

# “CONNECTING WITH YOUR CUSTOMER”

**Jim Ferrin, CGCS, CMCA, AMS**  
**Golf Course Superintendent**  
**Director of Landscapes**  
**Sun City Roseville Community**  
**Association**

## **Associations:**

- California Alliance for Golf, Secretary
- California GCSA, Government Relations Chairman
- Golf Course Superintendents of America (GCSAA)
- Sierra Nevada GCSA (past president), California GCSA, GCSA of Northern California
- Sacramento Water Task Force
- GCSAA Ambassador



# “Connecting With Your Customer”

Sun City Roseville next year will  
Celebrate its 20yr. Anniversary

- There are 3 customer bases
- The FIRST is our community resident:
  - **5003 residents**
  - **3110 homes**
  - **Average age 74**
- **87% are retired** and living well
- They are former professionals and invested wisely
- **Over 80% vote** in every local, state and federal election
- 95% of our residents when polled rated life in SCRCA as good or excellent
- If in good health they are money wise
- **They volunteer**



## “Connecting With Your Customer”

- 1200 single people occupy homes
- They truly are active residents
- With a fixed income they are very concerned with rising costs not only with monthly assessments but also with rising utility costs
- We have seen solar go in as well as drought plantings and now artificial turf



- The **SECOND CUSTOMER** is the SCRCA Association
  - Managed and operated by over 120 paid employees headed by an Executive Director
  - Governed by an elected BOD that oversees SCRCA through governing documents and state law
  - The BOD is assisted by numerous committees and sub committees along with staff managers which helps the BOD in carrying out their fiduciary duties
  - The most powerful committees are Finance and Properties
  - SCRCA is one of the most successful HOA's in the U.S.
- \$33 million in fixed assets, \$7.7 in its Reserve Fund- Beat Budget the Last 10yrs

**“Maintain and improve the community for residents while attracting new residents and meeting their needs.”**

**“Connecting With Your Customer”**



# “Connecting With Your Customer”

## SCRCA CUSTOMER CONCERNS:

Within our community:

- Fuel up **89%** in the last 10 yrs.
- Water costs up **107%** last 10 yrs.
- Electricity up **74%** over past 10 yrs.

## Getting Assistance

- The interaction with Roseville Electric and Kris Blair was critical to us saving energy going forward
- The Energy Sub Committee works closely with Kris monthly
- LP Consulting- Energy Gap Analysis Audit



# “Connecting With Your Customer”

## SCRCA UTILITIES

- **29- ELECTRICAL METERS**
- **28- WATER METERS**

### •2013-2014

Electricity- \$329,281

Water- \$245,507

### •2014-2015

Electricity- \$334,767

Water- \$241,762

### 2015-2016 Budgeted

Electricity- \$342,550

Water- \$241,256



# “Connecting With Your Customer”

One of your **Third Customers Bases**

## Kent Walton

- Director of Facility Maintenance and Operations
- Sits on the Property Committee
- Part of the Energy Sub Committee along with Kris Blair of Roseville Electric

## Goal of SCRCA Energy Committee:

- To maximize energy savings for the least amount of money.
- Using high efficacy lighting equals high efficiency



# “Connecting With Your Customer”

Kris Blair and Roseville Electric

## Rebates

- 43- HVAC units replaced
- \$58k in rebates to SCRCA

**SUCCESS!!!**



## “Connecting With Your Customer”

Rebates on HVAC enabled  
SCRCA to:

- Upgrade parking lot lights to  
LED lighting:

**AT NO COST \$\$\$\$**



# “Connecting With Your Customer”

## Upgrading the Lodge

### Energy Efficiency

- 1090 lights replaced with certified LED's at a cost of  
  
**\$11,709**
- Which is net in light of a possible \$4,000 in rebates



# “Connecting With Your Customer”

## GOLF AND LANDSCAPING

- Two of the most valuable amenities at SCRCA
- Two of the largest energy users at SCRCA
- The electrical rebate program made us look more closely at ways to save energy
- Maintaining golf courses and landscapes have many variables
- There have been many technological advances to make us superintendents better at what we do- energy wise: computer controlled irrigation systems, and VFD pumping systems



## Connecting With Your Customer”

### The Third Customer

Manages two major cost centers in  
SCRCA

Cost Departments:

- 18 hole golf course
- 9 hole golf course
- Landscaping of SCRCA
- Common Landscapes

ALSO...Maintenance and “Green” Care  
of SCRCA Open Spaces

**Energy Costs in Golf and Landscape  
amount to over 50% of the total SCRCA  
energy costs annually**

#### 2013-14

Electricity-\$93,668

Water-\$221,380

#### 2014-15

Electricity- \$89,259

Water- \$197,358

#### 2015-16 Budgeted

Electricity- \$96,500

Water-\$210,000



# “Connecting With Your Customer”

## Energy and Water Savings Golf Course and Landscape

- Pump Efficiency
- Central Controller Efficiency
- Water Use Efficiency
- kW Demand Efficiency

### What We Have Learned

- Bigger and more horsepower is not necessarily more efficient energy wise
- kW demand stays the same throughout the year which isn't good- highest \$\$\$
- Lengthening pumping run times with less pumps running elongates the water window but saves on kW



## “Connecting With Your Customer”

### Kilowatt hours per Acre Feet

- How much energy is consumed to pump a quantity of water
- 27 holes of golf is roughly 180 acres of irrigated turf
- At an average use of 2.5 acre feet of water needed for 1 acre of golf course turf there is an annual use of **450 AcFt** per year
- **788 kWh/AcFt annual usage**
- **(354,680 kWh divided by 450 AcFt= 788 kWh/AcFt)**



### Kilowatt Hours per Acre Foot \*

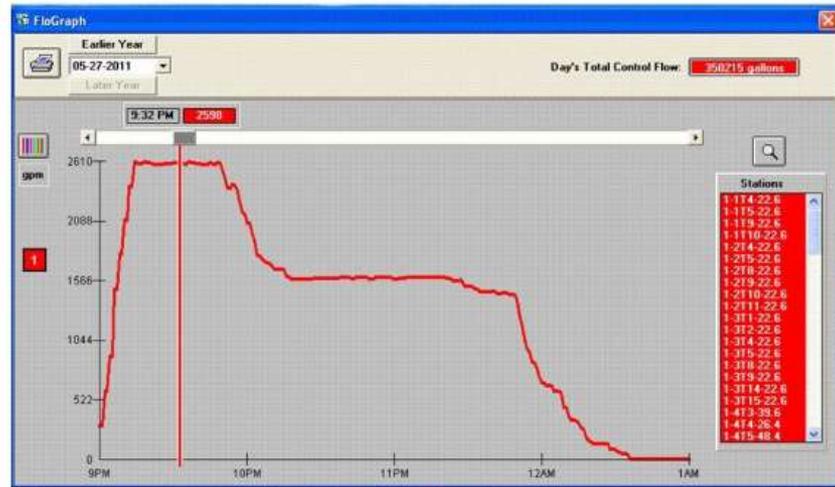


\*Source: The Golf Resource Group

# “Connecting With Your Customer”

## Flow Graph #1

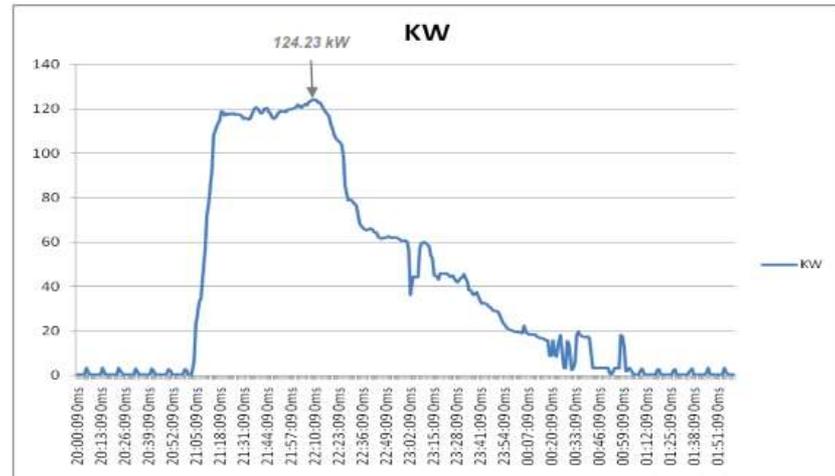
- The red line notes gallons per minute (GPM) of actual use as noted by irrigation computer- Maximum GPM is 2,598 GPM



**Flow Graph #1** (in red). Red line notes the overnight flows (in GPM) as recorded by the central computer. A total of 350,215 gallons are reported in the upper right hand corner of the chart. Maximum flows in GPM is noted at 2,598 GPM in the upper left hand corner of the chart.

## Power Graph #1

- The blue line notes the overnight Kilo Watt (kW) spot measurements as recorded
- The maximum kW reading was 124.23 kW



**Power Graph #1** (in blue). Blue line notes the overnight Kilo Watt (kW) spot measurements, as recorded by the Real RMS Fluke meter. The maximum kW reading for the night was 124.23 kW.

# “Connecting With Your Customer”

## THE AH-HA MOMENT

- I need to save power in order to pay about the same per year in energy costs (**changed my thinking**)
- This isn't about saving money. This is about minimizing our cost increases!
- You, as the Utility, should be communicating this to your customers

Table 3.1: Summary of Historical Energy Use and Costs

Use	Charges	kWh/kW	Increase
Total Use 2008	\$44,983.19	359360 kwh	
Total Use 2009	\$47,339.38	342240 kwh	5.24%
Total Use 2010	\$51,162.89	341040 kwh	13.74%
Peak Demand 2008	\$11,396.41	375.0 kw	
Peak Demand 2009	\$13,215.38	347.2 kw	15.96%
Peak Demand 2010	\$13,656.45	370.4 kw	19.83%

# “Connecting With Your Customer”

Notes on Solar- We thought About It

## Our Issues:

- **\$2.1 million dollar project**
- **Needs vote of the Residents**
- **Getting a reasonable ROI on the solar project – est. 12-16 yrs.-**
- **Financing will be a key element with a sharing of tax credits and Utility rebates assuming these are available in the future**
- **Future installation would depend on a aesthetically pleasing placement of the solar panels and equipment**
- **Look at it every 1-3 years**
- **Can save energy just with lighting upgrades**
- **Doesn't assist our Utility**



# **“Connecting With Your Customer”**

**QUESTIONS ?**

**COMMENTS ?**

**DISCUSSION ?**

**Thank You!!**

