12. Comparison of Alternatives

This section provides a comparison of the proposed Project and alternatives based on the analysis presented in Sections 5 through 11. This comparison describes the differences in impacts among the various alternatives, focusing primarily on noteworthy differences between the proposed Project and alternatives. For biological resources, the differentiators used to compare the alternatives included such considerations as total land disturbance, riparian vegetation communities affected, designated critical habitat lost or disturbed, and numbers of listed and special-status species affected (see Table S-3).

As shown in Table S-3 and detailed in Sections 5 through 11, although Alternatives 2 and 6 will result in direct and indirect impacts to biological resources, impacts associated with these alternatives will be lower in size and magnitude than the remaining alternatives. Alternative 2 would result in more land disturbance than Alternative 6 due to the extent of road improvements and construction. Alternative 6 follows the same route as the other alternatives through the ANF, impacting identical habitats and species, but it will comprise a net decrease in the size and magnitude of direct and indirect impacts as a result of the construction of the majority of the transmission line on the ANF by helicopter. This alternative results in the reduction of access road improvements by approximately 42.5 miles. However, impacts associated with helicopter construction, such as noise, rotor wash, and general disturbance to wildlife, would be greater under this alternative as compared to Alternative 2. It is important to note that helicopter-related impacts, while greater under Alternative 6, would be short-term while the loss of habitat and land disturbance associated with the other alternatives would be considered long-term impacts.

Alternative 7 would result in incrementally lower impacts to the federally and State listed least Bell's vireo. The Segment 7 overhead re-route would result in fewer 66-kV subtransmission structures than Alternative 2, and correspondingly less ground disturbance in areas that support least Bell's vireo. The Segment 8A overhead re-route (Option 1) would result in a new route for the 66-kV subtransmission line that would traverse habitat that likely supports least Bell's vireo, but is marginal habitat compared with the habitat crossed by Alternative 2. Segment 8A (Option 2) would occur in the same ROW as Alternative 2 in areas that support the least Bell's vireo, but would result in fewer 66-kV subtransmission structures in the ROW, therefore, decreasing ground disturbance. Both options would incrementally decrease impacts to the least Bell's vireo compared to Alternative 2, but Option 1 would likely result in impacts to fewer birds than Option 2 or Alternative 2. However, it should be noted that impacts to the least Bell's vireo would likely occur under both routing options of Alternative 7 as well as Alternative 2.

Alternative 3 and Alternative 5 will result in only incremental increases in impacts to biological resources as compared to Alternative 2. The re-routed portion of Alternative 3 would incrementally increase impacts to California annual grassland, native wildflower field, and desert wash habitats as compared to Alternative 2, while the implementation of Alternative 5 would result in additional incremental impacts to disturbed/developed areas and California annual grassland.

Although Alternative 4 would construct fewer miles of new transmission line than the other alternatives, it will result in a net increase in disturbance to unique vegetation communities as the re-routes (A through D and C Modified) traverse primarily natural habitats including CHSP, and the other alternatives traverse primarily barren/developed and agricultural habitats in this area of the project (Segment 8). In addition, a greater number of streams supporting riparian vegetation would be impacted by construction of Alternative 4. While there are slight differences in the routing options of Alternative 4, no individual route will result in a significant increase or decrease of impacts to biological resources.