State Water Infrastructure Authority
Meeting Date – July 8, 2020
Agenda Item I – 2020 Intended Use Plans (IUPs) for CWSRF and DWSRF Programs

Division of Water Infrastructure Staff Report

Background

North Carolina General Statute G.S. 159G-71 contains the powers and the duties of the State Water Infrastructure Authority (Authority) which include, "To establish priorities for making loans and grants consistent with federal law".

The Authority has this responsibility for the federal Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF).

The Division of Water Infrastructure (Division) proposes the application priority ranking methods to evaluate applications for the CWSRF and DWSRF to the US Environmental Protection Agency (EPA) each year in North Carolina's Intended Use Plan (IUP) for each of the SRF programs. Each program's IUP includes the Priority Rating System which contains the points that are applied by Division staff to evaluate application. The Division submits the IUPs to the US EPA as part of the capitalization grant applications.

At the Authority's April 8, 2020 meeting, the Division proposed the following changes to the CWSRF and DWSRF Priority Rating Systems and IUP:

I. Expand Project Benefits to include specific resiliency project priority points.

II. Establish incremental principal forgiveness increases to utilize funds available.

The Authority approved the attached CWSRF and DWSRF Priority Rating Systems for public review.

The Division opened the public comment period on May 4, 2020. The Division did not hold a public meeting due to social distancing requirements stemming from the Covid-19 pandemic and related executive orders. The public comment period closed on June 4. The Division received public comments from Ms. Rhonda Olson of Brunswick County and Grady McCallie, Peter Raabe, and Geoff Gisler of the NC Conservation Network, American Rivers, and Southern Environmental Law Center, respectively.

Brunswick County

1. Comment: Rescue of a non-viable system is not only a function of need but also timing. The governing boards of both the non-viable system and the rescuing system need to be amenable to the merger. There may be limited windows in which consensus between parties will make a rescue possible, and the rescue windows may not always coincide with the timetable of the application process. Nonviable system merger applications should be considered immediately upon submission and funded before application deadlines. The Intended Use Plan should be updated to allow for projects that occur within a specified time period after ownership change of a non-viable system to be eligible for principal forgiveness where the project specifically targets the customers previously served by the non-viable system.

   Response: It is not the intent of the Division that the current eligibility requirements discourage nonviable system mergers until after project funding is secured. Division staff will update application guidance to extend funding eligibility for up to two years after execution of a merger for applications that address infrastructure projects in the non-viable system needed to complete the merger. No changes to the priority points are recommended.

2. Comment: System size (>20,000 connections) should not be a determinant in affordability criteria. Large systems comprised of mixed economic neighborhoods must balance rates to keep water and wastewater services accessible to all backgrounds. Affordability criteria should be applied universally to focus on projects that specifically benefit disadvantaged neighborhoods, or potential risks to human health or the environment.

   Response: When the affordability criteria were developed, the residential connection criteria of <20,000 connections was developed as a gateway so that smaller systems, which do not have economies of scale, would move forward in the process for grant (principal forgiveness) eligibility. This system size gateway has enabled approximately 95% of systems to move further into the affordability criteria process. This process is not directly related to the principal forgiveness for which a non-viable system would be eligible. If an applicant receives non-viable system points under Line Item 1.A, then they would be eligible for 100% principal forgiveness, up to $3 million. This principal forgiveness would remain available only through the two-year "eligibility period" after the completion of a merger as discussed in the above comment. No changes to the priority points are recommended.

3. Comment: Although the application priority points are weighed in favor of supporting non-viable system mergers, the application and funding execution more closely reflects funding for planned CIP projects for existing systems. A small, non-viable system experiencing significant monetary and infrastructure upkeep issues may not have planned or require CIP projects.

   Response: The Division believes that providing additional prioritization to systems that implement an asset management system or capital improvement plan is appropriate. The Division awards these points to systems as a way to recognize proactive utility management. No changes to the priority points are recommended.

4. Comment: The requirement for an engineer's seal on the application puts undue stress on the certifying engineer and on the applicant for a non-viable system rescue project that does not include construction.

   Response: A PE seal is required for all construction project budgets; however, no budget is required for non-construction programs, such as the Asset Inventory and Assessment program, that is offered via the State Reserve Program. No changes to the priority points are recommended.

NC Conservation Network, American Rivers, Southern Environmental Law Center

5. Comment: Recent publications underline the need for integration of resilience into all CWSRF and DWSRF projects. In light of findings from the EO80 Resilience Plan and paper prepared by The Nature Conservancy, the use of the "100-year" floodplain as a basis for insurance, siting restrictions, and infrastructure design standards needs to be revisited.

   Response: The Division recognizes the uncertainty in the tools and methodology to determine the best level to reduce flood risk. Currently, projects that are funded are reviewed for floodplain protection requirements during the planning process (engineering report / environmental information document and plans / specifications steps). Funded infrastructure projects are required to provide protection up to at least two feet above base flood elevation where possible or hardened to be resilient against flooding. Additionally, if local floodplain

ordinances are more stringent than EPA requirements, those projects that are funded must meet the more stringent standards. No changes to the priority points are recommended.

6. Comment: The 2020 IUPs for Clean Water and Drinking Water should set minimum threshold requirements for resilience for all projects. As proposed, the priority rating systems for clean water and drinking water projects offer a modest number of points for a project that relocates out of a floodplain (5), fortifies or elevates within a floodplain (4), hardens against disruption by floods (4), or downsizes infrastructure after a floodplain buyout (4). The offer of modest points for reducing flood risk misses the mark: that should be a threshold requirement for funding, not a minor incentive to improve a project design.

   Response: The Division agrees that resiliency is important and resiliency projects should receive priority points. The Division recommends additional prioritization for projects moving infrastructure out of 500-year flood elevations, as discussed in Comment #7 below. The Division believes the recommendation for additional priority points provides an appropriate balance between resiliency and other project priorities like failing infrastructure, aging infrastructure, and compliance issues. The Division does not recommend making resiliency a requirement for projects to be eligible for SRF funding. NC Administrative code establishes minimum design criteria for water and wastewater infrastructure that are intended to ensure the systems are protective of human health and water resources. Funded projects are evaluated during the planning process to assure that appropriate permits have been obtained prior to construction phase. The Division will continue to review the spread of priority points for these line items in future IUPs.

7. Comment: The 2020 IUPs should give priority points for projects that move beyond the minimum threshold. The final IUPs should offer priority points for projects that locate infrastructure at least three feet above the highest recorded historical flood elevation. That is a rule of thumb, and it may be over-protective, but it is likely to work, and many applicants will find it easy to calculate, since they know how high the water reached in Florence and Matthew.

   Response: Division staff believe that it can be difficult to objectively measure the highest recorded flood elevation. However, it does recognize the value of taking additional resilience measures where possible by moving infrastructure as out of the 100- and / or 500-year floodplain. The Division proposes to add an additional line item (Line Item 2.N.1) that would provide 8 points for projects that move infrastructure from the 100-year floodplain to outside of the 500-year floodplain. Additionally, staff propose to allow 3 points for projects that move infrastructure from outside of the 100-year floodplain to outside of the 500-year floodplain (see the new Line Item 2.N.3).

8. Comment: The EO80 Resiliency Plan identifies guiding land use away from riparian zones and floodplains as a 'critical strategy.' Where applicants are proposing to expand system capacity, the IUPs should give priority points to applicants whose local ordinances ensure that expanded capacity will not serve new flood-prone development. The same analytical methods used to keep new or rebuilt infrastructure above historic recurring flood levels can be used by local governments to guide new development away from flood risk. To obtain the points, the final IUPs should require applications to include a written commitment by the local jurisdiction to enforce such a policy as a part of its development process.

   Response: Division staff acknowledge the value of guiding land use away from riparian zones and floodplains as an important strategy to increase resiliency. At this time, it is not clear what

criteria would be appropriate for an applicant to demonstrate that ordnance or planning documents are in place to meet the intent of this request. The Division is also concerned that by providing priority points for such a commitment will place the Division in an unintended position to enforce that the applicant meets their commitment by holding or removing a funding commitment. Division believes that it would be difficult to impossible to enforce applicant commitments that would be made to claim these points. Additionally, local land use plan and ordinance development stretch well beyond the scope of the application review process, which would be where staff would look for verification related to such commitments. No changes to the priority points are recommended.

9. Comment: The proposed IUPs offer 2 points for projects that are part of a local capital improvement plan. We recommend that the final IUPs offer additional priority points if the program has integrated resiliency components.

   Response: In its current review process, Division staff do not evaluate capital improvement plans to the level of detail required to determine which components relate to resiliency. Staff award points based on objective criteria such as the presence of the proposed project on a capital improvement plan. No changes to the priority points are recommended.

10. Comment: The Division and Authority should invest one quarter of its fee revenue in outreach and education to recruit resilient projects.

    Response: The Division acknowledges this comment. The fee revenue generated through the SRF programs is used to operate the programs. The fees do not include a set-aside fund from the DWSRF Capitalization Grant to support the Division of Water Resources Public Water Supply Section, whose staff works with potential drinking water applicants on a regular basis. Division staff work closely with other funding and governmental agencies to continue to make potential applicants aware of its funding programs. Division staff conduct extensive application outreach that begins approximately six to eight weeks ahead of a funding deadline. This includes in-class training, individual meetings, and reviews of draft applications. During these trainings, staff go through the priority points systems so that applicants are aware of any changes and the supporting documentation needed to successfully claim points. No changes to the priority points are recommended.

11. Comment: Many of the applications the Division receives for stormwater management projects rely on 'gray infrastructure' rather than 'green infrastructure' solutions. The 2020 IUP for CWSRF stormwater projects should require that applications include an explicit discussion of green stormwater infrastructure projects.

    Response: The Division receives very few stormwater management applications for gray infrastructure, and have only funded one such project. Most of the applications the Division receives are for green Infrastructure. This is because green stormwater-type projects are prioritized in Line Item 1.G, and additional priority is given for stormwater projects that improve water quality. Natural processes are also prioritized in Line Item 1.F when stormwater infiltration BMPs are included. Gray infrastructure receives no priority points. Thus green projects are always funded before gray infrastructure. If a gray infrastructure project is funded, consideration of alternatives occurs after project funding, during the Engineering Report phase of the project. No changes to the priority points are recommended.

12. Comment: The Division and Authority should use grants and principal forgiveness to support resilient projects and projects within the Green Project Reserve.

    Response: Green projects are incentivized with a reduced interest rate. While principal forgiveness would be an additional incentive to do green projects, the current and historical need of small and disadvantaged utilities for rehabilitation and replacement of wastewater infrastructure projects far exceeds the amount of principal forgiveness available. The IUP as proposed, clearly focuses available principal forgiveness to water and wastewater infrastructure projects for disadvantaged communities. Therefore, those funds are used to help communities that meet affordability criteria requirements work on their wastewater infrastructure.

Staff Recommendation

Staff makes the following two recommendations:

I. That the Authority approve the CWSRF and DWSRF Priority Rating Systems for use in the 2020 IUPs to expand Project Benefits to include specific resiliency project priority points.

II. To modify the IUP to establish incremental principal forgiveness increases to utilize available funds.

Proposed Changes to 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 Project Total 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 #	Category 1 – 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 infrastructure issues		15
1.C	Project **will** rehabilitate or replace infrastructure		15
1.C.1	Treatment units, pumps and/or pump stations to be rehabilitated or replaced are greater than 20 years old, **OR water/sewer** lines, storage tanks, drinking water wells or intake structures to be rehabilitated or replaced are greater than 40 years old		10
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		10
1.E – 1.E.2	Reserved for Other Programs		
1.F	Project will provide stream/wetland/buffer restoration		15*
1.F.1	Restoration project that includes restoration of a first order stream and includes stormwater infiltration BMPs		5*
1.F.2	Restoration project that includes restoration and / or protection of riparian buffers to at least 30 feet on both sides of the stream		5*

Line Item #	Category 1 – Project Purpose (continued)	Claimed Yes/No	Points
1.G	Project will provide stormwater BMPs to treat existing sources of pollution		15*
1.G.1	Project that includes BMPs or BMPs in series that achieve at least 35% nutrient reduction (both TN and TP) and 85% TSS reduction		10*
1.H	Project will provide reclaimed water/usage or rainwater harvesting/usage		15*
*CWSRF Only			
	Maximum Points for Category 1 – Project Purpose		25
	Subtotal claimed for Category 1 – Project Purpose		
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 by replacement, repair, or merger; includes replacing failing septic tanks		15
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		10
2.G – 2.H	Reserved for Other Programs		

Line Item #	Category 2 – Project Benefits (continued)	Claimed Yes/No	Points
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 100-year floodplain to outside 500-year floodplain **OR**		8
2.N.~~1~~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 a 500-year floodplain **OR**		3
2.N.~~2~~4	Project fortifies or elevates infrastructure within floodplain, **OR**		4
2.N.~~2~~5	Project improves ability to assure continued operation during flood events **OR**		4
2.N.~~2~~6	Project downsizes infrastructure related to buyouts **OR**		4
2.N.~~3~~7	Project provides redundancy/resiliency for critical treatment and/or transmission/distribution system functions including backup electrical power source		3
2.O	Project directly benefits subwatersheds that are impaired as noted on the most recent version of the Integrated Report		20
2.P	Project directly benefits waters classified as HQW, ORW, Tr, SA, WS-I, WS-II, WS-III* or WS-IV* (* these classifications must be covered by an approved Source Water Protection Plan to qualify)		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*
*CWSRF Only			
	Maximum Points for Category 2 – Project Benefits		35

Line Item #	Category 2 – Project Benefits (continued)	Claimed Yes/No	Points
	Subtotal claimed for Category 2 – Project Benefits		
Line Item #	**Category 3 – System Management**	**Claimed Yes/No**	**Points**
3.A	Capital Planning Activities		
3.A.1	Applicant has implemented an Asset Management Plan as of the date of application **OR**		10
3.A.2	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	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%		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 #	**Category 4 – Affordability**	**Claimed Yes/No**	**Points**
4.A	Residential Connections		
4.A.1	Less than 10,000 residential connections **OR**		2
4.A.2	Less than 5,000 residential connections **OR**		4
4.A.3	Less than 1,000 residential connections		8
4.B	Current Monthly Utility Rates at 5,000 gallons Usage		
4.B.1	Greater than $33 **OR**		4
4.B.2	Greater than $40 **OR**		6
4.B.3	Greater than $47		8

Line Item #	Category 4 – Affordability (continued)	Claimed Yes/No	Points
4.B.4	Greater than $58		10
4.C	Local Government Unit (LGU) Indicators		
4.C.1	3 out of 5 LGU indicators worse than state benchmark **OR**		3
4.C.2	4 out of 5 LGU indicators worse than state benchmark **OR**		5
4.C.3	5 out of 5 LGU indicators worse than state benchmark		7
4.D – 4.E	Reserved for Other Programs		
	Maximum Points for Category 4 – Affordability		25
	Subtotal claimed for Category 4 – Affordability		
	Total of Points for All Categories		

Proposed Changes to 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 Project Total 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 #	Category 1 – 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 infrastructure issues		25
1.C	Project will rehabilitate or replace infrastructure		12
1.C.1	Treatment units, pumps and/or pump stations to be rehabilitated or replaced are greater than 20 years old, **OR water/sewer** lines, storage tanks, drinking water wells or intake structures 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 – 1.H	Reserved for Other Programs		
	Maximum Points for Category 1 – Project Purpose		25
	Subtotal claimed for Category 1 – Project Purpose		
Line Item #	**Category 2 – Project Benefits**	**Claimed Yes/No**	**SDWR Pts**
2.A – 2.A.1	Reserved for Other Programs		
2.B	Project provides a specific public health benefit to a public water supply system by replacement, repair, or merger; includes replacing dry wells, addressing contamination of a drinking water source by replacing or additional treatment; or resolves managerial, technical & financial issues		20
2.C	Reserved for Other Programs		

Line Item #	Category 2 – Project Benefits (continued)	Claimed Yes/No	SDWR Pts
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 DENR 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		10
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
2.H.2	Project addresses contamination of a water supply source other than acute **OR**		10
2.H.3	Project addresses an emerging compound without a MCL but above a health advisory level		**7**
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		
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 100-year floodplain to outside 500-year floodplain **OR**		8
2.N.~~1~~2	Project relocates infrastructure out of a 100-year floodplain **OR**		5

Line Item #	Category 2 – Project Benefits (continued)	Claimed Yes/No	Points
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.~~2~~4	Project fortifies or elevates infrastructure within floodplain, **OR**		4
2.N.~~2~~5	Project improves ability to assure continued operation during flood events **OR**		4
2.N.~~2~~6	Project downsizes infrastructure related to buyouts **OR**		4
2.N.~~3~~7	Project provides redundancy/resiliency for critical treatment and/or transmission/distribution system functions including backup electrical power source		3
2.O – 2.R	Reserved for Other Programs		
	Maximum Points for Category 2 – Project Benefits		35
	Subtotal claimed for Category 2 – Project Benefits		
Line Item #	**Category 3 – System Management**	**Claimed Yes/No**	**Points**
3.A	Capital Planning Activities		
3.A.1	Applicant has implemented an Asset Management Plan as of the date of application **OR**		10
3.A.2	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	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%		5
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 #	**Category 4 – Affordability**	**Claimed Yes/No**	**Points**
4.A	Residential Connections		

Line Item #	Category 4 – Affordability (continued)	Claimed Yes/No	Points
4.A.1	Less than 10,000 residential connections **OR**		2
4.A.2	Less than 5,000 residential connections **OR**		4
4.A.3	Less than 1,000 residential connections		8
4.B	Current Monthly Utility Rates at 5,000 Usage		
4.B.1	Greater than $33 **OR**		4
4.B.2	Greater than $40 **OR**		6
4.B.3	Greater than $47 **OR**		8
4.B.5	Greater than $58		10
4.C	Local Government Unit (LGU) Indicators		
4.C.1	3 out of 5 LGU indicators worse than state benchmark **OR**		3
4.C.2	4 out of 5 LGU indicators worse than state benchmark **OR**		5
4.C.3	5 out of 5 LGU indicators worse than state benchmark		7
4.D	Reserved for the CDBG Program		
4.E	Reserved for the CDBG Program		
	Maximum Points for Category 4 – Affordability		25
	Subtotal claimed for Category 4 – Affordability		
	Total of Points for All Categories		