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April 15, 2020

Via Electronic Mail and U.S. Mail

United States Army Corps of Engineers, Mobile District Birmingham Field Office Attn: Dylan Hendrix Post Office Box 2288 Mobile, Alabama 36628-0001 dylan.c.hendrix@usace.army.mil

Re: Public Notice SAM-201700752-SBC, Proposed Wolf Bay Bridge and Corridor

Dear Mr. Hendrix:

The Southern Environmental Law Center submits these comments on behalf of Mobile Baykeeper concerning the above-referenced joint public notice ("JPN") issued by the U.S. Army Corps of Engineers ("Corps") and the Alabama Department of Environmental Management ("ADEM") on March 16, 2020. The City of Orange Beach ("City"), Alabama has re-applied for a Section 404 permit under the Clean Water Act ("CWA") for a Bridge and Corridor on either side of Wolf Bay. The City has proposed to build a \$76.5 million bridge and a 5- mile road that would link the coastal town of Orange Beach with an unincorporated area to the north, across Wolf Bay. The City is financing the bridge because the Alabama Department of Transportation has concluded it does not warrant state funding. The town has stated that the purpose of this bridge is to continue the annexation of additional land for the expansion of sprawling Orange Beach. The bridge is the determining factor of whether Orange Beach will develop this relatively undeveloped area. An EIS was conducted for this project with the FHWA as the lead agency in 1996.² In 2008, the City submitted an application to the Corps for this project, but the permit expired because the City failed to take action.³ The Corps should deny the permit for this project and should call for the creation of a Supplemental Environmental Impact Statement ("SEIS") for the Wolf Bay Bridge and Corridor pursuant to the requirements of the National Environmental Policy Act ("NEPA"). Furthermore, ADEM should deny the Section 401 water quality certification and the coastal zone management certification for this project because of

¹ Joint Public Notice U.S. Army Corps of Engineers, State of Alabama Department of Environmental Management, SAM-2017-00752-SBC, March 16, 2020 (hereinafter JPN); Summary of Estimated Construction Costs, Jan. 31, 2019. (Attachment A).

² FHWA, Eastern Pleasure Island, Evacuation Route, Project No. MAOA-0200(6) (Project 1), Final Environmental Impact Statement, Section 4(f) and Section 6(f) Statement, 1996. (hereinafter EIS) (Attachment B).

³ City of Orange Beach, Joint Application and Notification, U.S. Department of Army, Corps of Engineers; Alabama Department of Environmental Management, SAM-2008-02037-HEH, December 2008. (Attachment C); Letter from Harry Halley, Corps to Mayor Kennon, Orange Beach, Re: Department of the Army Application File Number SAM-2008-02037-HEH, June 29, 2009. (Attachment D).

ongoing uncertainty about the extent and nature of this project's direct, indirect, and cumulative impacts on waterways and water quality in Wolf Bay, an Alabama Outstanding Waterway.

The Corps should deny the Section 404 permit for the following reasons:

- 1) The City has not prepared adequate documentation under NEPA to support this project. The only Environmental Impact Statement for this project is 24 years old, and the Draft Environmental Assessment prepared by the City for the U.S. Coast Guard is not adequate. After the bridge is constructed, the City plans on allowing intense development in this area (including over 10,000 homes, golf courses, condos, apartments, etc.); the cumulative impacts on the environment must be studied in an SEIS.
- 2) The permit application is an illegal project segmentation under both NEPA and Section 404. The impacts from the construction of the bridge and corridor must be studied together.
- 3) The purpose of the project is unreasonably narrow, and therefore alternatives cannot be adequately explored.
- 4) The applicant has ignored a number of less-damaging practicable alternatives to "improve connectivity". This project therefore fails to satisfy the requirements of the 404(b)(1) guidelines.
- 5) The proposed project cannot survive the Corps' own public interest review criteria for 404 permits.
- 6) The FWS has acknowledged that this project will impact listed species without quantifying or adequately mitigating those impacts. The Corps must adequately consult with the U.S. Fish and Wildlife Service ("FWS") in the course of evaluating this permit application pursuant to the Endangered Species Act ("ESA").
- 7) The City has not provided ADEM with sufficient information to show that the project would not impact water quality. In fact, the City has not shown any models demonstrating that this project would not impair this Alabama Outstanding Waterway.
- 8) The City has not shown that this project is a regional project and has no other alternatives in contra to the coastal consistency regulations.
- 9) The City has not avoided or minimized detrimental impacts to the aquatic environment.
- 10) The JPN does not adequately describe the mitigation that is being proposed to compensate for the tremendous impacts that would occur if the project were to be constructed. With no concrete knowledge of potential mitigation measures, neither the Corps nor the public can meaningfully evaluate this project's impacts nor the adequacy or enforceability of any mitigation for those impacts.
- 11) A public hearing is requested to better understand this project and its impacts. Currently, the public has not fully been able to participate in this process.

I. An SEIS must be prepared for this project.

In 1996, the Alabama Department of Transportation ("ALDOT") and the Federal Highway Administration ("FHWA") released a Final Environmental Impact Statement ("FEIS" or "EIS") for what was then part of the proposed Wolf Bay Bridge and Corridor. The EIS examined the impacts of a seven mile and five lane bridge and corridor. The current proposed project is five miles, and in some places the Corps is studying the impacts for over a 200 foot corridor, enough for five lanes. The preferred alternatives from both projects are in approximately the same location. In that Draft EIS, many agencies commented on the significant impact that the project would have. The EPA also said "our primary concern" with the project "is the degradation of wetlands by highway construction and operation."

Others lumped their comments on this project with their comments on the extension to I-10. The Fish and Wildlife Service (FWS) commented that it:

is concerned about the secondary impacts that this project could have on fish and wildlife resources. Residential and commercial development in areas on coast Baldwin County within recent years have been substantial. Few areas along the Alabama coast in Baldwin County have escaped development. Consequently, coastal wetlands and fish and wildlife resources in south Baldwin County have experienced significant declines in abundance and quality Due to the location of the proposed action (i.e. resort area) and the high demand for housing in the project area, the proposed action will likely facilitate accelerated development of areas (especially waterfront areas) within the project corridor The FWS believes that this accelerated development may result in substantial adverse impacts to wetlands and fish and wildlife resources occurring within the project area. These secondary impacts should be fully assessed and appropriately mitigated in the final document. 8

The Corps suggested that because of the wetland impact, "using to the maximum extent possible those county and state roads that currently exist and could be improved, thereby reducing the wetland acreage involved in new corridor construction."

The Alabama Department of Economic and Community Affairs stated "the proposed project will have an adverse impact on coastal wetlands in the Wolf Bay area." ¹⁰

This 404 permit application is subject to the requirements of NEPA. NEPA requires federal agencies to evaluate, objectively and publicly, a project's need, impacts, and alternatives before proceeding. 42 U.S.C. § 4332(2)(c). In order for the Corps to properly consider a 404 permit for the Wolf Bay Bridge and Corridor, it must have sufficient information to make a

⁴ EIS, S-1 – S-2.

⁵ JPN, 1 (five mile corridor), 8 (200 foot corridor).

⁶ City of Orange Beach, Coast Guard Bridge Permit Template, City of Orange Beach, Draft Environmental Assessment for the Proposed Wolf Bay Bridge and Connecting Roads Project, June 2019, 6-7. (hereinafter Draft EA or Coast Guard Bridge Permit Template) (Attachment E).

⁷ EIS, Appendix, H-5 Letter from Heinz Mueller, EPA to Joe Wilkerson, FHWA, Feb. 27, 1995.

⁸ EIS, Appendix, H-1-H-2, Letter from Willie Taylor, FWS to Joe Wilkerson, FHWA, April 3, 1995 (emphasis added).

⁹ EIS, Appendix, H-8, Letter from Ronald Krizman, Corps, to Bill Carwile, ALDOT, Feb. 24, 1994.

¹⁰ EIS, Appendix, H-18, Letter from Phillip Hinesley, ADECA, to Bill Carwile, ALDOT, Feb. 23, 1995.

reasonable judgment as to whether the proposed discharge will comply with the 404(b)(1) Guidelines.

Because of the emergence of significant new information since the original 1996 EIS, the Corps must prepare (or require the City to prepare) an SEIS for the Wolf Bay Bridge and Corridor before it can issue a 404 permit. NEPA regulations state that an SEIS must be prepared if "the agency makes substantial changes in the proposed action that are relevant to environmental concerns" or if "there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(i)-(ii). The Wolf Bay Bridge and Corridor has changed substantially since 1996, and there have been changes to the environment in these twenty-four years. For instance, the entire purpose for building the road has changed (as well as the cost and design). It was studied first primarily as a hurricane evacuation route, but now the purpose is to "increase connectivity." At the time of the 1996 EIS, the only access to Orange Beach from the north was SR 59. Since then, the Foley Beach Express opened, providing a second access to the north. Now, ALDOT is planning a third bridge in between these two existing bridges. Because the purpose for building a road is now completely different, the adverse environmental impacts will be weighted differently. If the change or new information "presents a seriously different picture of environmental impact of the proposed project form what was previously envisioned,' the FEIS must be supplemented." Jersey Heights Neighborhood Ass'n v. Glendening, 174 F.3d 180, 190 (4th Cir. 1999) (quoting Hickory Neighborhood Defense League v. Skinner, 893 F.2d 58, 63 (4th Cir. 1990); citing 23 C.F.R. 771.130) (punctuation altered).

The environment has also changed. Baldwin County has become one of the fastest growing counties in the state and the City is experiencing similar growth. 11 Changes in demographics, population density, and locations of homes and businesses must be taken into account. Habitat for protected species is becoming increasingly more precious.

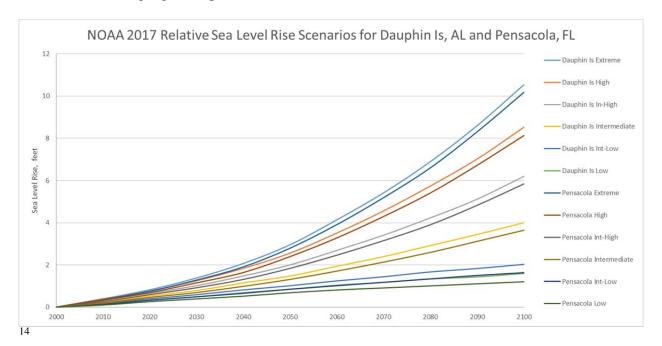
Additionally, the science behind sea level rise, storm surge, and climate change models has significantly advanced—with implications for the durability of the bridge. 12 Not only should the height and strength of the bridge be considered in this context, but the effect of sea level rise, storm surge on the corridor and connecting roads should be considered as well. Intermediate sea level rise scenarios accounting for accelerated climate change and sinking land predict one to two feet of sea level rise along the Alabama coast by 2050, compared to sea level in the year 2000. These same scenarios predict between two to six feet of sea level rise by 2100. The

¹¹ Draft EA at 1.

¹² Important regulatory changes have occurred since the publication of the EIS, which weigh in favor of supplementation. For example, on August 1, 2016, the Council on Environmental Quality issued Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews. This guidance states that it should apply to all new proposed agency actions when a NEPA review is initiated. In light of the need to supplement the EIS here, the City and the Corps should use this guidance in the development of a supplemental EIS to consider how climate change, including sea level rise and increased storm activity, could affect the proposed proposal.

¹³ National Oceanic and Atmospheric Administration, Global and Regional Sea Level Rise Scenarios for the United States, 2017

wider range for the end of the century is due to uncertainty surrounding emissions reductions and other climate change drivers. Orange Beach and the Wolf Bay Bridge project lie between the gauges NOAA maintains at Dauphin Island, AL and Pensacola, FL, so NOAA's sea level rise scenarios for both gauges are provided.



The Alabama coast rarely experienced these type of tidal flooding events, when water comes more than one or two feet above normal high tide, prior to this century. Today the shore experiences just a few days of this sort of flooding each year, but under intermediate estimates these floods can be expected one tenth to half the days of the year by the middle of the century. Additional development on the coast, including the building of this bridge and its abutments, must take this additional sea level rise into account. Attached, find maps of a two foot, four foot, and six foot sea level rise. In all scenarios, the abutments of the bridge and some of the bridge's induced development will be under water.

https://tidesandcurrents.noaa.gov/publications/techrpt83 Global and Regional SLR Scenarios for the US final.p df (last visited April 14, 2020).

This data from the 2017 NOAA report released new scenarios of sea level rise and fed into the 4th National

¹⁴ This data from the 2017 NOAA report released new scenarios of sea level rise and fed into the 4th National Climate Assessment. The report was part of an effort incorporating and improving upon previous work from NOAA, USACE, EPA, USGS, and academia, and it represents the most comprehensive study of sea level rise in the nation to date and provides localized projections for each tide gauge. These projections are more fine-tuned than coarser global estimations because they take account for factors such as subsidence and ocean current, which significantly increase the rate of sea level rise along the Alabama coast relative to the global average.

¹⁵ NOAA, Data, Patterns and Projections of High Tide Flooding, 2018. Accessed at https://tidesandcurrents.noaa.gov/pub.html (last visited April 14, 2020).

¹⁶ Sea Level Rise Maps, Two Foot Rise. (Attachment F); Four Foot Rise Map. (Attachment G); Six Foot Rise Map. (Attachment H).

Further, the impacts of storm surges and hurricanes must be considered. The impact of rising seas becomes even more powerful when storm surge or rainfall is added on top of a higher tide; therefore it is crucial to consider storm surge and rainfall vulnerabilities in addition to sea level rise. Attached, find a map of what a Category 2 Hurricane Storm Surge looks like for this area. The yellow on the map shows water over three feet deep and the blue shows water up to three feet deep. The storm surge model does not take higher sea levels or rainfall into account, so the combination of these still should be considered for long-lived infrastructure projects like this one.) Again, the abutments to the bridge and induced developments along the shore will be under water.

Recent history also illustrates what the SEIS must study. Hurricane Danny in 1997 dropped the most rainfall the state has seen from a tropical storm to date—estimates of rainfall from the storm around Mobile totaled around 40 inches, with over half that amount falling in just seven hours. Hurricane Katrina in 2005 produced storm surge along the Alabama coast ranging from 7-13 feet above normal water levels. It is crucial to use these past extremes to plan for future resilience to climate change. Hurricanes have dropped more rain in recent years compared to the historic average, even accounting for changes in storm frequency over time. As climate change alters wind circulation patterns, storms and other extreme weather events are more commonly stalling and unleashing more damage as a result. Recent research asserts that climate change has already increased the average and extreme rainfall of some hurricanes compared to pre-industrial conditions. The Atlantic basin has already seen an increase in the number of Category 4 and 5 hurricanes since the 1980s.

One study found that most of the property in Alabama sitting less than six feet above the high tide line, making it vulnerable to flood from sea level rise and intensifying storms, is found in the Orange Beach and Gulf Shore zip codes.²³ There is a consensus among researchers that climate change will continue to make storms and the floods that follow more intense, as warmer air can hold more moisture and add more fuel to storm systems.²⁴ Extreme rainfall has already

¹⁸ Morgan, L, *Alabama's Hurricanes: Biggest, Strongest, Most Surge*, AL.com, July 25, 2019, https://www.al.com/news/erry-2018/05/7d04b4b1aa6891/alabamas_hurricane_hall_of_fam.html (last visited April 14, 2020).

¹⁷ Category 2 Hurricane Map. (Attachment I).

¹⁹ Kunkel, K.E., D.R. Easterling, D.A.R. Kristovich, B. Gleason, L. Stoecker, and R. Smith, *Recent Increases in U.S. Heavy Precipitation Associated with Tropical Cyclones*, Geophysical Research Letters, 37, L24706, doi:10.1029/2010GL045164, 2019.

²⁰ Mann, M.E., Rahmstorf, S., Kornhuber, K., Steinman, B.A., Miller, S.K., Coumou, D., *Influence of Anthropogenic Climate Change on Planetary Wave Resonance and Extreme Weather*, Nature Scientific Reports, DOI: 10.1038/srep45242, 2017.

²¹ Patricola, C.M., Wehner, M.F., *Anthropogenic Influences on Major Tropical Cyclone Events*, Nature 563(7731), 2018.

²² Webser, P.J., Holland, G.J., Curry, J.A., Chang, H.R., *Changes in Tropical Cyclone Number Duration and Intensity in a Warming Environment*, Science 309, 1844-1846, 2005.

²³ 87% of Alabama's low elevation property is in the Orange Beach and Gulf Shore zip codes. Climate Central, *Alabama and the Surging Sea*, 2015, https://sealevel.climatecentral.org/uploads/ssrf/AL-Report.pdf.

²⁴ https://www.gfdl.noaa.gov/global-warming-and-hurricanes/ and https://nca2018.globalchange.gov/chapter/19/ (last visited April 14, 2020).

become more frequent and more damaging throughout the Southeast.²⁵ This trend will continue due to climate change even with future emissions reductions.²⁶ Extreme rainstorms—the sort of weather systems that drop more than six inches of rain in one area over two days— are around 50 percent more likely in the Southeast than they were in the middle of the 20th century.²⁷ This information was not studied as part of the EIS and must be fully analyzed in an SEIS. With this knowledge, it has to be decided whether it is prudent to build a bridge in the middle of an open bay to increase development along the coast.

Finally, the cumulative and indirect impacts of this additional development on marsh migration should also be considered. The future of the marshes and the ecosystem services they provide are at risk as sea levels continue to rise. The plants making up this habitat have adapted to live at very specific water levels and can drown in higher water. In the absence of man-made barriers, these marsh systems are able to migrate to higher ground with the tideline. As sea levels rise, tidal waters reach further in to formerly dry land, creating new habitat space for marsh grass. Through a process of plant colonization, the marsh grasses shift into newly inundated tidal area, while the lowest lying patches of marsh grass turn into open water. Evidence of marsh migration can already be observed up and down the coast along natural shorelines as marsh grass replaces trees. Armoring along the shoreline, including roads and bulkheads, in potential marsh migration spaces cuts off the marsh's evacuation route and through time can result in the loss of the marshland and its benefits. This pinch between a developing shoreline and a marsh's natural adaptation is sometimes referred to as "coastal squeeze."

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²⁵ Easterling, D.R., J.R. Arnold, T. Knutson, K.E. Kunkel, A.N. LeGrande, L.R. Leung, R.S. Vose, D.E. Waliser, and M.F. Wehner, *Precipitation Change in the United States, Climate Science Special Report: Fourth National Climate Assessment, Volume I*, Wuebbles, D. J., D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock, Eds., U.S. Global Change Research Program, Washington, DC, USA, 207–230, 2017.

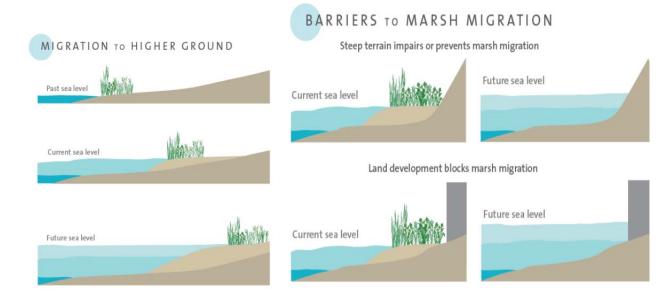
²⁶ Carter, L., A. Terando, K. Dow, K. Hiers, K.E. Kunkel, A. Lascurain, D. Marcy, M. Osland, and P. Schramm, Southeast, In Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II, [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)], U.S. Global Change Research Program, Washington, DC, USA, 2018.

²⁷ Specifically, the number of storms dropping rainfall more extreme than is expected in a 5-year return interval storm over two days (the storm system that would drop six inches of rain over 48 hours) have increased by 49% in the Southeast since the mid-20th century, and by 58% since the beginning of the 20th century. The National Climate Assessment defines extreme events as anything larger than the 5-year return interval, two day storm, which is about six inches of rain in 48 hours in our region.

²⁸ Marshes naturally respond to rising seas by gradually migrating inland along with the water. As sea levels rise, tidal waters reach further in to formerly dry land, creating new habitat space for marsh grass. Through a process of plant colonization, the marsh grasses send out new shoots from their roots and shift into the new tidal area. As the marsh grasses and other plants shift, the lowest lying patches of marsh grass become open water.

²⁹ Smart, L, *Unraveling Mysteries of Ghost Forests*, North Carolina Sea Grant, 2017. https://ncseagrant.ncsu.edu/coastwatch/previous-issues/2017-2/holiday-2017/unraveling-mysteries-of-ghost-forests/(last visited April 14, 2020).

³⁰ Northeast Regional Ocean Council, *Make Way for Marshes*, 2015, https://www.northeastoceancounci.ou/ <a href="https://www.northeastoceancounci



In addition to climate change impacts, the project applicants must consider the length of the bridge and the induced development that falls within the 100 year floodplain, marked in an attachment.³² Also, the long-term, post-construction impacts of stormwater runoff and other hydrological changes caused by projects like the Wolf Bay Corridor are now understood to be the primary impacts to watersheds, exceeding even the impacts caused by construction itself. These significant post-construction and climate change impacts were neither acknowledged nor considered in the 1996 EIS.

Additionally, the traffic patterns on and off the island have changed since the EIS. After the EIS was completed, Highway 161 was increased to five lanes.³³ A bridge connecting 161 to 95 will change the traffic patterns differently than it would have in 1996. Because the City has not completed an SEIS, the Corps, along with the Coast Guard must create an SEIS in order to analyze the federal action of permitting which will allow this bridge and corridor. In sum, this revised project presents a "seriously different picture" than the 1996 EIS. Thus, "the FEIS must be supplemented." *Jersey Heights*, 174 F.3d at 190 (citations omitted).

II. Orange Beach's Environmental Assessment and Finding of No Significant Impact is inadequate.

The City of Orange Beach has submitted a Draft Environmental Assessment ("EA") to the Coast Guard as part of their application for a Section 9 permit.³⁴ An EA can be used to determine whether the proposed activity may significantly affect the environment and thus whether a more exhaustive EIS is required. *See* 40 C.F.R. § 1508.9. However, a more exhaustive EIS is required when a major federal action will "significantly affect [] the quality of

³² Floodplains Map, (Attachment J).

³³ Draft EA at 1.

³⁴ Draft EA.

the human environment." 42 U.S.C. § 4332(2)(C). The City seems to have found that this project will have no significant impact.³⁵

In 1996, the FHWA and ALDOT found this same project significant enough to conduct an EIS, not an EA. The Corps and Coast Guard cannot backtrack and now find the project not significant. Federal FHWA NEPA regulations specifically provide that if major steps to advance the action have not occurred within three years after the approval of the FEIS, the applicant must prepare a written reevaluation of the FEIS. 23 C.F.R. § 771.129(b). The purpose of this evaluation is to determine whether or not an SEIS, or new EIS altogether is needed. *Id.* Although the FHWA is no longer the lead agency, these regulations are persuasive. It has been 24 years since the EIS, not three.

Second, this project *will* significantly affect the environment. On face, the bridge is almost a mile long across the bay.³⁶ Highway pollution (including trash, oil, heavy metals, organics) will increase with the bridge and corridor.³⁷ There is an increased chance that spills from vehicles carrying hazardous waste will end up in the bay.³⁸ Noise will increase.³⁹ Construction of the bridge alone will add sedimentation to the bay.⁴⁰ And the wetlands will be impacted. The Corps claims that 7.25 acres will be impacted, but the City states in its application that the project will impact 14 acres of wetlands.⁴¹ The Corps should explain this discrepancy.

Bridges also shade ecosystems which can have a significant impact as well. New bridges can be expected to block sunlight and eliminate plants that are very sensitive to reductions in light intensity. Bridges shade marsh plants, resulting in reduced photosynthesis, growth, and production. Persistent low light levels result in plant death. As a result of vegetative loss due to shading, there will be a reduction in the amount of detritus production and export to the estuary with subsequent effects on members of the benthic invertebrate community, such as shellfish. These losses of one part of the food web can have a reverberating effect on the entire estuary. Loss of plants will result in reduced habitat and nursery opportunities for organisms such as fish, crab, and shrimp, which serve as food for other dependent wildlife, such as wading birds. Accordingly, the loss of vegetation through shading ultimately results in reduced food for fish, shrimp, crabs, oysters, clams, mussels, birds, and other grass-dependent animals throughout the estuary.

Relevant factors that make a project significant include: 1."impacts that may be both beneficial and adverse"; 2. "unique characteristics of the geographic area such as proximity to . .

³⁵ Coast Guard Bridge Permit Template at 5.

³⁶ Coast Guard Bridge Permit Template at 3.

³⁷ EIS at 4-18.

³⁸ *Id*.

³⁹ Draft EA at 33.

⁴⁰ EIS at 4-18.

⁴¹ *Compare* JPN, 1 to City of Orange Beach, Joint Application and Notification to U.S. Army Corps of Engineers, May 1, 2019, 6 (hereinafter Application) (Attachment K).

wetlands, wild and scenic rivers, or ecologically critical areas"; 3. "[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial"; 4. "[t]he degree to which the possible effects on the human environment are highly uncertain"; 5. "[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts"; and 6. "[t]he degree to which the action may adversely affect an endangered or threatened species or its habitat". 40 C.F.R. § 1508.27(b). "If any 'significant' environmental impacts might result from the proposed agency action then an EIS must be prepared *before* agency action is taken." *Sierra Club v. Peterson*, 717 F.2d 1409, 1415 (D.C. Cir. 1983) (emphases in original). "[T]he existence of one or more significance factors can justify setting aside a FONSI [Finding of No Significant Impact] and remanding either for further consideration of those factors or preparation of an EIS." *Fund for Animals v. Norton*, 281 F. Supp. 2d 209, 235 (D.D.C. 2003).

All of the significance factors described above are implicated here. For example, this bridge will create significant cumulative impacts. This bridge will spur at least four square miles of development on the coast. A 2007 Feasibility Report of the bridge project written for the City describes the kind of development that is planned:

Interviews with stakeholders and developers indicated that significant new development is anticipated in the undeveloped area north of the waterway Several large parcels have already been annexed by the City of Orange Beach. The assumption in this analysis, based on interviews, is that the remainder of the large parcels north of the city will also be annexed over time **Developers report that building will accelerate with the opening of the bridge.**⁴³

Below is a list of the development planned in 2007.

- 5,500+ Condos
- 6,100+ Single-family homes
- Apartments
- Retail Space
- Hotel Accommodations
- Marinas
- Golf Courses⁴⁴

The Orange Beach 2020 Comprehensive Plan also shows that Orange Beach plans on annexing this land "to become a resort area with working waterfronts that include businesses common to water-based communities (i.e., marinas, bait shops, boat repairs, small retail stores,

⁴² See, Zoning Map below.

⁴³ Figg, Wolf Bay Bridge Feasibility Study for the City of Orange Beach, Alabama, March 22, 2007, 31 (emphasis added) (hereinafter Feasibility Study) (Attachment L).

⁴⁴ *Id.*

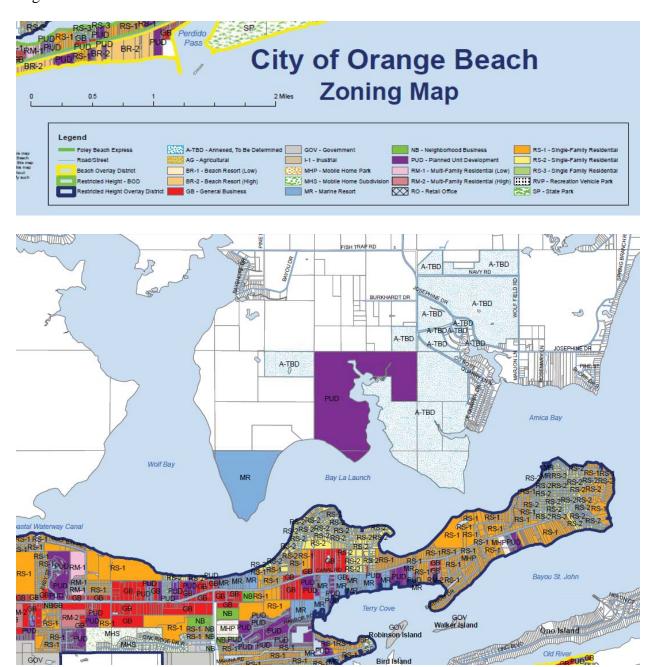
restaurants)."⁴⁵ It will be zoned for mixed use which includes retail stores, entertainment venues, restaurants, residential complexes.⁴⁶

None of this has development will occur without this bridge. The City has labeled certain parcels "To be Determined" on its zoning map on the majority of the parcels on the north side of this proposed bridge, in anticipation of annexing them as soon as the bridge construction is underway. Additionally, the two parcels that have been annexed are zoned for "MR – Marine Resort" and "PUD - Planned Unit Development". Comparing this map with the satellite map from the joint public notice, none of this development has started yet. When the City has applied for this permit, it was stated that the purpose of this bridge was to "grow" Orange Beach. ⁴⁷ Based on these actions, it is no secret that Orange Beach wants to build this bridge to continue its condos, golf courses and hotels to the north.

⁴⁵ City of Orange Beach, AL, *Community Preservation and Growth Management Plan*, March 9, 2020, 3 https://www.orangebeachal.gov/sites/default/files/pdfs/OBA%20CompPlan-Adopted_March%202020%20.pdf (last visited April 15, 2020).

⁴⁶ *Id.* at 6.

⁴⁷ Application at 2.



Even the Draft EA for the Coast Guard admitted that the bridge will bring this development, but it fails to explain how this is not significant. "Secondary consequences such as land use changes would occur primarily in the surrounding communities of the Project area. Any increased development due to the Project would add to existing land use pressures within the City and southern Baldwin County Secondary and cumulative impacts associated with fill discharges and wetland site development includes the loss and fragmentation of wildlife habitat, increased runoff from impervious surfaces, and possible pollution." With this development

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⁴⁸ Draft EA at 42.

comes the need for additional sewage, and the possible need for new treatment plant capacityanother cumulative impact that is not examined. Stormwater from increased impervious surfaces will also increase. Because this project's primary purpose is to stimulate development, these issues must be addressed.

Additionally, these cumulative and indirect impacts will occur in a "unique" geographic area. Wolf Bay was granted the "Outstanding Alabama Waterway" status by the Alabama Department of Environmental Management. ⁴⁹ The OAW (Outstanding Alabama Water) classification is the highest level of waterbody classifications given by the state. It indicates "high quality waters that constitute an outstanding Alabama resource of exceptional recreational and ecological significance."⁵⁰ The bay serves as a nursery for many types of commercially and recreationally important fish, crab, shrimp, and other Gulf of Mexico species; and, the land surrounding the bay is outstanding habitat for many other species, including the federallyprotected eastern indigo snake and the state-protected gopher tortoise. The development of this area could put this nursery and multiple species at risk. This development will bring increased sedimentation, nitrogen, pathogens from wastewater, oil and loss of habitat, all of which should be studied in an SEIS. See, e.g., Hanly v. Kleindienst, 471 F.2d 823, 831 (2d Cir. 1972) ("[O]ne more highway in an area honeycombed with roads usually has less of an adverse impact than if it were constructed through a roadless public park." (citation omitted)). In this case, the City has proposed just such a highway that will connect a roadless, undeveloped area.

The cumulative and indirect impacts of the width of the corridor must be studied in an SEIS as well. The corridor is 200 feet across in some parts.⁵¹ NEPA regulations define "cumulative impact" as the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions." 40 C.F.R. § 1508.7. The Feasibility Report anticipated a four lane road in the future: "Based on the current traffic counts, projected traffic demands and future expansion, a two lane roadway was determined appropriate for this facility, at this time, with the anticipation of future expansion to a 4-lane facility."⁵² The current 200 foot corridor that the Corps proposes to permit is certainly large enough to build four standard 12 foot lanes with shoulders. The cumulative impacts, including the traffic impacts, of a four lane road must also be analyzed.

Further the bridge and corridor will also "adversely affect an endangered or threatened species or its habitat." 40 C.F.R. § 1508.27(b). The FWS has stated that the bridge has the potential to impact the West Indian Manatee and the Gulf Sturgeon.⁵³ In fact, in 2008, a small summering population consisting of approximately 10 individual manatees was documented

⁴⁹ Baldwin County Commission and Highway Department, Wolf Bay Watershed Study, 2013 at 2-1, https://baldwincountyal.gov/docs/default-source/highway-department/studies/wolf-bay-watershedstudy.pdf?sfvrsn=7394be0c_2 (last visited April 13, 2020).

⁵¹ JPN at 8.

⁵² Feasibility Report at 76.

⁵³ Draft EA, Appendix J, Letter from William Pearson, FWS to Cindy House-Pearson, TTL, October 12, 2018.

from McReynolds Lake and the Basin area in the Mobile/Tensaw River Delta northwest of the property.⁵⁴

Additionally, although the Corps believes the direct impacts of the corridor itself "may affect" but will "not adversely affect" the eastern indigo snake, this is a puzzling conclusion, as the City plans to remove all of the gopher tortoises in the corridor. ⁵⁵ Eastern Indigo Snakes are dependent on Gopher Tortoise burrows for shelter in the winter. ⁵⁶ Moreover, Alabama's Department of Conservation and Natural Resources must be consulted about the gopher tortoise in an SEIS, since this is a state-protected species.

Further, the Corps does not mention two protected birds--the bald eagle which is protected under the Bald and Golden Eagle Act and the red-cockaded woodpecker which is protected under the Endangered Species Act. Several bald eagles have been sighted in the Corridor in the past. In 2008, a survey of the site found two nests located just approximately 2.25 miles northwest of the proposed project landing site.⁵⁷ Further, the red-cockaded woodpecker was listed by the Fish and Wildlife Service as a potential species that could occur along the proposed route.⁵⁸ In 2006, red-cockaded woodpeckers were observed at Sapling Point; a survey of the entire route corridor and adjacent area should be required during the permitting phase.⁵⁹

Furthermore, the cumulative and secondary impacts will certainly affect listed species and these have not been studied. In 1996, FWS warned that the "accelerated development may result in substantial adverse impacts to wetlands and fish and wildlife resources occurring within the project area. These secondary impacts should be fully assessed and appropriately mitigated in the final document." These secondary and cumulative impacts to protected species must be analyzed in a SEIS.

III. The Corps is segmenting the project, contrary to NEPA, Section 404, and the ESA.

NEPA prohibits segmenting projects. Segmentation is defined in the Council on Environmental Quality ("CEQ") regulations. In measuring the "significance" of the overall environmental impacts of a given project, the regulations forbid an agency from attempting to avoid significance by "breaking [an action] down into small component parts." 40 C.F.R. § 1508.27(b)(7); see also Preserve Endangered Areas of Cobb's History, Inc. v. U.S. Army Corps Eng'rs, 87 F.3d 1242, 1247 (11th Cir. 1996) ("The Corps cannot evade its responsibilities under

 ⁵⁴ Barry A. Vittor & Associates, Inc., *Threatened and Endangered Species Survey of a Proposed Hurricane Evacuation Route in Southern Baldwin County*, December 2008, 13. (Attachment M).
 ⁵⁵ JPN at 3.

⁵⁶ The Orianne Society, *The Eastern Indigo Snake*, https://www.oriannesociety.org/about/the-eastern-indigo-snake/ (last visited April 14, 2020).

⁵⁷ Barry A. Vittor & Associates, Inc., *Threatened and Endangered Species Survey* at 13.

⁵⁸ Feasibility Report at 73.

⁵⁹ Feasibility Report at 74.

⁶⁰ EIS, Appendix, H-1-H-2, Letter from Willie Taylor, FWS to Joe Wilkerson, FHWA, April 3, 1995.

the National Environmental Policy Act by artificially dividing a major federal action into smaller components, each without a significant impact." (internal quotation marks and punctuation omitted)). This 404 permit application must satisfy the above requirement in order to pass muster under NEPA.

In order to avoid segmentation, a project must have independent utility. *See*, *e.g.*, *Standing Rock Sioux Tribe v. U.S. Army Corps Eng'rs*, 301 F. Supp. 3d 50, 60 (D.D.C. 2018) (stating the rule as applicable with the D.C. Circuit). The Corps' regulations also define "independent utility" as follows: "A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multiphase project that depend upon other phases of the project do not have independent utility . . ." *Fla. Wildlife Federation v. U.S. Army Corps Eng'rs*, 401 F. Supp. 2d 1298, 1317 (S.D. Fla. 2005) (quoting 67 Fed. Reg. 2094 (Jan. 15, 2002)). In addition, "All activities which the applicant plans to undertake which are reasonably related to the same project and for which a [Corps] permit would be required should be included in the same permit application. District engineers should reject, as incomplete, any permit application which fails to comply with this requirement." 33 C.F.R. § 325.1(d)(2).

The ESA contains similar prohibitions on piecemealing projects. The regulations define "action area" pursuant to the Endangered Species Act as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." 50 C.F.R. § 402.02. This area is then used as the basis of an analysis of the direct, indirect, and cumulative effects of a proposed action on endangered species and critical habitat. *See id.* (defining "effects" and "cumulative effects" based on the action area). By this logic, the FWS and the coordinating federal agency or agencies cannot make a determination about whether a given project may adversely affect a species or its habitat by looking at isolated pieces of that project, or by looking only at a project's direct impacts while ignoring its indirect or cumulative impacts.

The Wolf Bay Corridor segment without the bridge has no independent utility. The Corps only proposes to analyze the impacts of the corridor and not the bridge. For instance, although the Corps fully admits that "the project would include construction of a two-lane bridge across Wolf Bay," the "Area of Disturbance" shown in red lines on the topographic lines on the Joint Public Notice does not include any of the impacts to the bay, fish, mammals, or aquatic vegetation from the construction and insertion of the pilings of the bridge. Even though the highway alternatives may bridge over these types of wetlands, there will still be significant impacts to wildlife and wetlands from the bridge due to construction activities. Attached, find a map showing a conservative estimate of the estuarine wetlands that the bridge will cross. 62

Additionally, the Corps currently has conducted a review of endangered species, but only reviewed the terrestrial impacts and not the aquatic impacts. The Corps concluded that the

⁶¹ Compare JPN at 1, with JPN at 5-12.

⁶² Wetlands Map. (Attachment N).

"corridor and bridge abutment construction activities" would have "no effect" on the West Indian Manatee and the Gulf Sturgeon, and that is the last mention of these species. However, the bridge does have the potential to impact these species. In fact, in correspondence with the City's consultants, the FWS agrees and states the project "has the potential to impact" the West Indian Manatee and the Gulf Sturgeon. Even in determining whether essential fish habitat will be affected, the Corps only analyzes the "terrestrial portions of the proposed activity" without analyzing the bridge which will certainly have impacts to fish habitat. Segmenting the project is illegal.

Under NEPA, the Corps must assess portions of a project beyond the regulated activity "where the environmental consequences of the larger project are essentially products of the Corps permit action." 33 C.F.R. Part 325 App. B § 7(b)(2). This assessment requires evaluating the regulated activity in relation to other portions of the overall project, such as the other segments of the road that would not be built but for this segment. This means the Corps must analyze the impacts of the bridge. The corridor and bridge abutments itself have no independent utility. For instance, one factor in determining the Corps' control is "whether or not the regulated activity comprises 'merely a link' in a corridor type project (e.g., a transportation or utility transmission project)." Part 325 App. B § 7(b)(2)(i).

[F]or those activities that require a DA permit for a major portion of a transportation or utility transmission project, so that the Corps permit bears upon the origin and destination *as well as the route of the project* outside the Corps regulatory boundaries, the scope of analysis should include those portions of the project outside the boundaries of the Corps section 10/404 regulatory jurisdiction. To use the same example, if 30 miles of the 50-mile transmission line crossed wetlands or other "waters of the United States," the scope of analysis should reflect impacts of the whole 50-mile transmission line.

Part 325 App. B § 7(b)(3) (emphasis added). By permitting the corridor and bridge abutments, the Corps will be determining the "route of the project." The Corps cannot simply review the road without also reviewing the environmental impacts of the bridge.

Additionally, the most current regional transportation plan's long range plan includes a description of the bridge that continues to county road 20.⁶⁵ This permit only analyzes a bridge and corridor to county road 95, approximately a mile short of County Road 20. Even more concerning, the City of Orange Beach's Long Range Plan states, "The proposed Wolf Bay Bridge will be in this district north of the Highway 161/180 intersection and will connect Orange Beach with the Josephine and Lillian communities to the north with the future goal of extending

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⁶³ Draft EA, Letter from William Pearson, FWS to Cindy House-Pearson, TTL, October 12, 2018.

⁶⁴ JPN at 2-3.

⁶⁵ West Florida Regional Planning Council, *Florida-Alabama 2040 Long Range Transportation Plan, Needs Plan and Cost Feasible Plan Amendment Report*, August 2018, p.73 of pdf https://www.ecrc.org/document_center/Programs/Florida%20Alabama%20TPO/Amendments%20and%20Modifications/Needs-Assessment-and-Cost-Feasible-Plan-Amendment-Final-Report.pdf (last visited April 12, 2020).

the route to Interstates 10 and 65."⁶⁶ The City plans to build a road to county road 20 and then to I-10. The entire project must be analyzed, especially since the ending at county road 95 is not a logical terminus.

IV. The City of Orange Beach's Section 404 Permit Application fails to satisfy the CWA's 404(b)(1) Guidelines and must therefore be denied.

EPA's Section 404(b)(1) Guidelines are binding regulations that dictate the circumstances under which the Corps may permit discharges of dredged or fill material into wetlands or other waters pursuant to the CWA. *See* 33 U.S.C. § 1344; 40 C.F.R. § 230.10. The Corps' regulations recognize that the Corps must deny a Section 404 permit if the discharge for which a permit is sought would violate the Guidelines. 33 C.F.R. § 320.4(a)(1).

The 404(b)(1) Guidelines prohibit issuance of a permit where:

- (i) There is a practicable alternative to the proposed discharge that would have less adverse effect on the aquatic ecosystem, so long as such alternative does not have other significant adverse environmental consequences; or
- (ii) The proposed discharge will result in significant degradation of the aquatic ecosystem . . . ; or
- (iii) The proposed discharge does not include all appropriate and practicable measures to minimize potential harm to the aquatic ecosystem; or
- (iv) There does not exist sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with the Guidelines.

40 C.F.R. § 230.12(a)(3). The City's permit application fails to meet all four of these regulatory criteria. Most notably, the extent of the Wolf Bay Corridor impacts has yet to be fully analyzed and addressed. Accordingly, the Corps cannot lawfully permit this project.

A. The Corps' Purpose Statement is flawed.

In this case, the Corps definition of the basic purpose of the project violates its own regulations. In light of the manner in which the Guidelines are written, a correct statement of the project's "basic purpose" affects whether the presumption of practicable alternatives applies, and thus, the extent of the applicant's burden. *See Nat'l Wildlife Federation v. Whistler*, 27 F.3d 1341, 1345 (8th Cir. 1994) (determining project purpose is "central" to practicable alternatives analysis). The Corps has discretion to characterize the project's basic purpose in the first instance, including whether to accept or reject the applicant's characterization of that purpose. In so doing, the Corps must take the applicant's goals and purposes into account. *La. Wildlife Federation, Inc. v. York*, 761 F.2d 1044, 1048 (5th Cir. 1985) (citation omitted). But "an

⁶⁶ City of Orange Beach, AL, Community Preservation and Growth Management Plan, March 9, 2020, 1 https://www.orangebeachal.gov/sites/default/files/pdfs/OBA%20CompPlan-Adopted_March%202020%20.pdf (last visited April 15, 2020).

applicant cannot define a project in order to preclude the existence of any alternative sites and thus make what is practicable appear impracticable." *Sylvester v. U.S. Army Corps of Engineers*, 882 F.2d 407, 409 (9th Cir. 1989). If an applicant did so and the Corps adopted the applicant's characterization of the project's purpose, the Corps would have abused its discretion.

In this case, the Corps changes the City's stated purpose and declares that the purpose of the Corridor is "to construct a new transportation corridor. The overall project purpose is to construct a new transportation corridor to improve connectivity between City of Orange Beach municipal boundaries on the north and south sides of the Gulf Intracoastal Waterway." The City has a few purposes that can be summarized as "[p]romoting long-term economic growth within the project corridor." The Corps narrows the City's purpose in such a way that no other alternative could be provided than a road from the only two parcels of land on Orange Beach on the north side of Wolf Bay to Orange Beach proper.

The Corps' statement of project purpose is far too narrow. Because an agency need only consider alternatives that are reasonable in light of the project's stated purpose, *Alliance for Legal Action v. FAA*, 69 Fed. Appx. 617, 622 (4th Cir. 2003), the statement of purpose and need "dictates the range of 'reasonable' alternatives and an agency cannot define its objectives in unreasonably narrow terms." *N.C. Alliance for Transp. Reform, Inc. v. DOT*, 151 F. Supp. 2d 661, 636 (M.D.N.C. 2001) (quoting *Carmel-by-the-Sea v. DOT*, 123 F.3d 1142, 1155 (9th Cir. 1997)). The Corps does not describe the reason to "improve connectivity" between the north and south sides of Orange Beach. Courts have regularly held that the statement of purpose and need should be defined to reflect the objective, general need for the proposed activity rather than the specific, narrow course of action preferred by the applicant. The rule as articulated by one federal appellate court is representative: "[T]he evaluation of 'alternatives' mandated by NEPA is to be an evaluation of the alternative means to accomplish the *general* goal of an action; it is not an evaluation of the alternative means by which a particular applicant can reach his goals." *Van Abbema v. Fornell*, 807 F.2d 633, 638 (7th Cir. 1986) (emphasis in original).

Any road "improves connectivity" between point A to point B; but, the Corps does not state the goal of connecting these points. Usually the purpose of "improving connectivity" is improving travel times and decreasing congestion. However, in this case, the people currently traveling from Orange Beach on the north and south side and vice versa are scant. There are only two land parcels on the north side that are in Orange Beach. Therefore, the purpose of a \$76.5 million bridge is not to decrease these two property owner's travel times. Nor is congestion particularly a problem for residents wishing to travel to Orange Beach. The 2007 Feasibility Report agrees: "As current demand is less than the capacity of the network, there is no excess demand that will be forced onto the WBB Those choosing to use WBB will do so for convenience (i.e., saving travel time by using a more direct route via WBB), not because of

⁶⁸ Application at 2.

⁶⁷ JPN at 1.

⁶⁹ Norm Marshall, *Smart Mobility, Review of Wolf Bay Bridge*, April 2020, 2. (Attachment O).

⁷⁰ See imbedded zoning map above.

⁷¹ Marshall at 7.

excessive congestion on the alternative arterial roads. The capacity analysis also reveals that the feeder routes, to WBB, SR 180 and US 98, are not congested."⁷²

The more accurate purpose is to improve connectivity in order to be able to develop the north shore. And, in fact, the City of Orange Beach states in its application:

The City currently has approximately 1,380 acres of property annexed in the Sapling Point area north of the GIWW with additional property planned to be annexed within the next year. The City is experiencing growth and the annexed area north of the GIWW is a natural progression for growth and development within the City limits. The City needs to address this growth with the creation of a new transportation corridor that would connect the City south of the GIWW to the City north of the GIWW and to areas of Baldwin County north of the City.

The project would provide a new two-lane bridge spanning the GIWW, to connect both sides of the City and new or improved two-lane connecting roads in order to improve access for traffic travelling between the island and mainland portions of Orange Beach in southern Baldwin County. The project would also:

- Provide immediate response times for City emergency and police personnel responding to incidents within the City's jurisdiction north of the GIWW;
- Provide improved access and visitors to the island portions of Orange Beach from areas north of the GIWW; and
- Provide increase economic opportunities for City and others north of the GIWW.⁷³

"[P]romoting long-term economic growth within the project corridor", is the purpose of the project. Orange Beach states that the project would "also provide immediate response times for City emergency and police personnel responding to incidents with the City's jurisdiction north of the GIWW" is a purpose. However, because there are only two parcels of land north of the GIWW, both of which are undeveloped, we understand this purpose to mean that the connection is necessary to respond to future incidents. Additionally, Orange Beach wants to "provide improved access for residents and visitors to the island portions of Orange Beach from areas north of the GIWW." However, again, since there are not many people visiting (much less residents) on the north shore, the goal is to allow future residents of the north shore to visit Orange Beach.

By stating that the purpose is to "increase connectivity" between the north and south side of Orange Beach without explaining the purpose of increasing connectivity, the Corps' statement of overall project purpose artificially constrains the consideration of a reasonable range of alternatives and strays from the project's core purpose, which is economic development. Such a statement of project purpose has the effect of eliminating the consideration of non-highway alternatives that address economic development goals.

⁷⁴ Application at 2.

⁷² Feasibility Report at 14.

⁷³ Application at 2.

B. The purpose of the Wolf Bay Corridor is not water dependent.

A project is not "water dependent" if it "does not require access or proximity to or siting within the special aquatic site in question to fulfill its basic purpose." 40 C.F.R. § 230.10(a)(3). In order to determine whether a project is water dependent, the basic purpose of the project must be known. As one recent court explained, quoting the Corps' own 2009 Standard Operating Procedures for the Regulatory Program:

the purpose of a residential development is to provide housing for people. Houses do not have to be located in a special aquatic site to fulfill the basic purpose of the project, i.e., providing shelter. Therefore, a residential development is not water dependent Examples of water dependent projects include, but are not limited to, dams, marinas, mooring facilities, and docks. The basic purpose of these projects is to provide access to the water.

Sierra Club v. Van Antwerp, 709 F. Supp. 2d 1254, 1261 (S.D. Fla. 2009) (quoting Army Corps. of Engineers Standard Operating Procedures for the Regulatory Program (Oct. 15, 1999)). As the application makes clear, the basic purpose of the Wolf Bay Corridor is not water dependent. Building condos, houses, and golf courses are not water dependent activities. Boosting economic development is not a water dependent activity.

C. Orange Beach has failed to clearly demonstrate that no practicable alternatives exist.

An applicant for a Section 404 permit for a non-water dependent activity, like this project, must "clearly demonstrate" that no practicable alternatives exist that do not require a discharge into wetlands or other special aquatic sites. 40 C.F.R. § 230.10(a)(3); see Shoreline Assocs. v. Marsh, 555 F. Supp. 169, 180 (D.Md. 1983) (quoting the regulations), aff'd, 725 F.2d 677 (4th Cir. 1984). "[T]he applicant and the [Corps] are obligated to determine the feasibility of the least environmentally damaging alternatives that serve the basic project purpose. If such an alternative exists . . . the CWA compels that the alternative be considered and selected unless proven impracticable." Utahns for Better Transp. v. DOT, 305 F.3d 1152, 1188-89 (10th Cir. 2002). Under the CWA, "the test is whether the alternative with less wetlands impact is 'impracticable,' and the burden is on the Applicant . . . with independent verification by the [Corps], to provide detailed, clear and convincing information proving impracticability." Id. at 186 (emphasis in original). In the application, all of the alternatives were taken primarily from the EIS - a 24-year-old document. None of the alternatives have any traffic counts associated with them, and so it is unclear how any of the alternatives "improve connectivity" or compare with each other.

The No Build Option was not considered at all in the application. "One of the reasons that Congress has required agencies to set out and evaluate alternative actions is to give perspective on the environmental costs, and the social necessity, of going ahead with the original proposal." *Town of Matthews v. DOT*, 527 F. Supp. 1055, 1058 (W.D.N.C. 1981). ALDOT and the FHWA decided not to pursue the project, and so the No Build Option should be carefully

analyzed. The AL-FL Transportation Planning Organization (TPO) did not prioritize this project to be funded in the next 25 years, which is why Orange Beach is funding this alone. The TPO but it on their visionary list and listed it in 2015 as a "needs" project not a "cost feasible" project. It was estimated to cost \$184,140,000, for only 3 miles. The August 2018, the Long Range Plan was later amended to include this project as a cost feasible project.⁷⁶ The project surprisingly shrunk to \$70,050,000 in cost, but it doubled in size. (This estimate is likely inaccurate, since the bridge between AL-161 and CR-95 was estimated to cost \$60,000,000 to \$90,000,000 in 1994.⁷⁷) Even with the reduction in size, ALDOT and FHWA still decided not to fund this. There are already two, and will be three other bridges connecting this small island to the rest of the mainland. Another bridge is excessive. Here, the needless environmental and social costs, as well the true inordinate expense, of the proposed project require serious consideration of the no build alternative. The City has inappropriately limited its analysis to comparing the relative merits of three alternative routes. At no point does it appear to have considered whether building the project is justified in light of its substantial costs and meager transportation benefits. This analysis is essential.

Since "promoting economic growth in the corridor" is the purpose, many less damaging environmental alternatives exist, such as a ferry or a park or a 100 foot corridor (instead of the current 200 foot corridor). 78 If the bridge's secondary purpose is for first responders to reach the future residents in Orange Beach, then an agreement with Baldwin County's police department may be a more economical way of reaching these residents. An economic development analysis should be completed to show the benefits (along with costs, such as additional wastewater and other infrastructure investments) of this alternative, and then it should be compared to other economic development alternatives. Thus far, no economic development analysis has been completed. "NEPA requires agencies to balance a project's economic benefits against its adverse environmental effects." Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 446 (4th Cir. 1996) (citation omitted). Without understanding the true economic benefits of the project, the public cannot understand the need or fully compare it with the alternatives.

D. "Sufficient information to make a reasonable judgment as to whether the proposed discharge will comply with the Guidelines" does not exist.

As described above, several indirect and cumulative impacts have not been studied. The data from the 1996 EIS is outdated and the data from the Draft EA submitted to the Coast Guard

⁷⁵ West Florida Regional Planning Council, 2040 Florida-Alabama Long Range Transportation Plan Final Report, Appendix F, p. 231 of pdf.

https://www.ecrc.org/document_center/Programs/Florida%20Alabama%20TPO/Plans%20and%20Documents/Final -Report-V5-07_20_16-1.pdf (last visited April 12, 2020).

76 West Florida Regional Planning Council, Florida-Alabama 2040 Long Range Transportation Plan, Needs Plan

and Cost Feasible Plan Amendment Report, p.73 of pdf.

 $[\]underline{https://www.ecrc.org/document_center/Programs/Florida\%20Alabama\%20TPO/Amendments\%20and\%20Modificat}$ ions/Needs-Assessment-and-Cost-Feasible-Plan-Amendment-Final-Report.pdf (last visited April 12, 2020).

⁷⁷ Herndon, Mike, Alternative Proposed to Evacuation Route, Baldwin Co. Press Register, July 25, 1994 (Attachment P).

⁷⁸ Application at 2.

is incomplete. Thus, the City and the Corps have failed to disclose the full impact that the proposed project will have on the structure and function of aquatic systems. This error has undermined the alternatives analysis as well as the requirement to show that the project has avoided and minimized direct, indirect, and cumulative impacts to the environment to the maximum extent practicable. The Corps thus lacks the information it needs to make a reasonable judgment as to whether the City's proposal can comply with the Guidelines.

The Guidelines require the Corps to make certain factual determinations addressing the potential short-term or long-term effects of a proposed discharge of dredged or fill material on the physical, chemical, and biological components of the aquatic environment. *See* 40 C.F.R. § 230.11. Among these factual determinations is the following provision:

Aquatic ecosystem and organism determinations. Determine the nature and degree of effect that the proposed discharge will have, *both individually and cumulatively*, on the structure and function of the aquatic ecosystem and organisms. Consideration shall be given to the effect at the proposed disposal site of potential changes in substrate characteristics and elevation, water or substrate chemistry, nutrients, currents, circulation, fluctuation, and salinity, on the recolonization and existence of indigenous aquatic organisms or communities.

40 C.F.R. § 230.11(e) (emphasis added). According to the Guidelines, these factual determinations shall be used in conducting the alternatives analysis and in determining whether the proposed discharge includes all appropriate and practicable avoidance and minimization measures. *See* 40 C.F.R. § 230.11 ("Such factual determinations shall be used in § 230.12 in making findings of compliance or non-compliance with the restrictions on discharge in § 230.10.").

Many of the indirect and cumulative impacts to listed species have not been studied for 24 years. The induced growth expected to occur as a result of the proposed project would cause habitat fragmentation, which could impact the distribution, survival, breeding, foraging, and roosting activities of many terrestrial species, including those that are federally protected. This development will bring increased sedimentation, nitrogen, oil, and pathogens from wastewater. The cumulative impacts on water quality also have not been considered. Additionally, because the purpose is too narrow, the Corps does not have sufficient data to allow for a meaningful comparison of alternatives.

V. The proposed project cannot survive the public interest review.

In addition to being subject to the 404(b)(1) Guidelines, applications for Section 404 permits are subject to the Corps' public interest review requirements as set forth in 33 C.F.R. § 320.4. "The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest." 33 C.F.R. § 320.4(a)(1). This evaluation requires a balancing test, in which "[t]he benefits which reasonably may be expected to accrue from the proposal must be balanced

against its reasonably foreseeable detriments." *Id.* In making this decision, the Corps must consider all relevant factors, including:

conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

Id. Every public interest review must also consider these general criteria:

- (i) The relative extent of the public and private need for the proposed structure or work;
- (ii) Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed structure or work; and
- (iii) The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited.

33 C.F.R. § 320.4(a)(2).

The Corps' public interest regulations explicitly recognize the importance of wetlands to the public interest, stating that "[m]ost wetlands constitute a productive and valuable public resource, the unnecessary alteration or destruction of which should be discouraged as contrary to the public interest." 33 CFR § 320.4(b)(1). Accordingly, the regulations provide that "[n]o permit will be granted which involves the alteration of wetlands identified as important [to the public interest] unless the district engineer concludes . . . that the benefits of the proposed alteration outweigh the damage to the wetlands resource." 33 CFR § 320.4(b)(4). *See Shoreline Assoc.*, 555 F. Supp. at 179 (upholding Corps' denial of permit based on its finding that wetlands were important to the public interest). Coastal wetland systems especially provide important wave buffering and flood retention services for coastal communities. Coastal wetlands are estimated to provide about \$31.4 billion in storm protection services on an annual basis, in 2019 dollars.

⁷⁹ See, W.J. Mitsch et al., Ecosystem Services of Wetlands, 11 Int'l J. of Biodiversity Sci., Ecosystem Servs. & MGMT., no. 1, at 1–4 (2015), available at

https://www.tandfonline.com/doi/full/10.1080/21513732.2015.1006250?scroll=top&needAccess=true; A. Bullock & M. Acreman, *The Role of Wetlands in the Hydrological Cycle*, 7 HYDROLOGY AND EARTH SYS. SCI., no. 3, at 358–389 (2003), *available at https://hal.archives-ouvertes.fr/hal-00304786/document*; M. Acreman & J. Holden, *How Wetlands Affect Floods*, 33 WETLANDS, no. 5, at 773–786 (2013), *available at https://link.springer.com/article/10.1007/s13157-013-0473-2*.

⁸⁰ Costanza, R., M. Grasso, R. de Groot, & K.E. Limburg, *The Value of the World's Ecosystem Services and Natural Capital*. Nature 387: 253-260 (1996); Costanza, R., O. Pérez-Maqueo, M.L. Martinez, P. Sutton, S.J. Anderson, &

Applying the Corps' public interest analysis to the Wolf Bay Corridor, this permit application should be denied. The corridor would have massive indirect and cumulative impacts in a vulnerable area. The hardening of this shore would prevent marsh migration and will exacerbate flooding in the area. The project will impact, fish and wildlife, recreation such as fishing and kayaking opportunities, and aesthetics—all relevant factors under the Corps' public interest regulations. It will destroy habitat and wetlands on the bay that has been designated as ADEM as outstanding. As such, the majority of comments at the 2018 public meeting were opposed to the project.⁸¹

The corridor is also a waste of resources. The FHWA and ALDOT do not back this project, as there are already two (and will soon be three) bridges connecting this island to the mainland. This bridge is costly and is likely to cost more than the City predicts, since it was predicted to be more expensive in 1994 than the current estimate. Finally, the benefits and alternatives to the bridge have not been studied. Balancing all of the costs of this project against its limited and speculative benefits demonstrates that the Wolf Bay Bridge and Corridor is not in the public interest. For this reason, the Corps should deny the 404 permit for this project.

VI. The Corps must consult with the FWS before issuing a 404 Permit.

In 2018, the FWS stated that this project has "the potential to impact" the Atlantic sturgeon and West Indian Manatee. It also stated its concerns about the Eastern Indigo Snake and Golpher Tortoise. The FWS gave the Corps some suggestions to decrease the impact, but it never stated that the project would not adversely affect species. Further, the cumulative and indirect impacts were not presented to FWS nor were they analyzed. Therefore, the Corps must initiate formal consultation with the FWS before proceeding with the 404 permitting process.

Under Section 7(a)(2), federal agencies are required to consult with the Service to "insure that any action authorized, funded, or carried out" by the acting agency "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification" of critical habitat. 16 U.S.C. § 1536(a)(2). The Section 7 process begins when the acting agency determines whether the effects of its action "may affect" listed species or critical habitat in the "action area." See 50 C.F.R. §§ 402.11, 402.13, 402.14 (laying out procedures for "early consultation," "informal consultation," and "formal consultation" when an acting agency determines its action "may affect" species or habitat). If so, the acting agency determines, with the written concurrence of the Service, whether the effects of its action are likely to adversely affect listed species or critical habitat. If the effects of its action are not likely to adversely affect species or critical habitat, the consultation may terminate at the informal stage without formal consultation. 50 C.F.R. §§ 402.13(a), 402.14(b)(1). To concur in a finding that the agency's action is "not likely to adversely affect" listed species, the Service

K. Mulder, *The Value of Coastal Wetlands for Hurricane Protection*, Ambio 37(4): 241-248, (2008); United States Environmental Protection Agency, *Wetland Functions and Values. Watershed Academy Web: Distance Learning Modules on Watershed Management*, 2016.

⁸¹ Draft EA at Appendix A.

must find that effects on listed species are expected to be "beneficial, discountable, or insignificant." 51 Fed. Reg. 19,926, 19,949 (June 3, 1986). Federal regulations provide that "[t]he threshold for formal consultation must be set sufficiently low" and that "the burden is on the Federal agency to show the absence of likely, adverse effects to listed species or critical habitat . . . in order to be excepted from the formal consultation obligation." See 51 Fed. Reg. 19,949 (emphasis added). If the agency cannot reach a "not likely to adversely affect" finding, formal consultation is required and the Service provides the action agency with a Biological Opinion on whether the effects of the action will likely jeopardize any endangered or threatened species or adversely modify their critical habitat. 50 C.F.R. § 402.14(g)(1)-(4). Here, the FWS never reached a "not likely to adversely affect" finding; therefore, the Corps must begin formal consultation.

Additionally, the FWS must study the indirect impacts to the project. The ESA's regulations define a project's "action area" as "all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action." 50 C.F.R. § 402.02. As has been stated, this area is then used as the basis of an analysis of the direct, indirect and cumulative effects of a proposed action on endangered species and critical habitat. *Id.* (definition of "effects," "cumulative effects"). The regulations further define "connected actions" as those that are "interdependent parts of a larger action and depend on the larger action for their justification." 40 C.F.R. § 1508.25(a)(1)(iii). By this logic, the FWS and the coordinating federal agency or agencies cannot make a determination about whether a given project may adversely affect a species or its habitat by looking at isolated pieces of that project (the corridor and bridge for example) or by looking only at a project's direct impacts while ignoring its indirect or cumulative impacts.

More fundamentally, the ESA regulations define "action" as those "directly *or indirectly* causing modifications to the land, air or water." 50 C.F.R. § 402.02 (emphasis added). Therefore, the FWS cannot make a finding that a given action will not adversely affect a species or critical habitat without looking at both the direct and the indirect impacts of a given project. FWS did not examine the indirect impacts when it rendered its letter in 2018. To comply with the ESA, the Corps must now formally consult with the FWS in order to correct these problems.

VII. The discharge would cause or contribute to violations of water quality standards.

EPA regulations unequivocally provide that "no discharge of dredged or fill material shall be permitted if it causes or contributes . . . to violations of any applicable State water quality standard." 40 C.F.R. § 230.10(b)(1). ADEM must therefore certify that the Wolf Bay Bridge and Corridor will not contribute to violations of Alabama's water quality standards. ADEM cannot make such a determination here.

As a threshold matter, ADEM does not have the information that it needs to make such a certification. The City has not undergone any modeling to demonstrate that the direct and

indirect impacts from the bridge will not lead to water quality standard violations. Wolf Bay is designated as an Outstanding Alabama Waterway, 82 and therefore feasible alternatives must be explored before more discharge is permitted. Ala. Admin. Code r. § 335-6-10-.09(1)(c)1.(ii). The Alabama Administrative Code states that an expansion of a point source that will discharge into an Outstanding Alabama Waterway "shall not be allowed unless a thorough evaluation of all practicable treatment and disposal alternatives by the permit applicant has demonstrated to the satisfaction of the Department that there is no feasible alternative to discharge to the waters classified OAW." Id. Providing the City a construction permit allows for an expanded discharge. The City must demonstrate that no other feasible alternatives exist other than bridging over Wolf Bay before this expanded discharge is allowed. And it cannot do so since many other alternatives exist to provide economic development in Orange Beach. The City has not given ADEM the information needed to render a proper 401 certification for the Wolf Bay Bridge. ADEM should therefore deny the 401 certification.

VIII. ADEM's Coastal Zone Management Consistency Determination must be denied.

In order to obtain ADEM's Coastal Zone Management (CZM) consistency concurrence, certain criteria must be met, and the City has failed to meet that criteria. The Alabama Administrative Code provides that dredging may be permitted if "the activity is related to an existing or approved water dependent use, or use of regional benefit." Ala. Admin. Code r. § 335-8-2-.02(1)(a). The burden of proof is on the applicant requesting the certification. *Id.* at 335-8-2-.03(2)(b). In this case, the purpose of the activity is not water dependent as discussed above. The bridge is to bring economic growth to Orange Beach. Second, this project is not of regional benefit or else ALDOT and FHWA would have built this bridge. Orange Beach admits as much in its application to the Coast Guard when it states that this project does not have to complete a conformity analysis because it is not of "regional significance". 83 This bridge that enables development of this peninsula will line the pockets of Orange Beach developers, not the region.

Further, ADEM regulations require there will be no dredging or filling in close proximity to existing natural oyster reefs, ...[nor] dredging or filling in close proximity to existing submersed grassbeds." Ala. Admin. Code r. §§ 335-8-2-.02(1)(b)-(c). In its application, the City has not demonstrated that the dredging will not be in "close proximity" to oyster reefs or submersed grassbeds, and therefore ADEM should deny the City its Coastal Zone Management consistency concurrence.

Also, the City has to prove that "no alternative project site or design is feasible and the adverse impacts to coastal resources have been reduced to the greatest extent practicable." Ala. Admin. Code r. § 335-8-2-.02(1)(e). Again, currently two other bridges from the island to the

⁸² Baldwin County Commission and Highway Department, Wolf Bay Watershed Study, 2013 at 2-1, https://baldwincountyal.gov/docs/default-source/highway-department/studies/wolf-bay-watershed-study.pdf?sfvrsn=7394be0c_2 (last visited April 13, 2020).
 Coast Guard Bridge Permit Template at 11.

mainland exist and another one is planned. Since the purpose of this bridge is to increase economic development, alternatives do exist (see above). These alternatives must be studied.

Finally, the City is responsible for mitigating for "unavoidable impacts . . . pursuant to criteria established in this administrative code and/or, in the absence of specific criteria, to the satisfaction of the Department." Ala. Admin. Code r. § 335-8-1-.03(2)(d). However, as seen below, the mitigation will not be in the watershed in contra to the Clean Water Act.

IX. The JPN fails to demonstrate that the City has avoided and minimized impacts to the maximum extent practicable.

Under the Corps' Guidelines for Preparing a Compensatory Mitigation Plan a mitigation plan must provide a statement demonstrating the permittee's efforts to first avoid and minimize impacts. Guidelines at 12. This statement must identify and specifically address impacts to outstanding resources (i.e. rare, unique, or high quality aquatic resources). *Id.* Compensatory mitigation is considered to be a last resort. No such documentation is provided here. This one mile long bridge and Corridor will have from 7.25 to 14 acres of impacts to wetlands as well as several square miles of indirect effects to habitat.

Impacts to aquatic resources and the failure to select the no build alternative or study other least damaging alternatives to economic growth are discussed above. As the 404(b)(1) Guidelines provide: no permit shall be issued "unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem." 40 C.F.R. § 230.10(d). Therefore, the 404 permit should therefore be denied.

X. The JPN provides insufficient detail to fully and meaningfully comment on the mitigation package.

The JPN does not provide sufficient detail regarding proposed mitigation for the Wolf Bay Bridge and Corridor. The Corps regulation on this issue states:

For an activity that requires a standard DA permit pursuant to section 404 of the Clean Water Act, the public notice for the proposed activity must contain a statement explaining how impacts associated with the proposed activity are to be avoided, minimized, and compensated for The level of detail provided in the public notice must be commensurate with the scope and scale of the impacts.

33 C.F.R. § 332.4(b)(1) (emphasis added).

The JPN fails to meet these requirements. As a threshold matter, the JPN does not contain sufficient information on the proposed mitigation in light of the scope and scale of this project, which involves substantial and far-reaching impacts to significant aquatic resources. The only mention about mitigation is that the applicant has "proposed to compensate for

unavoidable impacts to wetlands through the purchase of wetland mitigation credits from a USACE approved mitigation bank." And the Corps "has not verified the adequacy of the applicant's proposed mitigation plan at this time." This is not a sufficient description for this mile-long, \$76,500,000 project.

There is no indication of the exact scope of the mitigation or of the type of mitigation that will, or should, ultimately be selected (preservation versus enhancement versus restoration). In short, there is no explanation of how the identified mitigation can fully compensate for all of the aquatic impacts of the Wolf Bay Corridor.

The JPN fails to disclose, for example, the quantity of mitigation credits required, the location of the mitigation sites, how the City and the Corps selected the proposed mitigation sites, what standards and criteria will be used to determine whether the plan appropriately compensates for lost aquatic functions and values, and what adaptive management measures will be used to manage risks inherent in any restoration and enhancement activities proposed. The documents also lack baseline information about the current state of the impacted watershed and the aquatic resource needed to be fulfilled through mitigation. There is also no enforcement provision. Without this information, the available materials cannot provide reasonable assurance that the impacts of the Wolf Bay Bridge and Corridor will be adequately mitigated, nor can the public adequately comment on the proposal. The Corps also cannot evaluate the proposal in totality without more specific knowledge about mitigation.

Especially, of note, the Corps does not describe from which watershed the credits will be bought. On April 10, 2008, the EPA and the Corps issued a Final Rule on Compensatory Mitigation for Losses of Aquatic Resources under section 404 of the Clean Water Act. *See* 73 Fed. Reg. 19,594 (Apr. 10, 2008) (codified at 40 C.F.R. pt. 230.91 and 33 C.F.R. pt. 325 and 332). According to the EPA and the Corps, "[i]n general, the required compensatory mitigation should be located within the same watershed as the impact site, and should be located where it is most likely to successfully replace lost functions and services" 33 C.F.R. § 332.3(b)(1). Neither the application nor the public notice explain where this mitigation will occur. However, the 1996 EIS and the 2007 Feasibility Report⁸⁶ indicated that the mitigation will not be in the watershed. In the 1996 EIS, ADECA "recommend[ed] that DOT consider setting up a wetland mitigation bank in the project area. A mitigation plan should be developed which sets up major mitigation sites in the Wolf Bay/Bay Launch area. Wetland mitigation sites should be as close to the corridor as possible This wetland buffer would lessen development pressures on the area." Until this mitigation plan is detailed, the public notice is insufficient.

XI. The public has not had a meaningful opportunity to comment.

The release of the JPN at this stage in the evaluation process is premature and does not

⁸⁴ JPN at 2.

⁸⁵ *Id*.

⁸⁶ Feasibility Report at 71.

⁸⁷ EIS, Appendix, H-18, Letter from Phillip Hinesley, ADECA, to Bill Carwile, ALDOT, Feb. 23, 1995.

afford the public a meaningful opportunity to comment on the project. There are significant issues that remain unresolved at this point in the evaluation process, and the JPN should not have been released until adequate information about the project's impact on wetlands and other resources could be disclosed to the public. For example, there is no current NEPA document that accompanied the JPN to describe the full impacts of this project. There is no mitigation plan published nor water quality data. The Corps did not even publish the City's application, but it had to be obtained via a public records request from the City. The City does not own the land where the bridge is planned to be built, and the project is currently stalled.⁸⁸

Since the state of Alabama is subject to a "stay in place" order due to the COVID-19 pandemic and health crisis, we request a public hearing after an interim sufficient to allow such gatherings to be safe. This will allow all voices who have not been able to submit comments during this crisis to submit a public comment. The public information meeting held by the City in 2018 was not a public hearing. A true public hearing will give the public the opportunity to voice their opinion of this proposed permit, on the record to the agencies. The public deserves a full and fair opportunity to comment on the Section 404 permit application once there is sufficient information regarding the full range of impacts to wetlands and other resources.

CONCLUSION

The Corps should deny the Section 404 permit for the Wolf Bay Corridor and bridge. Apart from the illegal segmentation of this project in the permit application, the Corps lacks the necessary information on project impacts and mitigation to render a proper 404 analysis and public interest review, in large part because of the City's refusal to prepare an SEIS for this project. Similarly, ADEM cannot issue a water quality certification without more stream-specific information about this project's direct, indirect and cumulative impacts.

We appreciate the opportunity to submit these comments on the proposed project. Please contact me if you have any questions, and please notify us as to any future actions taken with respect to this JPN.

Sincerely,

Sarah Stokes Senior Attorney

cc: (Via Email)

Colonel Sebastien Joly, District Commander, U.S. Army Corps of Engineers, Mobile District (*sebastien.p.joly@usace.army.mil*)

⁸⁸ John Mullen, *Orange Beach Tables Wolf Bay Bride Proposal*, <u>Lagniappe</u>, Aug. 29, 2019 https://lagniappemobile.com/orange-beach-tables-wolf-bay-bridge-proposal/ (Attachment Q).

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