



January 29, 2021

Attn: Assistant Commissioner Gardner,
Director Brogle,
Bureau Chief Rosenwinkle,
CSO Leads and Municipal Representatives,

NewarkDIG (Doing Infrastructure Green), a coalition of community partners focused on improving Newark's stormwater infrastructure, formally submits comments to the 2020 Selection and Implementation of Alternatives Report (SIAR).

Thank you all for your efforts to bring New Jersey residents and business owners solutions to the combined sewer overflow (CSO) issue and thus closer to achieving the goals of the federal Clean Water Act. The effort to complete these Long Term Control Plans (LTCP) within five years must be commended, especially in light of the limitations imposed by the COVID-19 pandemic. We are eager to submit these comments to the New Jersey Department of Environmental Protection (NJDEP) in an effort to make the submitted LTCPs the best for our communities.

NewarkDIG, established in 2013, is committed to continuously improving the quality of life, health, and viability of the City of Newark and its residents using strategic collaborative methods including: community-driven urban design, public policy planning, environmental and social justice advocacy, education, and local capacity building. Our primary goal is the establishment of sustainable green infrastructure (GI) as the first line of defense to better manage stormwater runoff, improve water quality and resiliency to flooding, and reduce combined sewer overflows, with a focus on the Passaic River and its tributaries.

The comments below are focused on the Passaic Valley Sewerage Commission (PVSC) region and the City of Newark specifically though several recommendations would be appropriate for other permit holders.

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Co-Chair, NewarkDIG

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Green Infrastructure

NewarkDIG must commend the Newark city officials for their early and ongoing commitment to implementing green infrastructure in both the municipal and regional plans. In our efforts to bridge communications between the city and residents, we've found the desire for green infrastructure and its associated benefits has been of unwavering importance to the community. That importance has been reflected in the words and actions of the City of Newark Water & Sewer Department and their contractors. We are pleased that Newark is adopting a "green first" approach and is already in the process of beginning green infrastructure work.

In the submitted LTCP plan, however, green infrastructure commitments of 5% controlled area is much less than the 10% or 15% we were expecting based on community input and cost savings projections. Understanding that 5% is over 213 acres of managed surface area, we request Newark explore ways to encourage and incentivize the development of both public and private green stormwater infrastructure. A case study of Perth Amboy, released by the Hudson River Foundation and the New York-New Jersey Harbor & Estuary Program in 2018, utilized stormwater models developed with EPA's Stormwater Management Model to assess potential impacts of green infrastructure, along with site investigations, soil sampling and infiltration tests. They found that "with full implementation of the GI opportunities identified, it is anticipated that a 25%-30% reduction in wet weather flow can be accomplished, with a 20% average reduction in peak flow rates and total reduction in sewer flow by as much as 8%." Sewersheds they studied were 40-50 acres in size and were developed with investments of \$2-\$3 million. This modeling suggests a scale up in conjunction with the planned gray infrastructure would only benefit Newark's CSO reduction plan and could also help reduce street flooding.

Bringing GI up to scale will make the overall GI strategy more effective, more noticeable and useable by the community, address the high priority community concern of localized street flooding and provide the myriad additional benefits GI is known for such as cleaner air, safer streets, reduced heat island effect, better quality of life and green job opportunities.

Across the PVSC region, there is no evidence from the plan that concerted efforts were made to follow the NJDEP Evaluating Green Infrastructure guidance document from 2018 directing permittees to compile a geographic information system database, locate and assess feasible GI sites, conduct field studies to verify models, develop performance criteria, evaluate GI impacts on baseline conditions, address maintenance considerations and develop a range of cost estimates. The reason permittees felt comfortable ignoring the guidance was because it was not required. In the future, NJDEP should demand more and be specific about the methodology permittees must employ in their evaluations.

Additionally, it is recommended the City of Newark bring in a green infrastructure vendor familiar with the variety of effective green stormwater infrastructure controls. In the SIAR, Newark reported only two green infrastructure options (tree pits and raingardens) for use on public property. The costs associated with controlling 213 acres of impervious surface quickly become unmanageable when ignoring options like disconnecting downspouts on public buildings combined with harvesting systems, replacing impervious pavement, sidewalks and portions of parking lots with permeable pavement, combining

storage with biofiltration systems and others. A “true faith” examination of Newark’s green infrastructure capacity, especially when working in combination with plans for gray infrastructure would yield results more in line with community expectations. If the reduction of CSOs from green infrastructure is not considered in conjunction with gray projects, we lose several benefits of a combined approach, not least of which is the cost savings of digging once to install gray and green projects at the same time.

When considering the effectiveness of green stormwater infrastructure controls, it is recommended that Newark consider the value of GI to reduce pollutants in stormwater runoff. Simply measuring GI’s capacity for reducing volume ignores an entire and valuable contribution of green stormwater infrastructure in managing CSOs. Similarly, discussing GI in terms of citywide impervious cover does not distinguish specific CSO reductions received by control strategies in a particular sewershed. These areas have their own distinguishing characteristics and should be evaluated separately with plans developed accordingly.

NewarkDIG has spent the last five years engaging with residents in Newark about the CSO LTCP and the local jobs aspect of green infrastructure has consistently been of interest. That said, Newark’s plan should more definitively earmark dollars for training of residents for *both* green and gray positions and mandate then incentivize construction contractors to hire from within the local workforce. Having plans with implementation schedules set 5 to 10 years in the future means there is plenty of time for workforce training.

Water Conservation

Newark’s municipal and regional plans both include water conservation methods budgeted at \$1.5M which is laudable. The problem is that these efforts planned to stretch over 20 years. This is a complete waste of an upfront effort which could measurably reduce flow, help to inform and excite residents about water infrastructure upgrades and prepare Newark to better handle expected climate realities.

Additionally, Newark’s plan is not specific in its recommendations for water conservation methods given the \$1.5 million budget. The plan cites New York’s toilet replacement program, budgeted at \$1.85 million, yet states there are several options from education and municipal ordinance to plumbing replacement programs. What remains is an unrealistic expectation for minimal cost associated with city-wide education programs. This ignores the not-insignificant costs for developing educational materials and media, contracting a public engagement campaign and managing public feedback. No mention is made for the costs of an evaluation on how Newark’s dollars might best be spent on a program to replace plumbing fixtures or the cost to fund or incentivize a replacement campaign. Having specific recommendations from the SIAR with regard to water conservation can better help manage the relatively modest budget line.

Environmental Justice

The sections of Newark most vulnerable to the effects of CSOs and to the potential negative effects of proposed CSO controls were not highlighted for consideration in the SIAR—as they well should have

been. When considering sensitive areas for the 2018 report, an opportunity to consider environmental justice neighborhoods was wasted. A special effort needs to be made to outreach to these communities, inform them of the issue, detail the upcoming work and elicit feedback.

The environmental justice communities within Newark mostly heavily affected by CSO events should be the first considered for CSO controls such as green infrastructure that will benefit the city beyond the basic permit requirements.

When developing CSO controls, consideration of the heavily burdened environmental justice communities in Newark should be paramount. It is likely inevitable that there will be environmental consequences during the construction phase of LTCP implementation. Impact statements detailing these disruptions focused on the affected environmental justice communities can help determine methods to mitigate the damage. Compounding the cumulative environmental impacts from CSO outfalls with the social and economic disruptions needed to fix the problem may mean a speedier timetable to free these communities from CSO concerns.

Public Participation

The NewarkDIG GI Reformers have worked alongside the City of Newark Department of Water & Sewer Utilities and the Newark People's Assembly to bring information about the LTCP process to impacted residents and business owners. We have sought, through surveys, personal outreach and virtual events to solicit feedback to help inform the ongoing conversation around CSO-related water infrastructure upgrades. This outreach should not end because of the submission of LTCPs but be redoubled. The work of engaging and informing the public about their water infrastructure, disruptions due to upgrades and the efforts made to fund the work should all be funded throughout the entirety of the LTCP implementation process.

In general, plans in the PVSC region suffered from a lack of accountability. NJDEP should, in future permits, require measurable efforts to reach a significant portion of the affected population. Utilizing a variety of methods both, in person and virtual, will help maximize effectiveness.

As a region, PVSC took on the burden of convening a supplemental team but made little use of it beyond reporting the meetings to NJDEP as their version of public participation. Initially, the idea of a group of community stakeholders was a welcome first step to developing a broad-based public outreach strategy. Unfortunately, this idea was never fully realized. It cannot be overstated just how short of the mark were the community engagement and public information elements of this effort. The task was to communicate to the general public about potentially billions of dollars' worth of infrastructure upgrades and yet outreach was focused on only a small group of stakeholders.

To prevent permit holders from merely skimming the surface of public participation in the future, NJDEP can require specific benchmarks of population outreach within CSO sewersheds and reporting of outreach activities. Outreach to community members should include at minimum: holding meetings at accessible locations (meaning having both accessible ramps and elevators and also being close to public

transportation), giving at least 10 days' notice before meeting dates, creating and distributing materials in multiple languages, holding meetings on evenings and weekends, providing live translation for both in-person and virtual meetings, adding closed captioning for virtual meetings, and having project materials and reports posted and easily accessible on the permittee's website.

From PVSC, there seems to be little to no consideration of public input since the submission of the public participation report in 2018. The PVSC SIAR makes no mention of public input other than to attribute the inclusion of green infrastructure in the plan to public will. Continued effort, with matching budgetary considerations for the effort of municipal permit holders to conduct community engagement campaigns, should be required by NJDEP for the remainder of the LTCP implementation process.

Financial Considerations

The lack of host agreement for Newark as the site of PVSC is an environmental injustice considering the multitude of burdens conjoined with the responsibility including receiving sewage from 48 connected communities, dealing with truck traffic and odors, and having our regulator closed because of upstream wet weather events. PVSC should immediately consider revising this injustice to its host city.

Additionally, all 48 PVSC municipalities will benefit from the regional approach and therefore the costs for a parallel interceptor should be borne by the entire region rather than just the CSO communities. Newark's portion, more than \$27 million, represents a clear instance of affluent towns benefitting at the expense of the health and wallets of Newarkers. NJDEP has an opportunity to intercede on behalf of environmental justice communities such as Newark to insist that the 48 PVSC municipalities which will ultimately benefit from increased flow consider a regional payment scenario.

Regarding the financial capabilities assessment, no consideration was given to innovative funding strategies beyond a mention of possibly securing funding through the NJ Water Bank. The details of such financing could not be known and so leaves Newark without a reasonable method of financing these infrastructure upgrades beyond further burden to existing ratepayers. NJDEP should require that permit holders explore funding strategies including stormwater utilities. Given the fact that impervious cover is a direct source of increased wet weather flow, a consideration of payment for proportional burden is not unreasonable. It is past time Newark stop overburdening existing ratepayers with the upgrades and maintenance to the city's sewer system with no consideration of impervious cover.

Implementation timeline needs to be made more reasonable to address flooding issues. Securing long term payback periods for loans is understandable, but having the actual work take two decades leaves vulnerable communities continually at risk from toxic CSO events. Municipalities should exhaust all methods for reducing costs before expanding implementation timelines.

Climate change

The use of 2004 as a model year is much less consideration for the effects of a changing climate than the data suggests is required. To maintain proper climate projections, NJDEP can require climate modeling and rainfall data to be updated with each five-year permit.

Additionally, special consideration should be made for environmental justice communities and the climate impact from CSOs. Mitigating the effects of CSOs as one of many cumulative environmental burdens for these communities means making every effort to *quickly* address the detritus and toxins affecting their waterways and in sewer back-ups into homes and onto local streets.

Water Quality

The PVSC regional plan doesn't assure 85% capture across the entirety of the PVSC region. Water quality standards exceed the minimum in Newark but fall short in other municipalities. Water quality standards should be upheld for each permittee regardless of a regional approach.

Water quality testing was conducted from the middle of the Passaic rather than along the riverbank. In adherence to the Clean Water Act, we are interested in achieving fishable/swimmable waterways. To that end, it is recommended water quality samples be taken from along active shorelines as well as at CSO outfalls where people are more likely to recreate.