

**State Water Infrastructure Authority
Viable Utility Committee
January 30, 2024 Meeting
Agenda Item D– Review of Identification and Assessment Criteria Used in the Local
Government Unit Reassessment Process**

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 LGU 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 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 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. Additional assessments were 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

Staff have been considering ideas for improvements to the assessment and designation process and shared some initial thoughts at the December 2023 Authority meeting.

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 we recommend for implementation in this upcoming 2024 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, staff propose that the VUC consider broader changes to the assessment process. Staff have identified points for discussion for possible changes that will likely require more substantial work and thus are suggestions for consideration in 2025 or future

assessments. These ideas are presented to get discussion moving as we work to refine these ideas for possible implementation after the 2024 assessment round.

Recommended changes for 2024 Assessment Round

Division staff want to make specific corrections to improve 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 and adjusting the designation thresholds to account for the reduction in total possible points.

2. Modify Compliance Parameters

- The current assessment criteria include two parameters under which LGUs may score points for compliance issues. Each parameter is worth one point.
- For drinking water systems, a point is scored when the system has more than five Maximum Contaminant Level (MCL) violations in a five-year period or for ongoing treatment technique violations.
- For wastewater systems, a point is scored based on issues related to wastewater treatment operations or collection system violations. Division staff use data provided by the Division of Water Resources. A single point is scored based on any of the following conditions:
 - When a system falls within the top 10 percent for total number of wastewater treatment violations received in a five-year period, or

- If the system is in the top 20 percent for total number of wastewater violations AND more than 50 percent of inspections document violations for wastewater treatment operations in a five-year period, or
 - The system is in the top 10 percent for number of reportable sanitary sewer overflow (SSO) violations in a five-year period and the top 20 percent for number of SSOs per mile of collection system in a five-year period, or
 - The system is in the top 20 percent of systems for number of SSO violations in a five-year period and in the top 10 percent for the number of SSOs per mile of collection system in a five-year period. (Note: Staff are looking at different options for evaluating SSO violations without relying on mile of collection system lines.)
- Only one point is scored even if an LGU meets multiple criteria for scoring.
 - Currently, violations of the lead and copper rule are not captured in the compliance parameters because they are not based on MCLs. Staff recommend incorporating lead and copper violations into the scoring criteria for drinking water compliance issues. Staff are currently gathering data to develop a specific recommendation for how to incorporate lead and copper violations in a manner that is comparable to the other compliance criteria.
 - Under the current assessment criteria, there are two separate parameters for drinking water compliance and wastewater/collection system compliance. This complicates scoring because LGUs that provide only one service (wastewater or drinking water) have fewer total possible points than LGUs that provide both wastewater and drinking water service. To simplify scoring, staff recommend combining the two existing compliance parameters into one single parameter such that an LGU would score a maximum of one point if they meet any of the scoring criteria for drinking water or wastewater compliance issues.
 - Consolidating to one point would have minimal impact on designations. The 2021 assessment had only one LGU that scored two points for compliance. With a total score of 11, that LGU would have been above the designation threshold even if the two points were consolidated into one. In 2023, there was also only one LGU that scored two points for compliance. With a total score of five points, that LGU was well below the designation threshold. The 2022 assessment did not have any LGUs scoring two points for compliance.

3. *Update Designation Threshold to Reflect Changes*

- Move to a single value for the designation threshold
 - Dual values were initially established because there were two different parameters (drinking water and wastewater) for both population/mile and compliance.

- An LGU providing both utilities could potentially score four points, while a single utility provider could potentially score only two points.
- Proposed changes eliminate any difference in potential total score between dual service providers and single service providers.
- Lower threshold to account for removing parameters
 - The recommended changes discussed above result in eliminating three possible points for dual service providers and one possible point for single service providers. As a result, staff believes it makes sense to reduce the adjust the overall threshold for designation as distressed.
 - Staff used the 2023 assessment data to evaluate how many LGUs would have scored above different threshold levels with the population per mile parameters eliminated and the compliance parameters combined to a single point. The results of that assessment are in Table 1 as follows:

Table 1. Results of Threshold Changes (n=495)		
Potential Thresholds Evaluated with Population Per Mile Eliminated	# of LGUs exceeding threshold	% of LGUs exceeding Threshold
Existing threshold for Reference: >= 9 for dual service, >= 8 for single service (no changes to parameters)	107	22%
>= 9 for all (with changes)	66	13%
>= 8 for all (with changes)	90	18%
>= 7 for all (with changes)	117	24%

- Given that we already have almost 30 percent of LGUs identified as distressed, staff are hesitant to reduce the designation threshold significantly. Staff looked at different options and recommend a threshold of eight points if the recommended changes above are implemented to reflect the reduction of total possible points, especially for LGUs providing both water and wastewater service, without lowering the threshold to an unreasonably low number. The recommended threshold of 8 points correlates to roughly 20 percent of LGUs scoring high enough for designation.

4. *Update Scoring Threshold for High Rates Parameter*

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

thresholds for high rates 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 rates 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 85th percentile is consistent with affordability calculations used for other Division activities.

Ideas for future changes

Staff are suggesting the following topics for consideration and discussion as possible future changes to the assessment process but have no specific recommendations at this time.

- Revisit financial parameters
 - Consider how the assessment parameters compare to and possibly overlap with the LGC's Unit Assistance List (UAL). In particular, is there a way to utilize the UAL process instead of a separate assessment of financial parameters?
 - Can we simplify and reduce the number of parameters that we are using, particularly for certain metrics that are very similar?
 - Consider using trends or patterns for scoring rather than a single instance; for example, look at the possibility of assigning points based on average value over three years, or assign points only if a threshold value is exceeded for two out of three years.
- Revisit the weighting for the "high point" parameters and consider whether these parameters alone are influencing total scores too much.
 - Currently any LGU under a moratorium receives four points. Consider a tiered approach for moratorium points such that there are different point levels based on the reason that a unit is put under a moratorium. (Note that this is a parameter that only impacts LGUs providing wastewater; there is not a drinking water equivalent for moratorium. As we look at tiering and other options, we might want to look how the difference in total points for wastewater or combined versus drinking-water-only utilities impacts designations.

- Revenue Outlook is scored at four points and correlates with a point scored for rates. Consider whether the overall point value should be lowered or if there are options for different tiers of points based on how high rates are and how much the population is declining.
- UAL list is scored at three points. Consider whether this is too high in addition to the points assigned for individual financial parameters.
- Consider alternative ways to incorporate rates into the assessment parameters
 - Combine with affordability and cost recovery in some way.
 - Want to avoid sending the message that LGUs should be lowering their rates to avoid scoring points in the assessment.
 - Recognize that there is some lag from implementing rate changes to seeing the impact from that increased revenue.
 - Consider a process that links any scoring thresholds related to rates to affordability tiers.
- “Inherent” risk factors
 - We have been discussing parameters that are based on characteristics like a system’s size and local demographics rather than performance measures such as service population, revenue outlook, and affordability parameters.
 - Consider how these inherent risk factors are incorporated in the assessment process and whether there is a better way to use these factors in the identification and designation of distressed units.
 - Is there a way to utilize these parameters to differentiate the type of support provided to LGUs that are distressed primarily due to these inherent risk factors rather than other operational or financial indicators?
- Develop clear plans for de-designation
 - Consider requesting modification of G.S. 159G-45(c) to allow for some flexibility for de-designating units that may not need to go through all of the steps.
 - If currently designated units would no longer meet the designation threshold based on an updated assessment process, consider giving them the option to request de-designation or continue in the program.

Staff Recommendations

Division staff recommend that the VUC brings the following Assessment Criteria changes to the full Authority:

1. Remove the two population/mile parameters from the assessment.

2. Modify the drinking water compliance parameter to incorporate lead and copper rule violations AND consolidate the two compliance parameters such that a unit earns a maximum of 1 point if they exceed the criteria for drinking water compliance, Wastewater compliance, or both.
3. Change the designation threshold from nine points for dual service providers or eight for single service providers to a score of eight for all LGUs to account for removing the population per mile parameters and consolidating the two compliance parameters into one.
4. Change the scoring thresholds for the high rates parameter to be based on the 85th percentile of the monthly bill for 5,000 gallons using the most current rate data available.

Distressed Unit Assessment Criteria

Parameter	Weight	Description	Formula / Other	Data Source
Criteria Required by Statute				
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.		
Infrastructure/Organizational Criteria				
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
Infrastructure/Organizational Criteria (continued)				
WW / CS Compliance (*)	1	<ul style="list-style-type: none"> • 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. • CS: Point scored if either the following occur: <ul style="list-style-type: none"> ○ 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 ○ 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. 		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. Note that the benchmark values are updated every year.	<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
Infrastructure/Organizational Criteria (continued)				
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
Financial Criteria				
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

List of Acronyms		
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	