

State Water Infrastructure Authority
Meeting Date – February 20, 2024
Agenda Item K

Draft Priority Rating Systems and Affordability Criteria for Water and Sewer Projects

Division of Water Infrastructure Staff Report

Background

The federal Clean Water Act and federal Safe Drinking Water Act provide states with the broad authority to implement and operate State Revolving Fund (SRF) loan programs, including project funding prioritization. North Carolina General Statute (G.S.) 159G-71 empowers the State Water Infrastructure Authority (Authority) to establish priorities for making loans and grants consistent with federal law.

The US Environmental Protection Agency (USEPA) requires the Division of Water Infrastructure (Division) to update its Intended Use Plan (IUP) for the Clean Water SRF (CWSRF) and Drinking Water SRF (DWSRF) programs. Included within each program’s IUP is the Priority Rating System (PRS), which establishes the points applied by Division staff when an application for funding is evaluated. The Division proposes the PRS to the USEPA each year in the IUP for each SRF (Drinking Water State Revolving Fund [DWSRF] and Clean Water State Revolving Fund [CWSRF]) and submits the IUPs to the USEPA as part of the capitalization grant applications.

These PRSs are currently applied to infrastructure construction projects funded by the SRFs (including the Bipartisan Infrastructure Law SRF Emerging Contaminants), the state’s Drinking Water Reserve, state’s Wastewater Reserve, and the Viable Utility Reserve. A similar PRS is applied in the Community Development Block Grant-Infrastructure program.¹ The PRSs include four categories:

1. Category 1 – Project Purpose
2. Category 2 – Project Benefits
3. Category 3 – System Management
4. Category 4 – Affordability

The current PRSs provide a consistent and transparent methodology for prioritization that aligns with the Authority’s Master Plan and statutory requirements. The PRSs support applicants in their continued efforts toward long-term utility viability.

Scoring of Projects Under Current Priority Rating System Line Items

Congress appropriated funds to the SRF in the Infrastructure Investment and Jobs Act of 2021, commonly referred to as the Bipartisan Infrastructure Law (BIL). The BIL appropriated additional funds for five fiscal years (FY 2022 - FY 2026). Bipartisan Infrastructure Law funds are available to support all eligible SRF projects, as well as funds specifically to support lead service line replacement or to help address emerging contaminants (EC).

¹ See Agenda Item M for more information regarding changes to the CDBG-I PRS.

The PRSs as approved by the Authority on July 19, 2023, included new line items (1.J.1 – 1.J.3) and updates to line items (2.H.3 – 2.H.4) that provide priority to projects addressing perfluoroalkyl and polyfluoroalkyl substances (PFAS) contaminants and allows staff to identify projects eligible for the BIL SRF EC funds. This PRS was also adopted for projects to be funded out of regular SRF funds and all other funding programs.

Projects that address PFAS contaminants currently receive both Project Purpose points as well as Project Benefit points related to the contamination, thereby starting with a much higher score relative to other types of projects, such as replacing aging infrastructure or adding treatment to address other types of contamination. For example, a project to add a new treatment unit to remove high levels of PFOA exceeding the proposed MCL could start off by scoring 20 1.J.1 points, 10 2.H.4 points, and three 2.I points (total of 33 points to start), whereas a project to replace aged infrastructure starts off by scoring 20 points for 1.C and 1.C.1. The PRS applies to all funding programs and therefore affects the rankings for all funding programs.

Since the State of North Carolina received BIL SRF funds that are exclusive to specifically address EC projects (the BIL DWSRF-EC and BIL CWSRF-EC funds), staff discussed the potential need for revising the PRS to rebalance the points and ensure that other types of projects, particularly in drinking water, are not starting with a significant disadvantage in points in receiving the non-EC funds. Recommendations below would allow projects such as replacing aging infrastructure or providing service to disadvantaged communities to start off with approximately the same score as projects specifically addressing PFAS for funding programs that are not EC-specific.

Proposed Changes to Category 1 – Project Purpose and Category 2 – Project Benefits

The proposed PRS will be applicable for the following funding programs:

- State Revolving Funds
 - CWSRF (Base program)
 - BIL CWSRF-EC (these funds are exclusive to projects addressing PFAS)
 - DWSRF (Base program)
 - BIL DWSRF-EC (these funds are exclusive to projects addressing PFAS)
- State Reserve Program (Drinking Water and Wastewater)
- Viable Utility Reserve (Construction projects only)

As shown in the Drinking Water PRS table and the Wastewater PRS tables at the end of this staff report, the proposed PRS reduces Project Purpose priority points for line item 1.J.1 from 20 to 12. This is similar to points for line item 1.C (Replace/Rehab Infrastructure). Staff also recommend reducing points for line item 1.J.2 from 15 to 5, and keeping the points for line item 1.J.3 (EC evaluation/assessment projects) unchanged at 5 points.

Staff also propose to reduce Project Benefit priority points for line item 2.H (Project Addresses Contamination) as follows:

- Reducing 2.H.4 (Project addresses PFAS exceeding proposed MCL or Hazard Index) from 10 points to 5, and
- Reducing 2.H.3 (Project addresses any PFAS compounds exceeding 10 ppt or State-established regulatory standards or limits) from 5 points to 2.

Provided all other things being equal, the sum of line items 2.H.4 and 2.I would be similar to 1.C.1/1.D.1, age points for the infrastructure projects.

The combination of changes to line items 1.J.1, 1.J.2, 2.H.3 and 2.H.4 will result in scoring projects exclusively focused on addressing PFAS almost the same – or possibly slightly higher – than other types of high priority projects. Most projects addressing PFAS will do so either by installing additional treatment (which gain another 3 points under 2.I) or by changing the water source (which could potentially gain 5 – 10 points under line item 2.K with an interconnection). Combined with the revised priority points for line items 1.J.1 (12 points) and 2.H.4 (5 points), a project adding treatment or an interconnection to address PFAS with proposed MCL or Hazard Index exceedances would start off scoring at the same level or slightly higher than a project replacing aging infrastructure (20 points to start).

The proposed changes to the line item 1.J points and line item 2.H points will not change rankings for projects to be funded from the BIL DWSRF-EC or BIL CWSRF-EC funds, as all projects receiving those funds are scoring these points and will be equally affected by the change in points.

Finally, to ensure different contaminants in drinking water receive priority on a comparable scale, similar to the current PRS scale, staff propose to reduce line items 2.H.1 and 2.H.2 points to 10 and 5, respectively. Addressing contaminants such as Manganese and 1,4 Dioxane is included under line item 2.H.2. These proposed changes will continue to keep projects addressing these contaminants scoring at the same priority level as PFAS compounds above proposed MCL or Hazard Index (line item 2.H.4) as approved by the Authority in July 2023. Projects addressing acute contamination of a water supply source (line item 2.H.1) would continue to score the highest of all other types of contamination (10 points vs. 5 or 2 points).

Proposed Changes to Category 4 – Affordability

The Division does not recommend any changes to prioritization for Categories 3 and 4 of the existing PRS. However, staff recommend the following tactical change for line item 4.B (Current Monthly Combined Utility Rates for 5000 Gallons of Usage). Currently, line items 4.B.1 – 4.B.4 specify monthly bill thresholds (\$79, \$90, \$107, and \$129). Those dollar thresholds were calculated a few years ago at what were the 50th, 70th, 85th and 95th percentiles of monthly water and sewer rates in North Carolina in 2020. The thresholds in the PRS have not been updated since then, while monthly water and sewer rates have increased across the state. The staff recommends updating the thresholds using new rates data to ensure that priority is given to utilities that are already charging the highest rates, and doing so on a consistent, recurring basis. Rather than updating the specific dollar thresholds in the PRS and requiring Authority action each time, staff propose to change the line items 4.B.1 through 4.B.4 thresholds from

specific dollar amounts to the percentiles (i.e., 50th, 70th, 85th, and 95th percentiles). This would fix the PRSs to those percentile thresholds, allowing staff to update the equivalent dollar thresholds in application materials and guidance on a recurring basis, starting with Fall 2024 application materials.

Applicability to Equivalent Priority Rating Systems

Proposed changes to line items 1.J.1, 1.J.2, 2.H.1 – 2.H.4, and 4.B.1 – 4.B.4 in the Priority Rating System for Drinking Water projects and Priority Rating System for Wastewater projects will automatically apply to the same or equivalent line items in the Priority Rating Systems for Emerging Contaminants (DWSRF-EC and CWSRF-EC PRSs) and for line items 4.B.1 – 4.B.4 for Lead Service Line Replacement funding (DWSRF-LSLR PRS).

Staff Recommendation

Staff recommend that the Authority approve the Draft Priority Rating System for Drinking Water Projects and the Draft Priority Rating System for Wastewater Projects – and the equivalent changes to the DWSRF-EC, CWSRF-EC, and DWSRF-LSLR – for public review.

DRAFT 2024 PRIORITY RATING SYSTEM for Drinking Water Projects

Instructions: For each line item, mark "X" to claim the points for that line item. Be sure that your narrative includes justification for every line item claimed. At the end of each Category, provide the total points claimed for each program in the subtotal row for that category. Then add the subtotals from each category and enter the Total of Points for All Categories in the last line. Note that some categories have a maximum allowed points that may be less than the total of individual line items.

Line Item #	EC Line Item [†]	Category 1 – Project Purpose (Points will be awarded for <u>only one</u> Project Purpose)	Claimed Yes/No	Points
1.A		Project will consolidate a nonviable drinking water or wastewater utility		25
1.B		Project will resolve failed or failing infrastructure issues		22
1.C		Project will rehabilitate or replace infrastructure, including replacement by regionalization projects		12
1.C.1		Treatment units, pumps and/or pump stations to be rehabilitated or replaced are greater than 20 years old, OR lines, storage tanks, drinking water wells or intake structures to be rehabilitated or replaced are greater than 40 years old OR lead service lines		8
1.D		Project will expand infrastructure		2
1.D.1		Treatment units, pumps and/or pump stations to be rehabilitated or replaced are greater than 20 years old, OR lines, storage tanks, drinking water wells or intake structures to be rehabilitated or replaced are greater than 40 years old		8
1.E		Project will provide service to disadvantaged areas		20
1.F – 1.I		Reserved for other programs		
1.J		Project addresses PFAS emerging contaminants		
1.J.1	EC	Sole purpose of the project is to address Emerging Contaminants (construction projects) where 100% of the costs are associated with this purpose OR		20 12
1.J.2	EC	At least 75% of the project costs are to address Emerging Contaminants (construction projects) OR		15 5
1.J.3	EC	Sole purpose of the project is to evaluate alternatives to address Emerging Contaminants (may include pilot scale treatment study)		5
Maximum points for Category 1 – Project Purpose				25
Subtotal claimed for Category 1 – Project Purpose				

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Line Item #	EC Line Item [†]	Category 2 – Project Benefits	Claimed Yes/No	Points
2.A		Reserved for other programs		
2.B		Project provides a specific public health benefit		
2.B.1		Project addresses dry wells or contamination of a drinking water source; or resolves managerial, technical & financial issues		20
2.B.2		Projects that eliminate lead service lines		10
2.C		Reserved for other programs		
2.D		Project addresses promulgated but not yet effective regulations		10
2.E		Project directly addresses enforcement documents		
2.E.1		Project directly addresses an EPA Administrative Order for a local government Applicant located in a Tier 1 county, or addresses an existing or pending SOC, or a DEQ Administrative Order, OR		5
2.E.2		Project directly resolves a Notice of Violation or Notice of Deficiency		3
2.F		Project includes system merger or regionalization		
2.F.1		Project includes system merger OR		10
2.F.2	EC	Project includes system regionalization and/or system partnerships		5
2.G		Project addresses documented low pressure		10
2.H		Project addresses contamination		
2.H.1		Project addresses acute contamination of a water supply source OR		15 10
2.H.2		Project addresses contamination of a water supply source other than acute OR		10 5
2.H.3	EC	Project addresses any PFAS compounds exceeding 10 ppt or State-established regulatory standards or limits OR		5 2
2.H.4	EC	Project addresses PFAS exceeding proposed MCL or Hazard Index		10 5
2.I		Project improves treated water quality by adding or upgrading a unit process		3
2.J		Water loss in system to be rehabilitated or replaced is 30% or greater		3
2.K		Project provides a public water system interconnection		

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2.K.1		Project creates a new interconnection between systems not previously interconnected OR		10
2.K.2		Project creates an additional or larger interconnection between two systems already interconnected which allows one system's public health water needs to be met during an emergency OR		10
2.K.3		Project creates any other type of interconnection between systems		5
2.L – 2.M		Reserved for other programs		
2.N		Project provides resiliency for critical system functions		
2.N.1		Project relocates infrastructure from inside the 100-year floodplain to outside the 500-year floodplain OR		8
2.N.2		Project relocates infrastructure from inside the 100-year floodplain to outside the 100-year floodplain OR		5
2.N.3		Project relocates infrastructure from between the 100-year and 500-year floodplains to outside a 500-year floodplain OR		3
2.N.4		Project fortifies or elevates infrastructure within floodplain, OR		4
2.N.5		Project improves ability to assure continued operation during flood events OR		4
2.N.6		Project downsizes infrastructure related to buyouts OR		4
2.N.7		Project provides redundancy/resiliency for critical treatment and/or transmission/distribution system functions including cybersecurity and/or backup electrical power source		3
2.O – 2.S		Reserved for other programs		
Maximum points for Category 2 – Project Benefits				35
Subtotal claimed for Category 2 – Project Benefits				
Line Item #	EC Line Item[†]	Category 3 – System Management	Claimed Yes/No	Points
3.A		Capital Planning Activities		
3.A.1	EC	Applicant has implemented an Asset Management Plan as of the date of application OR		10
3.A.2	EC	Applicant has a current Capital Improvement Plan (CIP) that spans at least 10 years and proposed project is included in the plan		2
3.B	EC	System Operating Ratio is greater than or equal to 1.00 based on a current audit, or is less than 1.00 and unit cost is greater than 2.5% of MHI		5

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3.C		Applicant has an approved Source Water Protection Plan and/or a Wellhead Protection Plan		5
3.D		Applicant has implemented a water loss reduction program		5
3.E		Applicant has implemented a water conservation incentive rate structure		3
Maximum points for Category 3 – System Management				15
Subtotal claimed for Category 3 – System Management				
Line Item #	EC Line Item [†]	Category 4 – Affordability	Claimed Yes/No	Points
4.A		Residential Connections		
4.A.1	EC	Less than 10,000 residential connections OR		2
4.A.2	EC	Less than 5,000 residential connections OR		4
4.A.3	EC	Less than 1,000 residential connections		8
4.B		Current Monthly Combined Utility Rates at 5,000 Usage		
4.B.1	EC	Greater than \$79 the 50 th percentile OR		4
4.B.2	EC	Greater than \$90 the 70 th percentile OR		6
4.B.3	EC	Greater than \$107 the 85 th percentile OR		8
4.B.4	EC	Greater than \$129 the 95 th percentile		10
4.C		Local Government Unit (LGU) Indicators		
4.C.1	EC	3 out of 5 LGU indicators worse than state benchmark OR		3
4.C.2	EC	4 out of 5 LGU indicators worse than state benchmark OR		5
4.C.3	EC	5 out of 5 LGU indicators worse than state benchmark OR		7
4.C.4	EC	Project benefits disadvantaged areas		5
4.D – 4.G		Reserved for other programs		
Maximum points for Category 4 – Affordability				25
Subtotal claimed for Category 4 – Affordability				
Total of Points for All Categories				

[†] Only line items marked with “EC” will be used in scoring eligible applications for DWSRF-EC funding. These applications will also be scored using the full PRS for all other drinking water funding sources.

DRAFT 2024 PRIORITY RATING SYSTEM for Wastewater Projects

Instructions: For each line item, mark “X” to claim the points for that line item. Be sure that your narrative includes justification for every line item claimed. At the end of each category, provide the total points claimed for each program in the subtotal row for that category. Then add the subtotals from each category and enter the Total of Points for All Categories in the last line. Note that some categories have a maximum allowed points that may be less than the total of individual line items.

Line Item #	EC Line Item [†]	Category 1 – Project Purpose (Points will be awarded for <u>only one</u> Project Purpose)	Claimed Yes/No	Points
1.A		Project will consolidate a nonviable drinking water or wastewater utility		25
1.B		Project will resolve failed or failing infrastructure issues		20
1.C		Project will rehabilitate or replace infrastructure, including replacement by a regionalization project		12
1.C.1		Treatment units, pumps and/or pump stations to be rehabilitated or replaced are greater than 20 years old, OR lines, or tanks to be rehabilitated or replaced are greater than 40 years old		8
1.D		Project will expand infrastructure		2
1.D.1		Treatment units, pumps and/or pump stations to be rehabilitated or replaced are greater than 20 years old, OR lines, storage tanks, drinking water wells or intake structures to be rehabilitated or replaced are greater than 40 years old		8
1.E		Project will provide service to disadvantaged areas		20
1.F		Reserved for other programs		
1.G		Project will provide stream/wetland/buffer restoration		10
1.G.1		Restoration project that includes restoration of a first order stream and includes stormwater infiltration SCMs		5
1.G.2		Restoration project that includes restoration and/or protection of riparian buffers to at least 30 feet on both sides of the stream		5
1.H		Project will provide SCMs to treat existing sources of pollution		10
1.H.1		Project that includes SCMs in series that achieve at least 35% nutrient reduction (both TN and TP) and 85% TSS reduction		10
1.I		Project will provide reclaimed water/usage or rainwater harvesting/usage		10
1.J		Project addresses PFAS emerging contaminants		
1.J.1	EC	Sole purpose of the project is to address Emerging contaminants (Construction projects). 100% of the costs are associated with this purpose OR		20 12
1.J.2	EC	At least 75% of the project is to address Emerging contaminants (Construction projects) OR		15 5

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1.J.3	EC	Sole purpose of the project is to evaluate alternatives to address emerging contaminants (may include pilot scale treatment study)		5
Maximum points for Category 1 – Project Purpose				25
Subtotal claimed for Category 1 – Project Purpose				
Line Item #	EC Line Item [†]	Category 2 – Project Benefits	Claimed Yes/No	Points
2.A – 2.B		Reserved for other programs		
2.C		Project provides a specific environmental benefit		
2.C.1		Project replaces or repairs certain sewer lines, eliminates failed onsite wastewater system or non-discharge system, or resolves managerial, technical & financial issues		15
2.C.2		Project eliminates malfunctioning onsite wastewater systems		10
2.D		Project addresses promulgated but not yet effective regulations		10
2.E		Project directly addresses enforcement documents		
2.E.1		Project directly addresses an EPA Administrative Order for a local government Applicant located in a Tier 1 county, or addresses an existing or pending SOC, or a DEQ Administrative Order, OR		5
2.E.2		Project directly resolves a Notice of Violation or Notice of Deficiency		3
2.F		Project includes system merger or regionalization		
2.F.1		Project includes system merger OR		10
2.F.2	EC	Project includes system regionalization and/or system partnerships		5
2.G – 2.H.2		Reserved for other programs		
2.H.3	EC	Project addresses any PFAS compounds exceeding 10 ppt or State-established regulatory standards or limits OR		5 2
2.H.4	EC	Project addresses PFAS exceeding proposed MCL or Hazard Index		10 5
2.I		Project improves treated water quality by adding or upgrading a unit process		3
2.J – 2.M		Reserved for other programs		
2.N		Project provides resiliency for critical system functions		
2.N.1		Project relocates infrastructure from inside 100-year floodplain to outside 500-year floodplain OR		8
2.N.2		Project relocates infrastructure out of a 100-year floodplain OR		5
2.N.3		Project relocates infrastructure from between the 100-year and 500-year floodplains to outside the 500-year floodplain OR		3

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2.N.4		Project fortifies or elevates infrastructure within floodplain OR		4
2.N.5		Project improves ability to assure continued operation during flood events OR		4
2.N.6		Project reduces the size of infrastructure as a result of a buyout or other abrupt loss of population OR		4
2.N.7		Project provides redundancy/resiliency for critical treatment and/or transmission/distribution system functions including cybersecurity and/or backup electrical power source		3
2.O		Project <u>directly benefits</u> subwatersheds that are impaired as noted on the most recent version of the Integrated Report		20
2.P		Project <u>directly benefits</u> specific classified waters		10
2.Q		Project will result in elimination of an NPDES discharge		3
2.R		Primary purpose of the project is to achieve at least 20% reduction in energy use		5
2.S		Reserved for other programs		
Maximum points for Category 2 – Project Benefits				35
Subtotal claimed for Category 2 – Project Benefits				
Line Item #	EC Line Item[†]	Category 3 – System Management	Claimed Yes/No	Points
3.A		Capital Planning Activities		
3.A.1	EC	Applicant has implemented an Asset Management Plan as of the date of application OR		10
3.A.2	EC	Applicant has a current Capital Improvement Plan (CIP) that spans at least 10 years and proposed project is included in the plan		2
3.B	EC	System Operating Ratio is greater than or equal to 1.00 based on a current audit, or is less than 1.00 and unit cost is greater than 2.5% of MHI		5
3.C – 3.E		Reserved for other programs		
Maximum points for Category 3 – System Management				15
Subtotal claimed for Category 3 – System Management				
Line Item #	EC Line Item[†]	Category 4 – Affordability	Claimed Yes/No	Points
4.A		Residential Connections		
4.A.1	EC	Less than 10,000 residential connections OR		2
4.A.2	EC	Less than 5,000 residential connections OR		4
4.A.3	EC	Less than 1,000 residential connections		8

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4.B		Current Monthly Combined Utility Rates at 5,000 Usage		
4.B.1	EC	Greater than \$79 the 50 th percentile OR		4
4.B.2	EC	Greater than \$90 the 70 th percentile OR		6
4.B.3	EC	Greater than \$107 the 85 th percentile OR		8
4.B.4	EC	Greater than \$129 the 95 th percentile		10
4.C		Local Government Unit (LGU) Indicators		
4.C.1	EC	3 out of 5 LGU indicators worse than state benchmark OR		3
4.C.2	EC	4 out of 5 LGU indicators worse than state benchmark OR		5
4.C.3	EC	5 out of 5 LGU indicators worse than state benchmark OR		7
4.C.4	EC	Project benefits disadvantaged areas		5
4.D – 4.G		Reserved for other programs		
Maximum points for Category 4 – Affordability				25
Subtotal claimed for Category 4 – Affordability				
Total of Points for All Categories				

† Only line items marked with “EC” will be used in scoring eligible applications for CWSRF-EC funding. These applications will also be scored using the full PRS for all other wastewater funding sources.