APPENDIX F – DRAFT IMPAIRMENT DETERMINATION

The NPS has determined that the implementation of the NPS preferred alternative would not constitute impairment to the resources or values of Fort Stanton Park. This conclusion is based on consideration of the thorough analysis of the environmental impacts described in the EA, relevant scientific studies and other, and the professional judgment of the decision-maker guided by the direction in NPS *Management Policies* 2006. As described in the EA, implementation of the NPS preferred alternative would not result in impairment of park resources or values whose conservation is (1) necessary to fulfill specific purposes identified in the park's establishing legislation, (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or (3) identified in the park's management plan or other relevant NPS planning documents as being significance.

Alternative 2 (NPS Preferred Alternative) would result in short-term to long-term negligible to moderate adverse impacts on some of the park's resources, which include soils, water resources, water quality, wetlands, vegetation, wildlife, and scenic resources.

FINDINGS ON IMPAIRMENT FOR THE SLOPE REPAIR, STABILIZATION, AND ENVIRONMENTAL RESTORATION

Preferred Alternative

Soils – 0.43 acres of soil has been impacted by the embankment failure. Soils in the area of the failure are unstable and exposed to the elements, as all vegetation has been unearthed. As a result, soils have been eroding down the embankment. Soil is necessary to fulfill the purpose for which the park was established. Without soils, there would be no park. Soils are key to the natural integrity of the park. . Short-term minor adverse impacts to soils are anticipated during the construction phase of the slope stabilization and would be mitigated through wise construction practices, as discussed in the *Mitigation Measures of the Action Alternatives* section of this EA. The preferred alternative would not result in impairment of soils because long-term impacts are identified as beneficial. Soils would not be impaired within the project area after the completion of the preferred alternative. Soils would be more stable than before the embankment failure and would be less likely for future failures.

Water Resources – Water resources within the reservoir compound include the maintenance of stormwater, specifically at the location of the embankment failure. Water resources associated with stormwater is not necessary to fulfill the purpose for which the park was established. It is not key to the natural integrity of the park. Short-term minor adverse impacts from water resources are anticipated during the construction phase of the slope stabilization and would be mitigated through wise construction practices, as discussed in the *Mitigation Measures of the Action Alternatives* section of this EA. The preferred alternative would not result in impairment of water resources because water resources would not be impacted long-term by the preferred alternative.

Water Quality – Water quality within the reservoir compound has the potentially to be impacted by the embankment failure. The surface water located down gradient from the project area has the potential to receive excess runoff materials due to erosion if the embankment is not stabilized, thus potentially degrading water quality. In addition, stormwater percolation down to groundwater may be disrupted due to the lack of stable soils and vegetation in the area of the embankment failure. Water quality is necessary to fulfill the purpose for which the park was established. Water quality is key to the natural integrity of the park. Short-term minor adverse impacts to water quality is anticipated during the construction phase

of the slope stabilization and would be mitigated through wise construction practices, as discussed in the *Mitigation Measures of the Action Alternatives* section of this EA. The preferred alternative would not result in impairment of water quality because water quality would not be impacted long-term by the preferred alternative.

Wetlands – Wetlands are not identified within the project area, but are located down-slope from the project area. Wetlands are necessary to fulfill the purpose for the park within the natural management zone. Wetlands are key to the natural integrity of the park. The preferred alternative would not result in impairment of wetlands because the proposed action is not located in a wetland area, nor would the preferred alternative impact the wetlands located down gradient, away from the project area. Wetlands areas would only be impacted by the no action alternative. Under the no action alternative, soils and vegetation could continue to erode down slope and potentially deposit in the wetland area.

Vegetation – The existing slope embankment failure denuded an area of natural forest vegetation. Vegetation was displaces approximately 100 feet from the failure location into a wooded area. Vegetation is necessary to fulfill the purpose for which the park was established. Short-term minor adverse impacts to vegetation is anticipated during the construction phase of the slope stabilization and would be mitigated through wise construction practices, as discussed in the *Mitigation Measures of the Action Alternatives* section of this EA. The preferred alternative would not result in impairment to vegetation because over the long-term, vegetation would benefit after the completion of the stabilization process.

Wildlife – The existing slope embankment failure adversely impacted local forested wildlife habitats. Wildlife is necessary to fulfill the purpose for which the park was established. Short-term minor impacts to wildlife is anticipated during the construction phase of the slope stabilization and would be mitigated through wise construction practices, as discussed in the *Mitigation Measures of the Action Alternatives* section of this EA. The preferred alternative would not result in impairment to wildlife because it would improve habitat that was impacted due to the slope failure.

Scenic Resources – 0.43 acres of denude embankment may be seen by park visitor under the current embankment failure conditions. The findings of the viewshed analysis indicate that the location of the embankment failure is visible from several public-access areas of the park including the access road (looking north), the pool (looking north), and all areas east of the access road (looking north). The viewshed analysis also indicates that the location of the embankment failure is visible to areas outside of Fort Stanton Park including the residential properties located to the northeast of Fort Stanton on Skyland Terrance (looking west) and the properties located southeast of Fort Stanton on Bruce Place (looking northwest). Scenic resources are necessary to fulfill the purpose for which the park was established. Short-term minor impacts to scenic resources are anticipated during the construction phase of the slope stabilization and would be mitigated through wise construction practices, as discussed in the *Mitigation Measures of the Action Alternatives* section of this EA. The preferred alternative would not result in impairment to scenic resources because it would restore the viewshed of the project area back to its natural state as previously scene prior to the embankment failure.