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Re: Sierra Club of Maryland's Supplemental Comment on the Superconducting Magnetic Levitation Project's Water Quality Certification Application (23-WQC-0007)

I. Introduction

Sierra Club of Maryland (Sierra Club) opposes the Baltimore-Washington Superconducting Magnetic Levitation project (Maglev) because of the fundamental inequities of the project, its likely impacts on the Maryland public and the environment, including its negative impacts on water quality, and its anticipated toll on the local public transportation services that serve the corridor.[1] As we explained in our November 16, 2023, comment letter on Baltimore-Washington Rapid Rail's (BWRR) Water Quality Certification (WQC) application for the Maglev, the Maglev's WQC request must be denied by the Maryland Department of the Environment (MDE) for two major reasons: (1) the WQC application is incomplete because the final route for the Maglev is still unknown and likely to change from the route presented in the WQC application, and (2) the application shows that the Maglev would have impermissible impacts to water quality.

Serious flaws in the WQC application prompted MDE to request information about the Maglev project's proposed impacts on water quality, including its discharge points to impacted waters, impacts outside the limits of disturbance (LOD), proposed mitigation plans, and evaluation of impacts to species and species' habitat.[2]

In response, on November 16, BWRR provided hundreds of additional pages that it should have provided to MDE in its original WQC application. Yet, in its supplemental materials, instead of disclosing all the impacts requested by MDE, BWRR continues to defer key analyses until the National Environmental Policy Act (NEPA) process restarts and continues to state that Maglev would not cause an adverse impact on water quality but is still vague on how it can guarantee that outcome. BWRR also does not address issues and questions that Sierra Club and other groups

[1] Sierra Club Comments on BWRR SCMaglev Draft Environmental Impact Statement (May 20, 2021), *available at* https://www.sierraclub.org/sites/default/files/sce-authors/u25361/Draft%20EIS%20SC%20comments%20Baltimore%20Washington%20SC%20Maglev.pdf.

[2] Sept. 8, 2023, Letter from Danielle A. Spendiff, MDE, to BWRR, *available at* https://mde.maryland.gov/programs/water/WetlandsandWaterways/SiteAssets/Lists/SCMAGLEV/NewForm/23-WQC-0007%20(BWRR)_MDE%20WQC%20Comments_09082023.pdf.

raised in their comments. In short, BWRR has not fixed the serious flaws of its WQC application by submitting supplemental materials, and BWRR's request for certification must be denied.

II. Public Notice Issues with the Maglev Project

In its November 16 comments, Sierra Club explained the flaws with the public process for the Maglev including that BWRR and the federal agencies preparing the NEPA documents for the Maglev failed to disclose critical data and information underpinning their analyses.[3] Now MDE has compounded these process errors. It allowed BWRR to submit its supplemental materials the day the public comment period for BWRR's WQC application closed and MDE publicly posted BWRR's supplemental materials the following week, after the public comment period ended. To allow BWRR to supplement its WQC application without allowing public comment on those materials violates basic principles of administrative law which require public notice and comment on a water quality certification request. MDE's antidegradation policy and water quality certification regulations also require meaningful public comment on a WQC application.[4] Maryland requires public notice "of each application for certification,"[5] but without BWRR's supplemental materials, BWRR's application was certainly not complete[6] (and as explained below even with those materials it is still not complete).

Given MDE's actions, neither water quality experts outside of MDE nor the public have been allowed the time to fully comment on all the supplemental materials BWRR provided.

In November, Sierra Club requested that MDE provide additional time for the public comment period on the Maglev WQC application but to date MDE has not responded to this request. MDE must consider Sierra Club's supplemental comment and must similarly consider other commenters' submissions, even if submitted after November 16.

III. MDE Should Not Grant Certification to the Maglev Project because BWRR's Application Understates Impacts to Water Quality and is Still Incomplete.

Even though BWRR has now supplemented its WQC application with some of the materials MDE requested in September, including providing a draft concept stormwater management approach, MDE should not grant BWRR's WQC certification request for the Maglev because BWRR's application remains incomplete and because the Maglev would have unmitigated adverse impacts to water quality.

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[3] Sierra Club Comments on the BWRR WQC Application at 17-18 (Nov. 16, 2023), *available at* https://www.sierraclub.org/sites/default/files/2023-11/2023-11-16%20FINAL%20SC%20Comments%20on%20WQC%20re%20SCMAGLEV.pdf.

[4] Maryland COMAR §§ 26.08.02.04-2, 26.08.02.10(C).

[5] *Id. §* 26.08.02.10(C)(1).

[6] MDE stated in its September 8, 2023, letter that BWRR's WQC application was "lacking essential information." Sept. 8, 2023, Letter from Danielle A. Spendiff, MDE, to BWRR at 1.

BWRR's supplemental materials do not address many of the gaps MDE identified in BWRR's application nor those identified in Sierra Club's November 16 comment letter. In its supplement, descriptions of the complete, anticipated water quality impacts of the Maglev project continue to rely on future analyses, plans, and discussions with regulatory authorities that will only happen once the NEPA process restarts, even though the NEPA process is paused and there is no timeline for it to restart (or end).[7] Those someday analyses do not provide a complete picture of the water quality impacts of the project. For that and the following reasons, BWRR's application must be denied.

A. BWRR's supplemental materials understate Maglev's anticipated impacts on environmental justice in Maryland.

In its September 8th letter, MDE asked BWRR to assess whether the Maglev would have disproportionate construction and operational impacts on water quality in areas already overburdened by pollution and on sensitive populations, raising environmental justice concerns.[8] Because BWRR acknowledges that the Maglev would cause adverse water quality impacts on high-quality Tier II waters in Maryland like Beaverdam Creek and the Patuxent River, it was required to prepare a social and economic justification for its WQC application and an alternatives analysis. Properly analyzing the disproportionate impacts of the Maglev project on certain communities is key to this social and economic justification (SEJ). For many reasons we will not repeat here, BWRR fails to comply with the applicable regulatory standards for that SEJ.[9] For the most part, BWRR's supplemental materials do not add to its SEJ analyses and therefore cannot remedy those failures. BWRR addresses the environmental justice implications of the Maglev, which are related to the SEJ, but it fails to perform a proper analysis.

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[7] At points in the application, BWRR states that the Maglev project is still in the beginnings of the design process: "[t]he Superconducting Magnetic Levitation (SCMAGLEV) Transportation System project is in the early stage of design." BWRR Supplemental Materials (BWRR Supp.), Att. H at 1 (Nov. 16, 2023), *available at* https://mde.maryland.gov/programs/water/WetlandsandWaterways/Pages/SCMAGLEV.aspx. In recent articles, a spokesperson for the Northeast Maglev, that works closely with BWRR, has stated that "[n]othing has changed with the preferred alternatives that are under review by the [FRA]," yet the process is NEPA paused and FRA has not yet selected a preferred alternative. Daniel Zawodny, "Proposed Maryland Maglev tunnel could be one of the longest passenger rail tunnels in the US," The Baltimore Banner (Nov. 28, 2023), *available at* https://www.thebaltimorebanner.com/community/transportation/maglev-westport-passenger-train-tunnel-J3YX5G2S7ZBJVOQIHUDXCNYQGA/.

[8] *See* Sept. 8, 2023, Letter from Danielle A. Spendiff, MDE, to BWRR at 2.

[9] BWRR states that it has not identified any additional mitigation opportunities which means that a social and economic justification is still necessary. Cover Letter from BWRR to Danielle Spendiff, MDE at 5 (Nov. 16, 2023).

As we noted in our earlier comment letter, if the Maglev is constructed as proposed, approximately 80% of the land parcels that would have impacts ranging from vibrations, noise, and health hazards are located within communities already overburdened with pollution, comprised of majority-minority populations, comprised of low-income households, or having some or all of those characteristics. As the Federal Railroad Administration's Draft Environmental Impact Statement (DEIS) for the Maglev stated: "[d]ue to the prevalence of EJ population areas, impacts to resources along the corridor will predominately be located in EJ population areas."[10] And, comments on the DEIS noted, these potential impacts to communities are likely understated because the DEIS did not analyze impacts beyond one-quarter of a mile from the Maglev stations and trainset maintenance facility (TMF) or 500 feet from the rest of the route, and therefore did not address the construction impacts from the hundreds of heavy trucks that would supply materials to the Maglev 24 hours a day, for years.[11]

Despite these realities, in its supplemental materials, BWRR attempts to carve up Maglev's anticipated impacts to present an artificially rosy picture of impacts to sensitive communities or those already burdened by pollution. In its supplement, BWRR characterizes the proposed construction impacts of the Maglev as not "disproportionally targeted to [areas with an "EJ Score" in the 75th percentile]."[12] Yet, this conclusion is based on a flawed analysis. For example, rather than properly describing the environmental justice concerns raised by the anticipated *cumulative* impacts of the Maglev and its cumulative impact with other projects in the area, BWRR separately reports whether each project impact (e.g., placement of construction laydown areas, or road relocations) occurs within a community with a higher percentage of populations already overburdened with pollution or sensitive populations than most communities in Maryland.[13] BWRR must not separately report each project impact when undertaking an analysis of environmental justice but instead must assess the cumulative impacts on communities.

The DEIS at least attempted to perform this cumulative analysis. And, even when the DEIS considered project impacts individually, it showed that the Maglev would disproportionately impact communities already burdened by pollution and comprised of sensitive communities. As the City of Greenbelt explained:

> [T]he DEIS recognizes that 47 out of 56 locations that would be subject to moderate or high sensitivity aesthetic impacts are in EJ population areas, *id.* at 4.5-13, over 99% of impacted noise receptors are located within EJ population areas, *id.* at 4.5-15 to 16, 100% of severe vibration impacts would be felt in EJ population

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[10] Federal Railroad Administration's (FRA) DEIS at 4.5-7.

[11] City of Greenbelt comments on Maglev DEIS at 172-73 (May 24, 2021), *available at* https://www.greenbeltmd.gov/government/departments/planning-community-development/federal-state-projects/maglev-project-information.

[12] BWRR Supp., Att. A at 1.

[13] *Id.* at 2.

areas, *id.* at 4.5-16, and approximately 80% of the parcels that would be impacted are located within EJ population areas, *id.*[14]

BWRR's supplemental materials still do not accurately describe impacts to communities along the route and, as Sierra Club explained in its November 16th comments, BWRR cannot justify the social and economic need for a project with adverse water quality impacts when it does not fully describe the Maglev's burden on Maryland communities.[15]

B. BWRR's supplemental materials understate impacts to important water resources in Maryland.

BWRR's supplemental materials also appear to understate impacts to important water resources in Maryland like streams, wetlands, and groundwater.

First, BWRR provides incomplete information about **discharges from construction and maintenance**. MDE requested that BWRR "clearly" identify "[p]otential operational discharges" because of possible impacts on water quality.[16] Although BWRR provides additional information on discharges (that should have been provided with its initial WQC application), it qualifies its efforts to identify the location and nature of any potential discharges and direct fill entering receiving waters as "based on the current level of design," leaving MDE and the public unsure about the project's final anticipated impacts to water quality.[17] In addition, MDE requested additional discharge information in 2023, but BWRR supplied what it calls updated WQC Plan Sheets dated 2020, raising questions about who updated the maps and when the updating was performed.[18] Further, some of the updated WQC Plan Sheets appear to exclude discharge points. For example, BWRR identifies no potential discrete discharges from temporary construction areas right next to major watercourses, like the Patapsco River, which is unrealistic.[19]

Second, BWRR understates potential **impacts to wetlands** from the Maglev. In its supplemental materials, BWRR for the first time identifies additional permanent impacts to wetlands not previously disclosed in its WQC application, which is concerning.[20] BWRR also appears to understate the wetland impacts it does identify. For example, BWRR states that removing trees to convert a wetland from a forested wetland to an emergent wetland would

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[14] Greenbelt DEIS Comments at 172.

[15] Sierra Club Comments on the BWRR WQC Application at 13-17.

[16] Sept. 8, 2023, Letter from Danielle A. Spendiff, MDE, to BWRR at 3.

[17] Cover Letter from BWRR to Danielle Spendiff, Maryland Department of the Environment at 2 (Nov. 16, 2023), *available at* https://mde.maryland.gov/programs/water/WetlandsandWaterways/Pages/SCMAGLEV.aspx.

[18] *See, e.g.*, BWRR Supp. Att. B at 2-16.

[19] *See, e.g.*, BWRR Supp. Att. B, Drawing PP-76 (showing an area of temporary construction disturbance runoff adjacent to the Patapsco River, but identifying no discrete discharge points into the Patapsco River and explaining that runoff would be managed using "standard erosion and sediment control practices").

[20] BWRR Supp., Att. C at 1.

"have no potential impacts to the portion of the wetland extending beyond the LOD,"[21] nor would it affect the habitat or hydrology of the wetland. Yet, BWRR states that best management practices (BMPs) are needed to limit the introduction of invasive species from converted wetlands, acknowledging that removing trees from a forested wetland affects wetland ecology.[22] BWRR must go farther in describing impacts to wetlands. Removing trees from a forested wetland does not simply create a viable "emergent wetland;" rather, it destroys the existing forested wetland.

Worse, BWRR does not provide any specific mitigation measures for each wetland, but instead explains "BWRR would implement program wide techniques to prevent the potential for direct and indirect impacts from extending outside the LOD. As the SCMAGLEV design advances, BWRR would further consider planning or design measures intended to minimize impacts to and preserve areas adjacent to the construction or operation."[23] Deferring these key analyses does not provide MDE enough information to assess water quality impacts.

Third, BWRR's plan **to address impacts from tunnelling in the future leaves many questions about the plan's effectiveness.** Again, BWRR continues to defer key design details until after MDE must make a decision on BWRR's WQC application, stating: "[p]rotection of groundwater resources will begin with additional research during detailed design" or "continued ground investigations and agency coordination will be critical to ensuring the SCMAGLEV Project does not adversely affect drinking water quantity and quality."[24] In addition, BWRR explains that it would discharge water pumped during tunnel construction and dewatering activities into settling basins and then into nearby wetlands and waterways, without further treatment.[25] As several commenters have explained, the areas targeted for the Maglev tunnel include contaminated soils and legacy landfills.[26] Discharging water without further treatment beyond a

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[21] *Id.*

[22] *Id.* There seems to be a mismatch among BWRR's concept stormwater management plan, the descriptions of the proposed treatments, and the maps provided in Attachment E of BWRR's supplemental materials. For example, in the maps showing the proposed Southern Portal show two settling basins, one of which is described as an area for permanent stormwater treatment, and one area of temporary filter bags that would be used for "smaller, less frequent dewatering." BWRR Supp., Att. E at Drawing No. PP-52 (PDF page 145). In contrast, for the same area, the concept stormwater management plan BWRR submits describes one bioswale and two bio-retention cells. Supp. Concept. Storm. Mgmt. App. at PDF 13. It is unclear what BWRR intends to propose for the site.

[23] BWRR Supp., Att. C at 2.

[24] BWRR Supp., Att. E at 3.

[25] *Id.* at 5.

[26] *See* Maryland Coalition for Responsible Transit, Comments, Concerns and Questions on the SCMaglev WQC, Section 11, Appendices at PDF page 555 (Nov. 15, 2023); City of Greenbelt comments on the SCMaglev WQC at 13 (Nov. 16, 2023); City of Greenbelt comments on Maglev DEIS at 138. Recently the president of the Westport Neighborhood Association in Baltimore and

settling basin may cause water quality impacts BWRR does not acknowledge. Likewise, BWRR appears to be undecided about how it would address streams and wetlands that cross or span the excavation area for the Maglev's southern and northern tunnel portals. For both portal locations, BWRR states that BWRR would employ "pumping, or diversion (depending on wildlife present and volume of water), required to mitigate wildlife and wetland resource impact," revealing again that BWRR has not provided clear information about the resources that would be impacted.[27] BWRR also describes rerouting several intermittent streams and a stream that would be "pumped over the excavation [area for the tunnel] during construction," and then permanently routed in a new location. Yet, BWRR does not describe knock-on impacts from the construction and rerouting of these streams to nearby wetlands and other waterbodies due to soil compaction, diverting the flow of water, and creating a barrier to subsurface flow to wetlands.[28]

Fourth, **BWRR has not fully characterized impacts to streams.** As for impacts to other resources, in its supplemental materials, BWRR states it will provide key details later: "BWRR is committed to working with the resource agencies and providing information and details that become available as the design progresses."[29] BWRR also suggests that it is relying on outdated mitigation plans because it states that it has still not updated its stream mitigation plans to incorporate information and feedback from MDE, the U.S. Army Corps of Engineers, the Maryland Department of Natural Resources, and the U.S. Fish and Wildlife Service from a February 10, 2021, site visit.[30] While BWRR provides additional information about Permittee-Responsible Mitigation (PRM) opportunities and possible mitigation bank credits, it has not fully characterized the Maglev stream impacts and therefore cannot predict what mitigation would be necessary in the aggregate or in what watersheds. This uncertainty is compounded because, as BWRR's supplemental materials on PRM opportunities show, over time previously available PRM sites can become unavailable or the credits potentially available from such sites can change.[31] According to BWRR's new materials, changes to PRM opportunities are most significant in the Middle

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co-founder of the community's economic development corporation has raised similar concerns with impacts to her community from Maglev's proposal to dig "through the ground where chemicals could be exposed." Instead, her community would like to see more affordable housing and help for small businesses, not a passenger rail tunnel. Daniel Zawodny, "Proposed Maryland Maglev tunnel could be one of the longest passenger rail tunnels in the US," The Baltimore Banner (Nov. 28, 2023).

[27] *Id.* at 7.

[28] The negative impact of roads on wetlands in the area is well known. *See, e.g.*, Forman, Richard T. T., and Lauren E. Alexander. 1998. "Roads and Their Major Ecological Effects." *Annual Review of Ecology and Systematics* 29 (1): 207–31, *available at* https://doi.org/10.1146/annurev.ecolsys.29.1.207.

[29] BWRR Supp., Att. G at 1.

[30] *Id.* at 2.

[31] BWRR Supp., Att. G at 3.

Potomac Anacostia Occoquan watershed where BWRR has identified no available wetland bank credits.[32] If the PRM opportunities in that watershed decrease in the coming years, BWRR would have no way to mitigate Maglev impacts in that watershed.

Fifth, BWRR has still not provided enough information about the Maglev's possible impacts on **state or federally listed or potentially listed species**. In its November 16 comments, Sierra Club highlighted important potential impacts to the greenspaces, public parks, and other protected areas in Maryland that must be considered as part of a WQC application, in part because they provide important habitat for endangered and threatened species.[33] In its supplemental materials, BWRR does not remedy the WQC application's failure to properly characterize impacts to protected species and their habitat. Instead, BWRR repeats information that the FRA provided to the public in 2021 and states that the information is "compiled from agency correspondence in the DEIS.[34] It states that it will undertake—at some unknown future date—wildlife surveys that might be used to inform Maglev project development. This is insufficient.

In its September 8 letter, MDE stated that BWRR's WQC application failed to include "current characterizations or planned studies of State and federally listed potential endangered species" at both project and mitigation sites.[35] In its supplemental materials, BWRR does not provide any new information except a federally threatened or endangered species list from 2023, but the federal consultation process under the Endangered Species Act is far from complete. BWRR commits to "consider" certain protection or minimization measures as the design advances and provides a list of potential mitigation strategies that "may be implemented," to protect species and their habitats but does not commit to implementing any of them,[36] and therefore MDE may not consider them as it evaluates water quality impacts.

Critically, BWRR provides no updated information on the habitat or location of the federally endangered northern long-eared bat, the federally threatened swamp pink, and the candidate species the monarch butterfly, and also includes no studies, characterizations, or analysis from BWRR or from the federal agencies in addition to those already provided as part of the DEIS.[37] In addition, BWRR does not mention any need for federal Endangered Species Act coordination on the tri-colored bat, a species that is proposed to be listed as a federally endangered species and has been identified near the Maglev project area.[38] BWRR's supplemental materials about Maglev's possible impacts to species fail to fulfill BWRR's duty to

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[32] *Id.* at 3-4.

[33] Sierra Club Comments on the BWRR WQC Application at 9-11.

[34] BWRR Supp., Att. H at 1.

[35] Sept. 8, 2023, Letter from Danielle A. Spendiff, MDE, to BWRR at 4-5.

[36] BWRR Supp., Att. H at 4.

[37] BWRR Supp., Att. H at 6-14.

[38] U.S. Fish & Wildlife Service, *Proposed Rule to List the Tri-colored Bat as an Endangered Species*, 87 Fed. Reg. 56381 (Sept. 14, 2022).

describe impacts to species and their habitat, as required for water quality certification applications.[39]

Finally, although MDE requested additional information about Maglev's water quality impacts stemming from the possible need to **relocate or alter existing infrastructure like utility lines**,[40] BWRR states that it has coordinated utility issues with the relevant utility companies in a series of meetings in 2017 and 2018, but does not provide any additional details, explain whether those changes would create issues for water quality, or describe the outcome of the meetings. Regarding utility-related impacts, BWRR is asking the public to trust that it has handled the issue without providing specific examples of efforts to mitigate impacts from relocating or altering existing infrastructure and has not even provided minutes of the meetings with the utility companies.

IV. BWRR's supplemental materials do not address key flaws already identified by Sierra Club.

In addition to failing to address the issues raised by MDE, BWRR's supplemental materials also do not address many key issues raised in Sierra Club's November 16th comments. For example, BWRR does not address tunneling spoils and potential water quality impacts from their disposal. It also does not address: how the project would accommodate the flood risks from higher-intensity rainfall due to climate change; how large construction lay-down areas would be dismantled to avoid water quality impacts; how the Maglev could impact Maryland's ability to implement the Chesapeake Bay Watershed Agreement; the carbon footprint of the Maglev; or meaningfully address tree loss. BWRR's WQC application remains incomplete.

Water quality concerns and environmental impacts are some of the most significant issues with the Maglev train project in Japan and have indefinitely delayed the project.[41] MDE must exercise extreme caution in terms of allowing a similarly problematic project to advance in Maryland.

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[39] EPA Final Rule on CWA 401 Certification Requirements, 88 Fed. Reg. at 66602.

[40] Sept. 8, 2023, Letter from Danielle A. Spendiff, MDE, to BWRR at 5.

[41] *See* City of Greenbelt comments on Maglev DEIS at 85-86 (discussing concerns that the Japanese Maglev project may cause a major river to lose up to two tons of water per second). In mid-December 2023, the company constructing a Maglev line in Japan formally delayed the expected construction completion date to "2027 or later" because of the Shizuoka Prefecture's water quality and environmental concerns with the planned tunnel construction there. The Yomiuri Shimbun, JR Tokai Changes Schedule for Maglev Line Opening from 2027 to 'In 2027 or Later'; No Start Date for Shizuoka Pref. Construction, The Japan News (Dec. 15, 2023), *available at* https://japannews.yomiuri.co.jp/business/companies/20231215-155826/.

V. Conclusion

BWRR's Request for a Water Quality Certification for the Maglev must be denied. The Maglev as presented by BWRR would have unknown and unmitigated impacts on water quality and would violate Maryland's anti-degradation policy. BWRR's supplemental materials do not change that conclusion.

Sincerely,

Josh Tulkin

Director, Sierra Club Maryland Chapter