



May 21, 2024

Comment on bulkhead applications for 101 and 103 Anglers Way

Altamaha Riverkeeper respectfully requests that CRD/CMPA committee deny the bulkhead applications for 101 and 103 Anglers Way on Fancy Bluff Creek.

State mandated buffers are only protective of our State natural resources when they are maintained intact and buffer requirements fully enforced. Past satellite images of the properties claiming need of a bulkhead depict a property that was vegetated with a thick tree canopy. Current photos show a barren upland, cleared entirely to the bluff edge in some places, with only a few feet of vegetation left at the upland interface in other places. On May 20, 2024, ARK observed what appears to be channelization from upland runoff in an area void of natural vegetation between the waterline and upland property on the 101 Anglers Way parcel.

Why is a 50ft (or 25ft minimum) naturally vegetated buffer not intact on this property, as required by law? Did clearing of this property, without maintaining natural upland or marsh vegetation in a required buffer zone, create or contribute to erosion and/or bank destabilization?

The bulkhead applications for both properties include photos of the bank. However, from those photos and during ARK's site visit, there is lack of evidence of severe erosion or threat to upland property or structures. Without such evidence, a reasonable need for shoreline armoring has not been established; therefore, installing a bulkhead should be denied.

The application materials are somewhat misleading, as the application states that the properties are undeveloped and a dock is intended by not installed. The application materials are from 2022. Since that time, dock construction has been completed and the land is prepped for home construction. No other structures are currently on the property and construction plans for placement of buildings/houses on these properties were not included in the application. It is unclear in what way and to what extent the current bank condition and potential erosion poses a threat to the property.

Have neighboring property owners been notified and documentation provided of their support or opposition for this bulkhead installation, as is required in the Georgia DNR Coastal Resources Division Bank Stabilization Authorization application? It is ARK's understanding that the properties at 101, 103, 105, and 109 Anglers Way (in the names of Avery Coty, Joseph and Brittni Coty) are owned by relatives and being developed as one project, though separate plats. Therefore, it seems reasonable that neighboring, residential waterfront property owners who are not related and not involved in applying for a bulkhead should be informed, and their input provided in the public notice materials. Documentation of neighboring property owner input was not found in the online application materials included with these public notices.



This proposed bulkhead installation will have a direct impact on Georgia's coastal marshland, which is against the public interest. There is potential that installation of this bulkhead will cause marsh die off, could create or accelerate erosion where there currently is none or minimal, and could also lead to property damage of adjacent properties due to redirection of water flow and change in natural patterns of erosion/deposition. The upstream residential property west of the proposed bulkhead site has riprap along its shoreline. While at the site on May 20, 2024, I was told that the riprap is blamed for causing the accelerated erosion and morphology of the creek that has occurred in the bank of the 101 and 103 Anglers Way properties. Installing additional shoreline hardening will only create more erosive forces downstream of the new bulkhead, just as the preceding riprap caused damage. Thus, perpetuating damage to Georgia's coastal marshlands and harming the public.

The Green Growth Guidelines published on GADNR's Coastal Resources Division website state: "Over the past decade, there has been a movement to discourage structural practices along Georgia's coastal wetlands, waterways, and shorelines. **There is a broad scientific consensus that armoring generally degrades the integrity of the marine ecosystem.**" ... "Additionally, riprap revetments, bulkheads, and seawalls often contribute to erosion in other areas by altering water flow and sediment deposition upstream and downstream of the affected area." "...the use of hard armoring the streambank to control erosion **should be avoided unless there are severe conditions that warrant the need for structural controls.**"

(<https://coastalgadnr.org/GGG>, 4-23) emphasis added

What action has CRD taken to inform this property owner of the detrimental impacts of a bulkhead and to require design assessment for the preferred options for non-structural stabilization practices? There is no mention in the applications of non-structural or nature-based solutions being considered, other than no action.

The guidelines also state that shoreline armoring should be **a last resort**, only implemented in conditions with "(m)ajor erosion with high risk, natural buffers absent or not feasible." The applications for 101 and 103 Anglers Way do not fit the criteria of needing to implement shoreline armoring as no evidence was provided of high-risk erosion. The property owner can elect to repair the damage done to their property during land disturbing activities, maintain a naturally vegetated buffer zone, pursue living shoreline options, and implement non-structural practices such as maintaining and enhancing the natural vegetated buffer that should already exist on their upland property. Therefore, installation of the bulkhead for 101 and 103 Anglers Way should be prevented.

Respectfully,

Maggie Van Cantfort
Altamaha Coastkeeper (title)
Altamaha Riverkeeper, Inc (organization)
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127 F St #204
Brunswick, GA

Picture of the proposed bulkhead properties taken on May 20, 2024:
Red arrow in second picture pointing to erosion caused by upland runoff and lack of vegetated buffer.



To: Georgia Coastal Marshlands Protection Committee
c/o Maitland Bass
Department of Natural Resources
One Conservation Way
Brunswick, Georgia 31520

Via email: maitland.bass@dnr.ga.gov

Date: May 21, 2024

Comments on CMPA Applications for 101 and 103 Angler's Way, Brunswick, GA

Dear Coastal Marshlands Protection Act Committee:

Thank you for the opportunity to comment on the bulkhead applications for 101 and 103 Angler's Way on Fancy Bluff Creek. Please accept these comments submitted on behalf of the members and Board of Directors of One Hundred Miles (OHM), a non-governmental organization based in Brunswick. Our mission is to preserve and protect Georgia's 100-mile coast through education, advocacy, and community engagement. Our comments are reflective of our beliefs.

Georgia has over 2400 miles of shoreline. Maintaining a natural coastal waterway-upland interface is critical to the health of our coastal environment and for the protection of upland development. OHM recommends the Coastal Marshlands Protection Act Committee (CMPA) **deny** the bulkhead applications for 101 and 103 Anglers Way on Fancy Bluff Creek.

First, the application information and the public notice are inconsistent. According to the applications both signed and dated in 2022, the proposed activity for lot two (103 Angler's Way) consists of constructing a new single family private recreational dock. The proposed activity for lot one (101 Angler's Way) consists of constructing a bulkhead to stop active erosion at the upland/marsh interface. As of May 20, 2024, the dock has already been constructed per a site visit by the Altamaha Coastkeeper/Riverkeeper.

Second, we recommend denial of the permits for these two projects because bulkhead construction on a creek with no development in the uplands destroys the site's ability to adapt to changing natural conditions. As such we do not feel these project are in the public's best interest.

O.C.G.A. 12-5-288 (b)(1) states that, "filling of marshlands for residential, commercial, and industrial uses is normally considered contrary to the public interest." Any project that is less than 1/10 of an acre meets the letter of the law for a minor alteration of marshlands, but the impact of the alteration is permanent. The proposed bulkheads will create a permanent alteration of the natural waterway/upland interface for possible private gain.

In the Coastal Marshlands Protection Act of 1970, The General Assembly stated that the "... coastal marshlands resource system is costly, if not impossible, to reconstruct or rehabilitate once adversely affected by man-related activities and is important to

conserve for the present and future use and enjoyment of all citizens and visitors to this state."

Nature-based solutions that mimic Georgia's natural waterway-upland interface

"Nature-based solutions" are sustainable planning, design, environmental management, and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience.¹ A good example of a nature-based solution that is being implemented in coastal Georgia is a living shoreline. Living shorelines can protect coastal marshes and offer numerous benefits to communities. Living shorelines use natural elements such as plants to stabilize estuarine coasts, providing resilience against storms and improving water quality, fisheries habitat, biodiversity, and recreation opportunities.²

Several landowners have installed living shorelines in Glynn County - Little St Simons Island³ and Cannons' Point Preserve⁴ - offer great case studies for how the process works, how much it costs, and how the design can protect habitat and property.

Problems with hardened shorelines - Bulkheads

The U.S. Army Corps of Engineers defines a bulkhead as, "a vertical retaining wall that holds soil in place and prevents it from sliding into the sea. A secondary purpose is to protect the land from wave attack. For eroding bluffs and cliffs, bulkheads increase stability by protecting the toe from undercutting. They are often constructed of steel sheet pile that is driven into the ground or anchored, or they can consist of rock-filled timber cribs and gabions."⁵ Bulkheads are necessary sometimes, because buildings are threatened by erosion, rising seas or storm events, or a hard barrier is needed to deal with high energy wave action. They are a stabilization method to harden or armor natural transition areas. They are designed to be separate land and sea⁶ eliminating the natural function of that marshland/upland interface.

This application would be warranted if the property were developed and structures were being threatened by the natural creek erosion. However, the application material provides no evidence that any structure is at risk. Research shows that bulkhead construction leads to increased erosion both at the installation site and on nearby properties.⁷ and shoreline

¹ <https://www.fema.gov/emergency-managers/risk-management/climate-resilience/nature-based-solutions#:~:text=Nature%2Dbased%20solutions%20are%20sustainable,Reduce%20flood%20risk>

² *Building Community Resilience with Nature-Based Solutions. FEMA guide for local communities – June 2021.*
https://www.fema.gov/sites/default/files/documents/fema_riskmap-nature-based-solutions-guide_2021.pdf

³ <https://www.landscapepartnership.org/resources/w2b/living-shoreline-little-st-simons-island-ga>

⁴ <https://www.sslt.org/index.php/cannon-s-point/research/living-shoreline>

⁵ <https://www.iwr.usace.army.mil/Missions/Coasts/Tales-of-the-Coast/Corps-and-the-Coast/Shore-Protection/Armoring-Structures/>

⁶ <https://www.coastalwiki.org/wiki/Bulkheads>

⁷ Sara Martin et al., *The Effects of Large-Scale Breakwaters on Shoreline Vegetation*, ECOLOGICAL ENG'G, 2021, at 1,
<https://www.sciencedirect.com/science/article/pii/S0925857421001749>.

⁸ LARRY KEATING & DANA HABEEB, GA. INST. OF TECH., TRACKING THE EFFECTS OF SEA LEVEL RISE IN GEORGIA'S COASTAL COMMUNITIES iii (2012), <https://repository.gatech.edu/bitstreams/df427a6a-eccb-46d3-ac53-fb42000dce17/download>.

hardening can degrade water quality, eliminate marshland, harm habitat, and decrease biodiversity.⁹

Bulkheads eliminate the interface and transition area between water or marsh and uplands. Importantly, these hardening structures prevent marsh migration, the natural ability of salt marshes "to migrate upland and persist into the future."¹⁰ Marsh migration relies on marsh "transgression zones" or "undeveloped uplands" that provide space for the marsh to move upland as sea levels rise.¹¹ However, when a bulkhead or other upland barrier is constructed, marshes have no space to migrate upland and creeks have no space to naturally meander. By eliminating the opportunity for marsh migration and natural stabilization, shoreline hardening decreases the overall resilience of the ecosystems surrounding the structure and the coastal communities these structures are intended to protect.¹²

The Green Growth Guidelines published on GA DNR's Coastal Resources Division (CRD) website states "Over the past decade, there has been a movement to discourage structural practices along Georgia's coastal wetlands, waterways, and shorelines. There is a broad scientific consensus that armoring generally degrades the integrity of the marine ecosystem." ... "Additionally, riprap revetments, bulkheads, and seawalls often contribute to erosion in other areas by altering water flow and sediment deposition upstream and downstream of the affected area." ".....the use of hard armoring the streambank to control erosion should be avoided unless there are severe conditions that warrant the need for structural controls."¹³ The guidelines are clear that that shoreline armoring should be a last resort, only implemented in conditions with major erosion with high risk, natural buffers absent or not feasible."

Recommendations:

In conclusion, we recommend that the CMPA Committee **deny** the requests for bulkhead construction at 101 and 103 Angler's Way, Fancy Bluff Creek in Brunswick, Georgia for the following reasons:

- The notice posted to solicit comments from the public for 103 Angler's Way was misleading and did not include the appropriate information to inform public comment. Because the application requested permission to construct a private recreational dock, but a dock is already constructed, is this permit being issued retroactively?
- It is not clear if the applicant already holds a revokable license for the dock. If the applicant has not yet secured a revokable license, the CRD should include as a condition of that license the requirement to plant native grasses in the applicable

⁹ *Id.* See also *What Is a Living Shoreline?*, NAT'L OCEANIC & ATMOSPHERIC ADMIN., <https://oceanservice.noaa.gov/facts/living-shoreline.html> (last visited Sept. 29, 2023).

¹⁰ Sara Martin et al., *The Effects of Large-Scale Breakwaters on Shoreline Vegetation*, ECOLOGICAL ENG'G, 2021, at 1, <https://www.sciencedirect.com/science/article/pii/S0925857421001749>.

¹¹ Orencio Duran Vinent et al., *Coastal Dynamics and Adaptation to Uncertain Sea Level Rise: Optimal Portfolios for Salt Marsh Migration*, J. ENV'T ECON. & MGMT., 2019, at 2, <https://www.sciencedirect.com/science/article/pii/S0095069618304248>.

¹² Sara Martin et al., *The Effects of Large-Scale Breakwaters on Shoreline Vegetation*, ECOLOGICAL ENG'G, 2021, at 1, <https://www.sciencedirect.com/science/article/pii/S0925857421001749>.

¹³ <https://coastalgadnr.org/GGG>.

upland buffer to filter any pollutants, pesticides, animal waste, etc. in the runoff into adjacent tidelands, and to help stabilize the adjacent upland from further erosion behind the bulkhead. Additionally what enforcement actions were taken if the dock was constructed without the proper permissions?

- 101 and 103 Angler's Way is undeveloped, and no structures are threatened by the natural erosion occurring.
- The proposed bulkhead at 101 and 103 Angler's Way would be the first of its kind in this area and would increase scouring and un-necessary erosion of the bank north and south of the proposal bulkheads.¹⁴ This independent bulkhead would create more long-term problems for surrounding property owners, forcing them to construct neighboring bulkheads that will only magnify the impacts of shoreline hardening on Georgia's coast.

In addition to recommending denial of these applications, we also encourage the Department of Natural Resources (CRD and EPD) to incentivize shoreline property owners to employ living shoreline and other bioengineering solutions through an expedited permitting process, as opposed to the continuing practice of bulkheading, which generally further erodes the shoreline.

Again, thank you for the opportunity to comment on the bulkhead applications for 101 and 103 Angler's Way on Fancy Bluff Creek. Contact Lericia Harris or Alice Keyes any time if we can be of assistance or if you have any questions regarding these comments -
lericia@onehundredmiles.org/912-506-6274 OR alice@onehundredmiles.org/912-230-6494

Regards,

Lericia Harris

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¹⁴ LARRY KEATING & DANA HABEEB, GA. INST. OF TECH., TRACKING THE EFFECTS OF SEA LEVEL RISE IN GEORGIA'S COASTAL COMMUNITIES iii (2012), <https://repository.gatech.edu/bitstreams/df427a6a-eccb-46d3-ac53-fb42000dce17/download>.