



2011 REAP Regional Water Conference

Long Range Water Planning for Economic
Development
May 26, 2011

Agenda

- Background
- Water consumption and cost history
- Water Conservation Efforts
- Water's critical impact on healthcare
- Discussion

Background

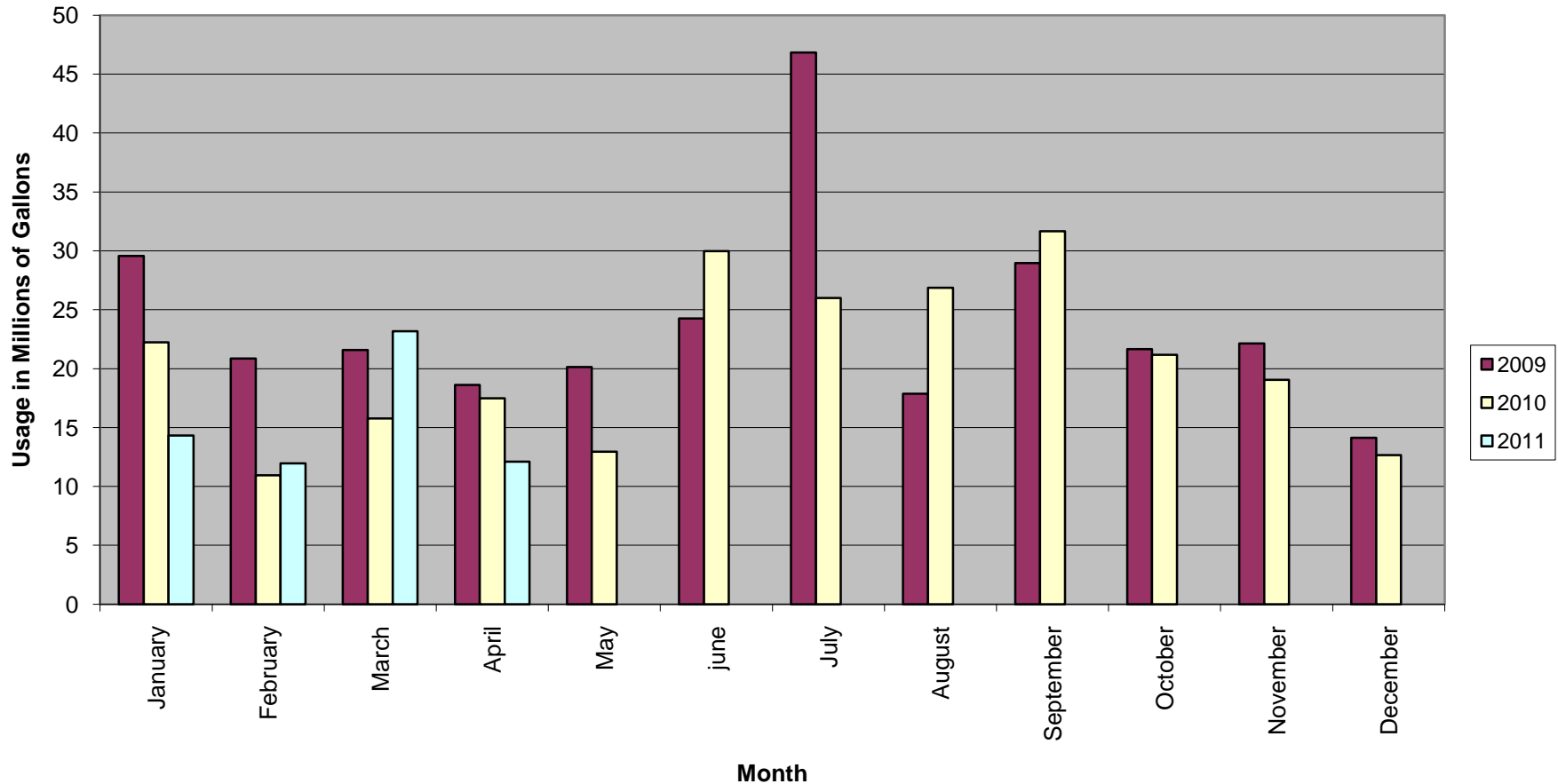
- Via Christi Health
 - ◆ Largest provider of health care services in Kansas, serving Kansas and northeast Oklahoma
 - ◆ 11 fully or partially owned hospitals
 - ◆ 16 owned or managed senior villages
 - ◆ Ambulatory surgery and imaging centers
 - ◆ 10,000 employees
 - ◆ 1,100 physicians have medical privileges at Via Christi Hospitals

Background

- Via Christi Hospitals Wichita, Inc.
 - ◆ 5 Hospitals
 - Via Christi Hospital – St. Francis
 - Via Christi Hospital – E. Harry
 - Via Christi Behavioral Health Center
 - Via Christi Rehabilitation Hospital
 - Via Christi Hospital – St. Teresa
 - ◆ Approximately 3.0 million square feet
 - ◆ 800+ inpatient bed capacity
 - ◆ 5000 Employees
 - ◆ Level I Trauma Center

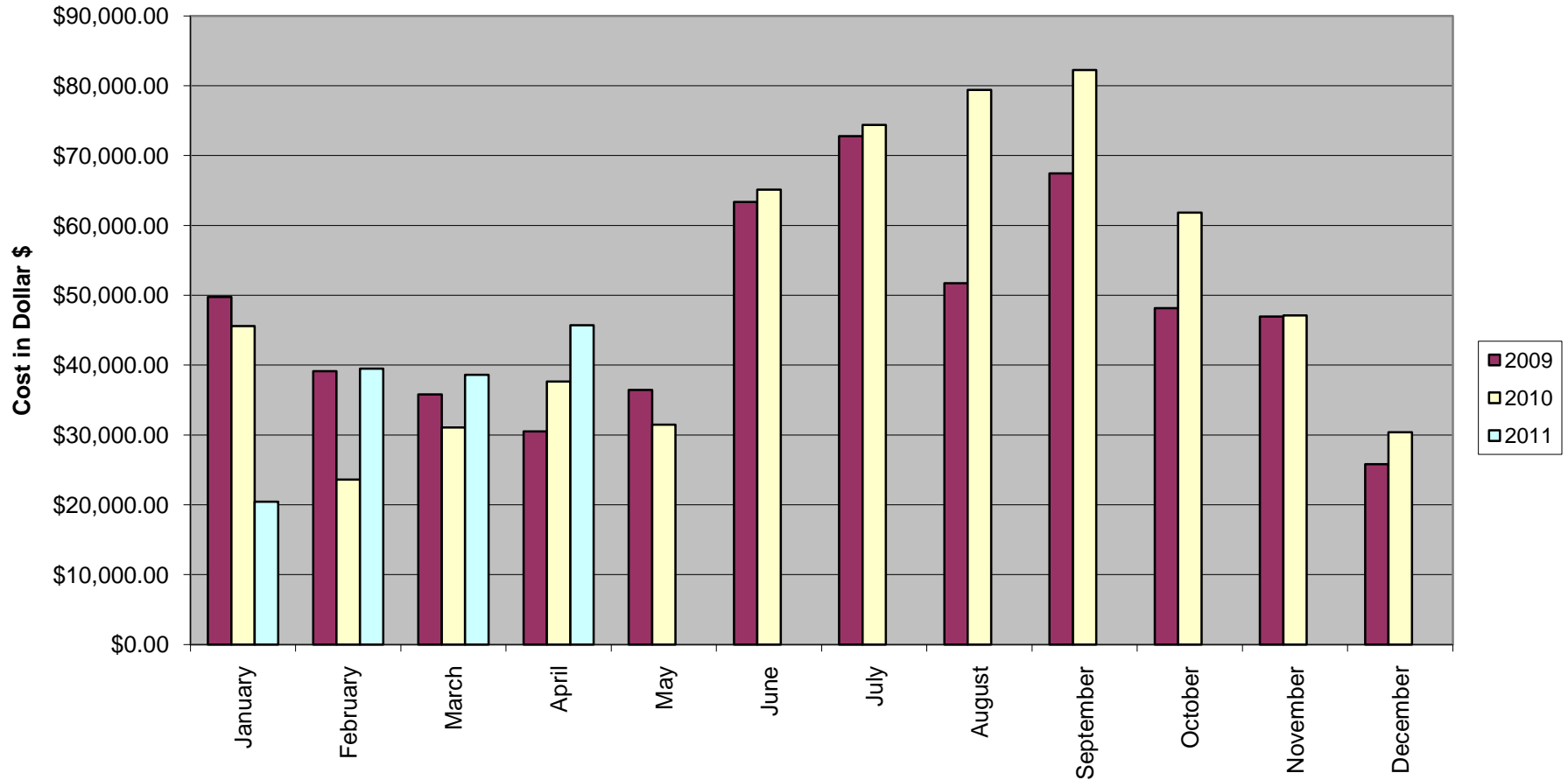
Consumption Statistics

Water Consumption in Millions of Gallons VCH-W



Cost Statistics

Water Cost VCH-W



Water Conservation Initiative

Annual Cost vs. Consumption

	2009	2010	2011
Million Gallons Total	286.57	246.74	257.48
Cost Total	\$ 567,863	\$ 609,935	\$ 616,295

2011 Estimated

Water Conservation Initiative

Pollution Prevention Internship

Via Christi Health partners with Kansas State University each year to employ an engineering student as an intern to conduct analysis and institute various pollution prevention initiatives.

2010 Intern Jay Reimer's project included a water conservation initiative.

Water Conservation Initiative

Aerator Replacement Overview

Replaced aerators allowed
2.0 or 2.2 gpm

New, low-flow aerators only
allow .5 gpm

Focused mainly on non-
patient areas

E. Harry & St. Francis
campuses



Mark's Plumbing Parts Part
#07013



Mark's Plumbing Parts Part
#29006

Water Conservation Initiative

Areas Affected

Public Areas

- Restrooms
- Medication Rooms
- Staff Lounges
- Clean & Dirty Utility

Patient Areas

- East and West pods in the O.R.
- Patient bathrooms in Ambulatory Care

Water Conservation Initiative

Aerator Installation



Old 2.2 gpm aerator



New .5 gpm aerator

Water Conservation Initiative

Results

Annual Water Savings

- ~4.4 million gallons for VCH - SF
- ~1.6 million gallons for VCH - H

Annual Cost Savings

- \$28,500 for VCH - SF
- \$10,600 for VCH - H

Water Usage in Healthcare

Critical Water Needs

- Hydration
- Processes
 - Hand washing
 - HVAC
 - Sanitation
 - Food preparation
 - Fire protection

Water Supply Emergency Mgmt

Most difficult to plan for:

- Sustain operations – 96 hour plan
 - Hydration – bottled water (11 pallets stored ~ 17,000 bottles)
 - Hand washing – hand gels
 - HVAC – no options
 - Sanitation – grey water
 - Food preparation – packaged food
 - Fire protection – no options

Discussion

Questions?