

**State Water Infrastructure Authority**  
**Meeting Date: February 20, 2024**  
**Agenda Item N**  
**Potential Changes to the Viable Utility Program Assessment Criteria**

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**Division of Water Infrastructure Staff Report**

**Background**

Session Law 2020-79, entitled in part “An Act to Improve the Viability of the Water and Wastewater Systems of Certain Units of Local Government...”, authorizes the State Water Infrastructure Authority (Authority) and Local Government Commission (LGC) to develop criteria to assess and review local government units (LGUs), and to utilize the assessment and review process to identify distressed LGUs.

In the Fall of 2020, the Authority and LGC developed the Identification Criteria and Assessment Criteria to evaluate LGUs and identify distressed LGUs. The Authority adopted the Assessment Criteria and the Identification Criteria at its meeting on November 18, 2020.

**Identification Criteria**

The Authority and LGC adopted the following Identification Criteria to be used to identify distressed LGUs:

1. An LGU whose fiscal affairs are under the control of the LGC pursuant to its authority granted by G.S. 159-181 (“under Commission fiscal control”), or
2. An LGU that has not submitted its annual audits for the last two (2) fiscal years to the LGC as required by G.S. 159-34, or
3. An LGU with a total Assessment Criteria score that:
  - a) Equals or exceeds 9 for LGUs providing both drinking water and wastewater services, or
  - b) Equals or exceeds 8 for LGUs providing only one service, either drinking water or wastewater, or
4. An LGU for which other information is available to or known by the Authority or LGC that reflects and is consistent with, but does not expressly appear in, the Assessment Criteria to account for situations in which the Assessment Criteria score does not wholly or accurately reflect a system’s level of risk due to the limitations of available data.

**Assessment Criteria**

The Authority and LGC approved 19 parameters to use for calculating the total Assessment Criteria Score used for Identification Criterion #3 (See Attachment 1). The parameters

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capture operational, managerial, and financial issues. Note that the first four parameters are required by statute. Each parameter is assigned a point value that ranges from one to four. Data are compiled for each LGU from a variety of sources, including the UNC Environmental Finance Center, LGC audit data, and Division of Water Resources compliance information. These data are used to assign points for each parameter for each LGU to determine total scores.

### **Assessment Rounds and Designations**

In 2021, the Division and LGC staff compiled LGU data in accordance with the approved criteria to complete the first assessment to identify distressed LGUs. Session Law 2020-79 requires that the Authority and the LGC assess and review LGUs against the distressed criteria on a frequency of no less than every two years. At its July 14, 2021, meeting, the Authority agreed that the Division will conduct an annual review of the Assessment Criteria each spring and use a two-year cycle for notifications and designations under Identification Criterion 3. The two-year cycle involves notifying LGUs when their assessment score exceeds the designation threshold under Assessment Criterion 3 for the first time. Upon notification, these LGUs may choose to (1) request designation at that time; (2) provide additional information for consideration or to correct errors in their score; or (3) wait and see if they score above the threshold in the next assessment. Local government units that exceed the threshold a second time are automatically recommended for designation if they have not already been designated. Assessments were also conducted in Spring 2022 and Spring 2023, with additional designations made by the Authority and LGC based on those assessments. There are currently 145 LGUs designated distressed (out of a total of approximately 500 LGUs).

### **Discussion**

The Viable Utility Committee (VUC) meeting on January 30, 2024 included discussion of ideas for improvements to the assessment and designation process. The VUC and staff are proposing a two-step approach to revise the assessment criteria and designation process.

For the first step, some specific changes have been identified that Division staff recommend for implementation in the upcoming 2024 assessment round. These suggested changes, which will be discussed in detail below, are intended to address some known deficiencies with the existing parameters and process. These changes are relatively straightforward, easy to implement, and are outlined below, including specific staff recommendations.

For the second step, the VUC and staff are considering broader changes to the assessment process that will likely require more substantial work and thus are suggestions for consideration in 2025 and/or future assessments. The VUC and Division staff will continue discussing and refining these ideas for possible implementation in 2025 and/or beyond. Any specific recommendations resulting from these discussions will be presented to the Authority in future meetings.

### Recommended changes for 2024 Assessment Round

Division staff want to make specific corrections to improve the accuracy of the Assessment Criteria for the upcoming 2024 assessment.

#### *1. Eliminate the Population/Mile Parameters*

- The current Assessment Criteria include two parameters that look at the service population density. One looks at service population per mile of drinking water distribution lines, and the other looks at service population per mile of wastewater collection system lines. An LGU scores one point for each of these parameters when service population per mile is less than 100.
- These parameters were added because of the idea that lower-density areas tend to face more service challenges and higher costs per customer than higher-density areas.
- Since implementing the Assessment Criteria in 2021, staff have learned of significant limitations with the data used to determine service population per mile of distribution or collection lines. The data are not available for some LGUs and, where data are available, the numbers are often inaccurate and/or out of date.
- Given the inability to identify complete and accurate data sources to evaluate population per mile for drinking water or wastewater across all LGUs, staff recommend removing these parameters from the Assessment Criteria.

#### *2. Modify Drinking Water Compliance Parameter*

- Under the current Assessment Criteria, an LGU scores one point when their system has more than five Maximum Contaminant Level (MCL) violations in a five-year period or has ongoing treatment technique violations.
- Currently, health-related violations of the Lead and Copper Rule are not captured in the compliance parameters because they are defined as Action Level Exceedances and are not MCLs.
- Staff recommend incorporating lead and copper Action Level Exceedances into the scoring criteria for drinking water compliance issues. Local government units will score one point when more than five Action Level Exceedances, MCL violations, and/or ongoing treatment technique violations occur in a five-year period.

#### *3. Update Scoring Threshold for High Rates Parameter*

- Under the current Assessment Criteria, an LGU scores one point for high utility bills. The rationale behind this parameter is that if an LGU already has high utility bills, they are less likely to be able to increase their rates to improve revenue.

- The thresholds for high utility bills are based on the monthly bill for 5,000 gallons of usage, with a point scored when the monthly bill is greater than \$50/month for LGUs that provide water service only; greater than \$60/month for LGUs that provide wastewater service only; and greater than \$100 for water and wastewater combined for LGUs that provide both services.
- These thresholds were set based on 2019 utility bills when the first assessment was done in early 2019 and have not been adjusted since. Given inflation and the overall increase in rates across the state, staff believe these thresholds are outdated and should be increased.
- To avoid having outdated thresholds in the future, staff recommend utilizing percentiles that can be easily updated with each assessment in conjunction with updating the rates used for that year's assessment.
- The utility bills thresholds currently in use were set by looking at 80<sup>th</sup> to 90<sup>th</sup> percentiles with each type of provider (Drinking Water Only, Wastewater Only, and Combined Service) considered separately. The specific data points used were round numbers for each provider category within the range of 80<sup>th</sup> to 90<sup>th</sup> percentile.
- For consistency and ease of calculations moving forward, Division staff recommend using the 85th percentile for each provider category. Using this percentile will be consistent with the range that was used to develop the initial Assessment Criteria.

### **Staff Recommendations**

Division staff recommend the following changes to the Assessment Criteria:

1. Remove the two population/mile parameters from the assessment.
2. Modify the drinking water compliance parameter to incorporate lead and copper rule Action Level Exceedances.
3. Change the high rates parameter scoring threshold to be updated each year based on the 85<sup>th</sup> percentile for each type of provider using the monthly bill for 5,000 gallons as calculated from the most current rate data available.

## Distressed Unit Assessment Criteria

Parameter	Weight	Description	Formula / Other	Data Source
<b>Criteria Required by Statute</b>				
Service Population	1	Identifies smaller systems (less than 10,000 people served).		Varied
Transfers Out	1	Point scored when money is transferred out of the system's dedicated utility fund in 2 or more of the last 5 fiscal years if the system also has a negative surplus in the fiscal year of the transfer, or if the system has no debt and there is a negative surplus with debt service for a \$1 million "test" project. This indicates that money generated by the utilities is not being put back into the system for improvements.		Calculated from LGC data
Transfers In	1	Indicates that the system is not generating enough money to cover expenses. Point scored when money is transferred into the primary water/sewer fund from other sources in 2 or more of the last 5 years.		Calculated from LGC data
Debt Service Coverage Ratio (DSCR)	1	Measures unit's ability to cover loan payments by looking at revenue, expenses, and loan payments (principal and interest). Threshold value is less than 1.1.	(Operating revenues - operating expenses excluding depreciation) / (principal + interest payments)	Calculated from LGC data
Established, operational, and adequately funded program for repair, maintenance, and management		This criterion is measured by other parameters that are identified by an asterisk (*) including compliance, flow moratorium, and UAL control issues.		
<b>Infrastructure/Organizational Criteria</b>				
DW Compliance (*)	1	Point scored for more than 5 MCL violations in a 5-year period or for ongoing treatment technique violations.		NC DEQ-DWR

Parameter	Weight	Description	Formula / Other	Data Source
<b>Infrastructure/Organizational Criteria (continued)</b>				
WW / CS Compliance (*)	1	<ul style="list-style-type: none"> <li>• WW: Point scored if either in the top 10% for number of violations in a 5-year period, or a combination of in the top 20% for number of violations in a 5-year period and more than 50% of inspections document violations for wastewater treatment operations.</li> <li>• CS: Point scored if either the following occur: <ul style="list-style-type: none"> <li>○ The system is in the top 10% of systems for the number of SSO violations in a 5-year period and the top 20% for the number of SSOs per mile of collection system, or</li> <li>○ The system is in the top 20% of systems for the number of SSO violations in a 5-year period and the top 10% for the number of SSOs per mile of collection system.</li> </ul> </li> </ul>		NC DEQ-DWR
Flow Moratorium (*)	4	Points scored when the system is under a moratorium preventing service expansion due to inability to treat wastewater or because the system has reached 90% of permitted capacity.		NC DEQ-DWR
Revenue Outlook	4	Reflects service unit's ability to generate income in the future. Points scored when the system has high rates AND declining population.		EFC rates; source of population varies
Affordability	1	Identifies economically disadvantaged communities by comparing the service area's population change rate, poverty rate, median household income (MHI), unemployment rate, and property valuation per capita to established state benchmarks. Point scored if 4 or 5 of these indicators are worse than the state benchmark. <b>Note that the benchmark values are updated every year.</b>	<u>Current Benchmarks:</u> Population change: 4.42% Poverty rate: 14.0% MHI: \$52,413 Unemployment rate: 4.0% Property valuation per capita: \$107,620	Developed by DWI/SWIA
Rates	1	Point scored when rates are already high. Indicates that the system is unlikely to be able to increase rates to improve revenue. High rates thresholds are: > \$100/month for combined water and sewer service; > \$50/month for water service only; and > \$60/month for wastewater service only.	2019 inside rate for 5,000 gallons used	EFC
DW Pop / Mile	1	Evaluates population density. Lower density areas tend to face more service challenges. Threshold value is less than 100.	Service Population/ Miles of drinking water pipe	LWSP (see above for population)
Sewer Pop / Mile	1	Evaluates population density. Lower density areas tend to face more service challenges. Note that there is a significant lack of data on miles of sewer line for small systems. Threshold value is less than 100.	Service Population/ Miles of sewer pipe	NC DEQ-DWR

Parameter	Weight	Description	Formula / Other	Data Source
<b>Infrastructure/Organizational Criteria (continued)</b>				
UAL Control Issues - W/S only (*)	3	Points scored for systems that have been identified as medium risk (2) or high risk (1) of accounting control issues associated with water and/or sewer systems based on annual audits.		LGC
<b>Financial Criteria</b>				
UAL Missing Audit	3	If audit not submitted, then treat as if on the UAL for control issues (for FY 19 audits)		LGC
Surplus (deficit) w/ Debt	2	Identifies systems that are not generating enough revenue to cover expenses, asset depreciation, and debt payments. Threshold value is less than or equal to \$0.	Operating Revenues- ((Operating Expenses- Depreciation)+Long-term Debt Service)	Calculated from LGC data
No Debt DSCR Test	1	Similar to the DSCR calculated above but includes \$1 million "test" project if system has no debt to allow evaluation of the ability to finance a simple project. Threshold value is 1.1.		Calculated from LGC data
% Depreciated	1	Evaluates the financial impact of depreciation of water and sewer assets as they age. Threshold value is greater than 50%.		Calculated from LGC data
Operating Margin	1	Point scored if the system is not generating enough revenue to cover operating expenses. Threshold value is less than 0.	(Operating Revenue - Operating Expenses) / Operating Revenue Includes depreciation	Calculated from LGC data
Quick Ratio	1	Evaluates a system's ability to meet short-term financial obligations with cash or easily accessible funds. Threshold value is less than 1.1.	Current assets (excluding inventories and prepaids) / current liabilities	Calculated from LGC data
Receivables Ratio	1	Measures how well the system is collecting money from customers. Point scored for 3-year average greater than or equal to 2.3 or if there is an increase of greater than or equal to 0.2 in each of the last two years which demonstrates a declining trend in bill payment.	Days Receivables /billing period Days receivables=Net Customer Accounts Receivable/Charges for services /365	Calculated from LGC data

<b>List of Acronyms</b>		
CS = Collection System	DWR = Division of Water Resources	SSO = Sanitary Sewer Overflow
DEQ = Dept. of Environmental Quality	EFC = Environmental Finance Center	SWIA = State Water Infrastructure Authority
DSCR = Debt Service Coverage Ratio	LGC = Local Government Commission	WW = Wastewater (sewer)
DW = Drinking Water	LWSR = Local Water Supply Plan	UAL = Unit Assistant List generated by LGC to identify communities that may have problems with accounting procedures identified through audits
DWI = Division of Water Infrastructure	MCL = Maximum Contaminant Level	