

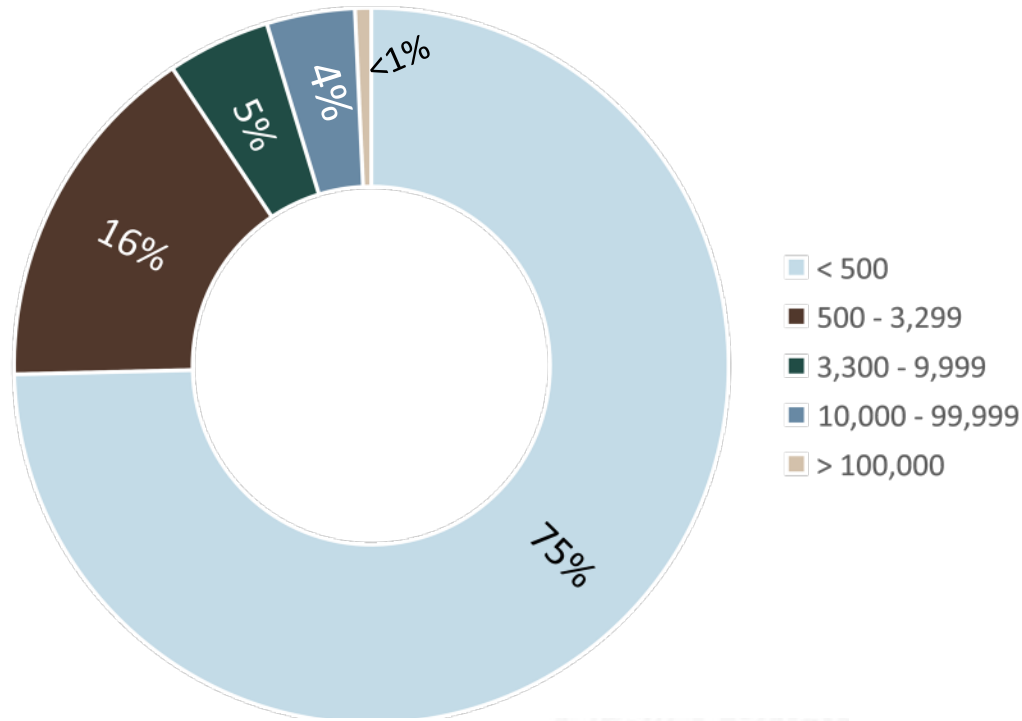
# Arizona's Capacity Assessment & Metrics

State & EPA Capacity Development Coordinators  
Meeting

June 21, 2023



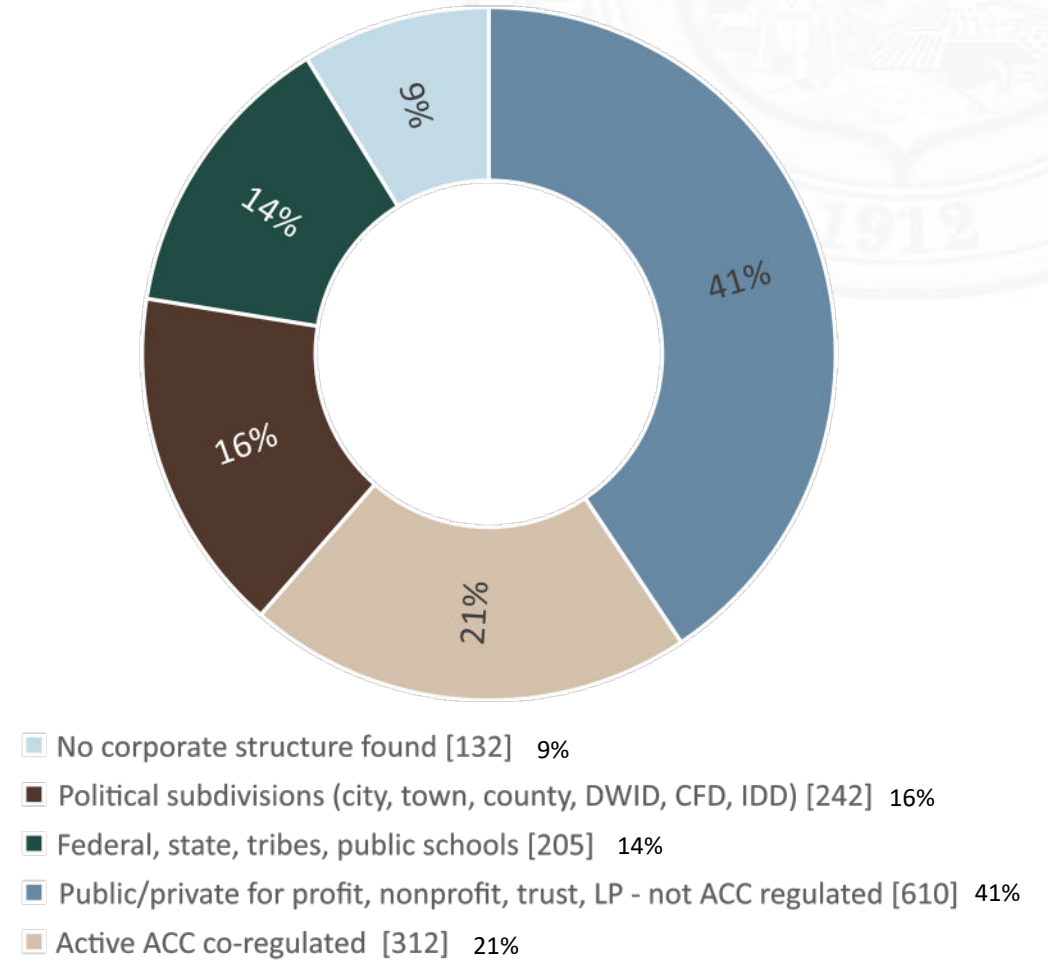
## PWSs by Population Served



**90%** 1382 systems (90 percent) serve fewer than 3,300 people

**75%** 1140 systems (75 percent) serve fewer than 500 people

## PWSs by Corporate Structure



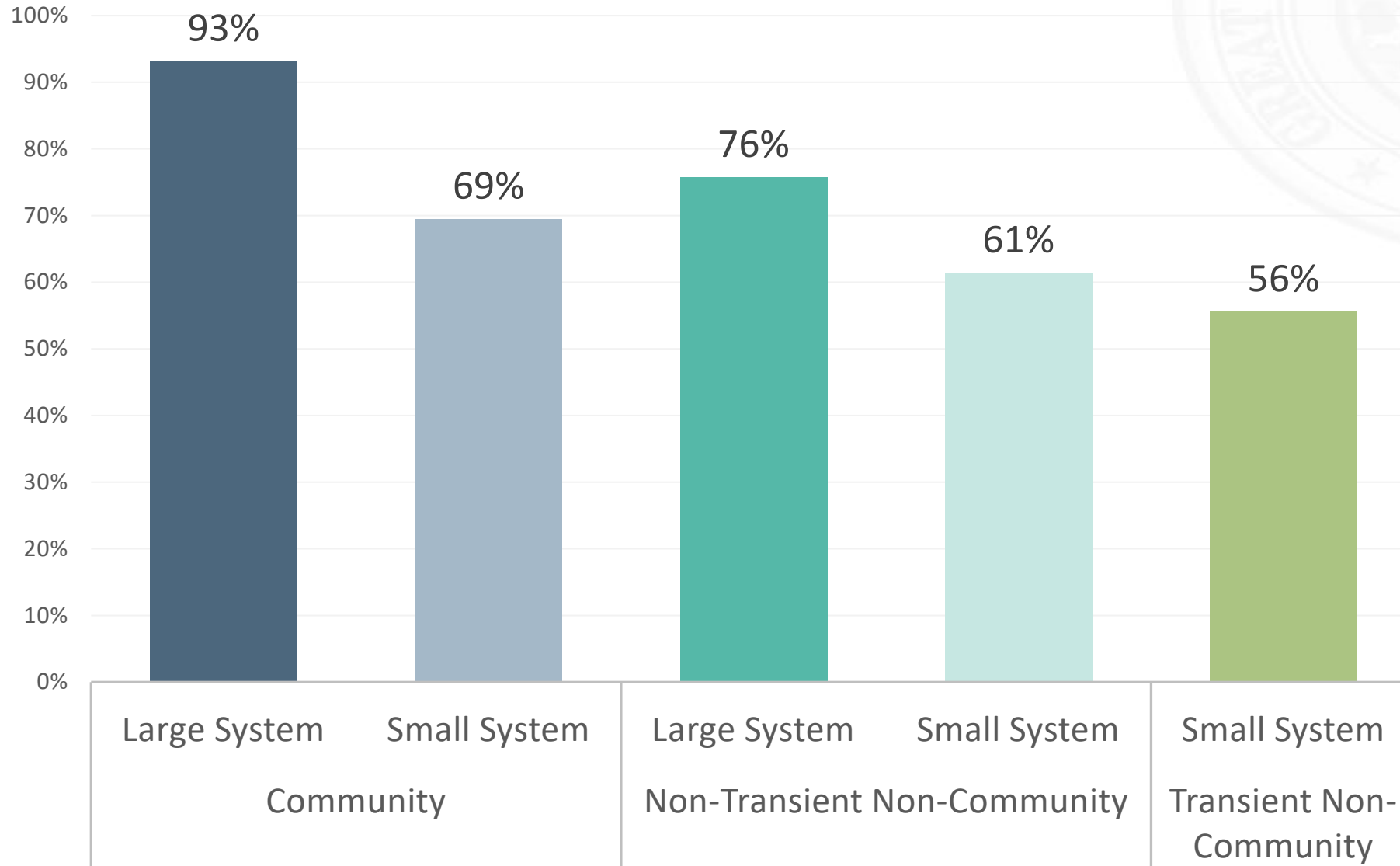
- November 2020 - August 2021 - Revised Arizona Capacity Development Strategy
  - **Main goal** = Increase TMF capacity by understanding capacity needs within the State
    - ❖ Step 1: Develop TMF Assessment Tool
    - ❖ Step 2: Conduct a baseline assessment of all public water systems in Arizona in one year
    - ❖ Step 3: Analyze data to gain a clearer understanding of statewide TMF capacity needs
    - ❖ Step 4: Utilize state programs and SRF set-asides to assist water systems with increasing TMF capacity
  
- Submitted to EPA April, 2022
- EPA approved Strategy October, 2022

# TMF Assessment Tool

- Approximately 110-120 questions, all Yes/No
  - Some not applicable, based on system
  - Score 0-100%
- 3 Sections
  - Technical Capacity Section:** Physical Infrastructure, System Operation, System Maintenance, Regulatory Compliance
  - Managerial Capacity Section:** Management and Governance, Staffing, Emergency Preparedness, Knowledge Management
  - Financial Capacity Section:** Asset Management, Metering/Billing/Collection, Financial Planning, Rates

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY			
Technical, Managerial and Financial (TMF) Assessment			
- Community Water System -			
<b>Water System Information</b>			
Water System Name:			
PWSID No:			
County:			
Community Served:			
System Grade (Distribution):			
System Grade (Treatment):			
Service Connections:			
Population Served:			
Type of Water System			
<b>Water System Representative</b>			
Name:			
Title:			
Phone Number:			
Email:			
<b>TMF Assessment Conducted By:</b>			
Name:			
Organization:			
Date of Assessment:			
<b>TECHNICAL CAPACITY</b>			<b>0</b>
<b>I. PHYSICAL INFRASTRUCTURE</b>		<b>Score:</b>	<b>0.00</b>
	<b>Assessment Questions</b>	<b>Yes/No</b>	<b>Notes</b>
Facilities	Is there adequate perimeter protection at the facility (fence/wall with lock)?		
	Are the yards and facility maintained without debris/vegetation?		
	Is there security lighting and surveillance?		
Source of supply	Is the supply of water adequate to meet current system demand?		
	Is the supply of water adequate to meet projected system demand?		
	Are there multiple sources of supply (versus a single source)?		
	Is there an emergency interconnection with adjacent utility?		
	Do you know the maximum amount of water you can pump from your source?		
	Do you know how much water you pump on an average day?		
	Does your system have the capacity to measure water usage (i.e. master flow meter)?		
Disinfection & Treatment System	Is the source protected against contamination?		
	Do you have a raw water sample tap to monitor your source water quality?		
	Is the technology effective? If applicable, has the system been optimized?		
	Are the assets in physically good conditions?		
	Are the chemicals stored securely and have adequate spill safety measures?		
	Is there adequate instrumentation in place to operate the system and to ensure accurate dosing?		
	Is the system automation with appropriate alarms and shut-off valves?		
Storage tank(s)	Is the system protected from the elements (e.g. heat/sun, rain/water, etc.)?		
	Is the storage volume sufficient to meet daily demand and emergency situations for fireflow?		
	Is the tank in structurally good condition (no leaks/patches, proper overflow		

## Sum of Avg. Total Score by PWS Type





## How do we pick systems?

- **Focus:** Small, disadvantaged communities with water quality or infrastructure-related issues (low TMF capacity)
  
- **Priorities:**
  1. Health-based exceedance and treatment technique violations
  2. Projected exceedances of a health-based standard based on predictive modeling
  3. Need for TMF capacity building (e.g., optimization, aging/failing infrastructure, water loss, rate review, corporate structure)
  4. Enforcement actions requiring technical support to resolve (e.g., design, permitting, funding)

- # of PWSs without MCL or treatment technique violations
- Reduction in the # of PWSs without corporate structure
- # of PWSs with an Asset Management Plan
- % of PWSs having a certified operator of the correct grade and class
- % of PWSs without monitoring and/or reporting violations

- Operator training on treatment systems
- Creating asset management plans for small systems
- Rate studies/rate cases for small systems
- Capitalizing on BIL funding
  - Preparing PWSs for SRF funding (design, permitting, costs)
  - Addressing emerging contaminants along with MCL issues





# Questions?



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