



Preliminary Audit Results

City of Leon Valley

3/18/2025

About Performance Services



- ✓ Established in 1998
- ✓ **Guaranteed** Energy Savings Contracts and Design-Build Public Sector Projects
- ✓ Vendor Neutral
- ✓ 700+ projects (\$2.5B+) completed
- ✓ 140+ Energy Star® certified buildings
- ✓ **56% Customers have done repeat business**
- ✓ 305+ Employees – Professional Engineers and Construction Professionals

Water Balance and Savings/Add'l Revenue

• Total Produced	336,880,000	100.0%
• Total Billed	288,565,000	85.7%
• Recoverable + Unrecoverable Losses	48,315,000	14.3%
• Estimated Recoverable (5-7%)	23,582,000	7.0%
• Estimated Unrecoverable (6-9%)	24,733,000	7.3%
• Water Meter Increased Revenue	13,814,000	4.1%
• Unrecoverable – Billed Unmetered, Unbilled Metered, Unauthorized Consumption, Reported Breaks and Leaks		
• Recoverable - Meter Inaccuracies, Unreported Loss, Systematic Data Handling Discrepancy, Unbilled Unmetered		
• Based on Averaging Water Audits 2020-2023		

Water Meter AMI Project Savings Detail

Calculated Water Recovery (AWWA Flows)

Water Meter Size	Baseline Water to Meters (gal/yr)*	Measured Meter Accuracy	Baseline Billed Water per Mtr Size (gal/yr)	New Meter Accuracy Improvement (%)	New Meter Accuracy	Future Billed Water w/ New Meters (gal)	Annual Billed Water Increase (gal)	Annual Billed Water Increase (\$)
5/8" x 3/4" Meters	142,268,550	94.0%	133,732,437	4.5%	98.5%	140,134,521	6,402,085	\$49,554
1" Meters	18,055,851	94.0%	16,972,500		98.5%	17,785,013	812,513	\$6,289
1.5" Meters	30,753,191	94.0%	28,908,000		98.5%	30,291,894	1,383,894	\$10,712
2" Meters	56,303,191	94.0%	52,925,000		98.5%	55,458,644	2,533,644	\$19,611
3" Meters	47,954,787	94.0%	45,077,500		98.5%	47,235,465	2,157,965	\$16,703
4" Meters	0	94.0%	0		98.5%	0	0	\$0
6" Meters	0	94.0%	0		98.5%	0	0	\$0
8" Meters	11,648,936	94.0%	10,950,000		98.5%	11,474,202	524,202	\$4,057
10" Meters	0	94.0%	0		98.5%	0	0	\$0
Totals	306,984,507		288,565,437				302,379,740	13,814,303

* Baseline water to meters determined from billed water documentation and measured meter accuracy - Best data available. Preliminary savings is estimating measured meter accuracy.

Average Water (\$/kgal)

- Residential (≤1")
- Commercial (1.5"-2")
- Large Commercial (3"+)

\$7.74
\$7.74
\$7.74

Conservative project payback is: 10.8 years!

Current Issues & Scope of Work

Issue	Impact	Benefit to Leon Valley
<p>Inaccurate water monitoring & metering system</p>	<ul style="list-style-type: none"> • Limited visibility into water usage patterns • Lack of visibility for planning purposes • Customer satisfaction • Losing water/sewer revenue • Water meters continue to lose accuracy - costs continue to increase, revenue decrease 	<ul style="list-style-type: none"> • Modernize infrastructure by converting existing PD meters to solid-state meters with fixed base network • Solid State vs Mechanical Meters = guaranteed accuracy for the life of the meter. • Solid State Meters have no moving parts subject to wear, reducing failures and lost accuracy
<p>Lead and Copper Rule Revision Pipe Identification</p>	<ul style="list-style-type: none"> • Need to inventory service lines and customer lines for TCEQ / EPA requirements 	<ul style="list-style-type: none"> • Perform survey of service lines and customer lines during water meter changeout
<p>Distribution Side Monitoring</p>	<ul style="list-style-type: none"> • No real time leak detection / pressure monitoring • Inability to detect issues/leaks at birth • Emergency repairs at higher cost 	<ul style="list-style-type: none"> • Move from reactive to proactive visibility of system operation • Repair leaks, ability to schedule repairs based on size of leaks/priorities

Water Meter AMI Example Equipment



ESPC Legislation



Title 9, Local Government Code §302



Contract #170103

- Budget-Neutral Upgrades = **NO UPFRONT CAPITAL INVESTMENT**
- **Guaranteed Results** = Scope failure is covered by PSI
- Modernize Infrastructure
- Reduce Water Loss & Increase Overall Efficiencies
- **NO NEW DEBT OBLIGATION**
- Compliance & Risk Management
 - Chapter 302 ensures **transparent procurement** process
 - **State guidelines** for accountability & efficiency
 - Risk mitigated by the PSI **performance guarantee**

ESPC Process

YOU ARE HERE

Preliminary Utility Audit

- Identify Existing Conditions
- Establish EUIs
- Preliminary UCRM (utility cost reduction measure)
- Preliminary Project Economics

✓ Project Development

Investment Grade Audit

- Define Existing Conditions
- Establish Utility Baselines
- Improvement List
- Final Pricing
- Final Savings
- M&V Plan

✓ Project Development
✓ Subcontractors
✓ M&V Team
✓ Construction

Implementation

- Subcontracting
- Project Schedule
- Project Management
- Closeout & Commissioning
- Training
- Begin M&V

✓ Construction
✓ Sub-contractors
✓ Project Development
✓ M&V Team

M&V

- Monitoring and Verification
- M&V Reporting
- Staff Training

✓ M&V Team
✓ Project Development

Investment Grade Audit

- Define Existing Conditions
- Establish Utility Baselines and Current Meter Accuracy
- Identify AMI/Distribution System to Meet City's Needs
- Detail Scope of Work for Revenue Increases
- Final Pricing – NO CHANGE ORDERS
- Project Economics
- 3rd Party Engineering Review
- M&V Plan



Investment Grade Audit Breakaway Fee

- IGA Breakaway Fee \$38,895.00
- Nothing Due Today
 - **Scenario 1: Project funds;** Fee rolls into the project scope
 - **Scenario 2: Project funds, City balks:** Fee due next budget year if IGA determines self-funding project but city chooses not to move forward
 - **Scenario 3: Project does not self-fund:** Fee is on PSI and City receives IGA report at no-charge

THANK YOU, LEON VALLEY!



MARSHALL CO BASEBALL