

# Decentralized Needs and the Clean Watersheds Needs Survey



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***Disclaimer:** The opinions in this presentation are of the presenter and do NOT reflect the opinions of NOWRA.*

# Onsite Wastewater Mega-Conference

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**CWNS History**



**CWNS Eligibilities  
and Categories**



**Decentralized in  
the CWNS**



**Decentralized  
Cost Estimation  
Tool**



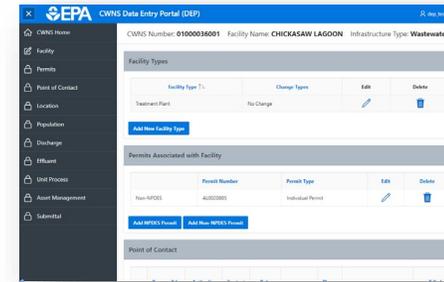
**Questions**

# What is the Clean Watersheds Needs Survey?

“...a comprehensive assessment of the **capital costs** (“needs”) to meet the water quality goals of the CWA and address water quality and water-quality-related public health concerns.”

## Need:

A water quality or water-quality-related public health problem existing or expected to occur within the next 20 years.



# What is the Clean Watersheds Needs Survey?

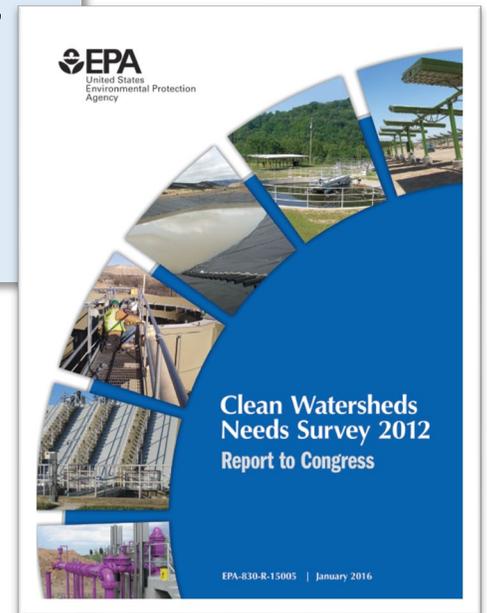
**Who:** All 50 states and territories. State staff (sometimes as part of their CWSRF duties) complete the survey on behalf of their state.

**What:** Data on wastewater treatment & collection, stormwater & CSS/CSO, decentralized wastewater treatment, and NPS projects/ facilities.

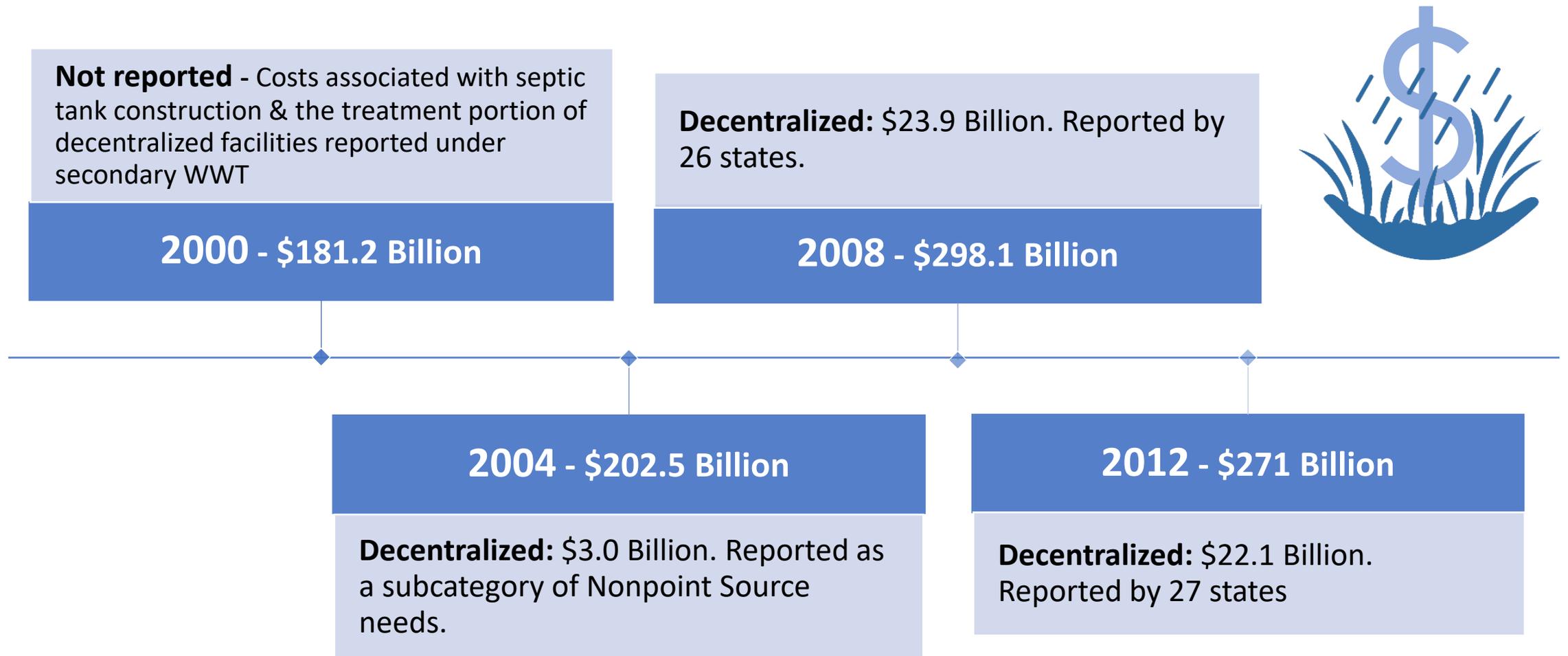
**When:** March 2022, with data collection open for approximately 1 year.

Survey results are compiled in a Report to Congress

Data are available via a public 'data dashboard' on the EPA website



# CWNS History



# CWNS and SRF Project Eligibility

Linked to **Clean Water State Revolving Fund** eligibilities

- 603(c)(1) Construction of publicly owned treatment works (POTWs)
- 603(c)(2) Implementation of a Section 319 nonpoint source management program
- 603(c)(3) Implementation of a Section 320 National Estuary Program Comprehensive Conservation and Management Plan
- 603(c)(4) Decentralized systems**
- 603(c)(5) Stormwater management
- 603(c)(6) Projects that reduce the demand for POTW capacity through water conservation, efficiency, and reuse
- 603(c)(7) Watershed pilot projects
- 603(c)(8) Projects that reduce the energy consumption needs for POTWs
- 603(c)(9) Reuse of wastewater, stormwater, or subsurface drainage water
- 603(c)(10) Security measures at POTWs
- 603(c)(11) Technical assistance to small and medium POTWs
- 603(c)(12) Assistance to a qualified nonprofit entity to provide assistance to an eligible individual for the repair or replacement of household decentralized treatment systems

# CWNS Categories

2022 Category Number	Category Name
I	Secondary Wastewater Treatment
II	Advanced Wastewater Treatment
III-A	Infiltration/ Inflow (I/I) Correction
III-B	Sewer Replacement/ Rehabilitation
IV-A	New Collector Sewers and Appurtenances
IV-B	New Interceptor Sewers and Appurtenances
V	Combined Sewer Overflow (CSO) Correction

2022 Category Number	Category Name
VI-A	Stormwater: Gray Infrastructure
VI-B	Stormwater: Green Infrastructure
VI-C	Stormwater: General Stormwater Management
VII	Nonpoint Source
X	Water Reuse
<b>XII</b>	<b>Decentralized Wastewater Treatment Systems</b>
<del>XIII</del>	<del>Planning</del> <i>(incorporated into other categories)</i>
XIV	Desalination

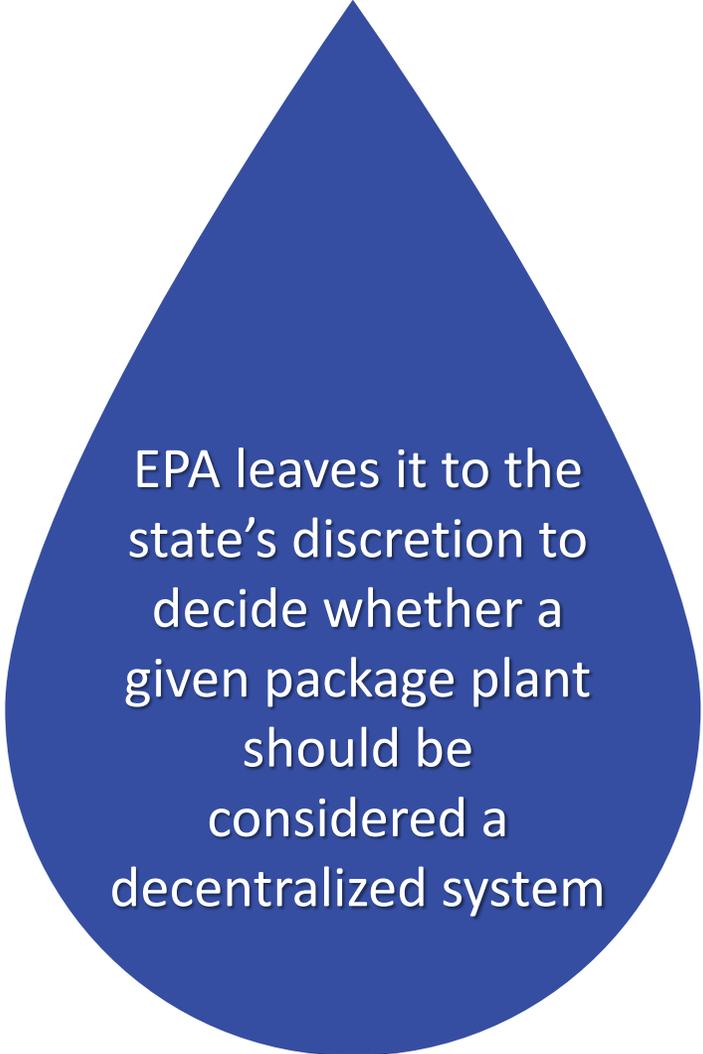
# Decentralized Wastewater Treatment Infrastructure

A system relying on natural processes and/or mechanical components to collect, treat, and disperse or reclaim wastewater from a single dwelling or building

*or* a wastewater collection and treatment system under some form of common ownership that:

- collects wastewater from two or more dwellings or buildings
- conveys it to a treatment and dispersal system on a suitable site near the dwellings or buildings.

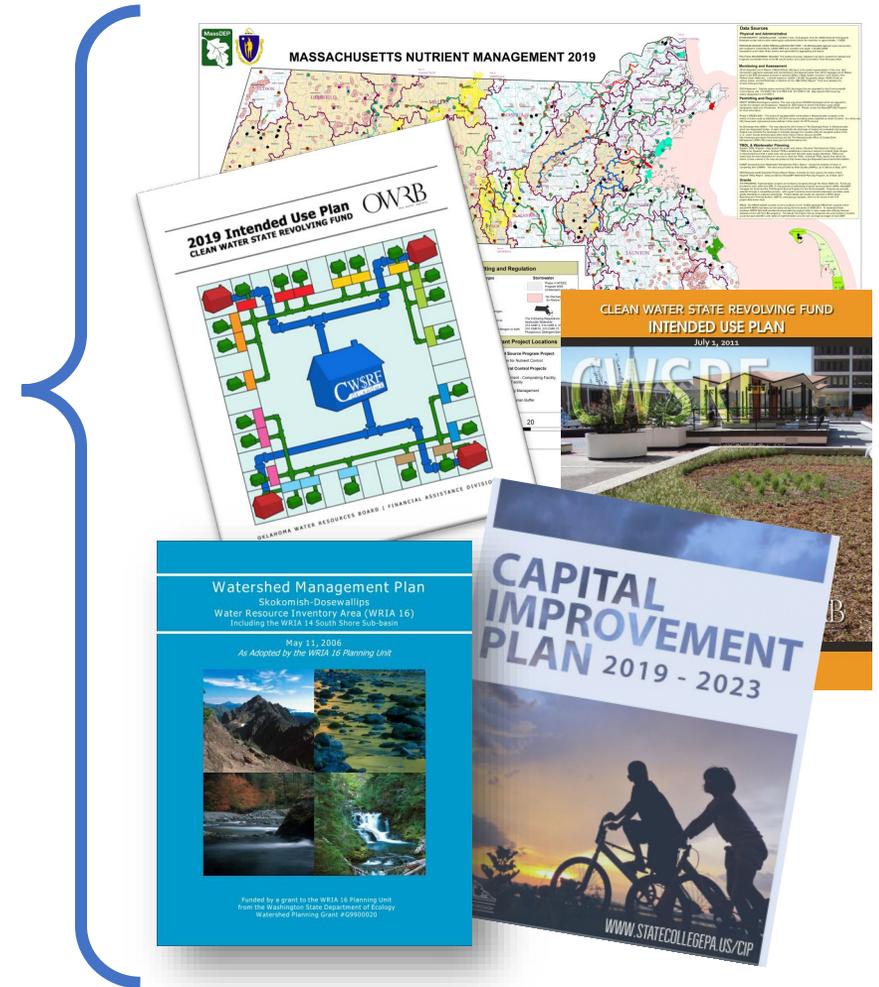
For the purposes of the CWNS, decentralized systems may be onsite (individual) or clustered. Clustered systems may include multifamily septic systems or package plants.



EPA leaves it to the state's discretion to decide whether a given package plant should be considered a decentralized system

# Submitting CWNS Projects

- Needed projects / activities must
  - ✓ address a water quality or human health problem
  - ✓ be supported with documentation
- Supporting document(s) describe the **solution** to the pollution problem (i.e., the project/activity) and the solution's **costs**
- Other options for documentation:
  - Small community form
  - Approved state-specific methods
  - Approved state-specific documentation
  - **EPA cost estimation tools**



# Cost Estimation Tool for Decentralized Needs

**Purpose**: simple estimation of a state's decentralized needs – not intended to estimate actual site construction costs

**Approach**: per-person unit cost-based equation for either New or Rehabilitation change types

Average costs for new or rehabilitation are based on:

1. 2012 CWNS cost curves,
2. 2012 documented costs,
3. data from the Clean Water Benefits Reporting (CBR) System,
4. and vendor and online searches.

# Cost Estimation Tool for Decentralized Needs

1. Select change type: (1) New or Replace or (2) Rehabilitation
2. Enter population served **OR** number of systems (“equivalent dwelling units”) and the average people per household (based on US census)

$$\mathbf{Cost} = CPI * LF_{city} * System\ Cost_{change\ type} * Population\ Served$$

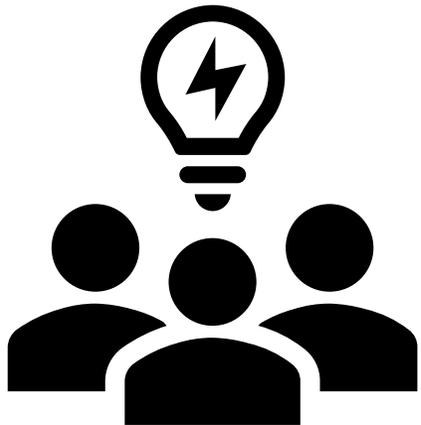


Time and location  
correction factors

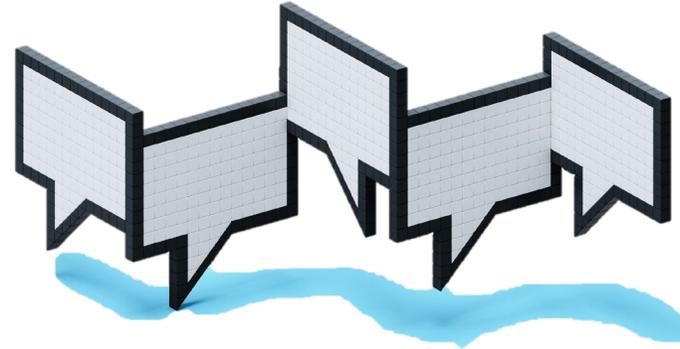


\$4,032 for New or Replace  
\$2,215 for Rehabilitation

Reminder: Use of the tool is NOT required – states are encouraged to submit their own methods



Are you an industry/ research group or state agency?

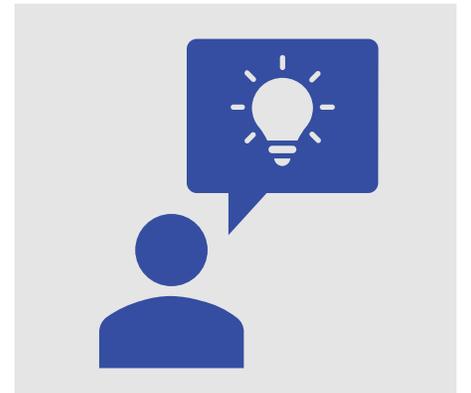
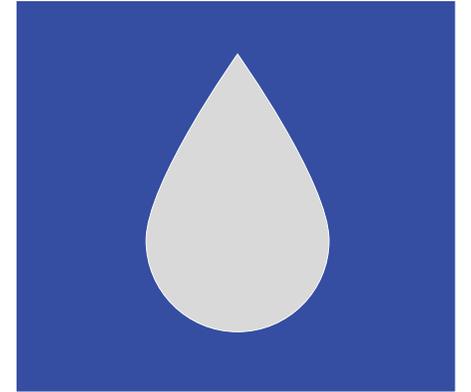


Have data or ideas for capturing your state's needs?

Contact your state's CWNS coordinator

<https://www.epa.gov/cwns/state-cwns-program-contacts>

# Any Questions?



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