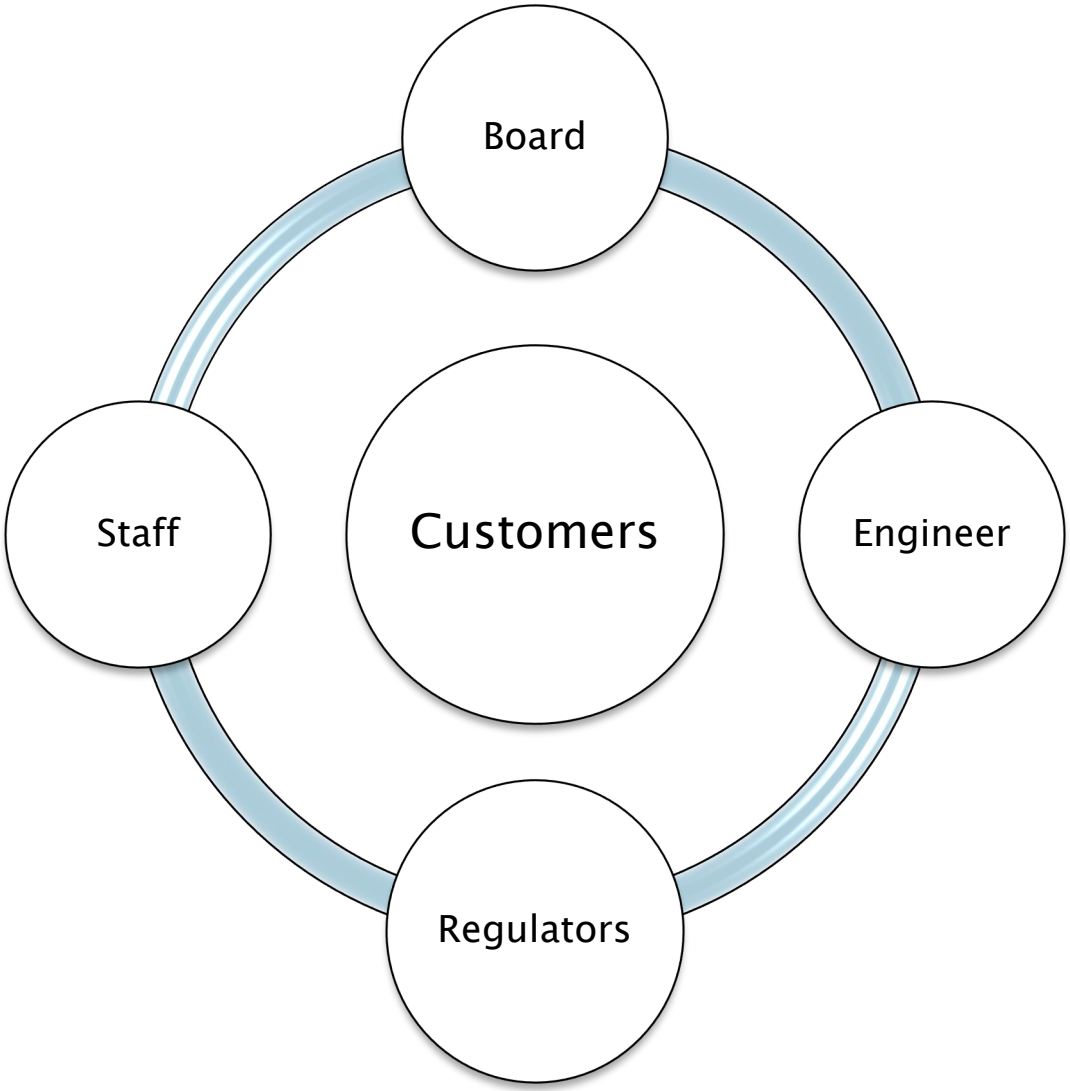
Water Board Training

NEVADA
RURAL WATER ASSOCIATION

Roles and Responsibilities



Common Challenges for Utilities

Aging infrastructure

Rate issues

Prioritize demands for utility expenditures

Long-term rate adequacy strategy

Customer satisfaction and confidence with services and rates

Common Challenges for Utilities

Operational issues

Workforce complexities

Knowledgeable and engaged board members

Key Management Areas →

1. Product Quality
2. Customer Satisfaction
3. Infrastructure Stability
4. Community Sustainability & Economic Development
5. Stakeholder Understanding and Support

Key Management Areas →

6. Employee Leadership and Development
7. Operational Optimization – Energy and Water Efficiency
8. Operational Resiliency
9. Water Resource Adequacy
10. Financial Viability

Customer Satisfaction

- Know what your customers expect
- Help your customers understand the value of water.
- Develop a way to gather feedback

Operational Resiliency

- Importance of O&M and link to infrastructure stability and asset life
- Identify weaknesses in the system and operations
- Financial implication of not providing adequate maintenance

How can we do this better?

- Core operation and maintenance activities
- Optimize operations
- As a thought exercise, what if?

Infrastructure Stability

- **Costs** and **condition** for each system component
- Understand operational performance
- Plan for repair and replacement over the long-term
- Minimize disruptions

Financial Viability

Ensure revenues adequate to recover costs, fund timely maintenance, repair, and replacement of assets, and provide for reserves.

Fiscal Sustainability Plan

- Asset Inventory
- Evaluation of condition
- Projected Lifespan
- Criticality

Fiscal Sustainability Plan

- Cost to maintain, repair, replace asset
- Rates
- Financing

Fiscal Sustainability Plan

COMPONENT	Unit Cost	# of Units	Total Cost	Year Installed	Expected Asset Life When New	Current Condition As A %	O&M Done As A %	Year Service Life Adjusted	Est. Equip Life Years From NOW	Year Adjustment If Past E.L.	Annual Depreciation Straight Line
Fencing											
Water Tank Fencing	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Water Tank Property Fencing	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Barricade Fencing	$0		$0			0%	0%	0	(2021)	(2021)	$0
Drinking Water Utilities											-
Source Related											-
Pump Controls	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Pumps	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Pump Motors	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
VFD	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
SCADA	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Air Vac	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Bubbler Water Level Sensors	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Air Compressors	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Pressure Transducers	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Telemetry & Level Sensors	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Generator	$0	0	$0	0	0	0%	0%	0	(2021)	(2021)	$0
Intake	-	-	-	-	-	-	-	-			-
Bar Screens	$0	0	$0	0		0%	0%	0	(2021)	(2021)	$0
Well Screens	$0	0	$0	0		0%	0%	0	(2021)	(2021)	$0
	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Treatment Related	-										-
Chemical Feed Pumps	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Altitude Valves	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Valve Actuators	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Field & Process Instrumentation Equipment	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Air Compressors & Control Units	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Pumps	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Pump Motors	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Pump Controls	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Water Level Sensors	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Pressure Transducers	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Sludge Collection & Dewatering	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
UV Lamps	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Membranes	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Back-up Power Generators	$0	0	$0			0%	0%	0	(2021)	(2021)	$0
Chemical Leak Detection Equipment	$0	0	$0			0%	0%	0	(2021)	(2021)	$0

Water Rates

- Review annually
- Sufficient to cover all operating expenses
- “Reasonable”
- Billing & overdue accounts

Water Meters

- Rate implications
- Customer acceptance
- Financing meter installation
- Added O&M cost for reading, billing, customer service, replacement

Ethics – *Merriam-Webster*

The discipline dealing with what is good and bad and with moral duty and obligation.

A set of moral principles; a theory or system of moral values.

The principles of conduct governing an individual or a group, as in *professional ethics.*

A guiding philosophy; a consciousness of moral importance.

Code of Conduct

The WEF asks participants to adhere to a code of conduct/ethics during meetings.

The AWWA asks its members to adhere to a code of practice.

The Certification Commission for Environmental Professionals has a Code of Conduct for Professional Operators certified through their program.

What elements do they have in common ?

Codes: taking the high road to protect the environment and protect public health.

HONESTY

Integrity

Comply with laws and regulations; go beyond the minimum

Provide excellent service

Act in the public interest; innovation, cost effectiveness, sustainability

Stewardship

Avoid conflicts of interest

Safety consciousness and practice

Fair dealing; avoidance of discrimination and unfair business practices

The JOB is protecting public health and the environment!

Ethics represent the standards for right and wrong that govern how professionals act. The consideration of questions of moral right versus wrong in the context of *business practice.*

Do right, you are a professional, so be a leader!

From a WEF course – *Sustainable Management: Leadership Ethics*

Leadership matters

Are Ethics applied in decision making?

Fallout

Legal implications

Company image easily damaged

vs. Good Ethical decision-making

Customers' positive response to good ethics

Organization Culture

Everyone influences everyone.

Lead by example: Adhere to ETHICAL NORMS.

Public perception is a fragile reality!

REAL INSTANCES

Permanent Revocation

March - Operator falsifies Contact Hour Training Certificates

Operator Appealed Decision to Revoke Certification

June - NDEP Administrator Permanently Revoked Opportunity to be Certified in Nevada

May 10, 2011… former water officials arrested in alleged $1.3 million bribery Scheme $$$

2016… admitted to "fraudulent purchases that resulted in personal gain."

20?? – Found Cheating on EXAM !

What do you think will happen?

Case Study: How to land in jail

Opportunity to go wrong…

A standard practice in Accounting is having internal controls in place:

Separation of Functions

Avoids giving people the opportunity to go wrong.

Working in the water & wastewater industry, there are thousands of small and large decisions made every day.

An attitude of always doing the right thing is one of your tools!

Thank You For Attending!