



Water Infrastructure Advisory Committee

Meeting #4

February 18, 2022

Welcome & Agenda

- Welcome
- TN Infrastructure Scorecard

Break (20 minutes)

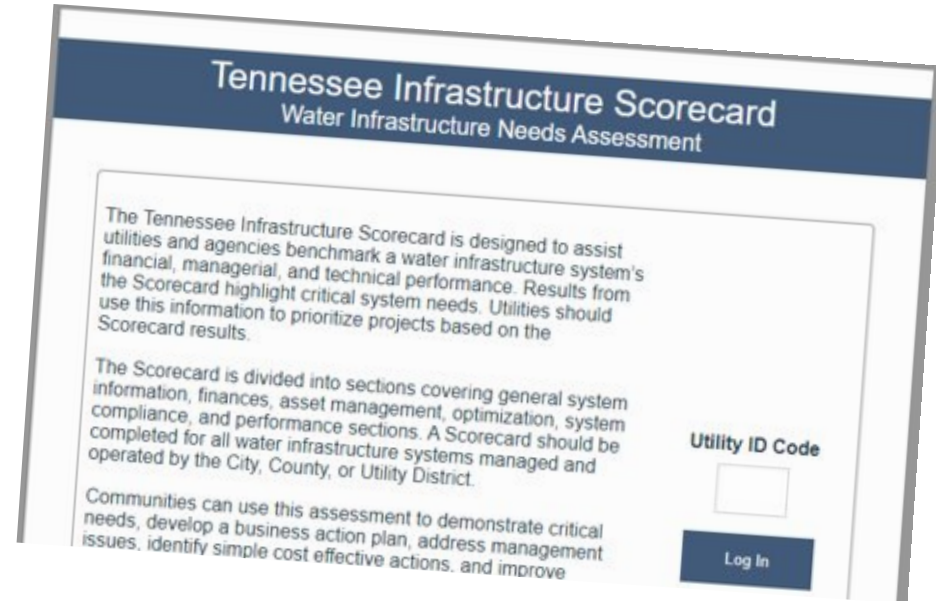
- Non-Competitive Grant Manual
- TDEC Next Steps and Engagement Opportunities
- Wrap Up



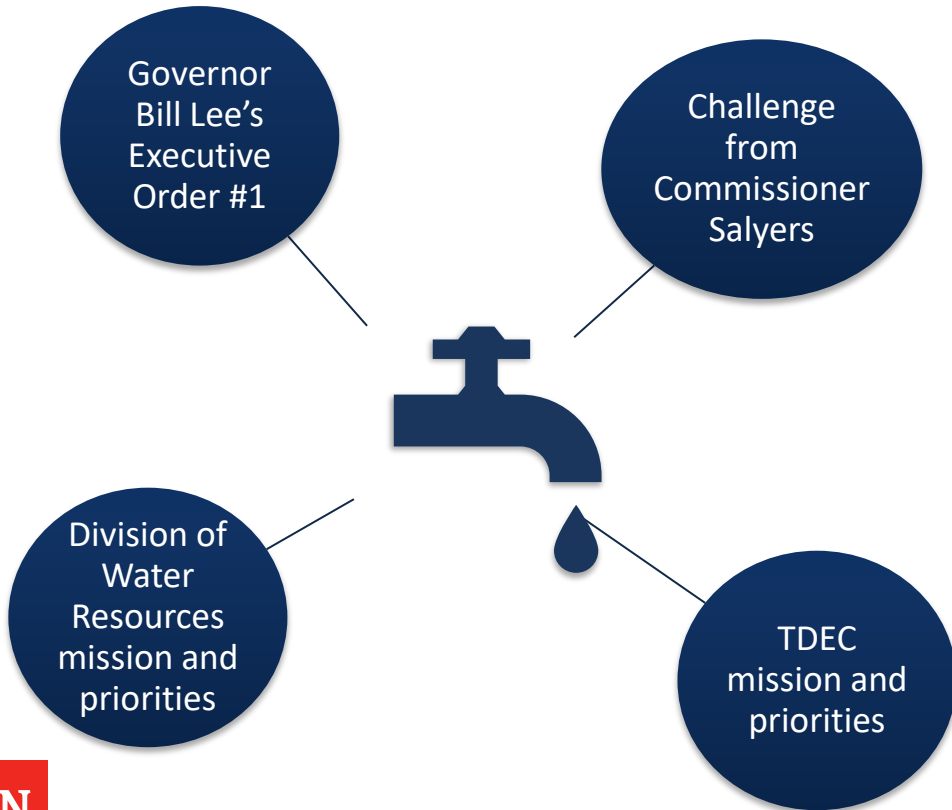
TN Infrastructure Scorecard

Tennessee Infrastructure Scorecard

- Assesses financial, managerial, operational, and environmental health of a system
- All water, wastewater, and stormwater systems need to complete the Scorecard
- Scorecard summaries must be submitted to TDEC with the grant proposal
- Five critical need areas reflected through the Scorecard
- Systems may seek assistance from TAUD to complete the Scorecard



A Look Back: Strategic Use of State Revolving Loan Funds



SRF supports **Small and Disadvantaged Communities (SDCs)** – an effort to bring financial and technical assistance to SDCs with a focus on water quality, sustainability and resilience

The Challenge: Identify, Fund and Assist SDCs

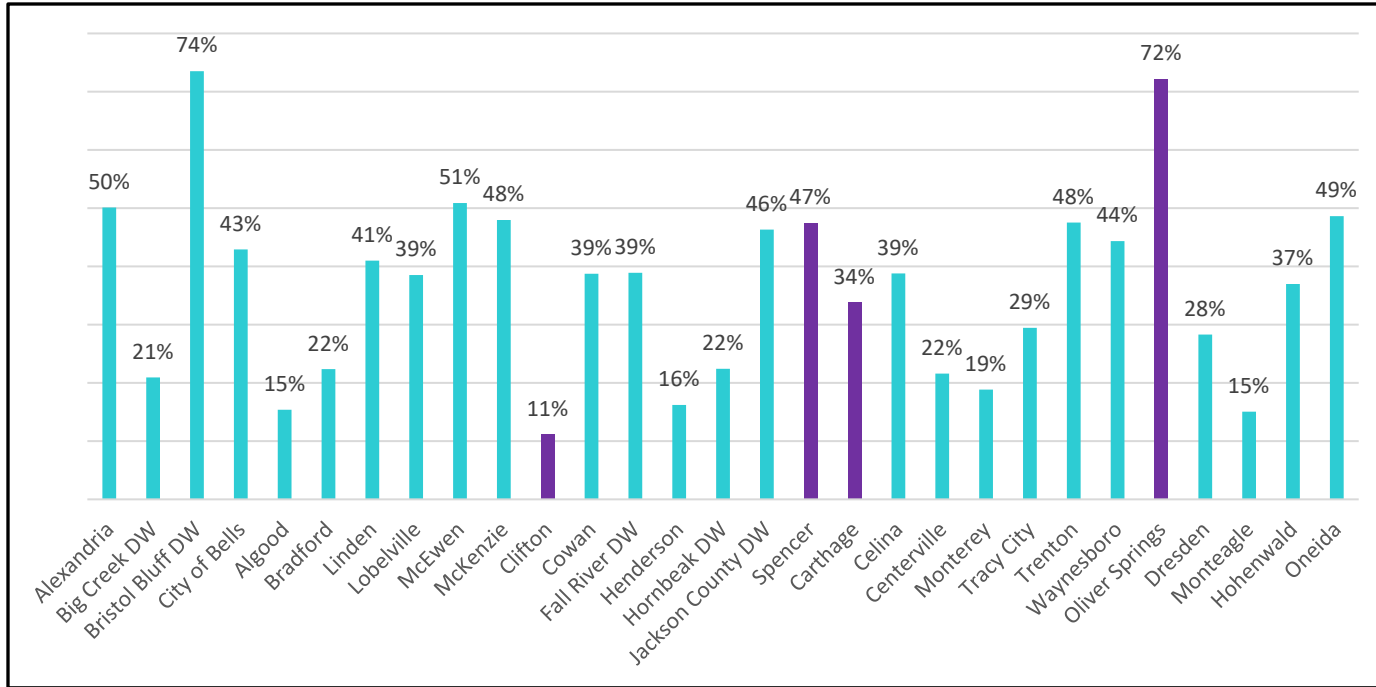
- Improved mechanism of **identifying** small and disadvantaged communities (SDCs)
- Develop a **funding** strategy for SDCs
- **Assist** with specific project development
- Provide direct and indirect **technical assistance**
- Create **tool**
- Gather **data** to better understand future needs
- Build on **lessons learned**



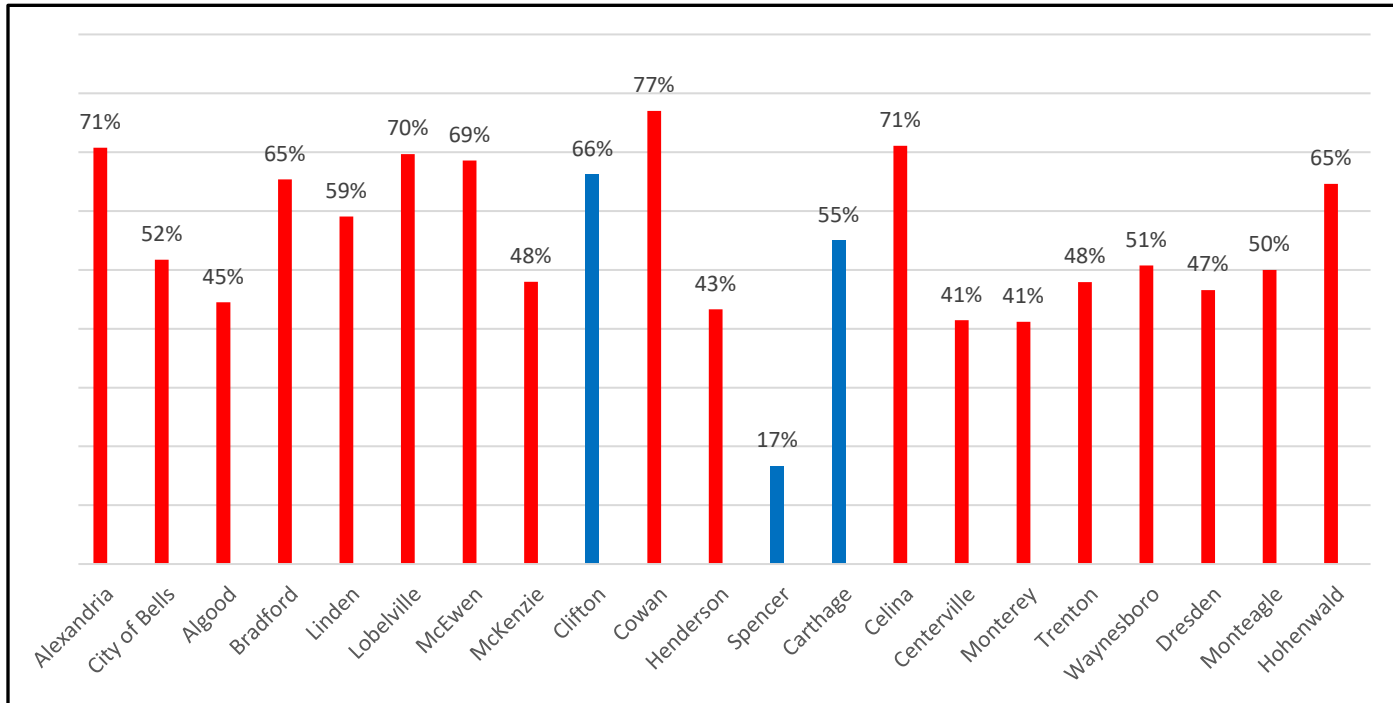
TN Infrastructure Scorecard

- **Identifies a System's Greatest Needs**
 - Technical, managerial, and Financial (TMF) strengths and opportunities
 - Immediate identification of critical needs
 - Trends and simple system updates
 - Business action plans leading to capital improvement plans
- **Benchmarks and Assesses**
 - Financial data (rates, revenues, debt, etc)
 - Monetizes concerns: rates, revenues, and costs
 - Asset Management
 - Drinking Water (water loss, optimization, system age, compliance)
 - Wastewater (I/I, optimization, system age, compliance)
- **Supports the State Agency**
 - For technical assistance-relevant topics
 - For funding priorities and assessing statewide needs

Unaccounted Drinking Water Loss by System



Inflow/Infiltration Percentage by System

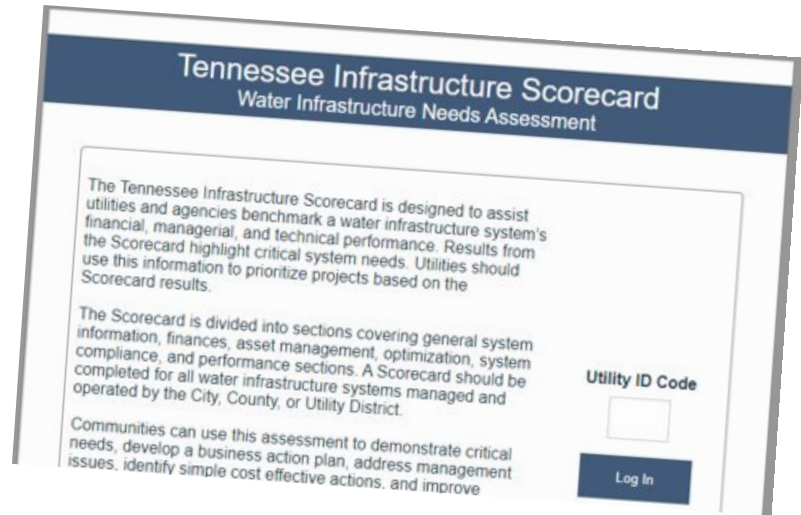


American Rescue Plan 2021



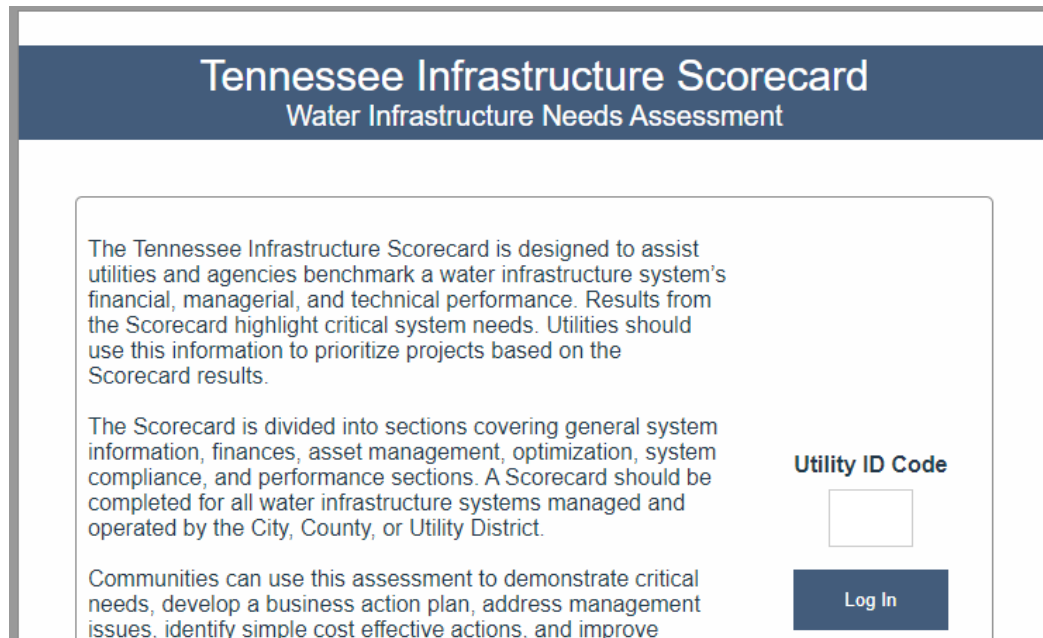
TN Infrastructure Scorecard Updates

- Updated the beta version Scorecard
- Improved format from excel to electronic form on-line
- Expanded to include:
 - Stormwater
 - Improved Compliance Information
 - Risk and Resiliency
 - Scorecard Summary with Critical Needs Identified



TN Infrastructure Scorecard Updates

- Demo of Scorecard
 - <https://www.tn.gov/environment/arp/infrastructure-scorecard.html>



The screenshot shows the Tennessee Infrastructure Scorecard Water Infrastructure Needs Assessment page. The page has a dark blue header with the title "Tennessee Infrastructure Scorecard" and subtitle "Water Infrastructure Needs Assessment". Below the header is a white box containing text. The text describes the purpose of the scorecard, which is to assist utilities and agencies in benchmarking their water infrastructure systems. It also mentions that the scorecard is divided into sections covering general system information, finances, asset management, optimization, system compliance, and performance. A "Log In" button is visible on the right side of the page.

Tennessee Infrastructure Scorecard
Water Infrastructure Needs Assessment

The Tennessee Infrastructure Scorecard is designed to assist utilities and agencies benchmark a water infrastructure system's financial, managerial, and technical performance. Results from the Scorecard highlight critical system needs. Utilities should use this information to prioritize projects based on the Scorecard results.

The Scorecard is divided into sections covering general system information, finances, asset management, optimization, system compliance, and performance sections. A Scorecard should be completed for all water infrastructure systems managed and operated by the City, County, or Utility District.

Communities can use this assessment to demonstrate critical needs, develop a business action plan, address management issues, identify simple cost effective actions, and improve

Utility ID Code

Log In

Scorecard summary review and submittal

ASSET MANAGEMENT		WATER LOSS	
Asset Mangement Plan	Yes	Unaccounted Water Loss	43%
GIS Mapping	0-25%	Millions of Gallons/year	153.32
Inventory and Condition Assessment	No	Production Cost/year	\$157,919.60
Planned O&M and Work Order System	No		
Meter Testing & Changeouts	Yes		
Captial Improvement Plan & Budget	No		
IT Infrastructure	Yes		
MODERNIZATION			
Drinking Water Plant >80% Capacity			No
Age of Drinking Water Plant	50+ years	Age of Drinking Water Lines, %	25-50%
COMPLIANCE			
Drinking Water Violations			No
State Mandated Compliance Order (Water)			No
Meeting Order Requirements (Water)			N/A

Asset Management Plans

Asset management is *the practice of managing infrastructure capital assets to minimize the total cost of owning and operating them, while delivering the service level customers desire* (US EPA)

- Benefits
 - Low-cost relative to capital improvement projects
 - Feasible project that can be completed by 2026
 - Not a depreciable asset
 - Excellent Return on Investment
 - Improves Technical, Managerial and Financial capacity
 - Supports compliance with the Safe Drinking Water Act
 - Improves financial sustainability and eligibility for SRF loans

Categories of Critical Needs

Significant Non-Compliance

- Chronic issues
- Human health and safety concerns
- Enforcement order
- Corrective Action Plan and Engineering Report

Drinking Water Loss

- Threshold: 40% unaccounted for treated drinking water
- Significant impact to operational costs
- Increase plant demands
- Energy and water waste
- Impacts raw water source; using more than needed

Categories of Critical Need

Inflow and Infiltration

- Threshold: 50% I/I
- Significant impact to operational cost
- Human health and safety concerns
- Increased plant demands – capacity issues
- Overflows and direct discharges to water resources
- Energy and water waste
- Severely impacts streams with discharge

Modernization of Aging and Failing Infrastructure

- Threshold: Plants at or approaching 80% design capacity
- Threshold: Distribution and collection lines older than 50 years
- Outdated treatment plants; past useful life

Progress of Infrastructure Scorecard 2.0

- Launched Version 2.0 on November 30, 2021. Since then...
- TAUD hosted 6 Scorecard Workshops
 - December 2021 and February 2022
 - Over 350 participants in a hybrid format
 - 248 systems have logged in to start their Scorecard
 - 30% have fully completed their Scorecard

Preliminary Emerging Trends

Asset Management Planning

- **163** completed
- **83%** have *no* comprehensive asset management plans
- **54%** *lack* maps of over half their system
- **75%** have no or limited inventory and condition assessment of assets
- **40%** have *no* planned maintenance
- **35%** have *no* computer technology at plant

Drinking Water

- **163** completed
- **18%** exceed water loss thresholds
- **25%** of systems are *purchase only*
- **39%** of water treatment plants are 51 years or older
- **28%** of distribution lines are 51 years or older

Wastewater

- **91** completed
- **33%** exceed I/I thresholds
- **10%** of systems are *collection only*
- **35%** of wastewater treatment plants are 51 years or older
- **56%** of collection lines are 51 years or older

Addressing Critical Need Priority Areas

- All grant applicant must provide a Scorecard Summary for every drinking water and wastewater system they own/operate
- Only applies to systems included in the proposal for work
 - Applicants may choose which systems to include, *other than those with significant non-compliance*
- Once critical needs are addressed, funds may be used for other projects with eligible activities
- Applicants may demonstrate they are addressing critical needs through non-ARP funded strategies within the timeframe established

Addressing Critical Need Priority Areas

- Non-competitive grant funds are targeted to support addressing critical need priority areas
- **Systems will need to demonstrate sufficiently addressing critical need priority areas in the grant application**
 - If **one** critical need is identified, it must be addressed according to the Matrix
 - If **two** critical needs are identified, both must be addressed according to the Matrix
 - If **three** critical needs are identified, **two** of the critical needs must be addressed according to the Matrix
 - If significant non-compliance is one, it must be addressed
 - If asset management is one, it must be addressed
 - Otherwise, up to the grantees to choose which two critical needs to address



Project Award Types

Investigation and Planning

- **Grant application:** project narrative, Scorecard summary, scope, budget, and timeline
- **Outputs:** planning documents, Preliminary Engineering Report (PER), FINAL Scorecard summary, and comprehensive Asset Management Plan(AMP) verification

Investigation, Planning and Design

- **Grant application:** project narrative, Scorecard summary, scope, budget, and timeline
- **Outputs:** Same as Investigation and Planning

Planning, Design and Construction

- **Grant application:** project narrative, Scorecard summary, scope, budget, and timeline **and PER**
- **Outputs:** Plans and specifications, permits, site certifications, bid packages, performance certifications, site inspections, FINAL Scorecard summary, and comprehensive AMP verification

Construction Only

- **Grant application:** project narrative, Scorecard summary, scope, budget, and timeline, PER **and plans and specification, permits and site certifications**
- **Outputs:** Bid packages, performance certifications, site inspections, FINAL Scorecard summary, O&M manual, and comprehensive AMP verification

Critical Needs Matrix: Drinking Water

Critical Needs	Investigation and Planning	Investigation, Planning, and Design	Planning, Design, and Construction	Construction Only
Significant Non-Compliance	Must establish a CAP/ER within 6 months of the grant award and/or meet the compliance schedule.	Must complete any documents (reports, manuals, and construction documents) as required in the Order or CAP/ER and/or must meet compliance schedule.	Must get approval of all required documents, including plans and specifications and a construction budget/schedule, that demonstrates all actions outlined in the Order or CAP/ER will be complete to the maximum extent possible within the grant timeline and compliance schedule.	Must get approval of all required documents, including plans and specifications and a construction budget/schedule, that demonstrates all actions outlined in the Order or CAP/ER will be complete to the maximum extent possible within the grant timeline and compliance schedule.
Asset Management	Must establish an Asset Management Plan by the end of the grant award.			
Water Loss	Must develop a Water Loss Control Plan.	Must develop a Water Loss Control Plan and plans and specifications.	Must develop a Water Loss Control Plan, plans and specifications, and dedicate at least 25% of the construction budget to water loss OR reduce water loss to below 40% by the end of the grant award.	Must dedicate at least 25% of the construction budget to water loss OR reduce water loss to below 40% by the end of the grant award.
Modernization	Must develop an Aging Infrastructure Replacement or Demand Reduction Plan.	Must develop an Aging Infrastructure Replacement or Demand Reduction Plan and plans and specifications.	Must develop an Aging Infrastructure Replacement or Demand Plan, plans and specifications, and dedicate at least 25% of the construction budget to asset replacement OR reduce plant demand to such a capacity that it doesn't meet or exceed 80% for 5 years.	Must dedicate at least 25% of the construction budget to asset replacement AND/OR reduce plant demand to such a capacity that it doesn't meet or exceed 80% for 5 years.

Critical Needs Matrix: Wastewater

Critical Needs	Investigation and Planning	Investigation, Planning, and Design	Planning, Design, and Construction	Construction Only
Significant Non-Compliance	Must establish a CAP/ER within 6 months of the grant award and/or meet the compliance schedule.	Must complete any documents (reports, manuals, and construction documents) as required in the Order or CAP/ER and/or must meet compliance schedule.	Must get approval of all required documents, including plans and specifications and a construction budget/schedule, that demonstrate all actions outlined in the Order or CAP/ER will be complete to the maximum extent possible within the grant timeline and compliance schedule.	Must get approval of all required documents, including plans and specifications and a construction budget/schedule, that demonstrates all actions outlined in the Order or CAP/ER will be complete to the maximum extent possible within the grant timeline and compliance schedule.
Asset Management	Must establish an Asset Management Plan by the end of the grant award.			
I & I	Must develop a I&I Reduction and Elimination Plan.	Must develop a I&I Reduction and Elimination Plan and plans and specifications.	Must develop a I&I Reduction and Elimination Plan, plans and specifications, and dedicate at least 25% of the construction budget to I&I OR reduce I&I to below 50% by the end of the grant award.	Must dedicate at least 25% of the construction budget to I&I OR reduce I&I to below 50% by the end of the grant award.
Modernization	Must develop an Aging Infrastructure Replacement or Demand Reduction Plan.	Must develop an Aging Infrastructure Replacement or Demand Reduction Plan and plans and specifications.	Must develop an Aging Infrastructure Replacement or Demand Plan, plans and specifications, and dedicate at least 25% of the construction budget to asset replacement OR reduce plant demand to such a capacity that it doesn't meet or exceed 80% for 5 years.	Must dedicate at least 25% of the construction budget to asset replacement AND/OR reduce plant demand to such a capacity that it doesn't meet or exceed 80% for 5 years.

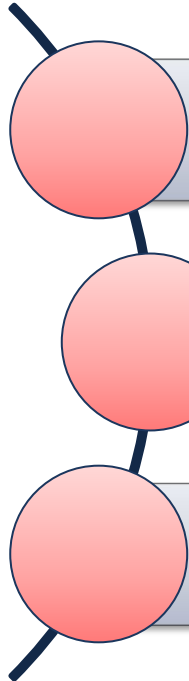


Break



Non-Competitive Grant Manual

Grant Goals

- 
- Protect and promote human health and safety and improve the quality of Tennessee's water by supporting drinking water and wastewater systems in significant non-compliance to work towards and achieve compliance
 - Improve the technical, managerial, and financial capabilities of small, disadvantaged, or underserved water infrastructure systems
 - Address critical water infrastructure needs across the state

Priority Areas

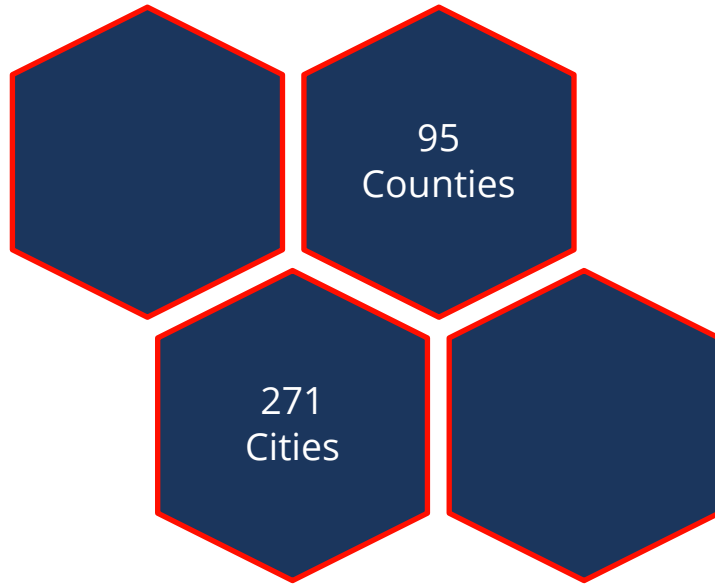
Critical Need Priority Areas

- Addressing Significant Non-Compliance
- Asset Management Planning
- Water Loss Reductions
- Infiltration / Inflow Reductions
- Modernization of Facilities and Equipment

Additional Priority Areas

- Water Reuse
- Green Infrastructure and Stormwater Management
- Consolidation / Regionalization
- Managing Risk and Building Resilience
- Planning for Replacement of Lead Service Lines
- Enhancing Service to Small, Underserved, or Disadvantaged Communities

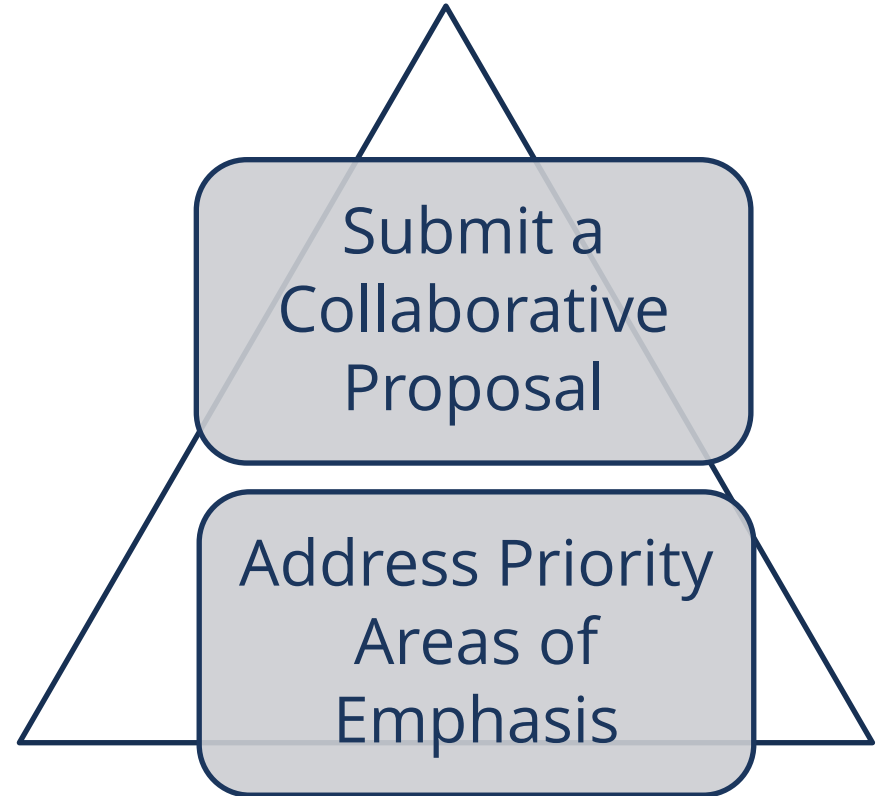
Eligible Grant Applicants



- All counties are eligible grant applicants
- Eligible cities are those that are incorporated and operate water or wastewater systems or a permitted stormwater program
- Systems not owned by cities or counties should collaborate with the communities they serve

Co-Funding

- 15-35% co-funding required, based on ATPI
 - ATPI 50 or below = 15%
 - ATPI 60-70 = 25%
 - ATPI 80-100 = 35%
- Cash and in-kind contributions are allowable
- Counties and cities may use an additional co-funding incentive for a maximum co-funding reduction of 5%



Collaboration



Multiple entities (systems, cities, and/or counties) may collaborate on a project or projects *for a shared purpose*



Entities engaging in collaborative projects may pool their funds together to accomplish the collaborative project(s)



Collaborative projects must identify a *grant applicant* that will enter a grant contract with TDEC



Only collaborative projects may be submitted at this stage

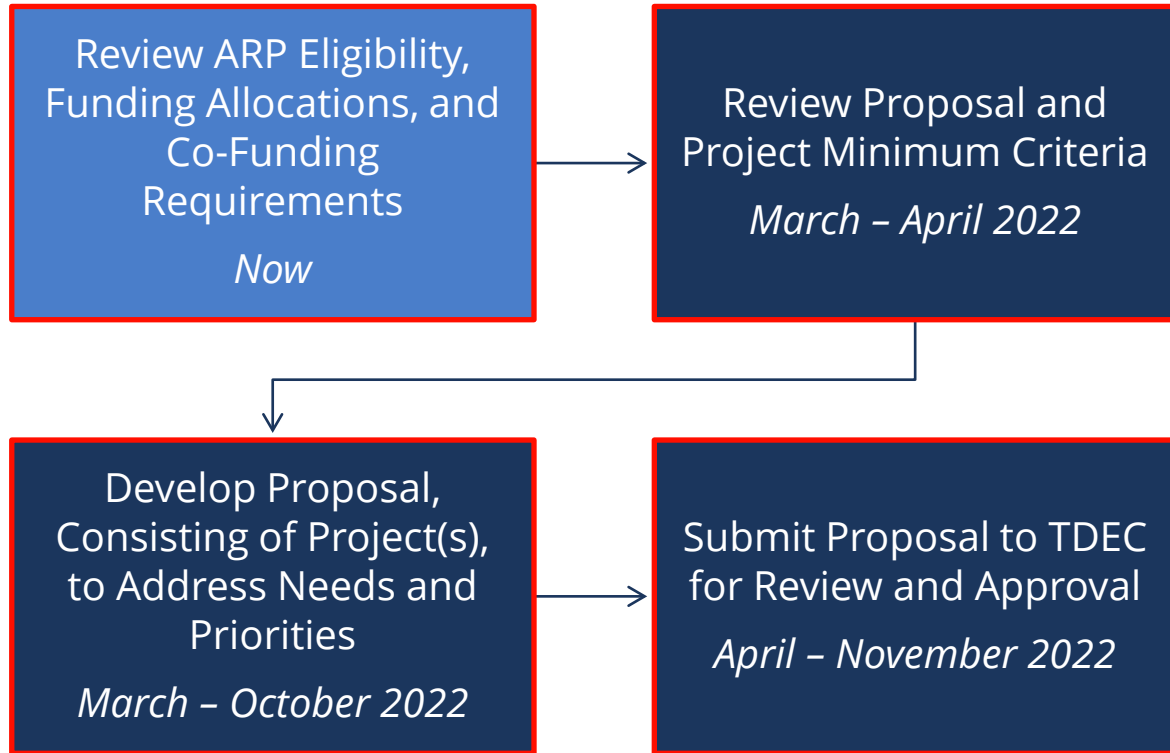


Partners qualify by a financial threshold (15% of a project's budget) or activity threshold (15% of equivalent goods, services, or activities)

Eligible Activities

- Projects may address **drinking water, wastewater, or stormwater** improvements
- Must align with U.S. Treasury's Final Rule
 - Federal rules mandate that activities must align with Drinking Water and Clean Water State Revolving Fund project eligibility
 - Expanded eligible activities include repair, replacement, or removal of culverts; residential well contamination; and expanded lead service line activities
 - Funds must be obligated by December 31, 2024
 - Funds must be fully spent by December 31, 2026
- Proposals must demonstrate adequately addressing critical needs identified by systems through the Scorecard
- **Up to 6% of the funding allocation may be used for pre-grant collaborative planning activities and administrative expenses**

Grantee Process



Proposal Requirements – General Information

Designated Grant Applicant

Identification of all water infrastructure systems in jurisdiction
Identification of all partners
Letters of Support

Brief Narrative

Addressing priority areas
Project award type(s) and name(s)
If collaborative, responsibility distribution

Proposal Timeline

Start and completion dates of all individual projects

Overall Grant Budget

If collaborative, distribution of funds
Total administrative expenses
Budget for individual project(s)

Demonstration of Co-Funding

Project Requirements – Technical Information

Addressing Priority Areas

Scorecard summaries identifying critical needs
Additional priority areas

All Projects

Description of project
Individual project budget
Detailed schedule
Maps of project area / area of interest

Construction Projects

Preliminary engineering report (or facilities plan)
Plans and specifications, as needed
List of required permits (as needed)
Site certification or letter in lieu of (as needed)

Streamlined Construction Projects

Projects that only address critical needs and can be permitted through a general ARAP and Construction General Permit or need no ARAP or CGP. Cannot require modification to existing NPDES, SOP, or water withdrawal ARAP. Only require submitting the "All Projects" documentation.

Grant Application Submittal

Collaborative Phase

March 31 – May 31

- Incentivizes partnership and collaboration
- Must involve multiple entities working together with a shared purpose
- Required co-funding based on the *lowest* co-funding of collaborative entities
- TDEC will enter a grant contract with one entity



Non-Collaborative Phase

June 1 – November 1

- Late submissions of collaborative proposals will be permitted
- Non-collaborative proposals (single entities for projects) may submit at this phase

Non-Competitive Grant Timeline

Release
Grant
Guidance
**Mar
2022**

Collaborative
Grant
Proposal
Period
Opens
**Mar 31,
2022**

Non-
Collaborative
Grant
Proposal
Period Opens
Jun 1, 2022

All Grant
Contracts
Executed
**Dec 31,
2022**

Notice
of
Intent
to Apply
**Mar
2022**

Host Non-
Competitive
Grant
Workshops
Apr 2022

Non-
Competitive
Grant
Phase
Closes
**Nov 1,
2022**



Application Evaluation and Reimbursement

- TDEC will review for project eligibility, addressing critical needs, meeting co-funding requirements (including incentives), and feasibility within the performance period
- Following an administrative and technical review, TDEC will enter grant contracts
- Grant contracts will start on March 3, 2021* and end on September 30, 2026

** TDEC is seeking an exception to allow all grant contracts to start on March 3, 2021.*

State Revolving Fund Companion Loans

Assistance for Asset Management Plans (AMPs)

- Loans up to \$500,000 for AMPs
- 50% loan forgiveness for communities with ATPI > 50
- 75% loan forgiveness for communities with ATPI < 50

Planning and Design Loans

- Loans up to \$500,000
- 50% loan forgiveness for communities with ATPI > 50
- Pop served 20,000 or less

Bipartisan Infrastructure Law

- SRF Solicitation released this week
- Must be on SRF Priority Ranking List to receive loan/grant through SRF



Next Steps and Engagement Opportunities

TDEC Next Steps and Engagement Opportunities

State Strategic
Project Framework
Announced
Summer 2022

Obligate All ARP
Funds
Dec 31, 2024

Competitive Grant
Timeline and Fund
Announced
Feb 2023

Spend All ARP Funds
Dec 31, 2026





Thank You!