

**Board of Directors** 

November 16<sup>th</sup>, 2023

Baltimore, MD 21230

Trevor Barnett,

Maryland Department of the Environment

Chair Attn: Danielle Spendiff

Suzy Kelly, Vice Chair

Hon. Parris Glendening

1800 Washington Boulevard, Suite 430

Jud Hill,

Treasurer

RE: Comments Recommending Denial of the Application for Water Quality

Certification 23-WQC-0007, BWRR SCMaglev Project

Palmer Dorn

Dear Ms. Spendiff: Sandra Baker

Bobbi Smith

Sarah Dean

Ryan Morrell

Matt Oakes

Jordan Maitland

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Robert F. Kennedy, Founding Board Member / Director

Emeritus

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This project is an unmitigated disaster for the Anacostia River, its tributaries, and allof the people who live, work, or play in its watershed. The Federal Railroad Administration's (FRA) SCMaglev Draft Environmental Impact Statement (DEIS) review process ended in May 2021. In August 2021, the FRA set a pause to review the significant number of submitted comments before moving forward on a final EIS. The pause is still in effect, but it does not preclude Baltimore-Washington Rapid Rail (BWRR) from moving forward with its own activities, including community outreach, lobbying, and strategizing for next steps, such as permits and certifications. BWRR has taken great liberties with these activities but has never addressed the root inconsistency of their desired project with this watershed, its residents' quality of life, or the harm this Maglev project will do here.

BWRR has submitted its application to the Maryland Department of the Environment (MDE) asking for a Water Quality Certification (WQC) approval for a Tier II antidegradation water quality permit. Tier II, high-quality waters have an existing water quality significantly better than the minimum requirements, as specified in water quality standards, and exceed the quality necessary to support the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water. The Tier II waters for this permit are Beaverdam Creek I & II and Patuxent River I. Beaverdam Creek is in the Anacostia River watershed and is, in fact, the closest we get to pristine waters in 176 sq mi total watershed area and our only Tier II high-quality waters area therein.

The role of the state of Maryland is to certify that the proposed SCMaglev project will not harm our state's waterways. The certification requires a net zero negative impact on these areas. BWRR has admitted it cannot meet the requirement and has included the required social and economic Justification in its proposed certification. its watershed. The MDE commented: "MDE has determined that the impacts to Tier II resources associated with this project are of great enough magnitude warrant additional project justification."



Even the Patuxent River Commission notes the damage that will come to our watershed from this project, despite our watersheds being neighbors but otherwise distinct.

The project will hurt our environmental justice communities, will create problems for all communities it passes through, and will permanently damage the environment. It will not deliver the promised financial benefits, nor will it be "green." Anacostia Riverkeeper agrees with the MCRT position that the project is not justifiable and that there is not enough information to substantiate benefits claims being made by BWRR. This is in alignment with the positions of the Patuxent River Commission, the Maryland Coalition for Responsible Transit, the Anacostia Watershed Community Advisory Committee, and our understanding of the position of Waterkeepers Chesapeake.

The BWRR documentation must prove that the SCMaglev would be built for the greater good despite the harm that will be caused to the waterways. The MDE must make an informed decision to grant the requested WQC. We and the others posit that the answer should be "no," based on the failure of the applicant to provide detail and supportive data.

BWRR either lacks the ability to or has attempted to intentionally put off providing the detailed planning information until after a WQC decision has been reached. While that has been addressed with MDE telling BWRR they must submit the required documentation by the end of the extended public comment period, MDE still has a critical decision to make regarding such a very large and impactful project.

# Purpose and Need: Social and Economic Justification

Social and Environmental Justification "The SEJ must demonstrate that an economic hardship and/or public benefit overrides the value of the ecological services or water quality benefit that the Tier II water segment provides. Before MDE can consider the SEJ in a decision, the applicant must first provide documentation to show that all reasonable avoidance, minimization, and mitigation alternatives have been considered, and where economically feasible, implemented."

Anacostia Riverkeeper agrees with the Patuxent River Commission in questioning whether the Anti-degradation review is sufficient for informed public comment and therefore an adequate basis for whether this permit should be granted. The Commission contends that it is not sufficient in numerous sections for informed public comment and therefore the justifications for the SEJ do not meet the standard required to grant Water Quality Certification.

BWRR statement of purpose: "The purpose of the SCMAGLEV Project is to evaluate, and ultimately construct and operate, a safe, revenue producing, high-speed



ground transportation system that achieves the optimum operating speed of the SCMAGLEV technology to significantly reduce travel time in order to meet the capacity and ridership needs of the Baltimore-Washington region." (Maryland High-Quality Waters (Tier II) Antidegradation Review Report Alternatives Analysis – No Discharge Alternative. General Project Purpose, Page 2)

The purpose and need statement by BWRR is so tightly defined to make one believe that only the Superconducting Magnetic Levitation (SCMaglev) train project can achieve the goal of an ultra-high-speed land-based transportation link between Baltimore and Washington. D.C. The real need is for a fast, reliable, and low-cost link between Baltimore and Washington, D.C. And there are two alternatives to the SCMaglev that exist and are operating: Amtrak and MARC.

For Cherry Hill, the location of the proposed the Superconducting Magnetic Levitation (SCMaglev) train project Baltimore station, with a projected 15-minute trip, a one-way ticket price is between \$42 to \$86 (or an average cost of \$60 per the DEIS), which is four-to-nine times the cost of a MARC ticket. Riders must be able to afford this proposed system. Amtrak's lowest-priced ticket from Baltimore to Washington, D.C., is \$5 per ticket for a coach seat on the Northeast Regional departing Baltimore early in the morning, far lower than the SCMaglev's. (https://www.amtrak.com/tickets/departure.html)

Viable Local Commuter Alternative: The MARC Express – With a stop at BWI Marshall Airport, 41 minutes from the heart of Baltimore, Penn Station to D.C., with a cost of a one-way ticket of \$9. A bit further south, but still in the inner city, is the West Baltimore Station. From there to D.C., MARC Express arrives in 30 minutes. Does building a high-speed train for the financially elite justify the permanent environmental damage that this project admittedly will cause? Continuing to upgrade and enhance Amtrak, the MARC, and the VRE systems is the far superior choice over building the Superconducting Magnetic Levitation train and better for the region's rail commuting future.

#### **BWRR Public Benefits Claims**

- BWRR claim: "Major sources of temporary and permanent jobs. This includes opportunities for EJ communities and partnerships with local educational providers."

  [RESPONSE] As stated above, BWRR's disingenuous numbers are changing. Estimates for job years for temporary and permanent jobs have changed drastically. How can we rely on such promises that have not been substantiated? Amtrak and the MARC currently provide jobs and career opportunities, which should increase with the improvements being made.
- BWRR claim: "Key transportation improvements without the displacement of residential communities"



[RESPONSE] This Superconducting Magnetic Levitation (SCMaglev) train is not a commuter train. Because the SCMaglev would have only three stops (Mt. Vernon Square, BWI Airport, and Cherry Hill in Baltimore), the residential communities along the route that will be impacted would not even have access to the service "benefit." The proposed stations in Washington, D.C., and Baltimore are not connecting to other major transportation hubs. Further, riders must be willing to spend the additional travel time to get to the planned stations' locations, as well as to expend the additional cost to travel from the destination station to the rider's ultimate destination. Unlike other transit systems, it would not serve other common transportation needs, such as school, shopping, or medical appointments, because of the lack of local stops and high-priced tickets. And, residents are only not "displaced" if they agree to have a train tunnel running beneath their homes and property. Otherwise, BWRR will simply take the home and property, if they have the power of eminent domain. It is also called involuntary resettlement, or involuntary displacement.

# **Safety**

Current Superconducting Magnetic Levitation train design will present safety problems, including the potential for accidents due to the lack of detailed and appropriate safety regulations and standards for this technology. This technology is not in full-time commercial operation anywhere in the world; rather, it is currently being tested in one location in Japan. It is commercially unproven technology for which the United States has no safety standards.

Superconducting Magnetic Levitation train safety certification, referred to as the Rule of Particular Applicability, is not planned for completion until after construction starts. In Appendix G, Part 3, page 4, the project's Draft Environmental Impact Statement states: "Construction can proceed prior to the completion of the Rule of Particular Applicability (RPA), but operation cannot commence without it." Not having the safety regulations worked out prior to construction design increases the likelihood of changes in construction design that would have deeper impacts on the environment than what is represented in the current application material. Allowing construction to start prior to safety certification is contrary to the U.S. Department of Transportation policy as written in its 2020 report, "Pathways to the Future of Transportation," which states that safety should be the first priority.

#### **Financial Stability Depends on Ridership**

To date, Baltimore-Washington Rapid Rail (BWRR) and the Northeast Maglev (TNEM) have not provided any analyses or unredacted data to validate that the Superconducting Magnetic Levitation (SCMaglev) project is financially feasible. They have not substantiated their claims that the SCMaglev is able to generate sufficient revenue to be self-sustainable and to cover the costs of the system's operation, maintenance, and loan servicing. In BWRR's Water Quality Certification application documents, it is clear that the financial success of operating and maintaining the SCMaglev is based on ridership. However, we have not seen any



ridership analyses, modeling, assumptions use, data, and findings that support their statements. The Maryland Department of the Environment and we, the communities through which the SCMaglev would be built and operate, should see clear evidence that BWRR's ridership projections are not grossly inflated. BWRR projects between 11.4 to 12.6 million passengers annually. This claim has not been substantiated.

How is this possible, when the MARC, operating three train lines in Maryland with a pre-COVID ridership peak at just over 9 million riders, and Amtrak have over 800,000 riders between Baltimore and Washington, D.C.? The COVID pandemic changed the nature of employment. Many more people continue to work from home. Currently, MARC ridership is still down by 11,800 passengers per workday. Amtrak is experiencing similar numbers, still down about 40 percent. Baltimore's population continues to shrink, down 8.2 percent since 2010. Further, high-end earners are leaving both Baltimore and Washington, D.C. The *Daily Record* reported that Maryland is among the states with the highest loss of high-earning residents. WTOP radio reported that Washington, D.C., lost high-end earners faster than any other state. So, the SCMaglev train ridership, already inflated, is losing its ridership base.

# **Jobs Claims**

In 2017, Baltimore-Washington Rapid Rail (BWRR) stated that the Superconducting Magnetic Levitation (SCMaglev) train project would create 74,000 jobs. (Note that these are "job year" calculations, not actual job numbers.) The number cited grew to 100,000, then to 120,000, 150,000, and currently 205,000. Surprisingly, however, the projected cost estimate has barely changed (\$15 to \$16 billion). Where are the analyses that substantiate the jobs numbers? In its Water Quality Certification application package, BWRR states it is employing the established and accepted IMPLAN method. What dataset or datasets are being used? What is the known or estimated accuracy of these data? What economic, growth, inflationary, or other assumptions are being used? What are the justifications for using these assumptions? What are best- and worst-case projections? Should the MDE and Marylanders take the word of BWRR without evidence and allow them to take on one of the largest construction projects ever in the state of Maryland?

### **Impacts on Communities**

The list of negative impacts on the specific communities along the Superconducting Magnetic Levitation (SCMaglev) train alignments is extensive. Especially vulnerable are Black and Brown or environmental justice communities. The Maryland Coalition for Responsible Transit's (MCRT's) questions and concerns were outlined in great detail in its comments to the 2021 Draft Environmental Impact Statement. No responses to the MCRT's comments or the many other comments submitted by other organizations and individuals have been received.



#### **Environmental Justice Communities**

- Eighty percent of the parcels that would be impacted by land use conversion, rezoning, and potential property acquisitions are in environmental justice (EJ) communities.
- Nearly all the project ancillary facilities (those located above ground) are located within the EJ population areas (e.g., stations, viaducts, tunnel portals).
- Increase in runoff, stormwater, and flooding issues will disproportionately affect the EJ communities.
- Most cultural resources (historic and archaeological resources) impacts occur within EJ groups.
- Ongoing construction impacts would occur at varying locations, including in many EJ communities, for varying durations during the construction period, 24-hours a day, seven days a week, for one to seven years.
- A decreased level of service in EJ residential areas and changes to local access or mobility can be anticipated.
- The vehicle collisions and other operational accidents could be elevated in EJ communities throughout the SCMaglev construction period.
- Potential spills of hazardous materials are more likely to occur in EJ communities.
- Most of the frequent and severe noise and vibration impacts will occur in EJ communities.
- Air pollution will worsen around stations due to increased traffic and potentially harmful emissions from ventilation facilities.
- Visual changes in neighborhoods and the elimination of greenspace will occur in and around EJ communities.
- Negative impacts to EJ neighborhood cohesiveness will be sustained, as has occurred with other transportation construction projects.
- Permanent and unrecoverable impacts to recreational facilities and parklands will occur if building the SCMaglev project is approved.

#### Incomplete, Vague, Avoidance, and Omissions

Throughout its Water Quality Certification (WQC) application, Baltimore-Washington Rapid Rail says they "intend to meet the requirements" or "opportunities have not been fully analyzed and quantified to date" or they intend to maintain the condition of waters within the affected watersheds by avoiding and minimizing impacts and providing mitigation for impacts that cannot be avoided. BWRR did not provide the required documents and detailed plans in their application.

MAGLEV\_WQC\_MEMORANDUM\_Finalv05.pdf see page 6 of 13. No specific methods are mentioned, just that BWRR will adhere to the "Best Management Practices," (BMP) without providing examples of what has been used before in similar situations. The MDE has since required these documents by the close of the public comment period (November 16, 2023). That the MDE had to prompt BWRR for these required documents should give the MDE pause when



considering BWRR's Water Quality Certification application.

# **Examples of Vague or Non-specific Statements**

This following is an example of not completing required documents that would show the true extent of damage.

"Note: BWRR intends to identify spaces for Potential Surface BMPs (Best Management Practices) *after* operational layout of the TMF site has been more developed. This will reduce and/or eliminate the amount of Potential Underground Stormwater Vault BMPs needed. Current layout is preliminary and conservative with assumed fully developed impervious."

#### **Procedural Omission**

(Chesapeake Bay Foundation) memo: "The MDE Antidegradation Review Report Form only includes project-specific impact calculations but fails to provide narrative responses to the other questions on the form throughout the analysis document. As such, neither MDE, nor the public can ascertain whether a serious attempt at antidegradation has occurred." Again, the lack of complete and comprehensive documentation obfuscates the extent of damage, and brings into question the applicant's KSAs (knowledge, skills, and abilities) to address the complexity of the problems their proposed project will bring.

# Vague Statements of Reassurance With No Supporting information

Exhibit H Summary of Stormwater Treatments states:

"Note: Sites Have Been evaluated and sufficient area is available within our LOD's to manage stormwater based on our current level of design. Specific treatments will be selected and sized as the design progresses and ESD's will be used to the MEP."

[RESPONSE] ESD is the "environmental site design." MEP is the "maximum extent practical."

This level of design is not specified, with no information on water volumes and capacity for treatment and sufficient area requirements. How can a certification decision be made without specific information and detailed plans. It is deeply concerning that the appearance is that the applicant is not as well versed in these topics as one would expect.

#### Lack of Proof of Effective Soil Removal

Baltimore-Washington Rapil Rail has stated that 75 percent of their 40-mile route will be underground and the tunnel will be 48 feet in diameter. Tunneling will begin at a point north of Greenbelt and go south to Washington, D.C., as well as at a point south of Linthicum, and then go north to Baltimore. According to its November 2018 report, the amount of soil removed would be between 9,000,000 to 10,900,000 cubic yards. For an average dump truck capacity between 10-14 cubic yards per load (an average of 12 for this example), 750,000 to 908,000, respectively, dump truck trips will be required. The sites for collection of the spoils are identified. However, there are no plans with what would be done with this huge volume of tunnel spoils.



# **Environmental Impacts**

# The Taking of Federal Land

Making federally-owned land available to private companies sets a dangerous precedent. Other private corporations could build landfills. Mining companies could claim "public good" and destroy land owned by the Beltsville Agricultural Research Center, Patuxent Research Refuge, or National Aeronautics and Space Administration. They could create an unnecessary and inconveniently located industrial zone, as well as impact federally-owned land in other parts of the United States.

# **Lowered Water Quality**

The construction of the Superconducting Magnetic Levitation project in Tier II catchment areas will lower the water quality. Baltimore-Washington Rapid Rail is not able to mitigate the damage they intend to inflict. Environmentally, the area will never recover.

### **Invasive Species in a Native Environment**

Once areas for the train maintenance facility, access roads, guideways, laydown areas, and the other facilities are cleared from the existing, native environment, invasive species will move it. They will gradually move into the remaining, fragmented forest. This will effectively eliminate the habitats of many species and essentially destroy the Patuxent Research Refuge as it is today.

## **Biologically Well-Studied Landscapes**

The Beltsville Agricultural Research Center (BARC) and Patuxent Research Refuge (PRR) represent some of the most biologically well-studied landscapes in the world, with data going back over 100 years. Both research centers represent the largest scientific field stations for their respective agencies. Hundreds of government scientists have worked here, many describing new species, and most doing research that related to the agriculture and natural areas retained by these properties. Lists of species were created and their status documented, physical collections made and accessioned to the National Collection, and the biological functions and processes documented and monitored across many decades. With looming environmental threats from climate change and continued over development, the loss of this unbroken land will reduce the ability to provide for animal and plant species.

# **Most Important Discovery Locations in the World**

The region is so well-studied that many species of animals, plants, and fungi were first described by science, and so many new species were first described from this site that it represents one of the most important discovery locations in the world, very likely the most important on the continent. It is typical for researchers to return to the location of the type to collect additional specimens for study. The destruction of the environs would greatly diminish that necessary component of scientific research.



### **Retention of Original Biodiversity**

The region has retained much of its original biodiversity. For example, the Patuxent Research Refuge has retained all its breeding bird species except for two (i.e., Broadwinged Hawk and Bachman's Sparrow). Similar results likely exist for all the other groups of plants, fungi, insects, and vertebrates. The combined protected landscapes of several government agencies have created an integrated refuge for the region's plant, animal, fungi, and micro-organisms. The extensive and interconnected nature of these landscapes allows for these species to ebb and flow in space and time without becoming locally extinct due to small parcel sizes. Mitigation for losses of unique and globally rare forests that will be destroyed is to plant trees somewhere else, buy other land, pay into a land bank, and other non-mitigation mitigations for land that cannot be replaced or recreated elsewhere because of their unique characteristics (DEIS Chapter 4.3, Page 17)

# Past and Current Study Sites Cannot Be Recreated Elsewhere

Once the landscape is altered with anthropogenic disturbances to the soils and vegetation removed and replaced with man-made structures, the land is dead to scientists for all practical purposes and to all the original plant and animal inhabitants. In addition to studies by employees of these agencies, the work of past researchers, the existence of ongoing study plots, taxonomic experts, and extensive documentation of the flora and fauna of the region attract other researchers from states, universities, and private groups from around the world.

#### **Documented Plant and Animal Species**

The Beltsville Agricultural Research Center (BARC) has 901 plant species documented, while the Patuxent Research Refuge (PRR) has 282 species of birds, 217 species of bees, and 72 species of butterflies. Thousands of insect specimens have been collected from the combined properties of the BARC and PRR. The biodiversity of these combined research centers is more studied, more completely known, and of greater taxonomic importance than any national park or wildlife refuge in the nation. Reductions in their living space will equate to reductions in their numbers. Many of the species using the PRR are migratory. Disruption of the resting areas are destructive to their migratory patterns and ability to reproduce and thrive.

# Loss of Natural Lands Cannot Be Recreated Elsewhere

If built, the natural lands lost to the proposed train maintenance facilities and support infrastructure sites cannot be recreated and mitigated elsewhere. "As described in Sections 4.10 through 4.12, the Build Alternatives would permanently impact forests, ecologically sensitive areas, and water resources, including wetlands, streams, and floodplains. Forest clearing, grading, and land development associated with the Build Alternatives would directly impact these resources, most notably along the surface components of each Build Alternative. Natural resource impacts occur primarily where Build Alternative elements would be on undeveloped land on the following properties: National Park Service (NPS) Property, Beltsville



Agricultural Research Center (BARC), the Patuxent Research Refuge (PRR), and Fort George G. Meade. Degradation of resource quality, fragmentation, and/or loss of these natural resources as a result of the impacts is irreversible." (DEIS Chapter 4.24, Page 2)

# **Irreplaceable Loss of Biodiversity**

If built, our area will suffer more from loss of biodiversity in this refuge than will be gained from high-speed transportation. "Resources considered scarce or rare, such as ecologically sensitive areas and historic resources are of particular concern. Construction of any of the Build Alternatives would require the irreversible and irretrievable commitment of identified natural and cultural resources as well as energy." (DEIS Chapter 4.24, Page 2)

## **Loss of Green Space**

If built, the last and largest green space between Baltimore and Washington, D.C., will be weakened and partially disassembled. Green Corridor, the area that covers Greenbelt Park, the Greenbelt Forest Preserve, Beltsville Agricultural Research Center, and Patuxent Research Refuge is the largest span of contiguous forest land on the East Coast between Richmond, Virginia, and Boston, Massachusetts. Former senator Paul Sarbanes called this area the "lungs of Maryland." "Additional, construction-related impacts to natural resources related to staging and work areas used temporarily by construction crews could be irretrievable. Construction work areas at waterway crossings and ancillary facilities would be larger in size than the footprint of the permanent structures." (DEIS Chapter 4.24, 3)

#### Cooling, Carbon Storage, Air Filtering Loss

If built, residents will lose the cooling, carbon storage, air pollution capture, calming, and spiritual aspects of this green area space. The impact area will be far beyond what the applicant claims. "Temporary" areas and access points will never be returned to their former capacities.

# **Insensitivity to Ecological Issues**

The preferred alignment by Baltimore-Washington Rapid Rail does the most environmental damage. This damage will not be reparable, will not be mitigated, and will cause the land around it to be unusable for wildlife habitats.

#### Climate impacts/Reforestation Deficits

The value of forest canopies and the protection of green space is critical. In this time of climate change, the fact that watersheds will sustain such a reduction in forest canopy is unacceptable. We will weaken and partially disassemble the last large green space between Baltimore and Washington, D.C. The Green Corridor, the area that covers Greenbelt Park, the Greenbelt Forest Preserve, the Beltsville Agricultural Center, and Patuxent Research Refuge, is the largest span of contiguous forest land on the East Coast between Richmond, Virginia, and Boston, Massachusetts. The land will be harmed by this needless construction. Former senator Paul Sarbanes called



this area the "lungs of Maryland." There would be an enormous reduction in reforestation acres and major impacts to our forest canopy.

# **Cumulative impacts to the Beltsville Agricultural Research Center**

Cumulative impacts of the proposed Superconducting Magnetic Levitation train project and the Department of the Treasury's Bureau of Engraving and Printing's final plan for a Currency Production Facility on the Beltsville Agricultural Research Center will impact the same Tier II waters the Baltimore-Washington Rapid Rail application addresses. The combination of these two projects' impacts on Tier II waters needs to be assessed and publicized, allowing the public sufficient time to comment.

#### **Claims of Reduced Emissions**

BWRR claims: "Reduced emissions, which foster better air quality for the health and safety of Tier II residents."

[RESPONSE] The Maryland Coalition for Responsible Transit's Draft Environmental Impact Statement comments and research by Dr. Owen Kelley (National Aeronautics and Space Administration) have disproven this: "Project developers claim that Maglev would benefit clean air and climate change due to the number of cars it would remove from the road. However, the draft environmental impact statement shows that Maglev would actually increase regional transportation energy consumption by 39% — enough energy to power 88,900 homes. While Maglev is 25% more efficient than auto travel, it is 37% percent less efficient than existing bus service and 20% less efficient than existing passenger rail. In total, Maglev operation would increase net carbon dioxide emissions from 286 to 336 million kilograms per year compared to maintaining existing options."

Sincerely,

Trey Sherard Riverkeeper Anacostia Riverkeeper