

impacts to the resources located within the corridors will be done during the functional designs. Benefits and/or impacts for the Monetary Settlement Alternative are not addressed with regards to what Swain County would do with the money. The county could choose to spend the money in ways that result in environmental (human and natural) and cultural benefits and/or impacts within the study area; however, these potential benefits and/or impacts are not taken into account in the matrix, as they are unknown.

4.2 Alternatives Eliminated from Further Study or Modified

Three of the nine preliminary study alternatives were suggested for elimination from further study based on the matrix. The suggestions were made by comparing the alternatives, and those that were likely to have higher impacts were suggested for elimination. In addition, those alternatives that appeared to offer little benefit to the study area were also suggested for elimination. The three alternatives suggested for elimination are the Buckeye Branch Bridge Corridor, the Interior Corridor, and the Flint Gap Corridor. Reasons for elimination are discussed below.

4.2.1 Buckeye Branch Bridge Corridor

When compared with the other preliminary study alternatives, this corridor would have minimal benefits for local communities and GSMNP visitors. Benefits associated with this alternative would include a short segment of new vehicular access within GSMNP and a new connection between GSMNP and the Nantahala National Forest. These benefits are not expected to justify the cost and environmental impacts associated with the corridor and a major bridge crossing of Fontana Lake. This alternative was recommended for elimination because it would likely provide few enhancement opportunities to the GSMNP experience and likely would not satisfy the 1943 Agreement.

4.2.2 Interior Corridor

When compared with the other corridors, the Interior Corridor would likely have a high potential to fragment habitat, impact wildlife, and alter the backcountry experience. While problematic rock formations are located throughout the study area, this corridor would involve construction west of the confluence of Hazel Creek and Fontana Lake, where the underlying rocks are believed to have the highest potential for acid production and are likely to contain higher concentrations of metallic minerals than the surrounding rocks. An alternative in this corridor may generate moderate increases in the number of visitors to the study area, and the new access in GSMNP may indirectly

provide moderate economic development opportunities in Bryson City and other study area communities. This corridor would have the potential to moderately impact the AT. Although this corridor complies with the original intent of the 1943 Agreement, the cumulative impact of the factors mentioned above are expected to be greater than those of the alternatives recommended for detailed study in the DEIS. Therefore, this corridor was recommended for elimination.

4.2.3 Flint Gap Corridor

The Flint Gap Corridor, when compared with the other corridors, would likely have a high potential to fragment habitat, impact wildlife, and alter the backcountry experience. In addition, this corridor would likely impact a high number of potential cultural resource sites and streams. While problematic rock formations are located throughout the study area, this corridor would involve construction west of the confluence of Hazel Creek and Fontana Lake, where the underlying rocks are believed to have the highest potential for acid production and are likely to contain higher concentrations of metallic minerals than the surrounding rocks. This corridor may generate moderate increases in the number of visitors to the study area and may indirectly provide moderate economic development opportunities in Bryson City and other study area communities. This corridor would have the potential to moderately impact the AT. This corridor would avoid major bridge crossings at the Hazel Creek and Eagle Creek embayments by diverting north from the Northern Shore Corridor toward the interior of GSMNP. While this corridor complies with the original intent of the 1943 Agreement, the Flint Gap Corridor was recommended for elimination because of the impacts mentioned above. (Note: Based on public interest, this corridor was later modified to reduce impacts and go forward in the NEPA process for detailed study in the DEIS. The modification of the Flint Gap Corridor into what is later referred to as the Northern Shore Corridor [baseline] addressed public requests to avoid major bridge crossings and provide access to the former community area of Proctor. The modifications are explained in more detail in Section 7.3.)

4.3 Alternatives Initially Suggested for Detailed Study in the DEIS

Six alternatives were initially suggested for detailed study in the DEIS and presented to the public and resource agencies for review and comment. Information on why these alternatives were suggested for detailed study is included below. Four of the six alternatives suggested for detailed study are partial-build or build corridors. The remaining two alternatives are the No-Action Alternative and the Monetary Settlement Alternative. Figure 8 shows the partial-build and build alternatives that were initially suggested for detailed study in the DEIS.