

newer and quieter types of equipment that have such features as low-noise mufflers and/or rubber tires instead of metal tracks. Portable noise barriers could also be considered for use around noisy pieces of stationary equipment.

4.3.5.4 Impairment Evaluation

Impairment to the existing soundscape of GSMNP and the AT would not occur under the No-Action Alternative, Monetary Settlement Alternative, Laurel Branch Picnic Area, and the Partial-Build Alternative to Bushnell. The Northern Shore Corridor is not likely to impair the existing soundscape of GSMNP or the AT based on the information obtained to date. Due to the magnitude of this alternative, it is likely that additional NEPA documentation would be required to address site specific impacts not currently known and to determine detailed mitigation measures as they relate to final design. The impairment determination related to the existing soundscape would be re-evaluated in such documentation.

4.4 Impacts to the Natural Environment

4.4.1 Wetlands

In compliance with Executive Order 11990 and Director's Order #77-1, a Statement of Findings for wetlands would be developed and released for public review if a partial-build or build alternative was selected for implementation. A Statement of Findings explains why an alternative with wetland impacts was identified as the preferred alternative, and includes such information as the delineated wetland mapping, a description of the wetlands, disclosure of the adverse impacts, minimization efforts, and proposed compensation. For any study alternative that impacts wetlands, more detailed design and additional field surveys may be required before a Statement of Findings is developed.

4.4.1.1 Methodology for Assessing the Wetland Impacts

Wetlands, both jurisdictional wetland and special aquatic habitats, were evaluated to determine impacts. Details regarding wetland types and classifications are discussed in Section 3.4.1, Appendix M, and Attachment M-3 and approximate wetland locations are depicted in Figure 3-5. Wetland impact analysis utilizes the wetland acreage expected to be lost or altered as a result of the new location of a road or recreational facilities or disturbance during construction. ArcGIS software was used to determine the wetlands directly and indirectly impacted by the potential construction footprint. Within the project study corridor, wetlands were identified by a GPS point, and acreages were estimated in the field. As a result of potential GPS inaccuracy and location of the single GPS point, direct impacts were determined as wetland GPS points that occurred directly in or within 100 feet (30 m) of the construction footprint. Indirect impacts were calculated as wetlands outside of the direct impacts but within 330 feet (100 m) upstream or 1,320 feet (400 m) downstream (based on NCDOT guidelines). Detailed discussions of methodologies are described in Appendix M.

Clarification of the term "baseline" for this project:

The Partial-Build Alternative to Bushnell and the Northern Shore Corridor include a baseline route, as well as options to that route. Baseline routes and options are detailed in Section 2.5 and shown on Figure 2-8. Baseline routes have been compared to existing conditions. Impact analyses for the options are shown as a difference from the associated baseline route.

Type

Impact types are either beneficial and/or adverse. Beneficial impacts are defined as having a positive effect on jurisdictional wetlands or special aquatic habitat. Adverse impacts have a negative effect on jurisdictional wetlands or special aquatic habitat.

Context

Context is defined as site-specific, local, or regional. Site-specific impacts are wetlands that would be filled or otherwise altered by a construction footprint. Local impacts are based on current NCDOT guidelines. Local impacts would occur within 330 feet (100 m) upstream and 1,320 feet (400 m) downstream of the construction footprint. These areas would not be directly affected by the road footprint but may have altered flow regimes or sedimentation from a project, especially during construction. Regional impacts are those impacts that occur downstream and outside of the localized impacts.

Duration

Short-term impacts are those that would occur for less than 1 year, typically as an episodic or temporary event. Long-term effects occur as a result of construction activities at a specific location throughout the life of construction (this is assumed to be between 1 year and 15 years), but the impact is more than that of a temporary event. Permanent impacts are considered to be anything that persist throughout the construction period. These impacts include the permanent loss of wetland acreage and function.

Intensity

The definitions for the wetland intensity levels are based on the current USACE agency requirements associated with permitting for linear transportation projects (Nationwide Permit 14). Due to the potentially large number of wetlands that would be filled and the total area of fill needed, selection of the partial-build or build alternatives would likely exceed the threshold of a Nationwide Permit 14 and it is likely that an Individual Permit would be required. Estimated wetland acreage for each alternative are used to determine intensity impacts. The indicated threshold limits for each threshold level were used to determine the intensity for both direct and indirect impacts.

For the purposes of this analysis, communities were considered rare when the Global Rank was G1 or G2, or when the Global Rank indicated an uncertainty, (G2? or G3?) that included the potential for a G1 or G2 community. All other community Global Ranks (G3, G4, G5, GD, and GW) were considered as secure. It should, however, be noted that under this Global Ranking system G3 communities are defined as vulnerable, but not imperiled.

Clarification of the term "baseline" for this project:

The Partial-Build Alternative to Bushnell and the Northern Shore Corridor include a baseline route, as well as options to that route. Baseline routes and options are detailed in Section 2.5 and shown on Figure 2-8. Baseline routes have been compared to existing conditions. Impact analyses for the options are shown as a difference from the associated baseline route.

No/Negligible

Impacts may occur, but are not detectable and have no observable effects on jurisdictional wetlands and special aquatic habitats. These are impacts that are not expected to be significant or observable.

Minor

Impacts associated with the fill or complete loss of less than 0.1 acre (0.04 ha) of jurisdictional wetlands and special aquatic habitats or when the construction footprint is within 50 feet (16 m) of a jurisdictional wetland and special aquatic habitat.

Moderate

Impacts associated with the fill or total loss of between 0.1 acre (0.04 ha) and 0.5 acre (0.20 ha) of jurisdictional wetlands and special aquatic habitats or up to 0.1 acre (0.04 ha) of jurisdictional wetlands and special aquatic habitats ranked G1 or G2, meaning a globally rare community.

Major

Impacts associated with the fill or total loss of more than 0.5 acre (0.20 ha) of jurisdictional wetlands and special aquatic habitats or more than 0.1 acre (0.04 ha) of jurisdictional wetlands and special aquatic habitats ranked G1 or G2, meaning a globally rare community.

4.4.1.2 Summary of Impacts

The most obvious impact to a wetland community is filling for a road crossing. Aside from the direct filling of wetlands, an increase or decrease in hydrologic inputs to a wetland adjacent to a road is a likely indirect consequence. Indirect upstream impacts are caused by damming effects, while indirect downstream impacts are caused by loss of hydrology due to culverts and a road re-directing flow. Other indirect impacts include shading and the possible introduction of invasive exotic species. Direct and indirect impacts to jurisdictional wetlands are summarized in Table 4-17a. Direct and indirect impacts to special aquatic habitats are summarized in Table 4-17b. Detailed impacts to both jurisdictional wetlands and special aquatic habitats are in Attachment M-1. All values of impact are approximate and are based on function designs prior to inclusion mitigation.

Clarification of the term "baseline" for this project:

The Partial-Build Alternative to Bushnell and the Northern Shore Corridor include a baseline route, as well as options to that route. Baseline routes and options are detailed in Section 2.5 and shown on Figure 2-8. Baseline routes have been compared to existing conditions. Impact analyses for the options are shown as a difference from the associated baseline route.

Table 4-17a. Direct and Indirect Jurisdictional Wetland Impacts within the Proposed Partial-Build and Build Alternatives¹

	Laurel Branch Picnic Area ²	Partial-Build Alternative to Bushnell (baseline)	Southern Option at Forney Creek Embayment	Northern Shore Corridor (baseline)	Southern Option at Forney Creek Embayment	Southern Option at Hazel/Eagle Creek Embayments	Southern Option Crossing Fontana Dam
Primitive Park Road							
<u>Direct Impacts</u>							
Count	0	1	1 less than baseline	10	9 less than baseline	2 less than baseline	5 less than baseline
Total Acreage (ha)	0	0.21 (0.09)	0.21 (0.09) less than baseline	1.23 (0.50)	0.21 (0.09) less than baseline	0.09 (0.04) less than baseline	0.63 (0.26) less than baseline
Primitive Park Road							
<u>Indirect Impacts</u>							
Count	0	4	2 more than baseline	16	2 more than baseline	No change from baseline	3 less than baseline
Total Acreage (ha)	0	0.22 (0.09)	0.10 (0.04) more than baseline	2.18 (0.88)	0.10 (0.04) more than baseline	0.19 (0.08) more than baseline	0.68 (0.28) less than baseline
Principal Park Road							
<u>Direct Impacts</u>							
Count	NA	5	3 less than baseline	15	3 less than baseline	2 less than baseline	5 less than baseline
Total Acreage (ha)	NA	0.42 (0.17)	0.28 (0.11) less than baseline	1.60 (0.65)	0.28 (0.11) less than baseline	0.09 (0.04) less than baseline	0.63 (0.26) less than baseline
Principal Park Road							
<u>Indirect Impacts</u>							
Count	NA	2	3 more than baseline	16	3 more than baseline	No change from baseline	3 less than baseline
Total Acreage (ha)	NA	0.13 (0.05)	0.20 (0.08) more than baseline	2.09 (0.85)	0.20 (0.08) more than baseline	0.19 (0.08) more than baseline	0.68 (0.28) less than baseline

¹ All values shown are approximate and based on functional designs prior to mitigation.

² The entrance/exit road to Laurel Branch Picnic Area is best discussed as a Primitive Park Road, but its design does not necessarily conform to the NPS design criteria for a Primitive Park Road.

NA Not Applicable.

Clarification of the term "baseline" for this project:

The Partial-Build Alternative to Bushnell and the Northern Shore Corridor include a baseline route, as well as options to that route. Baseline routes and options are detailed in Section 2.5 and shown on Figure 2-8. Baseline routes have been compared to existing conditions. Impact analyses for the options are shown as a difference from the associated baseline route.

Table 4-17b. Direct and Indirect Special Aquatic Habitat Impacts within the Proposed Partial-Build and Build Alternatives¹

	Laurel Branch Picnic Area²	Partial-Build Alternative to Bushnell (baseline)	Southern Option at Forney Creek Embayment	Northern Shore Corridor (baseline)	Southern Option at Forney Creek Embayment	Southern Option at Hazel/Eagle Creek Embayments	Southern Option Crossing Fontana Dam
Primitive Park Road							
<u>Direct Impacts</u>							
Count	0	0	No change from baseline	0	No change from baseline	No change from baseline	No change from baseline
Total Acreage (ha)	0	0	No change from baseline	0	No change from baseline	No change from baseline	No change from baseline
Primitive Park Road							
<u>Indirect Impacts</u>							
Count	0	3	No change from baseline	6	No change from baseline	1 more than baseline	1 less than baseline
Total Acreage (ha)	0	0.26 (0.10)	No change from baseline	0.53 (0.21)	No change from baseline	0.03 (0.01) more than baseline	0.02 (0.008) less than baseline
Principal Park Road							
<u>Direct Impacts</u>							
Count	NA	1	1 less than baseline	2	1 less than baseline	No change from baseline	No change from baseline
Total Acreage (ha)	NA	0.007 (0.003)	0.007 (0.003) less than baseline	0.03 (0.01)	0.007 (0.003) less than baseline	No change from baseline	No change from baseline
Principal Park Road							
<u>Indirect Impacts</u>							
Count	NA	3	1 less than baseline	8	1 less than baseline	No change from baseline	1 less than baseline
Total Acreage (ha)	NA	0.26 (0.11)	0.01 (0.004) less than baseline	0.57 (0.23)	0.01 (0.004) less than baseline	No change from baseline	0.02 (0.008) less than baseline

¹ All values shown are approximate and based on functional designs prior to mitigation.

² The entrance/exit road to Laurel Branch Picnic Area is best discussed as a Primitive Park Road, but its design does not necessarily conform to the NPS design criteria for a Primitive Park Road.

NA Not Applicable.

Clarification of the term “baseline” for this project:

The Partial-Build Alternative to Bushnell and the Northern Shore Corridor include a baseline route, as well as options to that route. Baseline routes and options are detailed in Section 2.5 and shown on Figure 2-8. Baseline routes have been compared to existing conditions. Impact analyses for the options are shown as a difference from the associated baseline route.

4.4.1.2.1 No-Action

The No-Action Alternative would not impact jurisdictional wetlands or special aquatic habitats in the project study corridors.

4.4.1.2.2 Monetary Settlement

The Monetary Settlement Alternative would not directly impact jurisdictional wetlands or special aquatic habitats in the project study corridors. Impacts resulting from this alternative would depend on how funds are used by Swain County. Indirect impacts to jurisdictional wetlands or special aquatic habitats within GSMNP would be unlikely.

4.4.1.2.3 Laurel Branch Picnic Area

No jurisdictional wetlands or special aquatic habitats were identified within the project study corridors for this alternative; therefore, no direct or indirect impacts to jurisdictional wetlands and special aquatic habitats within GSMNP would be anticipated.

4.4.1.2.4 Partial-Build Alternative to Bushnell (Primitive and Principal Park Roads)

The baseline Partial-Build Alternative to Bushnell would impact wetlands in three general areas: Gray Wolf Creek, Forney Creek, and Glady Branch. The Primitive Park Road would directly impact one jurisdictional wetland totaling 0.21 acre (0.09 ha) and indirectly impact four jurisdictional wetlands totaling 0.22 acre (0.09 ha). All four of the jurisdictional wetlands that may be indirectly impacted are ranked as globally rare. The Primitive Park Road would have no direct impacts to special aquatic habitat areas, but may indirectly impact 0.26 acre (0.10 ha) of three wetlands all classified as globally rare. Direct impacts to jurisdictional wetlands would be moderate and permanent. Due to the presence of rare communities the indirect impacts to jurisdictional wetlands and special aquatic habitats would be major and permanent. The Principal Park Road would directly impact five jurisdictional wetlands totaling 0.42 acre (0.17 ha), of which 0.13 acre (0.05 ha) are classified as rare, and indirectly impact two jurisdictional wetlands totaling 0.13 acre (0.05 ha), which are also classified as rare. The direct and indirect impacts would be major and permanent due to the presence of rare communities. Impacts to special aquatic habitats may also occur from the Principal Park Road. Impacts would directly occur to one special aquatic habitat comprising 0.007 acre (0.003 ha) and indirectly occur to three special aquatic habitats comprising 0.26 acre (0.11 ha). All four are rare communities. Again, the direct impact to special aquatic habitats for the Principal Park Road would be moderate, and the indirect impacts would be major.

Southern Option at Forney Creek Embayment (Primitive and Principal Park Roads)

As compared to the baseline Partial-Build Alternative to Bushnell, the Southern Option at Forney Creek Embayment would avoid impacts to jurisdictional wetlands and special aquatic habitats associated with Gray

Clarification of the term "baseline" for this project:

The Partial-Build Alternative to Bushnell and the Northern Shore Corridor include a baseline route, as well as options to that route. Baseline routes and options are detailed in Section 2.5 and shown on Figure 2-8. Baseline routes have been compared to existing conditions. Impact analyses for the options are shown as a difference from the associated baseline route.

Wolf Creek and Forney Creek. However, this option would impact wetlands associated with Glady Branch. The Primitive Park Road would reduce direct impacts to jurisdictional wetlands, but increase indirect impacts. For the Primitive Park Road, there would be no change from baseline Partial-Build Alternative to Bushnell for direct or indirect impacts to special aquatic habitats. The Principal Park Road would reduce direct impacts to jurisdictional wetlands, including rare communities. Indirect impacts to jurisdictional wetlands from the Principal Park Road would increase, but indirect impacts to rare communities would decrease. The Principal Park Road would directly and indirectly impact fewer acres of special aquatic habitat. All of these special aquatic habitat areas are classified as rare communities.

4.4.1.2.5 Northern Shore Corridor (Primitive and Principal Park Roads)

The baseline Northern Shore Corridor Primitive Park Road would have fewer direct impacts than the Principal Park Road and approximately equal indirect impacts to jurisdictional wetlands and special aquatic habitats. The Primitive Park Road would directly impact 10 jurisdictional wetlands comprising 1.23 acres (0.50 ha), of which nine are rare communities comprising 1.02 acres (0.41 ha). These impacts would be major and permanent. There would be no direct impacts to special aquatic habitats from the Primitive Park Road. The Primitive Park Road would indirectly impact 16 jurisdictional wetlands comprising 2.18 acres (0.88 ha) and six special aquatic habitats comprising 0.53 acre (0.21 ha). Thirteen of the 16 jurisdictional wetlands are rare (1.61 acres [0.65 ha]), and all of the special aquatic habitats are rare. Therefore, indirect impacts would be major to both wetland types for the Primitive Park Road.

The Principal Park Road would directly affect 15 jurisdictional wetlands comprising 1.60 acres (0.65 ha). Of the 15 wetlands, 13 are rare communities and comprise 0.98 acre (0.40 ha). These direct impacts would be major. The Principal Park Road would directly impact two special aquatic habitats comprising 0.03 acre (0.01 ha); however, both are rare communities, so the impacts would be moderate. The indirect impacts from the Principal Park Road are similar to the indirect impacts from the Primitive Park Road. The Principal Park Road would indirectly impact 16 jurisdictional wetlands comprising 2.09 acres (0.85 ha), of which 1.85 acres (0.75 ha) are rare, and eight special aquatic habitats comprising 0.57 acre (0.23 ha), of which all are rare. Similar to the Primitive Park Road, the Principal Park Road would have major indirect impacts to jurisdictional wetlands and special aquatic habitats.

Southern Option at Forney Creek Embayment (Primitive and Principal Park Roads)

As compared with the baseline Northern Shore Corridor described above, the Southern Option at Forney Creek Embayment would eliminate impacts to jurisdictional wetlands and special aquatic habitats associated with Forney and Gray Wolf creeks by bridging the Forney Creek Arm of Fontana Lake. However, this option would impact wetlands associated with Glady Branch. For the Primitive Park Road, this option would decrease direct impacts to jurisdictional wetlands, with no change in the impacts to rare communities. Indirect impacts to jurisdictional wetlands would increase, but the indirect impacts to rare communities would decrease. There would be no change from the baseline Northern Shore Corridor in the amount of direct or indirect impacts to special aquatic habitats for the Primitive Park Road at the Southern Option at

Clarification of the term "baseline" for this project:

The Partial-Build Alternative to Bushnell and the Northern Shore Corridor include a baseline route, as well as options to that route. Baseline routes and options are detailed in Section 2.5 and shown on Figure 2-8. Baseline routes have been compared to existing conditions. Impact analyses for the options are shown as a difference from the associated baseline route.

Forney Creek. The Principal Park Road would decrease the direct impacts to jurisdictional wetlands and special aquatic habitats including rare communities when compared with the baseline Northern Shore Corridor.

Southern Option at Hazel and Eagle Creek Embayments (Primitive and Principal Park Roads)

When compared with the baseline Northern Shore Corridor, the Southern Option at Hazel and Eagle Creek Embayments would eliminate impacts to wetlands associated with these two stream systems but increase indirect impacts. For this option, the Primitive and Principal Park Roads would have similar footprints with almost identical impacts. The Primitive and Principal Park Roads would reduce direct impacts to two jurisdictional wetlands; both are rare communities. There would be no change from the baseline Northern Shore Corridor in the direct impacts to special aquatic habitats for both road types. The indirect impacts to jurisdictional wetlands would also be the same for both road types. There would be an increase in indirect impacts, all of which are in rare communities. There is a slight difference in the amount of indirect impacts to special aquatic habitats for the two road types. The Primitive Park Road would impact one additional special aquatic habitat, and there would be no change from the baseline Northern Shore Corridor for the Principal Park Road.

Southern Option Crossing Fontana Dam (Primitive and Principal Park Roads)

The Southern Option Crossing Fontana Dam could only decrease impacts to jurisdictional wetlands and special aquatic habitats, as this section of road does not impact any additional wetlands (for both Primitive and Principal Park Roads). All impacts are reductions from the baseline Northern Shore Corridor by avoiding wetlands. In addition, the reductions are the same for both road types and are discussed together. The direct and indirect impacts to jurisdictional wetlands are reduced by avoiding five wetland areas, all of which are rare communities. There would be no change from the baseline Northern Shore Corridor in the amount of special aquatic habitats directly impacted for either road type, but indirect impacts would be reduced by avoiding one rare wetland community.

4.4.1.2.6 Cumulative Impacts

USFWS NWI mapping indicates approximately 10,333 acres (4,182 ha) of wetlands in the study area. Field investigations identified 69 wetlands totaling 6.93 acres (2.81 ha) in the project study corridors. The baseline Northern Shore Corridor for the Primitive Park Road would directly impact 17 wetland areas totaling approximately 1.63 acres (0.66 ha) and indirectly impact 24 wetland areas totaling approximately 2.66 acres (1.08 ha).

Past actions in the study area, described in Section 4.1.2, affected wetlands in the study area with Fontana Dam and development prior to the dam having the most evident impact. The creation and subsequent flooding of Fontana Dam and the series of impoundments on the Little Tennessee River eliminated the wetland area associated with these waters. Currently, many wetlands are located in areas that were disturbed

Clarification of the term "baseline" for this project:

The Partial-Build Alternative to Bushnell and the Northern Shore Corridor include a baseline route, as well as options to that route. Baseline routes and options are detailed in Section 2.5 and shown on Figure 2-8. Baseline routes have been compared to existing conditions. Impact analyses for the options are shown as a difference from the associated baseline route.

by settlements for farming or housing or by the mining and timber industries during the later 1800s and early 1900s.

The wetland impacts from other projects in the area were considered to determine the potential for cumulative impacts. The Ravensford Land Exchange would transfer less than 0.1 acre (0.04 ha) of wetlands to the EBCI, although none of these wetlands would be directly affected by construction on the site. A proposed wetland enhancement/restoration plan would compensate the loss of wetland to GSMNP. Mitigation is proposed to off-set indirect impacts due to construction of the schools.

Wetlands were also identified within and adjacent to the NPS right-of-way for Foothills Parkway (Section 8D) and might be adversely affected by construction of the parkway. With mitigation, the total wetland indirectly affected would be less than 1 acre (0.4 ha). Wetland impacts associated with all sections of Foothills Parkway are not known at this time.

While major wetland impacts are expected due to the construction of the Northern Shore Corridor, these impacts would be reduced through avoidance and minimization techniques. Avoiding impacts to wetlands may result in additional impacts to other resources. The potential benefits of avoidance for one resource will need to be weighed against the potential to impact other resources on a case-by-case basis. Remaining wetland degradation or loss would be offset through wetland compensation. This project combined with other current or planned projects in the area are not expected to have cumulative impacts to wetlands in the study area.

4.4.1.3 Options to Address Potential Impacts

Wetlands (referring to both jurisdictional wetlands and special aquatic habitats) are identified by the NPS as important natural resources. NPS has implemented a “no net loss of wetlands” policy in national parks and strives to achieve a “net gain” of wetlands across the national park system through restoration of previously degraded or destroyed wetlands. When planning for future development or other activities occurring in national parks, the NPS tries to avoid wetlands whenever practicable, minimize wetland impacts when avoidance is not possible, and mitigate all wetland impacts.

Avoidance Techniques

Once delineations have been conducted, the preliminary road designs would be re-evaluated to avoid direct and indirect impacts whenever possible. Direct impacts for wetland permitting requirements could be avoided by changing the footprint of the road or bridging the entire wetland system; however, the ecologic function of the wetland could still be impacted.

Clarification of the term “baseline” for this project:

The Partial-Build Alternative to Bushnell and the Northern Shore Corridor include a baseline route, as well as options to that route. Baseline routes and options are detailed in Section 2.5 and shown on Figure 2-8. Baseline routes have been compared to existing conditions. Impact analyses for the options are shown as a difference from the associated baseline route.

Minimization Techniques

Where no alternatives that avoid adverse impacts on wetlands are found to be practicable, minimization steps must be employed to reduce adverse impacts. Implementation of these steps would be required through design modifications and implementation of best management practices (BMPs) to limit and control impacts during and after project construction. Every practicable effort must be made to maintain the integrity of the natural wetland systems, preserving their features and functions.

Mitigation Techniques

After avoidance and minimization have been applied to the maximum practicable extent, remaining wetland degradation or loss must be offset through wetland compensation. Compensatory mitigation for wetlands will be determined by both the USACE and the NPS. Compensatory actions include restoration, creation, and enhancement of wetlands. Restoration is the returning of a degraded wetland to a pre-existing condition; creation is converting non-jurisdictional uplands to a wetland through site manipulation; and enhancement is increasing one or more of the functions performed by an existing wetland beyond what exists in the wetland (USEPA no date).

For the purpose of wetland compensation, wetland restoration proposals must, at a minimum, provide 1:1 wetland function replacement and a minimum of 1:1 wetland acreage replacement (NPS 1998b). Wetland mitigation sites must be on lands managed by the NPS and in the following order of preference: (1) within the same wetland system as the impacted wetland, (2) within the same watershed, or (3) in another watershed within the same NPS unit (NPS 1998b). The process for compensatory mitigation for wetland impacts may be time consuming, expensive, and complex. The success of restoration efforts, including the final community type, is uncertain, and the functionality may never fully reach that of the naturally occurring community.

Final compensatory mitigation requirements of USACE permits would be commensurate with the type and amount of impact associated with the permitted activity. It is unknown if compensatory mitigation would be required for the proposed project. NCDWQ may also require mitigation for wetland impacts as a condition of the Section 401 Water Quality Certification.

4.4.1.4 Impairment Evaluation

Impairment to the wetlands of GSMNP and the AT would not occur under the No-Action Alternative, Monetary Settlement Alternative, Laurel Branch Picnic Area, and the Partial-Build Alternative to Bushnell. The Northern Shore Corridor is not likely to impair the wetlands of GSMNP or the AT based on the information obtained to date. Due to the magnitude of this alternative, it is likely that additional NEPA documentation would be required to address site specific impacts not currently known and to determine detailed mitigation measures as they relate to final design. The impairment determination related to wetlands would be re-evaluated in such documentation.

Clarification of the term "baseline" for this project:

The Partial-Build Alternative to Bushnell and the Northern Shore Corridor include a baseline route, as well as options to that route. Baseline routes and options are detailed in Section 2.5 and shown on Figure 2-8. Baseline routes have been compared to existing conditions. Impact analyses for the options are shown as a difference from the associated baseline route.