



NH&RA

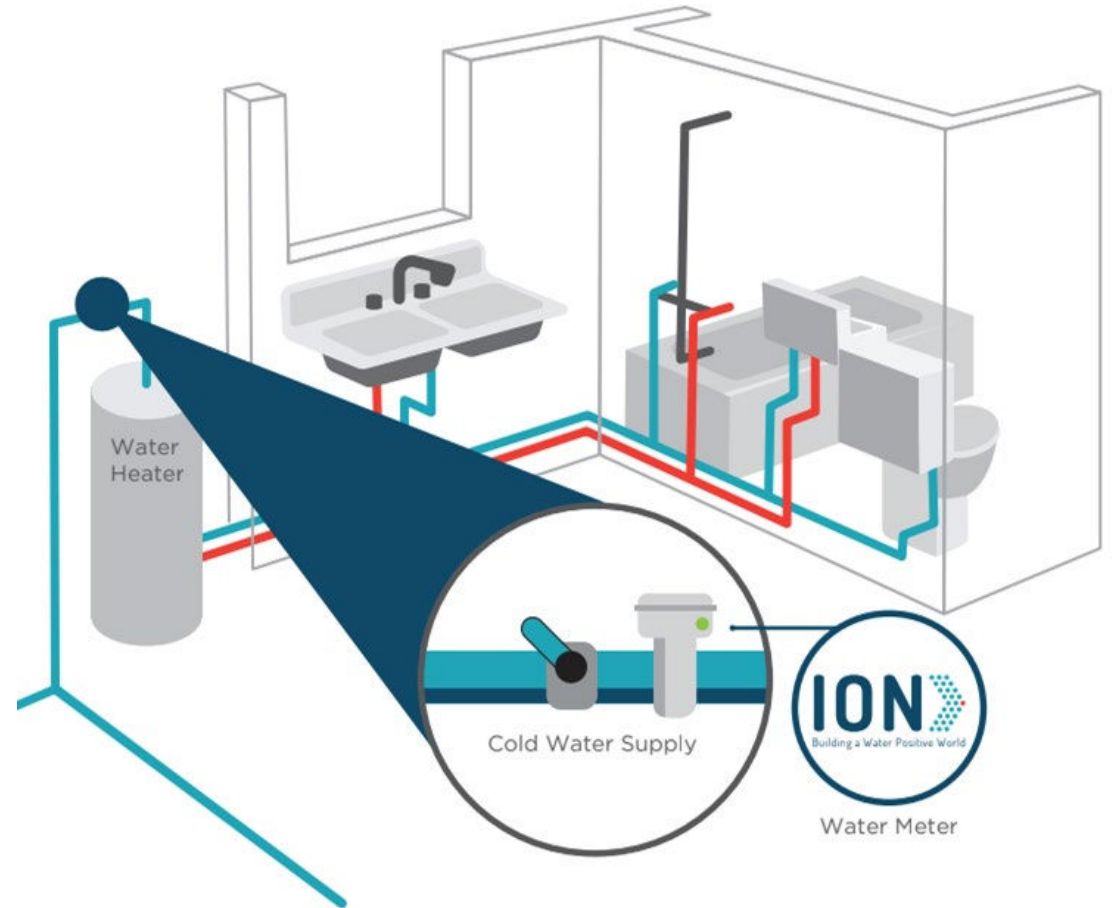
2024 Annual Meeting & Symposium

Water Optimization in Affordable Housing



How ION Works

- Our water optimization platform provides unit-level, real-time, actionable water performance data via smart sensors
- ION installs water sensors in EVERY unit of a property
- **Defines: Consumption vs Leaks**
- Generates automated work orders for leaks so site personnel can stop water loss before it impacts a property's bottom line
- Saves time and resources of site staff in addition to utility costs



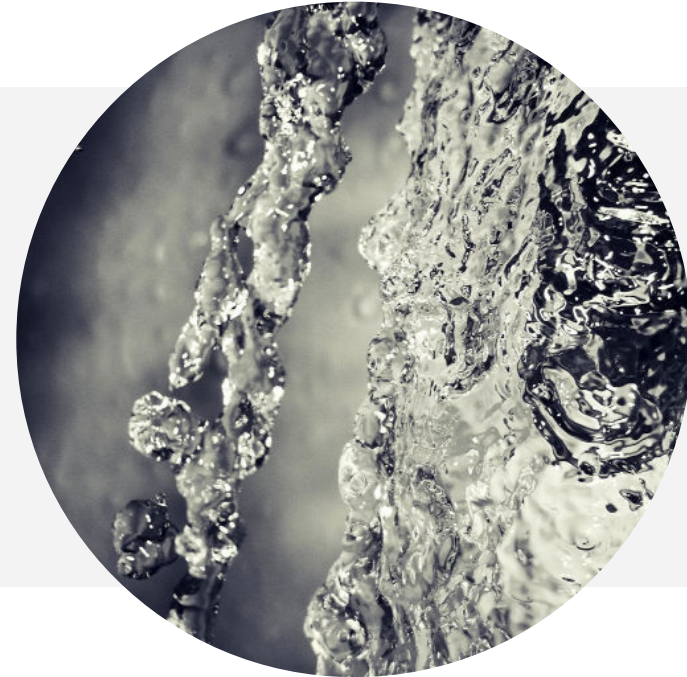


Affordable Water Performance



ION Under 50

Gallons per Bedroom per Day (GBD)



Affordable Avg 100

Gallons per Bedroom per Day (GBD)



Cost of Water Waste



200B

Gallons Wasted



\$3B

Excess Expense



800K

Tons CO₂e



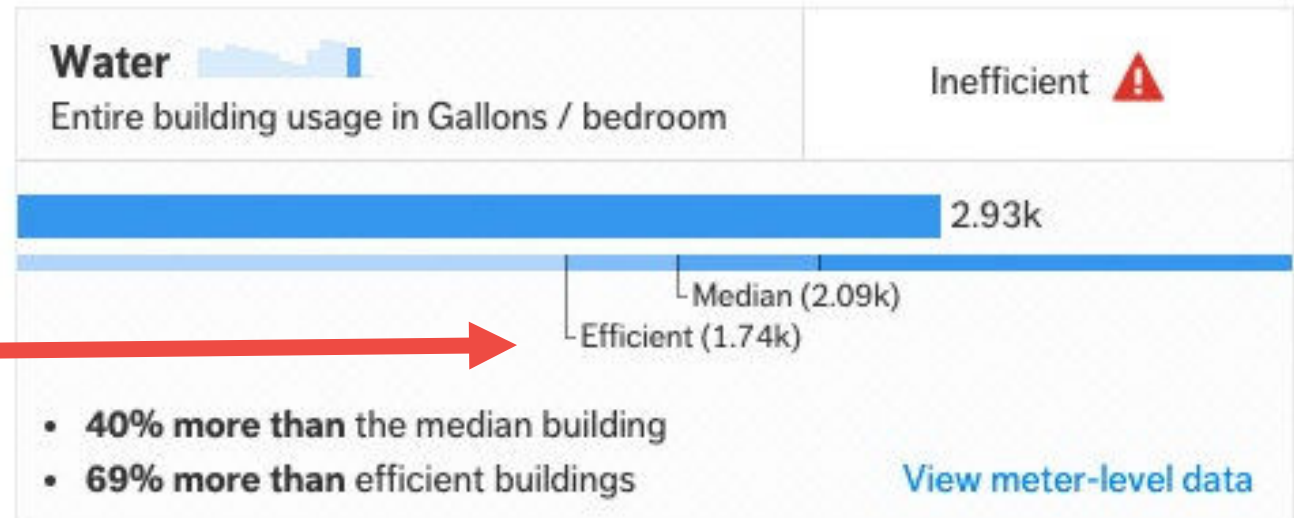
Optimization vs Benchmarking

▲ Property	▲ Units	▲ Bedrooms	▲ Gallons per Bedroom	▼ Gallons	▲ Leak Gallons	▲ No Leak Gallons	▲ Leak Gallons Percent	▲ Last Month Gallons	▲ Last Month Gallons	▲ Last Month Leak Gallons Percent	▲ Leak Trend
	271	528	27	448,781	3,718	445,063	1%	452,533	5,024	1%	0%
	258	520	37	601,955	14,631	587,324	2%	612,314	12,530	2%	0%
	312	726	42	937,051	78,640	858,411	8%	910,190	97,037	11%	-2%
	214	438	39	525,189	45,566	479,623	9%	536,684	38,337	7%	2%
	219	471	49	711,743	90,886	620,857	13%	733,943	75,932	10%	2%
	253	509	35	546,714	87,814	464,900	15%	541,060	69,898	13%	2%
	261	571	52	920,338	159,836	760,501	17%	910,113	132,784	15%	3%
	105	240	45	454,958	59,706	275,252	18%	373,265	48,608	13%	5%

27 GBD

VS

60 GBD





Impact of Water Optimization

Existing Water Performance of Top 25 Affordable Developers (Prior to Using ION)

Units	Bedrooms	Existing GBD
10,752	22,578	102

VS

Existing Water Performance of Top 25 Affordable Developers (Utilizing ION)

Units	Bedrooms	ION GBD
27,987	56,089	43

- If Kittle and Dominion were operating at these industry performance levels they would be wasting an additional **1.2 billion gallons of water** every year
- They would be emitting an additional **4,900 tons of CO2e** every year
- They would be wasting **\$18M of NOI** every year



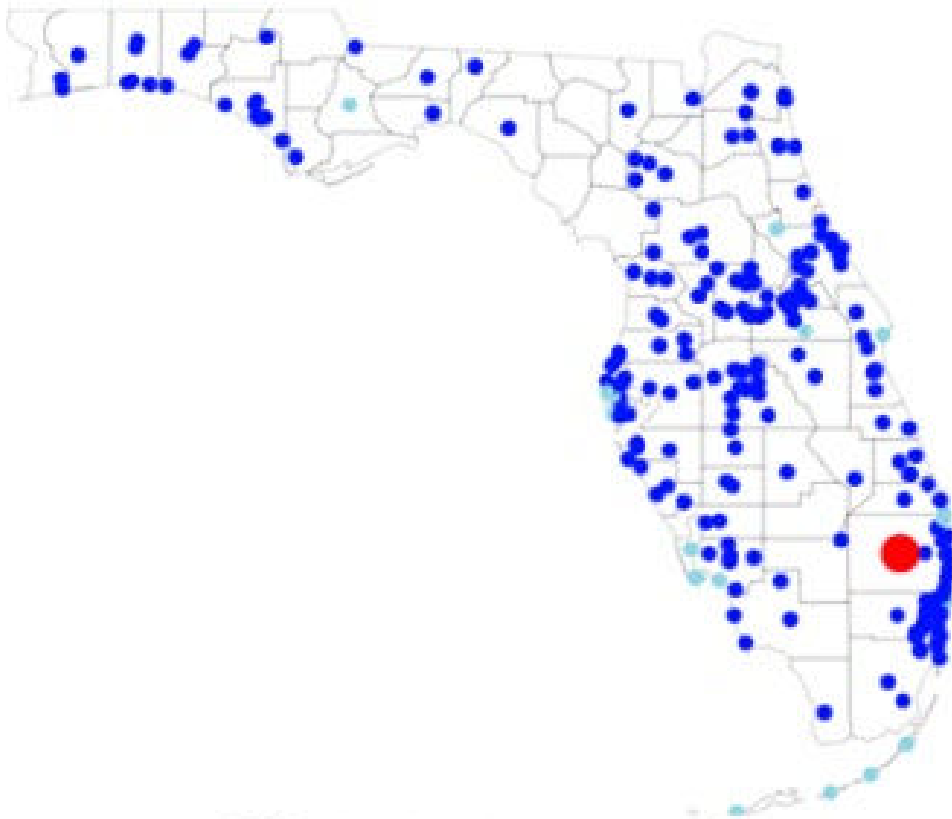


Water is Complicated

- Over **50K** Community **Water Systems** in the US
- Water is constantly degrading
- Water needs **ongoing management**
- Efficiently **constructed does not equate** to efficient **operation**



Which Property is Performing Best?

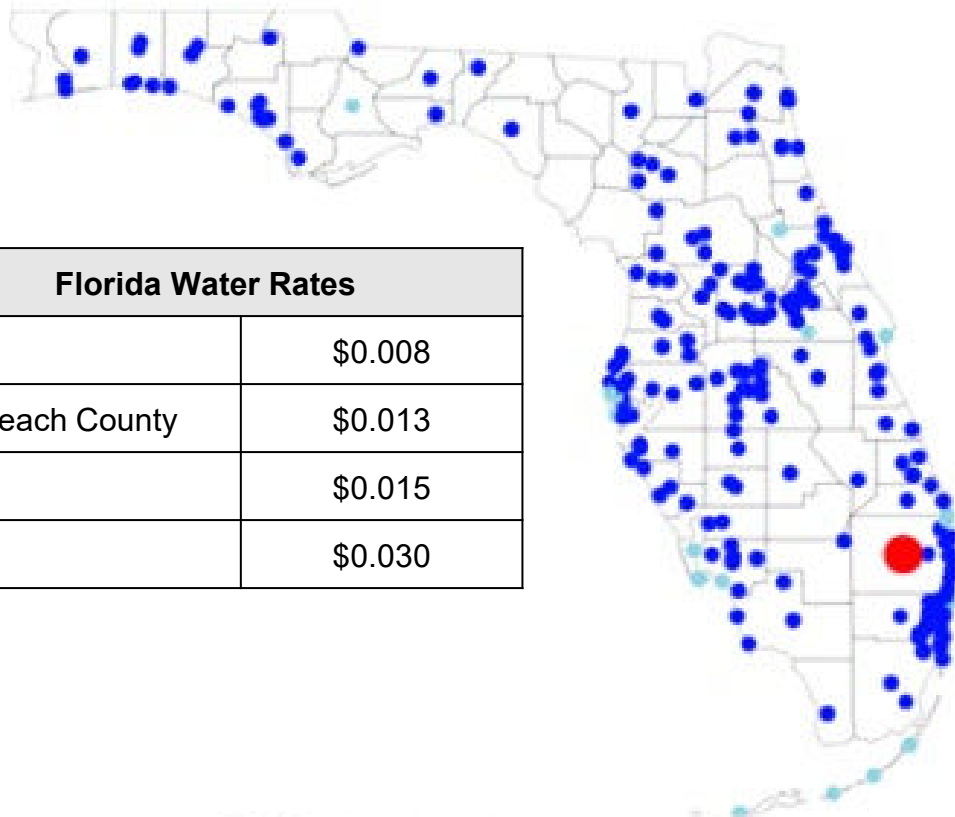


207 rate structures compared

50 Unit / 100 BR Development
\$29,091
\$56,484
\$108,268



Variability of Water



Florida Water Rates	
Low	\$0.008
Palm Beach County	\$0.013
Median	\$0.015
High	\$0.030

207 rate structures compared

Example Property (50 Units / 100 Bedrooms)		
	ION	Avg Affordable
GBD	50	100
Annual Consumption	1,825,000	3,650,000

Financial Variation			Delta	Debt Sizing
Low	\$14,545	\$29,091	\$14,545	\$207,789
Median	\$28,242	\$56,484	\$28,242	\$403,455
High	\$54,134	\$108,268	\$54,134	\$773,344



The ION Impact

Operating Turnaround

- 337 units installed January 2024
- 120K Gallons per Day
- 13K Gallons Yesterday
- **\$4K Savings per Day**

Debt Sizing

- 192 units closed December 2023
- Original proforma \$178K per year
- ION proforma \$96K
- **\$1.2M increase to debt sizing**

McCORMACK
BARON
SALAZAR

HARMONY  HOUSINGSM
AFFORDABLE DEVELOPMENT



Low Flow \neq Low Leak

Property	Vista la Rosa (2018)	Maple Pointe (2020)	Fort Chaplin (2017)
Toilets	1.28 GPF WS	1.28 GPF WS	1.1 / 1.8 GPF WS
Showerheads	1.75 GPM WS	1.5 GPM WS	1.5 GPM WS
Bath Faucets	1.2 GPM	1.2 GPM	1.2 GPM
Kitchen Faucets	1.5 GPM	1.5 GPM	1.5 GPM
Performance	148 GBD	121 GBD	250 GBD

THANK YOU

