Performance Measurement by Water Utilities
Santa Clara Valley Water District Case Study

Presenter:
Stan Williams, GM SCVWD
AMWA Annual Conference

AGENDA
1. Overview of the Santa Clara Valley Water District (SCVWD).
2. Performance measurement approach
3. Where we are at.
4. Where are we going.
5. Focus on Our Unique Topic:
   ➢ To demonstrate, through various examples, how we’ve used performance measurement to support our continual improvement management framework.
Primary Services

- Water Supply
- Ecosystem/Watershed Health
- Flood Protection
- Open Space/Trails/Recreation
SCVWD Profile

• Primary Water Resources Agency for the Santa Clara County (County), serving Silicon Valley:
  ➢ Service area of 15 cities, nearly 1.8 million residents, and more than 200,000 commuters.
  ➢ Imported water supply wholesaler
  ➢ Water treatment
  ➢ Groundwater basins management
  ➢ Water use efficiency
  ➢ Partnerships for recycled water
  ➢ Flood protection
  ➢ Watershed and habitat stewardship
  ➢ Total budget >$400 million, over 800 employees

SCVWD’s Mission and Vision

• “The mission of the District is a healthy, safe and enhanced quality of living in Santa Clara County through watershed stewardship and the comprehensive management of water resources in a practical, cost-effective and environmentally-sensitive manner.”
SCVWD’s Continual Improvement Timeline

1997 Strategic Planning and performance measurement reporting system
1999 QualServe Peer Review and Board Policy Governance Model
2000 Water Enterprise Performance Audit
2002 AMWA Gold Award
2003 Asset Management Program
   ISO Gap Analysis and partial registration
2004 Baldrige Criteria and CAPE Prospector feedback
2005 District Scorecard and CAPE Eureka Bronze
2006 AMWA Platinum Award and CAPE Eureka Silver
2007 Comprehensive Performance Audit and ISO 9001 and 14001 QEMS

Policy Governance Model
Adopted by SCVWD Board in 1999

- Board adopted policies include Ends Policies and Executive Limitations
- CEO’s interpretation of those policies must be:
  - Articulated: **Ends**: What is the plan, the strategies, goals, tactics? **Executive Limitations**: What is the system in place that minimizes the risk of the unacceptable situations occurring?
  - Justified as to why the interpretation is reasonable
  - Data selection to support the interpretation
    - Measures of success, measures to show compliance
    - Actual data to show achievement or compliance

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Malcolm Baldrige Based Management Model

In 2004 management team chose Baldrige model as a way of telling how good we were at:

- Delivering ever improving value to customers and stakeholders
  - Improving our effectiveness and capacity
- Creating organizational and personal learning
Our 2004 Scorecard Architecture

1. Collaboratively developed in 2004 through a series of “Conceptual Design” Workshops:
   - Managers/Process Owners.
   - Office of Performance Excellence.
   - Baldrige Consultant.
2. Structured around the 6 Baldrige Business Result Items to ensure a “Balanced Scorecard” approach.
3. Vision Integration:
   - “Clean” & “Green” = Products and Services Outcomes.
   - “Lean” = Organizational Effectiveness Outcomes.

DISTRICT SCORECARD 2004

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td><strong>Products &amp; Services</strong></td>
<td><strong>Customers</strong></td>
<td><strong>Financial &amp; Market</strong></td>
<td><strong>Human Resources</strong></td>
<td><strong>Organizational Effectiveness</strong></td>
<td><strong>Leadership &amp; Social Responsibility</strong></td>
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<tr>
<td>1.1 (30%) Clean Index</td>
<td>2.1 (40%) Consumer Satisfaction</td>
<td>3.1 (30%) Unit Cost</td>
<td>4.1 (40%) Workforce Strength</td>
<td>5.1 (30%) Lean Index</td>
<td>6.1 (60%) Regulatory Index</td>
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<tr>
<td>1.2 (30%) Green Index</td>
<td>2.2 (30%) Brand Image</td>
<td>3.2 (30%) Revenue &amp; Expenditures</td>
<td>4.2 (30%) Employee Well Being &amp; Satisfaction</td>
<td>5.2 (30%) Project Management Index</td>
<td>6.2 (20%) Ethics Index</td>
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<td>1.3 (30%) Reliability Index</td>
<td>2.3 (15%) Board Satisfaction</td>
<td>3.3 (20%) Net Operating Surplus</td>
<td>4.3 (15%) Safety Index</td>
<td>5.3 (20%) Risk Index</td>
<td>6.3 (20%) Social Responsibility Index</td>
</tr>
<tr>
<td>1.4 (10%) Open Space &amp; Trails (Public Access)</td>
<td>2.4 (15%) Partner Satisfaction</td>
<td>3.4 (20%) Investment Performance</td>
<td>4.4 (15%) Values / Culture Index</td>
<td>5.4 (20%) Supplier Performance Index</td>
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- Four Gauges Maximum per Scorecard Category

Yellow Index = Build in FY 2004
Blue Index = Build in FY 2006

V5 Revised 04-10-05
SCVWD’s 2006 CAPE Feedback Report Key Theme Strength:

“...Beyond using the Baldrige criteria as a driver for improvement, SCVWD has effectively used the structure of the criteria to drive integration. As examples, the Scorecard used to report key data results are structured around the Baldrige criteria, unit business plans are structured around the criteria and the criteria are used in the financial audit process”.

2006 Ends Report
Our 2007 Scorecard Architecture

- Refined through Learning from SCVWD’s 2006 CAPE Assessment Process:
  1. Now Aligns to our Key Product/Services.
  2. Provides Better Customer Alignment.

FY2007 District Scorecard
Performance Management Reporting System

Vision metrics are highlighted: Clean (Yellow); Green (Green); Lean (Blue)
FY2007 Second Quarter Performance

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<td>1.1 Water</td>
<td>2.1 Water Users</td>
<td>3.1 Unit Cost</td>
<td>4.1 Workforce Strength</td>
<td>5.1 Procurement Index</td>
<td>6.1 Leadership/Vision Index</td>
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<tr>
<td>1.2 Flood Protection</td>
<td>2.2 Flood Protection Benefit</td>
<td>3.2 Revenue Expenditures</td>
<td>4.2 Employee Well-Being &amp; Satisfaction</td>
<td>5.2 Project Mgmt Index</td>
<td>6.2 Regulatory Index</td>
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<tr>
<td>1.3 Environmental Stewardship</td>
<td>2.3 Environmental Impact</td>
<td>3.2 Financial Measures</td>
<td>4.3 Safety Index</td>
<td>5.3 Risk Index</td>
<td>6.3 Ethics Index</td>
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<td>1.4 Open Space &amp; Trails</td>
<td>2.4 General Public (Board/Brand)</td>
<td>3.4 Investment Performance</td>
<td>4.4 Value/Culture</td>
<td>5.4 Partners &amp; Suppliers</td>
<td>6.4 Social Responsibility Index</td>
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2007 District Comprehensive Performance Audit

Consolidate measurement of District performance relative to Ends Policies

Clarify and standardize CEO interpretations of Board policies
Supported by staff implementation of ISO, the world’s largest water and sanitation performance database becomes fully operational at the end of 2006. Performance-oriented, measurable outcomes:

- Systematic
  - Repeatable
- Aligned
  - Board Policies/Expectations and Budget
  - Supported by staff implementation of ISO
- Performance Oriented
  - Measurable Outcomes

### Total Organization Performance
**Plan Development**

- Systematic
  - Repeatable
- Aligned
  - Board Policies/Expectations and Budget
  - Supported by staff implementation of ISO
- Performance Oriented
  - Measurable Outcomes
Converging Trends

Maintaining public support requires response to these trends:

- Growing demands for accountability, transparency, and responsibility for results
- Increased availability and use of performance measurement as a management and reporting tool

District’s Management System

Santa Clara Valley Water District Management System

Key Customer Needs & Requirements
- Reliable water supply and flood protection
- Environmental protection and enhancement
- Reasonable cost
- Minimal nuisance from District work activities

District Mission, Vision, Values, and Board’s End Policies
Vision - “Getting cleaner, greener and lesser”

Measures of Success
Categories 4 - Measurement, Analysis, & Review. Mgmt. & S. - Customer & Market Knowledge

Develop Goals for Key Success Factors
Category 2 - Strategic Planning

Build Relationships with Customers
Category 3 - Customer Relationships and Satisfaction

Create and Manage Human Resources to Achieve High Performance
Category 3 - Human Resources

Define, Measure, Control, & Continually Improve Key Work Processes
Category 6 - Process Management

Business Results - Levels and Trends in Measures of Product/Service Performance, Customer Satisfaction, Financial/Market Results, HR Results, Organizational Effectiveness, and Leadership/Social Responsibility
Category 7 - Business Results

Feedback/Evaluation Loop
Strategic Planning Process

Chart 2.1.1 The District’s Strategic Planning Process

May-June

Situational Analysis
Annual Strategies, Opportunity and Weakness Assessment
Input:
• CAPE Assessments and Feedback, ISO Audits, External Audits, Scorecard Performance, Exit Policies, Executive Liaisons, Board Feedback, Industry Trends

Deployment and Monitoring
• Management Review
• Scorecard Reviews (at least quarterly)
• Agenda Review and Read Teams Meetings (weekly)
• Yellow Meetings (as needed)
• Leadership Team Meetings (Qtrly)
• Management and Leadership Team Meetings (Semi-Annually)
• Staff/Unit Meetings (weekly, monthly, qtrly)

August-September

Strategic Planning
• Respond to strategic challenges with goals and strategies responsive to strategic challenges

November-April

Resource Allocation
• Action Plans
• Assumptions and Responsibility
• Resources
• Budget
• Rates (Water, Wastewater Assessment and Special Parcel Tax)

Strategies are reviewed and updated annually to keep pace with changing environment

Future Development

Eliminate duplication

Simplification is goal

Transparency

Focus Groups
Thank you.

Questions?