

June 24, 2022

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submitted via file share

Re: Nimmo Parkway Phase VII-B Draft Environmental Assessment

Dear Mr. Johnson:

On behalf of the Back Bay Restoration Foundation, Wetlands Watch, and Lynnhaven River NOW, the Southern Environmental Law Center (“SELC”) submits the following comments on the draft Environmental Assessment (“Draft EA”) for the Nimmo Parkway Phase VII-B proposal (“Proposed Parkway”). SELC is a non-profit, non-partisan organization working in Virginia and at the federal level to promote clean water and healthy air, protect natural areas, and advance cleaner and more equitable transportation alternatives, smarter growth, and community revitalization while addressing our current climate crisis.

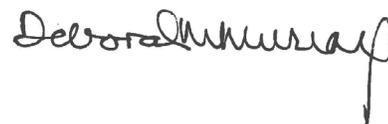
Given the ecological importance of the area it would cut through, the Proposed Parkway would have significant and adverse impacts on the environment as well as the surrounding communities. It is therefore critical that the City of Virginia Beach (the “City”), the Virginia Department of Transportation (“VDOT”), and the Federal Highway Administration (“FHWA”) use the process required under the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 et seq. (“NEPA”) to take a hard look at the proposal and to assess reasonable alternatives to it. Unfortunately, the Draft EA fails to do this, as discussed in this comment letter.

We hope you and your agency partners will find these comments helpful as you continue to review the project. We urge the City to take the time and expend the resources necessary to conduct the much more thorough and thoughtful analysis in an Environmental Impact Statement, as NEPA requires here.

Sincerely,



Morgan Butler
Senior Attorney



Deborah M. Murray
Senior Attorney

**Comments on Draft Environmental Assessment of
Nimmo Parkway Phase VII-B**

Submitted by:

The Southern Environmental Law Center, on behalf of:

Back Bay Restoration Foundation

Wetlands Watch

Lynnhaven River NOW

June 24, 2022

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I. INTRODUCTION

The City of Virginia Beach (“City”)’s proposed “Nimmo Parkway Phase VII-B” project (“Proposed Parkway” or “Proposed Road”) is a highly controversial project that would erect a physical and hydrological barrier along a right-of-way that cuts through the middle of a significant wetland floodplain and is bordered on both sides by the Back Bay National Wildlife Refuge (“Back Bay NWR” or “Refuge”). As described in detail in these comments, the Proposed Parkway would significantly and adversely affect the Refuge—an area of tremendous ecological value, as well as significantly increase flood risk for nearby residents and businesses.

The City’s Draft Environmental Assessment’s (“Draft EA”) is wholly inadequate. It fails to properly assess the significant impacts of the Proposed Parkway on the Refuge, including impacts to unique and sensitive wetlands, loss and fragmentation of wildlife habitat, and other significant impacts described in these comments. Critically, the Draft EA also fails to properly evaluate how the Proposed Parkway would significantly alter the hydrology of the Back Bay watershed in the vicinity of the project, with profound impacts on the Refuge and wildlife. The Draft EA also fails to consider that the Proposed Project’s impacts on wildlife habitat, wetlands, and hydrology would be magnified because they would be combined with the impacts from other major projects in the immediate area, such as the Nimmo Parkway Phase VII-A project and Avangrid’s Kitty Hawk offshore wind project.¹

Notably, the significant impacts on the Refuge from the Proposed Parkway also demonstrate that the Proposed Project would substantially diminish the value of wildlife habitat, resulting in the substantial impairment of Refuge resources. As explained in these comments, the Proposed Parkway would therefore constitute a constructive use of the Refuge under section 4(f) of the U.S. Department of Transportation Act.

Finally, the Draft EA impermissibly relies on outdated and unreliable data to justify considering only a Build Alternative and No Build Alternative, violating NEPA’s requirement to consider a reasonable range of alternatives.

An Environmental Impact Statement (“EIS”) must be prepared that would full evaluate the adverse impacts of the Proposed Parkway and objectively assess alternatives.

II. THE PROPOSED PARKWAY WOULD HAVE SIGNIFICANT ADVERSE IMPACTS ON BACK BAY NWR AND RESULT IN THE SUBSTANTIAL IMPAIRMENT OF REFUGE RESOURCES.

A. Introduction

Under the National Environmental Policy Act (“NEPA”), an EIS must be prepared for every “major Federal action[] significantly affecting the quality of the human environment.” 42 U.S.C. § 4332 (C). In determining whether a proposal may significantly affect the environment,

¹ The City’s website for the Proposed Parkway notes that once the City finalizes the Environmental Assessment, it will “then request a Finding of No Significant Impact to complete the NEPA process.” <https://www.nimmoparkway7b.com/faq/>. Because of the significance of the Proposed Parkway’s adverse impacts, the issuance of a Finding of No Significant Impact would be arbitrary and capricious and violate NEPA.

an agency must evaluate the direct, indirect, and cumulative effects of the proposal. *See* 40 C.F.R. § 1508.1 (g)(1)-(3) (2022). The City proposes to build the Proposed Parkway on a City-owned right-of-way (“ROW”) that cuts through one of the most sensitive areas of the Back Bay NWR, namely the Black Gut Natural Area/Conservation Site,² including the open waters of Black Gut. As discussed below, the Proposed Road would result in significant adverse impacts to the Refuge, including among others, the loss, degradation, and fragmentation of habitat in the Refuge; decreases in biodiversity; and fundamental changes to the hydrology of the Refuge, with corresponding severe impacts to wetlands and wildlife in the Refuge. While the Draft EA purports to assess the indirect and cumulative effects on the Refuge from the project, such assessment is wholly inadequate. Instead, an EIS must be prepared that will thoroughly assess the likely impacts on the Refuge and that will consider a range of alternatives.

Before turning to the significant, adverse impacts of the Proposed Road on the Refuge, the Refuge’s unique and complex ecosystem is discussed below.

1. *The Unique and Complex Ecosystem of Back Bay NWR*

The Report of John B. Gallegos (“Gallegos Report”), attached to these comments (“Exhibit A”), describes the unique characteristics of the Refuge and the significant adverse impacts to the Refuge that would occur as a result of the Proposed Parkway. Mr. Gallegos is a retired professional wildlife biologist with 40 years of experience with the Division of National Wildlife Refuges of the U.S. Fish and Wildlife Service (“USFWS”). For 24 years until his retirement at the end of December 2014, Mr. Gallegos was the senior wildlife biologist at the Refuge. He thus is intimately familiar with the Refuge’s ecological systems. In addition, in September 2021, Gallegos reviewed satellite imagery of the relevant parts of the Refuge, and he visited the Refuge in December 2021 to assess conditions within Refuge habitats adjacent to the City-owned ROW. Gallegos Rep. at 2. Based on his longstanding familiarity with the Refuge and expertise as a wildlife biologist, Gallegos concludes in his report that construction of the Proposed Parkway would have significant adverse impacts on Refuge resources, including the Black Gut Natural Area/Conservation Site and Black Gut, and would result in the substantial impairment of Refuge resources and undermine the purposes for which the Refuge was established. *See infra* Section II.B and Section III.A.

As described in the Gallegos Report, the Black Gut Natural Area/Conservation Site consists of well over 600 acres and encompasses extensive wetlands, including sensitive bald cypress wetlands and fresh-marsh habitats to the west and north of Sandbridge Road, and the open waters of Black Gut to the east.³ Because of the Refuge’s diverse array of high quality habitats and its “unique location mid-way along the Atlantic Coast,” the Refuge sustains “both

² The Natural Resources Technical Report to the Draft Environmental Assessment for the Proposed Parkway refers to the “Black Gut Conservation Site.” *See* NAT. RES. TECH. REP. at 22 & app. A, fig. 5-2, *included in* Draft EA, app. C at 122 of pdf & 143 of pdf. Refuge documents, however, including the 2010 Back Bay NWR Comprehensive Conservation Plan and the 2014 Back Bay NWR Habitat Management Plan refer to this area as the Black Gut Natural Area, as does the report of John B. Gallegos, attached hereto. To avoid confusion, these comments use the term “Black Gut Natural Area/Conservation Site.”

³ U.S. Fish & Wildlife Serv., Back Bay National Wildlife Refuge: Habitat Mgmt. Plan § 1.1 at 2 (Dec. 2014), <https://ecos.fws.gov/ServCat/DownloadFile/163820>. *See generally* Gallegos Rep. at 1–6. Maps #2 and #3 included in Appendix I to the Gallegos Report depict the location of the Black Gut Natural Area/Conservation Site.

northern and southern species at their geographic range limits.” Mr. Gallegos explains that the “close juxtaposition and overlap of habitat types” account for the overall “greater complexity and diversity of plant and wildlife species,” and that “the juxtaposition of bald cypress-black gum/tupelo-oak wetlands (collectively, ‘bald cypress swamp’) and freshwater marshes,” is especially valuable “because of the rareness of such habitat and the plant and wildlife species.” Gallegos Rep. at 3. For example, bald cypress swamps “support the highest number of neotropical bird species of all forested habitat types in the eastern United States.” Gallegos Rep. at 6 (citation omitted).

The Natural Resources Technical Report to the Draft EA acknowledges that the Virginia Department of Conservation and Recreation (“DCR”) ranks the “biodiversity significance” of the Black Gut Conservation Site as “B2 on a scale of B1-B5, with B1 being the most significant.” NAT. RES. TECH. REP. at 22, *included in* Draft EA, app. C at 122 of pdf. The technical report explains that “DCR Conservation Sites represent areas worthy of protection because of the natural heritage resources and habitat they support.” NAT. RES. TECH. REP. at 21, *included in* Draft EA, app. C at 121 of pdf. More recently, DCR’s Natural Heritage Program assessed and identified “natural lands” across the Commonwealth having at least 100 acres of interior cover and additional ecological integrity attributes (termed “Ecological Cores”). Based on five categories of ecological integrity, DCR ranked the Black Gut Conservation Site as “C2,” Very High.

As Mr. Gallegos states in his report, the “unique natural habitats, rare species, and outstanding diversity” of the Refuge, particularly the Black Gut Natural Area/Conservation Site, are “vital to the overall ecological integrity of the Back Bay NWR.” Gallegos Rep. at 5. As discussed below, the Proposed Parkway would have significant adverse impacts on the Refuge.

B. The Proposed Parkway Will Result in Significant Adverse Effects to Back Bay NWR.

1. *The Proposed Parkway Will Severely Impact the Complex Hydrology of the Back Bay Watershed and Significantly Affect Wetland Floral and Faunal Communities in the Refuge.*

As explained in the reports of Robert Young and John Gallegos, attached to these comments, construction of the Proposed Road would create a barrier to normal seasonal water fluctuations. *See* Gallegos Rep. at 12; Young Rep. at 5 (“Exhibit B”). The Back Bay watershed is influenced by wind driven, rather than lunar, tides, such that heavy winds from the south, primarily during the summer season, will push water to the north across wetlands and flood plains, while winds from the north have the opposite effect. As Mr. Gallegos explains: Depending upon wind direction and the corresponding wind tide, damming or ponding of water either north or south of the Proposed Parkway—with drying of areas on the leeward side—would occur” Gallegos Rep. at 12. Simply put, the Proposed Parkway will act as a dam or dike that will block the natural flow of water in the Refuge. *See also infra* Section IV.

The Draft EA, however, only looks at potential effects from stormwater runoff from the Proposed Road and fails to consider the complex hydrology of the watershed. But, by changing the way in which water moves across the Refuge, the Proposed Road would result in the substantial alteration of both surface and groundwater patterns. In turn, these fundamental

changes to the hydrological system would adversely impact wetland and floral and faunal communities in the Refuge, including in the Black Gut Natural Area/Conservation Site. *See Gallegos Rep.* at 12. Although the Indirect and Cumulative Effects Technical Report to the Draft EA refers to potential changes in wetland vegetation composition and hydrology, it does so only in the context of stormwater runoff. *See INDIRECT AND CUMULATIVE EFFECTS TECH. REP.* at 32, 34-35, *included in* Draft EA, app. C at 916, 919–20 of pdf.

In addition, the April 2019 scoping comments of Douglas G. Brewer, then Refuge Manager for the Back Bay NWR expressed similar concerns:

The raised roadbed [would] restrict both north and south flows, contributing to flooding in Ashville Bridge Creek, both upstream into Ocean Lakes and downstream in Back Bay. The wetland functions of the habitat surrounding Black Gut and adjacent to Ashville Bridge Creek are essential to the management of flooding at the north end of Back Bay. Isolation of these wetlands by the raised roadway decreases the flood storage capabilities of the area and will exacerbate existing storm water and wind-tide related flooding.⁴

Mr. Brewer also noted that “[a]lterations of the natural hydrological fluctuations can negatively impact unique floral and faunal communities on the Refuge, especially in the Black Gut Natural Area, and run counter to [Refuge] restoration efforts.” *Id.* at 2.

Clearly, there is no basis for the conclusion in the Indirect and Cumulative Effects Technical Report that “indirect impacts to wetlands are anticipated to be minor.”⁵ Instead, an EIS must be prepared that will fully examine the significant adverse impacts on the Refuge from the Proposed Parkway.

2. *The Proposed Road Would Result in Significant Loss and Fragmentation of Refuge Habitat.*

As discussed below, the Draft EA includes several, general statements regarding potential loss and fragmentation of habitat in the Refuge, and resulting impacts to wildlife. For example, the Draft EA notes that “[l]oss of wildlife habitat types” within the Refuge “may include” forested uplands [and] forested wetlands,⁶ among other types of habitat, and that “[i]ndividuals, including birds, mammals, reptiles, and amphibians, may be displaced and lose nesting, breeding, hibernation, or foraging habitat.” Draft EA at 47. In addition, the Draft EA acknowledges that the Proposed Parkway “would act as a barrier furthering fragmentation of the habitats north and south of the corridor,” *id.* at 72, and that habitat fragmentation “can have

⁴ Scoping Comments of Douglas G. Brewer, Manager of Back Bay NWR, to Ryan Johnson, City of Virginia Beach, on Proposed Nimmo Parkway Phase VII-B at 2 (30 April, 2019) [hereinafter Refuge 2019 Scoping Comments], *included in* Draft EA, app. D at 50-52 of pdf.

⁵ *See* INDIRECT AND CUMULATIVE EFFECTS TECH. REP. at 34, *included in* Draft EA, app. C at 919 of pdf.

⁶ Apart from the significant indirect (and cumulative) impacts on Refuge wetlands, the Proposed Road would also directly impact other wetlands. As the Draft EA notes that the Proposed Road would result in “direct, permanent impacts to approximately 9.7 acres of jurisdictional waters and wetlands, consisting of 2.3 acres of PEM wetlands [palustrine emergent wetlands], 7.2 acres of PFO wetlands [palustrine forested wetlands], 0.1 acre of POW [palustrine open water], and 0.1 acre of jurisdictional ditches.” Draft EA at 43 (citing Table 15). Other than noting these wetlands types, the Draft EA does not discuss the significance of such impacts.

wide-ranging indirect effects to sensitive wildlife including changes in species, lower diversity, separation of populations, disruption to wildlife movements and reduced biological diversity,” *id.* at 78. Similarly, the Draft EA states that “[f]ragmentation could affect nesting songbirds who require large tracts of land and could affect movement of reptiles, amphibians, and small and large mammals by both creating a barrier and through roadway avoidance.” Draft EA at 72.

Despite acknowledging such potential impacts, the Draft EA simply brushes them aside, without any analysis, based on the unsubstantiated notion that there is “widespread availability of such habitats in the project vicinity,” and therefore the “loss of these habitats would not result in substantial population level impacts to wildlife.” *Id.* at 71. Further, the Draft EA baldly asserts:

There is currently approximately 1,200 acres of contiguous undeveloped land north of the City of Virginia Beach right-of-way comprised of BBNWR, Naval Air Station Oceana Dam Neck, Hampton Roads Sanitation District property and private holdings, and approximately 1,700 acres of BBNWR habitat south of the City of Virginia Beach [ROW] and east of Sandbridge Road, consisting of wooded, marsh, and open water habitats. The acreage of potential loss of habitat as a result of the [Proposed Parkway] represents approximately 1 percent of the contiguous habitat surrounding the project.⁷

Id. at 71-72.

Such rationalization “is fundamentally unsound,” as Mr. Gallegos states in his report. The Draft EA erroneously assumes in effect that “habitat in one location is the same as habitat in another location.” Gallegos Rep. at 8. That is certainly not the case. Critically, the Draft EA makes no attempt to assess the characteristics, functions, and values of the habitat that the Draft EA presumes, without any support, is “widely available,”⁸ or to compare such habitat with Refuge areas that would be impacted by the Proposed Road, including the unique bald cypress swamp. *See* Gallegos Rep. at 8-10. Moreover, as Gallegos states in his report (and discussed *infra*) the notion that “population level impacts to wildlife” would not be substantial, *see* Draft EA at 71, “is contrary to established principles of wildlife population dynamics and habitat carrying capacities.” Gallegos Rep. at 11.

Further, the Refuge lands surrounding the City ROW “comprise the largest contiguous forested area in the Back Bay watershed,” and most are included in the Black Gut Natural Area/Conservation Site. *Id.* at 9. The large, unfragmented forest and marshes of the Black Gut Natural Area/Conservation Site serve as “critical stopover locations for neotropical migratory songbirds and migrating shorebirds.” *Id.* at 10 (citation omitted). In addition, bald cypress swamps “support the highest number of neotropical bird species of all forested habitat types in the eastern United States.” *Id.* at 6 (citation omitted). However, population numbers of many of these bird species have plummeted over the last several decades, *see id.* at 6, and forest fragmentation is “a major cause of population decline for forest nesting birds that prefer large tracts.” *Id.* at 10. As Mr. Gallegos indicates in his report, fragmentation of the wetlands habitat

⁷ This rationalization is repeated at several places in the Draft EA and in the Natural Resources Technical Report. *E.g.*, Draft EA at 47, 71-72, 78; NAT. RES. TECH. REP. at 26, *included in* Draft EA, app. C at 126 of pdf.

⁸ The Draft EA merely notes that habitat south of the City ROW and east of Sandbridge Road contains “wooded, marsh, and open water habitats.” Draft EA at 72.

in the Refuge as a result of the Proposed Road would negatively impact wetland-dependent bird species, particularly those that, during their migrations, breed or otherwise use the wetlands and wooded habitats of the Black Gut Natural Area/Conservation Site. *Id.* at 10. The Proposed Parkway would not only fragment and degrade valuable habitat in the Refuge for avian species but also for species that prefer the “large, contiguous wooded and emergent marsh habitats of the type found in the Refuge.” *Id.* at 10.⁹

With respect to the bald cypress swamp in the Refuge east of Ashville Bridge Creek, the Draft EA asserts, without discussion, that “[s]ensitive bald cypress swamp community would be avoided to the extent possible,”¹⁰ and that impacts from the Proposed Road “would be minimized to the maximum extent practicable.”¹¹ According to the Natural Resources Technical Report, “the length of the bridge” that would span the bald cypress swamp was designed “to minimize impacts to the swamp.” NAT. RES. TECH. REP. at 3, *included in* Draft EA, app. C at 103 of pdf. The Draft EA and technical reports do not explain, however, how, or to what extent, the “length of the bridge” would do so. Nor is there any relevant discussion about how the bridge would be constructed or even any clear indication of the height of the bridge. *See* Gallegos Rep. at 9. In addition, the Draft EA gives no indication as to the number of bald cypress trees that would be removed or the impacts on bald cypress trees left standing, including whether such trees would be “topped” in future. Nor does the Draft EA discuss the impacts on remaining bald cypress trees as a result of shading from the bridge. As Mr. Gallegos indicates, bald cypress trees “do not tolerate shade well.” *Id.* at 9. The Draft EA, however, merely notes in passing that impacts to this habitat “would likely include” shading from the Ashville Bridge Creek crossing, Draft EA at 43, without any analysis of the significance or extent of such impacts.

3. *The Proposed Parkway’s Severing of Existing Wildlife Corridors Would Have Significant Adverse Effects on Wildlife.*

The Draft EA acknowledges that the Proposed Road “could affect existing wildlife movement patterns as a result of a new east-west barrier, inhibiting movement north-south.” Draft EA at 71. But, here again, rather than analyze these impacts, the Draft EA points instead to possible “minimization” measures, such as “landscape maintenance measures,” “adaptive lighting,” and the possible “installation of wildlife crossings using small diameter concrete pipe . . . to accommodate movement of small mammals and amphibians.” *Id.* at 47. As to the “wildlife crossings,” the Draft EA, with no analysis, simply asserts that the “crossings would minimize the impact of fragmentation and limit the impact of fragmentation and limit roadway mortality.” *Id.* Clearly, the possible “wildlife crossings” under consideration would be of no use to larger mammals such as bobcats and deer. Nor is there any discussion of how and whether the “small mammals and amphibians” would even find these crossing—let alone the effectiveness of

⁹ The 2019 Refuge Scoping Comments likewise noted that “forest fragmentation [could be] expected to reduce or extirpate declining migratory bird species and land mammals, including the rare and native Bobcat, that require large, forested tracts.” Refuge Scoping Comments at 2, *included in* Draft EA, app. D at 51 of pdf.

¹⁰ Draft EA, tbl.7 at 24.

¹¹ Draft EA at 71.

such possible crossings.¹² See Gallegos Rep. at 11. Instead, the wildlife crossings would do little, if anything, to counter the significant impacts on wildlife that would occur as a result of the Proposed Road.

As Mr. Gallegos states in his report, potential impacts on bobcats are of particular concern:

Refuge habitats to the north and south of Sandbridge Road support the only known population of bobcats in the larger area. The City-owned ROW runs right through the heart of the bobcats' territories. I am concerned that construction of the Proposed Parkway would magnify the risk to the bobcat population and could lead to the extirpation of this unique species.

Gallegos Rep. at 14.

More broadly, as Mr. Gallegos explains, the permanent severance or disruption of the north-south wildlife corridors from the Proposed Road—particularly in the Black Gut Natural Area/Conservation Site—“would likely lead to overcrowding of wildlife populations into remnant habitats, resulting in the eventual degradation of those Refuge habitats as they are stripped of available foods, vegetation, and nesting cover by overcrowded wildlife.” *Id.* at 13 (citation omitted). By inhibiting or limiting the ability of wildlife “to travel to and from feeding, watering, sleeping/resting, and breeding areas north and south of the City-owned ROW,” some “wildlife populations would likely become isolated.” *Id.* at 13. This in turn would “limit[] their natural dispersal processes,” leading to the loss of “healthy, genetic diversity of affected wildlife populations.” *Id.* (citations omitted). As stated earlier, the assumption that other habitats north and south of the City corridor are “widely available” to wildlife that may be displaced by the Proposed Parkway is contrary to “basic principles of wildlife population dynamics and habitat carrying capacities.” *Id.*

In fact, as Mr. Gallegos notes, the existing Sandbridge Road demonstrates some of the impacts on wildlife and habitat that would occur from construction of the Proposed Parkway. Sandbridge Road has created “a physical barrier to wildlife” north and south of the road, thus “reducing the quality of wildlife habitats adjacent to it.”¹³ Gallegos Rep. at 13. As a result, “the area of the Refuge adjacent to Sandbridge Road is considerably less biologically diverse than the Refuge areas surrounding the City-owned ROW.” *Id.* Mr. Gallegos concludes that the Proposed Parkway, by severing or disrupting the north-south wildlife corridors, “would place those wildlife populations under serious duress,” ultimately leading to the serious impairment of “the normal biological functions of resident wildlife.” *Id.* at 14. Clearly, the placement of a few wildlife culverts for small mammals and amphibians, as well as the other “minimization”

¹² The Draft EA also notes that “[t]hese types of dry culverts have been reported as effective, primarily for small mammals, in states utilizing these structures (NCHRP 2002),” Draft EA at 47; NAT. RES. TECH. REP. at 27, *included in* Draft EA, app. C at 127 of pdf. But as Mr. Gallegos points out in his report, the document that the Draft EA cites for support simply offers general guidance and a framework for identifying indirect effects and developing potential minimization or mitigation strategies. It does not support an assumption that the potential use of small culverts here would be effective. Gallegos Rep. at 11.

¹³ The 2019 Refuge Scoping Comments also note that the Proposed Road would “limit the natural movements of wildlife that are important to maintaining biodiversity and conserving potentially at-risk species.” Scoping Comments at 2, *included in* Draft EA, app. D at 51 of pdf.

measures to which the Draft EA refers, are inadequate to address these major threats to existing wildlife populations. *See id.*

4. *The Proposed Parkway Will Result in the Spread of Invasive Species, Including Phragmites Reed, into Refuge Wetlands.*

Ecologically significant wetlands in the Refuge would also be adversely affected by the likely spread into the Refuge of invasive species, particularly Phragmites reed (*Phragmites australis*) from construction of the Proposed Parkway. Phragmites easily establishes in wetland areas located along road corridors, and it then quickly spreads into nearby, adjacent wetlands, “create[ing] a monoculture that eliminates the healthy biodiversity of . . . wetlands.” Gallegos Rep. at 15. Indeed, Refuge wetlands adjacent to Sandbridge Road provide a cautionary tale. Phragmites and another invasive plant species, the narrow-leaved cattail (*Typha angustifolia*), now “dominate wetlands along both sides of Sandbridge Road and have steadily expanded to the north and south of this road,” despite “extensive control efforts” undertaken annually by Refuge personnel “to try to reduce the spread and presence of Phragmites in Refuge wetlands.” *Id.* at 15.

The proliferation of Phragmites in Refuge wetlands along Sandbridge Road is clearly relevant to the possible effects from the Proposed Parkway on the highly valuable wetlands in the Refuge adjacent to the ROW. Yet the Draft EA does not even mention these impacts to Refuge resources from Sandbridge Road. Moreover, with respect to the impacts from construction of the Proposed Parkway specifically, the Indirect and Cumulative Effects Technical Report to the Draft EA merely notes that “the potential for the establishment of . . . terrestrial invasive species during construction of the project would be minimized by following provisions in the [Virginia Department of Transportation’s (“VDOT’s”)] Road and Bridge Specifications.” INDIRECT AND CUMULATIVE EFFECTS TECH. REP. at 37, *included in* Draft EA, app. C at 921 of pdf. Plainly, unspecified “minimization” measures cannot substitute for an assessment in the first instance of the likely spread of Phragmites into the Refuge.

Mr. Gallegos’ observations in his report, based on his review of satellite imagery in September 2021 and his visit to the Refuge in December 2021, also underscore the need for a thorough assessment of the likely spread of Phragmites into the Refuge from the Proposed Parkway. He states that, prior to his retirement at the end of 2014, he observed only a “small Phragmites stand” in the City-owned ROW, but that, during the December 2021 site visit, he found that this small stand had “expanded into several small ponds in the ROW’s western end and into the Refuge’s bald cypress swamps to the north and south of the ROW.” Gallegos Rep. at 16. By disturbing more wetland acreage, construction of the Proposed Parkway will result in the further dispersal of Phragmites into these areas, significantly impact these highly sensitive and valuable wetlands.

5. *The Draft EA Fails Adequately To Assess the Potential Impacts on Federally Threatened and Endangered Bat Species from the Proposed Road.*

Under NEPA, in assessing whether the effects of a proposal may significantly affect the environment, “agencies should consider . . . the affected area . . . and its resources, such as listed species and designated critical habitat under the Endangered Species Act. 40 C.F.R. § 1501.3(b)(1) (2022). Federal agencies also have an independent obligation under section 7 of

the Endangered Species Act (“ESA”) to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification” of designated critical habitat. 16 U.S.C. § 1536(a)(2). Under the ESA regulations, formal section 7 consultation is required when an “action may affect listed species or critical habitat.” 50 C.F.R. § 402.14(a).

Here, two federally listed bat species, the northern long-eared bat (*Myotis septentrionalis*) (“NLEB”) and the Indiana bat (*Myotis sodalis*), may be present in the Refuge or Refuge vicinity. The Indiana bat is a federally listed endangered species. While the NLEB is currently listed as a threatened species under the ESA, the USFWS issued a proposed rule in March 2022 to reclassify the NLEB as an endangered species. See 87 Fed. Reg. 16,442 (23 Mar. 2022). In the press release on the proposed rule, the USFWS stated that it “will announce [its] final decision in November 2022.”¹⁴ U.S. FISH & WILDLIFE SERV., *Service Proposes to Reclassify Northern Long-Eared Bats as Endangered* (22 Mar. 2022), <https://www.fws.gov/press-release/2022-03/proposal-reclassify-northern-long-eared-bat-endangered>.

With respect to the NLEB, the Draft EA and accompanying technical reports state that “there are no confirmed observations of the protected NLEB within the study area,”¹⁵ and that “indirect impacts” to the NLEB therefore “are unlikely.”¹⁶ Draft EA at 78. However, these documents do in fact acknowledge the possibility that the NLEB may be present. The Draft EA states that the “USFWS IPaC database . . . indicates . . . [the] potential for the federally threatened northern long-eared bat [NLEB],” Draft EA at 49, and the Indirect and Cumulative Effects Technical Report acknowledges that “summer populations of the NLEB could be supported in forested habitats within and surrounding” the study area, INDIRECT AND CUMULATIVE EFFECTS TECH. REP. at 27, *included in* Draft EA, app. C at 911 of pdf.¹⁷ In addition, the Draft EA notes that “habitat loss could indirectly impact the NLEB . . . through the fragmentation of suitable forage and summer roost habitat should [this] species be present.”¹⁸ Draft EA at 78.

¹⁴ The USFWS was required under a court order to reconsider the NLEB’s status, and it must finalize its determination regarding the NLEB’s status by the end of November 2022. See *Ctr. for Biological Diversity v. Everson*, Civ. Action No. 15-477, Order at 6 (D.D.C. 1 Mar. 2021) (requiring FWS to issue a final listing determination for the NLEB within 18 months of completion of the Species Status Assessment for the NLEB, anticipated to be completed in May 2021).

¹⁵ Draft EA at 78; see also INDIRECT AND CUMULATIVE EFFECTS TECH. REP. at 27, *included in* Draft EA, app. C at 911 of pdf.; Draft EA at 78.

¹⁶ Draft EA at 78.

¹⁷ The Natural Resources Technical Report also indicates that “[n]o known occurrences of [the NLEB] have been documented within the Study Area, although habitat may be present. Threatened or endangered species habitat is considered a value of the large contiguous forested wetland areas within the Study Area.” NAT. RES. TECH. REP. at 11, *included in* Draft EA, app. C at 111 of pdf.

¹⁸ The Natural Resources Technical Report also refers to the 2016 ESA Final 4(d) rule for the NLEB, and the Biological Opinion issued concurrently. Based on this rule and the Biological Opinion, the Technical Report concludes that any “tree removal activities” from construction of the Proposed Road “are anticipated to be exempted from [ESA] take prohibitions,” because of the lack of any known hibernaculum or known occupied maternity roost with certain specified distances of the proposed road. NAT. RES. TECH. REP. at 32, *included in* Draft EA, app. C at 132 of pdf. This Technical Report, however, predates the USFWS’s proposed March 2022 rule to list the NLEB as an endangered species. In the event the proposed rule becomes final, the reclassification of the NLEB would remove the species specific 4(d) rule for the NLEB.

Regarding the endangered Indiana bat, the Draft EA does not mention this bat species. But the documents from Dominion Energy and Kitty Hawk Wind, LLC to the Bureau of Ocean and Energy Management (“BOEM”) for their respective offshore wind projects indicate that both the NLEB and the Indiana bat may well be present near or within the Refuge. The statements in the “Constructions and Operations Plan” (“COP”) for the Kitty Hawk Wind project are particularly relevant here because Kitty Hawk Wind, LLC proposes to use the same City-owned corridor for its onshore transmission route as the City proposes to use to construct the Proposed Parkway. According to the Kitty Hawk COP, “the [NLEB] and Indiana bat are the two federally protected bat species likely to occur in or near the review area. Use of the area has been reported at different seasonal peaks.”¹⁹ In addition, the COP indicates that Indiana bats “were noted to use the area as a migratory/winter refugium while northern long-eared bats tended to use the area during the maternity season, and recently during the winter but likely present year-round.”²⁰

Dominion’s COP for its proposed offshore wind project is also relevant. The COP indicates that there are several known maternity roosts of the NLEB within two miles of the “Onshore Project Area,”²¹ and with “records of maternity colonies of [NLEBs] occurring at Naval Auxiliary Landing Field Fentress” adjacent to Dominion’s proposed onshore interconnection cable routes.²²

Based on the information set forth above, the Proposed Parkway may significantly affect the NLEB and the Indiana bat. Therefore, an EIS must be prepared that will thoroughly evaluate the potential effects on the NLEB and the Indiana bat along with other significant adverse impacts described in these comments.²³

Moreover, given the potential reclassification of the NLEB as an endangered species, Federal Highway Administration (“FHWA”) should begin formal consultation under ESA section 7 with the USFWS regarding potential impacts on the NLEB. *See* 50 C.F.R. § 402.11(a). The statement in the Draft EA that “[c]oordination with the USWFS will occur” regarding the

¹⁹ Kitty Hawk Construction and Operations Plan, ch. 5, § 5.3.1.1 at 36, *available at* <https://www.boem.gov/renewable-energy/state-activities/kitty-hawk-wind-construction-and-operation-plan-commercial-lease>.

²⁰ Kitty Hawk Wind also notes that “[r]esearch suggests woody wetlands along the coastal plain are important habitat for both species.” Kitty Hawk COP, ch. 5, § 5.3.1.1 at 36, *available at* <https://www.boem.gov/renewable-energy/state-activities/kitty-hawk-wind-construction-and-operation-plan-commercial-lease>. Certainly, the Black Gut Natural Area/Conservation Site includes this type of habitat.

²¹ Dominion defines the “Onshore Project Area” to include the onshore landing location in Virginia Beach, onshore export cables to Harpers Road in Virginia Beach, a switching station either south of Harpers Road or north of Princess Anne Road, and interconnection cables along one of several proposed routes from the switching station to Dominion’s existing Fentress Substation located in Chesapeake, Virginia. *See* Dominion Construction and Operations Plan (“COP”) at 1-3, ch. 5, § 5.3.1.1 at 36, *available at* <https://www.boem.gov/renewable-energy/state-activities/kitty-hawk-wind-construction-and-operation-plan-commercial-lease>.

²² Dominion COP at 4-168 & Table 4.2-10 at 4-167. Dominion also states that recent studies (2017, 2018, 2020) have documented the presence of Indiana bats in the coastal plain of Virginia. *See* Dominion COP, tbl.4.2-10 at 4-167 & 4-168-4-169.

²³ Mr. Gallegos notes in his report that, given the possible presence of both the NLEB and the Indiana bat near or within the Refuge, “at a minimum, surveys should be conducted to ascertain the likely presence of these bat species.” Gallegos Rep. at 15.

NLEB at some unspecified “subsequent permitting phase,” Draft EA at 50, cannot satisfy the agency’s obligation under the ESA to initiate formal consultation.

6. *The Proposed Parkway Would Have Significant Adverse Impacts on Water Quality in the Refuge as a Result of Increased Pollution from the Road.*

The technical reports to the Draft EA note that construction of the Proposed Road “would introduce impervious surface to an otherwise undeveloped area,” NAT. RES. TECH. REP. at 28, *included in* Draft EA, app. C at 128 of pdf, and could “increase the total volume and duration of runoff discharged to streams located in and downstream of the direct impact areas,” INDIRECT AND CUMULATIVE EFFECTS TECH. REP. at 34, *included in* Draft EA, app. C at 918 of pdf. However, without analyzing the potential impacts to the Refuge, the Draft EA and technical reports simply conclude that, because stormwater management measures “would be implemented to minimize water quality impacts,” indirect impacts to wetlands “are anticipated to be minor.” *See id.* at 34-35.²⁴ But as the Indirect and Cumulative Effects Technical Report indicates, runoff from the Proposed Road “would sheet flow through conserved open space in the [ROW] and into the surrounding wetlands, where applicable.” INDIRECT AND CUMULATIVE EFFECTS TECH. REP. at 34, *included in* Draft EA, app. C at 918 of pdf. Given the coastal storms and heavy wind driven tides affecting the Refuge, *see infra* Section IV.A., however, pollutants from the road, such as oil, gas, sediment, nutrients, and the like could well “sheet flow” and likely be carried “into the surrounding wetlands” of the Black Gut Natural Area/Conservation Site and Black Gut. *See also* Gallegos Rep. at 16-17.

7. *The Draft EA Fails to Address Significant Cumulative Impacts on the Refuge.*

Under NEPA, an agency must evaluate the potential direct, indirect, and cumulative impacts of a proposal. 40 C.F.R. § 1508.1(g)(1)–(3) (2022). Cumulative effects are:

effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.1(g)(3) (2022).

Contrary to these requirements, the Draft EA completely fails to assess the cumulative effects on the Refuge from the Proposed Road and “other . . . reasonably foreseeable actions.” One glaring omission is the Draft EA’s failure to consider the effects from construction of the Nimmo Parkway Phase VII-A, scheduled to begin in “spring/summer 2022.”²⁵ The Proposed Road would connect to Phase VII-A at that road’s eastern end. The effects from Phase VII-B, described above, would be magnified with the construction of Phase VII-A. Taken together,

²⁴ *Accord* Draft EA at 48; NAT. RES. TECH. REP. at 28, *included in* Draft EA. app. C at 128 of pdf.

²⁵ *See* CITY OF VA. BEACH, 2.078.000: Sandbridge Road-Nimmo Phase VII-A, <https://cipstatus.vbgov.com/ProjectDetail.aspx?id=1602> (last visited 23 June 2022).

these two “phases” would constitute a roughly 2.0-mile expanse that would cut across the Refuge, amplifying the significant adverse impacts on the Refuge from the Proposed Road.

In addition, the Draft EA fails to consider the cumulative effects from the Proposed Parkway and Kitty Hawk Wind, LLC’s proposal to use the same City-owned ROW as the onshore transmission route for its offshore wind project. The Draft EA merely notes the “future potential that the Nimmo Parkway VII corridor [ROW] may be utilized as a transmission corridor for electric utility lines associated with the Kitty Hawk Offshore Wind Project.” Draft EA at 80. But instead of analyzing the potential cumulative effects of the two projects, the Draft EA states that the offshore wind project is “not considered ‘reasonably foreseeable,’ as the project is not funded or imminent.” *Id.* Kitty Hawk Wind’s pending offshore wind project, with its voluminous 2021 Construction and Operations Plan, however, provides sufficient basis for an analysis of the likely cumulative effects of the Kitty Hawk project to proceed. Notably, the City-owned ROW is the only onshore transmission route that Kitty Hawk Wind proposes in its Construction and Operations Plan.²⁶

The September 2021 scoping comments submitted by the Acting Refuge Manager of the Back Bay NWR on the Kitty Hawk offshore wind project underscores the need to analyze the cumulative effects from the project in this case. As stated in those scoping comments: “The risks associated with the installation, operation, maintenance and capital upgrades of the planned onshore transmission line route, as shown in the July 26, 2021 Construction and Operations Plan, include potential environmental impacts that present conflicts to the mission of the [USFWS], the purposes for the establishment of Back Bay NWR and Refuge management objectives.”²⁷

C. The Draft EA Fails Adequately to Consider Feasible Alternatives That Would Have Considerably Lesser Impacts on Back Bay NWR.

The Draft EA looks only at a no action alternative (the “No Build” or “No Action Alternative”) and the Proposed Parkway (“Build Alternative”). In the context of its section 4(f) evaluation, the Draft EA rejects a “Build Alternative along the existing Sandbridge Road,” stating that, although such alternative “would be feasible,” it “would not avoid direct impacts” to the Refuge. Draft EA at 72. As an initial matter, the Proposed Parkway itself likely constitutes a “use” of Back Bay NWR under section 4(f) of the U.S. Department of Transportation Act. *See infra* Section III. When assessing the relative impact of these two alternatives, it is clear that an alternative that utilizes existing Sandbridge Road would have a lesser impact on the Back Bay NWR than an alternative that utilizes the City-owned ROW (*i.e.*, the Proposed Parkway). As Mr. Gallegos indicates, the earlier construction of Sandbridge Road has already adversely affected Refuge resources adjacent to the road, with the result that “this area of the Refuge is significantly less biologically diverse than the Refuge areas surrounding the City-owned ROW.” Gallegos Rep. at 17. *See also* 2019 Refuge Scoping Comments at 2 (“Sandbridge Road improvement alternative presents the least negative environmental impacts, since that corridor and associated disturbances already exist.”).

²⁶ *See, e.g.*, Kitty Hawk COP, ch. 3, § 3.2.2.1 at 9.

²⁷ Letter from Kathryn Owens, Acting Refuge Manager for the Back Bay National Wildlife Refuge, to Kitty Hawk COP, EIS Program Manager, Bureau of Ocean Energy Management [“BOEM”] at 1 (8 Sept. 2021) (attached hereto as Attachment 1).

The Back Bay NWR’s September 2021 scoping comments to BOEM on the Kitty Hawk offshore shore wind project also “strongly urge further evaluation of an alternate onshore route that excludes the path that includes the City of Virginia Beach property located between Sandbridge Road and Atwoodtown Road, which is bordered on both sides by the Refuge.”²⁸ In addition, the comments indicate that the “[n]egative impacts to the Ashville Bridge Creek and Black Gut Natural Area vicinities in this part of the Refuge are of special concern due to their undisturbed, unique and sensitive habitats.”²⁹

Moreover, as discussed more fully elsewhere in these comments, *see infra* Section V.C., the Draft EA also dismissed a Sandbridge Road alternative based on studies that were done two decades ago. Such outdated studies cannot justify the failure to consider Sandbridge Road as an alternative. *See, e.g., W. Watersheds Project v. Abbey*, 719 F.3d 1035, 1052 (9th Cir. 2013) (citation omitted) (finding alternatives analysis insufficient where agency “relie[d] on old data without showing that the data remained accurate”); *Pub. Emps. for Env’t Resp. v. U.S. Fish & Wildlife Serv.*, 177 F. Supp. 3d 146, 156 (D.D.C. 2016) (rejecting agency’s claim that alternatives previously considered in an earlier EIS sufficed, on the grounds that a “ten-year-old assessment of alternatives . . . would not account for” the change in circumstances that had occurred in the intervening period). *See also Hausrath v. U.S. Dep’t of Air Force*, 491 F. Supp. 3d 770, 798, 800 (D. Idaho 2020) (stating that agency was merely “going through the motions” in failing to consider alternatives other than a no-action and preferred alternative).

III. THE PROPOSED PARKWAY WOULD RESULT IN THE CONSTRUCTIVE USE OF BACK BAY NWR UNDER SECTION 4(F) AND THE RELATIVE HARM TO THE REFUGE OF ALTERNATIVES MUST BE EVALUTED.

The Draft EA asserts that the Proposed Parkway would not “use” Back Bay NWR within the meaning of Section 4(f) of the U.S. Department of Transportation Act, as amended. 49 U.S.C. § 303; 23 U.S.C. § 138. However, given the significant impacts the Proposed Parkway would have on wildlife, wildlife habitat, and hydrology, it is clear that the project would substantially impair—and therefore constitute a constructive use of—Back Bay NWR.

Since the Proposed Parkway would result in the constructive use of Back Bay NWR and there may be no prudent and feasible alternative that does not use the Refuge, Section 4(f) requires FHWA to select the alternative that will result in the least overall harm to the Refuge. Notably, the USFWS has historically opposed the Proposed Parkway and the April 2019 scoping comments of Douglas G. Brewer, then Refuge Manager for the Back Bay NWR, noted that the “Sandbridge Road improvement alternative presents the least negative environmental impacts, since that corridor and associated disturbances already exist.”³⁰ FHWA must therefore take a hard look at an alternative that would improve Sandbridge Road. Such a proposal would likely require the use of Back Bay NWR property through the acquisition of additional ROW, but it also would undoubtedly result in less overall harm to the Refuge than constructing an entirely

²⁸ Letter from Kathryn Owens, Acting Refuge Manager for the Back Bay National Wildlife Refuge, to Kitty Hawk COP, EIS Program Manager, Bureau of Ocean Energy Management at 1 (8 Sept. 2021) (Attachment 1).

²⁹ *Id.*

³⁰ Scoping Comments of Douglas G. Brewer, Manager of Back Bay NWR, to Ryan Johnson, City of Virginia Beach, (Apr. 30, 2019), *included in* Draft EA, app. D at 50–52 of pdf.

new roadway through an extremely important area of forested and wetland habitat. Gallegos Rep. at 17 (Exhibit A).

A. The Proposed Parkway Would Result in the Constructive Use of Back Bay NWR.

Under Section 4(f), federal transportation programs or projects that use “publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction of the park, area, refuge, or site)” may only be approved if FHWA finds: “(1) there is no prudent and feasible alternative to using that land; and (2) the program includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.” 49 U.S.C. § 303(c). Section 4(f) therefore acts as a thumb on the scale against using protected lands for transportation projects.

The types of “use” recognized under Section 4(f) fall into two categories: direct use and constructive use. While a direct use results from the permanent incorporation or temporary occupancy of land from a Section 4(f) property, constructive use results from proximity effects, such as noise, visual, or environmental impacts, that substantially impair the protected features, activities, or attributes of the Section 4(f) property. 23 C.F.R. § 774.15(a). In this way, “[t]he term ‘use’ is to be construed broadly, not limited to the concept of a physical taking, but includes areas that are significantly, adversely affected by the project.”³¹ *Alder v. Lewis*, 675 F.2d 1085, 1092 (9th Cir. 1982). “An analogy can be drawn between” the determination of “use” in the context of Section 4(f) and the determination that a project “significantly affects the quality of the human environment” and requires an EIS under NEPA. *Id.*

The Draft EA asserts that the Proposed Parkway would not result in a direct use of Back Bay NWR because no additional ROW—either permanent or temporary—would be required to complete the project. Draft EA at 71. The Draft EA also contends that the Proposed Parkway would not result in a constructive use of Back Bay NWR due to minimization and mitigation measures. *Id.* at 73.³² Noting that there will be limited impacts on Back Bay NWR’s recreational resources, air quality, and noise levels, the Draft EA then points to general statements about landscaping maintenance, wildlife crossings, and adaptive lighting as mitigation measures that would “result in indirect impacts that are not adverse and not [sic] result in a constructive use.” *Id.* at 71–73. The Draft EA’s scant Section 4(f) evaluation of the Proposed Parkway, however, fails to account for significant impacts that the project would have on Back Bay NWR. These significant impacts would result in substantial impairment—and therefore constructive use—of the Refuge.

³¹ See also *Brooks v. Volpe*, 460 F.2d 1193, 1194 (9th Cir. 1972) (“The word ‘use’ is to be construed broadly in favor of environmental statements in cases in which environmental impact appears to be a substantial question.”).

³² “Per 23 [C.F.R. §] 774.15(e)(5), and the analysis presented above, there would not be an ecological intrusion that substantially diminishes the value of wildlife habitat, substantially interferes with the access, or substantially reduces the wildlife use of the BBNWR. Through minimization and mitigation measures, the Build Alternative would result in indirect impacts that are not adverse and not result in a constructive use. FHWA will make the final determination for impacts to Section 4(f) properties.” Draft EA at 73.

At the outset, the Draft EA fails to adequately identify the “activities, features, or attributes” of Back Bay NWR that qualify the property for protection under Section 4(f). This is a critical step in the Section 4(f) evaluation process and a necessary prerequisite to analyzing proximity impacts since constructive use of a Section 4(f) property “only occurs when the protected activities, features or attributes of the property are substantially diminished.” 23 C.F.R. § 774.15(a). Back Bay NWR is national wildlife refuge that was established “as a refuge and breeding ground for migratory birds and other wildlife.” Exec. Order No. 7909 (June 6, 1938). It “protect[s] valuable wintering waterfowl habitats, the estuarine system, and water quality,” and the Refuge’s objectives include the management of “migratory bird groups, including threatened and endangered species, shorebirds, wading birds, marsh birds and songbirds/landbirds.”³³ The “activities, features, or attributes” of particular significance to Back Bay NWR therefore involve the support of these bird and other wildlife populations.

Under the regulations implementing Section 4(f), constructive use occurs when

[t]he ecological intrusion of the project substantially diminishes the value of wildlife habitat in a wildlife and waterfowl refuge adjacent to the project, substantially interferes with the access to a wildlife and waterfowl refuge when such access is necessary for established wildlife migration or critical life cycle processes, or substantially reduces the wildlife use of a wildlife and waterfowl refuge.

23 C.F.R. § 774.15(e)(4).³⁴ A close review of Proposed Parkway’s impacts on Back Bay NWR shows that the project would result in a substantial ecological intrusion in each of these instances. The Draft EA, however, attempts to minimize the impacts of the Proposed Parkway by noting that “[t]he acreage of potential loss of habitat as a result of [the project] represents approximately [one] percent of the contiguous habitat surrounding the project.” Draft EA at 72. This kind of oversimplified quantification completely obscures both the value of the habitat being impacted and the severity of such impacts. In fact, FHWA has noted that constructive use determinations “are not conducive to standardized quantitative analysis” and instead require considerations of the “particular set of facts to provide context.” 73 Fed. Reg. 13368, 13387 (Mar. 12, 2008).

The wildlife habitat in the vicinity of the Proposed Parkway is both valuable and complex. As a whole, Back Bay NWR is “an extremely important area for biodiversity conservation in the mid-Atlantic region” due to “its diverse array of high-quality habitats that support a large concentration of rare species.” Gallegos Rep. at 2 (internal citations omitted). In particular, the Proposed Parkway would adversely impact a number of “priority habitats”³⁵ near

³³ U.S. FISH & WILDLIFE SERV., BACK BAY NATIONAL WILDLIFE REFUGE: HABITAT MGMT. PLAN § 1.2 at 2–3. (Dec. 2014), <https://ecos.fws.gov/ServCat/DownloadFile/163820>.

³⁴ It should be noted that this is a non-exhaustive list. There may be other instances when FHWA or FTA determines there has been substantial impairment—and therefore constructive use—of a Section 4(f) property.

³⁵ “Priority habitats” were identified in the 2014 Refuge Habitat Management Plan. See Gallegos Rep. at 3–. These priority habitats were designated through a process used to identify and prioritize resources of concern in Back Bay NWR. See BACK BAY NATIONAL WILDLIFE REFUGE: HABITAT MGMT. PLAN § 3 (Dec. 2014), <https://ecos.fws.gov/ServCat/DownloadFile/163820>. One of the priority habitats found adjacent to the project, the bald cypress swamp, “support[s] the highest number of neotropical bird species of all forested habitat types in the eastern United States.” Gallegos Rep. at 6.

where their close proximity and overlap “create unique ‘edge microhabitats’ which account for greater complexity and diversity of plant and wildlife species.” Gallegos Rep. at 3. The Proposed Parkway would also intersect the Black Gut Natural Area/Conservation Site, an extremely ecologically significant area within the Refuge. *Id.* at 4–7. DCR has documented rare wetland habitats, state-listed rare plants, rare insects, and rare bird species in the Black Gut Natural Area/Conservation Site, *id.* at 4–5, and has ranked the area as having one of the highest ecological integrity values in Virginia’s natural landscape. *See supra* Section II.A.1. Significantly, the Black Gut Natural Area/Conservation Site’s “unique natural habitats, rare species, and outstanding diversity are vital to the overall ecological integrity of Black Bay NWR.” Gallegos Rep. at 5.

The impacts of the Proposed Parkway on these habitats would be significant and would substantially diminish their value, especially in regard to species the Refuge protects. This in turn would substantially interfere with access to important habitat that various species need for migration or critical life cycle processes in the Refuge and would substantially reduce wildlife use of this area.

Significant changes in hydrology caused by the Proposed Parkway due to its damming effect would substantially impact important wetland plant and animal communities in Back Bay NWR. Gallegos Rep. at 16, Young Rep. at 5 (Exhibit B). *See supra* Section II.B.1 and Section VI.B. In “block[ing] the north-south changes of water across [the Refuge] outside of Ashville Bridge Creek and a couple of small conveyances,” the Proposed Parkway would divide the larger basin between North Bay and Lake Tecumseh into two smaller basins with different hydrological conditions. Young Rep. at 5. “Changing the way the water moves around, the depth of flooding, the duration of flooding and even the direction of flow would change the nature and viability of all natural resources within the larger project area,” *id.*, including by establishing drying in areas blocked by the Proposed Parkway that would lead to habitat degradation and the loss of species and biodiversity. Gallegos Rep. at 12.

In addition, the Proposed Parkway would sever the largest contiguous forested area in the Back Bay watershed. *Id.* at 9–10. Numerous studies have shown this type of fragmentation can “adversely affect[] avian and other species that depend on large, contiguous wooded habitats,”³⁶ and “forest fragmentation has been identified as a major cause of population decline for forest nesting birds that prefer large tracts.”³⁷ Gallegos Rep. at 10. Species that use the Black Gut Natural Area/Conservation Site’s wooded and wetland habitats to breed or to stop over during their migrations would be particularly impacted by fragmentation caused by the Proposed Parkway, as well as larger species, such as the bobcat “that prefer large, contiguous wooded and emergent marsh habitats.” *Id.*

Road fragmentation would also result in the introduction and/or spread of parasitic or invasive species. In particular, the continued spread of Phragmites, which takes hold in disturbed wetland areas and spreads rapidly, has the potential to significantly impact and substantially diminish the value of habitat around the Proposed Parkway. Phragmites chokes out

³⁶ In fact, the FWS acquired forested and marsh habitats to the north and south of Sandbridge Road in part to help preserve the large areas of contiguous habitat. Gallegos Rep. at 10.

³⁷ For example, nest predation and parasitism have been shown to increase with forest fragmentation. *Id.*

native plants, “eliminates small intertidal channels,” and destroys “pool habitats that offer natural refuge and feeding grounds for invertebrates, fish, amphibians, and waterbirds.” *Id.* at 15. Additionally, Phragmites debris can raise the marsh surface elevation more quickly than native marsh plants, creating a higher and drier marsh that is less hospitable to—and less frequently used by—native plant and animal species. *Id.*

Road fragmentation would also result in changes to terrestrial species’ activities, and changes in behavior to avoid the Proposed Parkway would limit natural dispersal processes, result in loss of genetic diversity and increase the potential for extirpation of localized populations or extinction of narrowly distributed species from catastrophic events. *Id.* at 13. It may also lead to population overcrowding in remaining habitats. *Id.* Although the Draft EA asserts that the City “is considering” possible measures such as landscape maintenance, wildlife crossings, and adaptive lighting to minimize the impacts of the Proposed Parkway, these measures, even if incorporated into the project, would not be adequate to address the impacts to wildlife. *See Gallegos Rep.* at 11; *supra* Section II.B.3.

Taking these impacts together, it is clear that the Proposed Parkway would result in an ecological instruction that would substantially diminish the value of wildlife habitat in the Refuge, substantially interfere with access to the Refuge for migration or critical life processes, and substantially reduce the wildlife use of the Refuge. These impacts therefore result in the Proposed Parkway substantially impairing, and constructively using, Back Bay NWR.

B. FHWA Must Assess the Relative Harm of Each of the Alternatives on Back Bay NWR.

Since the Proposed Parkway would constitute a constructive use of Back Bay NWR and there may be no feasible and prudent avoidance alternative to the use of the Refuge, Section 4(f) requires FHWA to select the alternative that would result in the “least overall harm” to the Section 4(f) property in light of the statute’s preservation purpose. 23 C.F.R. § 774.3(c)(1). Among other factors, FHWA must consider “[t]he relative severity of the remaining harm, after mitigation, to the protective activities, attributes, or features that qualify each Section 4(f) property for protection,” and “[t]he views of the official(s) with jurisdiction over each Section 4(f) property” when assessing the relative harm of various alternatives.³⁸ 23 C.F.R. § 774.3(c)(1).

As discussed above, the Proposed Parkway would have significant impacts on the Refuge that would result in the substantial impairment of the protected activities, features, or attributes of the Refuge.³⁹ And many of the impacts that would result from the development of the Proposed Parkway have already resulted in harm to the ecological resources within the portions

³⁸ Comparable mitigation measures should be developed where possible, meaning “the comparison may not be skewed by over-mitigating one alternative while under-mitigating another alternative.” FED. HIGHWAY ADMIN., SECTION 4(F) POLICY PAPER § 3.3.3.2 (Jul. 20, 2012),

<https://www.environment.fhwa.dot.gov/legislation/section4f/4fpolicy.aspx>. The selected alternative must also include all possible planning to minimize harm to Section 4(f) property. 23 C.F.R. § 774.3(c)(2).

³⁹ And for this reason, a constructive use can never be a *de minimis* impact. Am. Ass’n of State Highway Transp. Off., *Complying with Section 4(f) of the U.S. DOT Act* 12 (2009), <https://environment.transportation.org/wp-content/uploads/2021/05/pg11-1-lowres.pdf>; Fed. Highway Admin., *Section 4(f) Policy Paper*, Question 7A (Jul. 20, 2012), <https://www.environment.fhwa.dot.gov/legislation/section4f/4fpolicy.aspx>.

of Back Bay NWR that adjoin Sandbridge Road. Sandbridge Road has already fragmented the Refuge and impacted the wildlife habitat and hydrology in the vicinity of the road, and these impacts have resulted in the degradation of wildlife habitat, the proliferation of the invasive Phragmites and narrow-leaved cattail, and the introduction of noise and lighting impacts in the Refuge. Gallegos Rep. at 12, 15. These existing impacts may mean that use of the Refuge to improve the Sandbridge Road corridor would result in only *de minimis* impacts, since the additional impacts may not “adversely affect the features, attributes or activities qualifying the property for protection under Section 4(f).” 23 C.F.R. § 774.17.

Importantly, the USFWS has also recognized the destructive impact the Proposed Parkway would have on the refuge,⁴⁰ and the agency voiced opposition to the project during the project scoping process. Draft EA at 74. While improvements to Sandbridge Road would likely result in the direct use of some very small amount of the Refuge land through the acquisition of some additional ROW directly adjacent to the road, improvements to an existing road through the refuge would result in less harm than the development of an entirely new road through a portion of the refuge with extremely important wetland and forested habitat. Furthermore, improving Sandbridge Road would also present opportunities to minimize or mitigate the current impacts of the existing road on Back Bay NWR through improved design features.

* * *

FHWA must thoroughly analyze the various alternatives requiring the use of the Refuge in its Section 4(f) evaluation for the project. The Proposed Parkway would constitute a constructive use of Back Bay NWR given the significant impacts of the project that would result in the substantial impairment of the refuge. In balancing the relative harm of project alternatives, improvements to Sandbridge Road would result in less overall harm to the Refuge than the construction of an entirely new road through an extremely important portion of the refuge.

IV. THE PROPOSED PARKWAYS’S IMPACT TO FLOODING AND HYDROLOGY WOULD BE SIGNIFICANT AND WOULD HAVE SIGNIFICANT ADVERSE EFFECTS ON SURROUNDING PROPERTY AND NATURAL RESOURCES.

The Draft EA’s assessment of the Proposed Parkway’s effect on flooding and hydrology is deficient in significant respects. The Draft EA asserts in numerous places that the Proposed Parkway would not pose a substantial flooding risk or significantly impact hydrology. However, as discussed in the report from Dr. Robert S. Young attached to these comments as Exhibit B,⁴¹ the Draft EA fails to offer evidence that supports these conclusions, and the Proposed Parkway’s effect on flooding and hydrology—and the impacts resulting from those effects—would likely be significant. NEPA requires that the City, VDOT, and FHWA prepare NEPA documentation that properly evaluates these impacts.

⁴⁰ In fact, restoring large, unfragmented “core” areas has been a key part of forest habitat management in the Refuge, and USFWS has worked to limit the damaging impacts of Sandbridge Road by preserving large areas of contiguous forested habitat to the north and south of the road. Gallegos Rep. at 9–10.

⁴¹ Dr. Robert S. Young, *A Scientific Analysis of the Environmental Assessment: Nimmo Parkway Phase VII-B* (June 2022).

A. The Proposed Parkway Would Significantly Increase Flood Risk from Storm Surge and Wind Driven Flooding.

Section 1 (“Purpose and Need”) of the Draft EA briefly discusses existing flooding conditions in the vicinity of Sandbridge Road. It explains that wind driven flooding from Back Bay can overtop the roadway and cause it to become impassible, and it notes that “[w]hen a storm is present, the effects of the wind driven tide are exacerbated, often closing Sandbridge Road entirely.” Draft EA at 8. It also notes that “sea level rise . . . coupled with wind driven tides only exacerbate the threat of flooding in the future.” *Id.* at 10.

Of course, it is not just Sandbridge Road itself that is increasingly susceptible to flooding from wind driven flooding, coastal storms, and sea level rise. The residences, businesses, and natural resources located along the road and in the broader project area are also vulnerable to the same growing threat. The construction of the Proposed Parkway would increase these risks, and this serious concern must be credibly evaluated as part of the environmental review of this project. In fact, EPA raised similar concerns in an April 17, 2019, comment letter on the Proposed Parkway:

Given the known flooding issues in the area, the NEPA document should clearly explain how the proposal mitigates for additional risk of flooding. EPA recommends information be provided that addresses how the design plan accounts for current and projected (pre- and post-construction) hydrologic regime and how it may be impacted by the proposed project.⁴²

The Draft EA, however, has failed to do so, in violation of NEPA.

As discussed in the attached report from Dr. Young, a coastal geologist who directs Western Carolina and Duke Universities’ joint Program for the Study of Developed Shorelines, much of the Proposed Parkway would be located in a significant wetland floodplain. Young Rep. at 2. During typical precipitation events, much of the water in the vicinity of the project area is conveyed through Ashville Bridge Creek and other smaller conveyances such as ditches. However, when water levels are elevated due to wind driven tides or coastal storms generating storm surge, water moves across the wetland floodplain in this area as broad surface flow, usually in a northerly direction. Ashville Bridge Creek and the other smaller conveyances cannot convey all of the flow during these types of events. *Id.*

Construction of the Proposed Parkway would effectively place a large dam across this wetland floodplain. *Id.* When the project area is impacted by storm surge, strong wind tides, or other events generating surface flow, the Proposed Parkway would interrupt the movement of the water and raise the elevation of the surge or floodwater in areas south of the Proposed Parkway. *Id.* Further, as explained by Dr. Young, it is reasonable to anticipate that the Proposed Parkway would increase the surge from a moderate-sized storm by several feet, particularly in combination with the Nimmo Parkway Phase VII-A project (discussed below). This would increase storm surge and flooding for properties to the east (in the Sandbridge Community), the west (in the Lago Mar neighborhood), and the south of the Proposed Parkway, and Dr. Young

⁴² Scoping Comments of Barbara Okorn, EPA, to Ryan Johnson, City of Virginia Beach, on Proposed Nimmo Parkway Phase VII-B at 1 (Apr. 17, 2019), *included in* Draft EA, app. D at 44 of pdf.

concludes that the Proposed Parkway “would place homes and other private property at substantially greater risk from flooding and storm damage than they are under current conditions.” *Id.* at 1–3. This and other significant impacts must be studied and evaluated in an EIS.

The Draft EA asserts repeatedly that the Proposed Parkway would not pose a substantial flooding risk and that it would not substantially increase flood elevations, the probability of flooding, or the potential for property loss or hazard to life. *See* Draft EA at 25. However, as explained in Dr. Young’s report, the Draft EA provides almost no analysis to support this conclusion; it simply refers to a “[p]reliminary hydrologic and hydraulic analysis” that allegedly “showed no significant impact to hydrology . . . in the vicinity associated with the Build Alternative.” *Id.* at 44.

Upon request, the City provided a copy of this “preliminary hydrologic and hydraulic analysis” to SELC. Dr. Young reviewed the provided analysis and determined that it was limited to the hydrology of Ashville Bridge Creek. Young Rep. at 3. Therefore this makes the analysis irrelevant to assessing the potential impact of the non-bridged portion of the Proposed Parkway on storm surge or wind driven flooding. *Id.* Dr. Young explains that the data from the preliminary analysis referenced in the Draft EA do not support the Draft EA’s conclusion that the Proposed Parkway would not substantially increase flood elevations or flood risk in the project area; nor do the data alter his conclusion that the Proposed Parkway would, in fact, substantially increase the risk of flooding and flood damage during coastal storms and wind driven flooding events in the project area. *Id.*

In his report, Dr. Young also points out that the Draft EA fails to assess how the Proposed Parkway could exacerbate the risk of property damage from waves associated with storm surge. He explains how the elevated storm surge caused by the Proposed Parkway would allow waves to reach areas that they would not have previously reached, and how it would also enable larger waves within existing flood zones. Young Rep. at 3–4. Both of these factors create new risks for private property located near the Proposed Parkway, but the Draft EA does not assess these risks. Further, the Proposed Parkway is located within a FEMA Flood Zone AE, meaning that it could experience waves during storm surge that could significantly impact the earthen structure supporting the road. *Id.* at 4. The Draft EA also fails to assess this impact. The lack of assessment of these potentially significant impacts cannot satisfy NEPA.

Nor does the Draft EA assess the vulnerability of the Proposed Parkway itself to flooding during coastal storms. EPA recommended in its April 2019 comments on the Proposed Parkway that the Draft EA “include consideration of extreme weather events in particular in association with resiliency design.”⁴³ Dr. Young notes in his report that the National Oceanic and Atmospheric Administration’s Sea, Lake, and Overland Surges from Hurricanes (SLOSH) model indicate that a Category 3 hurricane occurring today would inundate the Proposed Parkway at its currently proposed elevation. Young Rep. at 6. Further, rising sea level means the Proposed Parkway would be flooded even during smaller storms in future years. *Id.* Yet, the Draft EA

⁴³ Okorn/EPA Scoping Comments at 2, *included in* Draft EA, app. D at 45 of pdf.

does not evaluate these potential impacts to the Proposed Parkway, even though they are a key consideration in the assessment of different alternatives and designs.

In summary, the Draft EA fails to properly assess the potential for the Proposed Parkway to increase flood elevations and exacerbate flood risk from wind driven flooding and coastal storms, violating NEPA's requirement to evaluate the environmental impacts of the project. The Proposed Parkway would put homes and private property at significantly greater risk of flooding and flood-related damage than they are under current conditions, and the City, VDOT, and FHWA must prepare an EIS that fully and objectively considers these effects and impacts.

B. The Draft EA Fails to Properly Assess the Proposed Parkway's Impact to Wetland Hydrology.

The Proposed Parkway would be constructed across a wetland floodplain with very complex hydrology. Young Rep. at 5. Wind tides push water into the project area from the south, primarily during the summer, and large rainstorms can bring water down from the north through manmade and natural conveyances. Flood events of all kinds can generate surface flow across the floodplain in either direction. The wetlands are also supported by a near-surface water table that sea level rise is continually bringing closer to the surface. *Id.*

As Dr. Young explains in his report, the Proposed Parkway would block the flow of water across this floodplain, apart from Ashville Bridge Creek and a few small conveyances. *Id.* Together with the Nimmo Parkway Phase VII-A project, it would divide the larger basin between North Bay and Lake Tecumseh into two smaller basins, each of which would now be subjected to different hydrological conditions. The Proposed Parkway would therefore change the local hydrology by altering the depth and duration of flooding, the direction of water flow, and the way water moves across the landscape. These changes, in turn, would have the potential for significant impacts to protected wetland ecosystems and the wildlife habitat they provide—both within the proposed corridor and on adjacent Back Bay National Wildlife Refuge lands. *Id.* See *supra* Section II.B. The U.S. Army Corps of Engineers raised similar issues in an April 30, 2019, comment letter to the City on the Proposed Parkway, stating that the agency is “concerned about potential secondary impacts to wetlands on adjoining properties, such as decreasing or increasing hydrology, both of which can change the character of a wetland.”⁴⁴

The Draft EA asserts that “[p]reliminary hydrologic and hydraulic analysis showed no significant impact to hydrology” from the Proposed Parkway. Draft EA at 44. However, as discussed above and in Dr. Young's report, the preliminary analysis relied on in the Draft EA was limited to the hydrology of Ashville Bridge Creek. It is therefore irrelevant to an assessment of the large-scale changes to the hydrology of the larger wetland system in the vicinity of the Proposed Parkway. Young Rep. at 3. Further, although the Draft EA and the Indirect and Cumulative Effects Technical Report mention that the Proposed Parkway could impact wetland vegetation composition and wetland hydrology, Draft EA at 76 & EFFECTS TEC. REP. at 32, this issue is raised in reference to the direct threat posed by stormwater runoff from the proposed

⁴⁴ Scoping Comments of Melissa Nash, Army Corps of Engineers, to Ryan Johnson, City of Virginia Beach, on Proposed Nimmo Parkway Phase VII-B at 2 (Apr. 30, 2019), *included in* Draft EA, app. D at 49 of pdf.

roadway, and not the much larger-scale threat of new hydrological conditions generated by the Proposed Parkway. Young Rep. at 5.

The Draft EA’s failure to evaluate the Proposed Parkway’s hydrological effects, and how those effects, in turn, would impact wetland ecosystems and wildlife habitat, is arbitrary and capricious and violates NEPA. Instead, an EIS must be prepared that will carefully and thoroughly assess these impacts.

C. The Draft EA Fails to Evaluate the Cumulative Flooding and Hydrological Effects of the Proposed Parkway and the Nimmo Parkway Phase VII-A Project.

The “effects” that an agency must study when it is evaluating the impact of a proposed action include “cumulative effects.” The CEQ regulations define “cumulative effects” as “effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions.” 40 C.F.R. § 1508.1(g)(3) (2022). As further explained in CEQ’s NEPA regulations, “[c]umulative effects can result from individually minor but collectively significant actions taking place over a period of time.” *Id.* EPA’s comments on the Proposed Parkway also emphasized the importance of addressing cumulative effects to “aid in the identification of resources that are likely to be adversely affected by multiple projects.” Okorn/EPA Scoping Comment at 2–3, *included in* Draft EA, app. D at 45–46 of pdf. EPA specifically encouraged consideration of other ongoing and proposed transportation projects in the NEPA documentation and suggested “evaluating the need for a larger study that encompasses all of these projects.” *Id.* at 3.

In addition to failing to properly assess the direct and indirect effects of the Proposed Parkway on flooding and hydrology, the Draft EA fails to assess, in violation of NEPA regulations, the cumulative effects of the Proposed Parkway on flooding and hydrology when added to other reasonably foreseeable projects. The most obvious and directly related reasonably foreseeable action in the vicinity of the Proposed Parkway is the Nimmo Parkway Phase VII-A project (“Nimmo VII-A”). Nimmo VII-A is an approved but yet-to-be-constructed road that will upgrade the existing Sandbridge Road corridor beginning at Sandpiper Road in the Sandbridge Community. Nimmo VII-A will roughly parallel the existing Sandbridge Road corridor for approximately 1.1 miles until a point where the City proposes to link it to the Proposed Nimmo Parkway Phase VII-B project. Draft EA at 20. According to the City’s “CIP Project Status” webpage, the Notice to Proceed to construction for the Nimmo Parkway Phase VII-A project is anticipated to be issued “spring/summer 2022.”⁴⁵

The Nimmo Parkway Phase VII-A project will be constructed on top of fill to “raise the roadway elevation to be passible during the 100 year flood and to account for [three] additional feet of sea level rise.”⁴⁶ As a result, it presents many of the same types of flooding and hydrology issues discussed above with regard to the Proposed Parkway. Given that an approximately 0.5-mile portion of the Proposed Parkway located east of the proposed Ashville Bridge Creek bridge would also be built on fill necessary to accommodate the base flood elevation plus three additional feet, the two projects together would erect a roughly 1.5-mile-long

⁴⁵ See CITY OF VA. BEACH, 2.078.000: Sandbridge Road-Nimmo Phase VII-A, <https://cipstatus.vbgov.com/ProjectDetail.aspx?id=1602> (last visited 23 June 2022).

⁴⁶ *Id.*

obstruction across the wetland floodplain and alter surface flow as discussed above. The cumulative impacts of the two projects on flooding and hydrology would be even more significant than the impact of the Proposed Parkway alone, Young Rep. at 1, 2 & 5, and those impacts must be evaluated in an EIS.

However, other than listing Nimmo VII-A as a “present and reasonably foreseeable action,” Draft EA at 80, the Draft EA does not address the cumulative effects of the two projects or attempt to evaluate the additive impacts of the two projects on flooding and hydrology, specifically. Instead, the Draft EA merely offers that the Proposed Parkway “would contribute to moderate (small extent, long duration, probable likelihood) adverse incremental impacts for water resources and wildlife habitat” and recites the obvious fact that “[r]easonably foreseeable future actions would also contribute to cumulative effects.” Draft EA at 82.

Given that these two projects would literally connect to one another and form a major hydrological barrier across a large wetland floodplain, the failure to assess the significant, cumulative effects of these two proposals on flooding and hydrology, and the resulting impacts to surrounding property and natural resources, is arbitrary and capricious and violates NEPA.

V. THE DRAFT EA IMPROPERLY REJECTS REASONABLE ALTERNATIVES FROM CONSIDERATION.

A. Introduction

NEPA requires federal agencies to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” 42 U.S.C. § 4332(2)(E). This requirement applies to EAs and EISs. *See id.* § (2)(C)–(D). Agencies must “[u]se the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.”⁴⁷ 40 C.F.R. § 1500.2(e) (2019).⁴⁸ Accordingly, “an agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action, and sufficient to permit a reasoned choice.” *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1520 (9th Cir. 1992) (internal quotation marks omitted) (citations omitted).⁴⁹

⁴⁷ *See also* 40 C.F.R. § 1501.5(c)(2) (EAs must discuss alternatives) *Bob Marshall All. v. Hodel*, 852 F.2d 1223, 1229 (9th Cir. 1988) (federal action involving unresolved conflicts as to proper use of resources triggers NEPA’s alternatives requirement, whether or not an EIS is also required).

⁴⁸ This comment letter primarily quotes and cites to the version of the Council on Environmental Quality’s (“CEQ’s”) NEPA regulations that were in effect prior to 2020. CEQ’s NEPA regulations allow an agency to apply CEQ’s longstanding 1978 regulations to any NEPA process that was begun prior to September 14, 2020, *see* 40 C.F.R. § 1506.13 (2020), which is clearly the case for this process. The Draft EA’s citations to the pre-2020 CEQ regulations indicate that it is applying that version of the regulations to this project, and we agree it is the appropriate version to apply.

⁴⁹ *See also* *Methow Valley Citizens Council v. Reg’l Forester*, 833 F.2d 810, 816 (9th Cir. 1988), *rev’d on other grounds sub nom. Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989) (reasonable range of alternatives framed by purposes of project). The Draft EA itself notes that the CEQ NEPA regulations governing the implementation of NEPA “require the consideration of a reasonable range of alternatives prior to making any decisions to proceed with a particular course of action.” Draft EA at 11 (citing 40 C.F.R. § 1505.1 (2019)).

The requirement to analyze alternatives has been long recognized as the “heart” of NEPA, *see, e.g., Defs. of Wildlife v. N.C. Dep’t of Transp.*, 762 F.3d 374, 394 (4th Cir. 2014). Consideration of alternatives is meant to “foster both informed decision-making and informed public participation,” *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1194 (9th Cir. 2008) (internal quotation marks omitted) (quoting *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 960 (9th Cir. 2005)), The failure to consider a “viable but unexamined alternative” renders the analysis inadequate. *Alaska Wilderness Recreation & Tourism Ass’n v. Morrison*, 67 F.3d 723, 729 (9th Cir. 1995) (quoting *Res. Ltd., Inc. v. Robertson*, 35 F.3d 1300, 1307 (9th Cir. 1993)).⁵⁰ The dismissal of alternatives without objective exploration also violates NEPA, *see* 40 C.F.R. § 1502.14 (2019), as does the unreasoned and arbitrary rejection of reasonable alternatives.

The Draft EA for the City’s Nimmo Parkway Phase VII-B proposal violates NEPA because it fails to evaluate any alternatives to the Proposed Parkway and only studies the proposed “Build Alternative” and the “No Build (No Action) Alternative.” The Draft EA acknowledges that improvements to the existing Sandbridge Road corridor could meet the project purpose and need. Draft EA at 12. But it fails to analyze such alternative. It attempts to justify this failure based on: (1) 20-year-old studies that, as discussed in the attached memorandum from Walter Kulash, P.E. (“Exhibit C”) have no bearing on current conditions, along with (2) conclusory assertions regarding the potential for “additional” impacts of such alternatives that it fails to evaluate or quantify. As such, the Draft EA precludes the “informed decision-making,” *Ctr. for Biological Diversity*, 538 F.3d at 1194, and “reasoned choice,” *Idaho Conservation League*, 956 F.2d at 1520, that NEPA requires. Critically, as discussed below, the Proposed Parkway itself does not satisfy the purpose and need of the project. The Draft EA’s consideration of alternatives is thus fundamentally flawed, and an EIS must be prepared that will objectively examine a range of alternatives.

B. The Proposed Parkway Does Not Satisfy the Project Purpose and Need.

The Draft EA provides that the project purpose and need is “to provide reliable access and connectivity to the Sandbridge Community.” Draft EA at 10. Flooding along Sandbridge Road is clearly the primary obstacle to “reliable access and connectivity,” and flooding events that impact travel on Sandbridge Road have become more frequent and of longer duration]. *Id.* at 6-10. The Proposed Parkway would do nothing for those who live or work along Sandbridge Road when Sandbridge Road is flooded.⁵¹

The failure of the Proposed Parkway to satisfy the project purpose and need makes it even more essential that the NEPA process thoroughly study alternatives to the Proposed

⁵⁰ *Accord Dubois v. U.S. Dep’t of Agric.*, 102 F.3d 1273, 1289 (1st Cir. 1996), *cert. denied sub nom. Loon Mt. Rec. Corp. v. Dubois*, 521 U.S. 1119 (1997).

⁵¹ Further, because the Proposed Parkway would not address the conditions that make the existing road unreliable, Sandbridge Road would still need to be improved even if the Proposed Parkway is built. As a result, the environmental impacts of the Proposed Parkway cannot be properly assessed without also considering the impacts that would result from upgrading Sandbridge Road. Conversely, improving the existing Sandbridge Road corridor would satisfy the project purpose and need—for the Sandbridge Community as well as the residents and businesses of Sandbridge Road—while negating the need for, and the impacts of, the Proposed Parkway.

Parkway that would address the purpose and need, including upgrading the existing Sandbridge Road corridor.

C. The Draft EA May Not Rely on an Outdated Resign and Unreliable Data from Prior Studies to Eliminate Reasonable Alternatives from Consideration.

Significantly, the Draft EA acknowledges that improving the Sandbridge Road corridor could meet the project purpose and need. *Id.* at 12. Yet the Draft EA’s only review of potential impacts associated with improving the existing Sandbridge Road corridor is based on outdated estimates of impacts, compiled in 2003, for a proposed alignment that itself is outdated. *See* Draft EA at 12, Table 3 (including footnotes). Relying on that information, the Draft EA concludes that improving the Sandbridge Road corridor would “have substantially higher right-of-way and environmental impacts and costs than the Nimmo Parkway corridor” and eliminates the Sandbridge Road corridor from further evaluation. Draft EA at 13. However, key conditions along the Sandbridge Road corridor and in the broader project area have changed significantly in the past 20 years. Alignments and designs developed in 2002—and the impacts estimated for them at that time—are no longer valid and cannot be relied upon to eliminate reasonable alternatives from detailed consideration.⁵²

1. *Subsequent Road Improvement Projects Have Rendered Prior Estimates of Impacts Obsolete.*

The Draft EA cannot rely on outdated studies as the basis for eliminating alternatives that would improve the Sandbridge Road corridor (hereinafter “Sandbridge Road alternatives”). This is because of the relevant changes that have occurred in the project area over the past two decades. For example, several significant road improvement projects have either been completed or are currently in process along the 2.7-mile segment of Sandbridge Road that is used as the basis for comparison with the Proposed Parkway in Table 3 of the Draft EA.⁵³ As Mr. Kulash explains in his attached memorandum, these road improvement projects have helped to address, or will address, several of the problematic areas along Sandbridge Road, such that some of the impacts and costs attributed to the Sandbridge Road alternative in Table 3 of the Draft EA have

⁵² As the Back Bay NWR stated in its April 30, 2019, scoping comments to the City, “[r]eliance on outdated or incomplete alternative feasibility and cost comparison studies should be avoided to ensure that all important variables are considered.” Scoping Comments of Douglas G. Brewer, Manager of Back Bay NWR, to Ryan Johnson, City of Virginia Beach, on Proposed Nimmo Parkway Phase VII-B at 2 (Apr. 30, 2019), *included in* Draft EA, app. D at 51 of pdf.

⁵³ A number of such projects are listed on pages 3–4 of Appendix B of the Draft EA and include, among others:

- Completed improvements that added turn lanes to Sandbridge Road at the Sandbridge Road/Flanagans Lane intersection and softened a problematic curve;
- Completed replacement and raising of the bridge where Sandbridge Road crosses Hell's Point Creek on Sandbridge Road; the bridge was raised to 1.5 feet above the 100-year floodplain elevation to minimize flooding;
- Completed improvements at Sandbridge Road/Lotus Drive/Atwoodtown Road intersection that added a turn lane on Sandbridge Road and widened the road in the vicinity of the intersection; and
- The planned raising of Sandbridge Road to a minimum elevation of 3 feet at the low-lying Sandbridge Road/New Bridge Road intersection.

either already been incurred, or have been rendered unnecessary, by the other projects.⁵⁴ See Kulash Memo at 2-3.

For example, the wetland impact figure (8.8 acres) that is presented for “Sandbridge Road (Previously Studied)” in Table 3 of the Draft EA as the proxy for impacts from all Sandbridge Road alternatives comes from a 2003 report on a preferred alignment to improve Sandbridge Road.⁵⁵ That alignment was, of course, designed to address the conditions in the Sandbridge Road corridor as they existed at that time. As described in the Draft EA, “[t]his alignment generally followed the existing Sandbridge Road Corridor, with the exception of a deviation into an undeveloped parcel containing forested wetlands needed to ease sharp curves and other hazards.” Draft EA at 4.

Notably, this “deviation” from the existing corridor was approximately 4,000 feet long, and as Mr. Kulash explains, it accounted for almost 50% (4.2 of the 8.8 acres) of that alignment’s total wetland impacts. See Kulash Memo at 2. Further, as Mr. Kulash finds, the “deviation”—and its corresponding wetland impacts—are no longer necessary as a result of road improvement projects that have been completed on Sandbridge Road since the 2002 study was prepared. See *id.* at 2–3. A properly updated Sandbridge Road alternative that accounts for those completed road improvement projects would therefore avoid those wetland impacts, such that the figure of 8.8 acres of wetland impacts attributed to a Sandbridge Road alternative in the Draft EA is clearly outdated and unreliable. See *id.* at 4. The NEPA documentation must consider updated Sandbridge Road alternatives that factor in these changes to the corridor.⁵⁶

2. *Subsequent Alternative Transportation Planning Undermines the Validity and Reliability of Data and Findings from Prior Studies.*

The Sandbridge Road alignments assessed in the City’s 2002 study all included a multi-use path that would have had significant wetlands impact. As discussed above, and explained more fully in Mr. Kulash’s memorandum, if the multi-use path had not been part of that 2002 alignment, the wetland impacts attributed to the Sandbridge Road alternative in the Draft EA would drop by another 22% (from 4.6 acres to 3.6 acres). See *id.* Further, Mr. Kulash notes that not including a multi-use path in the 2002 alignment would have reduced the overall acreage of

⁵⁴ See Draft EA at 5 (“These improvements served to meet some of the needs which were raised in the 1999 and 2002 studies which focused on traffic and safety issues.”).

⁵⁵ See VANASSE HANGEN BRUSTLIN, INC., COMPARISON REP. ON SANDBRIDGE RD. & NIMMO PARKWAY 5–7 (Jan. 14, 2003), included in *Sandbridge Rd. Corridor Presentation Notebook 2003* 9–24 of pdf, www.nimmoparkway7b.com/about. The figure of 8.8 acres of wetlands is for “Section 3” of the preferred alignment, which extended from the Sandbridge Road/Atwoodtown Road intersection to McClanan’s curve. *Id.* at 7 (15 of pdf).

⁵⁶ The Environmental Protection Agency (“EPA”) has also urged consideration of Sandbridge Road alternatives that account for road improvement projects that are currently being planned or have been completed in recent years on Sandbridge Road. In a June 11, 2019, letter on the proposed project to the Army Corps of Engineers, EPA advised: “[I]t seems that the range of alternatives evaluated is being limited in this assessment. For example, since part of Sandbridge Road is being upgraded and elevated and a bridge is being elevated, possible alternatives to consider may be addressing the remaining portion of Sandbridge Road” Letter from Barbara Okorn, EPA, to Melissa Nash, Army Corps of Engineers (June 11, 2019) (Attachment 2).

private and Federal property impacted by the Sandbridge Road alternative by approximately 4 acres. *See* Kulash Memo at 3.

However, an updated Sandbridge Road alternative need not include a multi-use trail. For example, a 2015 City study of alternative transportation linkages in the Back Bay NWR area⁵⁷ recommended construction of a multi-use trail linking Sandbridge to other areas of the City on a separate and different corridor from Sandbridge Road.⁵⁸ Thus, the wetland and property impacts ascribed to a Sandbridge Road alternative in the Draft EA include substantial impacts resulting from inclusion of a multi-use trail that is no longer necessary, and this is further reason why the Draft EA’s outdated impact estimates should not be relied upon to reject Sandbridge Road alternatives from consideration. An objective assessment of alternatives should consider a Sandbridge Road alternative without the inclusion of a multi-use trail, thereby reducing the impacts from improving Sandbridge Road.

Notably, FHWA has developed guidance on the degree to which studies, analyses, and conclusions from transportation planning processes can be incorporated into the NEPA process.⁵⁹ Although not binding, FHWA’s guidance, makes clear as a general matter that prior planning documents need to be “up-to-date,” “reliable,” and “reasonably current.”⁶⁰ It also speaks directly to the specific issue of when these documents may be used to eliminate alternatives from consideration:

12. What information or analysis from the transportation planning process is needed in an EA or EIS to support the elimination of an alternative(s) from detailed consideration? . . .

Alternatives passed over during the transportation planning process because they are infeasible or do not meet the NEPA “purpose and need” can be omitted from the detailed analysis of alternatives in the NEPA document, as long as the rationale for elimination is explained in the NEPA document. Alternatives that remain “reasonable” after the planning-level analysis must be addressed in the EIS, even when they are not the preferred alternative. When the proposed action evaluated in an EA involves unresolved conflicts concerning alternative uses of available resources, NEPA requires that appropriate alternatives be studied, developed, and described.⁶¹

⁵⁷ *See* CITY OF VA. BEACH, ALT. TRANSP. STUDY: BACK BAY NAT’L WILDLIFE REFUGE (Dec. 18, 2015), <https://www.vbgov.com/government/departments/parks-recreation/design-development-projects/Pages/tripp-grant-bbnwr.aspx#:~:text=Back%20Bay%20NWR%20Alternative%20Transportation%20Study%20Background%20The,Wildlife%20Refuge%20%28BBNWR%29%20without%20using%20private%20motor%20vehicles>.

⁵⁸ Specifically, the study recommending building the multi-use trail on the same corridor being proposed for the Proposed Parkway. *Id.* at v. The study noted that the multi-use path in this location would “satisfy a known latent demand for a bike-ped connection between Sandbridge and the rest of the City.” *Id.* at 21

⁵⁹ 23 C.F.R § 450 app. A.

⁶⁰ *Id.* (response to Question 6). *See also* Section (b) of the response to Question 11, which notes that the responses to Questions 4–7 provide elements to consider with respect to the acceptance of planning products for NEPA documentation.

⁶¹ 23 C.F.R. § 450 app. A (Question 12 and response thereto).

Here, even the outdated studies that the Draft EA relies upon to eliminate Sandbridge Road alternatives from consideration made no findings that improving the Sandbridge Road corridor would be unreasonable or infeasible, or that it would fail to provide reliable access and connectivity to the Sandbridge Community.⁶² As noted above, the Draft EA itself acknowledges that improving the Sandbridge Road corridor could meet the project purpose and need. Further, there are clearly unresolved conflicts concerning the use of environmental resources within, and in the vicinity of, the proposed project area. *See supra* Section II.B. Therefore, pursuant to FHWA’s own guidance, one or more alternatives for improving the existing Sandbridge Road corridor should be studied, developed, and described in the project’s NEPA documentation. The Draft EA’s failure to do so violates NEPA.⁶³

D. The Draft EA Impermissibly Relies on Vague and Unquantified Assertions Regarding “Additional” Impacts from Sandbridge Road Alternatives.

The Draft EA compounds the error of basing its estimates of impacts on outdated studies when it then attempts to layer unsubstantiated and unquantified “additional” impacts on top of those. More specifically, the Draft EA asserts that new City design standards would “potentially” result in increases of some impacts from the Sandbridge Road alternative shown in Table 3—but it then fails to evaluate or quantify what those additional impacts would be: “[R]econstructing Sandbridge Road to current standards would further increase impacts to private and federal property and potentially lead to additional displaced homes, impacts to wetlands, and impacts to cultural resources in addition to the impacts identified in the previous studies.” Draft EA at 12. The Draft EA’s conclusory assertions neither address the likelihood or significance of such impacts, and thus provide no objective sense of what the impacts of improving the existing Sandbridge Road corridor might be.

These assertions are particularly egregious given that Table 3 of the Draft EA indicates that the “Sandbridge Road (Previously Studied)” alternative would impact *fewer* acres of wetlands than the Proposed Parkway.⁶⁴ Thus, even if Table 3’s wetland impact figure for improving Sandbridge Road were valid (which, as discussed above, it is not), the Draft EA’s vague assertions about the potential for additional wetland impacts cannot reasonably support the Draft EA’s apparent conclusion that improving the Sandbridge Road corridor would impact more

⁶² The Draft EA states that “[a]n October 2002 comparison study and 2003 comparison study (City of Virginia Beach 2003) identified the Nimmo Parkway as the preferred options.” Draft EA at 11. However, neither the 2002 “Public Involvement and Comparison Report: Sandbridge Road and Nimmo Parkway” nor the 2003 “Comparison Report: Sandbridge Road and Nimmo Parkway” appear to identify a “preferred option.” *See* VANASSE HANGEN BRUSTLIN, INC., PUB. INVOLVEMENT & COMPARISON REP. (Oct. 8, 2002), *included in Sandbridge Rd. Corridor Presentation Notebook 2003* 25–52 of pdf; VANASSE HANGEN BRUSTLIN, INC., COMPARISON REP.: SANDBRIDGE RD. & NIMMO PARKWAY (Jan. 14, 2003), *included in Sandbridge Rd. Corridor Presentation Notebook 2003* 9–24 of pdf, www.nimmoparkway7b.com/about. They simply conclude with “options for consideration” to assist in deciding whether to focus on the proposed Nimmo Parkway corridor or the existing Sandbridge Road corridor.

⁶³ *See, e.g.*, *Pub. Emps. for Env’t Resp. v. U. S. Fish & Wildlife Serv.*, 177 F. Supp. 3d 146, 156 (D.D.C. 2016) (finding agency’s attempt to incorporate into EA a ten-year-old assessment of alternatives “cannot be considered reasonable” because it would not account for changes in circumstances over that time); *W. Watersheds Project v. Abbey*, 719 F.3d 1035, 1052 (9th Cir. 2013) (holding agency errs when it relies on old data without showing that the data remain accurate).

⁶⁴ *See* Draft EA at 12, Table 3 (showing 8.8 acres of wetland impacts for “Sandbridge Road (Previously Studied)” versus 9.7 acres of wetland impacts for “Nimmo Parkway Corridor”).

acres of wetlands than the Proposed Parkway.⁶⁵ Further, the Draft EA does not indicate the *type* or *quality* of wetlands that would potentially be impacted along Sandbridge Road due to the new design standards—a key consideration given that the wetlands adjoining Sandbridge Road have already been degraded by the presence of that road.⁶⁶

Moreover, the Draft EA states that in order to meet the City’s new design standards, Sandbridge Road would need to be raised approximately 1.5 to 4 feet higher than the elevation considered in the old studies. Draft EA at 12. The Draft EA asserts that this additional elevation would “extend the lateral impacts of the roadway,” potentially leading to impacts to adjacent properties such as drainage issues, displaced homes, wetland impacts, and cultural resource impacts. *See id.*

However, as discussed in the attached memorandum from Mr. Kulash, this range of additional elevation potentially needed for upgrading Sandbridge Road does not assist in assessing or understanding the actual impacts, and is potentially misleading. *See* Kulash Memo at 4. There is a range of potential impacts that generally vary within the 1.5 – 4.0 feet range of additional elevation mentioned in the Draft EA. *Id.* Mr. Kulash explains that simply providing that broad range does not indicate, for example, where or how much additional right-of-way may be needed, whether and where additional wetlands might be impacted, or whether or where drainage concerns may be a valid concern for adjacent properties. *See id.* In addition, even at the high end of the 1.5 – 4.0 feet range, construction methods and project design elements can minimize or avoid many of the concerns the Draft EA mentions with regard to the additional elevation. *See id.* at 3–4.

Without assessing how much additional elevation would be needed at various locations along the Sandbridge Road corridor, and without evaluating how that amount would translate to actual impacts, there is no way to adequately gauge the likelihood or the extent of the “additional” impacts to which the Draft EA refers in dismissing Sandbridge Road alternatives from consideration. *See id.* Again, the reader is left to guess what the impacts of improving the existing Sandbridge Road corridor would actually be. This failure to study or evaluate the impacts of updated Sandbridge Road alternatives precludes and is contrary to the “informed decision-making” that NEPA requires.

E. Improving the Existing Sandbridge Road Corridor is a Reasonable, Feasible, and Cost-Effective Alternative to the Proposed Parkway.

In Exhibit D to these comments, Mr. Kulash provides a concept plan that shows how the reliability issues on Sandbridge Road could be addressed along the Sandbridge Road corridor in a reasonable, feasible, and cost-effective manner that meets the City’s new design standards for flooding. *See generally* Kulash Rep. Mr. Kulash notes in his report that in developing his concept, he chose to emphasize minimizing inconvenience to the residents and businesses along

⁶⁵ *See* Draft EA at 13 (“Based on the additional screening criteria and the above comparison, the Sandbridge Road corridor is estimated to have substantially higher right-of-way *and environmental impacts* and costs than the Nimmo Parkway corridor.” (emphasis added)).

⁶⁶ *See* Gallegos Rep. at 15 (explaining that the invasive Phragmites reed establishes easily in disturbed wetland areas and that both Phragmites and the narrow-leaved cattail now “dominate wetlands along both sides of Sandbridge Road”).

Sandbridge Road and the Sandbridge Community by developing a plan that maintains access to adjacent properties and keeps traffic flowing simultaneously in both directions throughout construction. *Id.* at 2. He also explains that he focused on an approximately 1-mile segment of the existing Sandbridge Road corridor that he believes should be the highest-priority segment for upgrading due to its increasing vulnerability to flooding. *Id.* However, he emphasizes that his concept plan is one of any number of ways to approach improving the existing Sandbridge Road corridor to address the road’s reliability issues, and he explains that the same engineering strategies reflected in his concept plan could also be employed effectively elsewhere along the Sandbridge Road corridor. *Id.* at 10–11.

His report demonstrates that improving the existing Sandbridge Road corridor is a reasonable, feasible, and cost-effective alternative to the Nimmo VII-B proposal, further supporting the need for a thorough study of Sandbridge Road alternatives as part of this NEPA process.

* * *

In summary, the Draft EA for the Proposed Parkway violates NEPA because it fails to study reasonable alternatives for improving the existing Sandbridge Road corridor, and instead dismisses any such alternatives from detailed consideration based on unreliable data from an outdated study and conclusory assertions regarding new impacts. As such, the Draft EA presents a highly flawed and inadequate picture of the impacts of improving the existing Sandbridge Road corridor. Upgrading the Sandbridge Road corridor is a reasonable, feasible, and cost-effective alternative to the Proposed Parkway and must therefore be objectively assessed in an EIS required here.

VI. THE DRAFT EA’S TRAFFIC ANALYSIS OF THE PROPOSED PARKWAY IS FLAWED.

The Draft EA’s analysis of the traffic impacts of the Proposed Parkway has significant flaws. Table 10 of the Draft EA, which compares projected Year 2048 traffic volumes for the Build and No Build Alternatives, shows that the total volume of traffic would be the same in both scenarios. Draft EA at 32. However, in fact, access to the Sandbridge Community would be much faster and more reliable under the Build scenario than under the No Build scenario. Indeed, that is the purpose of the project. It is simply unreasonable to assume that the Proposed Parkway would not generate significant, additional traffic to and from the Sandbridge Community by making it easier and faster to get there.

Similarly, the increased accessibility the Proposed Parkway would provide to the Sandbridge Community would also spur additional development in and around Sandbridge, which would, in turn, generate additional traffic using the Proposed Parkway. The Draft EA’s attempted answer—that induced growth would not occur because the Sandbridge Beach neighborhood is nearly built out—is no answer at all. Draft EA at 76–77. Zoning can be changed, and redevelopment of existing housing to higher density housing is already occurring in the Sandbridge area.

Moreover, given Sandbridge Road’s increasing vulnerability to flooding, it is difficult to see how that road could even remain a viable route in the future without significant improvement. Thus, the Draft EA’s assumption that 24 percent of traffic will “divert” from the Proposed Parkway to Sandbridge Road in Year 2048 is highly questionable. *See* Draft EA at 32.

Therefore, the Draft EA in all likelihood underestimates the traffic volume for the Build Alternative—and significantly so. As a result, all of the Draft EA’s impact analyses that rely on those traffic volumes—such as Air Quality, Noise, and the Section (4) evaluation—are unreliable. To properly assess the potential impacts of the Proposed Project, an EIS must be prepared with a valid traffic analysis that corrects these flaws.

VII. CONCLUSION

Thank you for your consideration of these comments.

VIII. EXHIBITS AND ATTACHMENTS

Exhibits

- A. Report of John B. Gallegos (“Gallegos Report”)
- B. Report of Robert S. Young, PhD, PG (“Young Report”)
- C. Memorandum of Walter Kulash, P.E. (“Kulash Memo”)
- D. Report of Walter Kulash, P.E. (“Kulash Report”)

Attachments

- 1. Letter from Kathryn Owens, Acting Refuge Manager for the Back Bay NWR, to Kitty Hawk COP, EIS Program Manager, BOEM (Sept. 8, 2021) (“Owens Letter”)
- 2. Letter from Barbara Okorn, EPA, to Melissa Nash, Army Corps of Engineers (June 11, 2019) (“Okorn Letter (June 11, 2019)”)