APPENDIX H ñ Summary of the Biological Evaluation for the BLM Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management

In accordance with Section 7(a)2 of the Endangered Species Act of 1973, as amended, the Bureau of Land Management (BLM), Arizona State Office, requested formal consultation and conference for the BLM Arizona Statewide Land Use Plan Amendment and Environmental Assessment for Fire, Fuels, and Air Quality Management. A Biological Evaluation was written that provided detailed analyses of all federally listed (endangered or threatened), proposed, and candidate species, as well as designated or proposed critical habitat, that may be affected by the proposed action. Development of this BE was guided by the Regulations on Interagency Cooperation (Section 7 of the ESA) in 50 CFR Part 402 and BLM Manual 6840, and it followed the U.S. Fish and Wildlife Service (USFWS) Arizona Ecological Services Office (AESO) outline as found in Attachment B of the Consultation Agreement for this project. All anticipated environmental effects, conservation actions, mitigation, and monitoring are disclosed in the BE. This included analysis of all direct and indirect effects of the Proposed Action, including any interrelated and interdependent actions, on listed, proposed, or candidate species (as a group, considered as ìFederally protected speciesî), and designated or proposed critical habitat, from the analysis of the actions in the Statewide LUP Amendment and EA.

The planning area for the proposed Statewide LUP amendment includes all BLM-administered public lands within the state of Arizona and those portions of California administered by the Yuma and Lake Havasu Field Offices. Within the project area, 30 endangered species, 12 threatened species, one species proposed for listing, and five species that are candidates for listing inhabit either BLM-administered lands in Arizona or adjacent Federal, state, reservation, or private lands that could be affected by fire suppression or the proposed fire management activities (see **Table 3.6** of this EA). These 48 Federally protected species can be grouped as follows: two amphibians, 10 birds, 14 fish, 12 flowering plants, eight mammals, and two reptiles. Based on discussions and analyses during informal consultation, determinations were made that the proposed action would have no effect on 25 species within the action area of the project (see Appendix B of the BE).

The proposed action analyzed in the BE was the amending of BLMís seven existing Land Use Plans (LUPs) to comply with current fire policy and guidance and to fully integrate fire and fuels management and direction found in the latest Department of Interior (DOI) and BLM resource program guidance for lands administered by BLM. As described in the EA for the project, the LUP Amendment would establish **Desired Future Conditions, Land Use Allocations,** and **Management Actions, including Conservation Measures,** and would amend existing LUP decisions concerning fire, fuels, and air quality management. The BE analyzed the effects to Federally protected species from each of the proposed treatment methods for fire and fuels management, including wildland fire use, prescribed fire, and mechanical, chemical, and biological vegetation treatments.

In addition to the proposed fire management activities, the BE analyzed the effects to Federally protected species from fire suppression activities within the planning area. Currently, fire suppression operations that occur on BLM-administered lands in or near sites occupied by federally listed, proposed, or candidate species, or designated or proposed critical habitat, require emergency consultation or conference to comply with Section 7 of the Endangered Species Act, as amended. The proposed action would include continued

fire suppression operations in some locations that are not suitable for implementing the proposed treatment methods. In addition, fire suppression operations would occur during wildland fire use and prescribed fire activities. Under the proposed action, general and species-specific Conservation Measures would be implemented to the extent possible during fire suppression activities on BLM-administered lands. The implementation of these Conservation Measures and broad analysis of fire suppression activities would result in greater consistency statewide in minimizing potential direct, indirect, and cumulative effects to listed, proposed, and candidate species within the action area. This comprehensive analysis would also minimize or eliminate the future need for emergency consultation when fire suppression activities occur within the range of listed, proposed, or candidate species or their critical habitats.

Because of the planning-level of the analysis, no fieldwork was conducted to obtain site-level species information. Instead, the method used to develop the Conservation Measures and analyze the effects of the proposed action included 1) gathering information on species distribution, habitat and life history requirements, and response to wildfire, fire suppression, prescribed fire, and vegetation treatments from government and scientific references, internet sources, and species experts or resource managers in Federal, State, or non-governmental agencies; 2) generating GIS or other distribution maps for each species to assess the proximity of species locations and habitats to BLM-administered lands, and to determine the likelihood that fire suppression and the proposed fire management actions would affect those species; and 3) generating GIS maps depicting vegetation communities (GAP vegetation) and recent fire reports, land-ownership, historical/natural fire frequency regimes, and current condition of fire frequency regimes. The maps were then used in conjunction with the species and habitat information to consolidate and develop the Conservation Measures and to analyze the effects of the proposed action on the Federally listed, proposed, and candidate species within the action area.

The BE provides species-specific analyses for each of the 48 species that may be affected by fire suppression or the various treatment elements of the proposed action. Information for each species provided in the BE includes species life history, species status and distribution, affected habitat, and an analysis of the direct and indirect effects from fire suppression and each proposed fire management activity (wildland fire use, prescribed fire, and mechanical, biological, and chemical vegetation treatments). Potential effects to each Federally protected wildlife, fish, or plant species are similar to those listed in **Section 4.9.2** of this EA, which generally describes direct and indirect effects of the proposed action on special status species. The BE also provides an analysis of the cumulative effects of actions on state and private lands that may affect each species. Finally, for each species and designated or proposed critical habitat, a determination of ìmay affect, and is likely to adversely affectî (LAA) or ìmay affect, but is not likely to adversely affect î (NLAA) was then concluded from the species-specific analysis. **Table 4.7** of this EA provides a summary of the effects determination for each species and critical habitat analyzed in the BE.

In many cases, the determination of ìmay affect, and is likely to adversely affectî stems from potential effects to the species from fire suppression operations, and not the proposed fire management actions. Because of the low tolerance of either the species or its habitat to fire use activities (wildland or prescribed fire use) or vegetation treatments, or a lack of accumulated hazardous fuels, preliminary projections by BLM estimated that the proposed fire management activities would not be implemented in habitats occupied by 28 of the 48 Federally protected species or associated critical habitats analyzed in the BE. Thus, the proposed fire management actions would not directly or indirectly affect these species. At these locations, all wildfires would be fully suppressed, and thus any potential direct or indirect effects to the species would be from fire suppression operations. Conservation Measures (see **Appendix D** of this EA) would be implemented to the extent possible in sites occupied by Federally protected species to minimize or eliminate effects of suppression activities to the species, although effects of fire suppression operations would be balanced with the need to minimize effects of the wildfire itself and the need to protect firefighter and public safety. The

Incident Commander would have the final decision-making authority on implementation of Conservation Measures during fire suppression operations. For the remaining 20 species, one or more of the proposed fire management actions may be implemented in habitats supporting the species to reduce accumulated hazardous fuels or restore forest or rangeland habitat conditions. Mandatory Conservation Measures (see **Appendix D**), including pre-project surveys, seasonal or distance restrictions, and minimizing human or surface-disturbing activities in or near occupied sites, would be implemented to minimize or eliminate any potential direct or indirect effects to the species. Final determinations for which fuels treatments, if any, would be implemented in or adjacent to habitats occupied by Federally protected species would be determined during pre-project planning and environmental analyses in Fire Management Plans and site-specific project level plans.

Through the species-specific analyses in the Biological Evaluation, the BLM determined that the proposed project (including both fire suppression operations and the proposed fire management actions) may affect, and is likely to adversely affect, the following 29 Federally listed species: Chiricahua leopard frog, cactus ferruginous pygmy-owl, southwestern willow flycatcher, Yuma clapper rail, bald eagle, Mexican spotted owl, desert pupfish, Gila topminnow, razorback sucker, Virgin River chub, woundfin, Yaqui chub, Yaqui topminnow, Little Colorado spinedace, loach minnow, spikedace, Arizona cliffrose, Brady pincushion cactus, Holmgren milk-vetch, Huachuca water umbel, Kearneyís blue-star, Nichol turkís head cactus, Peebles Navajo cactus, Pima pineapple cactus, Jones cycladenia, Siler pincushion cactus, Hualapai Mexican vole, desert tortoise (Mojave population), and New Mexico ridge-nosed rattlesnake; as well as designated critical habitats for the Mexican spotted owl, razorback sucker, Virgin River chub, woundfin, Little Colorado River spinedace, loach minnow, spikedace, Huachuca water umbel, and desert tortoise (Mojave population). Through formal consultation under the Endangered Species Act, as amended, the BLM requested that the USFWS prepare a Biological Opinion for these 29 species and nine critical habitats.

Additionally, the BLM determined that the proposed project may affect, but is not likely to adversely affect, the following 11 Federally listed species: California brown pelican, masked bobwhite, northern aplomado falcon, bonytail chub, beautiful shiner, Yaqui catfish, black-footed ferret, jaguar, lesser long-nosed bat, ocelot, and Sonoran pronghorn; as well as designated critical habitats for the bonytail chub, Yaqui chub, beautiful shiner, and Yaqui catfish. The BLM requested that the USFWS provide written concurrence with the determinations for these 11 species and four designated critical habitats.

BLM policy in Manual Section 6840 requires BLM to confer on proposed species at the ìmay affectî level. The BLM determined that the proposed project may affect, and is likely to adversely affect, the proposed endangered Gila chub and the 10(j) population (equivalent to a ìproposedî status) of the Federally listed California condor, as well as proposed critical habitats for the Gila chub and cactus ferruginous pygmy-owl. Through formal conference under the Endangered Species Act, as amended, the BLM requested that the USFWS prepare a Conference Opinion for the these two species and two proposed critical habitats, such that the Conference Opinion could be converted to a Biological Opinion should the species be listed or should critical habitat be designated later. The BLM also requested written concurrence from the USFWS with a finding of ìmay affect, not likely to adversely affectî for the 10(j) population (equivalent to ìproposedî status) of the Federally listed Mexican gray wolf.

Finally, under the Memorandum of Agreement on Section 7 Programmatic Consultations (2000), the BLM requested recommendations from the USFWS based upon the effects analyses and determinations for the following five candidate species: relict leopard frog (NLAA), yellow-billed cuckoo (LAA), AcuÒa cactus (LAA), Fickeisen plains cactus (LAA), and black-tailed prairie dog (NLAA).