February 6, 2018

District Engineer, U.S. Army Engineer District, Mobile, RD-A
Attn: Ms. Amiee P. Smith
P.O. Box 2288
Mobile, Alabama 36628-0001


To Whom It May Concern:

We are Mobile Baykeeper, a twenty-one-year-old nonprofit organization with the mission of providing citizens a means to protect the beauty, health, and heritage of the Mobile Bay Watershed and our coastal communities. We are submitting comments on behalf of our board, officers, staff, and more than 4,500 members regarding the application to fill 4.98 acres of wetlands in the Dog River Watershed to expand a residential development.

We believe that the avoidance measures proposed by the applicant are not sufficient to meet the requirements of EPA 404(b)(1). Furthermore, extensive evidence exists to show that the fill of additional wetlands in the Dog River Watershed would have significant adverse impacts on the watershed and would be contrary to Section 401(a)(1) of the Clean Water Act. Furthermore, wetlands are vitally needed to abate storm surge, protect water quality, and avoid flooding hazards (particularly in this flood prone area). For these reasons, Mobile Baykeeper asserts the cumulative adverse effects that would result to the environment, economy, and public safety outweigh the interests of developing 29 residential lots and the application should be denied as proposed.

Concerns Specific to Dog River Watershed

We have significant concerns with the amount of wetlands being filled for the expansion of this residential area in the Dog River Watershed, a predominantly developed watershed. The Dog River Watershed Management Plan (DRWMP) was recently published by Mobile Bay National Estuary Program. The plan utilized scientific modeling, existing study analysis, and stakeholder input to prioritize issues impacting the watershed and generate strategies to reduce pollution and improve conditions. As a result of these findings, the plan recommends several management measures including acquiring and preserving existing natural wetlands and employing constructed stormwater wetlands. In section 3.5 the plan states "The overall health of the greater Dog River Watershed depends upon the existence of its wetlands."
section 5.4 the plan explains that the watershed has suffered from a drastic loss of wetlands\textsuperscript{v} and in section 6.2.2 the plan identifies that the greatest loss of wetlands in the Watershed has occurred as a result of filling wetlands for development. It goes on to state that, “The drastic depletion and fragmentation of wetlands has reduced the level of ecosystem services provided by these critical habitats, therefore lessening the health and hydrologic resilience of the entire Watershed.” The plan also states that this loss, degradation, and fragmentation of wetlands is a major factor in increased severity and frequency of flooding\textsuperscript{vii}, shoreline erosion\textsuperscript{vi}, and storm surge\textsuperscript{viii} Stating that “Natural wetlands...provide the greatest protection for storm surges caused by tropical storm systems.” This is especially important as the land use and land cover (LULC) continues to change from natural permeable landscapes to impervious surfaces in this watershed. The latest updates to FEMA flood insurance risk maps (FIRM) have added a flood area\textsuperscript{ix} that was not present on previous maps to the area proposed to be filled. See Figure 1. This is ostensibly due to sea level rise and LULC change in the area. The WMP goes on to explain, “The preservation and protection of these areas are vital as the effects of the storm surge are magnified by additional habitat loss.” This once again is clearly demonstrated as the National Weather Service’s Sea, Lake, and Overland Surges from Hurricanes (SLOSH) model’s Maximum Envelope of Water (MEOW) product shows that the area proposed to be filled would currently be under 6-9 feet of water during a Category 5 hurricane\textsuperscript{x}. See Figure 2 Additional wetland fill in the area would exacerbate this effect. The plan clearly demonstrates why non-essential wetland fill in the Dog River Watershed will have serious negative effects on water quality, on the safety and resilience of communities, infrastructure, and resources located within the watershed. A synthesis of the importance of protecting wetland habitats is offered in section 7.4, “Although the loss and conversion of habitat is challenging and expensive to reverse, it is critical to protect and preserve remaining areas of ecological significance such as forests, wetlands, and stream floodplains, which provide a natural filter for pollutants, pathogens, sediment, etc. (emphasis added). Failure to protect these wetlands, shorelines, marshes, and forests will exacerbate negative impacts...
described throughout this WMP.”

Furthermore, the specific location of this project within the Dog River Watershed is concerning, it has been selected as a priority for preservation due to its importance for the watershed as a whole. The proposed project is within “one of the largest contiguous bottomland hardwood wetland systems remaining” and “protection will help to ensure that water quality and habitat conditions do not continue to degrade and the benefits currently provided by these areas are not lost.” Additionally, “preservation will help support the long-term health and vitality of the Watershed.” It is also part of a wetland area evaluated by the Watershed Management Team (WMT) to have a high Wetland Rapid Assessment Procedure (WRAP) score of 0.86 (See Figure 3) and is therefore extremely ecologically important for the watershed.

Avoidance

The applicant proposes to disturb 12.8 acres of undisturbed forested habitat including 4.98 acres of forested wetland habitat “to expand an existing residential development to provide the community of Riviere Du Chien with additional housing opportunities, specifically 29 additional lots, for single family homes.”

As mandated by the Clean Water Act § 404 and contained in the § 404(b)(1) Guidelines (hereinafter referred to as “Guidelines”), “no discharge of...fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem”. Since the applicant makes no assertion that the purpose of this project is water dependent, as described in the Guidelines, “practicable alternatives that do not involve special aquatic sites are presumed to be available.” And, “all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem.” Both the Guidelines and numerous administrative and legal decisions have established that to rebut this presumption, the applicant must prove there is no practicable alternative by providing “detailed, clear, and convincing information proving impracticability” and the Corps must independently verify this finding.

The applicant states they will:

- “Fill 4.70 acres of forested wetlands as opposed to the entire 7.49 acres of forested wetland habitat located on the site…”
- Place,”Restrictive covenants...on deeds to the lots containing avoided wetlands…”
- Maintain, “A 20-foot-wide buffer...along the back side of each lot…”
- Place, “The detention basin...within an upland area on the site to allow for additional avoidance of impact to wetland areas.”
• Ensure that “Access to the site would be through an existing roadway…”

While we applaud these avoidance efforts, they do not assert or prove that there is no practicable alternative. It is well established that because the applicant has not definitively shown there is no practicable non-wetland site that fits the project purpose then the permit must be denied. The USACE regulatory SOP specifically reaffirms this point stating, “for example, the basic project purpose of any residential development is to provide housing for people. Houses do not require access or proximity to a special aquatic site and they do not have to be located in a special aquatic site to fulfill their basic purpose of housing people. Therefore, a residential development is not water dependent. If a project is not water dependent, alternatives that do not involve impacts to special aquatic sites are presumed to be available to the applicant, unless it is clearly demonstrated that such alternatives are not available (see 40 CFR 230.10(a)(3)).

When evaluating whether practicable alternatives exist it is important to remember:

- The Guidelines require and administrative decisions have upheld that the Corps must presume practicable alternatives exist.
- The Corps must make an independent finding of whether there is a practicable, less environmentally damaging project alternative and all practicable alternatives must be considered.
- As defined in 40 C.F.R. § 230.10(a)(2) practicable alternatives are those alternatives that are “available and capable of being done after taking into consideration cost, exiting technology, and logistics in light of the overall project purposes”.
- The Army has affirmed that the Corps must consider all practicable alternatives regardless of any contention by the applicant that the proposed project is more attractive.
- The applicant need not own alternative sites for them to be “available”. The sites only need to be reasonably available for purchase. Additionally, “The mere fact that an alternative may cost more does not necessarily mean it is not practicable.”

While it is the burden of the applicant to demonstrate clearly and in detail that there are no practicable alternatives, an examination of the application reveals that 10 contiguous lots could be constructed with virtually no impacts to wetlands. Additionally, by utilizing an alternative design several other lots could be oriented to fit onto upland areas present in nonadjacent portions of the site. Because the basic purpose of a residential development project is “to provide housing” this alternative would meet the purpose of the project. This clearly demonstrates that practicable alternatives that do not involve impacts to special aquatic sites are available to the applicant.

Minimization

After verifying avoidance requirements have been met, the applicant must demonstrate to the Corps that they have minimized any remaining impacts to wetlands and aquatic sites. To minimize these potentially harmful effects, the Corps should ensure that the design incorporates all feasible minimization techniques and BMPs. These include but are not limited to: alternative site designs, bridges or other wetland crossings that reduce the amount of impacted wetlands, appropriate erosion and sedimentation BMPs during construction, and incorporation of LID practices into the project to the maximum extent.
If the application is approved, the applicant and the Alabama Department of Environmental Management (ADEM) must conduct regular monitoring during construction to monitor impacts and have the ability to take appropriate corrective measures immediately. To ensure this occurs, any permit approved should include conditions requiring the applicant to create a comprehensive plan that addresses best management practices and monitoring activities.

We request that the applicant be required to conduct twice a week inspections that include background, on-site, and downstream turbidity monitoring if/while working in or near a waterbody and after any rainfall of 0.50 inches or greater. We also request that site inspections and turbidity monitoring be required no less frequently than twice a month during the course of the project. If any deficiencies are found, weekly monitoring should be conducted until all issues have been corrected. To ensure this occurs, any permit approved should include conditions requiring the applicant to create a comprehensive plan that addresses best management practices and monitoring activities. We request copies of all inspections and turbidity monitoring conducted during the project be forwarded to Mobile Baykeeper at ckistler@mobilebaykeeper.org.

Mitigation

Once all feasible avoidance and minimization has been performed, any remaining unavoidable adverse impacts to wetlands must be addressed through “appropriate and practicable compensatory mitigation”.

The applicant proposes to account for these unavoidable permanent impacts by purchasing 14.52 pine savannah mitigation credits in a designated USACE area that is located outside of the damaged watershed of subject. Mobile Baykeeper strongly suggests the applicant undertake restoration and preservation projects identified within the DRWMP or at least contribute comparable funds to a project of priority. Specifically, Figure 7.4.1 in the WMP displays potential areas for habitat preservation and section 7.5 identifies management measures and projects for suggested restoration. Mobile Baykeeper requests that the required mitigation is fulfilled by funding suggested restoration projects from the WMP ideally within the impacted 8 digit HUC catalogue unit and preferably within the impacted 12 digit HUC sub-watershed so as to provide the least negative impact to hydrology and water quality within the watershed. If this proves impracticable we request that wetland mitigation credits are purchased within the impacted 12 digit HUC sub-watershed. If this also proves impracticable, we request that the mitigation is conducted at a 5:1 ratio with 5 acres of wetlands restored or mitigation credits purchased for every acre filled.

General Comments

As mentioned earlier, many of the wetlands within the Dog River Watershed and the City of Mobile have already been lost due to drainage or fill making it vitally important to be strategic in all future wetland fill project approvals. Wetlands provide the critical functions including flood conveyance and storage, stormwater detention and stormwater purification, species habitat, water treatment and pollution abatement, buffer zones that filter additional nonpoint pollution, nursery grounds and sanctuaries for fish, and recreation-use areas. Furthermore, wetland loss exacerbates issues of downstream water pollution, flooding, erosion, and loss of wildlife habitat. The introduction of impervious surfaces from this development will increase the quantity and velocity of stormwater runoff during large rainfall events. That is a major concern for this area, where urban stormwater
runoff (as identified by the Dog River Watershed Management plan) remains a significant issue needing to be addressed through management and conservation efforts.

**Summarized**

- Location of the proposed project is a major concern. The Dog River Watershed is plagued with several issues that any amount of wetland fill will exacerbate, furthermore the proposed wetlands to be filled are considered highly ecologically important to the watershed as a whole.
- Avoidance measures proposed by the applicant are not sufficient to meet the requirements of EPA 404(b)(1).
- Appropriate erosion and sedimentation BMPs should be clearly demonstrated. We highly encourage the incorporation of LID practices into the project to the maximum extent possible and conduct frequent and appropriate site inspections and monitoring.
- To minimize impacts, inspections should be conducted twice a week and after any rainfall of 0.50 inches or greater and the applicant must create a comprehensive plan for best management practices and monitoring activities.
- Any compensatory mitigation should preferentially seek to restore wetlands and fund projects in the same 8 digit HUC catalogue unit and preferably within the 12 digit HUC sub-watershed so as to provide the least negative impact to hydrology and water quality within the watershed.
- If this application is approved Mobile Baykeeper urges the Corps to require the applicant to fund restoration and preservation projects identified within the Dog River WMP to fulfill the mitigation requirements.

Given these concerns, Mobile Baykeeper **recommends the denial of this permit**. The Dog River WMP was created to be an active guide for policy makers, watershed resource managers, and decision makers to strategically manage and protect the watershed. Mobile Baykeeper urges the Corps to not dismiss the concerted effort made in the WMP and adequately consider it when evaluating this application.

Thank you in advance for your consideration of these comments. Please feel free to contact us with any questions at (251)-433-4229.

Respectfully,

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