

**Round Hill General Improvement District  
Board of Trustees Workshop  
January 26, 2010**

**Tuesday**

**6:00pm**

**1. Meeting Called to Order. (Side A/c#1)**

Meeting was called to order by Chairman Glen Smith.

**2. Pledge of Allegiance. (Side A/c#4)**

Pledge of Allegiance was led by Chairman Smith.

**3. Roll Call. (Side A/c#7)**

Chairman Glen Smith, Vice Chairman Steve Teshara and Trustees Chuck Fagen, Steve Seibel and Wes Rice were present. The District Manager, Administrative Assistant and District Counsel were present. Residents Barbara Smith, Karl Aynedter and Janet Murphy were present. Brent Farr of Farr West Engineering was also present.

**4. Public Comment. (Side A/c#8)**

Resident Karl Aynedter reported that a construction truck had been parked in the street blocking others from getting through in both directions on Elks Point Road. He asked if District staff could talk to the person involved. Manager Reed stated that he would follow up on this request.

Janet Murphy asked why the residents of Round Hill were not notified of the January 26, 2010 workshop. Manager Reed stated that the special workshop meeting was noticed on the posted Agendas, noticed on the January 22, 2010 billing statement and noticed on the newsletter enclosed with the billing statement.

**5. Approval of Agenda. (Side A/c#52)**

Motion to approve the agenda as presented. Rice/Teshara 5-0 approved.

**6. Discussion of the District's current rate structure and consideration of future possible rate adjustments. (Side A/c#54)**

Manager Reed reported that Farr West Engineering was hired by the District to conduct a rate structure analysis. Brent Farr was in attendance to present his findings. Attached to these minutes is a copy of the presentation of the analysis.

Brent presented a review of the scope of work, water rate goals, existing residential and commercial rates and existing revenues and requirements. Brent also presented his observations and the impacts of Capital Improvement Plan (CIP) projects. He provided charts regarding current rate comparisons and a new tiered rate structure. He presented possible alternatives to rate making and explored the impact on the customers of Round Hill.

The Board had many questions regarding how and why rates were currently structured. Manager Reed and Brent Farr explained the current rate structure. There are some inconsistencies in the current structure that need to be modified.



Brent stated that the tiers for residential usage do not necessarily fit well with the goal of conservation. He noted that the Round Hill General Improvement District allows 20,000 gallons per month as a base rate and the average annual usage by a typical residential customer is only 12,000 per month. The next tier is for 30,000 gallons. The more water a customer uses, the less expensive the water costs per unit between 20,000 and 30,000 gallons. He noted that rate tiers indicate how aggressive a District is with conservation.

Vice Chairman Teshara reported that the Round Hill General Improvement District was one of the first metered Districts. In order to comply with State grant funding the District received for the Lake Intake Extension Project the District installed and switched to meters. It was up to the Board, at the time of setting those rates, to look at minimizing the impact to the customers as they got used to the new meters and rates. The only rate adjustment that has been made since metering began was a sewer rate increase of \$3.00 per home for three consecutive years in order to fund the Emergency Sewer Lift Station Replacement.

Discussions of the Districts' irrigation water rates centered around the perception that those rates were inconsistent with other water rates. Justification for the irrigation rate discrepancies could be that irrigation within the District is a benefit to all District customers.


Chairman Smith requested more information on how much conservation incentive is appropriate and what would be an appropriate differential between residential and commercial rates. He preferred to see a 5 year gradual increase rather than 3 years.

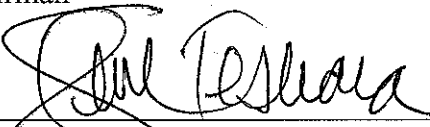
Since this meeting was a workshop, there were no votes taken. Any future votes on rate adjustments will take place after all appropriate public hearings are conducted.

**7. Adjournment. (Side C/c#300)**

Motion to adjourn made by Trustee Rice.

Attest:

  
\_\_\_\_\_  
Glen Smith  
Chairman

  
\_\_\_\_\_  
Steve Teshara  
Vice Chairman



# Round Hill General Improvement District

Rate Workshop  
January 26, 2009

## Review Scope of Work

- Collect and Evaluate Existing Information
- Cost of Service Analysis
- Develop Water and Sewer Rate Structures
- Develop Water and Sewer Capacity Fees
- Develop Road Maintenance Fees
- Develop Storm Drain Maintenance Fees (Dropped)
- Evaluate Feasibility of Ad Valorem Tax Implementation
- Provide Recommendations to Modify Tariffs
- Public Presentations and Board Meetings

## Water Rates – *What are they for?*

- Fund the non-profit water utility
  - Treatment (power, chemicals)
  - Pumping (power, pump maintenance, etc.)
  - Maintenance (tanks, water lines, etc.)
  - Management Costs
  - Capital Improvement Fund
    - Replacement of water lines
    - Upgrades to water treatment plant
    - Tank replacement and maintenance

## Water Rate Goals

- Ensure sufficient revenues that will cover current and future operation and maintenance costs, debt service, depreciation and capital improvements.
- Create and maintain equity among all rate payers.
- Provide a basis for rates and the rate structure that can be easily explained to customers (simplify rate structure).
- Achieve goals pertaining to water conservation that are consistent with State objectives.

## Existing Residential Water Rates

The existing rate structure for a  $\frac{3}{4}$ " residential meter is as follows:

Base Rate:	\$45.00, which includes 20,000 gallons of water
Tier 1	\$2.00 per 1,000 gal. between 20,000 and 50,000 gal.
Tier 2	\$2.50 per 1,000 gallons for usage above 50,000 gal.

Larger residential meters are handled in the following way:

Base rate:  $(\text{meter size})^2 / (3/4)^2 \times \$45.00$

For example, the base rate for a 2-inch meter would be:  $(2)^2 / (3/4)^2 \times \$45.00 = \$320$

The usage tiers are handled in the same way. A customer with a 2-inch meter would be allowed to use up to  $(2)^2 / (3/4)^2 \times 20,000$  gallons = 142,000 gallons with the base rate.

## Existing Commercial Water Rates

The existing rate structure for a  $\frac{3}{4}$ " commercial meter is as follows:

Base Rate:	\$45.00, which includes 7,000 gallons of water
Tier 1	\$9.65 per 1,000 gal. between 7,000 and 11,000 gal.
Tier 2	\$12.85 per 1,000 gallons for usage above 11,000 gal.

Larger commercial meters are handled in the following way:

Base rate:  $(\text{meter size})^2 / (3/4)^2 \times \$45.00$

For example, the base rate for a 2-inch meter would be:  $(2)^2 / (3/4)^2 \times \$45.00 = \$320$

The usage tiers are handled in the same way. A customer with a 2-inch meter would be allowed to use up to  $(2)^2 / (3/4)^2 \times 7,000$  gallons = 50,000 gallons with the base rate.

## Breakdown of Customers and Rates

[illegible]

Existing Revenues and Requirements	Revenue
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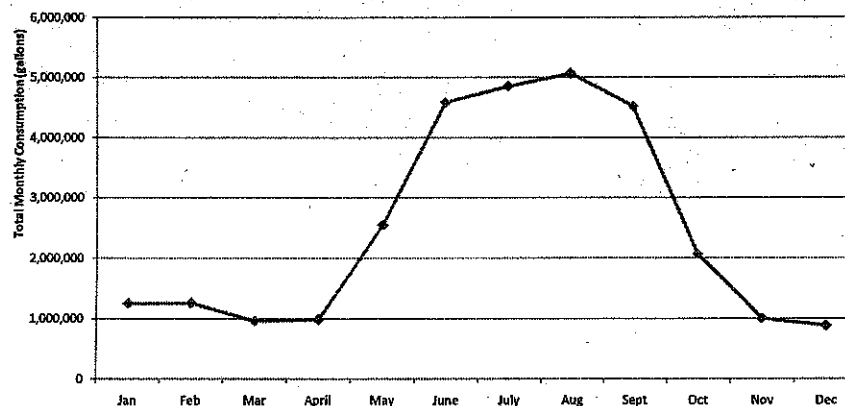
- 2009 Revenue = \$509,621
  - 2009 Operating Expenses = \$517,362 (including \$166,374 in depreciation)
  - 2009 Operating Loss = \$7,741
  - 2009 Net Cash Provided by Operating Activities = \$106,361
  - 2009 Cash Balance = \$1,739,774
- 
- 2010 Budget shows operating loss of \$268,876 -- due mostly to capital improvements that will be funded by cash balance.

## Analysis and Observations

- Review Customer Count and Rate Structure
- No basis for residential or commercial tiers could be found
- Residential tiers do not seem to reflect actual usage or promote conservation
- Commercial and residential rates are not equitable (based on cost of service)
- Commercial tiers are too tight
- Commercial irrigation rate is much lower than indoor rate
- Base rate should be tied to meter size using equivalent meter ratios
- Eliminate current water EDU formula
- Do not include varying amounts of water to be used based on meter size
- Tariff does not include all rates
- Rates are somewhat confusing for a small utility – too many special rates
- Rates should be simple and equitable

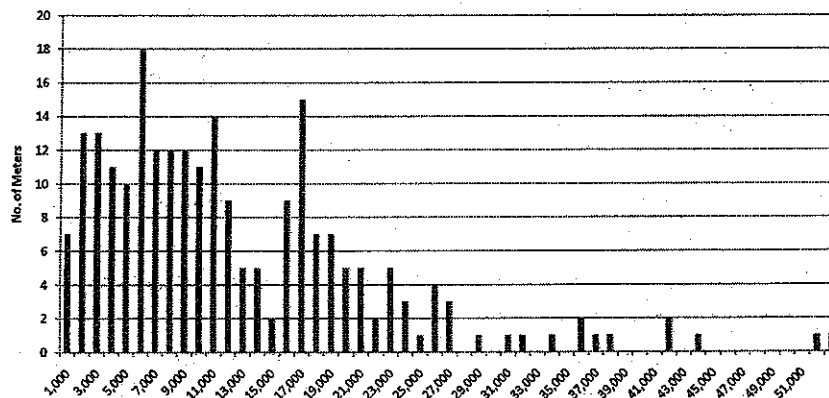
## Usage Data

Monthly Consumption for 3/4" Meters  
Round Hill GID (2007)



## Usage Data

Water Use & No. of 3/4" Meters  
Round Hill GID



## Future Revenue Requirements – Capital Improvement Plan

Project	Projected Date	Estimated Cost (2009 Dollars)
New Office Tank	2011	\$1,100,000
Replace Extra-Office Tank	2012	\$1,400,000
Replace Office Control Tank	2012	\$200,000
Water Treatment Plant Expansion	2012	\$2,400,000
Water system replacement	Starting in 2012	\$10,000,000
Total 10-year CIP		\$15,100,000 (including water system repl.)

## Impact of CIP on Rates

The financial impact of this capital improvement program over a 20 year period is significant. If this program is financed using state revolving loan funds, the revenue requirement will rise from a current level of \$500,000 to \$900,000 over the 20 year period. Accounting for inflation of operation and maintenance costs, the revenue requirement will rise even further to approximately \$1,300,000. This simple analysis shows that over a 20 year time horizon, the revenue requirement of the water utility will more than double and could even triple depending upon how aggressive the District is with implementing the capital improvement program. This analysis indicates that the District would need to raise rates annually between 4 and 5 percent, which may not be realistic. However, even for inflation and some additional debt service, the District should plan on average annual rate increases of at least 3 percent.

## Short Term Rate Changes – Modifications to Rate Structure

- Focus on ¾" Residential Rates (430 units)
- No water allowed with base rate  
(fixed versus variable costs)
- Adjust tiers to reflect usage
- Apply tiers to Pinewild, Castle Rock and Apartments
- Fix minor inconsistencies
- Increase Commercial Irrigation Rate
- Modify Tariff
- Allow 3 years to make changes

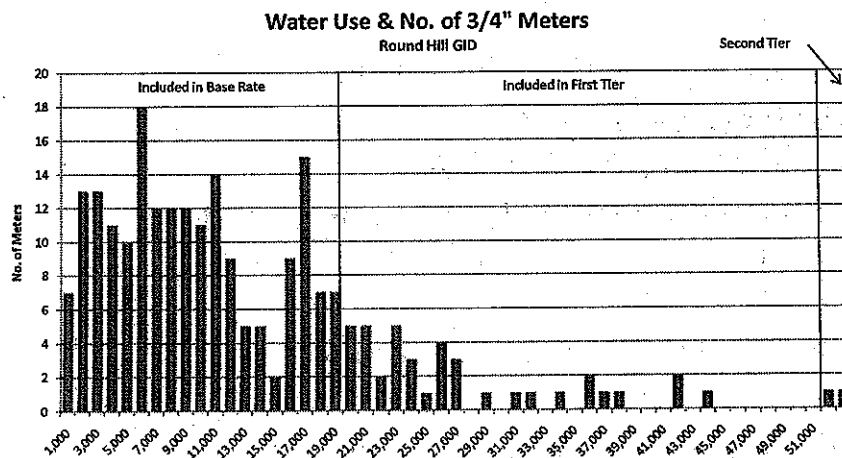
## New Tiers

Tier 1: 0 to 5,000 gallons (indoor use)  
\$2.00 per thousand

Tier 2: 5,000 to 20,000 gallons  
(average summer use)  
\$3.00 per thousand

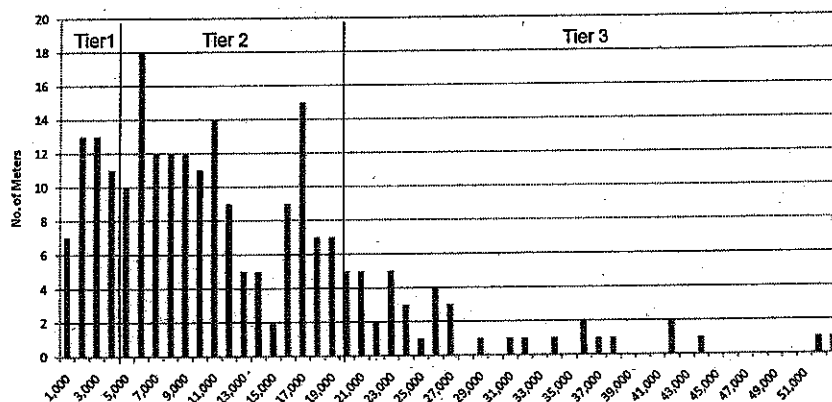
Tier 3: Over 20,000 gallons  
(beyond average summer use)  
\$4.00 per thousand

## Old Tiers



## New Tiers

Water Use & No. of 3/4" Meters  
Round Hill GID



## Impacts to the Customer

	10,000 Gallons	20,000 Gallons	30,000 Gallons	40,000 Gallons	50,000 Gallons	60,000 Gallons	70,000 Gallons
Current Monthly Bill	\$145.00	\$290.00	\$435.00	\$580.00	\$725.00	\$870.00	\$1,015.00
Proposed Monthly Bill	\$145.00	\$290.00	\$435.00	\$580.00	\$725.00	\$870.00	\$1,015.00
Revenue Increase	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Same Impacts apply to Pinewild, Castle Rock, Etc. Pinewild's average rate will likely rise by 60%

Revenues may increase by as much as \$100,000 per year, but may be less depending on how much water is conserved as a result of the new rates.

Revenue increase of \$100,000 is roughly a 25% increase in rates.

## Affordability of Residential Rates

State standard is that total annual bill, assuming average use of 15,000 gallons per month, is at least 2% of the median household income for the area.

MHI for this area is \$60,000 (State MHI is \$45,000). 2% of \$60,000 is \$1,200, which equals a monthly bill of \$100. Proposed rate is \$85, which indicates it is affordable.

## Rate Comparisons

$\frac{3}{4}$ " Residential Meter – 15,000 gallons per month

Kingsbury GID \$85.00 +/- (tentative)

\$53/Month Base Rate

0-5,000 gallons = \$1.25/thousand

5,000 – 20,000 gallons = \$2.50/thousand

Over 20,000 gallons = \$4.00/thousand

## Rate Comparisons

$\frac{3}{4}$ " Residential Meter – 15,000 gallons per month

South Tahoe PUD \$65.00 +/-

\$20.68/month meter fee

\$2.94/thousand

Tahoe City PUD \$55.20

\$47.00/month base rate

0 – 8,000 gallons = \$0.50/thousand

8,000 – 20,000 = \$0.60/thousand

20,000 – 40,000 = \$0.95/thousand

Over 40,000 = \$1.95/thousand

## Rate Comparisons

$\frac{3}{4}$ " Residential Meter – 15,000 gallons per month

Cave Rock \$180.82 flat rate

Skyland \$114.23 flat rate

Zephyr \$66.43 flat rate

Truckee Meadows Water Authority \$49.24

\$15.70/month base rate

0 – 6,000 gallons = \$1.63/thousand

6,000 – 25,000 = \$2.64/thousand

Over 25,000 = \$3.05/thousand

## Rate Comparisons

$\frac{3}{4}$ " Residential Meter – 15,000 gallons per month

### Summary:

Round Hill GID	\$45.00 (Current Rate)
TMWA	\$49.24
Tahoe City PUD	\$55.20
South Tahoe PUD	\$65.00
Zephyr	\$66.43 flat rate
Round Hill GID	\$85.00 (Proposed Rate)
Kingsbury GID	\$85.00 +/- (tentative)
Skyland	\$114.23 flat rate
Cave Rock	\$180.82 flat rate

## Commercial Irrigation Rate

Commercial Irrigation Rate is \$4.72 per thousand gallons.

Commercial Rate is \$9.65 per thousand gallons for first tier and \$12.85 for second tier.

## Long Term Changes

- Increase Base Rate and Tiered Usage Rates to Accommodate Revenue Requirements
- Look at Commercial Rates



## Rate Comparison

$\frac{3}{4}$ " residential /  $\frac{3}{4}$ " commercial / Irrigation Only

	0	25.00	50.00	75.00	100.00	125.00	150.00	175.00	200.00
Residential	\$ 0.00	\$ 25.00	\$ 45.00	\$ 45.00	\$ 45.00	\$ 45.00	\$ 45.00	\$ 45.00	\$ 45.00
Commercial	\$ 0.00	\$ 25.00	\$ 45.00	\$ 45.00	\$ 45.00	\$ 45.00	\$ 45.00	\$ 45.00	\$ 45.00
Irrigation Only	\$ 0.00	\$ 25.00	\$ 47.20	\$ 70.80	\$ 95.40	\$ 120.00	\$ 144.60	\$ 169.20	\$ 193.80

Notice large discrepancy between residential and commercial. Rates should be based on cost of service. Consider the example of a bookstore and a typical single family home.

Also – irrigation rate isn't consistent with conservation policies. It's also contrary to tiered rates and to seasonal peaking.

