

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com



Budget Rates on a Budget: A Guide for Smaller Agencies



Water Smart Innovations Conference 2011

October 5, 2011

Who We Are



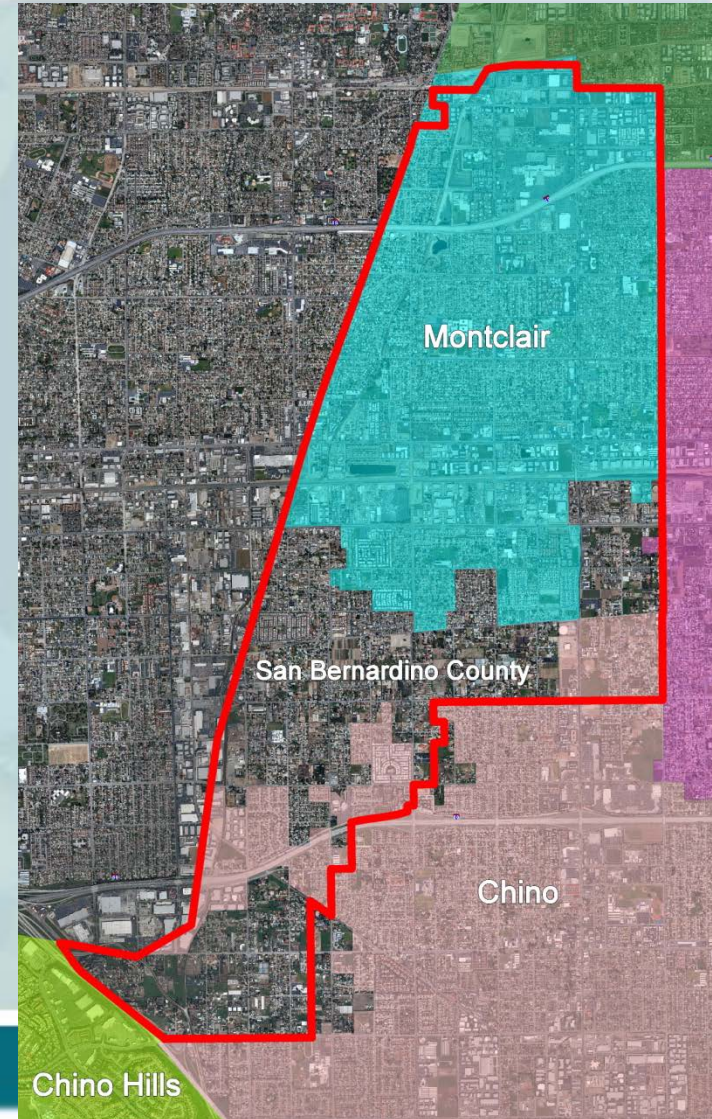
💧 County Water District

- Retail & Wholesale Service

- 134,000 Population

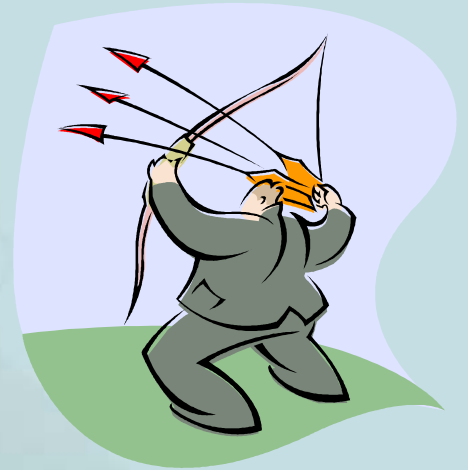
💧 12,000 Retail Customers

- City of Montclair
- City of Chino (portions)
- San Bernardino County



Rate Development Objectives

- ◆ Fund Operations, Maintenance and Capital Replacement Programs
- ◆ Maintain Adequate Reserves
- ◆ Meet Established State Water Use Efficiency Requirements
- ◆ Gradual, Multi-Year Implementation of Rate Increases to Avoid “Rate Shock”
- ◆ Mitigate Tiered Rate Impact on Large Lots
- ◆ Maintain Adequate Funding with Reduced Demand and Separate Conservation Fund



Water Budget Concepts

💧 Inclining Block Rate

- More Water Use = Higher Cost per Unit

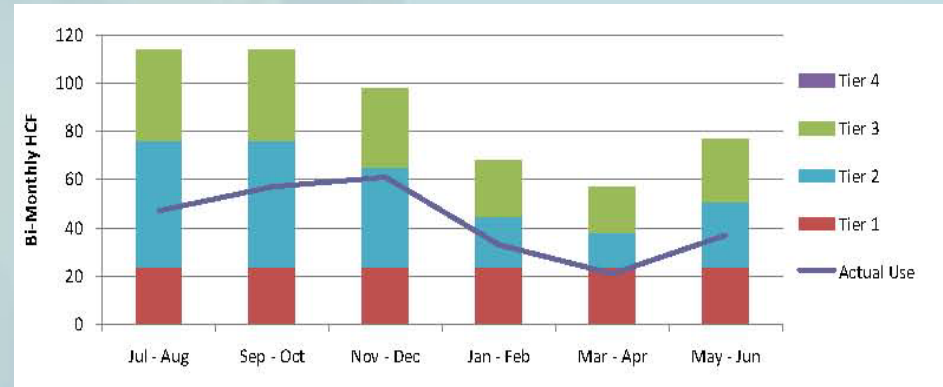
💧 “Budget”

- Generous Allocation for Indoor and Outdoor Needs
- *Different for Each Customer and Billing Period*

💧 Single-Family Residential

- Similar Water Use Requirements
- Residential Accounts Served by Single Meter

💧 May Adjust Future Allocations, Customers



Water Budget Assumptions

Tier 1 – Indoor Allocation

💧 4 Persons Per Household (pph)

- City of Montclair **3.854 pph***
- City of Chino **3.586 pph***
- SB County **3.291 pph***

*California Department of Finance Housing Estimates, 2009

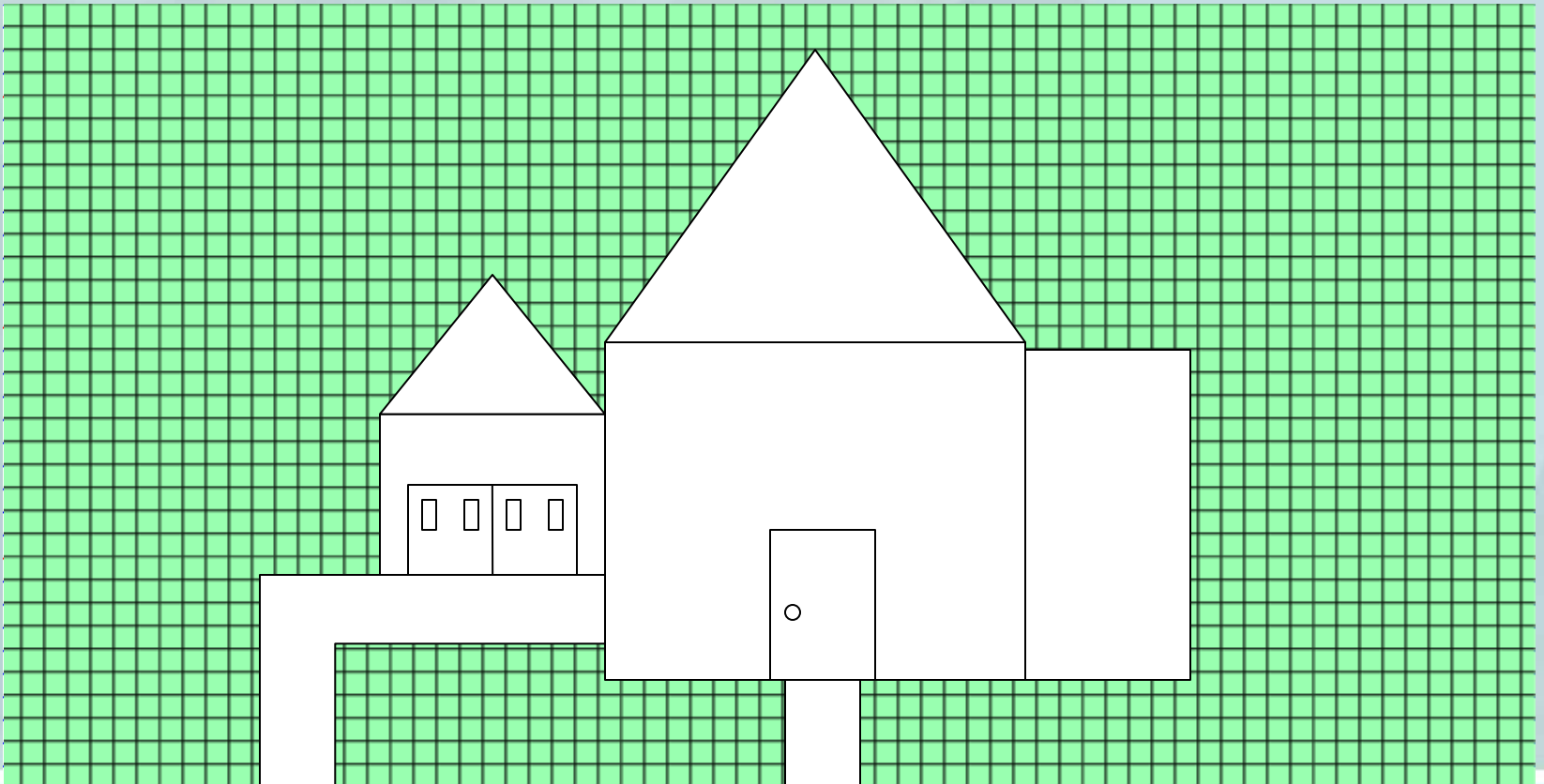
💧 75 Gallons Per Day (gpd) Per Person

- Average Indoor Use **69.3 gpd****

**AWWARF Residential End-Uses of Water Study, 1999

Water Budget Assumptions

Tier 2 – Outdoor Allocation



Water Budget Assumptions

Tier 2 – Outdoor Allocation

💧 Up to **54 inches** of Water per Square Foot of Landscaped Area

➤ Pomona CIMIS Station **48 inches** per year*

*California Irrigation Management Information System (CIMIS)

💧 Seasonal Adjustment

| Jan-Feb | Mar-Apr | May-Jun | Jul-Aug | Sep-Oct | Nov-Dec | Total |
|---------|---------|---------|---------|---------|---------|-------|
| 10% | 7% | 13% | 25% | 25% | 20% | 100% |

Water Budget Assumptions

Tier 3 – Inefficient Usage

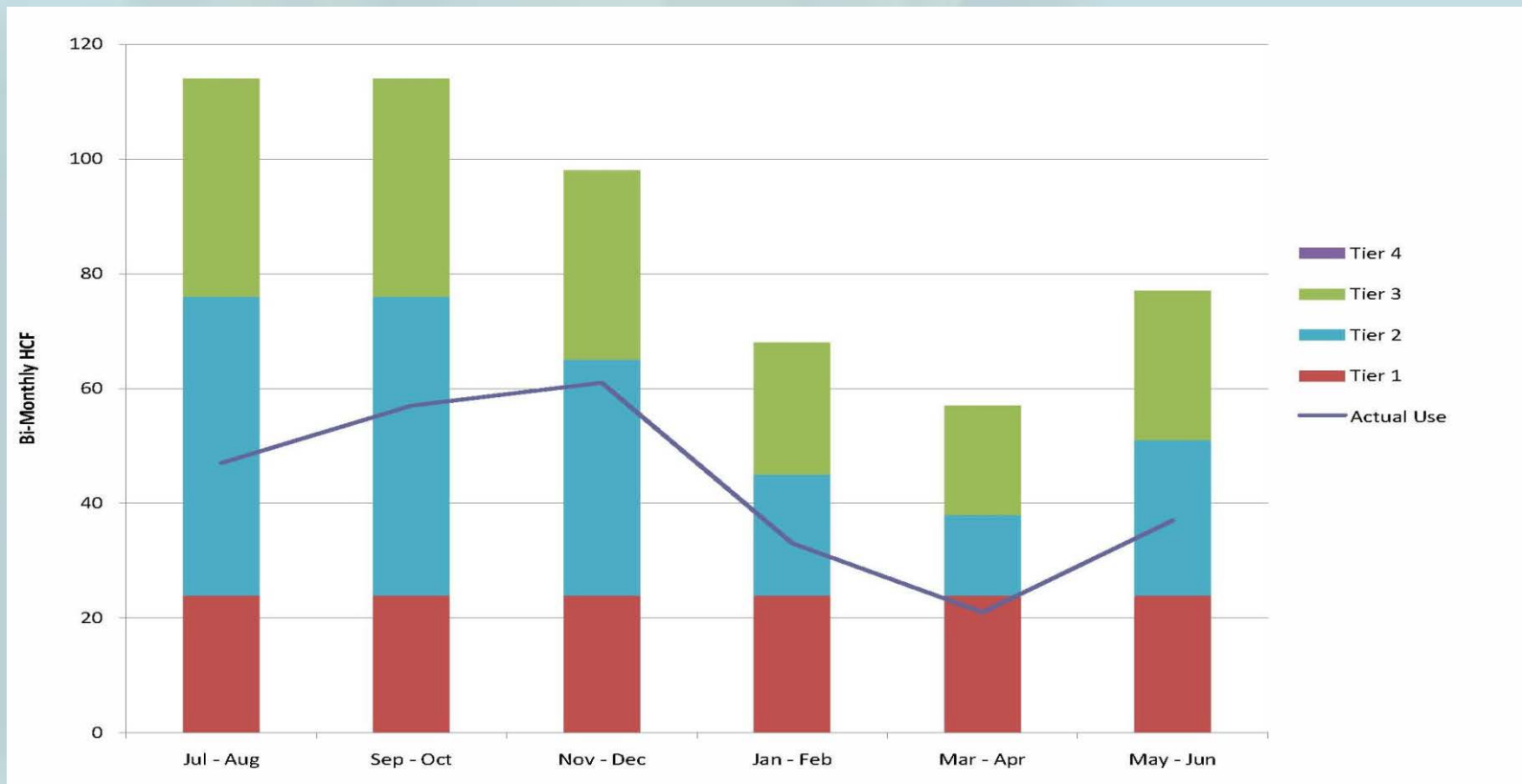
- 💧 Water Use Above Tier 1 & Tier 2
- 💧 Allocation = $\frac{1}{2}$ Tier 1 + $\frac{1}{2}$ Tier 2

Tier 4 – Excessive Usage

- 💧 Water Use Above Tier 3
- 💧 Separate Water Conservation Fund

Water Budget Assumptions

Sample Customer's Allocation vs. Usage

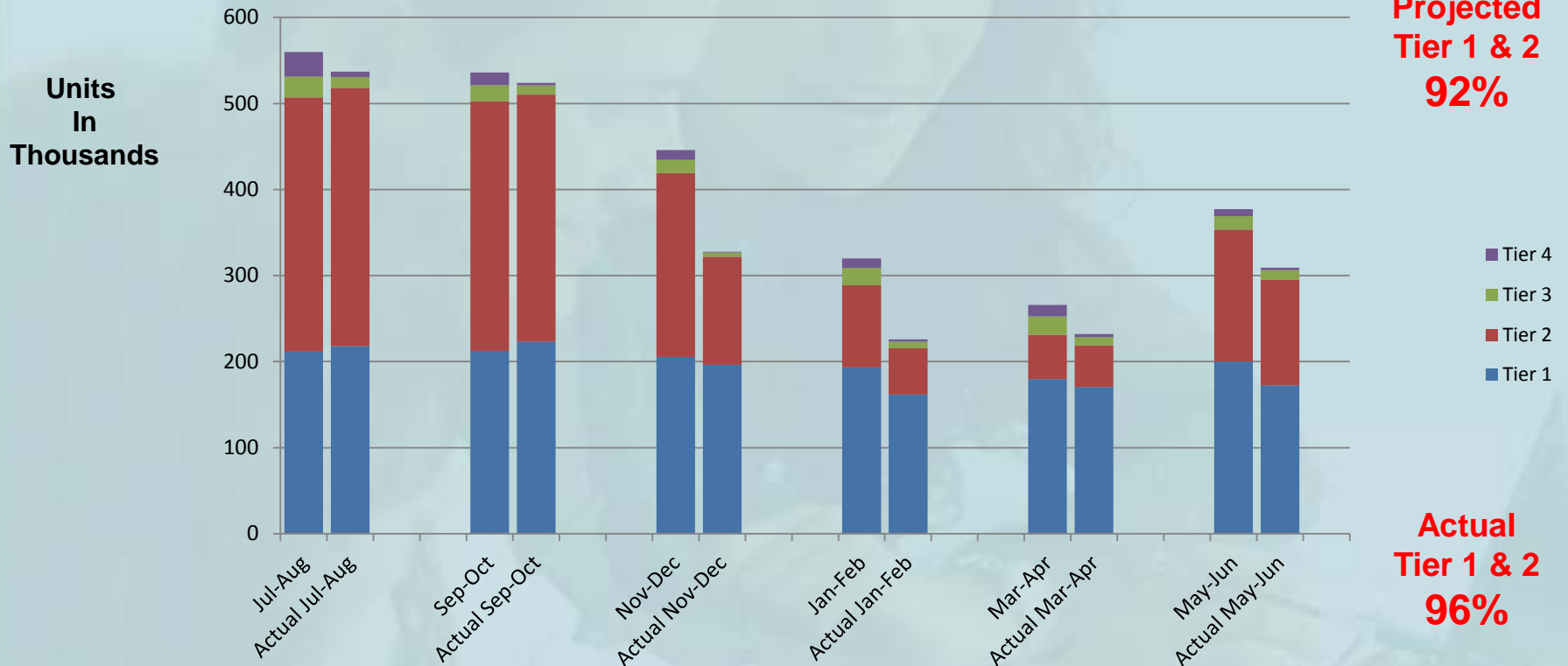


Volumetric Rates (HCF)

| Single-Family Residential | Previous Rate | Effective Aug. 1, 2010 | Effective Jan. 1, 2011 | Effective Jan. 1, 2012 |
|----------------------------------|----------------------|-------------------------------|-------------------------------|-------------------------------|
| Tier 1 | \$1.358 | \$1.408 | \$1.549 | \$1.704 |
| Tier 2 | \$1.358 | \$1.608 | \$1.769 | \$1.946 |
| Tier 3 | \$1.358 | \$2.100 | \$2.352 | \$2.587 |
| Tier 4 | \$1.358 | \$3.216 | \$3.602 | \$4.142 |
| | | | | |
| All Other Customers | Previous Rate | Effective Aug. 1, 2010 | Effective Jan. 1, 2011 | Effective Jan. 1, 2012 |
| Domestic | \$1.358 | \$1.518 | \$1.689 | \$1.891 |
| Recycled | \$0.944 | \$1.139 | \$1.267 | \$1.418 |

Projected Customer Impact

Single-Family Residential Use by Billing Period



Public Notification and Education

Proposition 218 Notice

Notice of Public Hearing:

Notice is hereby given that the Board of Directors of the Monte Vista Water District will hold a public hearing to receive public comments and consider adoption of a budget-based tiered water rate structure which will increase over current water rates by the District. This notice explains the reasons for the increase and the proposed structure, the basis on which the rates are calculated, a schedule for initiation of the proposed rates, and the for adopting new water rates under state law.

Pursuant to the Americans with Disabilities Act, persons with a disability who request such modification or accommodation in order to participate in a meeting from the District Secretary at (909) 624-0037, by email at tracy@mwwd.org, or (909) 624-0037. Notification 24 hours before the meeting will enable District staff to make reasonable arrangements to assure accessibility to the meeting.



Proposed Water Rates

Single-Family Residential Customers (Budget-Based Tiered Rate)

Over 80% of the District's accounts provide water to single-family residences. The District has determined a tiered rate structure for its single-family residential customers to encourage efficient use of water and charges more for use of water. Each single-family residential customer is allocated a certain amount of water for indoor and outdoor use. Tiers 1 and 2. If the customer exceeds this amount, higher rates for the additional water use, represent:

- Tier 1 – Indoor Use: Each single-family residential customer is allocated 12.2 units per month for indoor use (748 gallons of water). The indoor use by single-family residential customers fell within either Tier 1 or Tier 2. (Please see chart below.)



www.MVWD.org
(909) 624-0037

Recommended

Attention Residents

The District's new budget-based tiered rate structure meets your watering needs throughout the year. The amount of water used is less than the amount of Tier 2 water provided during the winter months.

Tier 2 Water: More in Winter

Adjust your outdoor watering to be unnecessary in winter.

Please see our [Recommended Watering Schedule](#).

[Para traducir este aviso de información al español](#)

Did You Know?
Monte Vista Water District is a member of the Green Valley Initiative, a regional movement to promote sustainable practices in the greater Inland Empire region. [Click here for more information.](#)

Your Water District
Pressure reducing valves help maintain pressure throughout the water distribution system.

Proposed 3-Year Water Rate Schedule

Public Hearing: January 27, 2010 Proposed Three-Year Water Rate Schedule

Monte Vista Water District's Board of Directors will hold a public hearing on **Wednesday, January 27, 2010 at 7 p.m.** in the District's Board Room, 10575 Central Avenue, Montclair to receive public comments and consider adoption of a budget-based tiered water rate structure and a three-year schedule of water rates.

The proposed rate structure represents an increase over current water rates. Several factors contribute to the need to increase water rates: increased cost of imported water due to drought and environmental constraints, new legislation mandating 20 percent reduction in use by 2020, replacement of aging infrastructure and maintaining adequate financial reserves.

Proposed Budget-Based Tiered Rate Structure (Single-Family Residential Customers only; 80% of District customers)

A budget-based tiered rate structure, proposed for individually metered single-family residential accounts only, rewards efficient use of water and charges more for inefficient or excessive use of water. Each single-family residential customer will be allocated a sufficient amount of water for indoor use (Tier 1) and outdoor use (Tier 2). If customers exceed these amounts, they will be charged higher rates for the additional water use (Tier 3 and Tier 4). In 2009, 92 percent of all water

used by single-family residential customers fell within either Tier 1 or Tier 2. (Please see chart below.)

Customers who wish to increase their allocation of indoor or outdoor water due to special circumstances may apply for a variance.

Flat Rate (All Other Customers)

All customers, that are not categorized as single-family residential (multi-family, commercial, industrial, institutional, agricultural, nurseries, and dedicated landscape uses) will be charged a flat rate that represents the average rate paid by single-family residential customers.

Readiness-to-Service Charge (RTS)

The Readiness-to-Service (RTS) fees, based on meter size that covers the fixed cost of operating the District (maintenance of the water system, customer service, administration, etc.), will also increase by an average of 11 percent over the next three years.

A "Notice of Public Hearing," mailed to all District account holders in early December, describes in detail the reasons for the proposed rate increases, the basis on which the proposed rates are calculated and rate schedules for a three-year period, beginning February 1, 2010.

For information relating to the public hearing and proposed water rates, contact the District at (909) 624-0035 or visit our website at www.mwwd.org.

| | |
|-------------------------------|--|
| Tier 1 Indoor Use | Allocation: 24.4 units/60-day billing cycle, based on 4 persons per household using 75 gallons per person per day. One unit = 748 gallons |
| Tier 2 Outdoor Use | Allocation: 0.045 units (34 gallons) per sq. ft of irrigated land per year, based on property lot size and seasonal landscape needs (more during summer, less in winter) |
| Tier 3 Inefficient Use | Allocation: The sum of 50% of Tier 1 and 50% of Tier 2 allocations per billing period |
| Tier 4 Excessive Use | All usage above Tier 3 |

Planning for Implementation...

... Begins While Developing the Model

A faded, light blue-tinted background image showing a woman and a child looking at a laptop screen together. The woman is on the right, leaning over the child on the left, who is pointing at the screen. The image is semi-transparent and serves as a background for the text.

Who Will Lead the Effort?

- ◆ District Staff vs. Consultant

- Functional Aspect of Task
- Technical Needs

- ◆ MVWD Chose to Use District Staff to Implement the Rate Model



Preparing the Billing System

- Upgrade Server Performance
- Database Cleanup
- Gathering Property Information
 - County Records, GIS, Third-Party Sources
- Inserting Formula Components into Billing Software
- Develop Billing Software Formula
 - Test for Accuracy
- Data Output



Bill Creation & Distribution

💧 Design Layout


- As Soon as Model Development Permits

💧 Billing Software Data Export File

- Source of Bill Creation

💧 Programming Layout

- Quality Testing



PO BOX 71 10575 Central Ave.
Montclair, CA 91763 - 0071 www.mvwd.org

(909) 624 - 0035
Mon - Thurs 7:30 am - 5:30 pm ; Fri 8:00 am - 5:00 pm

WATER CUSTOMER
100 WATER WAY
MONTCLAIR CA 91763

PAY YOUR BILL ONLINE AT WWW.MVWD.ORG

| | |
|-------------------------|----------------|
| ACCOUNT NUMBER | 999-999-99 |
| SERVICE ADDRESS | 100 WATER WAY |
| CURRENT CHARGE | 89.61 |
| TOTAL AMOUNT DUE | \$89.61 |
| DUE DATE | 03/31/2010 |

AMOUNT INCLUDED \$

Please return this stub with your payment. Make checks payable to MVWD.

MONTE VISTA WATER DISTRICT
PO BOX 71
10575 CENTRAL AVE
MONTCLAIR, CA 91763-0071 www.mvwd.org

BILL DETAIL

| | |
|--|----|
| Your Water Budget For This Period In Units | 39 |
| Your Water Consumption | 34 |

| | |
|--|--------------------|
| Readiness To Serve | \$ 36.38 |
| Consumption | |
| Tier 1 Indoor Use | \$1,408 x 24 33.79 |
| Tier 2 Outdoor Use | 1,608 x 10 16.08 |
| Tier 3 Inefficient Use | 2,100 x 0 0.00 |
| Tier 4 Excessive Use | 3,216 x 0 0.00 |
| Total Consumption Charge | \$ 49.87 |
| Pass Through Charges | |
| Chino Basin Watermaster | 0.00 |
| Southern California Edison | 0.00 |
| Metropolitan Water District | 0.00 |
| Montclair Utility Tax | 3.89% |
| Total Pass Through Charge | \$ 3.36 |
| Total For This Period Due Immediately | \$ 89.61 |
| Total Amount Due | \$ 89.61 |

BILL SUMMARY

| | |
|-------------------------|----------------------|
| CUSTOMER NAME | WATER CUSTOMER |
| SERVICE ADDRESS | 100 WATER WAY |
| ACCOUNT NUMBER | 999-999-99 |
| BILLING PERIOD | 1/1/2010 - 2/28/2010 |
| TOTAL AMOUNT DUE | \$89.61 |

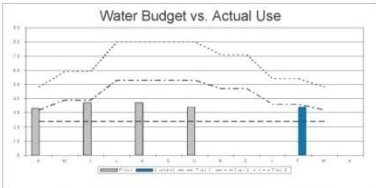
SPECIAL MESSAGES

Online Bill Pay is now available! Go to www.mvwd.org and click on the Online Bill Pay icon to register.

Questions? Contact Customer Service at (909) 624-0035, Ext. 0.

ACCOUNT INFORMATION

| | | |
|-----------|--------------|---------------|
| Meter # | Current Read | Previous Read |
| 000000000 | 2448 | 2414 |



Water Budget vs. Actual Use

Your water efficiency rating this billing period is:

EFFICIENT

Thank you for being an efficient water user!

Number of days in this billing period: 58
1 unit = 100 cubic feet = 748 gallons

Charges billed through closing date of 2/28/2010

Reporting

◆ *Will Your Software Support Your Reporting Requirements?*

- Tiered Rate Statistics
- General Ledger Revenue
- Other?



Why Variances?

- 💧 **Water Budget Based on Estimates**
 - People Per Household
 - Landscape Area
- 💧 ***Budget Calculation Provides Generous Indoor and Outdoor Allocations***
 - Covers Nearly All Water Needs
- 💧 **Special Circumstances May Require Additional Indoor or Outdoor Use**

Variance Categories

💧 Indoor Variances

- People Per Household
- Licensed Care Facility
- Medical Needs



💧 Outdoor Variances

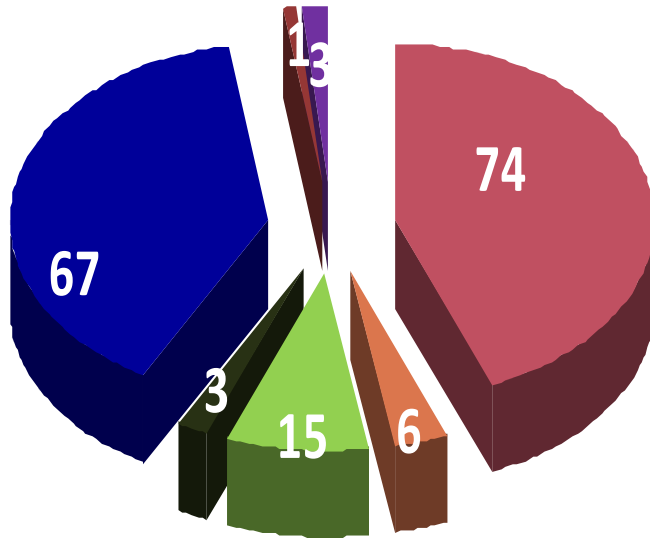
- Landscape Area
- New Landscaping
- Livestock/Large Animals
- Pool Refilling
- Leaks



💧 Other

Customer Variance Requests

Processed Variances



- People Per Household
- Leaks
- Large Animals
- Medical Needs
- Pool Refilling
- Landscape Area
- New Landscaping



For Office Use Only:
 Account #: _____
 Approved/ Denied: _____ Date: _____
 Processed: _____ Date: _____
 Tier 1 Adjustment: _____ units
 Tier 2 Adjustment: _____ units

Application for Water Budget Variance

This form is to request an adjustment in water budget allocation under the District's budget-based tiered rate structure for single-family residential customers. If you believe you need an increased allocation based on the criteria listed below, you must complete and return this form in its entirety. Incomplete applications, including applications without requested supporting documentation, will be returned without review. The budget-based tiered rate structure is designed to reward those who use water efficiently with lower rates, as well as to assist customers in identifying leaks and over-watering. Variances may be approved only for the reasons listed on this application and are subject to periodic review by the District.

Account Name: _____ Account Number: _____

Service Address: _____

I request an increased water allocation for the following reason(s):

- 1. More than Four (4) Full-Time Residents in Household** Total number in household: _____
Please list the names, ages, and relationships for all full-time, year-round household residents on the reverse side of this application. **The District reserves the right to require documentation or other verification for any full-time resident.**
- 2. Child, Adult, or Elder Care Facility** Total persons currently cared for: _____
Please submit a copy of a current and valid license issued by California Department of Social Services. Other forms of documentation for unlicensed but valid and legal care facilities will be considered for approval on a case-by-case basis.
- 3. Medical Needs** Estimated gallons per day required: _____
Please submit medical documentation. Documentation examples: letter from health care provider, medical device receipt, etc.
- 4. Irrigated Landscape Area Greater than District Estimate** Actual landscape area (sq.ft.): _____
Please submit a drawing of your property area using the graph provided on the reverse side of this application.
- 5. Establishment of New Landscaping** New or rehabilitated landscape area (sq.ft.): _____
Please submit permit or a drawing of your landscape area using the graph provided on the reverse side of this application.
- 6. Pool Requires Refilling** Date you will refill pool: _____ Total capacity of pool (gallons): _____
- 7. Livestock and Large Animals (100+ pounds)** Type(s): _____ # of animals: _____
- 8. Leaks** Date leak fixed: _____
Please submit documentation of leak fix. Documentation examples: before/after photographs, receipt for plumbing repair, etc.
- 9. Other Circumstance** – There may be instances where an increased allocation on a permanent or temporary basis may be appropriate. If you believe that is the case please provide details on a separate page and attach any available documentation.

I affirm, under penalty of perjury, that I am the above account holder and the information contained herein, including supporting documentation, is complete and accurate. I further understand that all variances are subject to change and I may be liable for back charges if I provide incorrect information.

Signature (unsigned applications are automatically denied) _____ Date _____
 Daytime Phone Number (8am – 5pm) _____ Email (optional) _____

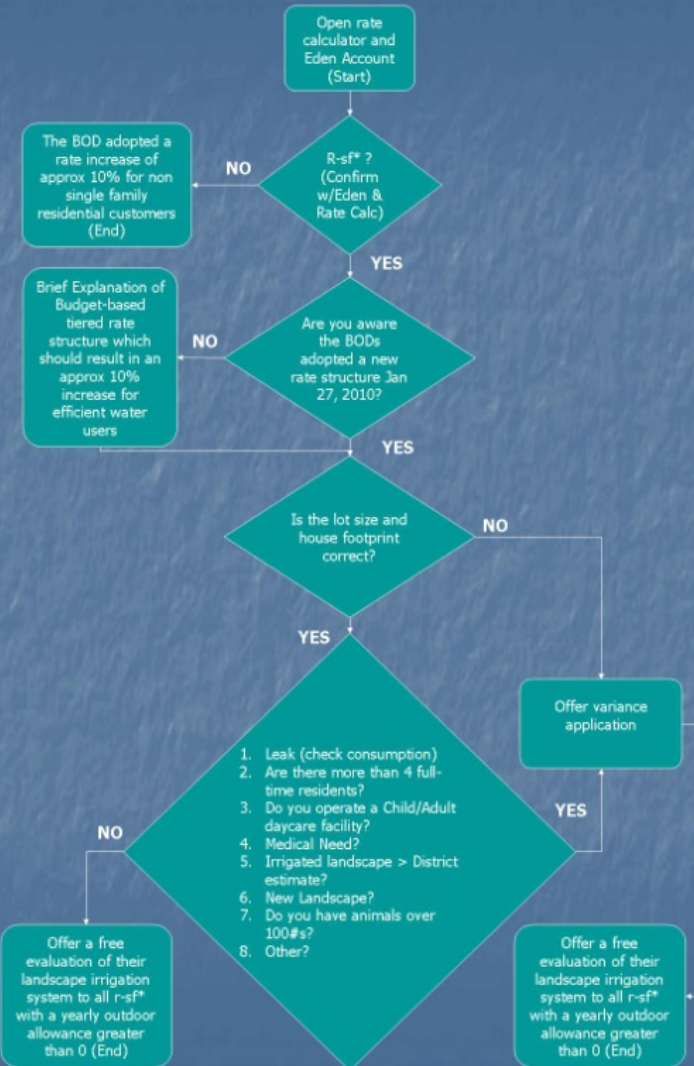
Please return to:
 Monte Vista Water District
 Attn: Customer Service Dept.
 P.O. Box 71
 Montclair, CA 91763
 Fax #: 909-624-4725

Please allow 30 days to process your variance request. Once approved and processed, variances will be applied to **FUTURE BILLINGS** and will NOT be retroactively applied. Please provide contact information if there are questions about your application.



Staff Training

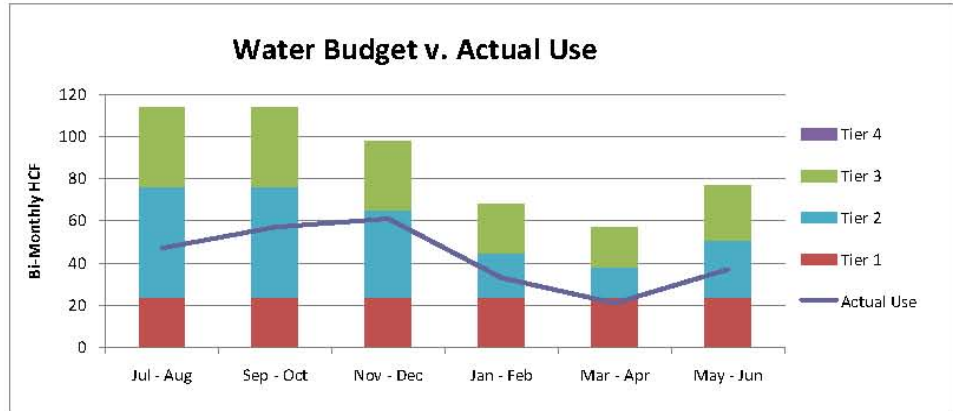
- 💧 ***Start Months Early***
- 💧 **Weekly Staff Meetings**
 - Break Down Bill Formula
 - New Bill Layout
 - Variances
 - Addressing Customers' Questions (Flowchart)
 - FAQs Worksheet
 - Rate Calculator

Why is my bill so high? / I received a letter in the mail?



Monte Vista Water District Rate Calculator

| | | | | |
|--|-------------------|---------------------------------|------------------|-------------------|
| Account | Total SF | House Size | Hardscape | Irrigation |
| 014-114 | 7,210 | 1,459 | 1,150 | 4,601 |
| Address | | | | |
| [Redacted] | | | | |
| owner | | | | |
| [Redacted] | | | | |
| Type | Meter Size | Yearly Outdoor Allowance | | |
| r-sfd | 0.75 | 207 | | |
|   | | | | |



| BILL COMPARISON | | | | | | | | | | | |
|--|----|--------------|------------------|-----------------|------------------|------------------|-----------------|-----------------|-------------------------|-----------|--------------|
| Based on Last years consumption (July '08 - Jun '09) | | | | | | | | | | | |
| <u>February-09</u> | | <u>Total</u> | <u>Jul-Aug</u> | <u>Sep-Oct</u> | <u>Nov-Dec</u> | <u>Jan-Feb</u> | <u>Mar-Apr</u> | <u>May-Jun</u> | <u>Most Recent Bill</u> | | |
| | | | | | | | | | Reading | 32 | |
| Tier 1 | \$ | 1.408 | \$ 198.53 | \$ 33.79 | \$ 33.79 | \$ 33.79 | \$ 33.79 | \$ 29.57 | \$ 33.79 | \$ | 33.79 |
| Tier 2 | \$ | 1.608 | \$ 184.92 | \$ 36.98 | \$ 53.06 | \$ 59.50 | \$ 14.47 | \$ - | \$ 20.90 | \$ | 12.86 |
| Tier 3 | \$ | 2.100 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |
| Tier 4 | \$ | 3.216 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ | - |
| RTS | | | \$ 22.74 | \$ 22.74 | \$ 22.74 | \$ 22.74 | \$ 22.74 | \$ 22.74 | \$ 22.74 | \$ | 22.74 |
| Utility Tax | | | \$ 3.64 | \$ 4.26 | \$ 4.51 | \$ 2.76 | \$ 2.03 | \$ 3.01 | \$ | 2.70 | |
| Total | | | \$ 540.11 | \$ 97.15 | \$ 113.86 | \$ 120.54 | \$ 73.77 | \$ 54.34 | \$ 80.45 | \$ | 72.10 |
| Current | \$ | 1.358 | \$ 478.98 | \$ 85.94 | \$ 100.05 | \$ 105.70 | \$ 66.19 | \$ 49.26 | \$ 71.84 | \$ | 64.78 |
| Change | | | 12.76% | 13.04% | 13.80% | 14.05% | 11.44% | 10.31% | 11.99% | | 11.29% |

| Billing Period ~ Tier Breakdown | | | | | | | | | | | | |
|---|-----------|-----|-----------|-----|-----------|----|-----------|----|-----------|----|-----------|----|
| | Jul - Aug | | Sep - Oct | | Nov - Dec | | Jan - Feb | | Mar - Apr | | May - Jun | |
| | From | To | From | To | From | To | From | To | From | To | From | To |
| Tier 1 | 0 | 24 | 0 | 24 | 0 | 24 | 0 | 24 | 0 | 24 | 0 | 24 |
| Tier 2 | 24 | 76 | 24 | 76 | 24 | 65 | 24 | 45 | 24 | 38 | 24 | 51 |
| Tier 3 | 76 | 114 | 76 | 114 | 65 | 98 | 45 | 68 | 38 | 57 | 51 | 77 |
| Tier 4 | 114 | 114 | 114 | 114 | 98 | 98 | 68 | 68 | 57 | 57 | 77 | 77 |
| Last Years Consumption Data July '08 - June '09 | | | | | | | | | | | | |
| Last Years | 47 | | 57 | | 61 | | 33 | | 21 | | 37 | |
| Tier Distribution | | | | | | | | | | | | |
| Distribution Allowance | 25.0% | | 25.0% | | 20.0% | | 10.0% | | 7.0% | | 13.0% | |
| | 52 | | 52 | | 41 | | 21 | | 14 | | 27 | |

Customer Response

- ◆ Slight Increase in Call Volume
- ◆ Increase in Length of Calls
 - Not Enough to Warrant Additional Staff
- ◆ Offer Assistance
 - Free Irrigation Evaluation
 - Rebates & Incentives
 - Gardening Classes
 - Variances (if eligible)



Administrative Costs

| | |
|-----------------------------------|------------------|
| ● Staff Labor | \$95,000 |
| ● Hardware/ Software Upgrades | \$25,000 |
| ● Custom Programming | \$ 6,000 |
| ● Billing Creation & Distribution | \$ 5,000 |
| ● Customer Communications | <u>\$14,000</u> |
| | \$145,000 |

Lessons Learned

- ◆ Know Your Customer Base
- ◆ Begin Communicating with Software and Other Vendors While Developing the Model
- ◆ Test During All Phases of Implementation
- ◆ Think Early about Your Reporting Needs



Questions?

- ◆ **Stephanie Reimer**
Accountant / Customer
Service Supervisor
sreimer@mvwd.org

- ◆ **Justin Scott-Coe**
Public Affairs Director
jscottcoe@mvwd.org

(909) 624-0035
www.mvwd.org

