

**State Water Infrastructure Authority**  
**Meeting Date: December 10, 2024**  
**Agenda Item J**  
**Proposal for Statutory Changes Related to AIA and MRF Grants**  
**Funded by the Drinking Water and Wastewater State Reserve**

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**Division of Water Infrastructure Staff Report**

**Overview**

North Carolina's Asset Inventory and Assessment (AIA) and Merger/Regionalization Feasibility (MRF) grant programs were established in the 2015 updates to NCGS §159G in order to support water and wastewater utilities' obligations to protect public health and environmental quality through sound fiscal policies and efficient operation and maintenance. Through managing more than 600 AIA and MRF projects over the past eight years, Division of Water Infrastructure (Division) staff have realized three main paradigms among recipients of AIA and MRF programs.

The first is that AIA and MRF grants assist local government units (LGUs) and water and wastewater utilities with their existing strategic and systematic application of sound management practices.

Second, AIA and MRF grants reveal, most often for the first time, the complexity of daily, annual, and generational challenges that the utility must overcome to meet their desired level of service.

Lastly and as expected, Division staff found that the per-LGU demand for AIA and MRF funding has increased consistently with the availability of additional funding sources that allow higher per-project funding limits (VUR and ARPA) alongside national economic trends (inflation).

Based on the Division's findings discussed below, staff suggest an increase to the current funding limits in NCGS §159G-36(c) for AIA and MRF grants funded by the Wastewater and Drinking Water State Reserve (WW and DW SRP) from \$150,000 for AIA grants and from \$50,000 for MRF grants.

**Background**

- 2015 – Updates to NCGS §159G established the AIA and MRF grant programs.
  - NCGS §159G-36.(c)(5) established the funding limit of \$150,000 every three years for Asset Inventory and Assessment (AIA) grants to the same LGU from the WW or DW SRP.
  - NCGS §159G-36.(c)(4) established the funding limit of \$50,000 every three years for Merger/Regionalization Feasibility (MRF) grants to the same LGU from the WW or DW State Reserve Program (SRP).
  - Since the creation of the WW and DW SRP, the General Assembly has allocated \$10M each year to the combined WW and DW SRP which provides grants for planning (AIA and MRF) and construction projects.

- 2020 – NCGS §159G-34.5 established the Viable Utility Reserve (VUR) which includes funding for AIA and MRF grants Distressed LGUs often need to fulfill the requirements in 159G-45.(b).
  - AIA grants funded out of the VUR have no funding limit within the lifetime VUR limits of \$15M for a single LGU or \$30M for merging LGUs as established in NCGS §159G-36.(d).
  - In 2020, the General Assembly allocated \$9M (non-recurring) to the VUR for both planning (AIA) and construction grant funding.
  - In 2023, the General Assembly allocated \$10M (non-recurring) to the VUR for both planning (AIA) and construction grant funding.
- 2021 – Session Law 2021-180 allocated approximately \$77.6M in SRP and \$353M in VUR grant funding from the state’s allocation of the American Rescue Plan Act (ARPA).
  - ARPA AIA and MRF grants funded by the SRP allocation are subject to a \$400,000 cap per LGU for any combination of AIA, MRF, and/or other planning project.
  - ARPA AIA and MRF grants funded by the VUR allocation are subject to the same requirements set forth in NCGS §159G for the VUR.

**Division Approach and Analyses**

Division staff considered three approaches to determine whether the existing WW and DW SRP funding limits for AIA (\$150,000) and MRF (\$50,000) grants sufficiently meet the needs of water and wastewater utilities and fulfill the mission of the “Statewide Water and Wastewater Utility Master Plan: The Path to Viability”. The three analyses are:

- 1) Per-project averages based on total number of funded AIA or MRF grants compared to the total value of funding AIA or MRF grants.
- 2a) For AIAs – Average and median AIA funding on a per-connection basis.
- 2b) For MRFs – Average and median MRF funding on a per-participant basis.
- 3) Peg the July 2015 AIA and MRF funding limits to the Bureau of Labor’s CPI Inflation Rate.

**Analyses Inclusions**

- 1) All AIA and MRF projects funded during competitive application cycles.
- 2) The total project cost as shown on the application for funding when it differed from the amount requested for funding due to other funding sources and/or local contributions beyond SRP-related costs.

**Analyses Exclusions**

- 1) Program-related costs, specifically fees and local match amounts.
- 2) The variability of project costs due to project scopes, LGU challenges, system components, and consultant delivery method.
- 3) All AIA and MRF projects funded by Session Laws and other directed grants.

## **1) First Analysis – Initial Considerations**

- 1) Prior to 2017, North Carolina did not have a Statewide Water and Wastewater Utility Master Plan.
- 2) Prior to 2018, LGUs with more than 10,000 residential connections were eligible to receive SRP AIA funding.
- 3) Prior to 2021, “Distressed LGUs” and the related requirements of the Viable Utility Program did not exist.
- 4) Prior to 2022, the Division did not have formal guidelines for AIA projects.
- 5) Prior to 2024, the Division did not have formal guidelines for Distressed LGUs’ required rate studies.

## **1) First Analysis – Per-Project**

First, Division staff looked at the aggregated per-project funding amounts since the first funding round in 2016 through the creation of VUR in 2020 and ARPA in 2022:

- Since Fall 2016 – the first round of WW and DW SRP funding for AIA and MRF grants:
  - AIA Grants (SRP only)
    - 136 drinking water utilities have been awarded 146 AIA grants totaling approximately \$19.3M, averaging \$132,100 per AIA grant
    - 137 wastewater utilities have been awarded 151 AIA grants totaling approximately \$20.1M, averaging \$139,500 per AIA grant.
  - MRF Grants (SRP only)
    - 94 drinking water utilities have participated in 31 SRP MRF grants totaling approximately \$1.53M, averaging \$49,200 per MRF grant
    - 84 wastewater utilities have participated in 31 SRP MRF grants totaling approximately \$1.54M, averaging \$49,500 per MRF grant.
- Since Summer 2021 – the first round of VUR funding for AIA and MRF grants:
  - AIA Grants (VUR only)
    - 20 drinking water AIA grants have been awarded totaling approximately \$3.8M, averaging \$189,400 per AIA grant
    - 21 wastewater AIA grants have been awarded totaling approximately \$4.7M, averaging \$223,500 per AIA grant.
  - MRF Grants (VUR only)
    - No drinking water MRF grants have been awarded
    - Three wastewater MRF grants have been awarded totaling \$275,000, averaging \$91,700 per MRF grant, and

- Four combined drinking water and wastewater MRF grants have been awarded totaling \$803,000, averaging \$200,750 per MRF grant.
- Since Spring 2022 – the first ARPA funding for AIA and MRF grants:
  - AIA Grants (ARPA and co-funded with SRP and/or VUR)
    - 158 drinking water AIA grants have been awarded totaling approximately \$34.0M, averaging \$215,100 per AIA grant
    - 132 wastewater AIA grants have been awarded totaling approximately \$31.4M, averaging \$238,000 per AIA grant
  - MRF Grants (ARPA and co-funded with SRP and/or VUR)
    - 40 drinking water utilities have participated in 12 ARPA MRF grants totaling approximately \$2.3M, averaging \$189,200 per MRF grant
    - 18 wastewater utilities have participated in eight ARPA MRF grants totaling approximately \$2.3M, averaging \$143,750 per MRF grant

### 1) First Analysis – Findings

On a per-project basis, the most recent AIA and MRF funding average has increased beyond the limits of the WW and DW SRP as utilities pursue the means to comply with additional requirements while taking advantage of additional funding sources that provide AIA and MRF funding beyond the current SRP limits.

This seemed the most obvious result, so Division staff then considered two further approaches: 1) a system-specific approach based on the number of connections of the utility, and 2) cost increases due to inflation.

### 2) Second Analysis – System Size Based on Number of Connections

#### Second Analysis – Additional Considerations

- 1) Wastewater systems typically have more assets and maintenance requirements than drinking water systems.
- 2) Asset Management Plans, Capital Improvement Plans, and Rate Studies are valuable to utilities when the plans are reliable, actionable, and perpetuated.
- 3) Utilities that have existing strategic plans for their own needs and those that do not benefit from the AIA and MRF programs.

#### 2a) AIA General Findings

Summary statistics were aggregated and calculated across all AIA projects separately for each drinking water and wastewater utility on a per-connection and per-utility basis as shown in Table 1 below.

- Based on the average number of connections per category and median funding per connection, the range of median estimated funding for Q1-Q4 is \$164,996 to \$226,143 for drinking water systems and \$174,494 to \$262,737 for wastewater systems.

- More generally, the median estimated funding for LGUs with ≤10,000 connections was, on average, \$282,552 for drinking water and \$402,091 for wastewater utilities.

<b>Table 1 – Average and Median AIA funding ranges based on number of residential connections</b>					
<b>LGU Project Category</b>	<b>AVG. Connections [1]</b>	<b>AVG. Total Max Funding per Avg Connection (\$/connection) [2]</b>	<b>MEDIAN Total Max Funding per Avg Connection (\$/connection) [3]</b>	<b>AVG. Funding for AVG. Connections (\$) [1]x[2]</b>	<b>MEDIAN Funding for AVG. Connections (\$) [1]x[3]</b>
<b>Drinking Water (DW)</b>					
≤400 (Q1)	253	\$802.24	\$707.17	\$202,925	\$178,878
401 to 1,100 (Q2)	720	\$260.67	\$229.06	\$187,768	\$164,996
1,101 to 2,600 (Q3)	1,709	\$119.04	\$98.29	\$203,476	\$168,007
2,601 to 10,000 (Q4)	5,122	\$50.64	\$44.15	\$259,341	\$226,134
10,001 to 50,000	18,324	\$11.39	\$13.07	\$208,620	\$239,530
>50,000	139,500	\$2.75	\$2.81	\$383,599	\$391,854
AVERAGE (DW)				<b>\$447,614</b>	<b>\$335,949</b>
<b>Wastewater (WW)</b>					
≤400 (Q1)	222	\$1,723.10	\$977.65	\$382,578	\$217,067
401 to 1,100 (Q2)	753	\$287.57	\$231.85	\$216,427	\$174,494
1,101 to 2,600 (Q3)	1,779	\$155.41	\$105.71	\$276,475	\$188,058
2,601 to 10,000 (Q4)	5,315	\$60.88	\$49.43	\$323,605	\$262,737
10,001 to 50,000	16,437	\$19.74	\$16.42	\$324,480	\$269,965
>50,000	111,175	\$2.59	\$2.41	\$287,478	\$267,741
AVERAGE (WW)				<b>\$772,804</b>	<b>\$386,656</b>

**2a) AIA Key Finding**

Utilities that utilize the most common \$150,000 in SRP AIA funding often result in AIA projects with limited scopes that do not result in complete Asset Management Plans. Further, utilities that rely on SRP AIA grants often must return for additional AIA funding or supplement their Asset Management Planning efforts with local contributions beyond the required match amount.

**2b) MRF General Findings**

Summary statistics were aggregated and calculated across all MRF projects at the utility level, for all projects and separately for drinking water (DW), wastewater (WW), and combined (DW and WW) as shown in Table 2 below. Notable observations include:

- There were a total of 90 MRF projects awarded, 32 of which were led by a distressed LGU, at a total of \$8.303 million. Separate from the recipients, an additional 70 distressed and 107 non-distressed partners participated in the MRF projects.

- The most funding was spent on drinking water projects (\$4.194 million), then wastewater (\$3.155 million), and combined DW and WW (\$953,000). However, at a project level, the highest awards per LGU on average were for combined DW and WW projects (avg. \$238,250), followed by drinking water (avg. \$99,880), and wastewater (avg. \$78,875).

<b>Table 2 – Average and Median MRF Funding Ranges Based on the Number of Participating Systems</b>				
<b>STATISTICS (per LGU &amp; System Type)</b>	<b>MRF Grants</b>	<b>Total Participants</b>	<b>Total Funding (\$)</b>	<b>Total Funding per LGU Partner (\$/LGU)</b>
<b>All Projects</b>				
TOTAL	90.00	267.00	\$8,303,000	-
AVERAGE	1.27	3.76	\$116,943	\$33,302.73
MAX	3.00	18.00	\$578,000	\$175,000.00
MEDIAN	1.00	3.00	\$50,000	\$25,000.00
MIN	1.00	2.00	\$35,000	\$7,142.86
<b>Drinking Water (DW)</b>				
TOTAL	42.00	123.00	\$4,195,000	-
AVERAGE	1.00	2.93	\$99,881	\$36,459.75
MAX	1.00	10.00	\$450,000	\$175,000.00
MEDIAN	1.00	2.00	\$50,000	\$25,000.00
MIN	1.00	2.00	\$35,000	\$7,142.86
<b>Wastewater (WW)</b>				
TOTAL	43.00	121.00	\$3,155,000	-
AVERAGE	1.08	3.03	\$78,875	\$28,038.42
MAX	2.00	11.00	\$450,000	\$112,500.00
MEDIAN	1.00	2.00	\$50,000	\$25,000.00
MIN	1.00	2.00	\$35,000	\$7,142.86

***2b) MRF Key Finding***

Utilities that utilize the most common \$50,000 in SRP MRF funding often result in MRF projects that lack depth in the feasibility analysis as the number of participating systems increases.

**3) Third Analysis – Bureau of Labor’s CPI Inflation Rate**

Staff considered a third analysis, independent from the above methods, that simply pegs the AIA and MRF funding limits to the Bureau of Labor’s (BOL) CPI Inflation Rate since July 2015 (when the AIA and MRF programs were established in NCGS §159G) as shown in Table 3 below. These values were calculated on December 3, 2024, at the following BOL website:

[https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm)

<b>Table 3 – Bureau of Labor’s CPI Inflation Rate</b>		
<b>SRP Grant Type</b>	<b>July 2015 (USD \$)</b>	<b>October 2024 (USD \$)</b>
AIA	\$150,000	\$198,403
MRF	\$50,000	\$66,134

**Analysis 3 - Key Findings**

The Bureau of Labor’s CPI Inflation Rate consistently tracks with staff findings in the previous analyses of Median per-connection AIA funding [Table 1] and per-partner MRF funding [Table 2] above.

**SWIA’s Authority**

The Authority’s duties are established in NCGS § 159G-71, including:

NCGS § 159G-71(6): To assess and make recommendations on the role of the State in the development and funding of wastewater, drinking water, and stormwater infrastructure in the State.

NCGS § 159G-71(8): To make recommendations on ways to maximize the use of current funding resources, whether federal, State, or local, and to ensure that funds are used in a coordinated manner.

NCGS § 159G-72 also authorizes the Authority to make recommendations or legislative proposals to the Environmental Review Commission, the Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources, and the Fiscal Research Division, through its annual reports.

As such, the Authority has the authority to make recommendations for legislative proposals to maximize the use of current funding resources, including recommendations to revise statutory limits to funding programs under NCGS § 159G. The Division is requesting the Authority’s assessment of the role of the State in developing and funding wastewater and drinking water infrastructure by increasing the State’s financial support of AIAs and MRFs. If the Authority concurs that the State should increase its support of AIAs and MRFs, the Division is requesting the Authority to consider making a recommendation for a legislative proposal to raise the funding limits for AIA and MRF grants under NCGS § 159G-36(c). New proposed funding limits can be determined through discussion and use of the analysis presented in this staff report. A specific recommendation from the Staff is presented below.

**Staff Recommendations**

- Division staff recommend that the Authority recommends a legislative change to increase the funding limit set forth in NCGS § 159G-36(c)(5) for AIA grants funded by the WW and DW SRP from \$150,000 to \$200,000.

- Division staff recommend that the Authority recommends a legislative change to increase the funding limit set forth in NCGS § 159G-36(c)(4) for MRF grants funded by the WW and DW SRP from \$50,000 to \$75,000.