary	Difference between 2nd and 4th blocks
Block 4	Excessive	Top 5% of customers

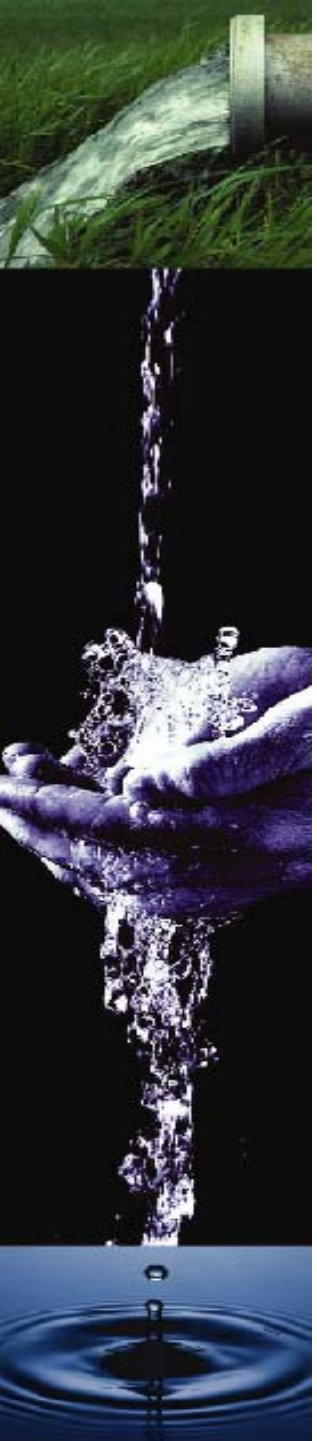
* Excludes customers with usage between zero and 748 gallons



Modify Block Cut-offs

	Existing Blocks (in gallons)	Proposed Blocks (in gallons)
Block 1	0 - 7,481	0 - 5,237
Block 2	7,481 - 12,717	5,237 - 12,718
Block 3	12,717 - 17,205	12,718 - 19,451
Block 4	over 17,205	over 19,451

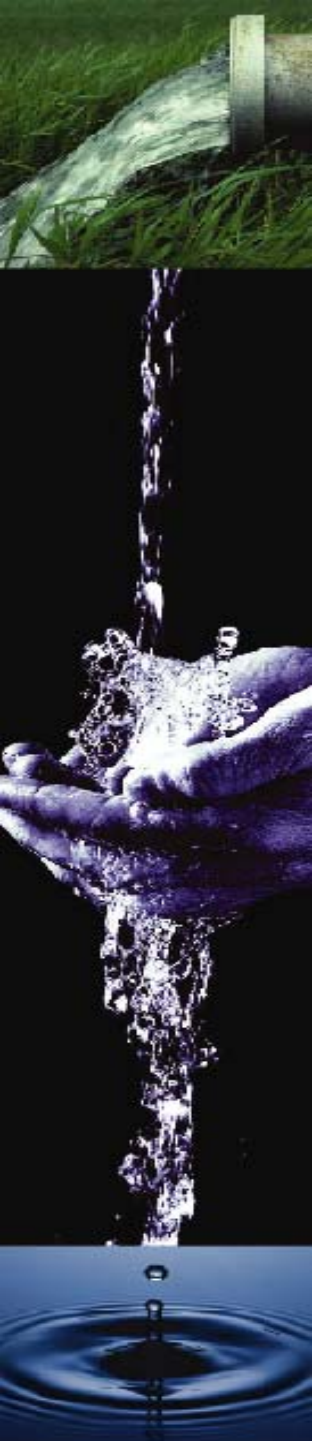
1 CCF = 748.1 gallons



Modify Block Cut-offs

	Proposed Blocks (in gallons)	% of bills ending in block	% of usage billed in block
Block 1	0 - 5,237	**47%**	**56%**
Block 2	5,237 - 12,718	**41%**	**29%**
Block 3	12,718 - 19,451	**8%**	**7%**
Block 4	over 19,451	**5%**	**7%**

Note: Based on actual FY 2007 and FY 2008 billing data

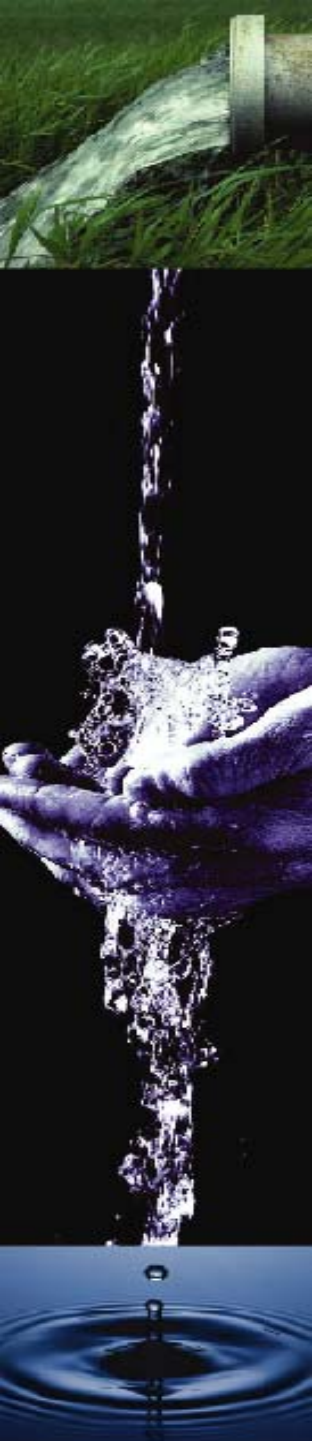


Modify Block Cut-offs

	Proposed Blocks (in gallons)	% of bills ending in block	% of usage attributable to bills ending in block	Average monthly usage for bills ending in block (gallons)
Block 1	0 - 5,237	**47%**	**20%**	**3,167**
Block 2	5,237 - 12,718	**41%**	**45%**	**8,403**
Block 3	12,718 - 19,451	**8%**	**16%**	**15,749**
Block 4	over 19,451	**5%**	**19%**	**31,899**

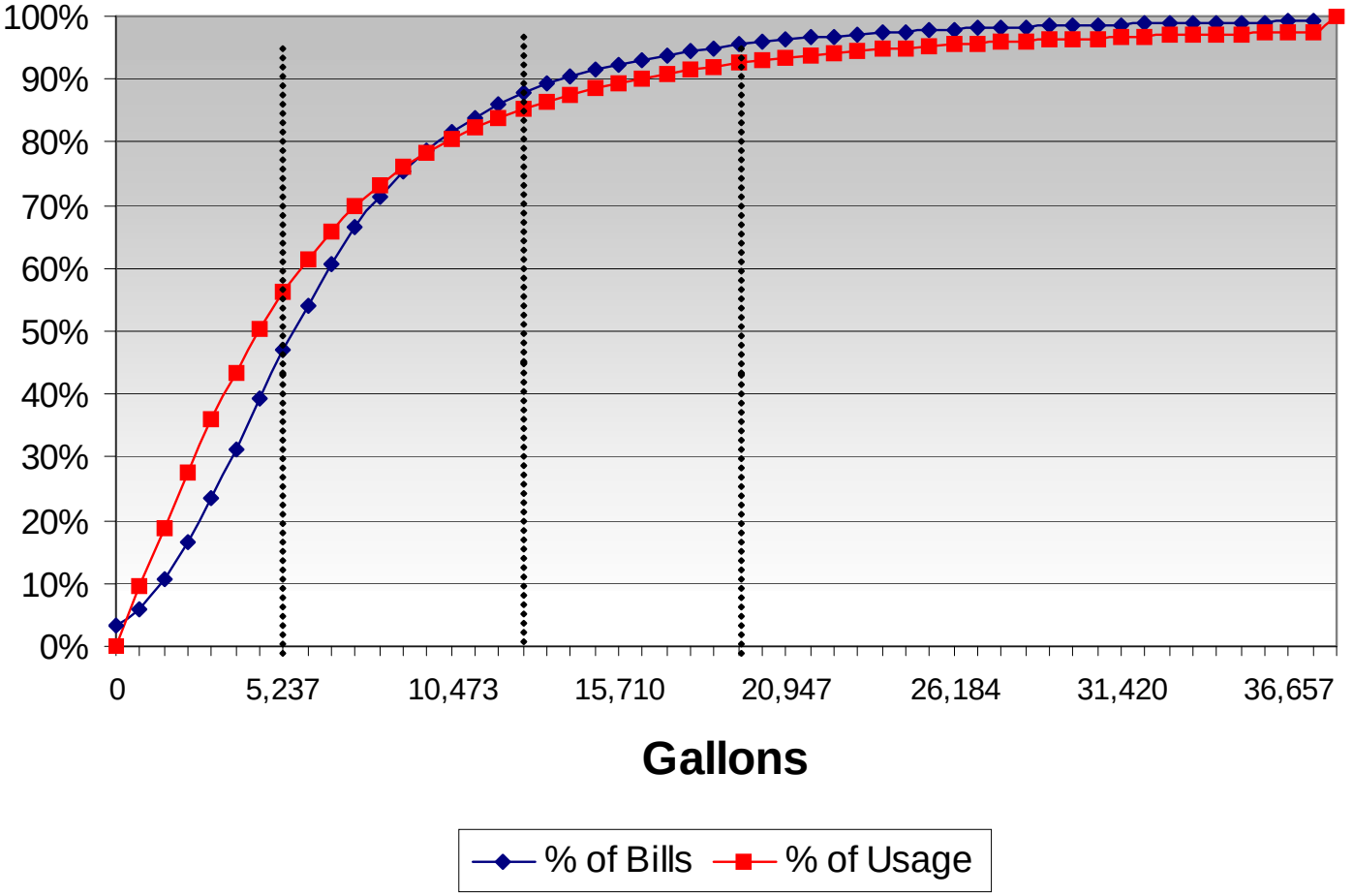
Note: Based on actual FY 2007 and FY 2008 billing data

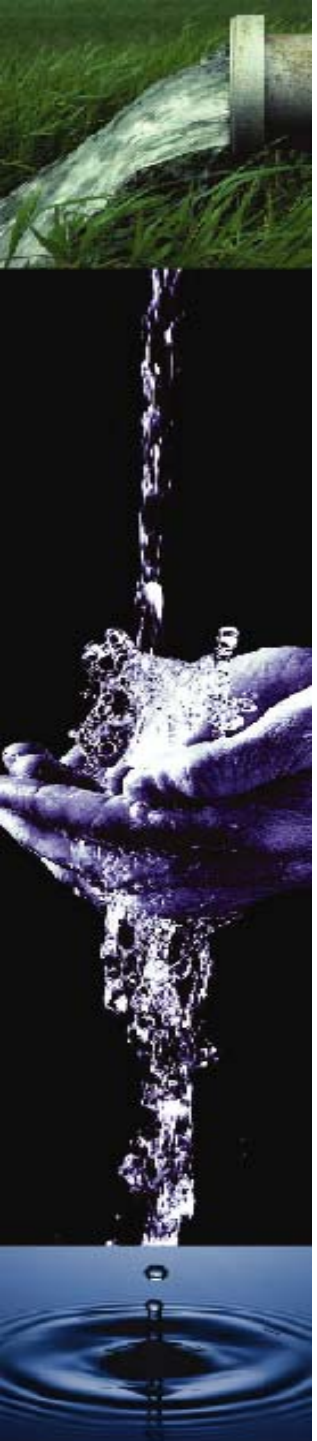
Average monthly usage for all residential customers
7,579 gallons



Modify Block Cut-offs

FY 2007 and FY 2008



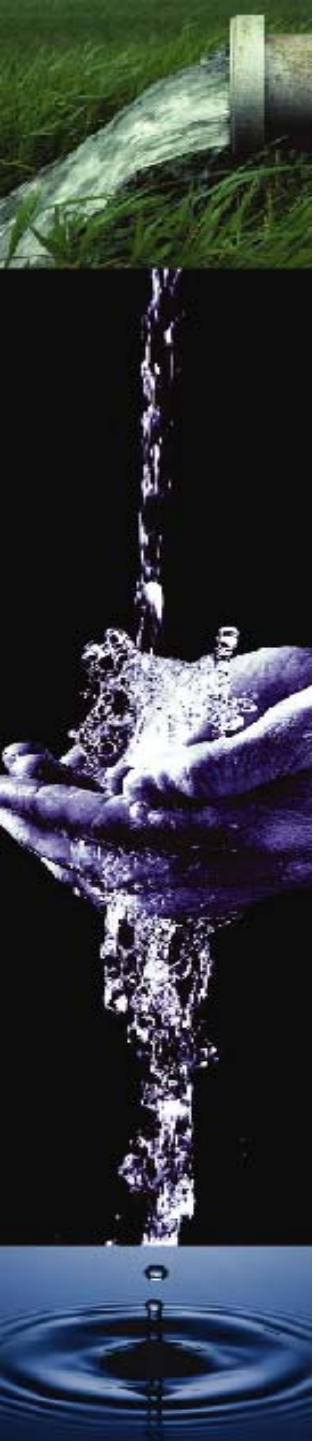


RFC's Recommendation

RESIDENTIAL

2. Modify rate differentials between blocks

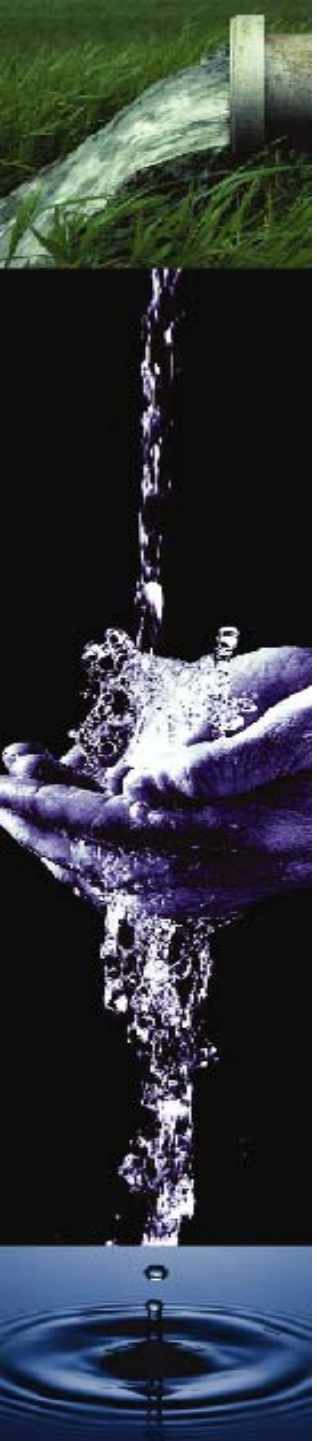
- **Increase financial incentive to conserve water**



RFC's Recommendation

Factors to consider when establishing rate differentials:

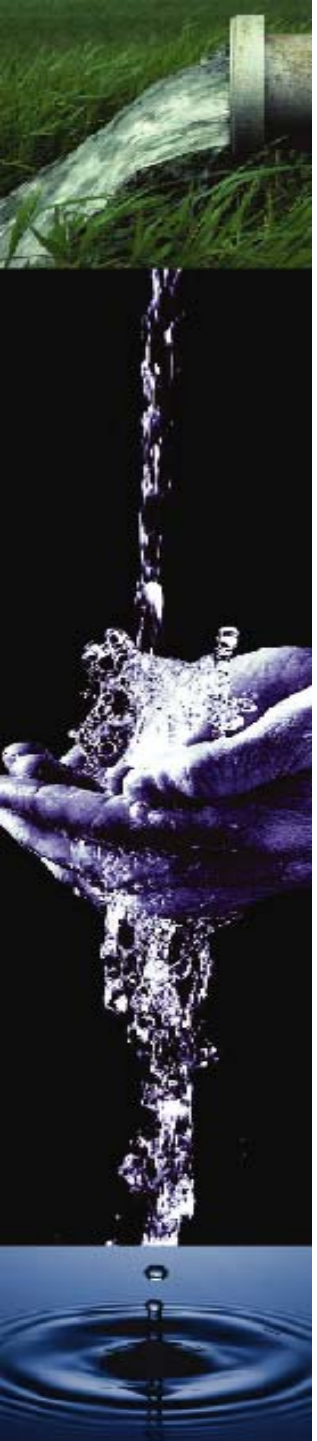
- Cost of service allocation
- Customer impacts
- Usage ratios (i.e. peak month to winter average
- Demand management



RFC's Recommendation

RESIDENTIAL

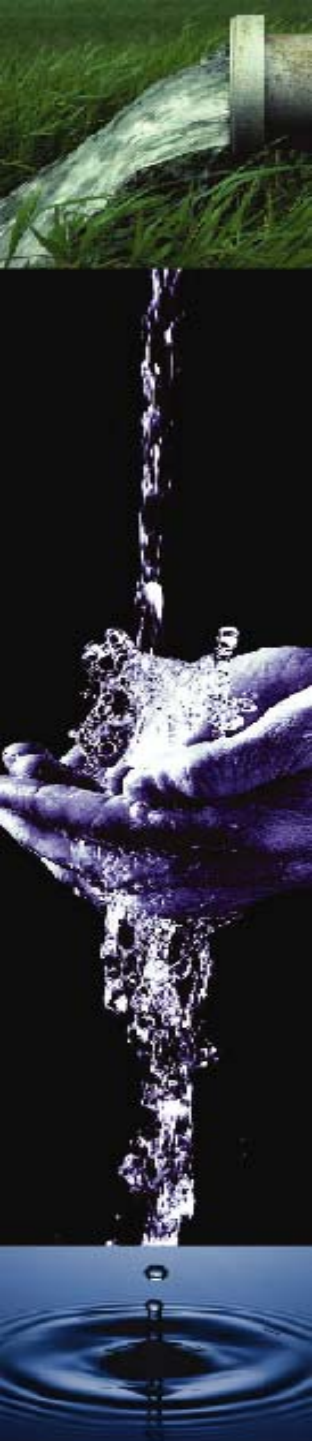
3. **Increase rate differential between seasonal and non-seasonal rates**
   - ❑ **Reduce peaks**



RFC's Recommendation

Seasonal Rate Differentials

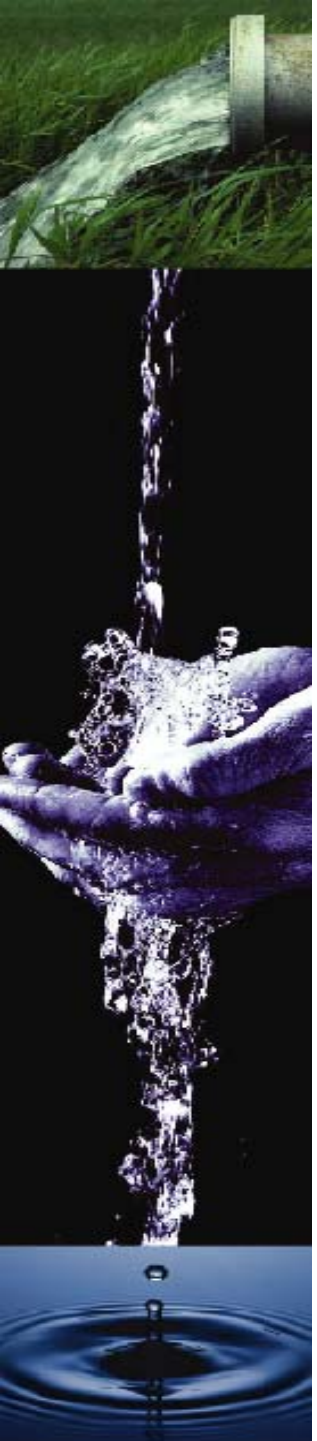
Residential Inside-City	Existing Differential	Example of Proposed Differential
Block 1	1.00	1.00
Block 2	1.09	1.10
Block 3	1.08	1.25
Block 4	1.29	1.50



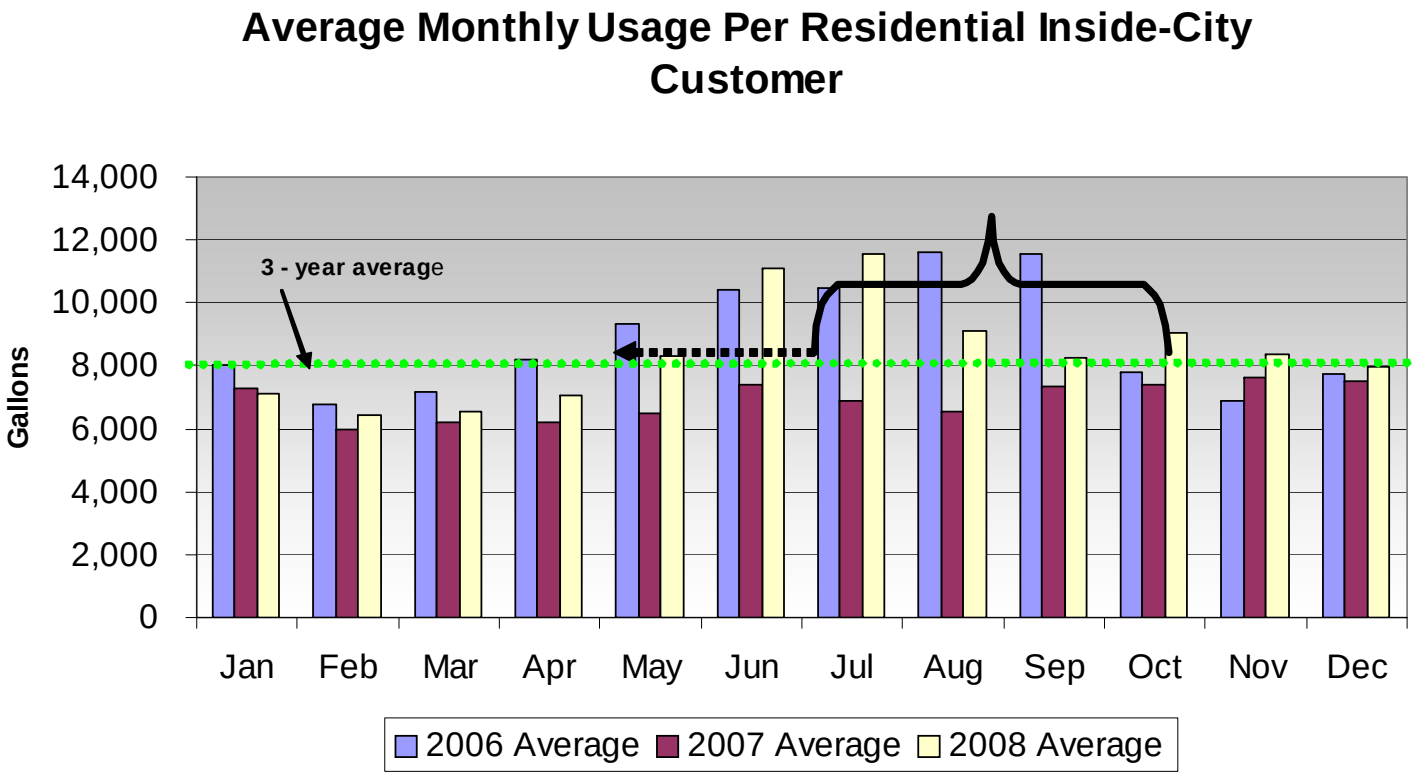
RFC's Recommendation

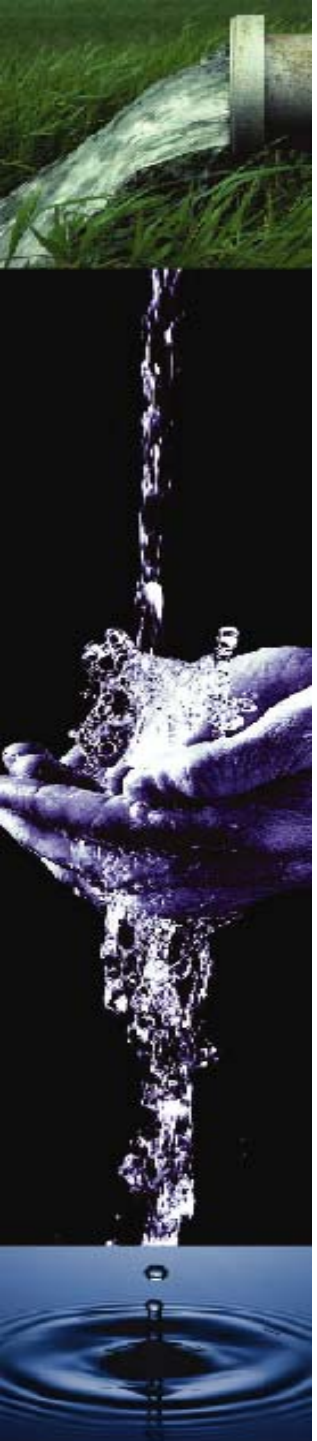
RESIDENTIAL

4. **Increase billing "season" by two months - May to October (currently July to October)**



RFC's Recommendation

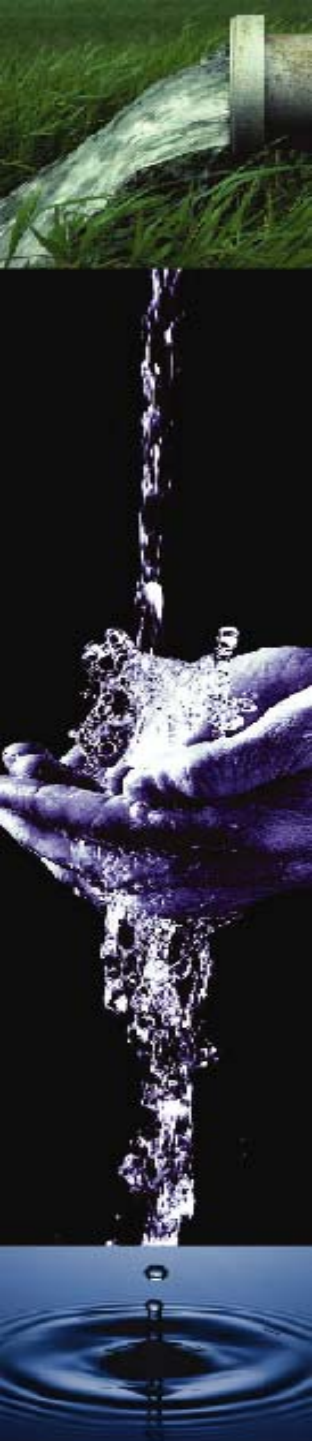




RFC's Recommendation

RESIDENTIAL

5. **Increase allocation to fixed component**
   - ❑ **Mitigate revenue instability**
   - ❑ **Provide funding for conservation**

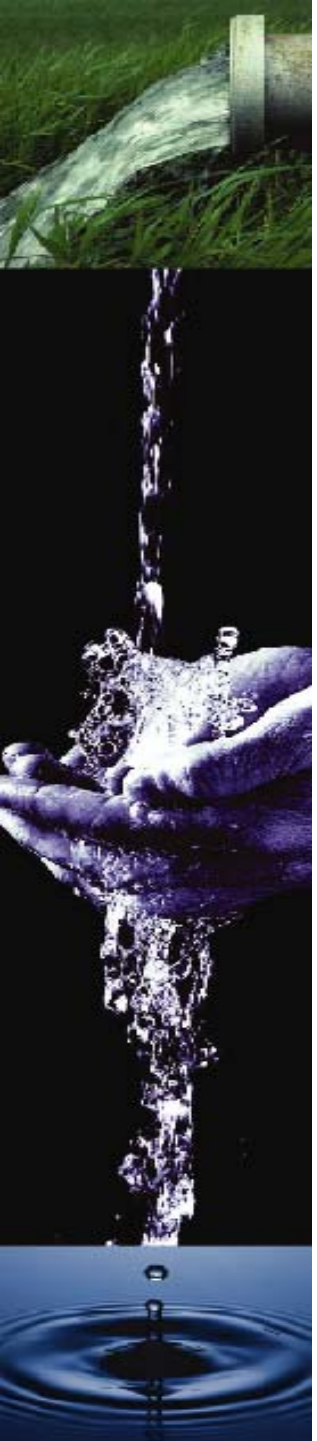


RFC's Recommendation

GENERAL CLASS

1. **Change individualized base (average annual usage) from 90% to 100%**
   - ❑ **Target discretionary water usage and peaks**

   Note: **Establish appeals process to adjust base if customer expands business**

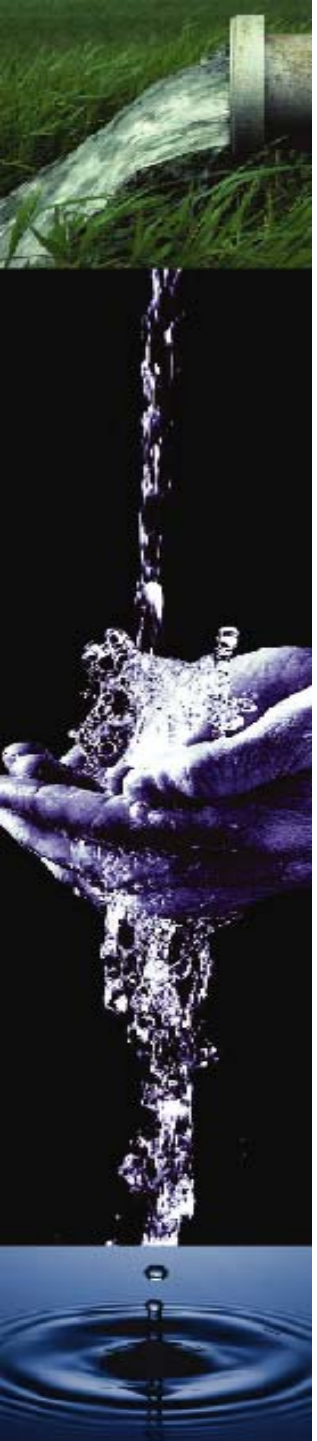


RFC's Recommendation

	Existing Blocks*	Proposed Blocks**	Description
Block 1	100%	100%	Non-Discretionary indoor usage
Block 2	125%	125%	Non-Discretionary indoor and outdoor usage
Block 3	150%	175%	Discretionary
Block 4	200%	> 175%	Excessive
Block 5	> 200%	N/A	N/A

* Cut-offs are the percentage of Base which is 90% of average monthly consumption

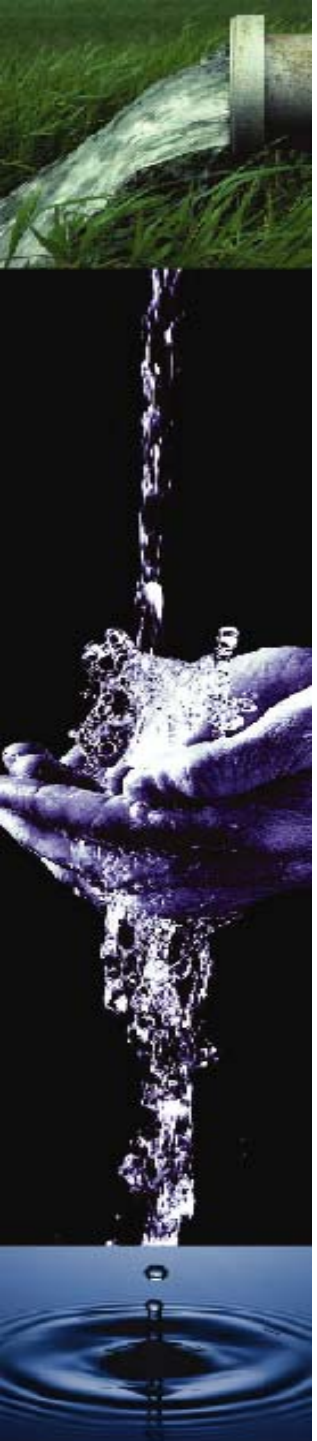
** Cut-offs are the percentage of Base which is 100% of average monthly consumption



RFC's Recommendation

GENERAL CLASS

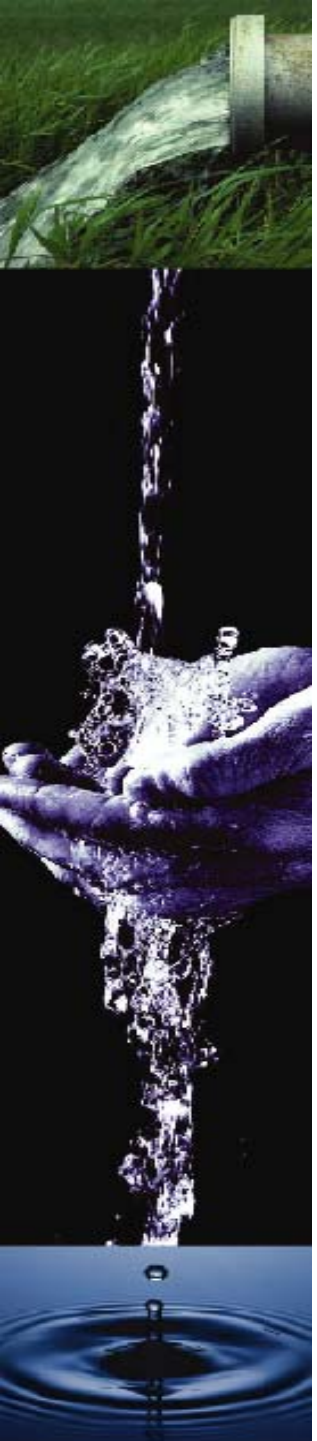
2. **Modify rate differentials**
3. **Increase allocation to fixed component**
   - ❑ **Mitigate revenue instability**



RFC's Recommendation

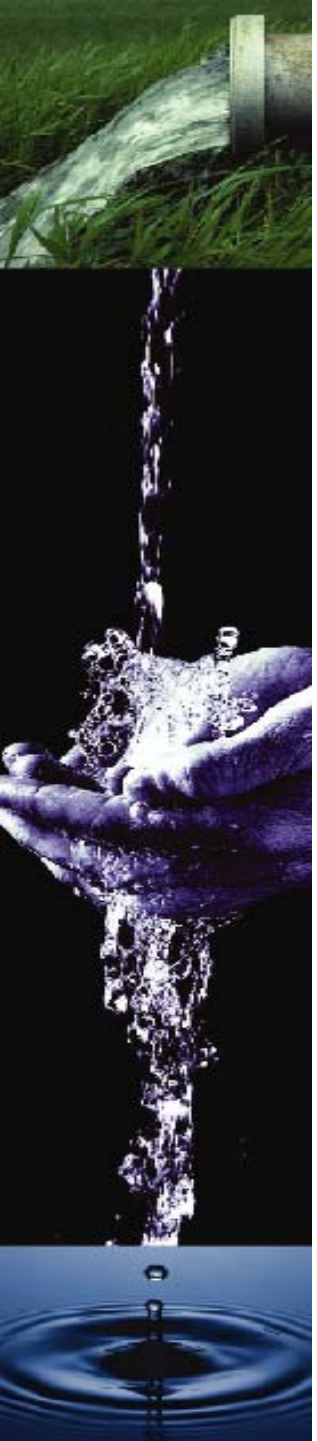
IRRIGATION CLASS

1. **Modify block cut-offs**
   - ❑ **Target non-discretionary outdoor water usage**
2. **Add seasonal rate structure**
   - ❑ **Reduce peaks**
3. **Provide incentive to install irrigation meters and comply with annual irrigation inspection**



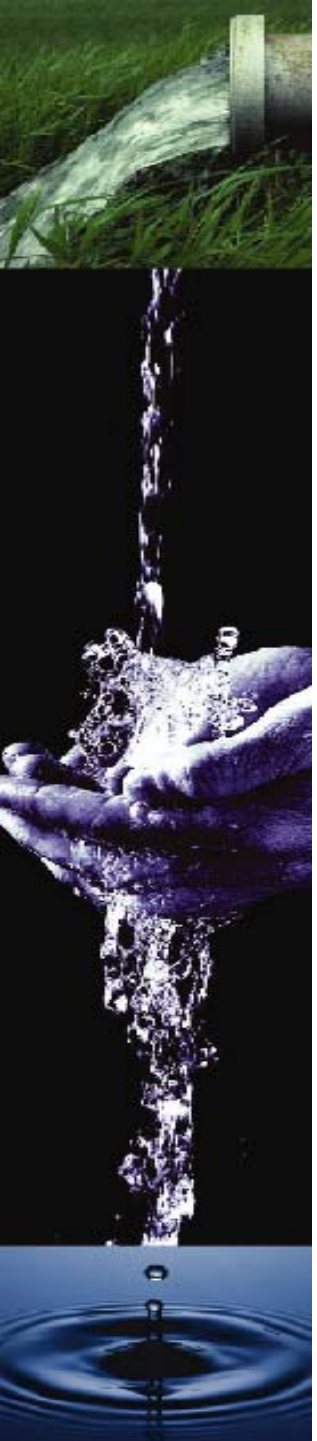
Proposed Irrigation Block Cut-offs

	Current Blocks (gallons)	Proposed Blocks (gallons)
Block 1	12,717	7,481
Block 2	17,205	14,214
Block 3	over 17,205	over 14,214

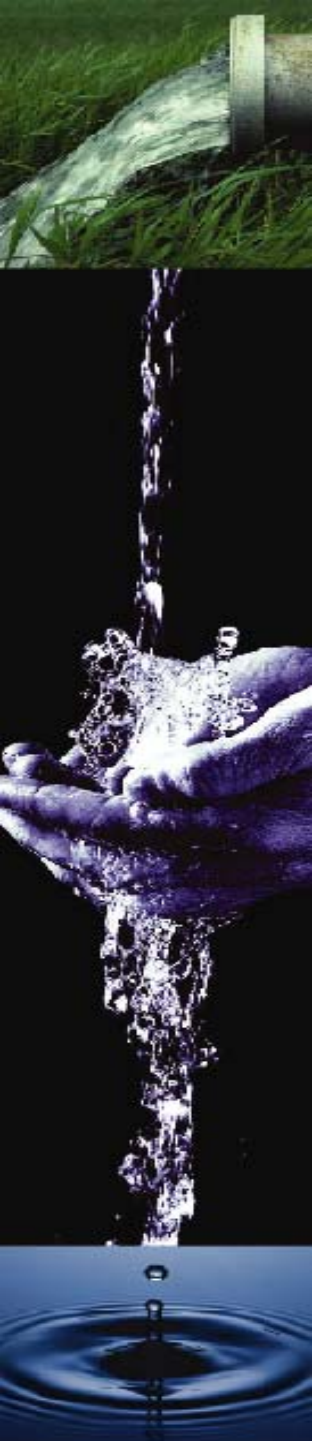


Evaluation of Water Delivery Rate Structure Recommendations

Objectives	Modify Cut-Offs	Increase Rate Differentials b/w blocks	Increase Rate Differential b/w Seasonal Vs Non-Seasonal	Increase Season	Increase Base to Volumetric Cost Allocation
Reward efficient water users	✓	✓			
Reduce discretionary water use		✓	✓	✓	
Revenue stability					✓
Affordability to disadvantaged customers	✓	✓			

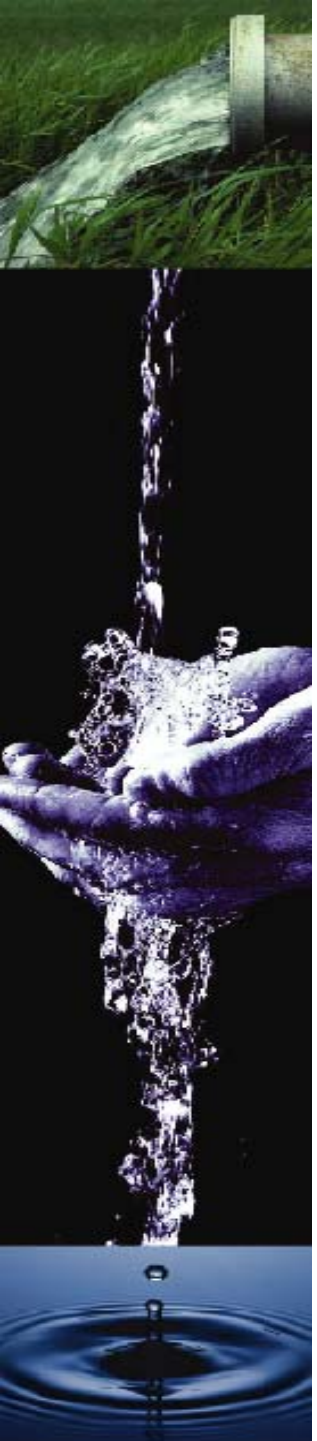


Water Supply



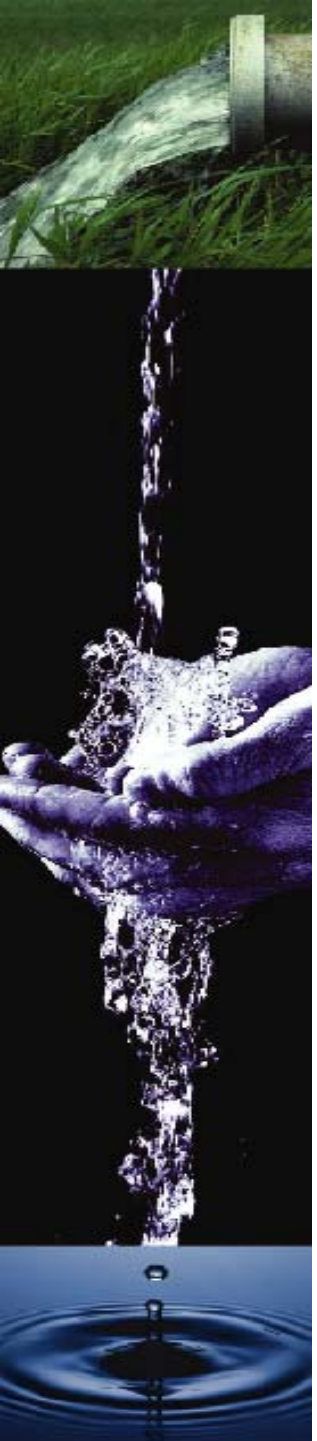
Purpose of Existing Water Supply Rate Structure

- **Separate uniform rate to recover cost of obtaining water supply**



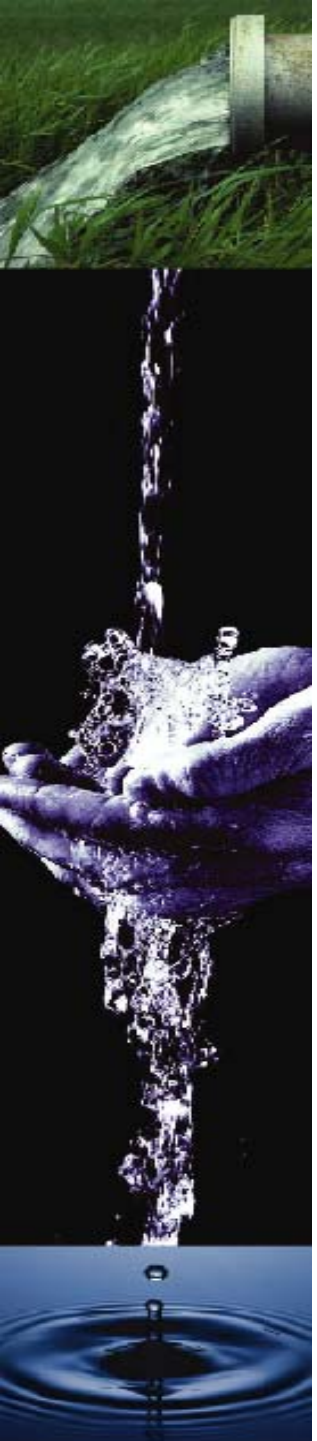
Opportunities for Improvement

- **Reflect cost of next increment of water supply**
- **Promote conservation by implementing tiered rate**
- **Full recovery of water supply costs**



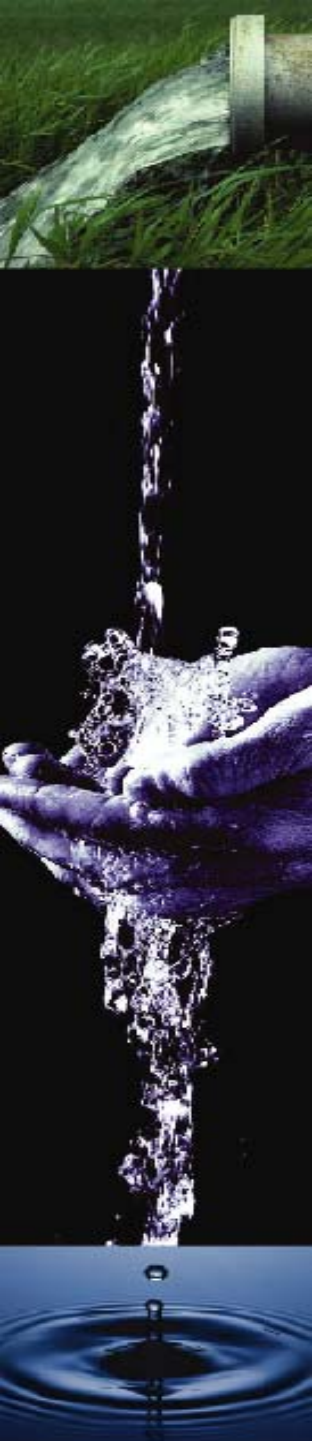
Water Supply Options

- **Develop tiered rate structure reflecting water supply costs**
- **Fully allocate water supply costs**



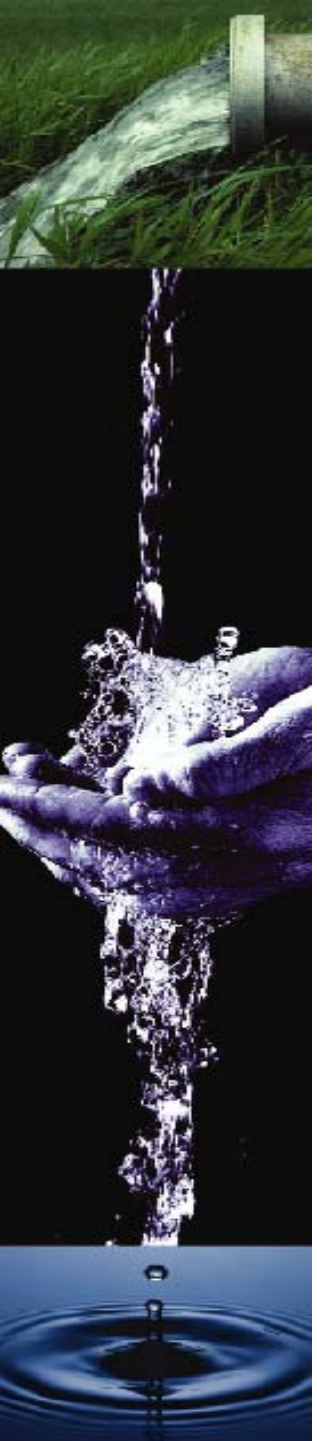
RFC's Recommendation

1. **Recover all water supply costs**
2. **Establish tiered rate structure**
   - ❑ **Residential and Irrigation Class: Predetermined cut-offs**
   - ❑ **General Class: Individualized cut-off based on % of base**

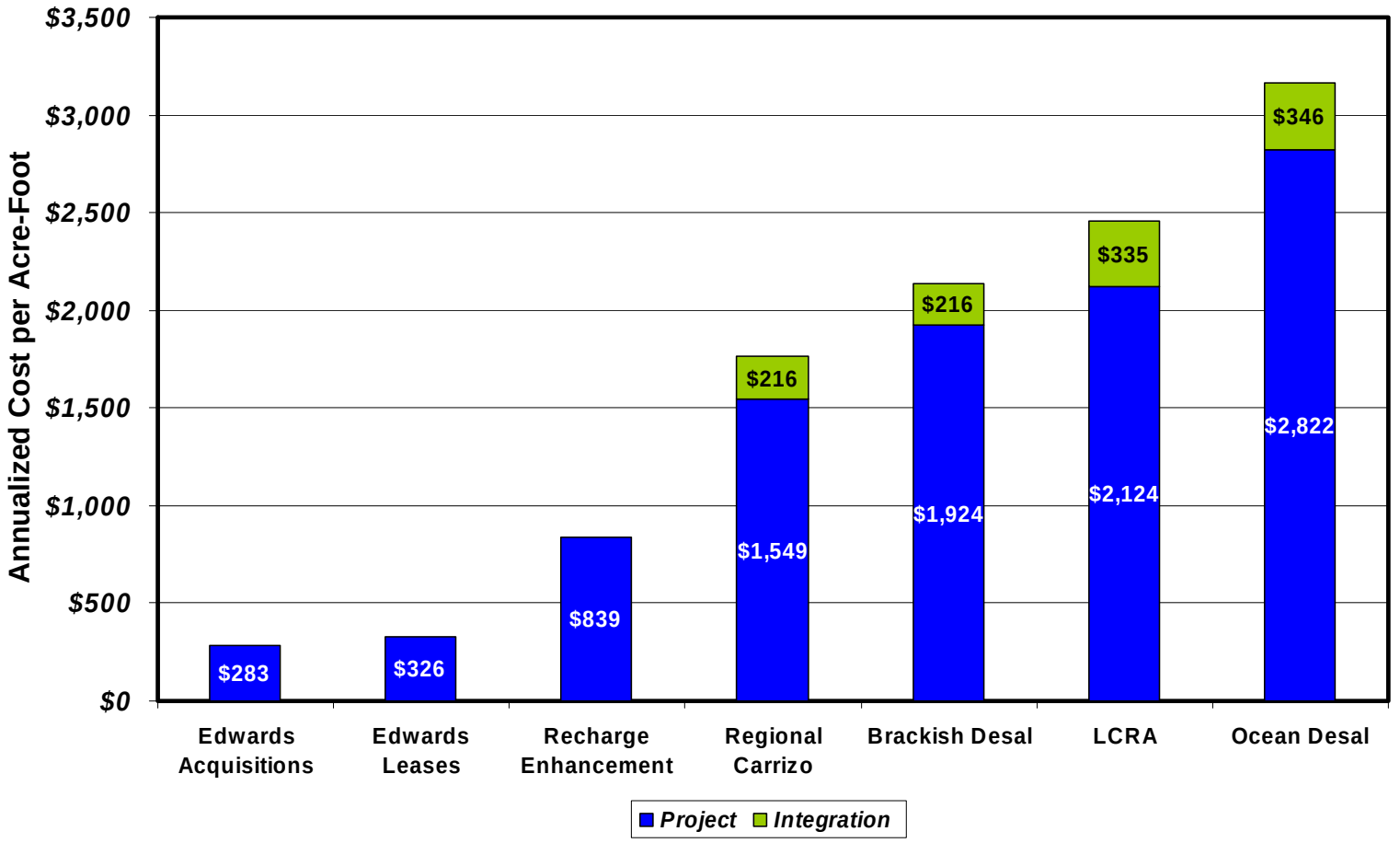


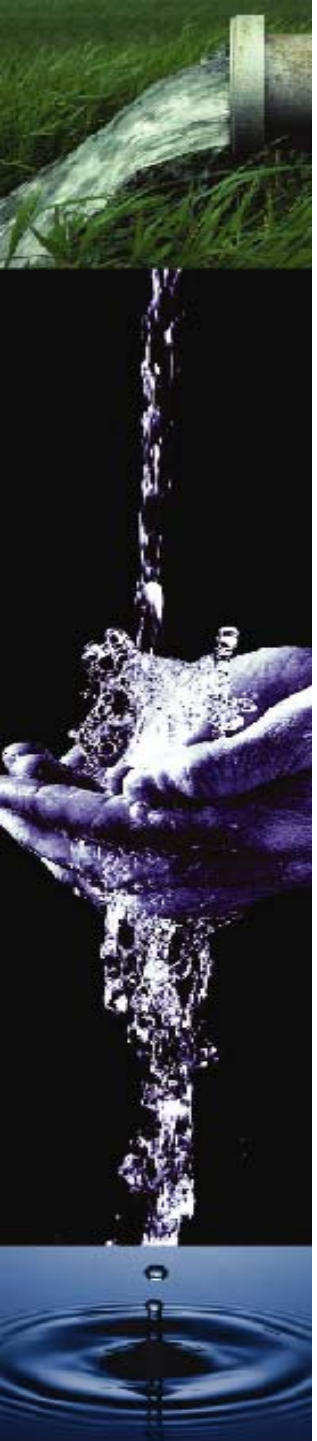
RFC's Recommendation

	Proposed Blocks (gallons)
Residential	
Block 1	0 - 5,237
Block 2	5,237 - 12,718
Block 3	12,718 - 19,451
Block 4	over 19,451
General	
Block 1	100%
Block 2	125%
Block 3	175%
Block 4	> 175%
Irrigation	
Block 1	0 - 7,481
Block 2	7,481 - 14,214
Block 3	over 14,214

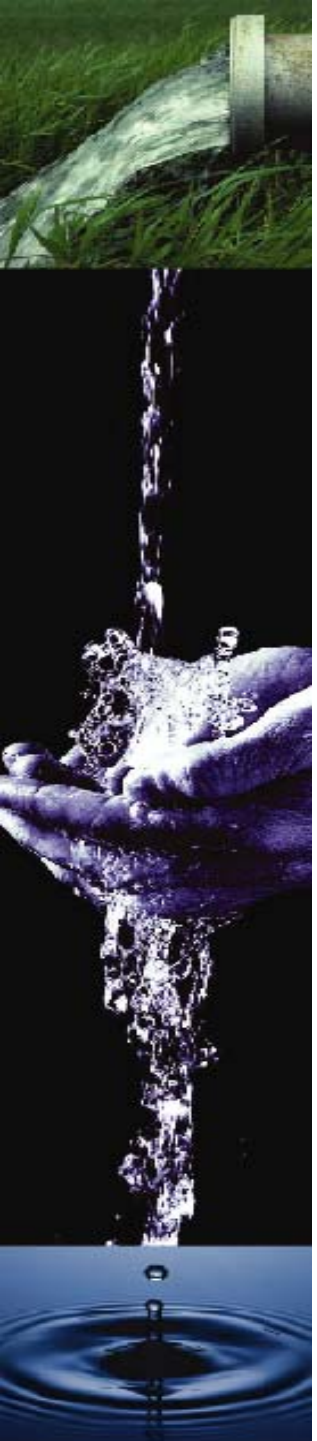


Basis for Water Supply Rate Differentials



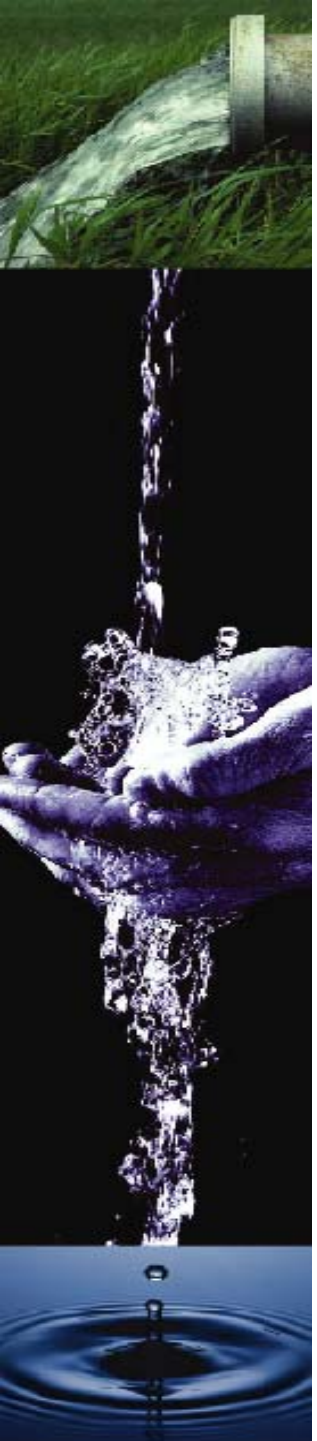


Wastewater



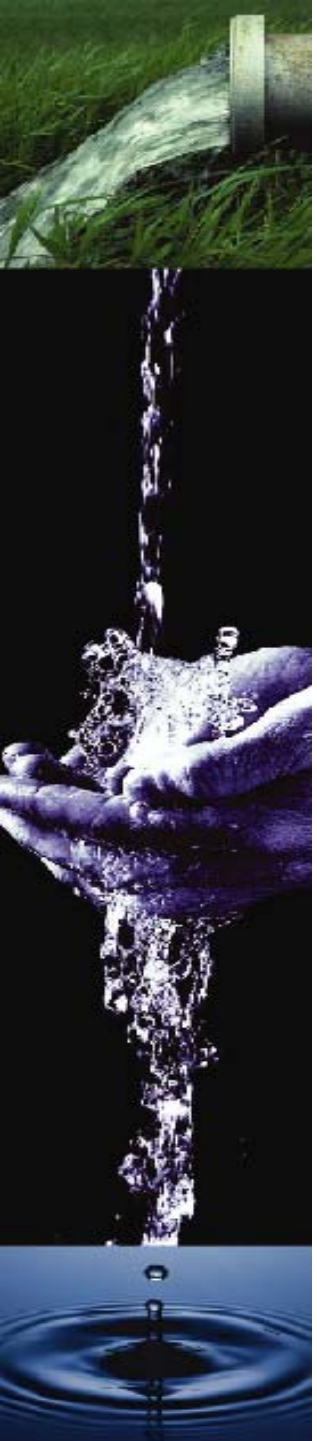
Purpose of Existing Wastewater Rate Structure

- **Residential**
  - **Based on winter average (Nov – March) water usage to reflect water not returned to wastewater system**
- **General**
  - **Based on 100% of water usage**



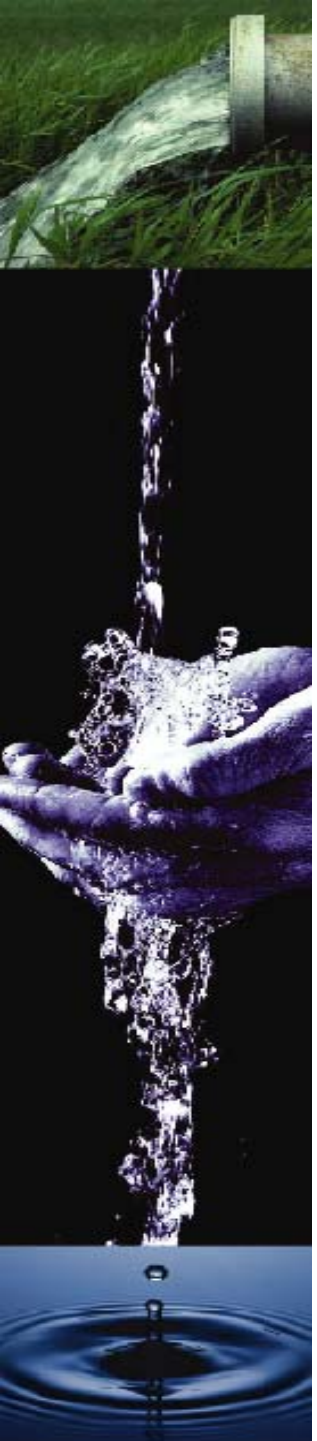
Opportunities for Improvement

- **Eliminate minimum usage to promote water conservation and equity**
- **Recognize costs associated with Fats, Oils and Grease (“FOG”) and lift stations**



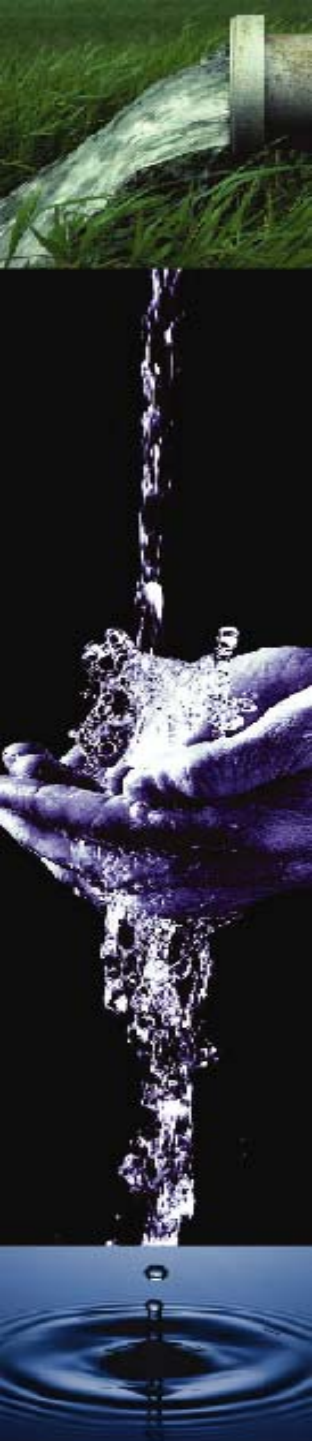
Wastewater Rate Structure Options

- **Modify basis of determining wastewater returned to system:**
  - **% of water use**
  - **% of winter average water use**
  - **Water use with a cap**
- **Eliminate minimum**
- **Recognize costs associated with Fats, Oils and Grease (“FOG”) and lift stations**

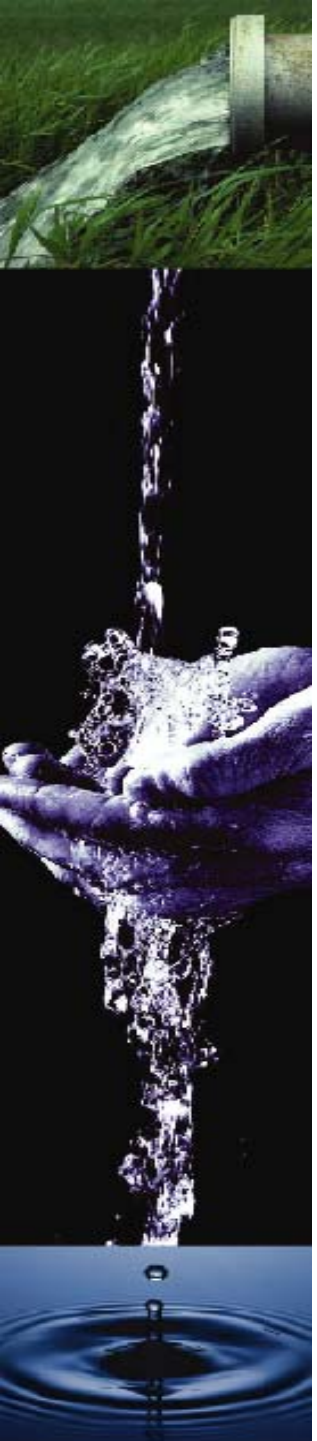


RFC's Recommendation

1. **Maintain winter average as basis**
   - **Effectively reflects non-discretionary usage**
   - **Look at establishing a cap on winter average**
2. **Eliminate minimum and establish base**
3. **Leave volumetric structure as-is, but adjust rates to ensure recovery of appropriate costs**
4. **Institute incentive to comply with Best Management Practices (FOG)**
5. **Develop lift station maintenance fee**



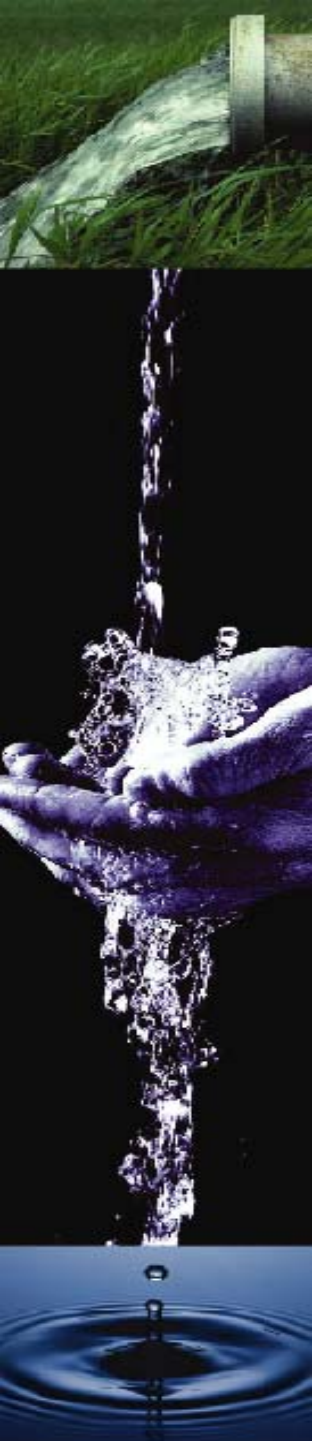
Other System-wide Rate Structure Issues



Outside-City Rates

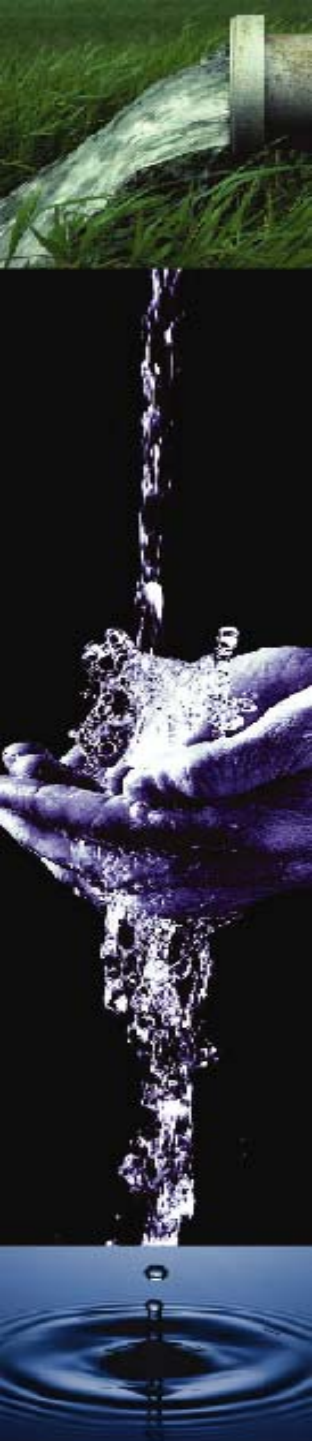
Outside-City differentials are applied to Inside-City rates

1. **Do we want to continue to have outside-City differentials?**
2. **Should outside-City differentials continue to vary or have one differential for all customer classes and meter sizes?**



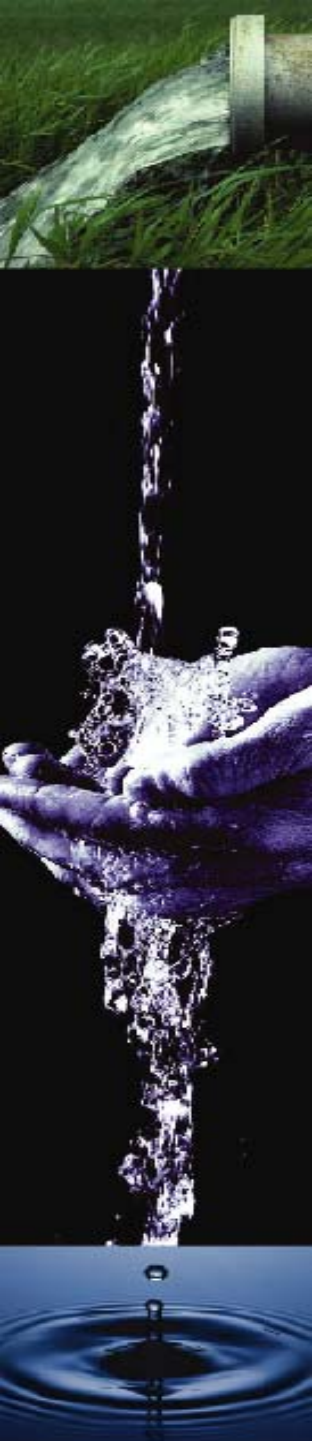
Separate Rate for Energy Costs

1. **Do we want to have a separate rate for energy costs (“pass through”)?**
2. **If we base this on projection of energy costs, do we have a “true-up” mechanism?**
3. **Will Council support automatic pass through?**



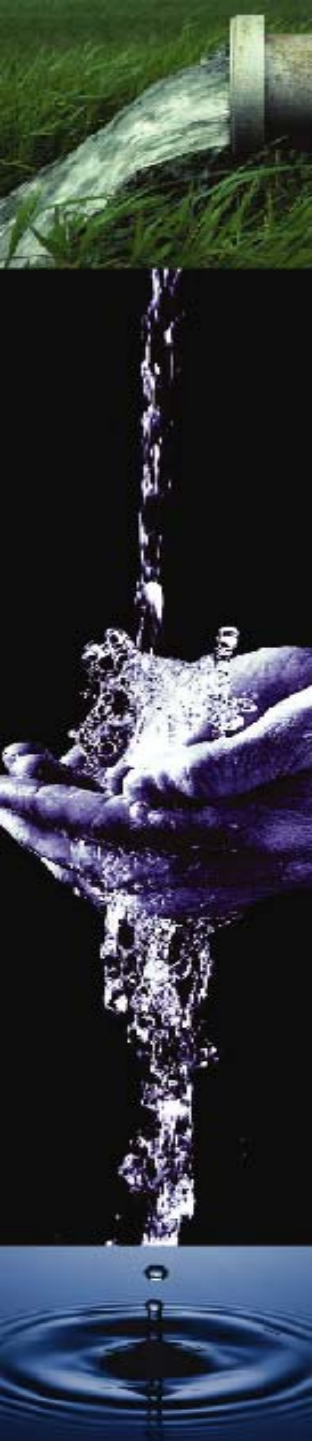
Private Fire Protection Fees

Recalculate fees based on cost of service allocation



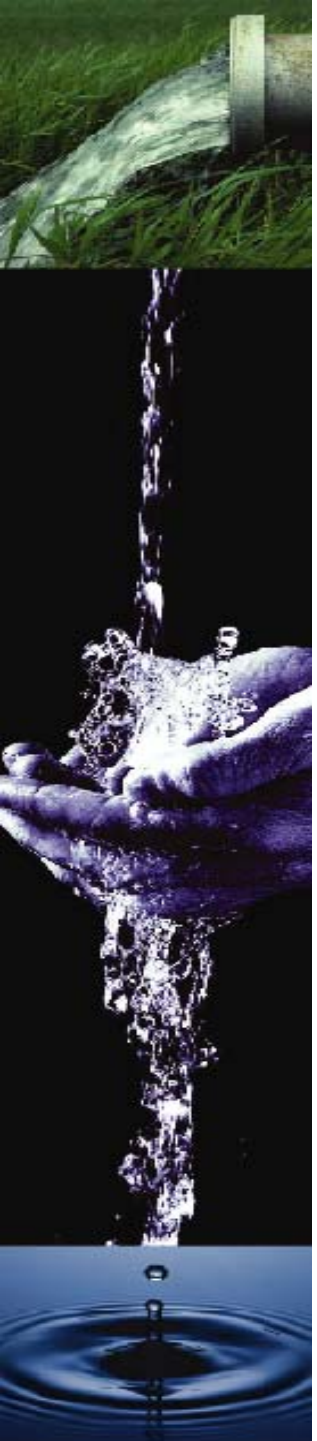
Institutionalize Rates for Affordability Customers

1. **Determine if Affordability Discount should be changed from a discount to a reduced meter charge**
2. **Review legality and impact on Senior Lien Ordinance**



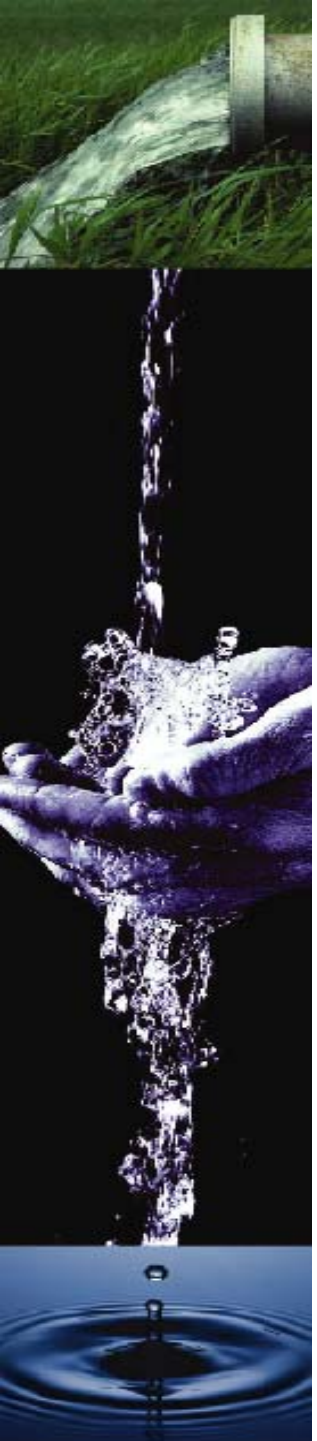
Edwards Recharge Zone

1. **Determine if an Edwards Recharge Zone is appropriate and cost justified**



Recycled Water Rates

1. **Analyze and modify rates as necessary to ensure the appropriate recovery of costs.**



Sewer Service Surcharge

1. **Use Chemical Oxygen Demand (COD) in lieu of Biochemical Oxygen Demand (BOD) to calculate surcharge**