



Dedicated to protecting our nation's ground water



October 19, 2020

The Honorable Andrew Wheeler
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460

The Honorable David Ross
Assistant Administrator for Water
U.S. Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460

SENT VIA ELECTRONIC MAIL

US Environmental Protection Agency, Docket ID No. EPA-HQ-OW-2020-0426, Federal eRulemaking portal: <https://www.regulations.gov/>

Dear Mr. Wheeler and Mr. Ross,

The National Ground Water Association (www.ngwa.org) and the Ground Water Protection Council (www.gwpc.org) appreciate the opportunity to provide comments and feedback to the USEPA on the Proposed 2020 Financial Capability Assessment for Clean Water Act (CWA) Obligations published at <https://www.federalregister.gov/documents/2020/09/18/2020-20649/proposed-2020-financial-capability-assessment-for-clean-water-act-obligations>.

The National Ground Water Association (NGWA) and the Ground Water Protection Council (GWPC) support funding for communities needing assistance in managing their water resources and for stormwater reuse that may be used as a source of recharge for aquifers as well as supporting the environment. Assessing the financial capability of communities is fundamental to providing financial assistance for adequate needed infrastructure.

Key points essential to our perspectives are:

- Stormwater management is critical in meeting CWA goals
- Stormwater management can impact drinking water in positive and negative ways

- Funding for stormwater capture and treatment can be critical to achieving greater water security and resilience
- Inadequate funding for stormwater projects can jeopardize groundwater quality (lack of treatment prior to injection or infiltration)
- Affordability should include all aspects of a water system. In medium to smaller communities there may not be separate water, wastewater, and stormwater utilities. They are often one and the same. EPA should consider all aspects of an individual community's water system.

Consistent with these perspectives and with our respective organization's prior comments concerning the potential impacts of stormwater practices on groundwater, we believe that EPA's assessment of financial capacity of programs and communities must take into account the cost of groundwater protective design of stormwater infiltration measures and small communities' limited technical and fiscal capabilities to implement those measures.

The research to date¹ indicates that groundwater quality is vulnerable from infiltration of untreated stormwater. The 2018 EPA and 2019 NAS reports cited in the footnotes point to aspects of aquifers and the groundwater environment that should be considered when designing, permitting, and implementing stormwater infiltration. However, neither of the reports provide guidance to design stormwater infiltration systems that are protective of groundwater. Both reports clearly state that more research needs to be done on potential effects because, relative to research on surface water systems, comparatively little has been completed regarding stormwater impacts on groundwater. The reports indicate that the research is needed to provide definitive guidance on where infiltration may be appropriate and done with adequate protections.

Without adequate guidance, EPA may be unintentionally encouraging the installation of cheaper stormwater controls that, once installed, could significantly impact communities that rely on groundwater for drinking water supply. Consequently, EPA is fostering a process to transfer pollutants from one water source to another – from surface water to groundwater – without having done the necessary research and development to support protective measures for downgradient and downstream public and aquatic life receptors. While particular stormwater control measures may be located outside of municipalities' wellhead/source water protection areas, as defined under the Safe Drinking Water Act, groundwater flow may carry contaminants that are not naturally degraded in the subsurface environment into delineated wellhead/source water protection areas. Shifting the contamination from surface water to groundwater may ultimately impact the quality of the municipalities' water supplies thus shifting the financial burden for clean-up to a different program by causing them to incur additional treatment costs to provide safe water to their customers.

Question 15 Regarding Drinking Water Costs and Additionally Sensitive Area Factors

In response to question 15 regarding consideration of drinking water costs and additionally sensitive area factors, given that nearly 73 percent of community water systems serving 10,000 or fewer people

¹ Environmental Protection Agency. 2018. The Influence of Green Infrastructure Practices on Groundwater Quality: The State of the Science, National Academies of Science. 2019. EPA/600/R-18/227, https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=342610 Improving the EPA Multi-Sector General Permit for Industrial Stormwater Discharges. <https://www.nap.edu/catalog/25355/improving-the-epa-multi-sector-general-permit-for-industrial-stormwater-discharges>

are groundwater-supplied,² it is crucial that stormwater infiltration and reuse methods, used and funded in these communities, be proven protective of groundwater supplies. Protection of the quality of groundwater that is used for drinking water may have design and pretreatment features that can affect the cost to communities to manage stormwater. Additionally, 34 million people live in communities which rely on private wells. A preliminary review of the over 7,000 MS4 communities suggests that at least 22 percent of the MS4 communities may be groundwater-supplied, with some states having over 50 percent of their MS4 communities supplied by groundwater.

Most of these communities are small and medium sized. For those dependent upon groundwater, protection of their water source is needed. These systems and small communities also have few financial resources or expertise to protect their drinking water. Some may opt for least cost and insufficient methods of stormwater management and disposal, with inadequately designed stormwater infiltration measures that are not protective of groundwater quality. By not considering drinking water costs, EPA may be encouraging the use of stormwater infiltration measures which may impact the quality of the communities' groundwater supplies and/or may ultimately, via groundwater conveyance, transmit stormwater contaminants back to the same surface waters intended to be protected. Costs for treating contaminated groundwater to be a water supply source may far exceed the cost of adequately designed and constructed stormwater measures that are protective of groundwater quality.

By not adequately addressing groundwater protection prior to funding and construction, EPA is creating risk for (1) concentrating pollutants in groundwater, (2) potentially encouraging new and uncontrolled nonpoint pollution sources, (3) functional equivalent discharging of pollutants to streams and lakes through groundwater conveyance, and (4) unintended additional treatment needs and costs for drinking water systems to meet maximum contaminant levels. By not considering the impacts to drinking water costs, there is a great potential to not only transfer pollutants but also responsibility from the CWA program to SDWA program, potentially creating a greater federal, state, and local administrative burden and cost. The most effective approach would be to reduce or eliminate the pollution at the source.

A comprehensive approach to stormwater control and management is needed that considers all significant contaminants and their sources. Stormwater control measures that are most appropriate for the subsurface environments to which they may be applied and contaminants released by infiltration, well injection or other means need to be considered as part of the approach for assessing financial capability of communities to meet CWA obligations.

Research is needed to develop guidance for municipalities and industry that adequately protects the subsurface environment and groundwater where groundwater is vulnerable and infiltrated stormwater contaminants would not receive sufficient natural degradation. This research should be an intensive effort and is needed now, before proceeding with a stormwater control measure financing program.

SCM Maintenance Inclusion

NGWA/GWPC Comment: Does the financial capability assessment of communities for stormwater control measures also include the maintenance of these structures to ensure that they continue to function as designed? This ongoing cost concern is particularly important for small communities where stormwater infiltration is being considered and which have limited fiscal and technical capability to

² U.S. Environmental Protection Agency. 2020. Government Performance Results Act Drinking Water Tool. GPRA [Drinking Water] Inventory Report. <https://obipublic.epa.gov/analytics/saw.dll?PortalPages>

maintain the stormwater control measures. It is especially important if enhanced aquifer recharge is also a goal for the stormwater control measure. The Federal Register states that EPA does not anticipate establishing implementation schedules that would exceed the useful life of the community's water infrastructure assets and further states that "Based on EPA's experience with water programs, the assumed useful life of water infrastructure assets for the purpose of financing is typically 30–40 years." If not maintained, stormwater control measures will not be effective in degrading or attenuating contaminants, and may ultimately impact the quality of the groundwater, causing the communities to incur further costs beyond their capability to deal with. The capacity of soils to attenuate contaminants may be exceeded and contaminant breakthrough may occur, releasing contaminants to the vadose zone and aquifer, thereby affecting groundwater quality of communities' and well owners' water supplies. If the facilities are not maintained, the intermediate and longer-term usefulness of the facilities makes the investment questionable. If, because of lack of maintenance, contaminant breakthrough occurs at these SCMs and groundwater becomes contaminated, this contamination may eventually discharge to streams which are intended to be protected by the SCMs that infiltrate the stormwater to the subsurface. Lack of maintenance may be particularly problematic for SCMs within or near delineated wellhead/source water protection areas.

Many small community water systems are served by homeowners' associations (HOAs) that typically are tagged with maintaining stormwater basins. For example, in the mid-Atlantic region, one state's experience has been that most HOAs were unable or unwilling to spend the funds needed to maintain stormwater infiltration basin performance and local government was then responsible for the maintenance as well as paying for flooding damages associated with failing systems. This cascade of failure and transfer of responsibility has had a significant impact on local governments and their financial capability.

Small Groundwater-Supplied Municipalities as Potential Grant Recipients

Based on the inventory of community water systems³ and the inventory of MS4s completed in 2009⁴, it is possible that some communities that may be required to respond to NPDES stormwater requirements may have populations smaller than 2,500 persons. A preliminary review of the 2009 MS4 inventory (which is incomplete) suggests that up to 10 percent of the MS4 municipalities may be small communities. Eighty-three (83) percent of small community drinking water systems serving 3,300 or fewer persons are groundwater-supplied.⁵

NGWA/GWPC Comment: Priority for funding SCMs should be given to small communities that have few fiscal and technical resources and typically rely on groundwater sources for water supply. Grants to groundwater-supplied communities, particularly to small municipalities, should include additional funding for hydrogeologic assessments to determine compatibility of SCM design to their wellhead/source water protection areas and to the local subsurface environment's ability to naturally degrade anticipated stormwater contaminants as well as to apply any needed pretreatments.

³ U.S. Environmental Protection Agency. 2020. Government Performance Results Act Drinking Water Tool. GPR [Drinking Water] Inventory Report. <https://obipublic.epa.gov/analytics/saw.dll?PortalPages>

⁴ U.S. Environmental Protection Agency. 2014. National Pollutant Discharge Elimination System Inventory of Phase I and Phase II MS4 permittees in 2009. File: TEMP-All MS4s_6-5-14 2014.

⁵ U.S. Environmental Protection Agency. 2020. Government Performance Results Act Drinking Water Tool. GPR [Drinking Water] Inventory Report. <https://obipublic.epa.gov/analytics/saw.dll?PortalPages>

Additionally, consideration should be given to stormwater reuse “maintenance” grants to the smallest communities to ensure that the SCMs continue to operate as designed over the long term to be protective of their groundwater sources of drinking water and support the productivity of the investments made.

Integrated Planning

EPA indicates that National Association of Public Administrators issued its 2017 report, “Developing a New Framework for Community Affordability of Clean Water Services” with recommendations for providing additional technical assistance to municipalities seeking to develop integrated plans.

NGWA/GWPC Comment: As indicated in earlier comments, EPA should be promoting integrated planning of stormwater management and safe community groundwater supply. For small communities, additional financial and technical capability may need to be provided by county, state, or federal sources. The implications for SCM cost and financing need to be fully evaluated on a life-cycle basis, including a life-cycle assessment, such as following ISO 14040 and 14044.

Question 2 Regarding Additional Data Sets to Consider for Environmental Justice Factors

EPA Question #2: In addition to the data sets that are discussed in this Notice, what other data sets are you aware of that meet NAPA’s criteria as identified in the October 2017 report, “Developing a New Framework for Community Affordability of Clean Water Services”? Additionally, EPA raised the question about supplemental information to be considered.

NGWA/GWPC Comment: EPA should utilize the full data complement of its water databases, including the Safe Drinking Water Information System inventory of public water systems. The SDWIS data on communities relying on groundwater for primary or supplemental and emergency supply can be compared to the data on MS4 communities and industrial stormwater permit holders to identify communities potentially at risk if SCMs include stormwater infiltration for stormwater disposal. Larger communities relying on surface water as their primary source often have water wells for back up and emergency supply and may also be affected if stormwater infiltration is utilized. Most but not all groundwater-supplied community water systems are small and, often in rural areas, environmental justice issues may emerge and should be carefully evaluated to determine if communities are disadvantaged in any way. At least 16 percent of groundwater-supplied communities that are also MS4 communities have populations of 3,300 or less.

Basis for the Interest of the National Ground Water Association and the Ground Water Protection Council in Stormwater Infrastructure Financial Assistance

NGWA, the largest trade association and professional society of groundwater professionals in the world, represents over 10,000 groundwater professionals within the United States and internationally. NGWA represents four key sectors: scientists and engineers, employed by private industry, by the consulting community, by academic institutions, and by local, state, and federal governments, to assess groundwater quality, availability, and sustainability; water-well contractors responsible for developing and constructing water-well infrastructure for residential, commercial, and agricultural use; and the manufacturers and the suppliers responsible for manufacturing and providing the equipment needed to make groundwater development and enhancement possible. NGWA’s mission is to advocate for and support the responsible development, management, and use of groundwater.

NGWA views groundwater and the subsurface as a significant natural resource that should be sustainably managed for current and future use. The subsurface environment should be considered from an integrated resource perspective in managing the total water resource. The water resources in the subsurface environment, with proper management can provide, groundwater for drinking, industrial and manufacturing applications, food production, and ecosystem support.

The Ground Water Protection Council's membership consists of representatives of state water quality and underground injection control regulatory agencies that mutually work toward the protection of groundwater nationwide. Our focus is specifically on protecting groundwater supplies, conserving groundwater resources for all beneficial uses, and recognizing groundwater as a critical component of the ecosystem. The GWPC is unique among state associations in that its members are the state officials who set and enforce regulations for groundwater protection and underground injection control.

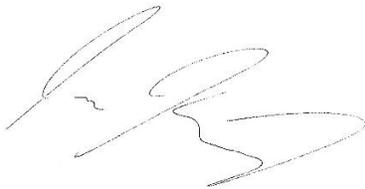
The National Ground Water Association and the Ground Water Protection Council appreciate the opportunity to comment on this financial capability assessment for Clean Water Act infrastructure. We look forward to working with EPA to follow up on points raised in these comments.

For follow-up, please contact:

Charles Job
Regulatory Affairs Manager
National Ground Water Association
cjob@ngwa.org
(202)660-0060

Mike Paque
Executive Director
Ground Water Protection Council
mpaque@gwpc.org
(405)516-4972

Thank you,



Jon Kenning PhD, GWPC President and
Water Protection Bureau Chief
Montana Department of Environmental Quality



Terry Morse, CAE, CIC
Chief Executive Officer
National Ground Water Association