

Special Concerns for Small Water Utilities

Region 4 Water Utility Finance Forum
July 26, 2017

- **Open up the Forum for discussion**
- **Get us thinking about the special needs of small water systems**

- Acknowledge that small water systems often have particular financial concerns
- But they also often have a different set of compliance, Technical, & Administrative concerns

Yet these small water systems have the same critical responsibility as large systems:

- To protect public health and provide opportunities for economic development

- Many similarities
- But small **Water** system operators often have way more day-to-day responsibilities
 - Preventive Maintenance
 - Analytical testing
 - Inspection

And Small Water Systems...and small utilities (wastewater, too) in general...

- Have more challenging issues with financing
- Thus, compliance concerns can be more difficult to resolve

- Can be less income
 - \$ Recovery of water leaks
 - Customers not paying bills (lost income)
- Particularly critical to plan for the future (Capacity Development)
- Can be less available credit for incurring loans



Let's Focus On...

Special Concerns for Small Water Systems

- **Compliance**
- **Staffing**
- **Administrative**
- **(Financial)**

They are all linked together...



Alabama Inventory

- Approx 570 purchase water contracts to systems serving < 10,000 people
- Approx 466 treatment systems (GW & SW) serving < 10,000 people



Common Enforcement Problems

- Late Monthly Operation Reports (MORs)
- Falsifying Reports (yes...very strange)
- Not maintaining 0.2 mg/L chlorine residual
- Excessive Water Loss
 - Leaks
 - Inaccurate meters
- Sampling (Bacteriological & Chemical)
 - Not sampling in accordance with the plan

- **Because completing MORs is occasionally seen as an “administration” issue**
- **System administration person may complete the MORs without proper Operator oversight**
- **End result – duplicate/errant MORs that don’t reflect delivered water quality**
- **And, on occasion, a small purchase water system may just not test for Chlorine residual**

- Some of the ‘Administration’ concerns result from hiring a part time contract operator
- Contract operators can be invaluable...but make sure your service contract spells out the duties and expectations of the contractor for meeting all necessary operator responsibilities

- **Whose responsibility is it to ensure your small water system complies with the Safe Drinking Water Act and all permit requirements..?**

- **The Utility’s Responsibility..!!!**

(The Operator also has his or her own responsibilities to maintain certification)



Common Enforcement Problems

- Lead & Copper Rule
 - Not maintaining or properly using corrosion control
 - Improper sampling
 - Operator collecting sample from outside faucet when customer did not collect sample
 - Collecting sample from vacant home or location in home that is not used
 - Not flushing prior to sampling
- DBP Stage 2
 - Sample on wrong week
 - Exceeding MCL
 - Not completing Distribution System Evaluation (DSE) as required
 - When water source changes
 - Significant changes to distribution system
 - Every 9 years



Common Enforcement Problems

- Facility Maintenance
 - Leaks and excessive corrosion in treatment plants and pumping facilities
 - Grounds maintenance – not keeping grass cut
 - Access to facilities not being restricted
 - Doors not being maintained
 - Fences/locks not being maintained
- Tank Maintenance
 - Recommend maintenance contract
 - Ladder guard not in place
 - Excessive corrosion
 - Leaks



“Common” Enforcement Problems

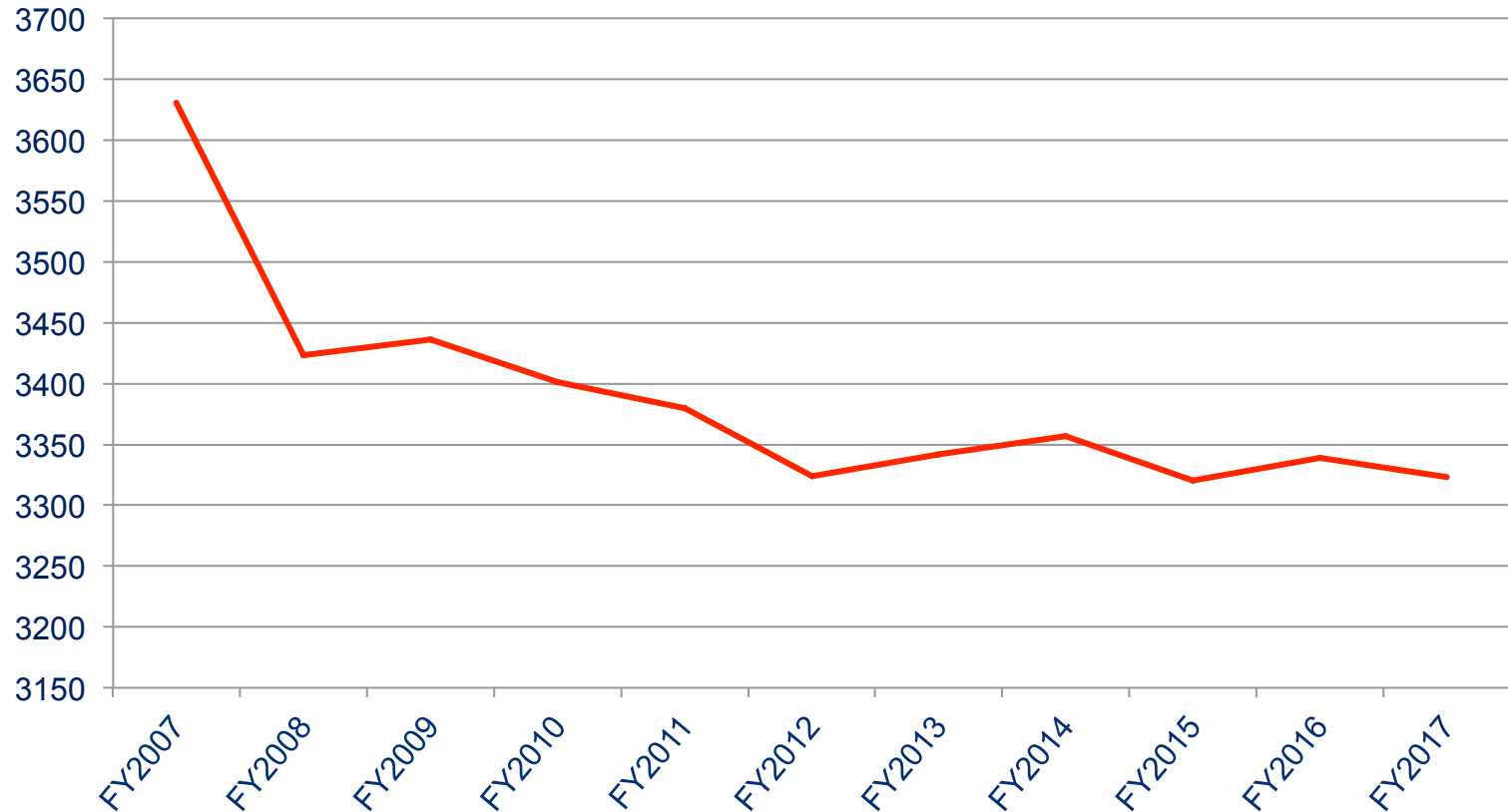
- Not having a certified operator

Losing the operator of record can readily occur in a small system due to one person (the Operator) becoming ill, passing away, or changing employment



Operator Inventory

Number of Alabama Certified Operators





Operator Inventory

Alabama presently has:

- **3350 Operators overall (Water & Wastewater)**
- **2526 Water Operators (Grades I through IV)**
- **834 Grade II Water Operators**
 - **25 % of our universe is Grade II Water Operators**
 - **33% of our Water Operators are Grade II**



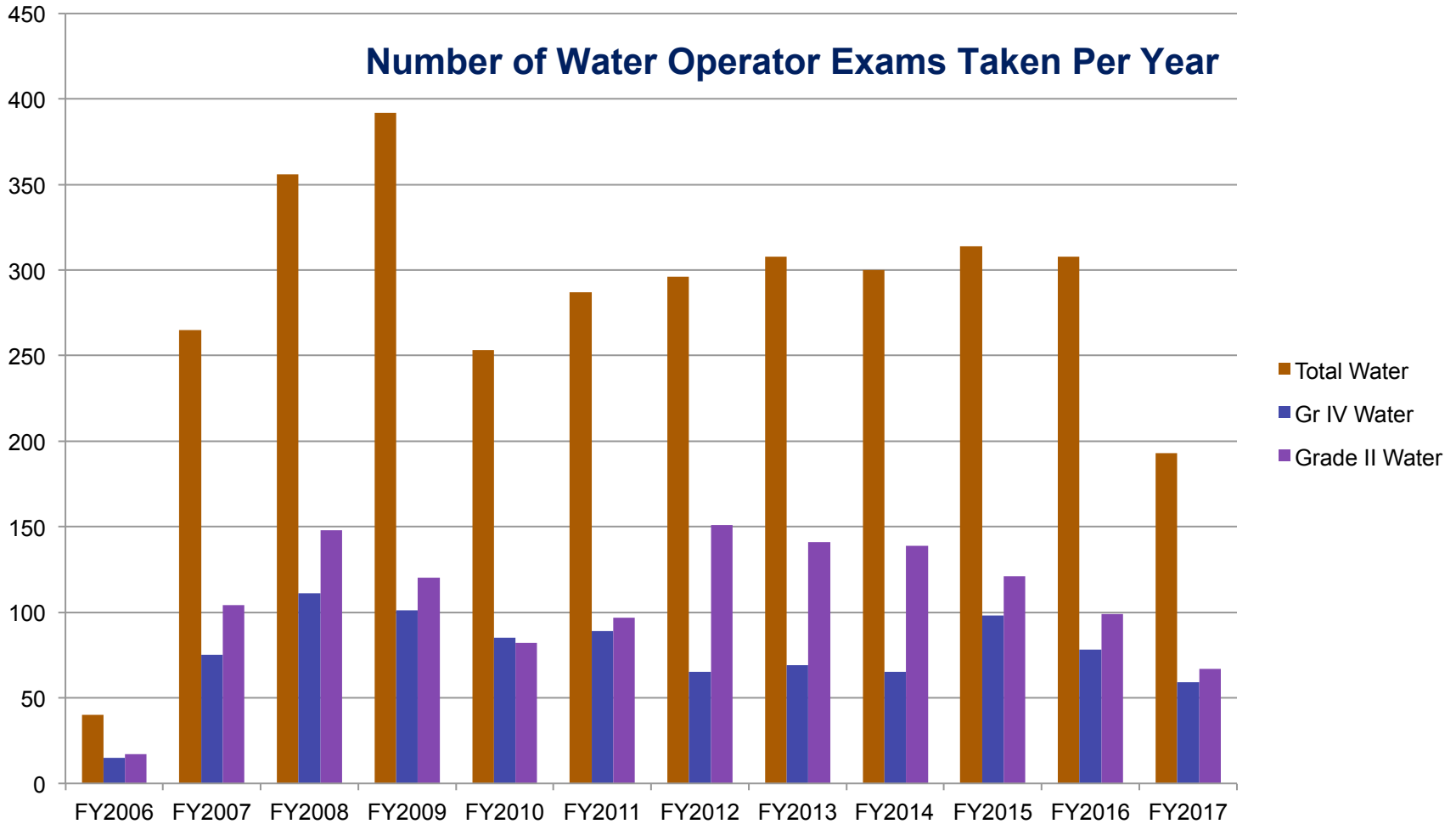
Operator Inventory

The Grade II Water operator category is the largest of any certification category in the state.

Thus, the trend of decreasing operator #s is likely true for our Grade II Water category.



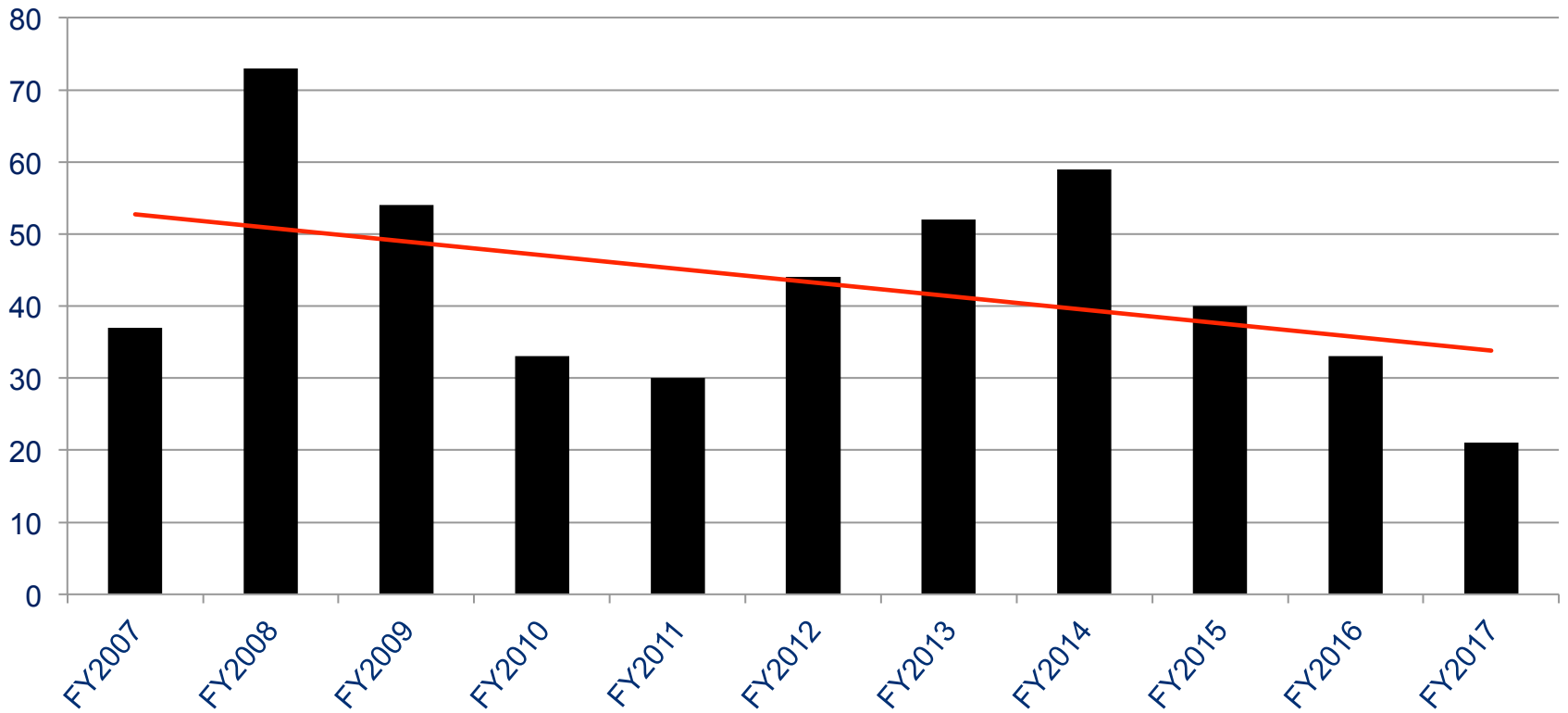
Operator Inventory





Trend of Decreasing Grade II Water Operators

Number of People Passing
GR II Water Exams





Operator Inventory

Since about 2009, we have seen a decreasing trend in the number of people taking the Grade II Water exam.

The pass rate has remained steady...so we really need to see more people **TAKING the Grade II Water exam.**



Operator Inventory

The “gap” has likely been filed in recent years due to an increase in contract operation and more operators working multiple systems.



Operator Inventory

We also suspect that after the economic crisis of 2008, operators are working longer into their retirement years.



Operator Inventory

**The biggest unknown is the possibility
of future retirements**



Operator Inventory

Should a significantly high number of retirements occur in the years ahead (say next 5 years), we may be on our way in Alabama to having a shortage of certified operators for small systems

Questions..?

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