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April 30, 2020

The Honorable John Barrasso, Chair
Committee on Environment and Public Works
United States Senate

The Honorable Tom Carper, Ranking Member
Committee on Environment and Public Works
United States Senate

Submitted electronically to: QFR@epw.senate.gov

RE: Discussion Drafts of the America's Water Infrastructure Act of 2020 and the Drinking Water Infrastructure Act of 2020

Dear Chair Barrasso and Ranking Member Carper:

Thank you for this opportunity to comment on the Discussion Drafts of the America's Water Infrastructure Act of 2020 (AWIA 2020) and the Drinking Water Infrastructure Act of 2020 (DWIA 2020). WaterNow Alliance[1] is a nonprofit network of more than 550 local water leaders nationwide dedicated to advancing sustainable, affordable, and climate resilient water strategies, and we appreciate your bipartisan efforts to make critical investments in sustainable water infrastructure with these two important bills. We also commend you for your continued work on these vital issues while also simultaneously responding to the public health and economic impacts of COVID-19.

We are encouraged by the recognition in the Discussion Drafts that federal investments in the nation's water infrastructure are essential to our economic recovery, once the immediate medical and economic needs resulting from the coronavirus pandemic have been met. Federal investment in local water systems has declined significantly over the last thirty years; local utilities and cities now represent 95% of all spending on urban drinking, wastewater, and stormwater infrastructure nationwide.[2] Particularly in the face of the considerable additional challenges posed by climate change, the time is right for a return to federal investment in water resilience.

In particular, localized, onsite and decentralized water infrastructure, management technologies, installations, and strategies have tremendous potential to provide increased water supply security and address urban flooding and water quality challenges—often at far lower cost than conventional alternatives while providing multiple community benefits. We appreciate that the bills recognize the value of decentralized strategies, and offer the following recommendations to strengthen the bills' ability to accelerate and support their widespread deployment. To this end, our comments focus on AWIA 2020 Sections 2007, 2018, and 3012, and DWIA 2020 Sections 13 and 14. In brief, we make 5 specific recommendations:

(1) Sewer Overflow and Stormwater Reuse Municipal Grants (AWIA 2020 Sec. 2007). Provide that the full range of localized, distributed water management projects that can address sewer overflows and stormwater runoff are eligible for grant funding, including specifically consumer rebates and financial incentives for green stormwater infrastructure, water use efficiency measures, and onsite reuse.

[1] www.waternow.org.
[2] Not Everything is Broken, pp. 38, 60, RAND 2017, https://www.rand.org/pubs/research_reports/RR1739.html.

(2) Stormwater Infrastructure Technology (AWIA 2020 Sec. 2018). Provide that "stormwater control infrastructure projects" include distributed green infrastructure and onsite reuse. Increase the per project implementation grant amount from $2 million to $4 million.

(3) Municipal Ombudsman (AWIA 2020 Sec. 3012). Include three additional categories of information a utility seeking assistance will be able to receive from the ombudsman to support local water use efficiency and conservation efforts: (1) accessing local municipal revenue bond proceeds to finance consumer incentives; (2) revising utility rate structures to ensure fiscal health and stability notwithstanding declining volumetric sales; and (3) identifying opportunities for issuance of Environmental Impact Bonds.

(4) Advanced Drinking Water Technologies (DWIA 2020 Sec. 13). Eliminate a potential barrier to otherwise eligible entities by removing a requirement that a potential grant applicant have plans to identify, or have already identified, ways to "employ new or emerging, yet proven, technologies." Provide that the full range of localized, distributed water management projects that can address drinking water challenges are eligible for grant funding, including specifically consumer rebates and financial incentives for water use efficiency measures and onsite reuse. Increase the per project grant amount from $500,000 to $1 million.

(5) Drinking Water Infrastructure Discretionary Grant Program (DWIA 2020 Sec. 14). Provide that onsite, decentralized water infrastructure projects that can address drinking water management challenges are fully eligible for grant funds.

A new generation of localized water solutions is coming online with extraordinary but as yet untapped potential to address the supply, water quality, flooding, and environmental contamination challenges facing cities, towns and special districts nationwide. Onsite, decentralized installations and technologies distributed widely across a community, "distributed infrastructure," includes a wide range of water management solutions. These technologies and installations serve the same functions as more conventional, centralized infrastructure—they provide clean drinking water and manage wastewater and stormwater—often more affordably while building local resilience to disasters and ability to withstand shifts resulting from climate change.[3] Far more so than conventional water infrastructure, decentralized water strategies are also able to provide economic and other co-benefits for local communities and the environment, including, permanent local green jobs, increased property values, improved public health, affordable rates, increased energy efficiency, increased wildlife habitat, improved water quality, improved air quality, reduced greenhouse gases, increased open space, and reduced crime.[4]

[3] Nancey Green Leigh & Heonyeong Lee, *Sustainable and Resilient Urban Water Systems*, pp. 8-9, Sustainability, Vol. 11 (2019), https://www.researchgate.net/publication/331066784_Sustainable_and_Resilient_Urban_Water_Systems_The_Role_of_Decentralization_and_Planning; Optimizing the Structure and Scale of Urban Water Infrastructure: Integrating Distributed Systems, p. 5, The Johnson Foundation at Wingspread, August 2014, https://www.johnsonfdn.org/sites/default/files/reports_publications/CNW-DistributedSystems.pdf.

[4] See Moving Toward a Multi-Benefit Approach for Water Management, pp. VII-VIII, 17, 27-28, 34-35, https://pacinst.org/wp-content/uploads/2019/04/moving-toward-multi-benefit-approach.pdf; Cynthia Koehler & Caroline Koch, *Innovation in Action: 21st Century Water*

While many local utilities have adopted initiatives at various times to promote conservation, efficiency, onsite reuse, or distributed green infrastructure programs, these programs are usually relatively small scale. As detailed in WaterNow's recent report, *Innovation in Action: 21st Century Water Infrastructure Solutions (Innovation in Action)* investing in localized solutions, particularly for water use efficiency, at much higher levels is essential if the country is to realize the benefits that can accrue from these solutions in the aggregate, and be more resilient against recurring and worsening drought due to climate change.[5] For these reasons, we respectfully request that you adopt the recommended revisions listed below.

(1) *Sewer Overflow and Stormwater Reuse Municipal Grants (AWIA 2020 Sec. 2007)*

WaterNow Alliance applauds the Discussion Draft's proposed amendments to the Sewer Overflow and Stormwater Reuse Municipal Grants program recognizing the role green infrastructure plays in reducing sewer overflows and addressing stormwater runoff and to allocate grant funds to rural communities set out in AWIA 2020 Sec. 2007. Green infrastructure is, however, not the only localized water infrastructure strategy that serves these crucial water management purposes; nor is it the only type of water management strategy eligible for grant funding under the Sewer Overflow and Stormwater Reuse Municipal Grants program. "[G]reen infrastructure, water and energy efficiency improvements, and other environmentally innovative activities" are listed as the types of projects to be funded under this program.[6]

To ensure the amendment is clear that the full range of localized, distributed water management projects that can address sewer overflows and stormwater runoff are eligible for grant funding, including green infrastructure, water use efficiency, and onsite reuse; and to ensure grant funds allocated to rural communities are also used for environmentally sustainable of projects, we respectfully recommend the following modification to AWIA 2020 Sec. 2007 (new proposed language yellow-highlighted and underlined):

- ''(A) GREEN, LOCALIZED, ONSITE INFRASTRUCTURE.—To the extent'';
- "(B) RURAL ALLOCATION.—To the extent there are sufficient eligible project applications, the Administrator shall ensure that a State uses not less than 15 percent of the amount of the grants made to the State under subsection (a) in a fiscal year to carry out projects in rural areas for the purpose of planning, design, and construction of—(i) treatment works to intercept, transport, control, treat, or reuse municipal sewer overflows, sanitary sewer overflows, or stormwater; or (ii) any other measures to manage, reduce, treat, or recapture stormwater or subsurface drainage water including through the use of green infrastructure, water and energy efficiency improvements, and

Infrastructure Solutions, pp. 24, 25, 48, 51, 63, 73, 76-77, 82, 98, 106, San Francisco, Calif.: WaterNow Alliance (2019), https://tapin.waternow.org/wp-content/uploads/sites/2/2019/11/WaterNowAlliance_Innovation-In-Action_FINAL-1.pdf; see also The Impact of *Green City, Clean Waters* on Philadelphia: Measuring the Triple Bottom Line Impact of Green Stormwater Infrastructure pp. 18-26 (detailing the crime reduction and health benefits of Philadelphia's program), https://www.sbnphiladelphia.org/wp-content/uploads/2019/04/Impact-of-Green-City-Clean-Waters-on-Philadelphia-2019.pdf; see also Santa Fe Water Division: Fostering a long-standing culture of water efficiency, WaterNow Case Study, p. 5, https://tapin.waternow.org/wp-content/uploads/sites/2/2019/04/SantaFeWaterUtilitiesDivision.pdf.

[5] Cynthia Koehler & Caroline Koch, *Innovation in Action: 21st Century Water Infrastructure Solutions*, San Francisco, Calif.: WaterNow Alliance (2019), https://tapin.waternow.org/wp-content/uploads/sites/2/2019/11/WaterNowAlliance_Innovation-In-Action_FINAL-1.pdf.

[6] 33 U.S.C. § 1313(f)(2).

other environmentally innovative activities eligible for assistance under section 603(c).

These revisions will help elevate green *and* onsite water infrastructure projects as eligible projects under sewer overflow and stormwater reuse municipal grants.

(2) *Stormwater Infrastructure Technology (AWIA 2020 Sec. 2018)*

We support the Stormwater Control Infrastructure Project Grant program to provide grants on a competitive basis to eligible entities to carry out stormwater control infrastructure projects that incorporate new and emerging, but proven, stormwater control technology set out in SWIA Sec. 2018. Proven stormwater control technologies include distributed green infrastructure and onsite reuse systems. These localized stormwater strategies have been successfully applied in communities nationwide for many years, and have helped to significantly reduce sewer overflows and improve water quality.[7]

To ensure that the reference to "stormwater control infrastructure projects" set out in AWIA 2020 Sec. 2018 specifically includes decentralized, consumer-facing distributed green infrastructure and onsite reuse systems, we respectfully recommend the following modification to AWIA 2020 Sec. 2018 (new language yellow-highlighted and underlined):

- (1) GRANT AUTHORITY.—The Administrator shall provide grants, on a competitive basis, to eligible entities to carry out stormwater control infrastructure projects that incorporate new and emerging, but proven, stormwater control technology, including, but not limited, to localized, distributed green infrastructure or onsite reuse projects implemented via rebates, direct installations, and other financial incentives designed to encourage participation in water runoff management improvement program, in accordance with this subsection.

This revision will ensure that effective localized stormwater management strategies are eligible for grant funds under this laudable program.

In addition, WaterNow urges that the authorized per project grant amount be increased from $2 million to $4 million. Larger scale federal investments in new and emerging stormwater management technologies will not only allow local water providers to leverage more of their local resources, but will also significantly increase the economic and social impact of these investments.

(3) *Municipal Ombudsman (AWIA 2020 Sec. 3012)*

WaterNow supports expansion of the types of information the Municipal Ombudsman is able to provide to municipalities seeking assistance as they work to comply with the Clean Water Act to

[7] See, e.g., Cynthia Koehler & Caroline Koch, *Innovation in Action: 21st Century Water Infrastructure Solutions*, pp. 73-105, San Francisco, Calif.: WaterNow Alliance (2019), https://tapin.waternow.org/wp-content/uploads/sites/2/2019/11/WaterNowAlliance_Innovation-In-Action_FINAL-1.pdf; see also Milwaukee Metropolitan Sewerage District, Weathering the storm where rain falls, WaterNow Case Study, https://tapin.waternow.org/wp-content/uploads/sites/2/2019/03/WaterNow_MilwaukeeMetropolitan-_CaseStudy_FINAL.pdf; DC Water, Clean Rivers Project, Case Study, https://tapin.waternow.org/wp-content/uploads/sites/2/2019/03/DCWaterCaseStudyvF.pdf.

include information on establishing local funding sources, organization analyses, grant application assistance, and developing innovating funding strategies and mechanisms set out in AWIA 2020 Sec. 3012. EPA guidance on these complex issues is a valuable resource for local water managers.

Municipal water utilities and their ratepayers shoulder the vast majority of the cost for non-agricultural, local water infrastructure. These entities work to balance their responsibility to provide high quality, safe water for our communities with the obligation to keep rates affordable and ensure water accessibility for all. To this end, tax-free municipal bonds are generally the investment vehicle of choice since they often represent the lowest cost financing available for large-scale projects. It is well documented that localized solutions, largely implemented through consumer rebates or direct installation programs, are often far less expensive than conventional infrastructure alternatives while meeting the same water management needs.[8] However, determining *how* to pay for these solutions can be a major barrier to widespread adoption of distributed, innovative solutions. As others have noted, the opportunity to scale distributed systems requires that utilities be empowered to access capital for these investments in the same way that they access capital for conventional infrastructure.[9] To this end, as a result of efforts by WaterNow and our partners, in May 2018, the Governmental Accounting Standards Board (GASB) issued new guidance clarifying that public water providers are authorized to access capital to finance localized water programs just as they do for their tangible assets.[10] The new GASB guidance is a game changer for the nation's local public utilities.[11] If even a tiny percent of the annual capital spending for water infrastructure across the country is redeployed, or expanded, to distributed solutions, it would represent vast new investment capacity and a major expansion in the adoption of these technologies and programs.

Further, traditionally, the water utility service model, particularly for drinking water, relies on volumetric sales notwithstanding the reality that costs are 80% (or more) fixed for most agencies. Following the energy sector, utilities are beginning to shift to a more sustainable business model that treats water like a service instead of a commodity. However, this transition is expensive and politically challenging.

To ensure local decisionmakers have access to information about the full scope of local funding

[8] See, e.g., Conservation Limits Rate Increases for a Colorado Utility, pp. 6-8, Alliance for Water Efficiency, November 2013, http://www.allianceforwaterefficiency.org/WorkArea/DownloadAsset.aspx?id=8671.
[9] See, generally, Bond Financing Distributed Water Systems: How to Make Better Use of Our Most Liquid Market for Financing Water Infrastructure, Ceres, https://www.ceres.org/sites/default/files/reports/2017-05/Ceres_WaterBondFinancing_082814.pdf.
[10] Implementation Guide No. 2018-1, *Implementation Guidance Update—2018*, p. 2, Governmental Accounting Standards Board, https://www.gasb.org/jsp/GASB/Document_C/DocumentPage?cid=1176170563952&acceptedDisclaimer=true; see also Little-Known Accounting Policy Could Fuel Green Infrastructure Surge, KQED, May 23, 2018, https://www.kqed.org/science/1924341/little-known-accounting-policy-could-fuel-green-infrastructure-surge; see also Financing the Future of Water Infrastructure Just Got a Whole Lot Easier Part 3: Capital, Cash and Scale, WaterNow Alliance, May 2018, https://waternow.org/financing-the-future-of-water-infrastructure-just-got-a-whole-lot-easier-part-3-capital-cash-and-scale/; For more information on this policy clarification and how to use bond proceeds to debt finance distributed infrastructure see generally Go Green: Muni Bond Financing for Distributed Water Infrastructure, Earth Economics et al., June 2018, https://waternow.org/go-green-muni-bond-financing-for-distributed-water-solutions/.
[11] A layperson's guide to this policy change can be found here: https://waternow.org/wp-content/uploads/2019/01/WaterLeaderGuide-Handout.pdf.

sources available to finance sustainable, distributed water strategies and about available sustainable rate models, we respectfully recommend the following modification to AWIA 2020 Sec. 3012 (new language yellow-highlighted and underlined):

- "establishing local funding sources, accessing revenue bond proceeds, including to finance consumer incentive programs, available rate non-volumetric rate models, organization analyses, grant application assistance, and developing innovative funding strategies and mechanisms, including, but not limited to, Environmental Impact Bonds."

This addition outlines a broader range of available financing mechanisms and rate structures available to local water managers on which the Municipal Ombudsman will provide valuable assistance.

(4) *Advanced Drinking Water Technologies (DWIA 2020 Sec. 13)*

WaterNow supports the Advanced Drinking Water Technology Grant Program for water providers serving populations of 100,000 or fewer as well as disadvantaged communities set out in DWIA 2020 Sec. 13. Federal grant funds are key funding sources for these communities. However, the second eligibility criteria listed in Sec. 13 is potentially a barrier to an otherwise qualifying water provider's ability to access these much-needed grant funds. As drafted, Sec. 13 specifies that to be eligible a water provider must have "plans to identify or has identified opportunities in the operations of the public water system to employ new or emerging, yet proven, technologies, as determined by the Administrator." The requirement to have a plan or have already identified ways to employ new or emerging technologies prior to applying could overly limit eligible water providers, as smaller or disadvantaged communities often lack capacity or funding to develop such plans.

Further, proven water technologies aimed at efficient use of water include newer distributed strategies such as customer-side-of-the-meter leak detection devices and smart irrigation controllers as well as more familiar solutions such as turf change-outs, high efficiency appliances and fixtures, and lead service line replacements. These localized strategies have been successfully applied in a number of communities nationwide, and have helped to meet water management challenges and keep water rates affordable.[12]

To eliminate this potential barrier and ensure it is clear that the full range of localized, distributed water management projects that can address drinking water challenges are eligible for grant funding, we respectfully recommend the following modifications to DWIA 2020 Sec. 13 (new proposed language yellow-highlighted and underlined, proposed deletions blue-highlighted in strikethrough):

[12] See, e.g., Cynthia Koehler & Caroline Koch, *Innovation in Action: 21st Century Water Infrastructure Solutions*, pp. 43-72, San Francisco, Calif.: WaterNow Alliance (2019), https://tapin.waternow.org/wp-content/uploads/sites/2/2019/11/WaterNowAlliance_Innovation-In-Action_FINAL-1.pdf; see also Spanish Fork: Adding Capacity for Peak Demand with Smart Irrigation, WaterNow Case Study, https://waternow.org/2019/07/26/spanish-fork-how-smart-irrigation-revolutionized-water-use/; see also Santa Fe Water Division: Fostering a long-standing culture of water efficiency, WaterNow Case Study, p. 5, https://tapin.waternow.org/wp-content/uploads/sites/2/2019/04/SantaFeWaterUtilitiesDivision.pdf; Tucson Water: Efficiency Means Avoided Costs, WaterNow Case Study, https://waternow.org/2020/02/05/tucson-water-efficiency-means-avoided-costs/

- has ~~plans to identify or has identified~~ opportunities in the operations of the public water system to employ new or emerging, yet proven, technologies, including, but not limited to distributed water use efficiency and onsite water management strategies, as determined by the Administrator, that enhance treatment, monitoring, affordability, efficiency, or safety of the drinking water provided by the public water system, including technologies not identified in the study conducted under subsection (a)(1).

In addition, WaterNow urges that the authorized per project grant amount be increased from $500,000 to $1 million. Larger scale federal investments in new and emerging water management technologies will not only allow local water providers to leverage more of their local resources, but will also significantly increase the economic and social impact of these investments.

(5) *Drinking Water Infrastructure Discretionary Grant Program (DWIA 2020 Sec. 14)*

WaterNow applauds the creation of the Drinking Water Infrastructure Discretionary Grant Program set out in DWIA 2020 Sec. 14. We further support the inclusion of eligible projects that would otherwise be eligible for funding under the Drinking Water State Revolving Fund, which already authorizes funds to be used for consumer rebates and direct installations. However, this eligibility is not widely understood. To clarify that the full range of localized, distributed water infrastructure projects that can address drinking water management challenges are eligible to receive grant funds under this new program, we respectfully recommend following modification to DWIA 2020 Sec. 14 (new language yellow-highlighted and underlined):

- any other drinking water infrastructure project, including, but not limited to, localized, distributed water infrastructure projects implemented via rebates, direct installations, and other financial incentives designed to encourage participation in water conservation or efficiency programs, that the Administrator determines to appropriate.

This addition will ensure that effective localized water management strategies that are part of the portfolio of new and emerging technologies that are eligible for grant funds under this commendable program.

Support for Additional Sections

We also support the following provisions and urge their continued inclusion in the bills:

- Clean water infrastructure resiliency and sustainability program (AWIA 2020 Sec. 2001)
- Wastewater efficiency grant pilot program (AWIA 2020 Sec. 2005)
- Pilot program for alternative water source projects (AWIA 2020 Sec. 2006)
- Reauthorization of Clean Water State Revolving Loan Funds (AWIA 2020 Sec. 2015)
- Wastewater infrastructure discretionary grant program (AWIA 2020 Sec. 2016)
- Midsize Drinking Water System Infrastructure Resilience and Sustainability

Program (DWIA 2020 Sec. 9)

- Needs Assessment For Nationwide Rural and Urban Low-Income Community Water Assistance (DWIA 2020 Sec. 10).

Conclusion

Localized water infrastructure has enormous potential to sustainably manage our water resources now and for future generations, often more affordably than other alternatives. As detailed above, we propose revisions to certain sections of AWIA 2020 and DWIA 2020 to ensure local water providers have increased access and ability to finance and implement these cost-effective, equitable, and environmentally friendly solutions.

We appreciate your consideration of our comments and look forward to working with you to transform the nation's water infrastructure to secure our water future.

Sincerely,

Executive Director
WaterNow Alliance