Waterworks Park Stream Restoration Public Meeting Minutes

Date: 5/6/2026

Time: 6:00 PM

Attendees:

Jennifer Carr (ARF) jennifer@arundelrivers.org
Lily Hariton (ARF) lily@arundelrivers.org
Matt Johnston (ARF) matt@arundelrivers.org
Mal Box (ARF) mal@arundelrivers.org (virtual)
Anne Roderer (City of Annapolis) amroderer@annapolis.gov
Jim Cooper (Biohabitats)
Ryan Frantz
Stephanie Meredith (Annapolis resident) stephem22@gmail.com
Ted Weber (Annapolis resident) savethereefs@earthlink.net
S. H.
Louise Taylor (ltaylor2@comcast.net)
Rob Schnabel (Chesapeake Bay Foundation) rschnabel@cbf.org (virtual)
Karen Jennings (virtual)
Jens' iPhone (virtual)

Note: The meeting was recorded in accordance with the Whole Watershed Act and will be posted on the project web page: https://www.arundelrivers.org/projects-1/waterworks-park

Presentation

Meeting Overview

- Introduction to Arundel Rivers Federation
- Project context and goals
- Proposed design
- MDE stream restoration authorization checklist
- Questions and answers

Arundel Rivers Federation

- Mission: Deeply rooted in the South, West, and Rhode rivers, Arundel Rivers Federation heals and protects our waterways and champions clean water across Maryland.
- Departments: Riverkeeper, Education and Outreach, and Restoration.

Project Location

The first 1050 ft. of stream length coming off Housely Rd. trailhead.

Existing Site Conditions

- The stream begins with the outfall directly downstream from the stormwater pond on the opposite side of Housely Rd. Shortly after the rock apron immediately downstream of the culvert area ends, stream damage begins. Representative photos show vertical and lateral instability of stream banks. This project is focusing on a section of stream with rejuvenated, active erosion, and terminates where the system begins to stabilize at a wetland area upstream of Broad Creek.
- Historical influences on the site: runoff that was previously intercepted by forested systems now results in steep stream banks over shoulder/head height due to deforestation.

Why are we doing the work

- This is a voluntary water quality and riparian biodiversity improvement project
- Not for mitigation – not for something already built, being built, and cannot be used as mitigation for anything built in the future
- To reduce nitrogen, phosphorus, and sediment transport to the bay
- To preserve park trails and increase habitat value of site

Project Partners

- Funders: Chesapeake Bay Trust (CBT), City of Annapolis, and Anne Arundel County Bureau of Watershed Protection and Restoration (BWPR).
- Regulatory agencies: Maryland Department of the Environment (MDE), US Army Corps of Engineers (USACE), and Anne Arundel County. MDE, Maryland Department of Natural Resources (DNR), and USACE have already visited the site. The project team (Arundel Rivers Federation, Biohabitats, City of Annapolis, and BWPR) worked with USACE on the extent of the project to limit impacts to existing resources on site.

Nutrient Loads Reduced

Preliminary numbers: 64.17 lbs TN/year, 395.00 lbs TP/year, 333,920.19 lbs TSS/year reduction and 74.06 EIA credits.

The engineer has taken measurements and soil samples, as required by Anne Arundel County, to get a more accurate number. The goal is to keep sediment and pollutants out of the Waterworks dam and Broad Creek.

Whole Watershed Act Public Presentation Requirements

1. The project design report and plans
    - The design report will be posted on the project's web page when completed. This public meeting is happening early in the design process.
    - The current design plans will be presented in the next slides and posted on the project's web page
2. The forest stand delineation
    - Will be posted on website when complete

3. MDE's Stream Restoration Authorization Checklist
    - The checklist will be presented after the design plans
    - Will be posted on website when complete

Project Design

- The project will abate stream erosion and help restore grades more consistent with historical conditions. The upstream portion of the design provides stable drops along the channel length to dissipate erosive flows and arrest bank erosion. The downstream portion has less channel slope; valley-grades structures will tie in sustainably and stably with a downstream wetland system, per specific guidance from the USACE at a pre-application meeting conducted with regulatory staff and other stakeholders. .
- The design is consistent with many other ARF, City of Annapolis, Anne Arundel County projects: a Regenerative Stormwater Conveyance (RSC) within the gully to deal with runoff from Parole center and attenuate the impacts of output from the stormwater retention pond immediately upstream.
- Impacts will be confined to remain very close within the gully itself. Work will stay as close to the channel as possible without a lot of grading. The design includes the in-channel Regenerative Stormwater Conveyance system and a smaller valley-wide approach as it ties out to the wetlands.

MDE Stream Restoration Authorization Checklist

1. Project purpose:
    a. TMDL/WIP through sediment and nutrient reduction
    b. Other grant-funded project: habitat enhancement through step pool habitat, tree plantings.

2. Restoration activities:
    a. stream and floodplain restoration
    b. wetland restoration/creation.

3. Required information: This meeting is early in the design process for community input and feedback. The 90% design report and hydrological and hydraulic study will be posted to the website once completed for permit submission .

4. Public engagement required by the Whole Watershed Act.
    a. ARF will certify that we have notified all residents and businesses within 200 ft of the project by mail – this letter has been sent
    b. Public meeting minutes and the recording will be posted to the ARF website;
    c. Other outreach has taken place, such as posting signage at the trailhead – this sign has been posted for months.

5. Alternative site analysis: Alternatives analysis will be documented covered in the design report, which will be posted to the website. The primary alternative is to do nothing and let this system continue to erode into Broad Creek and harm the biological systems there. Another alternative considered is grading out the steep banks to increase floodplain connection, which would be more disruptive to the ecosystem. Instead, we are confining our work to the channel to maximize benefits while minimizing disturbance.

6. Assessment of site condition and function:
    a. *Perennial streams:* this is a perennial stream at the bottom of a significant urbanized area.
    b. *Biological function-based parameter:* Anne Arundel County's Bureau of Watershed Protection & Restoration will have their survey team complete this requirement. They will do benthic monitoring this spring to establish baseline biological integrity using BIBI (benthic index of biotic integrity) scores.
    c. *Geomorphology/hydraulic function-based parameter:* Existing stream conditions do not exhibit lateral or vertical stability:
        i. *Lateral Stability*: This site demonstrates evidence of active, widespread lateral erosion leading to lateral instability.
        ii. *Floodplain Connectivity (Vertical Stability):* Evidence of floodplain disconnection throughout the majority of the reach, documenting vertical instability.
    d. *Nontidal wetlands*: The project team coordinated with the U.S. Army Corps of Engineers to most effectively limit impacts to existing wetlands. The selected design approach will enhance or maintain existing wetland features.
    e. *Riparian Areas*:
        i. Forest stand delineation (FSD) will be posted to Arundel Rivers website. The forest stand delineation/natural resources inventory (NRI) – is an inventory to identify what resources exist on the project site, what's in good condition and getting better, and opportunities to get this forested system on a path to improvement.
        ii. The project team utilizes the FSD to minimize impacts and avoid specimen trees (24" and greater), designing around them.
        iii. No woody material will be exported; when a tree is taken it is reused on site as habitat.
        iv. FSD/NRI data is also used as a reference point for the natural communities on site that we want to continue to thrive and/or reestablish. This is a beautiful, forested site and we intend to perpetuate this condition.
        v. Impacts are temporary and we will plant more trees than are felled; those felled will be repurposed on site.

Best practices to reduce impacts:

- Use the streambed as construction access to reduce impacts to trees and stream banks. The intent of this project is to restore the stream and enhance the condition of the stream's riparian forest and adjoining upland ecosystems.
- Limiting road widths to only that needed for construction equipment, and by using the shortest paths possible.
- Designed around specimen trees. Clearly mark trees for removal.
- Bring in material as needed to reduce clearing for staging areas.
- Use the smallest equipment possible for construction.
- Where it is demonstrated that large trees must be removed, reuse them in the restoration design as habitat elements.
- Do not raise water levels to heights where extensive tree loss is anticipated. An RSC design approach was selected to minimize these impacts.
- Use materials and designs which allow for movement of aquatic life through, over, or around the structure.
- Avoid impacts to State-listed rare, threatened species or species in need of conservation – a preliminary onsite review with MDE, USACE, DNR has been conducted.
- Planting larger caliper trees when possible.
- Assess upland conditions and design to ensure that floodplain connectivity remains in place.
- The design drawings currently uploaded to the website depict the Limit of Disturbance (LOD). As the design progresses, future versions will show any individual trees identified as part of the FSD to be removed. We typically do not remove all trees marked for removal – if we are able to work around it, we will. It is good for the environment and for time, money and safety not to take down trees.
- Reducing and mitigating impacts is a continuous conversation throughout project design.

7. Impacts/conversions/enhancements and functional uplift*:*
    a. The project aims to take an eroding system and convert it into one that prevents erosion and helps to sustain the ecosystems already in place on site. Aside from work in stream bed to arrest, there are not many changes proposed for the overall system. We are not looking to change conditions in the forested system.
    b. *Resource Improvement:* Goals include, but are not limited to enhanced habitat, protection of public trails, wetland protection, and water quality improvements.
    c. *Wetland Creation and Resource Conversion:*
        i. Areas of wetland creation are depicted on the plans.
        ii. *Resource* conversion is quantified when applicable.
    d. *Avoidance and minimization of impacts:* prioritized and achievable through strategies such as ongoing coordination with State and federal agencies, in-

channel construction access, regular inspections, and ongoing monitoring. Streams in Maryland are subject to annual time of year stream restrictions; ARF will follow the MDE guidance.

8. Co-benefits: Funder and ARF goals for this project extend beyond stabilization and water quality to incorporate multiple co-benefits including:
    - The restoration and creation of wildlife, riparian buffer, and wetland habitat.
    - Carbon sequestration.
    - Climate change mitigation, adaptation, and resilience.
    - Improving and protecting public health.
    - Recreational opportunities and public access to waterways and natural habitats.

9. Monitoring:
    - The permit applicant is required to conduct post-construction monitoring for a period of at least 5 years after completion of construction of the project to ensure project goals are met. The applicant minimally provides MDE with periodic reports in accordance with the Authorization documenting stream stability, stream and floodplain function, and vegetation viability within the project area, as well as any adaptive management actions taken to ensure continued stream stability, stream and floodplain function, and vegetation viability.
    - ARF does monitoring and reporting for all of its projects.
    - MDE is working to make monitoring reports available to the public.

Proposed conditions

Pictures of projects with step pools in other forested systems were shared. Waterworks will have step pools, each with 1 ft drops in elevation. Photos also showed examples of preserving trees while working in the stream channel.

Community Questions

Questions from attendees in person

1. **What is an RSC?**
   Regenerative Stormwater Conveyance (RSC) or Step Pool Storm Conveyance (SPSC) systems are interchangeable terms representing a strategy to convey water down a steep slope by stepping it down through a series of weirs and step pools.

2. **What is benthic monitoring?**
   Stream benthic macroinvertebrate monitoring looks at the composition of aquatic insect larvae found in the monitoring area as an indicator of water quality and stream channel condition to support habitat.

3. **When is the stream closure?**
   Stream closures are usually spring/early summer and prohibit working in the stream during the closure period to protect aquatic life. Permits will state any specific closures, restrictions, conditions, and monitoring requirements for the project to which ARF will adhere.

4. **<u>Statement from Stephanie Meredith (Annapolis resident):</u>**
   My name is Stephanie and I've been using the trail from Housley to Waterworks Park for the last 6 years, multiple times a week, for walking and trail running. I strongly urge you to include the trail itself into the restoration plan. Erosion from the trail is a significant contributor to the sedimentation of the stream.

   In the years that I've used the trail, I've watched the erosion worsen, especially in the last couple years. Its use as a mountain biking trail causes some of the erosion, but frequent summer storms also wash away a lot of soil. There are no erosion controls to keep the sandy soil in place and parts of the trail are washed out from water rushing downhill. In some areas, the level of the trail has dropped by more than a foot, and the gentle hills that I used to run are too steep to do so now. There are many exposed tree roots, some of which are damaged by impacts with bike tires. If more roots are exposed, trees along the trail may start falling down.

   What used to be a place of enjoyment and relaxation is now in a truly sad state. Please include the trail in the restoration plan so that it really can be enjoyed by everyone for years to come.

   Panel Response:
   (Anne, City of Annapolis) Funding for this project has a water quality and habitat focus. The City and community stakeholders, such as the MORE mountain biking group, are engaged in improving the Waterworks Park trail system. The park is part of the City of Annapolis Recreation and Parks system; the suggestion will be conveyed to the department.

5. **<u>Statement from Ted Weber (Annapolis resident):</u>**
   My name is Ted Weber. I'm an Annapolis resident and a senior scientist at a wildlife nonprofit, with professional certifications in ecology, wetlands, forest assessment, and stream sampling. Waterworks Park has been one of my favorite local hiking spots for many years, and is remarkably undisturbed, containing mature, late-successional forest, probably 100 years old. Without a doubt, it's the highest-quality forest the city owns. MD DNR has identified the area where this project is proposed as FIDS (forest interior birds) habitat (18 species recorded in

the park) and a Sensitive Species Project Review Area, which means rare species or communities occur where the construction is planned.

The stream in question runs between two ponds and does not discharge directly into any other streams or rivers. It was likely eroded primarily during road and development construction before the upstream stormwater pond was installed. Most of the stream appears stable, it flattens into a wetland well before entering the former city reservoir, and the unstable sections can be remedied without cutting down 100+ year old trees and breaking the forest canopy, which would ruin the FIDS habitat and facilitate invasive species. There is no threat to the trail system, which is well upslope. Clearing the stream valley for questionable benefits is like driving a dump truck through a china shop to fix a chipped plate.

List of FIDS recorded on eBird: Barred Owl, Hairy Woodpecker, Pileated Woodpecker, Acadian Flycatcher, Brown Creeper, Veery, Wood Thrush, Yellow-throated Vireo, Red-eyed Vireo, Northern Parula, Black-throated Green Warbler, Black-and-white Warbler, American Redstart, Prothonotary Warbler, Ovenbird, Louisiana Waterthrush, Hooded Warbler, Scarlet Tanager.

6. **<u>Question from Ted Weber (Annapolis resident):</u>**
   Why not do work at the source of the water, which is the stormwater pond, and stabilize the outfall, which seems to be – there's some rubble there that has sort of fallen all over the place – why not do something there rather than opening 1100 feet of mature, late successional forest that is the best forest that Annapolis has?

   Panel Response:
   We are not clearing the entire LOD. There will not be a wide swath cleared. We will very carefully mark individual trees that may need to come down when we put in structures. We use the stream bed itself as an access road and we do not clear from one limit of the LOD to the other. We understand that has happened on other projects in other locations by other organizations, but that is not how we at ARF do it and it will not be done here. If a contractor showed up and cleared the entire LOD on a project of ours, they would lose their job and they would not work with us again.
   The pond upstream has been deemed stable, but you're right that the outfall is not stable. The rock that was put there was far from sufficient to stabilize it and the water continues to blast out of the outfall and do damage. Our project will stably convey that water downstream through the step pools that will walk it down through the system. We have already walked the site with representatives from MDE, DNR (wildlife and heritage), and USACE and discussed in detail the plans to make sure everyone was comfortable with this project moving forward.

7. **<u>Question:</u> (Inaudible) …in regards to the credits being based off of generic models (FieldDoc) and is there value pursuing credits when water flows into a reservoir?**
   We do not want to fill up that dam which is a valuable community resource. We see no reason to let the sediment to continue to fill in the dam. The dam is not isolated, but part of Broad Creek subwatershed, and that sediment and nutrients are still going into the system.

   Anne Arundel County cannot use credit numbers simply generated by a model (such as found on FieldDoc) that estimates credits simply on length. The engineers must go out on site and take bank measurements and soil samples to calculate accurate sediment and nutrient credit estimates. (clarification: the soil samples are for nutrient content). The early estimates from FieldDoc presented here are based on a model. The engineering team is currently working on evaluating the data obtained from field measurements and lab soil samples to give us accurate nutrient information. For all the right reasons, Anne Arundel County requires us to minimize impacts and do extra field work to get accurate information.

8. **<u>Ted Weber (Annapolis resident):</u> What type of models can be used to calculate credits?**
   Maryland expert panel recommendations are used to estimate TMDL reductions, which include BEHI/BANCS. Suggest adding references to these documents in this response. In other counties, using an online model (like CAST) based on length of stream is sufficient for estimating the sediment and nutrient reductions per foot of restoration system installed.

9. **<u>Ted Weber (Annapolis resident):</u> You mentioned a survey to identify rare and threatened species. Were any identified and how do you avoid impacts to these species?**
   This is why that specific DNR department (wildlife and heritage) sent folks out to examine the site and have those conversations. As part of the permit conditions, DNR may require additional surveys for rare, threatened, and endangered (RTE) species – they have not weighed in definitively at this early stage. There is a habitat preference for one of the species, the Eastern Mud Salamander. We are also looking to enhance and increase habitat diversity, for example at the sloped part of the channel that comes out of the pond outfall where there is really no wildlife habitat as the stream and banks continue to erode. This project is designed to enhance habitat for not just RTE species, but also for species traditionally associated with this forested system. We picked the RSC technique because it avoids impacts to the upland slopes which are home to some nice vegetation. We want to focus the impact where the stream is already eroded and the habitat is degraded and leave the remainder as untouched as possible. USACE requested that we keep the project out of the wetlands. Comments such as this are not something we ever oppose – we want to work with our regulatory partners.

Questions submitted in the chat

1. **<u>Rob Schnabel (Chesapeake Bay Foundation):</u> Is the stream construction project for MS4 credit?**
   Panel Response: This is not a mitigation project. Both the City and County are funders and supporters of this project which actually originated from a DNR suggestion. The County and the City have MS4 permits (for stormwater management within their jurisdictions) which requires credits from restoration projects. This encourages managing stormwater more naturally than with pipes and traditional structural stormwater systems. While this project did not arise out of a need for these credits, they will be reported per permitting requirements of the credits will be distributed between City and County will be coordinated in the future.

2. **<u>Rob Schnabel (CBF):</u> Given [that this is a] Whole Watershed Act project, will there be [a] "whole watershed approach"? [Is] upland stormwater management to be included to address the source of the problem? [The project is] Not "restoration" if [doesn't] address water prior to entering the stream from impervious acres / parking lots and roadways during rain events. Stormwater is the source of the erosion; sediment / nutrients are secondary, a result of excessive water runoff. You know [that it is] so important to educate the public on this.**
   Response: This is not a Whole Watershed funded project, which is currently focused on 5 different watersheds across the state (the Severn River WS is the one in our region). However, the Whole Watershed Act has requirements for all restoration projects like this, as we reviewed in the checklist. Regarding upstream work, there is a stable stormwater pond immediately upstream and the contributing upland area is business and parking lot heavy.
   Note: ARF welcomes partnership from CBF in engaging any upstream business landowners or seeking funding specifically to reduce impervious surfaces.

3. **<u>Rob Schnabel (CBF):</u> Based on your 60% design, what is the current cost estimate?**
   Response: The project has not yet been bid out for construction, however we are estimating around $1.2 million. Design costs are already funded through grants. There will be a competitive bid process for construction.

4. **<u>Karen Jennings:</u> Was this project identified in the City's WIP report that was produced several years ago?**
   This project was not specifically identified in the City's WIP, however it reflects the goals of the WIP

5. **<u>Rob Schnabel (CBF):</u> Since this is MS4 credit, how many acres of impervious surface be given for this project?**

Response: Early estimates using Anne Arundel County's BMP Credit Calculator suggest 20+ acres of impervious surfaces restored. The engineering team is currently processing the field-verified credits which will be posted to our website as soon as they are available. This project does not impact ongoing efforts to work with upstream business to gauge their interest and willingness to reduce their parking lots and impervious surfaces. We welcome continued conversations with you in your role at CBF and our partners to help you further understand the importance of generating impervious surface reduction credits.

6. **Rob Schnabel (CBF): Who are the funders for this project?**
   Response: The current funders (for design) are the Chesapeake Bay Trust, Anne Arundel County, and the City of Annapolis.

7. **Rob Schnabel (CBF): No State DNR Trust Fund funding?**
   No DNR funding has been secured yet. However, ARF has an application pending.

8. **Rob Schnabel (CBF): Was there any outreach to landowners in the watershed to do stormwater management? The shopping mall parking lot, upslope of the pond, is half full since the pandemic so there are likely opportunities to address the source of stream erosion, stormwater from impervious surfaces, if outreach is undertaken.**
   Arundel Rivers has made numerous attempts to reach out to surrounding apartment complexes but has not yet had success in getting a response. We welcome CBF's partnership in outreach to the owners of the shopping center to gauge their interest in reducing the size of their parking lot. We also welcome CBF's partnership in securing funding for impervious removal work.

<u>Questions submitted in writing by Ted Weber (Annapolis resident):</u>

1. **How many trees will be cut down to construct the project? How much tree canopy will be lost? How much soil will be compacted by roads and heavy equipment? What will the impact be to forest-dependent wildlife?**
   The Natural Resources Investigation/Forest Stand Delineation (NRI/FSD), once completed and in conjunction with project plans, will detail the number of trees to be removed with the project. Tree canopy loss will be minimized, confined to only what cannot be avoided when installing structures. The LOD will not be cleared. The stream bed will be used as the only access road for the project. Areas outside of the already degraded stream will not be impacted by heavy equipment. The design intent is to maintain this feature as a forested headwater system.

2. **Why does the project developer claim that restoration work will be confined to the stream channel when the design plan shows a LOD significantly beyond this? What about the access roads? Where will they be?**

The LOD encompasses any potential project area that we want the public to stay out of during construction and will be lined with blaze orange fencing, it does not indicate where trees will be cleared nor does it mean the entire area will be cleared. The only access road will run through the already degraded stream channel.

3. **What is the evidence that this stream is still eroding? If there is solid evidence that the stream is still eroding, what length of stream is actively eroding?**
   Attached to this document is LiDAR-based evidence provided by the County of the channel actively eroding from 2017 to 2023. The project design report provides additional information. The initial report is posted on ARF's project website and the final one will be posted as soon as it is available.

4. **What is the evidence that this stream, which connects two ponds, has any impact on Broad Creek. the South River, or the Chesapeake Bay?**
   This project is located within the Broad Creek subwatershed. The dam acts as more of a control point versus a structure that has isolated an entire section of a watershed. Relief points in the dam structure allow water to flow over the dam wall. This visible flow. carries pollutants into Broad Creek and the South River. Further, sediment is clearly rejuvenated from erosional processes on the stream feature under storm flows.

5. **How many mature trees have fallen due to stream erosion at this site since the park opened to the public?**
   This metric has not been tracked.

6. **What is the evidence it's exporting sediment into the pond? Has it been measured?**
   Unstable and eroding stream banks have been verified by the engineering team through field measurements and soil samples. This erosion is documented in the Lidar image included within the minutes and the amount of sediment exported annually will be included with the final design report.

7. **What is the evidence that sediment has made fishing more difficult in the reservoir? If the reservoir is too shallow for boats, have you considered dredging it?**
   Funders are interested in stabilizing degraded streams, restoring natural function, and increasing habitat. Arresting erosion from this stream means keeping sediment out of the fishing pond. Sediment is not good for fish habitat, filling spawning areas and areas used for cover and foraging. There are no current plans to dredge the reservoir; upstream solutions are more cost effective and have greater ecosystem benefits.

8. **What is the evidence that the stream poses a threat to public safety, given it is downslope from the trail and trees would fall away from it?**
   Parts of the trail near the trailhead are located close to the eroding stream. Stabilizing the stream will limit continued erosion of stream banks into vulnerable trail areas.

Trees compromised by ongoing erosion can break or fall onto the trail system regardless of the location of the stream.

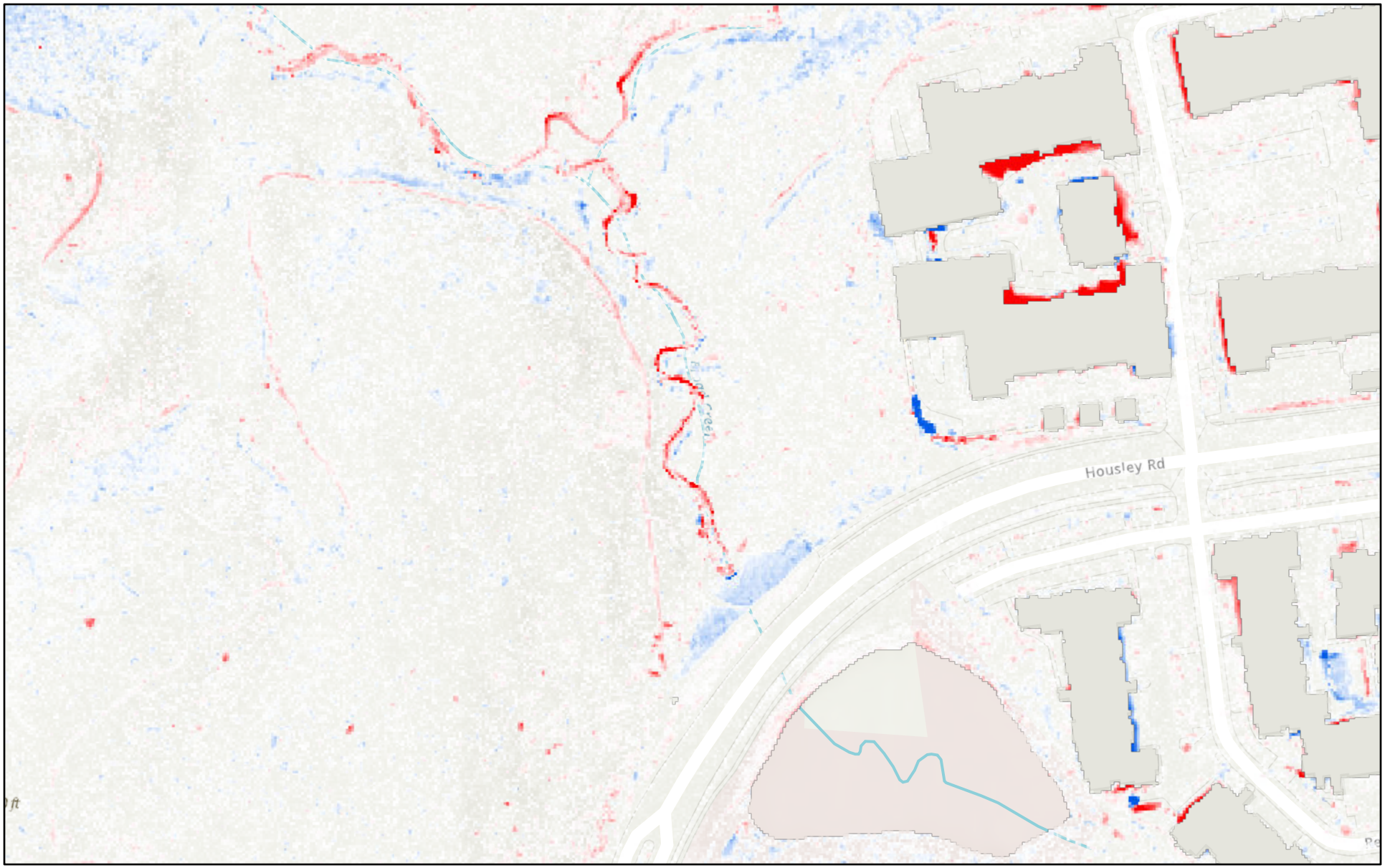
9. **If stormwater pond outfall is an issue, why do you think a downstream restoration will be effective and stable?**
   The outfall of the stormwater pond is located at the top of this project site and will be stabilized as part of this restoration work. In the past, the channel at an outfall would be lined with rocks for a short distance, a technique that has proven woefully insufficient on sites throughout the Chesapeake Bay. To ensure stability of the channel, we are restoring the damaged and ineffective outfall and stabilizing the length of the channel to ensure that future stormflows no longer cause damage. This more comprehensive approach extends durability and effectiveness.
10. **How much will this proposed project cost? Was a cost-benefit analysis performed? Can the money be better spent on other streams or stormwater BMPs?**
    This project is estimated to cost around $1.2 million. Implementing multiple upland BMPs such as rain gardens would not repair the existing damage to the stream channel and surrounding habitat and is less cost effective per square foot than the proposed stream restoration project.
    This project was selected for design grant funding because it stood out amongst other projects from across the state as a worthy investment.

11. **Does Waterworks Park count toward the city's tree canopy goal?**
    Waterworks Parks is located outside of the City of Annapolis municipal boundary and is not included in its tree canopy accounting.

12. **Will the project have to meet city code regarding preservation and environmental impact? (e.g., what constitutes a specimen tree, 20" dbh vs. 24")**
    Waterworks Parks is located outside of the City of Annapolis municipal boundary and is subject to Anne Arundel County rules and regulations.

13. **Waterworks Park is not in the City of Annapolis Stormwater Management Inventory and Watershed Improvement Plan. Should the city focus its limited funding and grant money on the high-priority sites identified in this plan instead?**
    While the City of Annapolis is a vital partner and one of three funders of the initial design, the bulk of construction funding is expected to come from other competitive grant sources. This property is unique because it is City-owned but lies outside of the City of Annapolis municipal boundary. While the City therefore has a specific vested interest in the long-term health, durability, and resilience of Waterworks Park, they also welcome partnerships and collaborations such as this one that support both the goals of the City's WIP and broader regional watershed goals.

Untitled map



5/7/2026

DEM Difference 2017 to 2023

2 - -2

World_Hillshade

1:2,302

0 0.01 0.03 0.06 mi

0 0.02 0.04 0.09 km

Sources: Esri, Vantor, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland,