Formation of the Oklahoma Strategic Alliance

Ratified by Governor Stitt on September 3, 2019.

Members:
• Office of the Secretary of Energy and Environment
• Department of Environmental Quality
• Water Resources Board
• Oklahoma Rural Water Association

Committed to work together and combine resources to help Oklahoma’s rural and small community water systems update infrastructure, improve management and operations, and achieve sustainability.
Activities

Water Loss Control

Rate Analysis

Long Range Sustainability

OKLAHOMA STRATEGIC ALLIANCE 2020 RURAL WATER IMPACT
Water Loss Control - Auditing

...moving from “unaccounted for” water to an understanding of real loss, apparent loss, and unbilled usage.

Real Loss:

Apparent Losses:

Unbilled usage (metered or unmetered):

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Audits Completed: 175

Total Water Usage and Loss Types

- Billed Authorized Consumption 74.3%
- Unbilled Authorized Consumption 3.7%
- Real Loss: 19.4%
- Customer Metering Inaccuracies: 2.1%
- Data Handling Errors: 0.2%
- Theft: 0.3%

Total Apparent Loss: 900.9 MG/yr @ $4.9 Million/yr

Total Real Loss: 6.9 BG/yr @ $8.4 Million/yr (production cost)
Water Loss Control – Leak Detection / Meter Analysis

• Typically multi-week (2-4 weeks) event.

• Leak Detection
  • ORWA finds leaks, and trains staff how to find them.

• Meter Analysis
  • ORWA tests all production meters, and a percentage of customer meters

AWWA Meter Testing: 6 meter types

Leak Detection at 28 systems
  # Leaks Detected: 152
  810 MG/yr real loss identified

Meter Analysis at 11 systems
  26.4% of customer meters inaccurate
  50% of production meters inaccurate

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Water Loss Control – Results

Real Loss Repaired:
   Over 490.9 MG/yr saved.
   Valued at over $1.2 Million/yr at
   production cost.

After participating, PWS are becoming
more accurate with data recording and
management.

Total PWS operations costs are
increasing.

Apparent loss and unbilled usage is
decreasing.
Rate Analysis

A fully funded water system: enough revenue for operations, maintenance, capital improvement, contingency fund.

9 rate studies completed and adopted:

• 0.33 average increase in operating ratio.

• $2.06 Million in increased revenue for systems.
Long Range Sustainability

One Water System, Many Environments

- 3 Operations and Maintenance Plans, at a savings of $26,550
- 10 Emergency Response Plans, at a savings of $36,000
- 3 Personnel Policies, at a savings of $14,000
- 7 Financial Management Policies, at a savings of $61,950
- 1 Board Management Policy, at a savings of $8,850
- 9 Asset Management Plans, at a savings of $70,200
- 1 System Map, at a savings of $30,000
- 5 Standard Operating Procedures, at a savings of $44,250
- 6 Source Water Protection Plans, at a savings of $78,000
- 7 Safety Plans, at a savings of $6,300
- 4 Sanitary Sewer Surveys, at a savings of $136,000
- 7 Hydraulic Analyses, at a savings of $70,000

OKLAHOMA STRATEGIC ALLIANCE 2020 RURAL WATER IMPACT
Apprenticeship Program

- Approved by U.S. DOL, Office of Apprenticeship
- Developed for
  - Incumbent employees and
  - Future Water and/or Wastewater Systems Operation Specialists
- Will provide consistent, base-level of knowledge & training within the industry
- Pre-Apprenticeship Program designed for 9-12th grade students
  - Introduce students to the industry
  - Job-shadowing opportunities
  - STEM fairs / Career Tech Job fairs, etc.
Apprenticeship Program

• Water Systems Operations Specialist & Wastewater Systems Operations Specialist
  • Each program consists of the minimum requirements below:
    • 2 year term
    • Approx. 4000 hrs. On-the-Job Learning
    • Approx. 288 hrs. formal classroom training
  • 18 yrs. old to enter program
  • Hourly wage rate at completion $17.00/hr
Return on Investment

In FY 2020, the Strategic Alliance has generated $6.04 in direct economic benefit for every dollar invested.
Future Plans

Continuing work with water loss control and rate analysis.

Adding two new areas of focus: asset management and source water protection.

Long range sustainability expanding to focus on disadvantaged communities.

NEW WATER RATES

- $16 per 2,000 gal. base rate
- $5 per 1,000 gal. for the next 3,000 gal.
- $7 per 1,000 gal. for the next 4,000 gal.
- $9 per 1,000 gal. for over 5,000 gal.

Effective Next Billing Cycle

OKLAHOMA STRATEGIC ALLIANCE 2020 RURAL WATER IMPACT
When it’s all said and done, the majority of improvements made at a water system **have always been, and will always be, do-it-yourself.**

*Change starts and ends with the water system acting on our suggestions.*

For more information, please contact:

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