

Drinking Water Arrearage Survey Results

September 16, 2021

Division of Drinking Water
Needs Analysis Unit



PREPARED BY

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About the Drinking Water Arrearage Survey

- In July 2021 the State Water Board received \$985 million for a Water and Wastewater Arrearage Payment Program.
 - The Program prioritizes meeting drinking water arrearage needs first, followed by wastewater if sufficient funds are available.
- Legislation required the State Water Board to survey community water systems (CWSs) to determine statewide arrearage needs and use this information to determine an allocation formula.
- The State Water Board launched the Drinking Water Arrearage Survey on August 11, 2021 to collect this information.

Drinking Water Arrearage Survey Outreach

- Open to **2,871(44)** Community Water Systems for **30 days**.
- State Water Board emailed CWS contacts **6** times about the survey through listserv and hosted **3** informational webinars and **1** Q&A session.
- Direct outreach to systems was conducted by:
 - 2 DDW Arrearage Units & All District Staff
 - LPA Staff
 - 3 Technical Assistance Organizations
- Approximately **2,504 (87%)** systems contacted directly (phone or email). Not 100% because staff did not reach out to systems that had completed survey or systems that don't charge for water.

Drinking Water Arrearage Survey Technical Assistance

- The State Water Board approved a total of **93** technical assistance requests (28 were received 9/7 through 9/10).
- Of the 93 technical assistance requests, **88 (95%)** had surveys submitted by the deadline.
- There were **5** that unfortunately did not submit the survey. Of the five systems that didn't submit, only **1** system charges for water.

Summary of Drinking Water Arrearage Survey Results

PARTICIPATION

CWS Completed Survey:
2,293 out of 2,844 (80.62%)

CWS Completed Survey that Charge for Water:
1,845 out of 2,128 (86.70%)

CWS Non-Responders that Charge for Water: **283 out of 2,128 (13.30%)**

ARREARAGES

Total Reported Arrearages:
\$315,400,661

Total Reported Late Fees: **\$16,009,161**

Estimated Arrearages for Non-Responders: **\$8,320,000**

Total ***Estimated*** Need with Admin Costs (late fees *excluded*): **\$333,186,952**

Drinking Water Arrearage Survey Analysis

For the purpose of the analysis, there were a handful of survey responders and non-responders that DDW staff are reaching out to in order to address data inconsistencies.

- 10 systems responded to the survey and were excluded from the analysis due to data inconsistencies.
- 11 systems did not respond to the survey, but may be included in future analysis after outreach concludes.

1. SURVEY RESULTS FROM REPORTERS



Contents

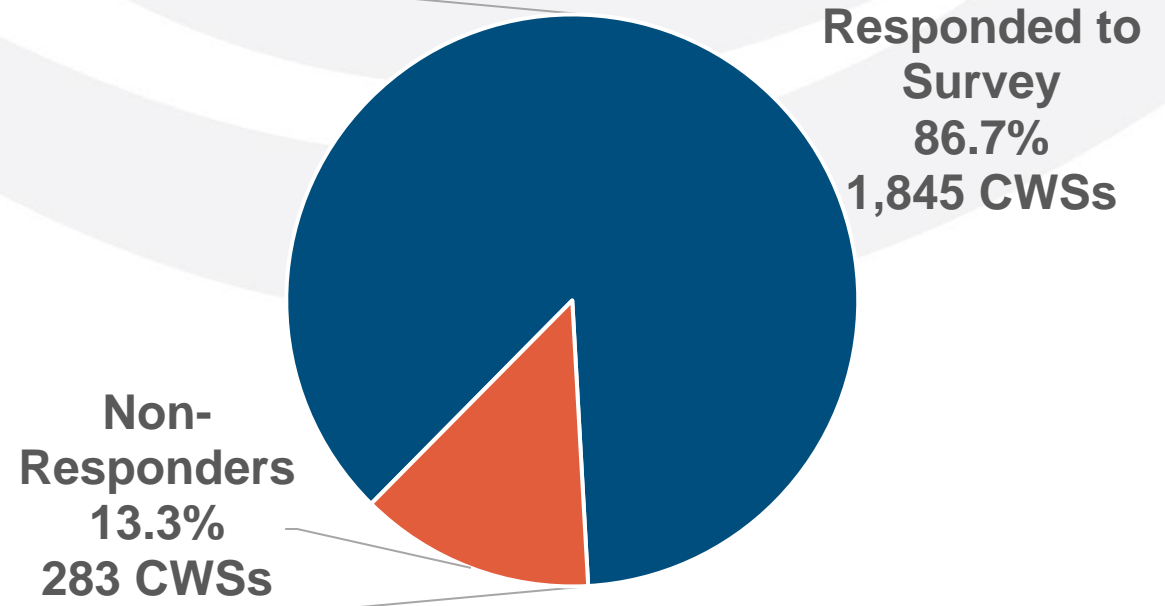
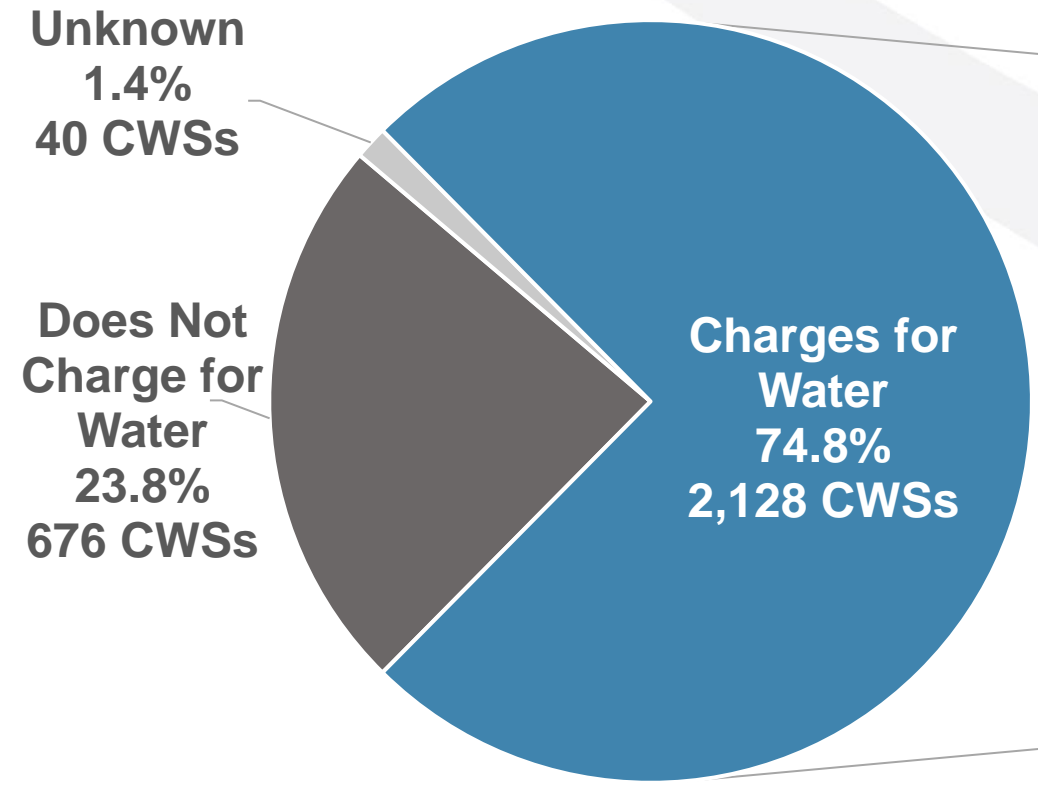
- **Survey Participation** (Slide 11)
- **Reported Accounts in Arrears** (Slide 17)
- **Reported Arrearages – Excluding Late Fees** (Slide 23)
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**DATA
ANALYSIS**

Survey Participation

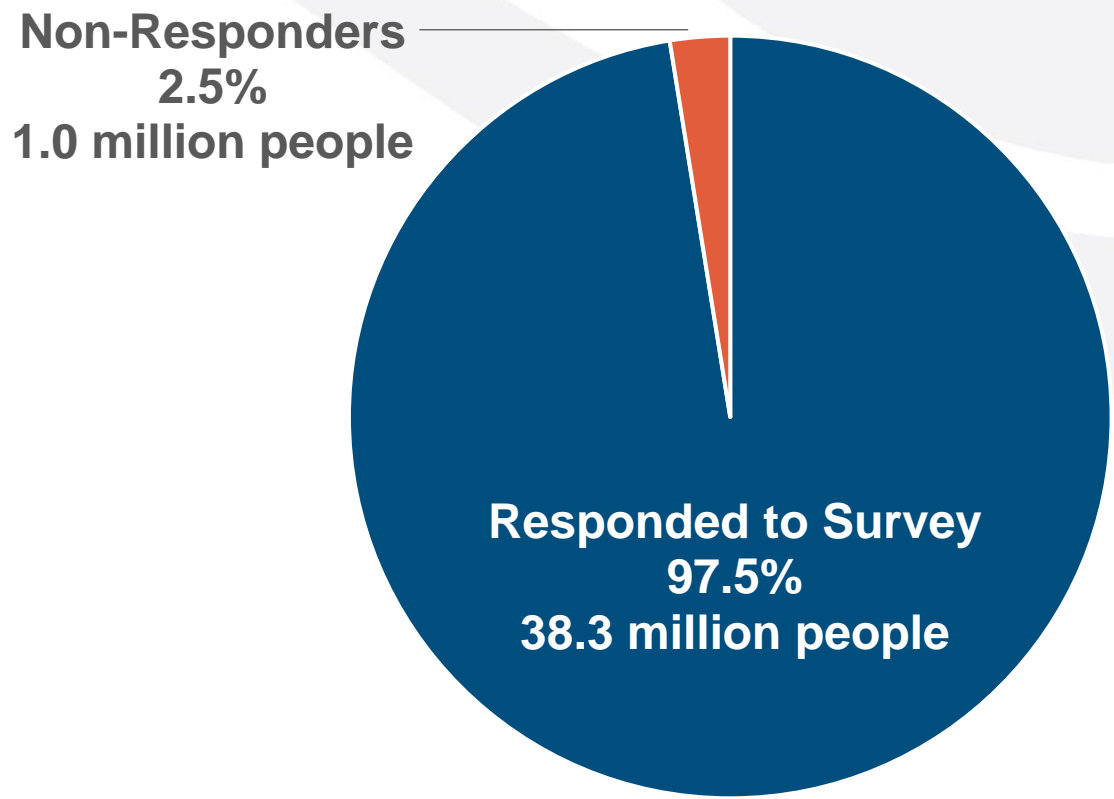
Survey Completion: CWSs that Charge for Water



2,128 CWSs that Charge for Water

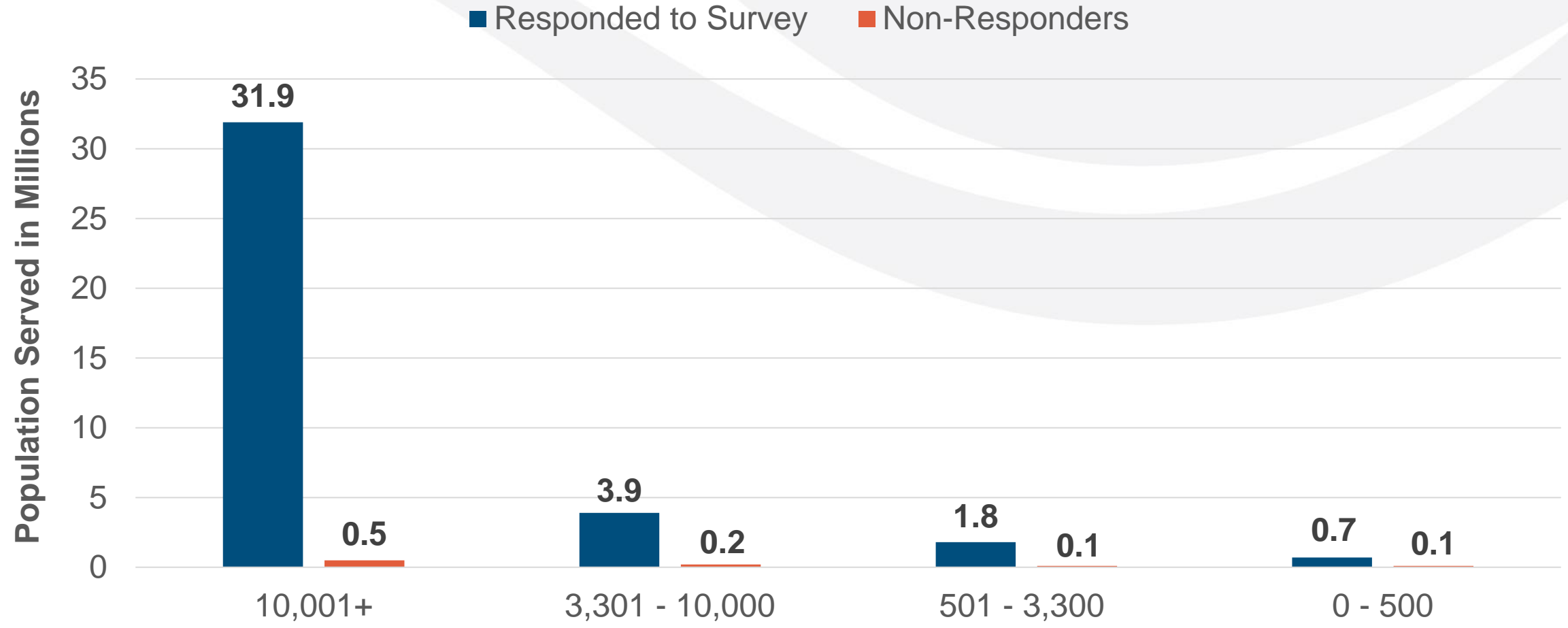
2,844 CWSs

Survey Completion: Population of CWSs that Charge for Water



2,128 CWSs that Charge for Water

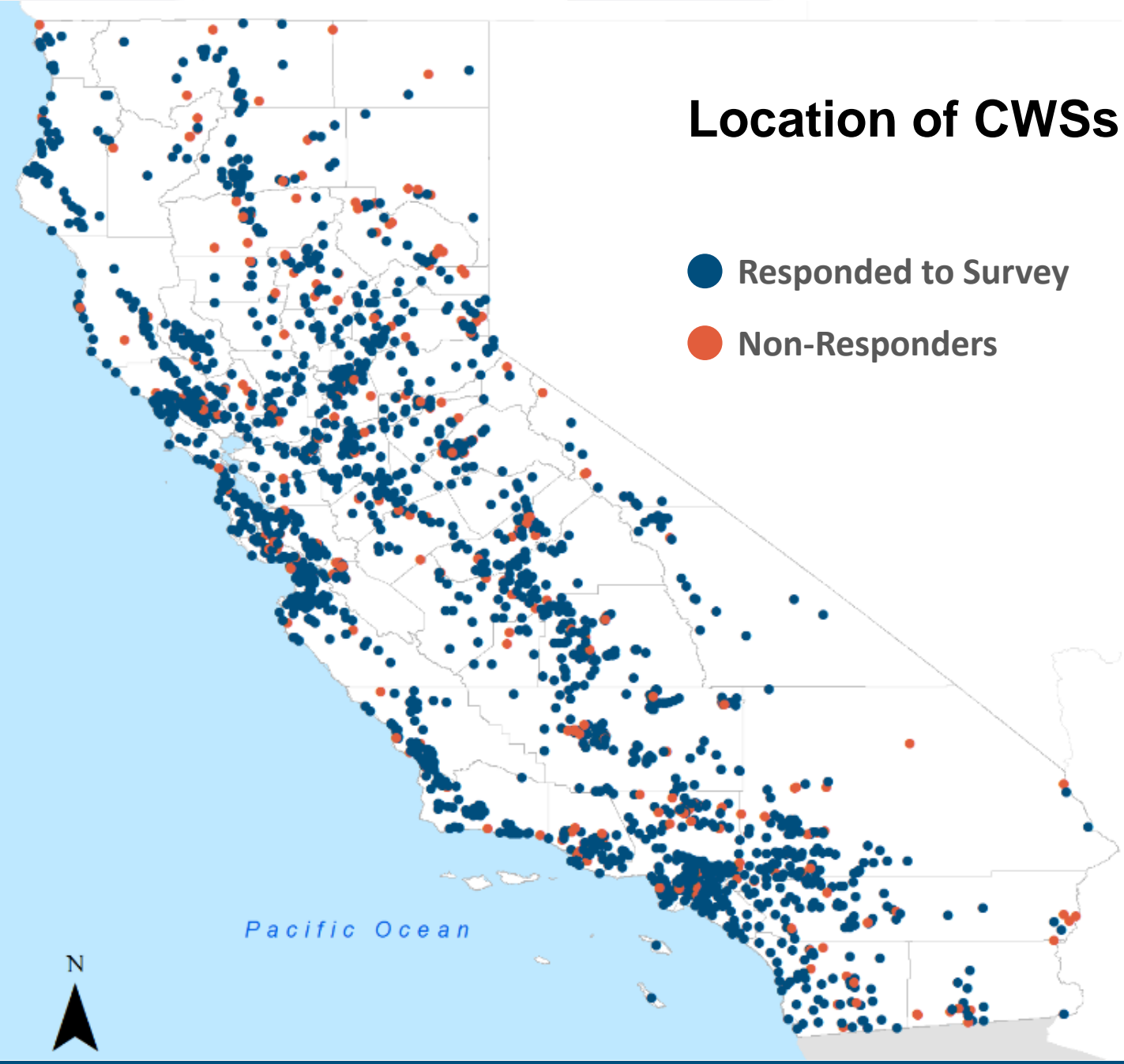
CWSs (that charge for water) Survey Responders by Population Served



Systems by Number of Service Connections

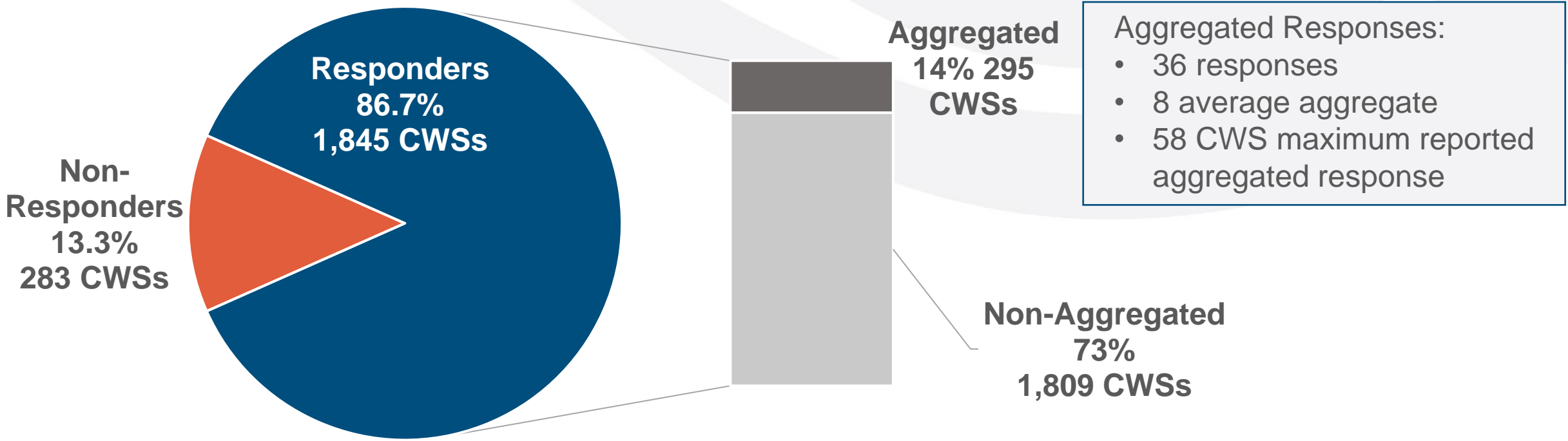
Location of CWSs that Charge for Water

- Responded to Survey
- Non-Responders



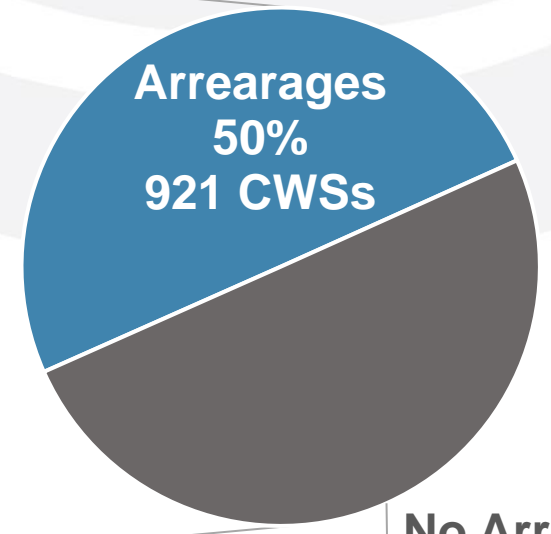
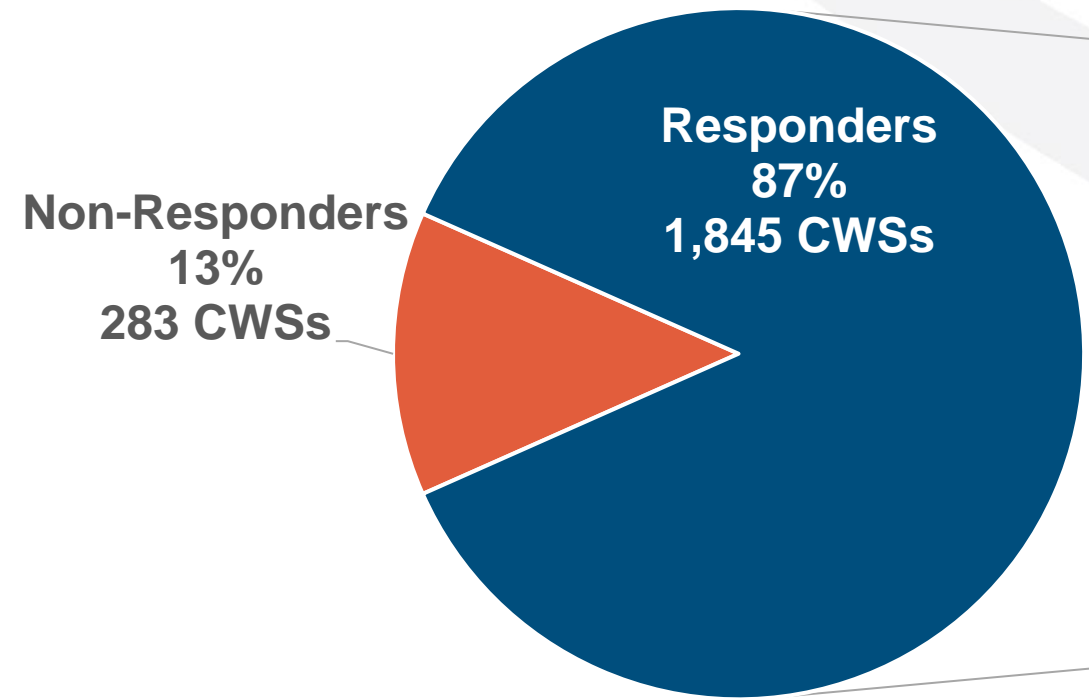
Approximately 45 community water systems are not included due to insufficient location data.

Survey Responders that Charge for Water: Number of Aggregated Survey Responses



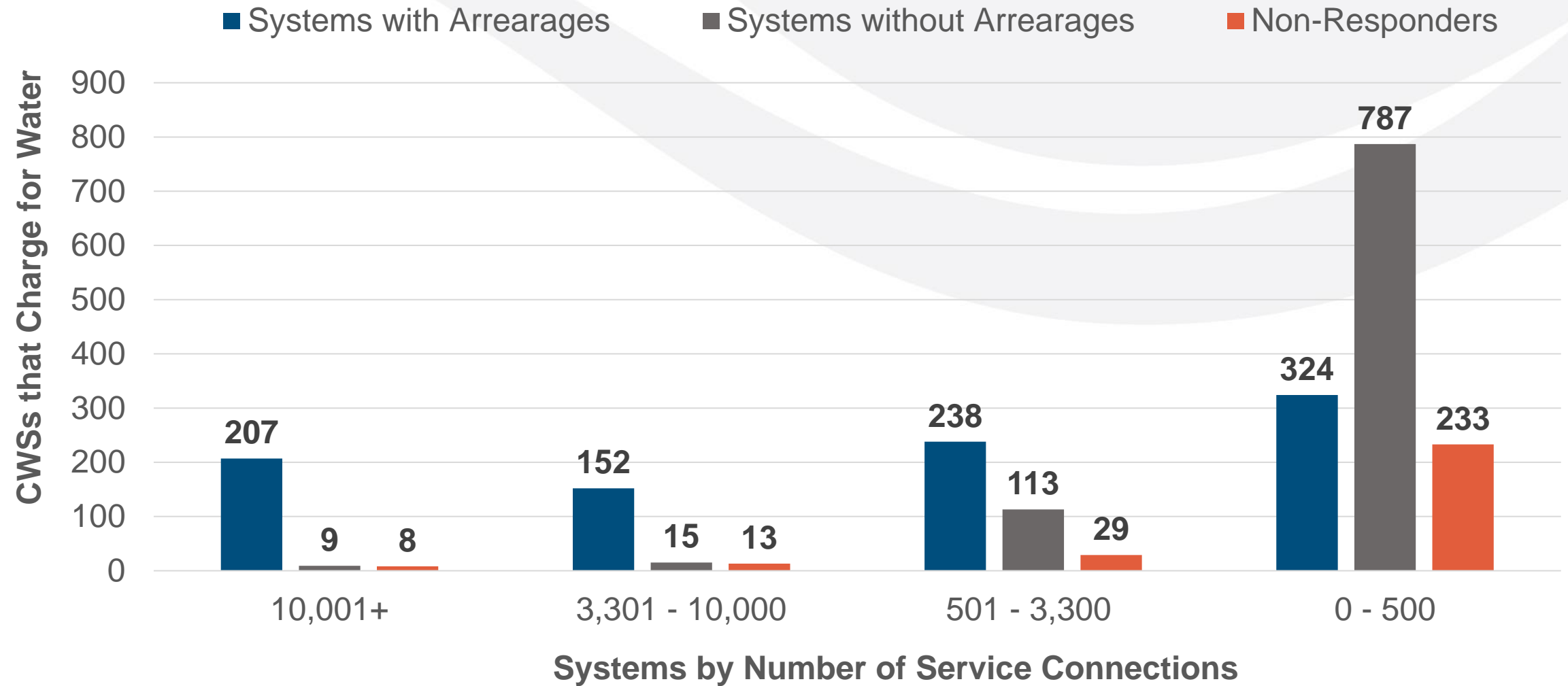
Reported Accounts in Arrears

Survey Responders that Charge for Water & Reported Arrearages



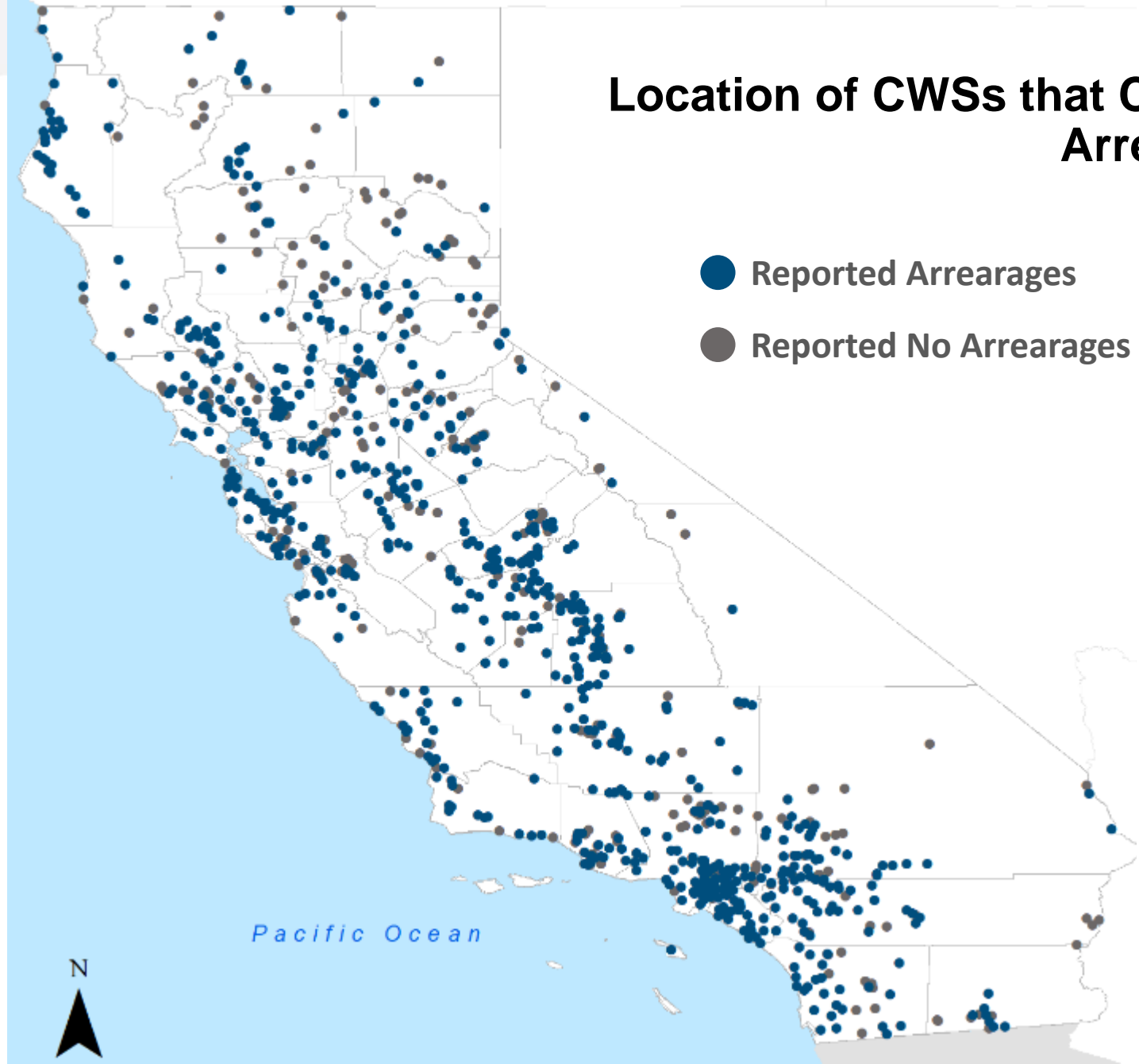
No Arrearages
50%
924 CWSs

Survey Responders that Charge for Water & Reported Arrearages



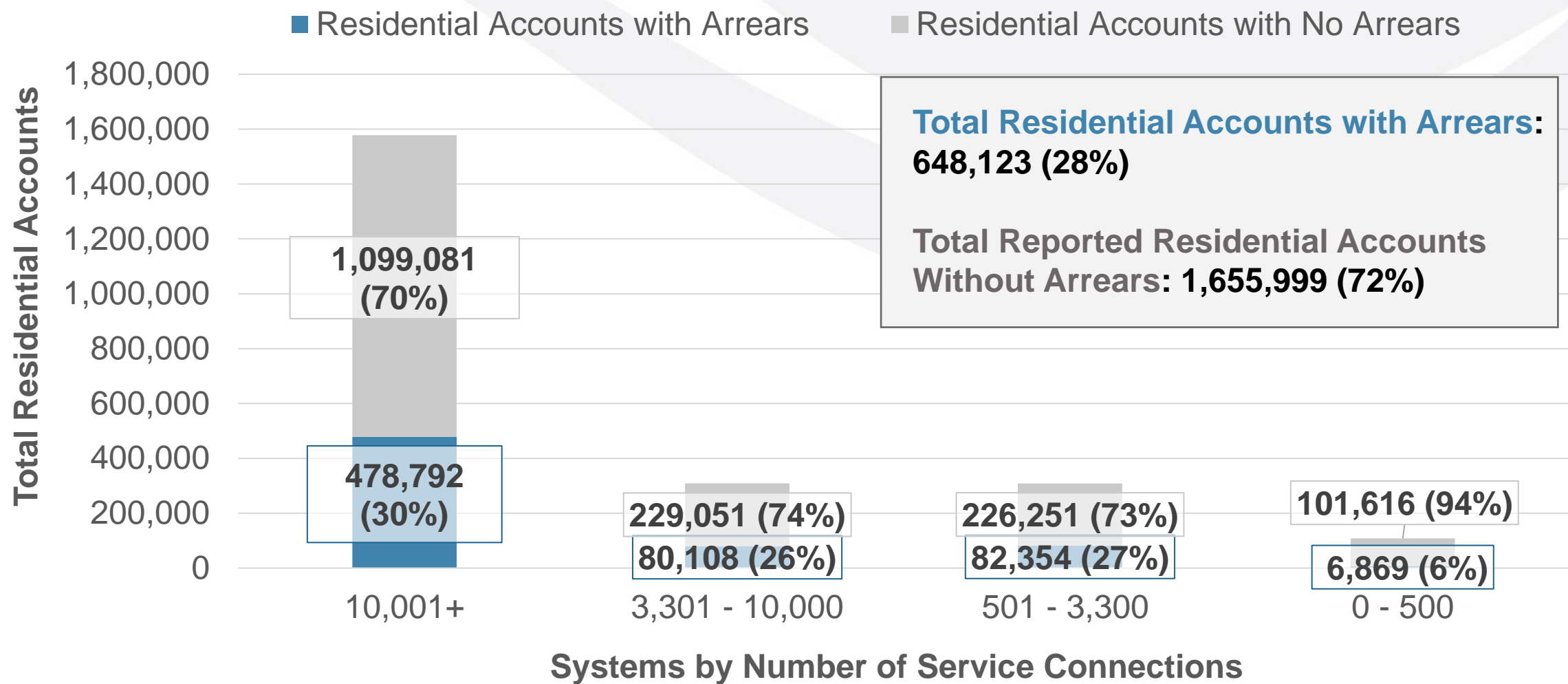
Location of CWSs that Charge for Water & Reported Arrearages

- Reported Arrearages
- Reported No Arrearages

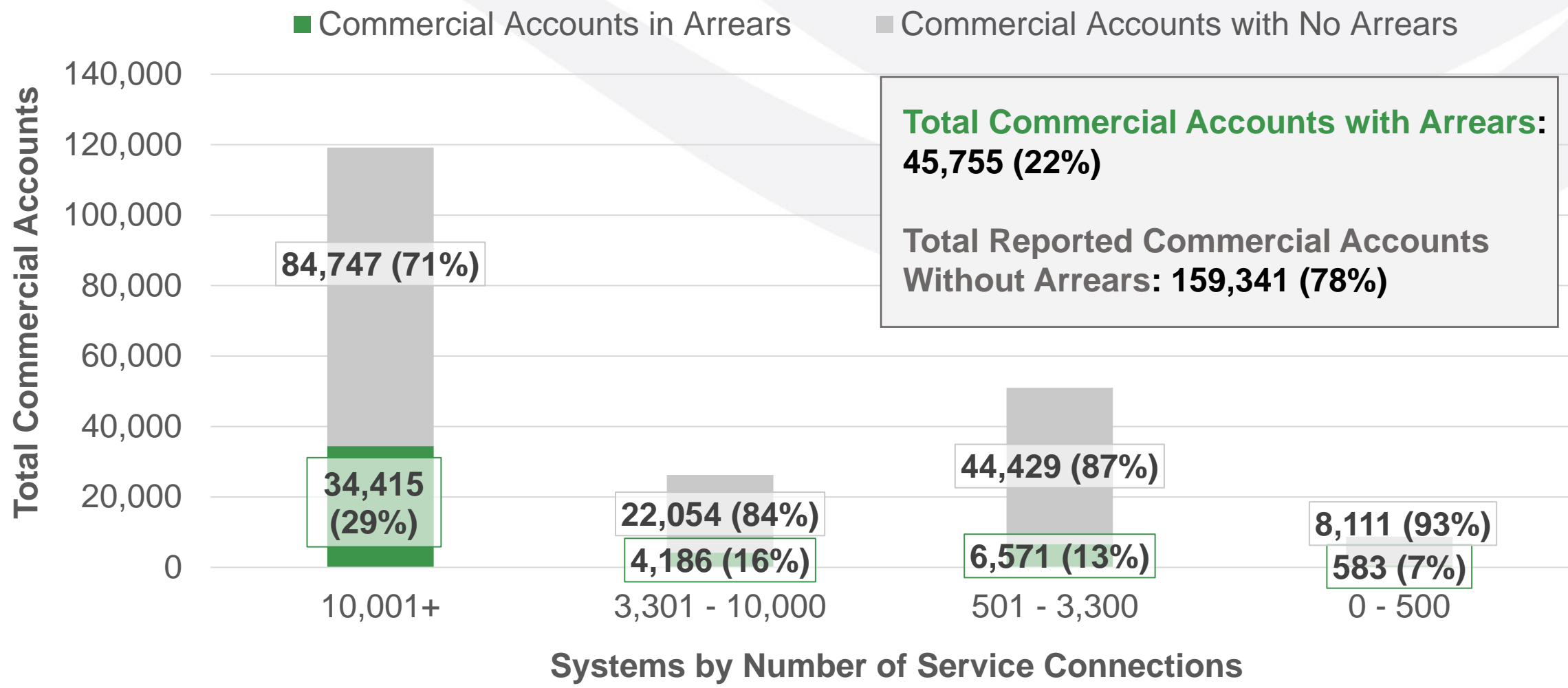


Approximately 45 community water systems are not included due to insufficient location data.

Reported Residential Accounts in Arrears



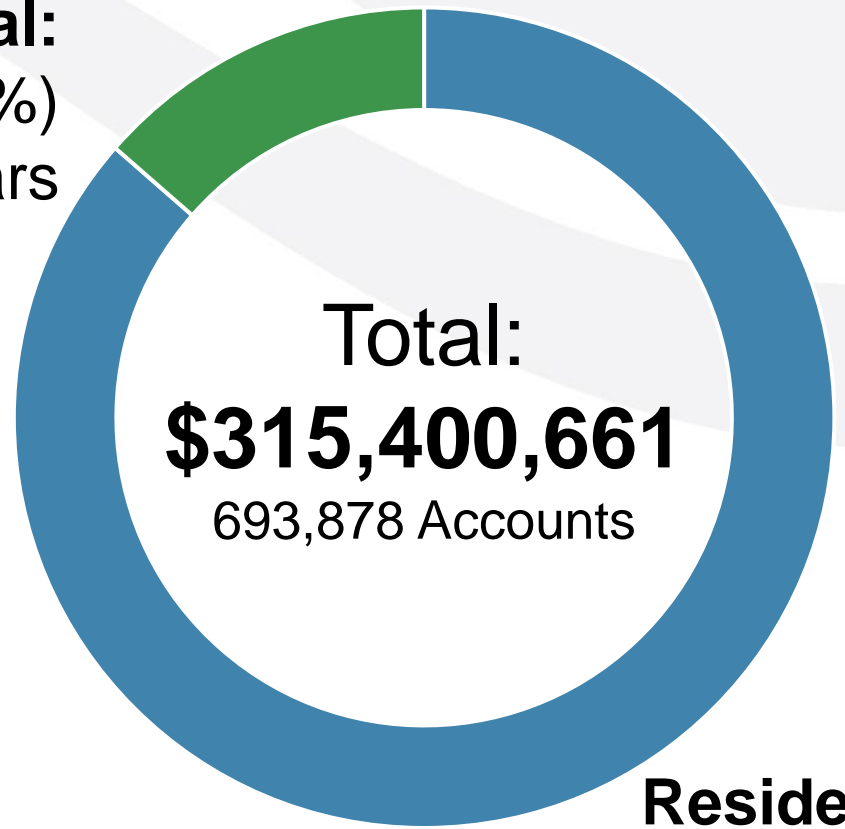
Reported Commercial Accounts in Arrears



Reported Arrearages Excluding Late Fees

Survey Responders that Charge for Water: Total Residential & Commercial Arrearages (late fees excluded)

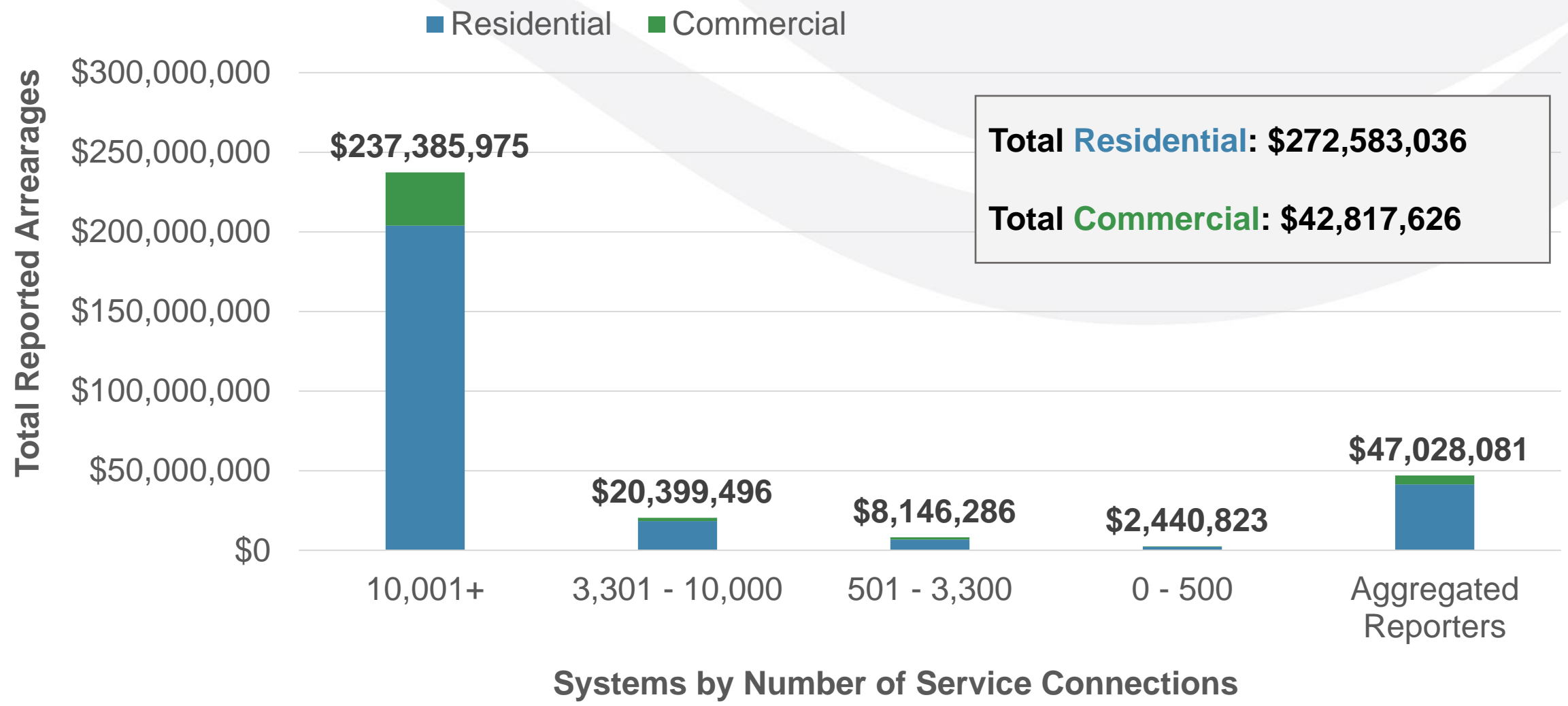
Commercial:
\$42,817,626 (14%)
45,755 (7%) Accounts in Arrears



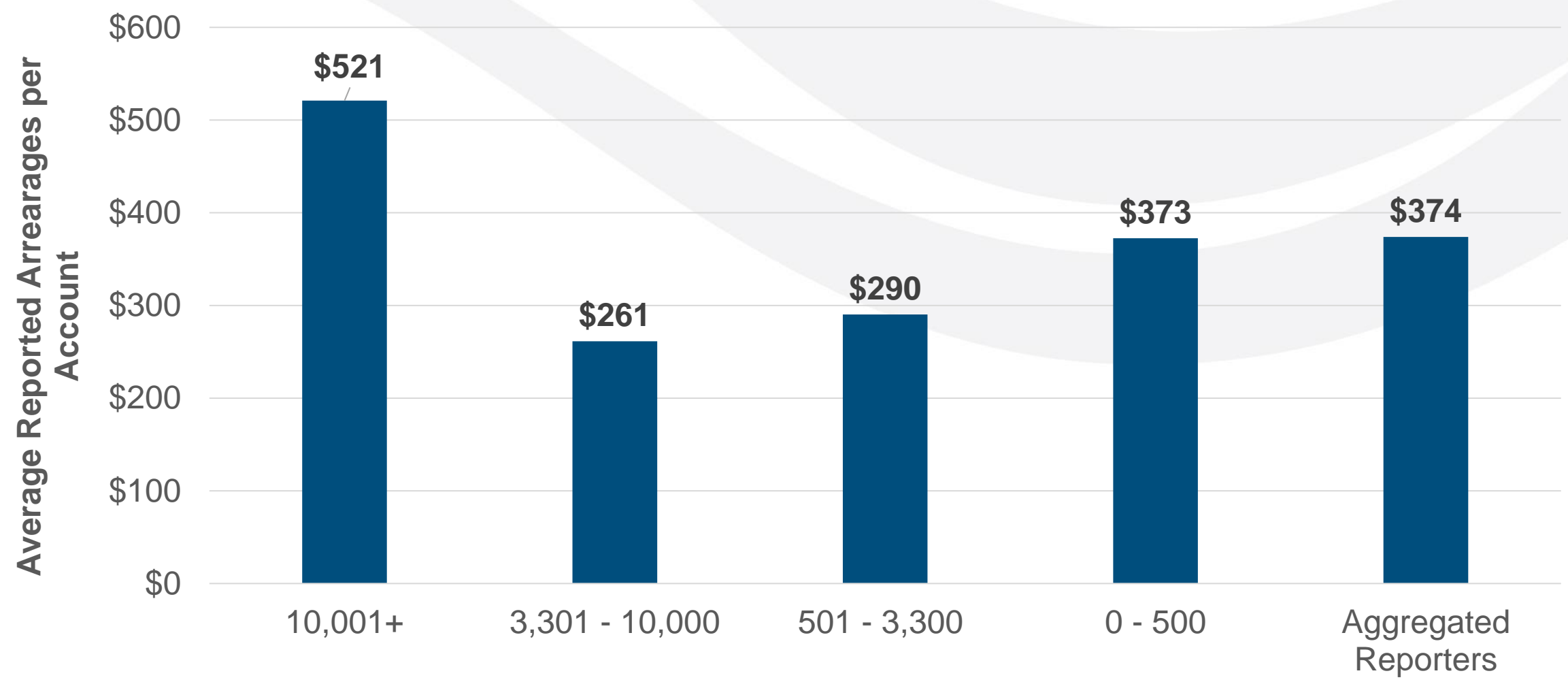
Total:
\$315,400,661
693,878 Accounts

Residential:
\$272,583,036 (86%)
648,123 (8%) Accounts in Arrears

Survey Responders that Charge for Water: Total Residential & Commercial Arrearages Reported by System Size (late fees excluded)

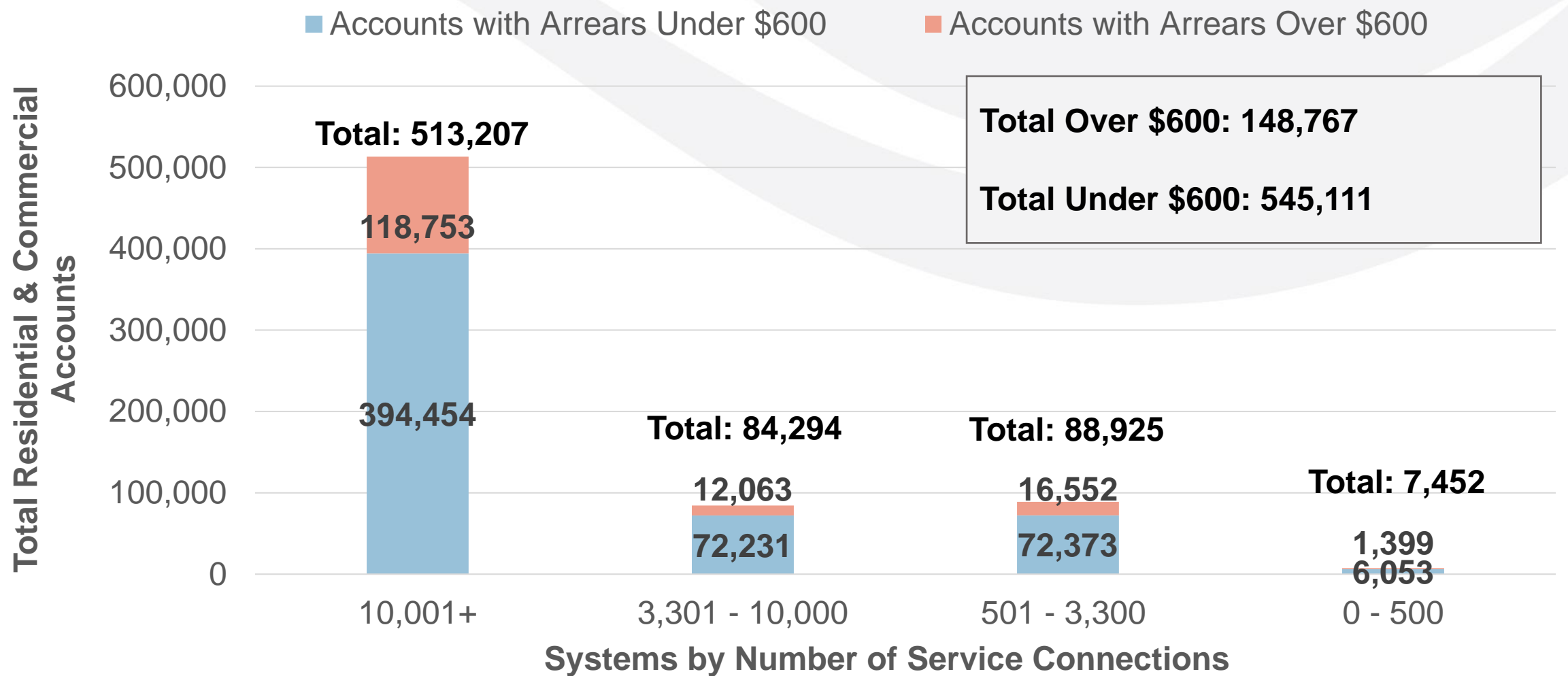


Average Total Arrearage per Account for Reporters

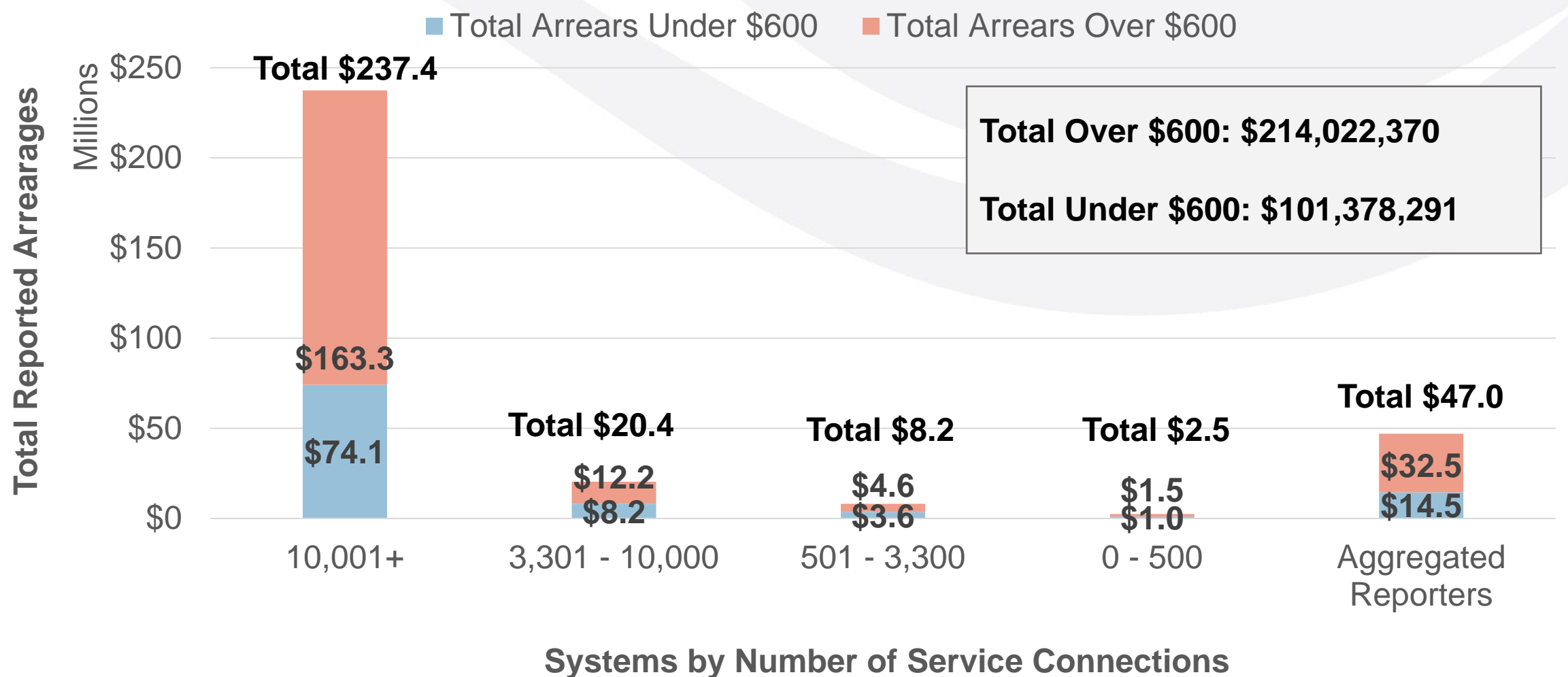


Systems by Number of Service Connections

Survey Responders that Charge for Water: Total Residential & Commercial Accounts with Arrearages Over/Under \$600 by Number of Service Connections (*late fees excluded*)

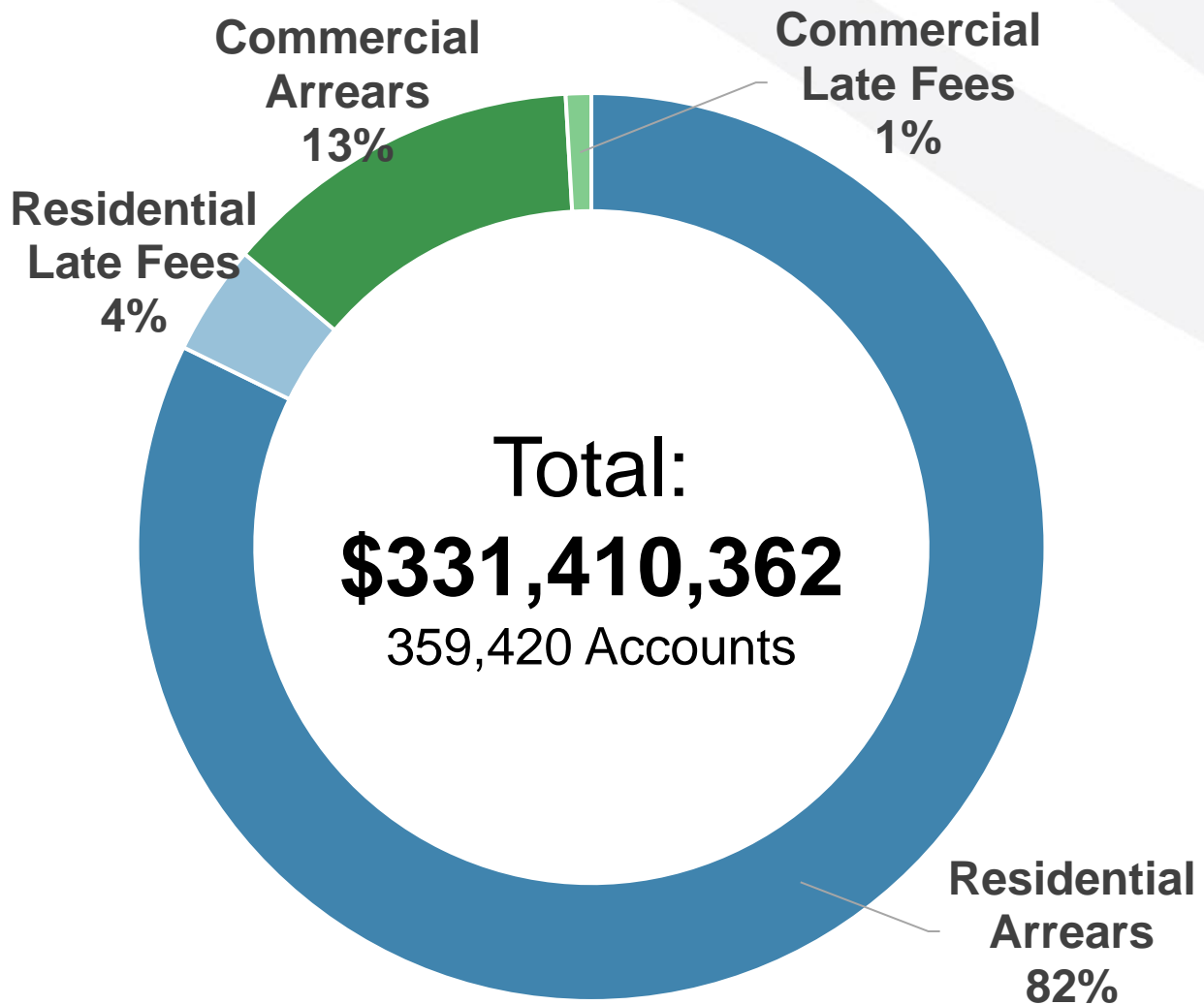


Survey Responders that Charge for Water: Total Residential & Commercial Arrearages Over/Under \$600 by Number of Service Connections (*late fees excluded*)



Reported Arrearages Including Late Fees

Survey Responders: Total Residential & Commercial Arrearages (late fees included)

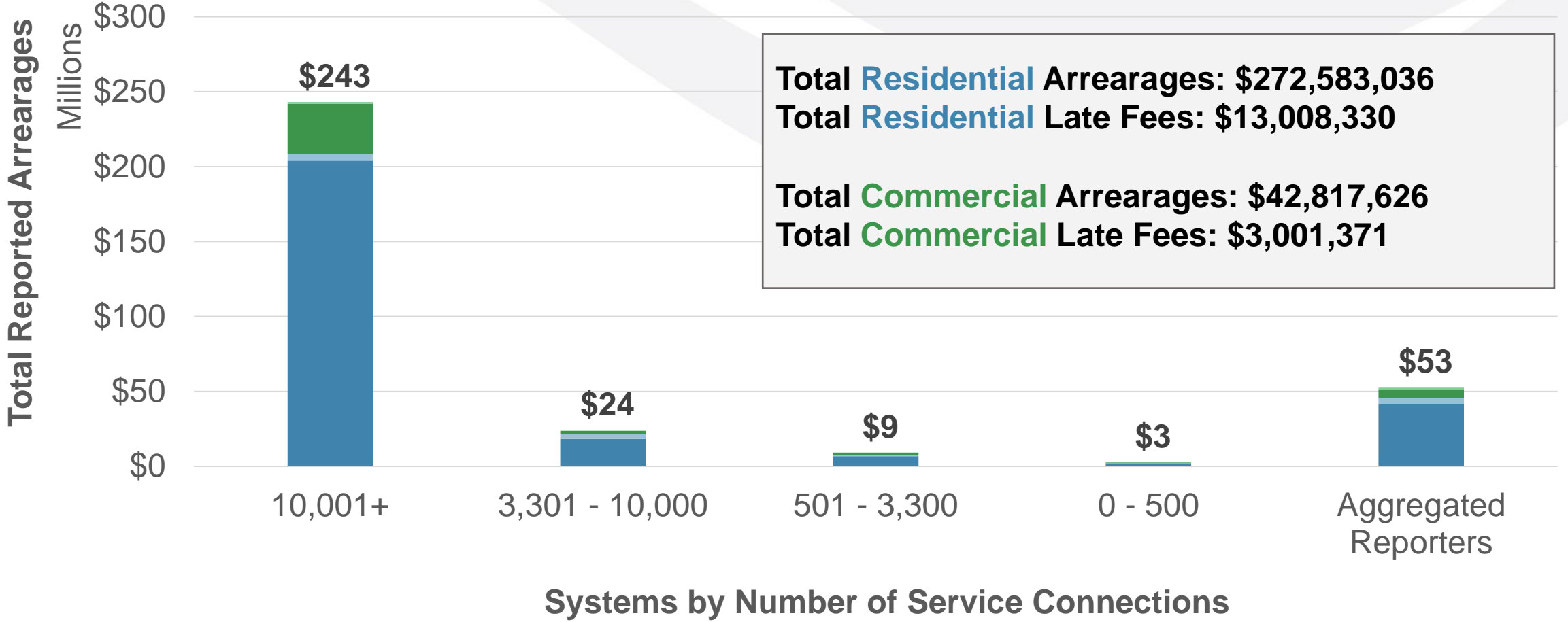


Total Commercial:
\$45,818,996 (14%)
45,755 (7%) Accounts in Arrears

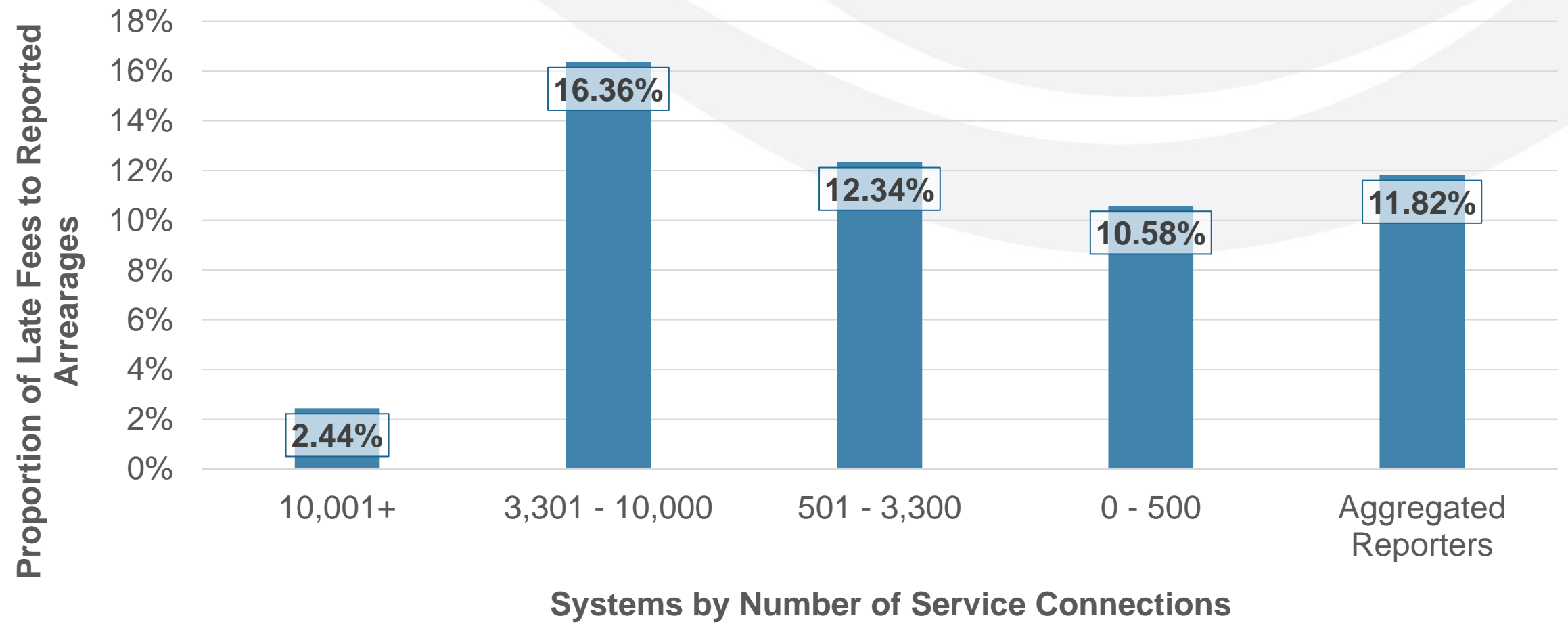
Total Residential:
\$285,591,366 (86%)
648,123 (8%) Accounts in Arrears

Survey Responders: Total Residential & Commercial Arrearages with Late Fees

- Residential Arrearages
- Commercial Arrearages
- Residential Late Fees
- Commercial Late Fees



Survey Responders: Proportion of Total Residential & Commercial Late Fees to Reported Arrearages

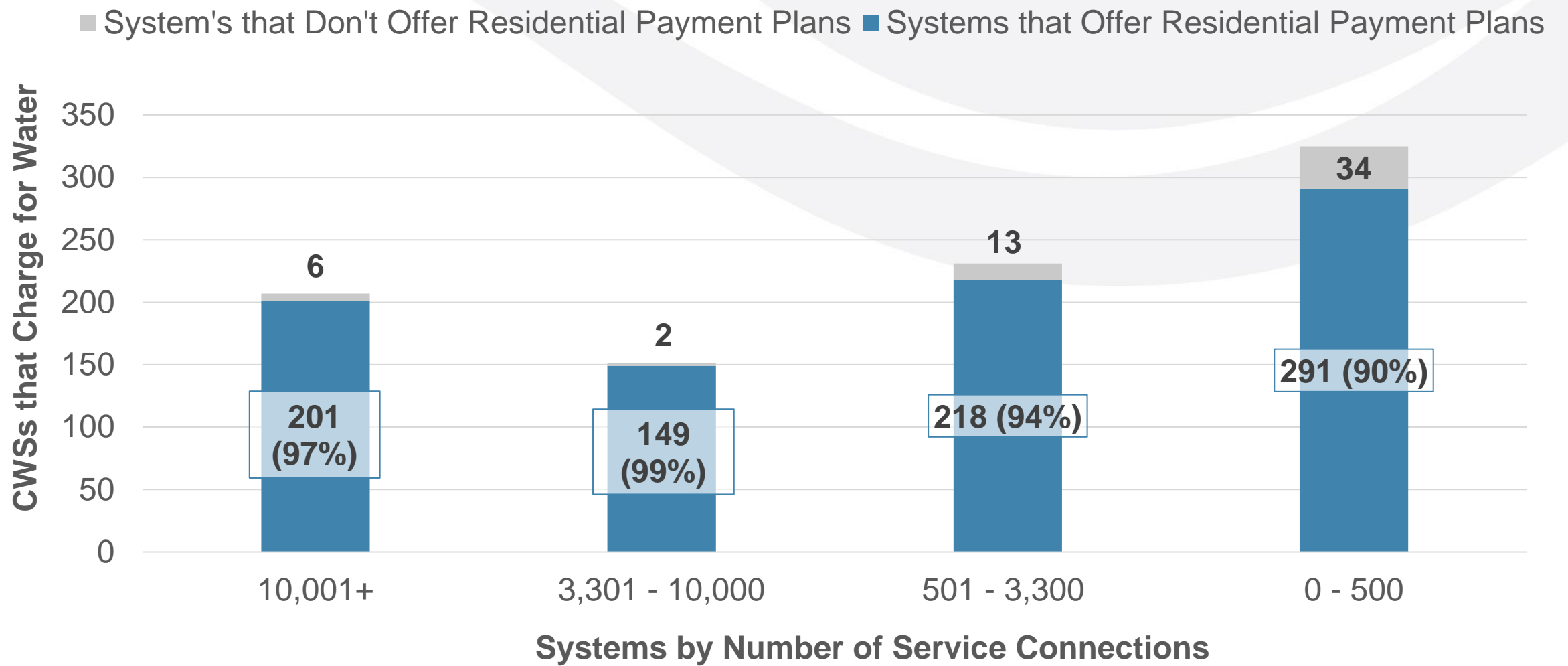


Survey Responders: Proportion Range of Total Late Fees to Reported Arrearages

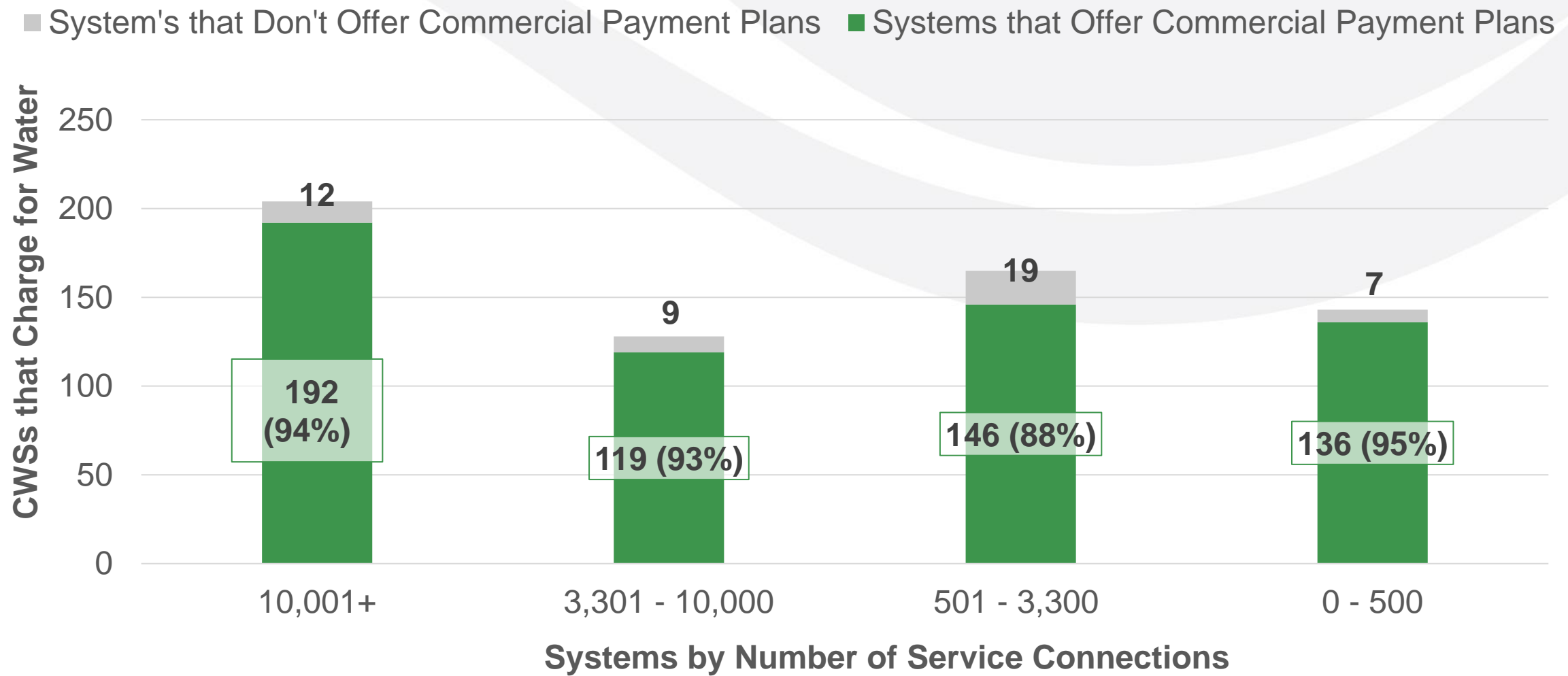
Avg. Late Fee		Range
57.30%		0.3 – 2,812.50%
After filtering out over 100%		Range
25.55%		0.3 - 100%

Payment Plans & Shut-Off Protection

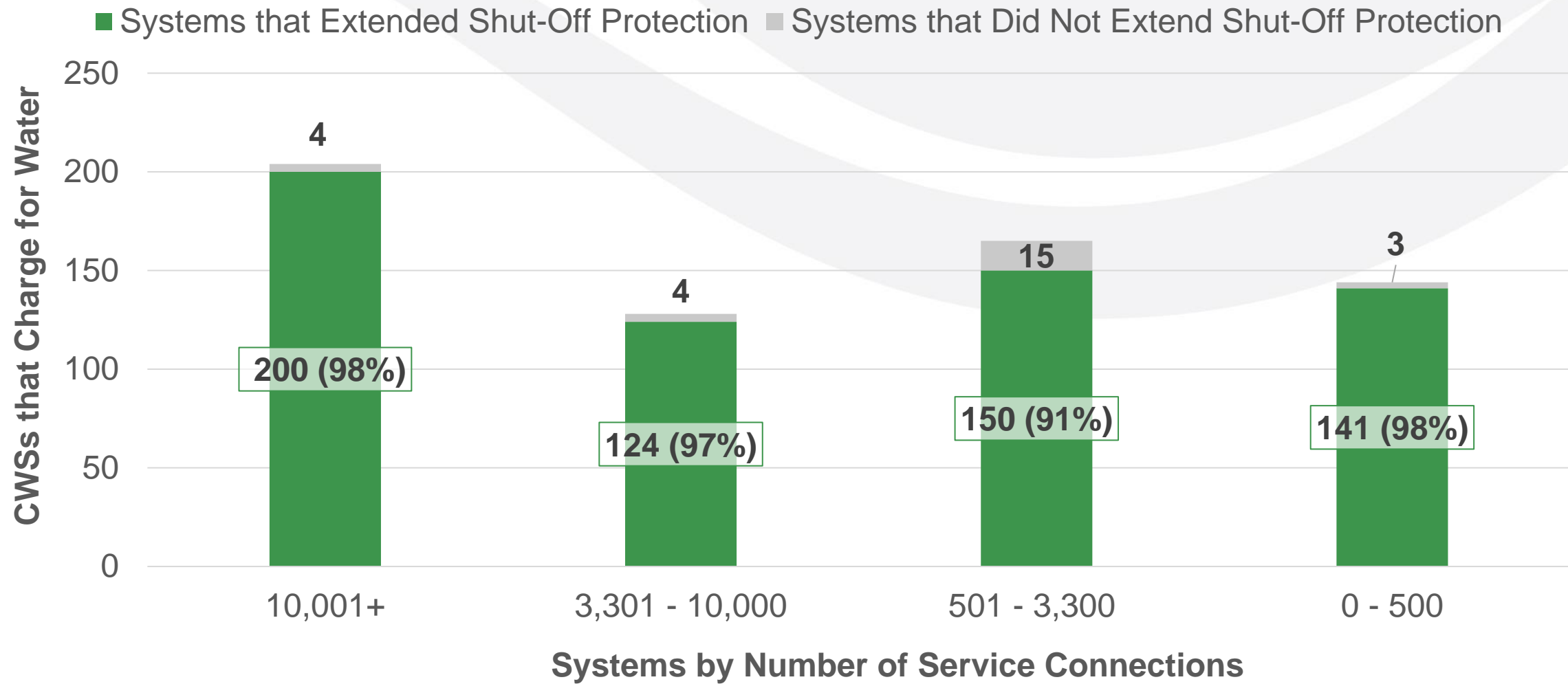
Survey Responders that Charge for Water & Reported Arrearages: Number of Systems that Offer Residential Payment Plans



Survey Responders that Charge for Water & Reported Arrearages: Number of Systems that Offer Commercial Payment Plans

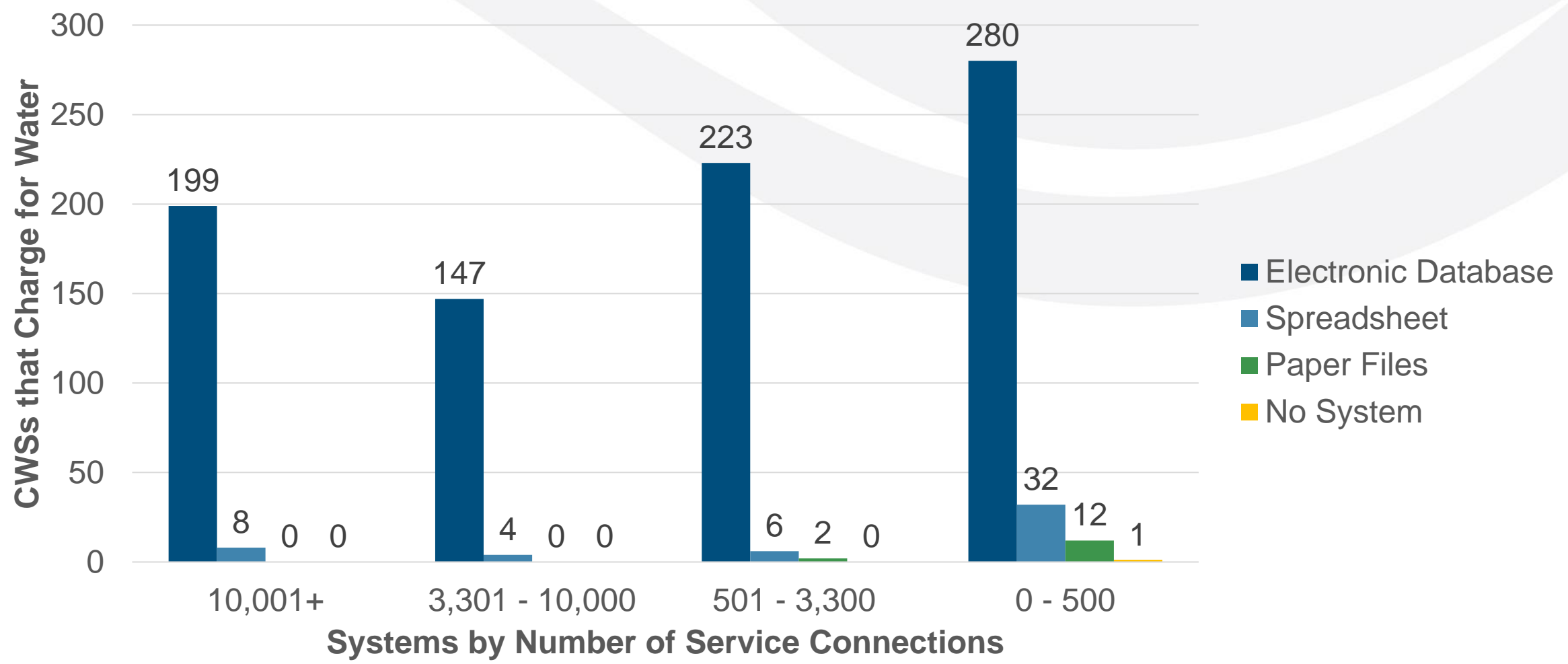


Survey Responders that Charge for Water & Reported Arrearages: Number of Systems that **Extended Shut-Off Protection to Additional Commercial Customers**

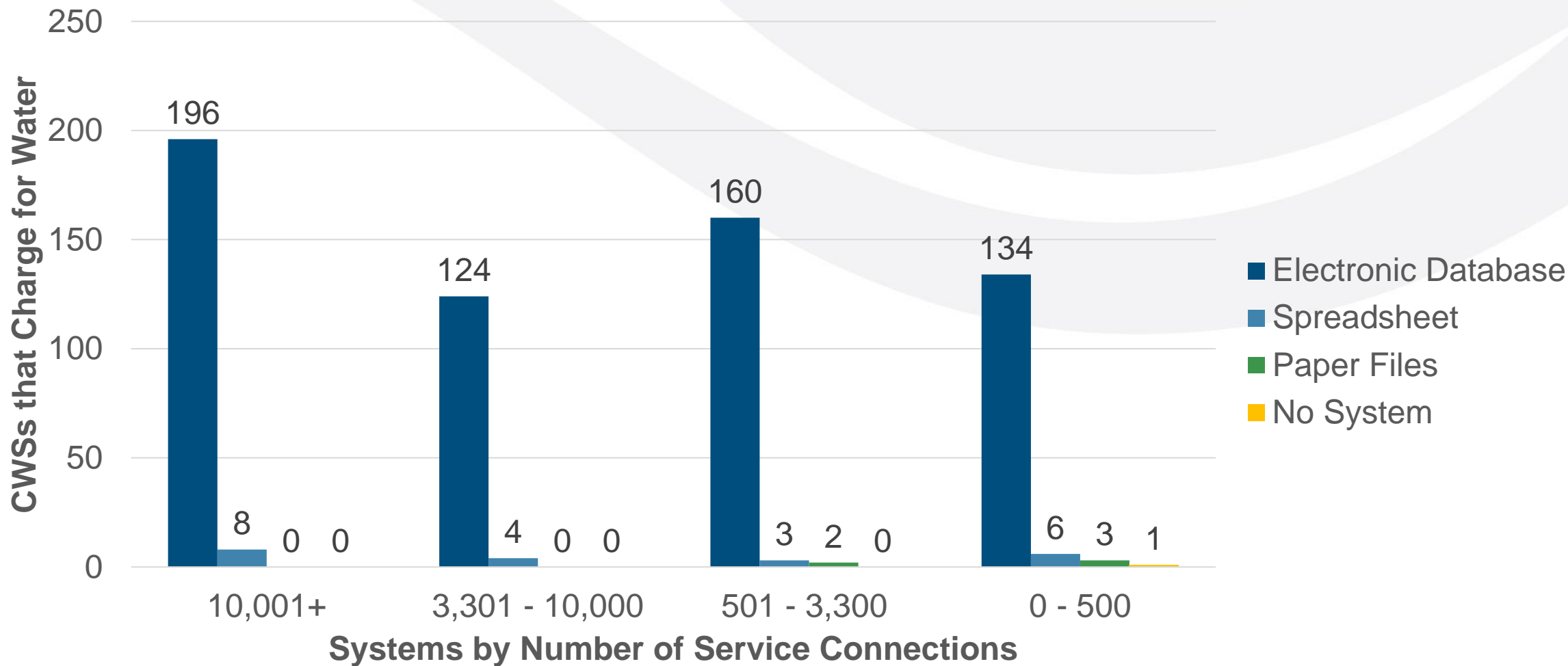


Available Documentation & Arrearage Reporting Information

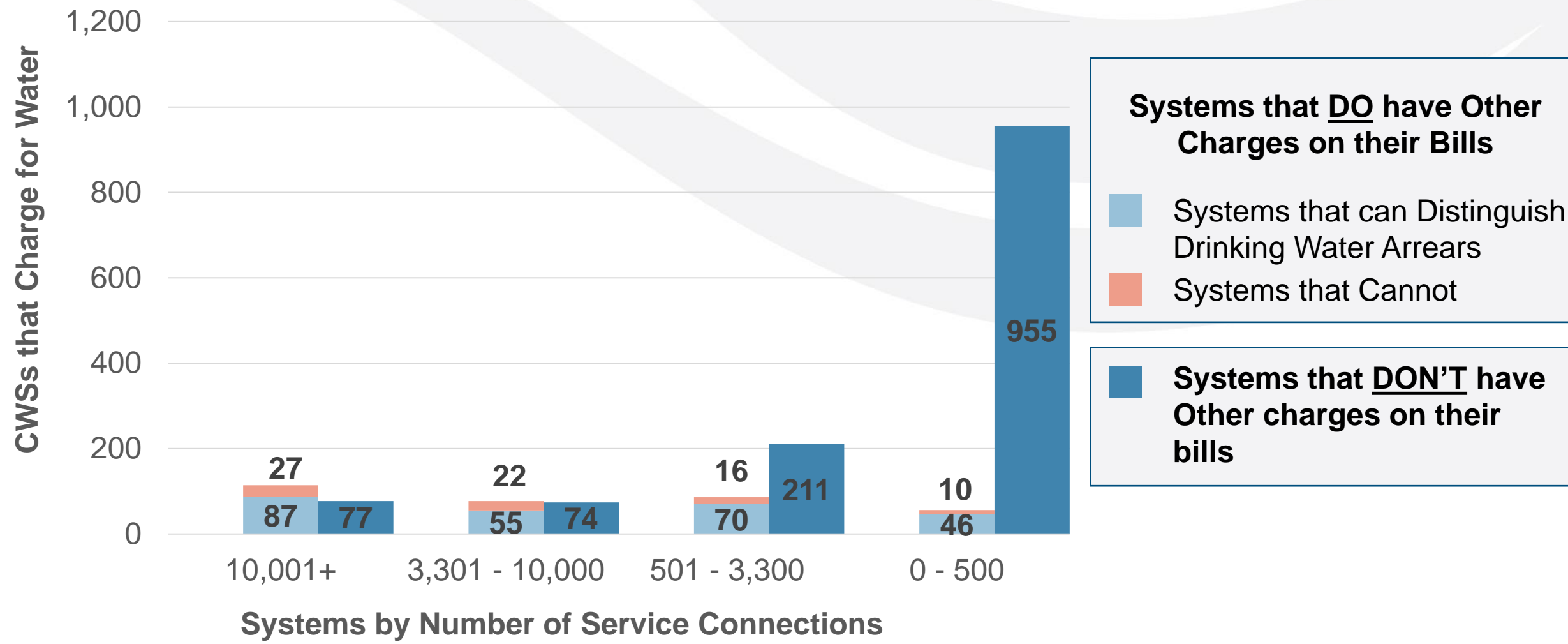
Survey Responders: The Types of Residential Accounting Systems Used by Water Systems with Arrears



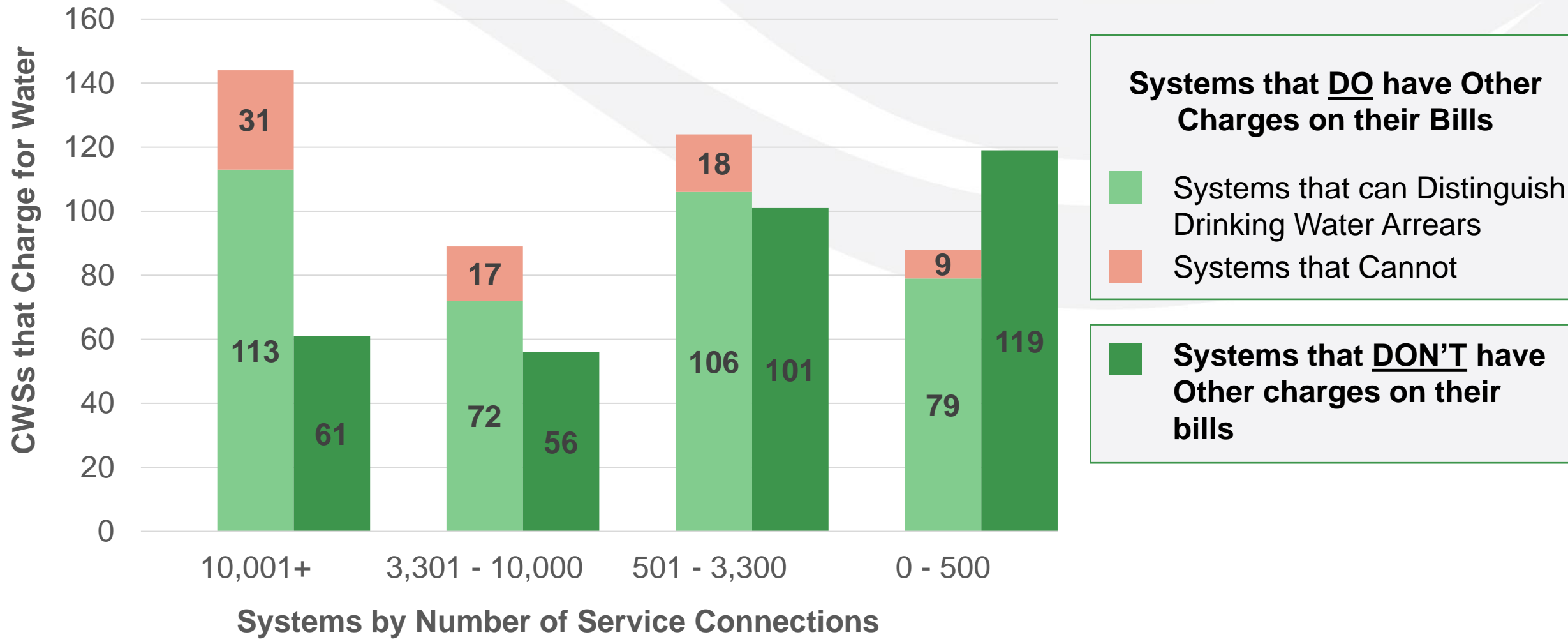
Survey Responders: The Types of Commercial Accounting Systems Used by Water Systems with Arrears



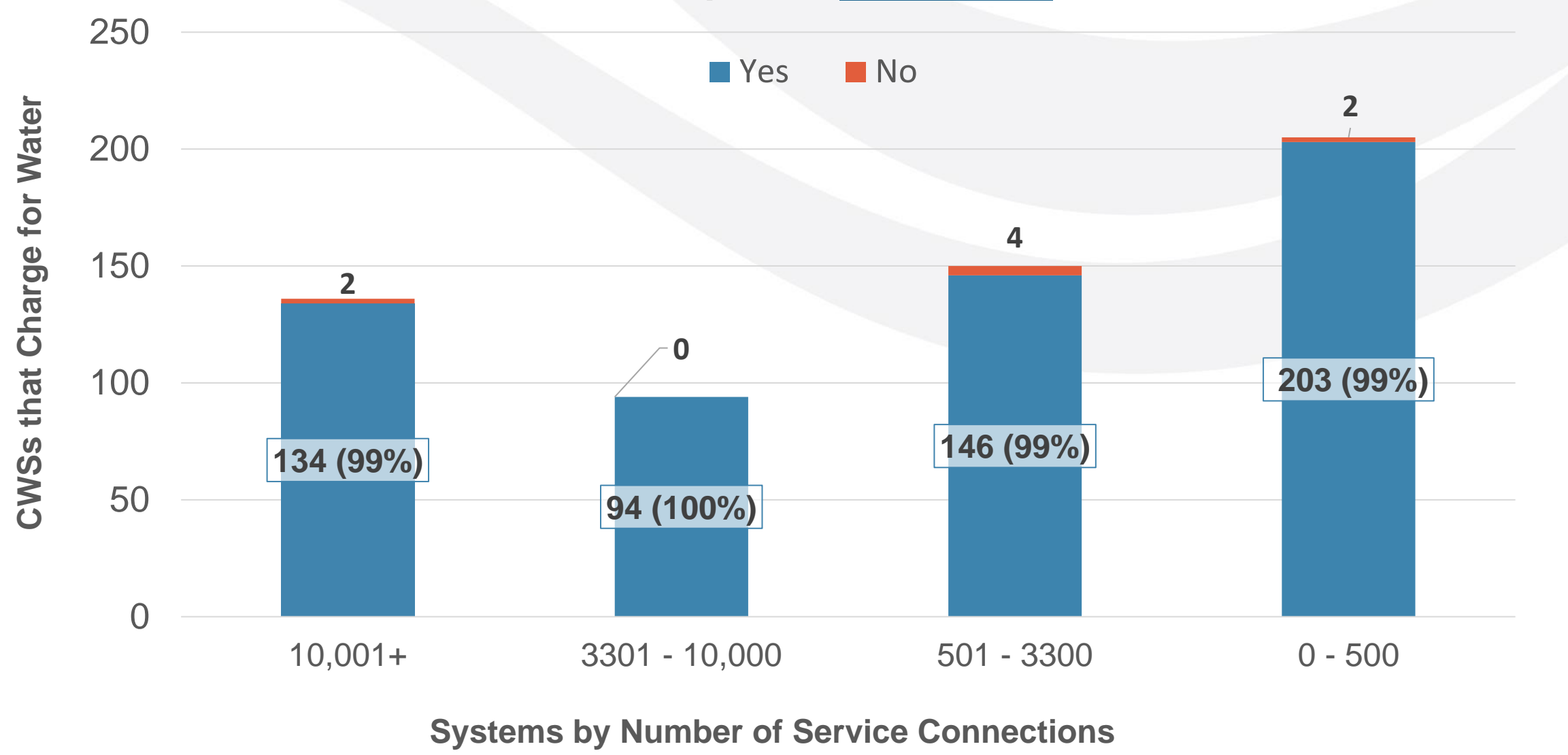
Survey Responders: Systems that Charge for Other Services on Residential Bills



Survey Responders: Systems that Charge for Other Services on Commercial Bills

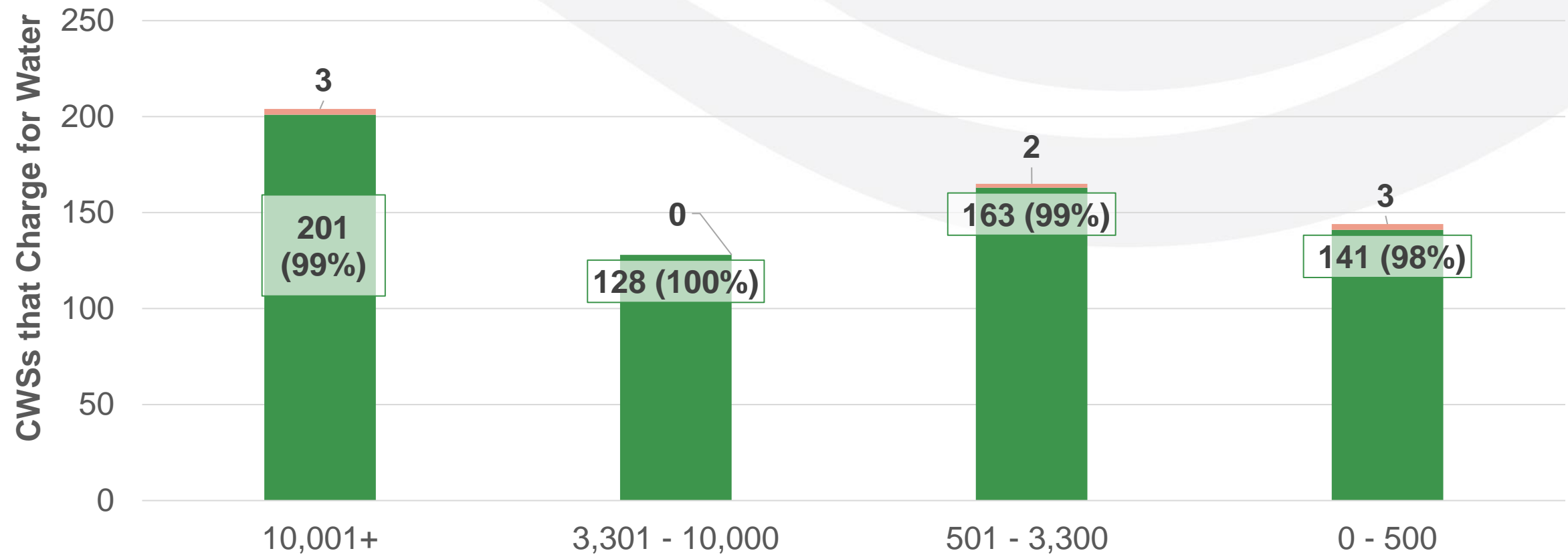


Survey Responders: Can Provide Evidence for Reported Residential Accounts in Arrears



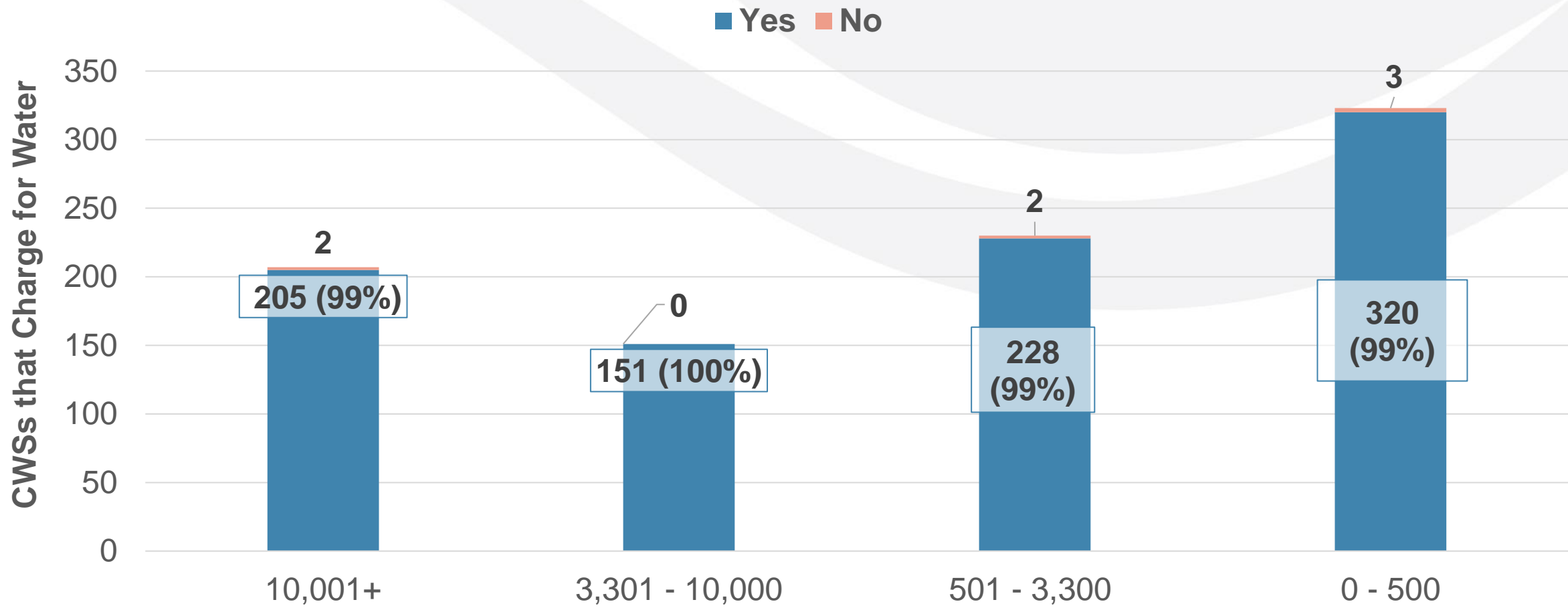
Survey Responders: Can Provide Evidence for Reported Commercial Accounts in Arrears

■ Yes ■ No



Systems by Number of Service Connections

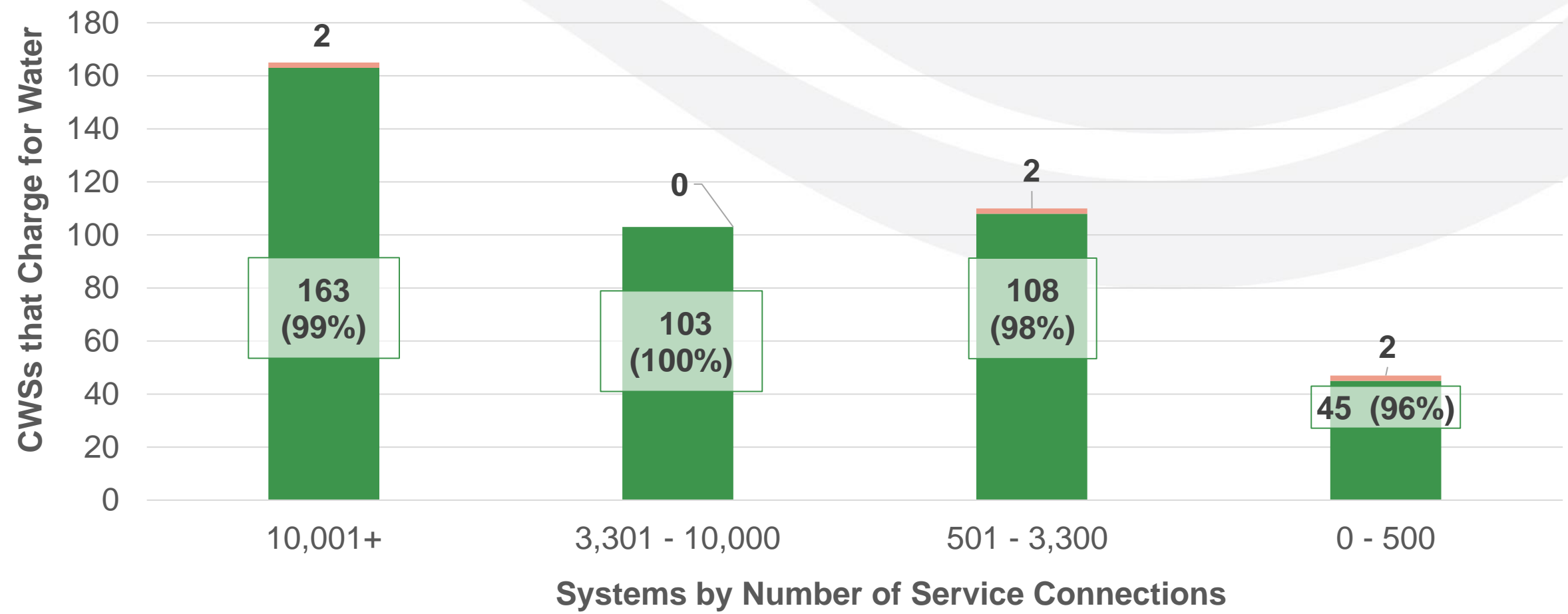
Survey Responders: Can Provide Evidence for Reported Residential Arrearages Amounts



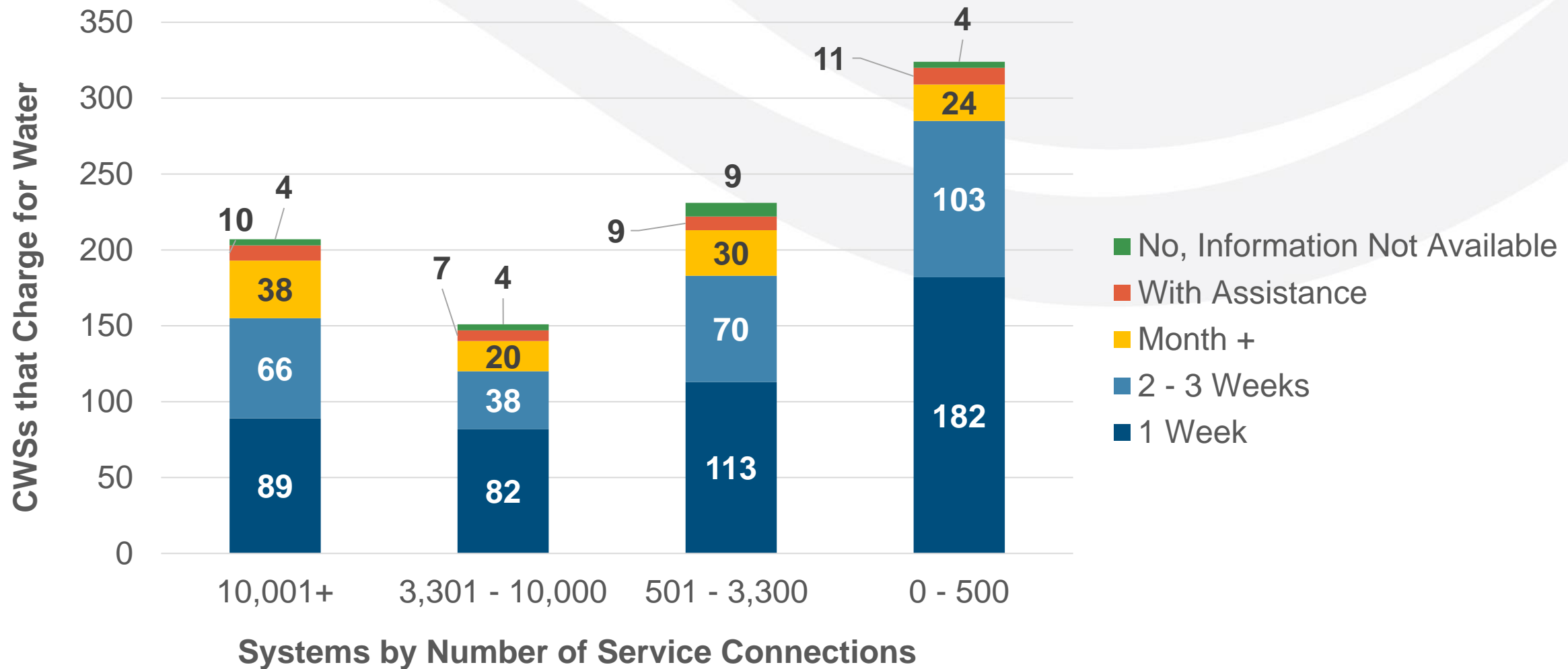
Systems by Number of Service Connections

Survey Responders: Can Provide Evidence for Reported Commercial Arrearages Amounts

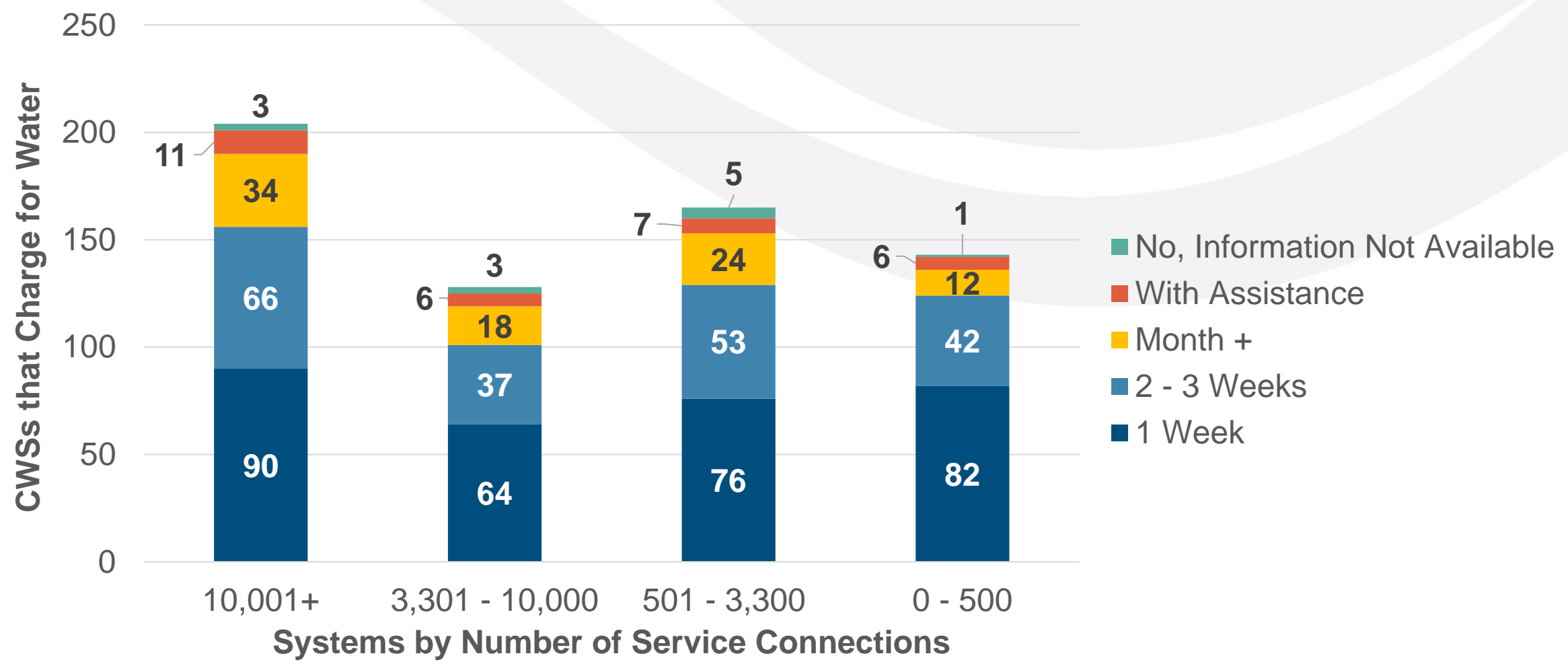
■ Yes ■ No



Survey Responders: The Amount of Time Needed to Provide Spreadsheet of Residential Customers in Arrears

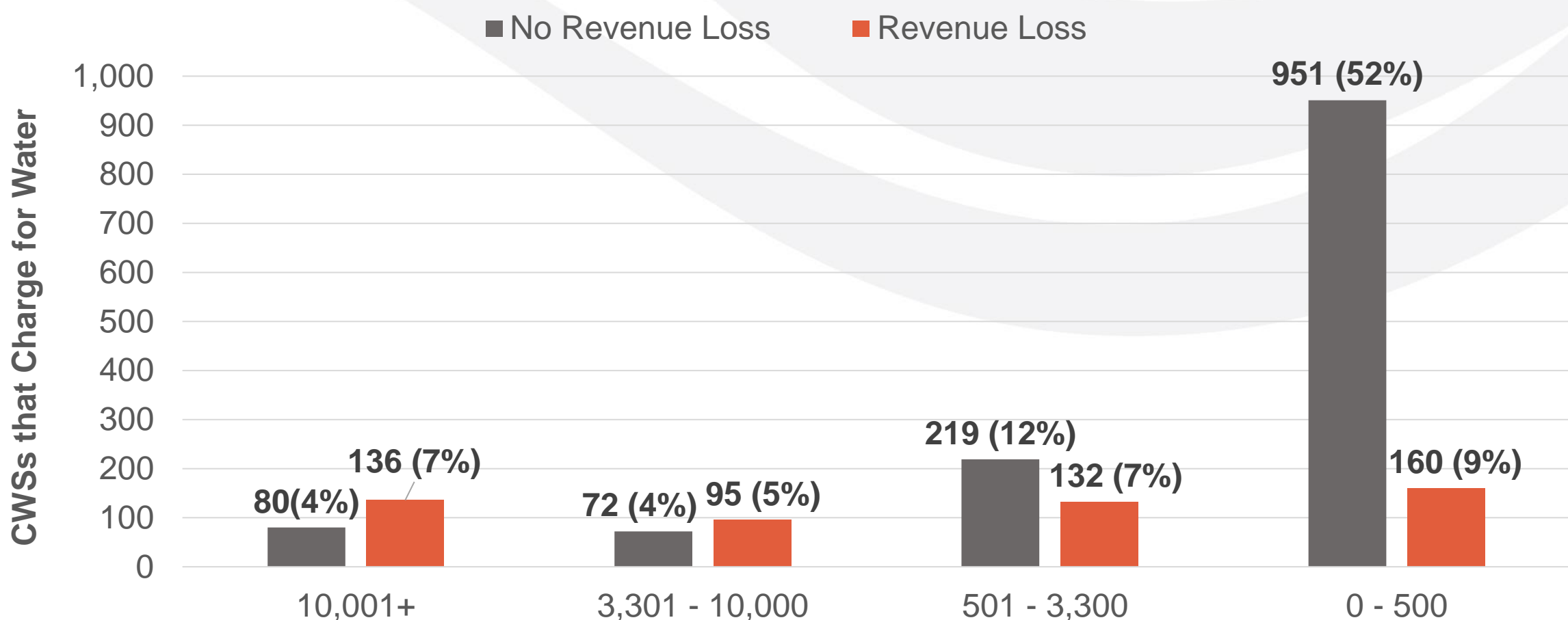


Survey Responders: The Amount of Time Needed to Provide Spreadsheet of Commercial Customers in Arrears



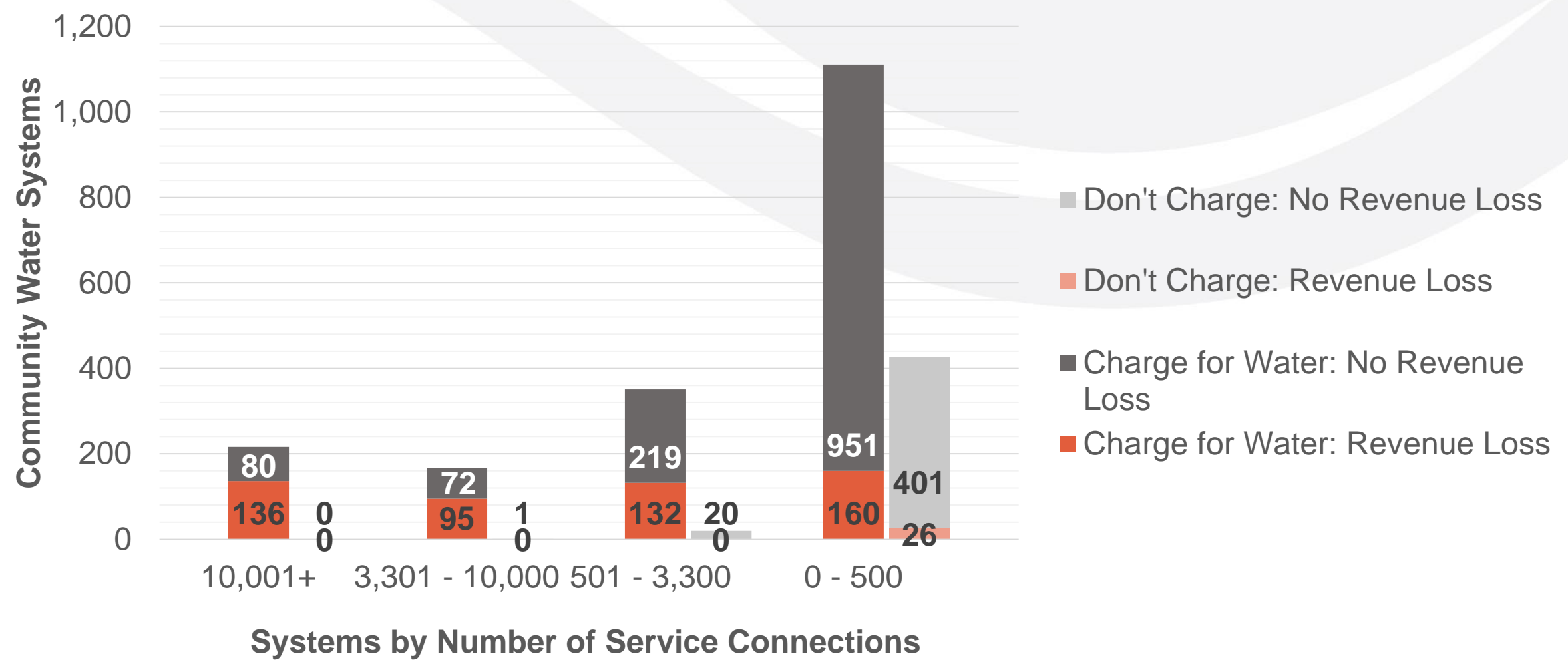
Reported Revenue Loss

Survey Responders that Charge for Water: CWSs that Reported Revenue Loss During the COVID-19 Pandemic

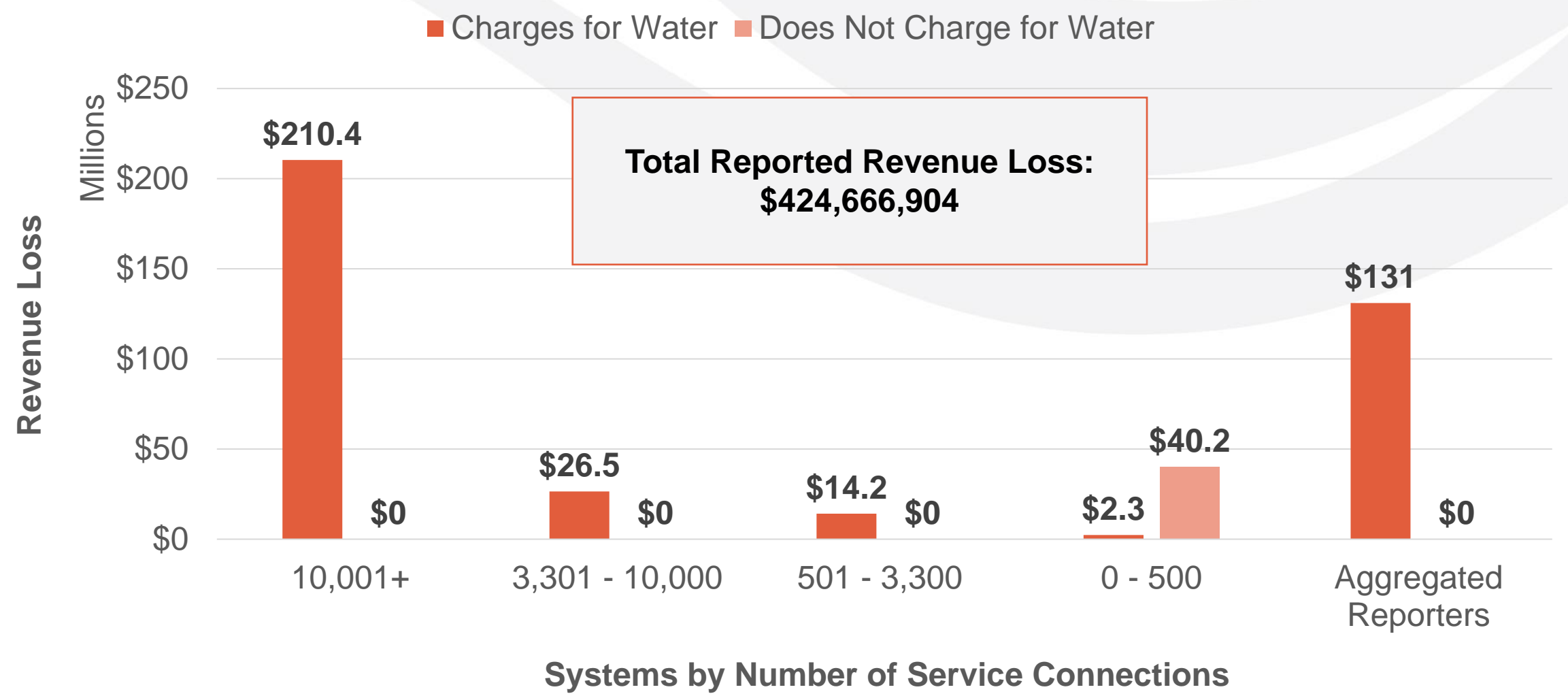


Systems by Number of Service Connections

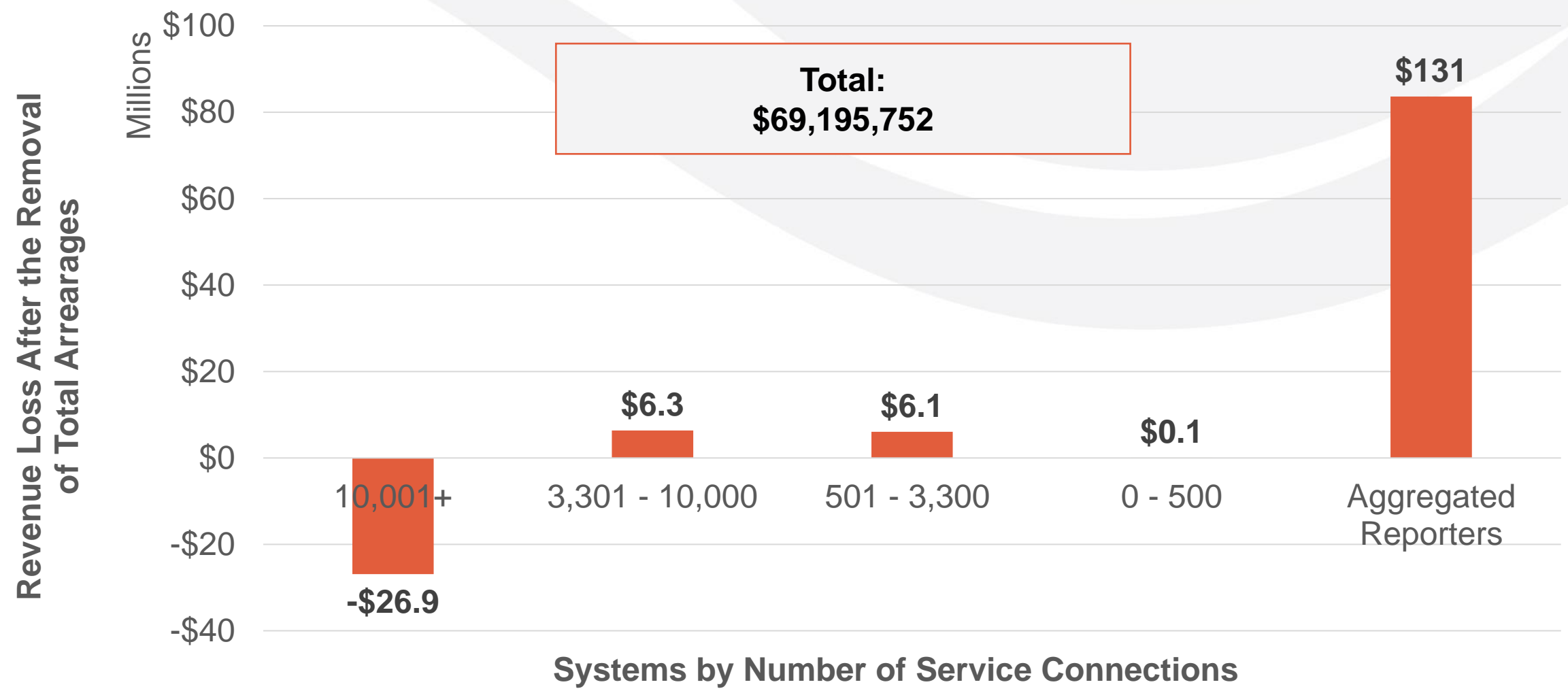
Survey Responders: CWSs that Reported Revenue Loss During the COVID-19 Pandemic



Survey Responders: Total Reported Revenue Loss During the COVID-19 Pandemic



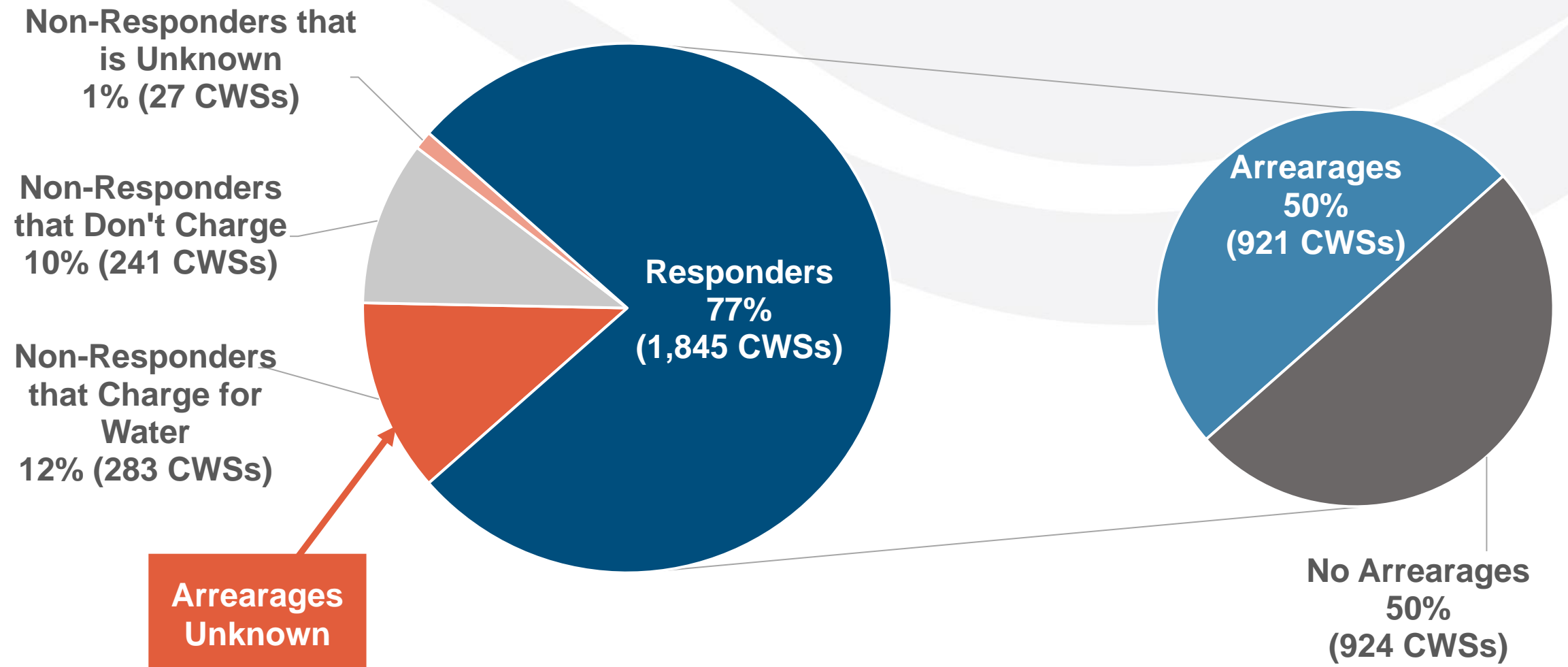
Survey Responders that Charge for Water: Revenue Loss After the Removal of Total Reported Arrearages



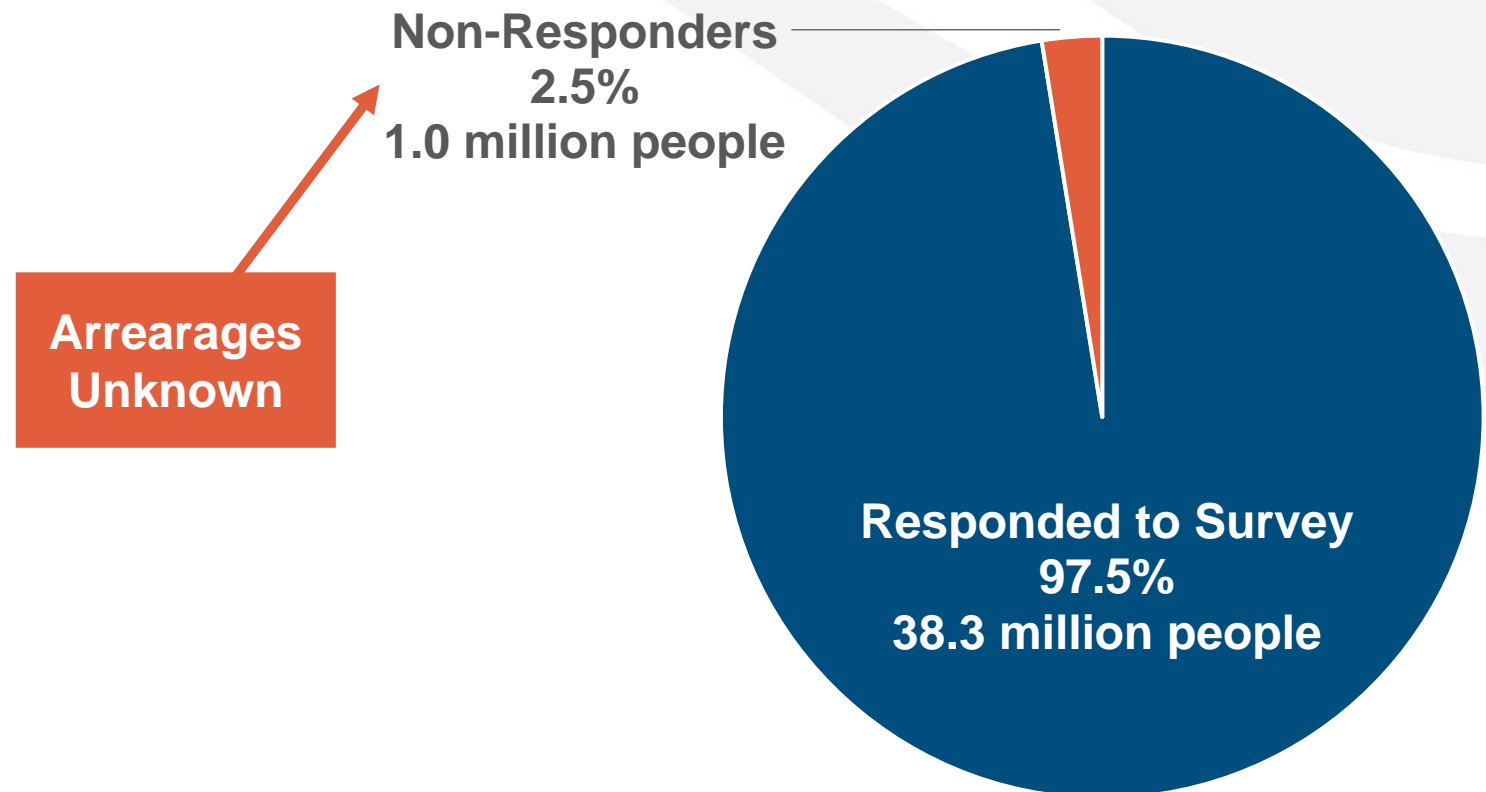
2. ESTIMATING ARREARAGES FOR NON-REPORTERS



Survey Responders that Charge for Water & Reported Arrearages

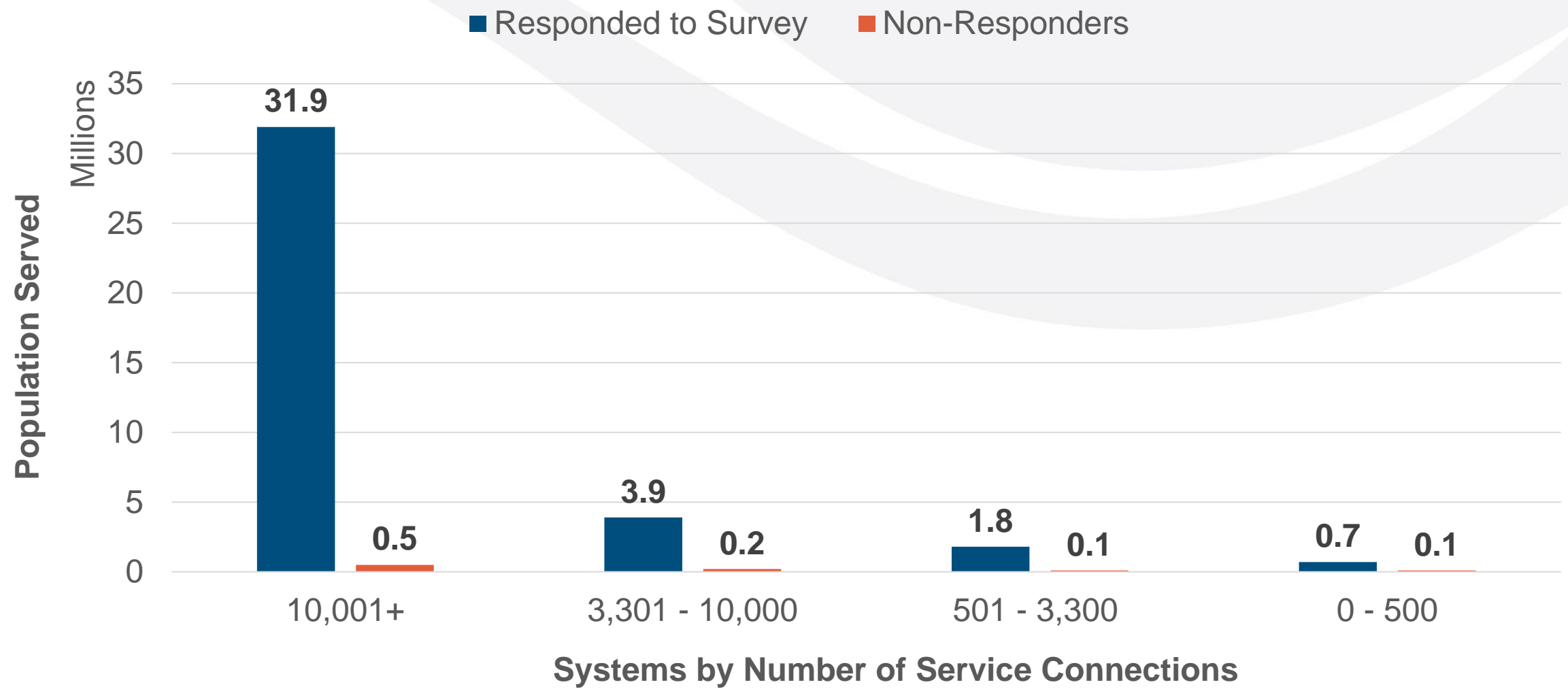


Survey Completion: Population of CWSs that Charge for Water



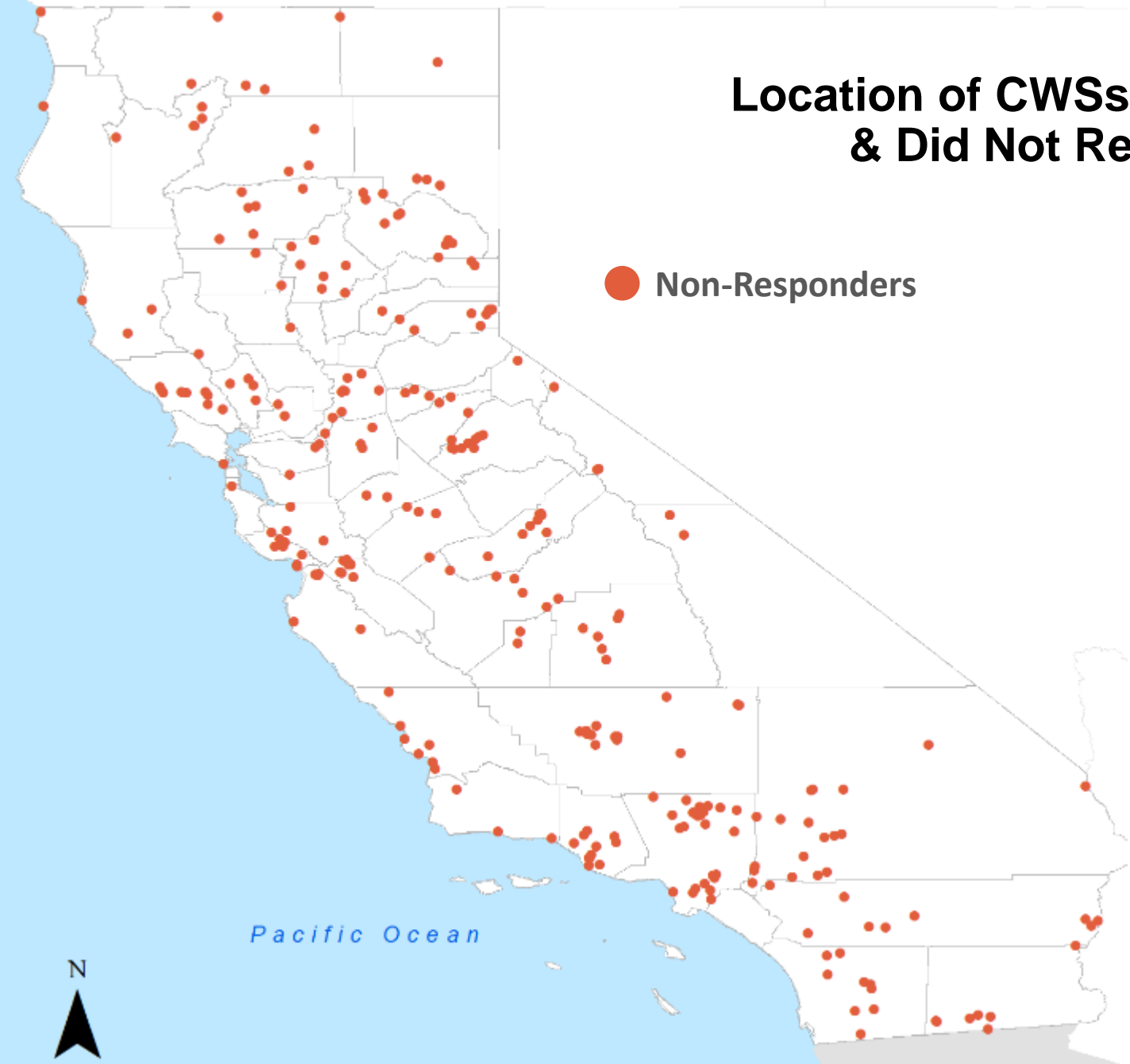
2,128 CWSs that Charge for Water

CWS (that charge for water) Survey Non-Responders by Population Served



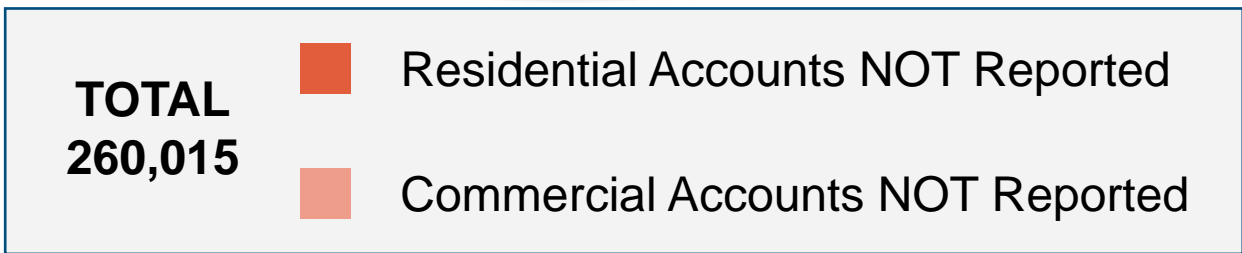
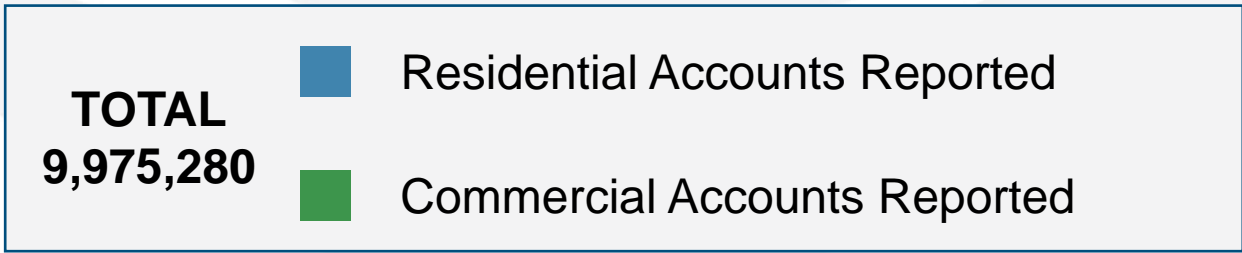
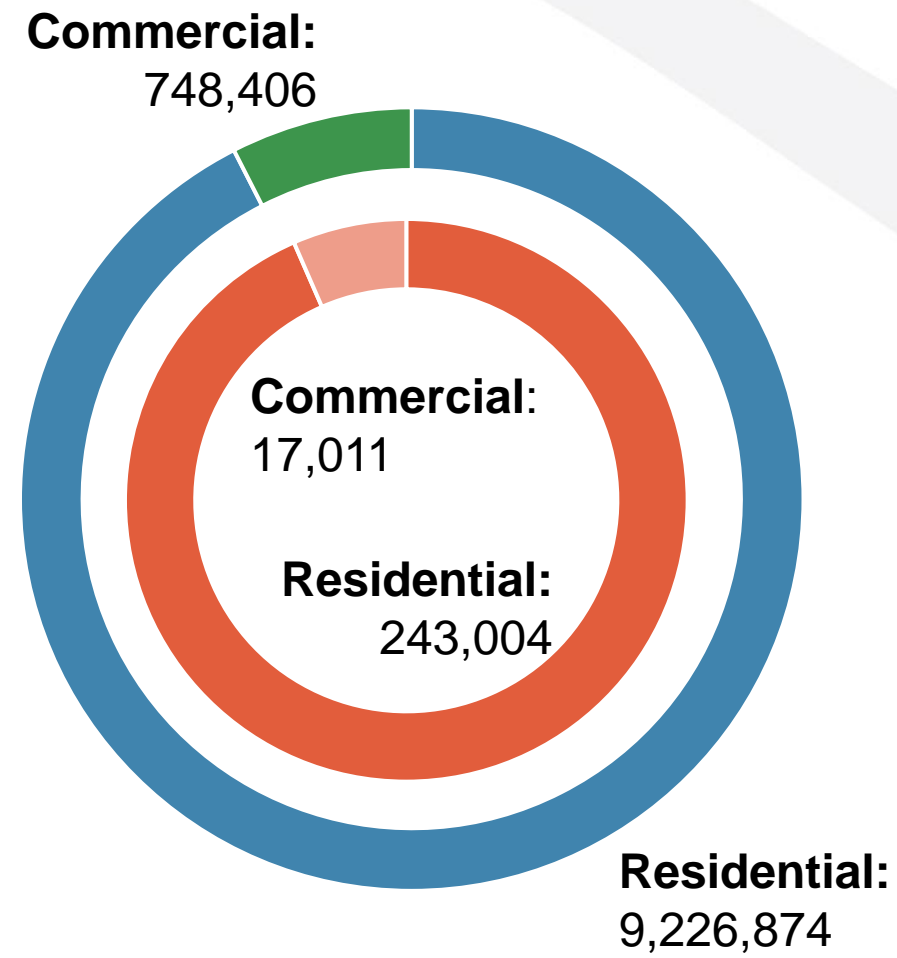
Location of CWSs that Charge for Water & Did Not Respond to Survey

● Non-Responders

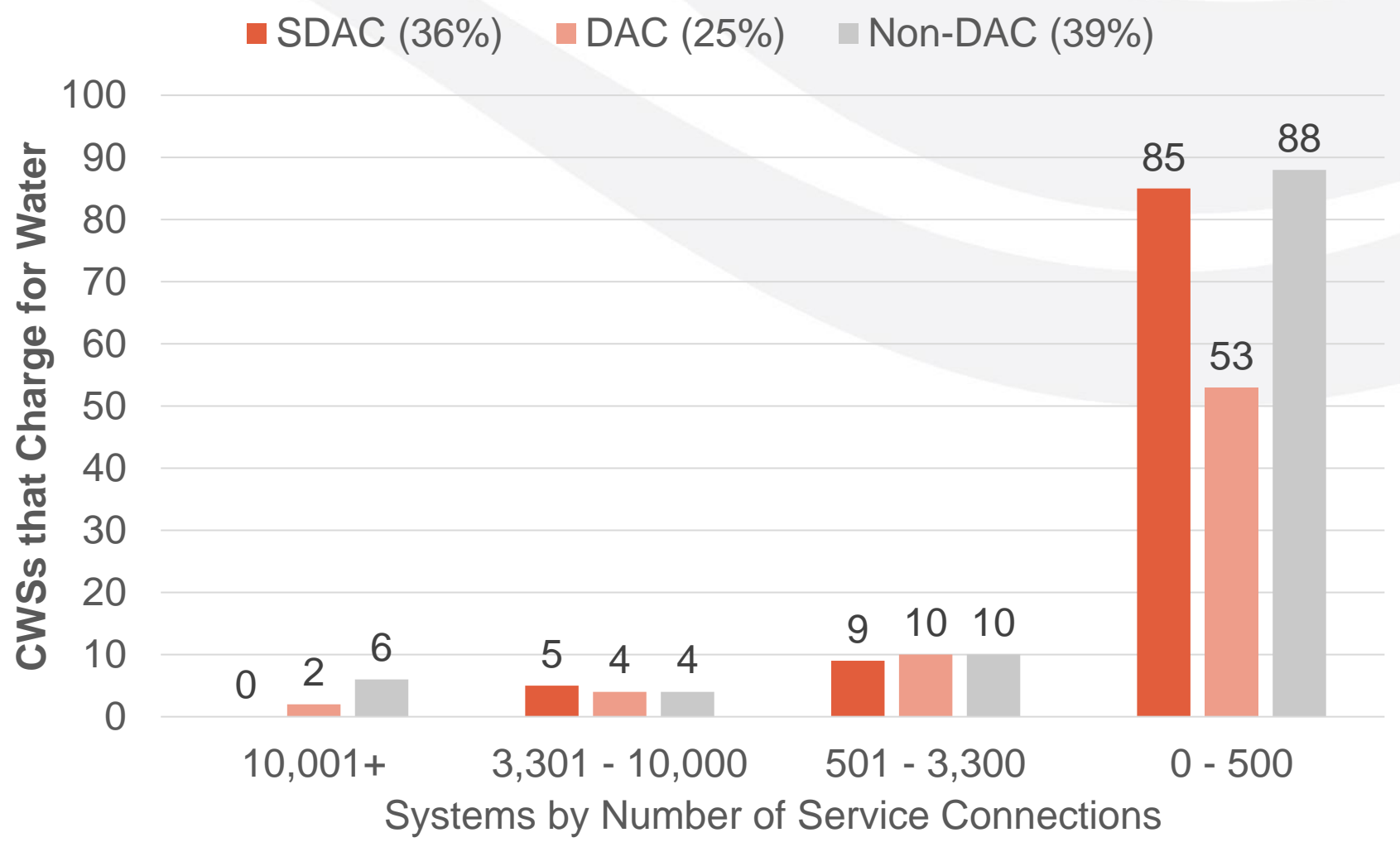


Approximately 45 community water systems are not included due to insufficient location data.

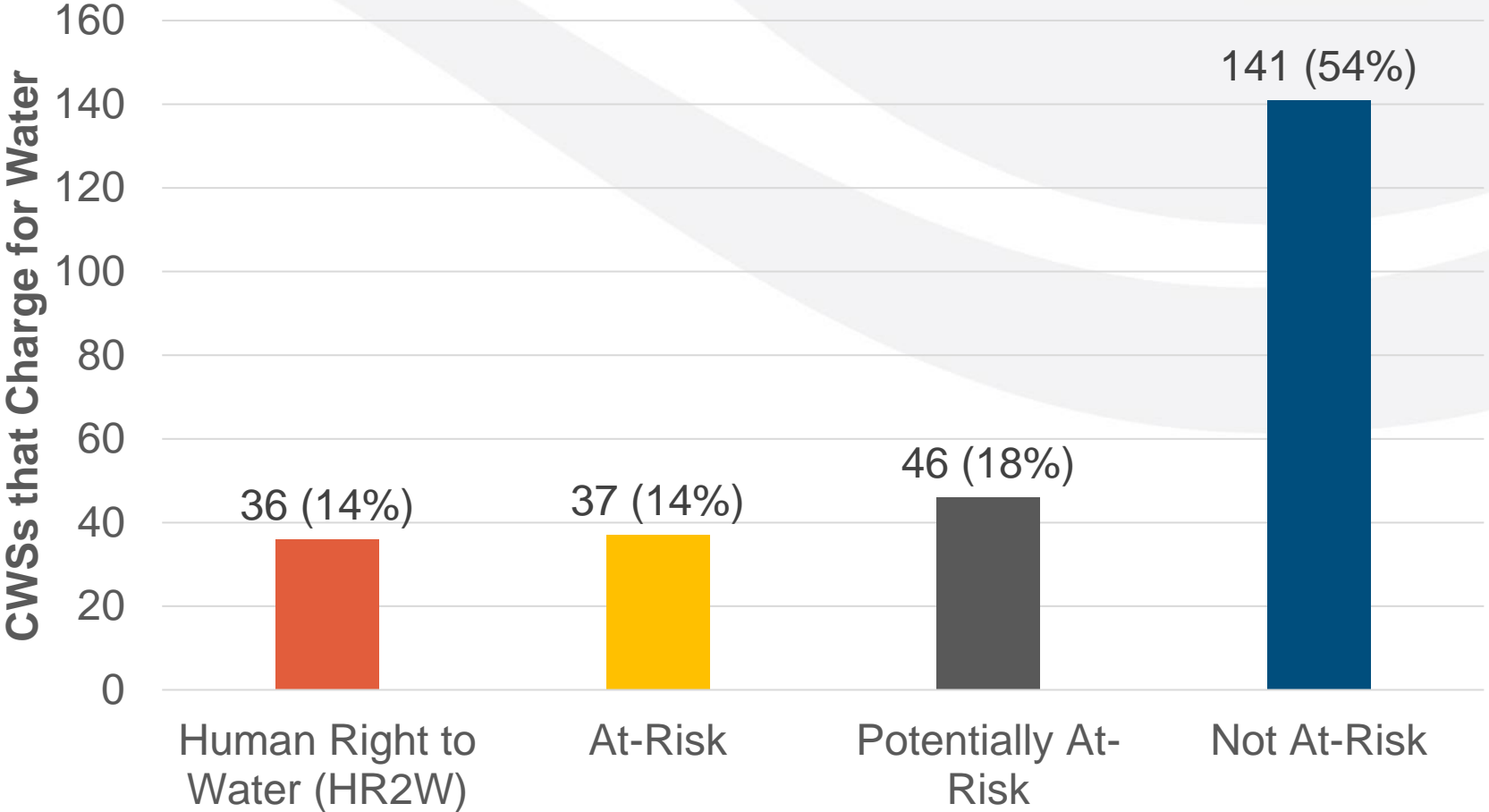
Survey Non-Responders that Charge for Water: Total Residential & Commercial Accounts



Disadvantaged Community Status of **Non-Responders** that Charge for Water



SAFER Status of **Non-Responders** that Charge for Water

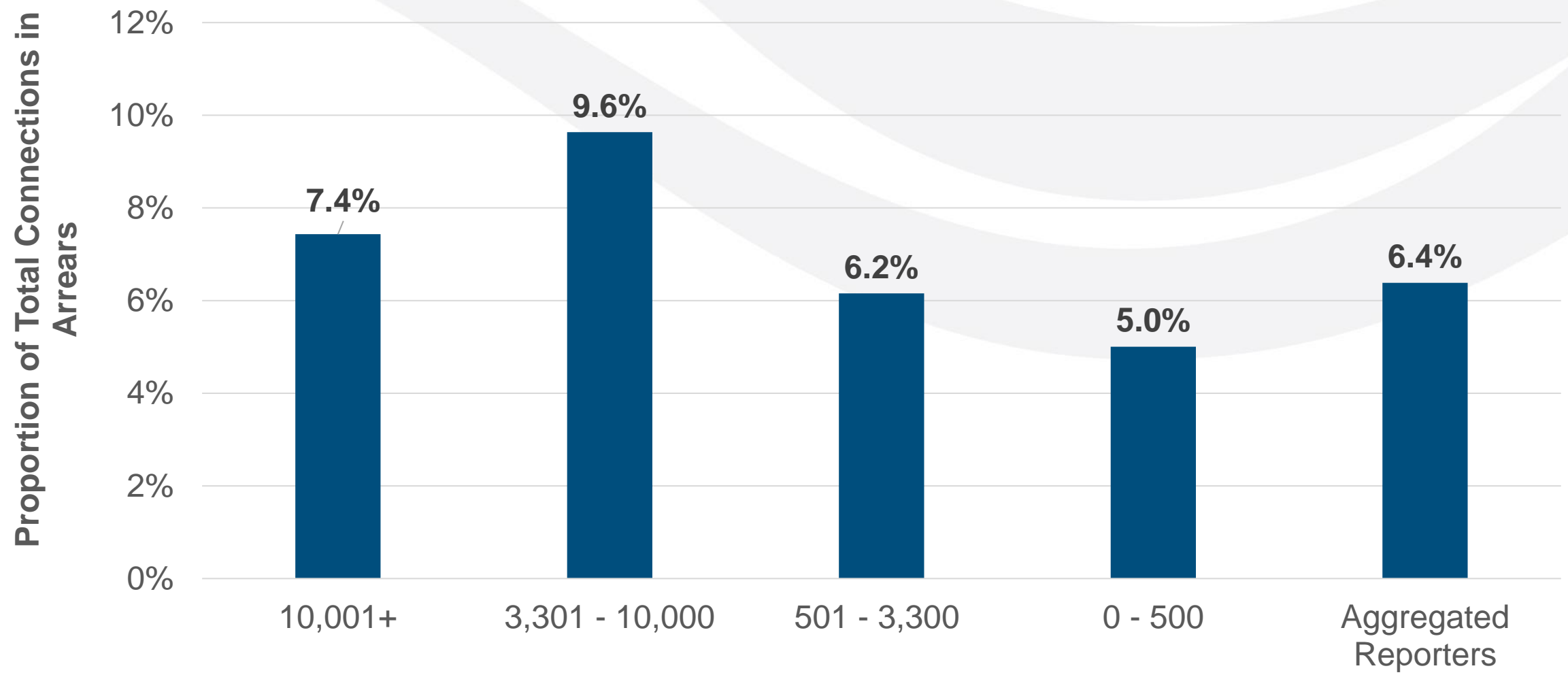


Systems by Number of Service Connections

Methodology for Estimating Arrearages for Non-Reporters

- Used statistical modeling to determine if there is a strong correlation between arrearages and the following metrics:
 - Median household income
 - Number of service connections
 - Population served
 - Average annual residential drinking water rates for 6 HCF
 - Annual revenues
- Modeling indicated the strongest correlation is with “Number of service connections.”
- Staff used the average proportion of accounts in arrears per service connection bucket of water systems and the average arrears per account to estimate arrearages for non-reporters.

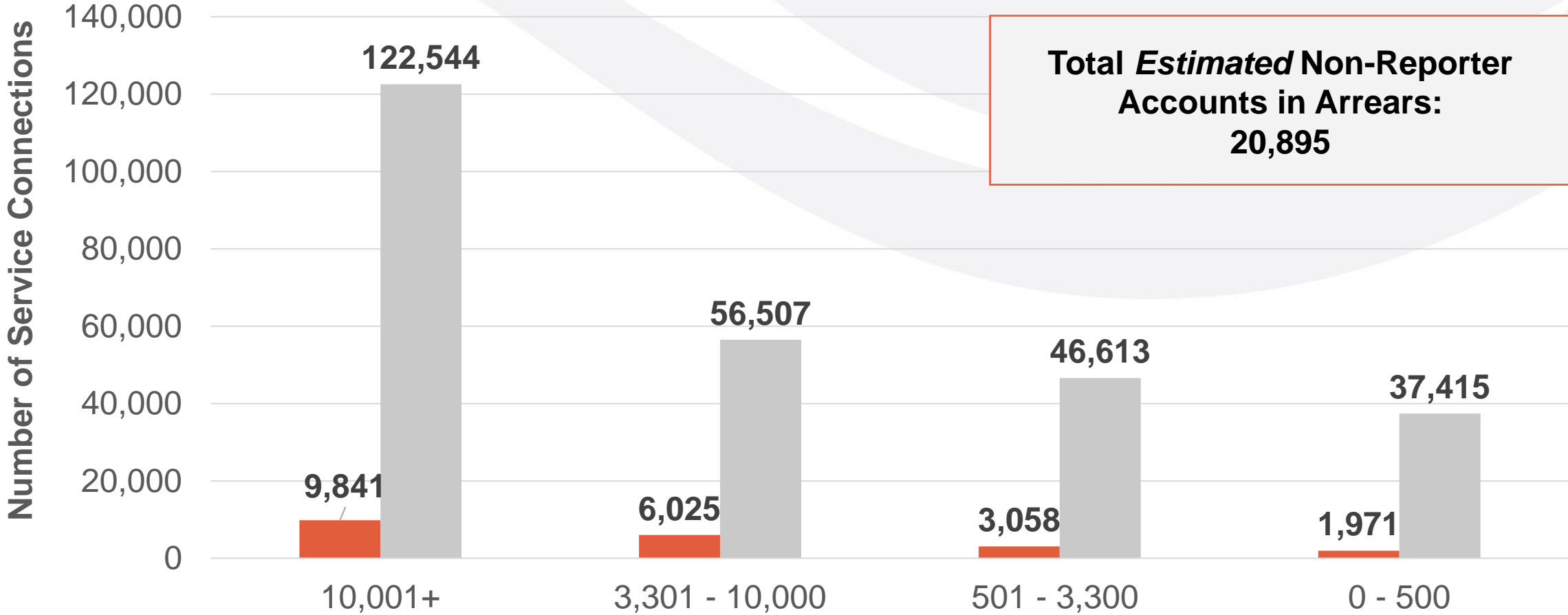
Proportion of Residential and Commercial Service Connections in Arrears



Systems by Number of Service Connections

Estimated Non-Reporter Service Connections in Arrears

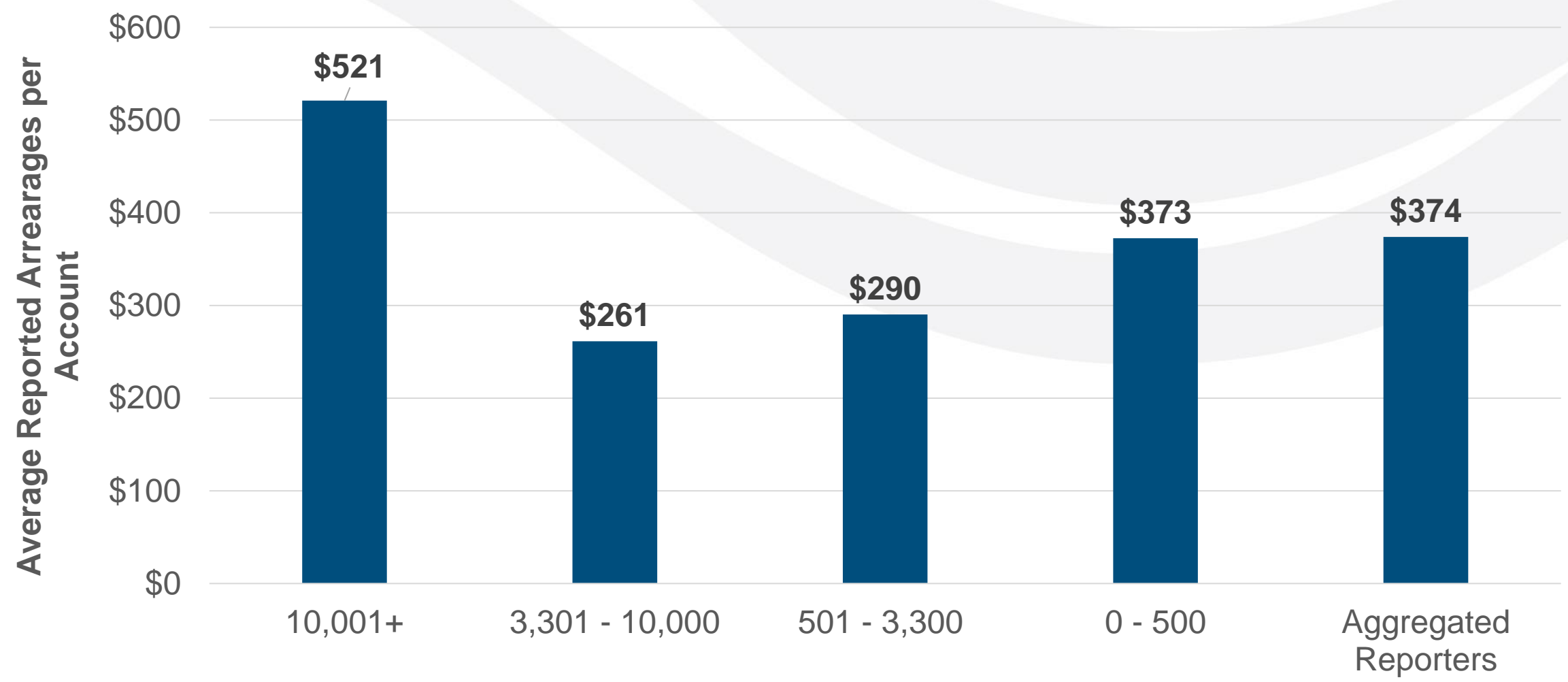
■ Estimated Service Connections in Arrears ■ Not In Arrears



Total Estimated Non-Reporter Accounts in Arrears: 20,895

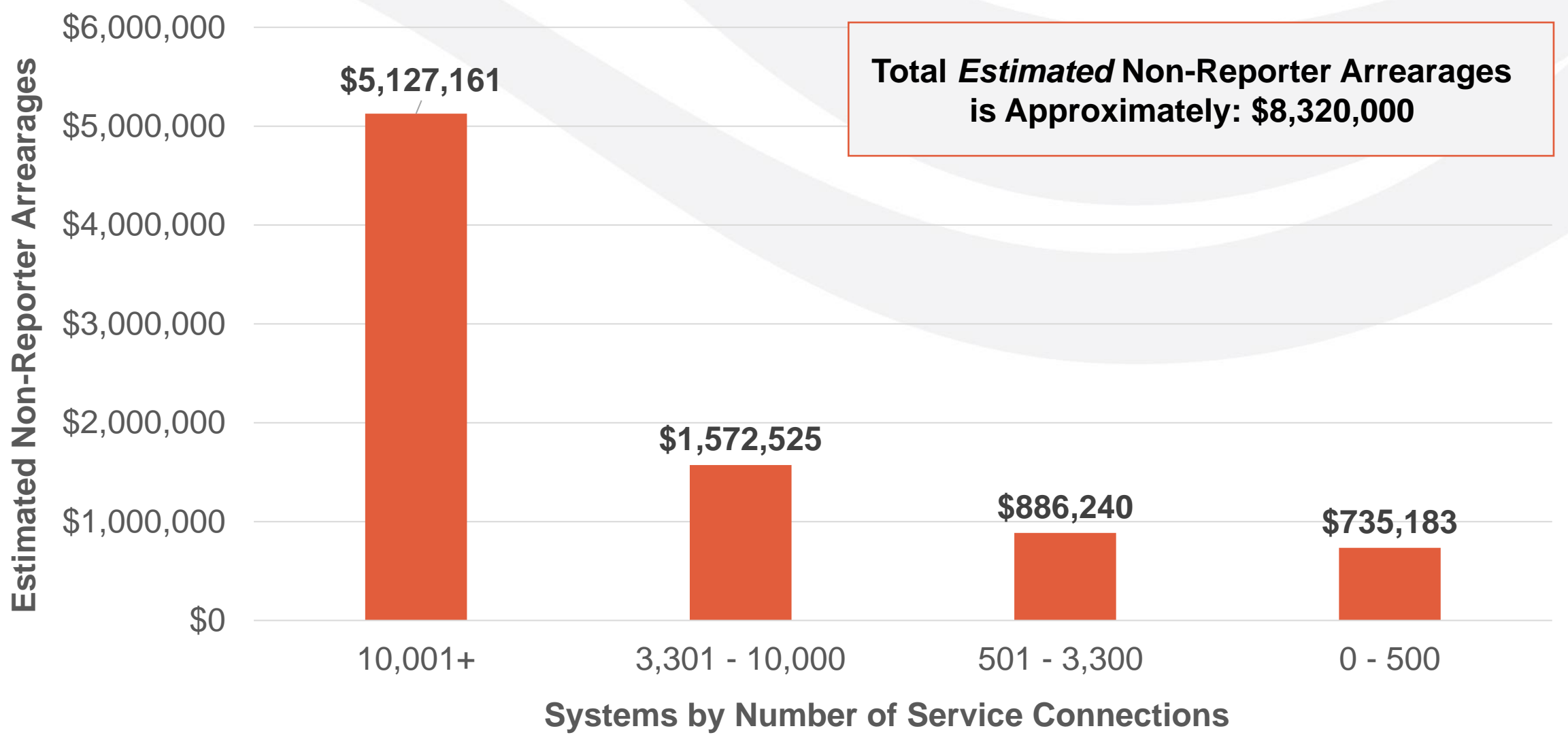
Systems by Number of Service Connections

Average Total Arrearage per Account for Reporters



Systems by Number of Service Connections

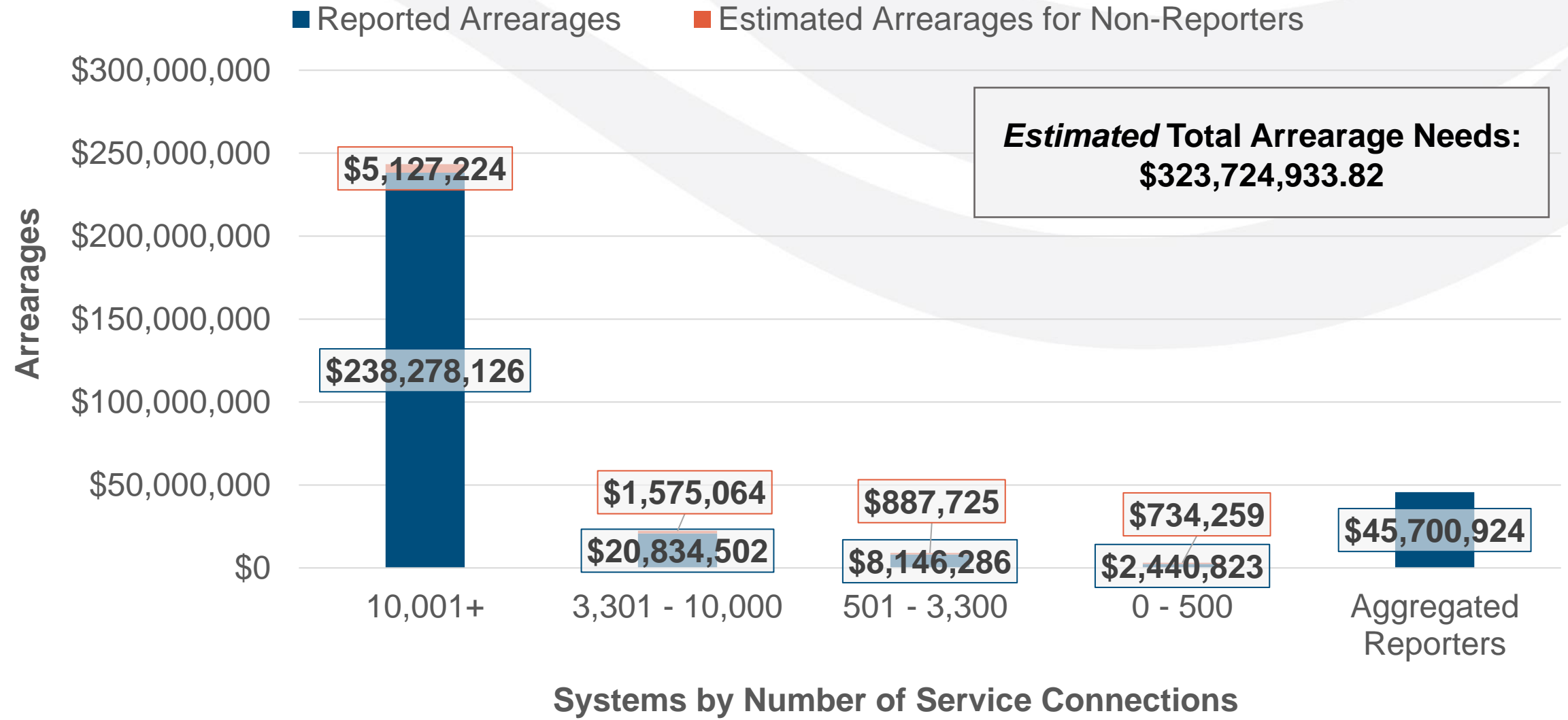
Estimated **Non-Reporter** Arrearages



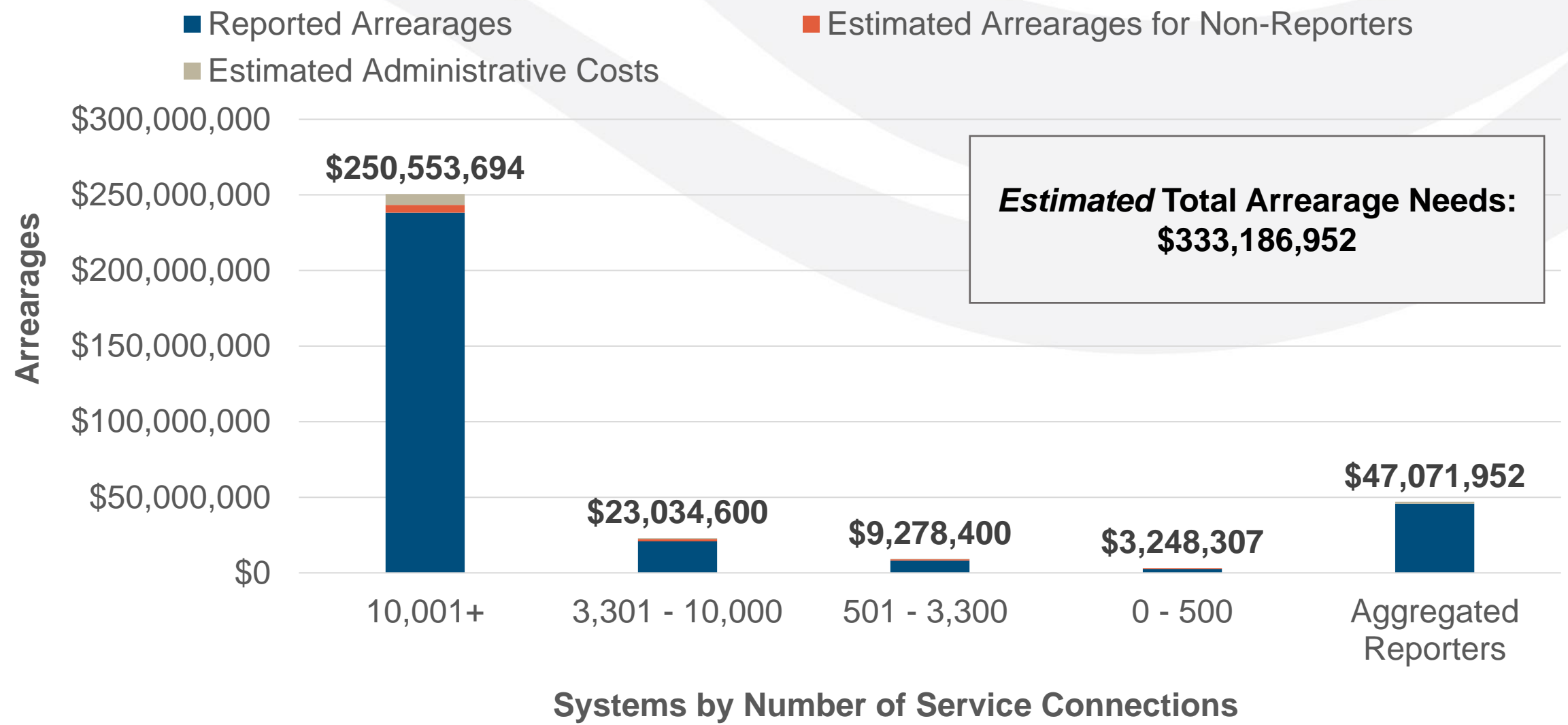
3. PROGRAM FUNDING ALLOCATION



Estimated Total Statewide Arrearage Needs for Reporters and Non-Reporters

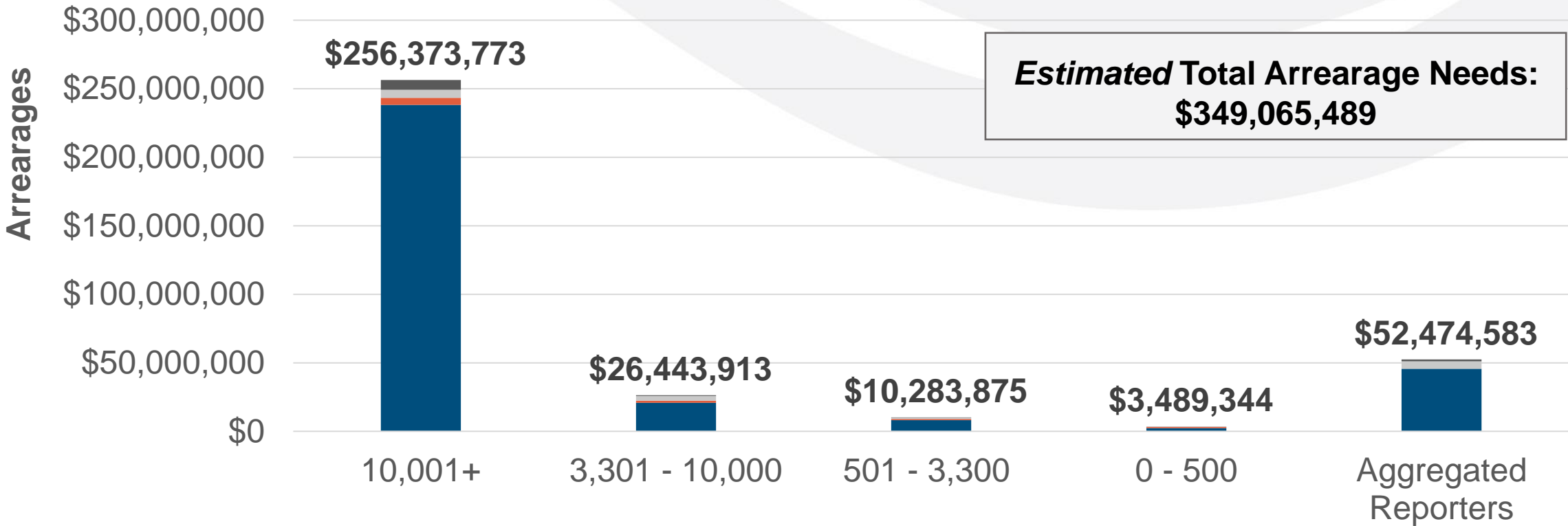


Estimated Total Statewide Arrearage Needs for Reporters and Non-Reporters with Administrative Costs Added



Estimated Total Statewide Arrearage Needs for Reporters and Non-Reporters with Late Fees and Administrative Costs Added

- Reported Arrearages
- Late Fees
- Estimated Arrearages for Non-Reporters
- Estimated Administrative Costs



**Estimated Total Arrearage Needs:
\$349,065,489**

Systems by Number of Service Connections



**CALIFORNIA
WATER & WASTEWATER
ARREARAGE PAYMENT PROGRAM**

Program Website:

https://www.waterboards.ca.gov/arrearage_payment_program