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Addendum



# **Addendum to the Biological Assessment for the Prescott National Forest Land and Resource Management Plan – Yellow-billed cuckoo Proposed Critical Habitat**

Coconino and Yavapai Counties, Arizona



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# List of Acronyms

AZGFD – Arizona Game and Fish Department  
BA – Biological assessment  
BO – Biological opinion  
ESA – Endangered Species Act  
LRMP – Land and resource management plan  
NF – National forest  
NFS – National Forest System  
OHV – Off-highway vehicle  
PCE – Primary constituent element  
PCH – Proposed critical habitat  
PNVT – Potential natural vegetation type  
USFS – U.S. Forest Service  
USFWS – U.S. Fish and Wildlife Service  
WSR – Wild and scenic river  
YBC – Yellow-billed cuckoo

# Introduction

## Background

This biological assessment (BA) has been prepared as an addendum of Endangered Species Act (ESA) § 7(a)(2) consultation on the proposed revised land and resource management plan (proposed LRMP) for the Prescott National Forest (Prescott NF or the forest) of the U.S. Department of Agriculture, Forest Service (USFS), Southwestern Region.

This BA summarizes an analysis of the potential effects to federally proposed critical habitat (PCH) for the threatened yellow-billed cuckoo from implementing the direction described in the proposed LRMP. The Prescott NF LRMP was prepared and revised as required by the National Forest and Rangeland Renewable Resources Planning Act of 1974, and as amended by the National Forest Management Act of 1975 (NFMA). Once finalized, the revised LRMP will replace the 1987 Prescott National Forest LRMP and its amendments.

The proposed LRMP is part of the land management planning process and provides forest-level direction to meet the Forest Service's mission during management of activities on the Prescott NF. LRMPs identify general land use purposes or suitability; future conditions that are desirable; goals and objectives for resource conditions on specific lands; and standards, guidelines, or other mechanisms that establish the management framework for all activities conducted and allowed on National Forest System (NFS) lands. LRMPs are developed and amended over time and must comply with the National Environmental Policy Act (NEPA) and the ESA. Site specific management actions (e.g., projects) implement the LRMPs and are also subject to individual NEPA and ESA requirements.

Because LRMPs do not prescribe the timing or exact location of specific land management activities, there is some uncertainty about the potential environmental consequences of implementing LRMP direction. This uncertainty extends to effects on federally listed species and critical habitats as well as proposed species and habitats. This BA evaluates the predicted effects of LRMP programmatic direction that may result in site specific land management activities. The determination of effects for yellow-billed cuckoo PCH results from evaluating the expected outcome of implementing LRMP direction (i.e., objectives, standard and guidelines, suitability determinations, and management area direction) and assumes that LRMP guidance will be followed when site specific land management activities are carried out in the future. Amending a LRMP (e.g., deleting/adding/changing standards and guidelines and other plan components) either for site specific projects or programmatically (i.e., a permanent change for all future projects) should and will occur on an as needed basis to adaptively keep the LRMP up to date. Such amendments would be considered outside of the scope of this consultation and would require their own site specific ESA § 7(a)(2) consultation to address the effects of the proposed actions.

Please note, wildland fire suppression activities are covered under ESA § 7(a)(2) emergency procedures; therefore, they are not included in the proposed action for this consultation.

A tiered approach to ESA § 7(a)(2) consultation is warranted. This approach includes consultation at the LRMP programmatic level that will result in a biological opinion (BO) with an incidental take statement and reasonable and prudent measures with implementing terms and conditions (T&Cs), as applicable. Additionally, each site specific project/activity implemented under the revised LRMP that may affect a listed species or critical habitat will undergo a separate ESA § 7(a)(2) consultation, which will be tiered to the programmatic level LRMP BO.

## Biological Assessment Objectives

The objectives of this BA are to:

**Comply** with requirements of § 7(a)(2) of the Endangered Species Act, as amended, for the Prescott NF proposed LRMP;

**Review** the land management programs (Watershed and Soils, Wildlife, Fish and Rare Plants, Wildland Fire and Fuels Management, Recreation Management, Roads and Engineering, Wilderness and Special Areas, Lands and Special Uses, Minerals Management, Rangeland Management, and Forestry and Forest Health) to identify ongoing activities that may affect yellow-billed cuckoo proposed critical habitat;

**Identify** plan components and other program guidance in the proposed LRMP that may affect yellow-billed cuckoo proposed critical habitat;

**Determine** the potential direct, indirect, cumulative, and interrelated/interdependent effects of the programmatic direction and activities described in the proposed LRMP on yellow-billed cuckoo proposed critical habitat within the action area.

## Consultation History

Communications in the form of emails, phone calls, and face-to-face meetings have been a part of the collaboration and consultation process associated with the development of a proposed LRMP. The following are relevant to the development of this BA:

**March 2013:** An initial list of species for consultation/conference consideration was sent to the USFWS Arizona Ecological Services Office (AESO).

**March/April 2013:** Emails and conference calls occurred between members of the Prescott NF and USFS Southwestern Regional Office (RO) to provide advice on the development of an interagency Consultation Agreement (CA).

**March/April 2013:** Emails and phone calls exchanged between Prescott NF and AESO regarding the content of a proposed CA. Agreed to meet in person to informally discuss the consultation process.

**May 15, 2013:** Albert Sillas and Noel Fletcher (Prescott NF biologists) and Mary Rasmussen (Prescott NF planner), met with Brenda Smith, Brian Wooldridge, and Shaula Hedwall (AESO biologists) to discuss the consultation process, review the potential species list, review initial species effects determinations, and to identify the type of information needed to describe the proposed action. Several people from the USFS Regional Office participated by video conference including: Ron Maes and Steve Plunkett (RO Wildlife TE&S Team Leaders) along with Matt Turner and Michelle Aldridge (RO Planners).

**May 16, 2013:** The proposed species list was updated to reflect information received during discussions on May 15.

**May 23, 2013:** A signed copy of the CA was sent to all involved parties.

**June-December 2013:** Prescott NF biologists compiled species information and developed effects determinations for several draft versions of the BA.

**August and October 2013:** RO Wildlife TE&S Team Leaders conducted technical reviews of the draft BA.

**October 30, 2013:** Albert Sillas and Noel Fletcher (Prescott NF biologists) and Mary Rasmussen (Prescott NF planner), met with Brenda Smith, Brian Wooldridge, and Shaula Hedwall (AESO biologists) to discuss changes in species listing status, effects determinations based on proposed actions, and consultation timelines.

**January 8, 2014:** Copies of the draft BA and proposed LRMP were sent to USFWS AESO for a 30-day review.

**January 24, 2014:** Request for formal consultation with transmittal of the final BA to USFWS AESO.

**February 6, 2014:** Prescott NF received acknowledgement from USFWS regarding receipt of consultation package for proposed LRMP.

**July 9, 2014:** Prescott National Forest received the Final Biological Opinion from USFWS AESO. YBC not included in this document as it was not listed at the time. Critical habitat for the YBC was also not included as it had not been proposed at this time.

**August 15, 2014:** USFWS proposes critical habitat for the YBC (Fish and Wildlife Service, 2014a).

## Species Addressed

This is a re-initiation of consultation on the Prescott NF proposed LRMP to address the recent YBC proposed critical habitat affected by the proposed action.

### Yellow-Billed Cuckoo (*Coccyzus americanus occidentalis*)

Endangered Species Act Status:	Threatened, October 2014
Recovery Plan:	No
Critical Habitat:	Proposed, October 2014
Determination of Effects (Species):	May Affect, Likely to Adversely Affect
Determination of Effects (Proposed Critical Habitat):	May Affect, Likely to Adversely Affect

## Natural History and Distribution

The yellow-billed cuckoo (eastern and western populations) is a neo-tropical migrant bird that winters in South America and historically bred throughout most of continental North America, including portions of eastern and western Canada, northern and central Mexico, and the Greater Antilles (AZGFD, 2011).

The western yellow-billed cuckoo is a riparian-obligate species. Nesting and foraging habitat includes open cottonwood woodlands with an understory of dense vegetation, especially near water. In the arid west, this type of habitat usually occurs along river corridors. Nests are usually in willows. The larger populations of western yellow-billed cuckoos in the U.S. are in Arizona and New Mexico. The species is now extirpated as a breeder in western Canada, Washington, and Oregon, and it is rare and patchily distributed throughout the areas west of the Rocky Mountains outside New Mexico and Arizona. The primary threats to the species are a) present or threatened destruction, modification, or curtailment of its habitat or range, b) over utilization for commercial, recreational, scientific or educational purposes, c) disease or predation, d) inadequacy of existing regulatory mechanisms, and e) other natural or manmade factors affecting its continued existence (Fish and Wildlife Service, 2014b).

Yellow-billed cuckoos (YBC) typically occur in narrow riparian cottonwood-willow galleries and are known to use salt cedar. Dense understory foliage is an important factor in nest site selection in Arizona. YBC are also known to use mesquite bosques in Arizona.

A stick platform nest thinly lined with leaves, mesquite, cottonwood strips, grass, and catkins is built by the male and female in willow or mesquite thickets, 4 to 30 feet above ground. Clutches of 3 to 4 eggs are laid and incubated for 4 to 11 days to hatch synchronously. While young are altricial, they leave the nest in 7 to 8 days. Double clutching can occur in this species.

The Western Distinct Population nests west of the Rocky Mountains in North America, south to southern Baja California. The species migrates south in the winter to Argentina and Uruguay in South America (Terres in HDMS). Historically the species was locally common and widespread in California and Arizona, locally common in New Mexico, Oregon, and Washington, and it was uncommon in Colorado, Wyoming, Idaho, Nevada, Utah, and British Columbia in Canada.

Currently, the largest remaining population west of the Rocky Mountains is in Arizona as the species is rare in Colorado and Idaho and possibly extirpated in Nevada. There is some discussion as to whether the Texas population is more similar to the eastern than western population. Regardless, cuckoos are widespread and uncommon to common in central and eastern Texas.

The proposed Western Distinct Population of YBC includes areas west of the continental divide including parts or the entire States of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington, and Wyoming. The boundary also includes areas of southwestern British Columbia in Canada and northwestern Mexico.

### **Status of the Species Rangewide and within the Action Area**

In the western U.S., declines in riparian habitat have been identified as the primary cause in YBC population declines. For the Western population, states average over 90 percent declines in riparian habitat and 70 percent declines nationwide. YBC is relatively common in much of the eastern U.S.

The species is generally found in southern and central Arizona and extreme northeast portion of the state. Despite declines in riparian habitats from historic levels, the cuckoo is still found in all counties in Arizona.

On the Prescott NF, YBC have been documented along the Verde River, Sycamore Creek and Little Sycamore Creek. YBC have also been documented breeding on the adjacent important bird areas (IBAs), Aqua Fria National Monument, and the Upper Verde River.

### **Proposed Critical Habitat**

Proposed critical habitat (PCH) has been identified for the YBC (Fish and Wildlife Service, 2014a). On the Prescott NF, YBC PCH occurs in two different general areas. The first main large critical habitat unit would extend from Sullivan Dam on the Verde River downstream to below Cottonwood. The other area of proposed critical habitat would occur on the Agua Fria and its tributaries. The portions on the Prescott NF include a small piece along Ash Creek, portions of Little Ash, Sycamore, and possibly Indian Creek as well.

### **Threats**

The USFWS have identified the following threats for YBC PCH: disruption of hydrological processes that are necessary to maintain a healthy riparian system, loss of riparian habitat regeneration caused by poorly managed grazing, loss of riparian habitat from development activities and extractive uses, degradation of riparian habitat as a result of expansion of nonnative vegetation, destruction of riparian

habitat by uncontrolled wildfire, and reduction of prey insect abundance by the application of pesticides (USFWS 2014a).

## Climate Change

The potential effects of climate change could include loss of riparian habitats that YBC depends on and long term drought and hotter average temperatures, which could also result in a higher risk of stand-replacing fires near and within riparian habitats. However, there are no expectations of measurable changes within the temporal bounds of this action.

## Effects Analysis for Proposed Critical Habitat

For a species with proposed critical habitat, the effects analysis approach identifies how the proposed primary constituent elements (PCEs) or biological features essential to the conservation of the species are likely to be affected by the proposed LRMP.

## Proposed Primary Constituent Elements

The proposed primary constituent elements (PCEs) of the physical or biological features essential to the conservation of the western yellow-billed cuckoo consist of three components as described in Table 1.

**Table 1. Western yellow-billed cuckoo proposed critical habitat –primary constituent elements**

<b>PCE #</b>	<b>Primary Constituent Elements</b>
<b>PCE-1 Riparian woodlands</b>	Riparian woodlands with mixed willow-cottonwood vegetation, mesquite-thorn-forest vegetation, or a combination of these that contain habitat for nesting and foraging in contiguous or nearly contiguous patches, that are greater than 325 feet (100 meters) in width, 200 acres (81 hectares) or more in extent. These habitat patches contain one or more nesting groves, generally willow-dominated, have above average canopy closure (greater than 70 percent) and have a cooler, more humid environment than the surrounding riparian and uplands habitats.
<b>PCE-2 Adequate prey base</b>	Presence of a prey base consisting of large insect fauna (for example, cicadas, caterpillars, katydids, grasshoppers, large beetles, dragonflies) and tree frogs for adults and young in breeding areas during the nesting season and in post-breeding dispersal areas.
<b>PCE-3 Dynamic riverine processes</b>	River systems that are dynamic and provide hydrologic processes that encourage sediment movement and deposits that allow seedling germination and promote plant growth, maintenance, health and vigor. (e.g., lower gradient streams and broad flood plains, elevated subsurface ground water table, and perennial rivers and streams). This allows habitat to regenerate at regular intervals, leading to riparian vegetation with variously aged patches from young to old.

## Watersheds and Soils

The proposed LRMP has four objectives (Obj-18, Obj-19, Obj-23, and Obj-31) that direct Watershed and Soils program activities. These are described in detail in the front section of this BA. The first three objectives were assessed relevant to their general effects to riparian habitat and then as they related to YBC proposed critical habitat. Obj-31 is a process that involves acquiring instream flow water rights and completing the monitoring and reporting that goes along with those water rights. This objective does not involve making any on-the-ground decisions to modify the physical structure of the habitat. It would only



have beneficial effects to the terrestrial and aquatic physical natural resources associated with riparian habitat.

There are no proposed objectives (e.g., treatments, management actions, projects) specifically for riparian PNVT habitats in the selected alternative.

The proposed LRMP would improve watershed resources and the associated riparian habitat (Forest Service, 2012). Guide-WS-3 would ensure that riparian areas are at least maintained in their existing condition if not improved by any projects that may impact these habitat features, thus providing for the maintenance or improvement in quantity and quality of YBC PCE-1 and thus YBC PCE-2. Implementing Obj-18, Obj-19 and Obj-23 would likely improve riparian vegetation habitat features for all wildlife species. If located in YBC proposed critical habitat, Obj-19 in particular could likely have the potential to impact and improve the quality of YBC habitat in the project areas. Some short term adverse effects to the vegetation associated with proposed PCEs might be expected during implementation, followed by long term beneficial effects to proposed PCEs. Guide-WS-4 through Guide-WS-10 would provide direction for project design to avoid or minimize impacts to riparian habitat features, and thus, associated species' habitat.

All of these Watershed objectives are proposed for the purpose of improving watershed integrity and would contribute to the long term maintenance or improvement for all YBC PCEs through riparian habitat improvement.

The types of projects that are ongoing and proposed within the watershed and soils program are typically those that improve the function and physical condition of the vegetation and the soil in both upland habitat types as well as in riparian habitats. The projects would be expected to improve the condition of the riparian vegetation and thus provide for all aspects of YBC PCEs in proposed critical habitat for both the YBC and its prey species.

### **Wildlife, Fish and Rare Plants**

The proposed LRMP has five objectives (Obj-24 through Obj-28) that direct Wildlife/Fish/Rare Plants program activities. None of the objectives for the Wildlife/Fish/Rare Plants program are relevant to YBC or its habitat and would not have any impacts to proposed critical habitat.

Guidelines for the Wildlife/Fish/Rare Plants program would, however, influence projects in other program areas. Guide-WL-2 is the only guideline relevant to the YBC proposed critical habitat. By applying design features specific for YBC to projects occurring within YBC proposed critical habitat, site specific projects in these areas should contribute to the recovery of the species by providing for all of the YBC PCEs. Prescriptions to maintain or improve the PCE of proposed critical habitat would be an example of project design features that would influence the details of site specific projects in such a way as to alleviate or minimize unwanted impacts to the species, improve habitat quality, and contribute to the recovery of the species.

### **Wildland Fire and Fuels Management**

The proposed LRMP has five objectives (Obj-1 through Obj-5) that direct the Wildland Fire and Fuels program activities. None of the objectives is relevant to YBC proposed critical habitat as they are specific for vegetation types where YBC proposed critical habitat is not found or known to occur.

None of the Wildland Fire and Fuels standards or guidelines is specifically relevant to YBC proposed critical habitat. Guide-Wildland Fire-8 is indirectly relevant in as much as it would contribute to

protecting riparian resources where prescribed fires may occur near riparian habitats, thus protecting all of the YBC PCEs.

The impacts from wildland fire and aviation operations would be addressed in an emergency consultation relevant to the associated suppression actions and are not included in the analysis of effects to YBC proposed critical habitat. All YBC proposed critical habitat is mapped as avoidance areas for retardant use. Ongoing activities within the Wildland Fire and Fuels program include site specific projects with site specific NEPA analyses for hazardous fuels reduction and forest health, wildfire management, aviation operations, and fire prevention patrols. The NEPA projects are reviewed annually to ensure current compliance with law, policy and direction. Fire prevention patrols consist of fire personnel patrolling open roads to look for abandoned campfires and contact forest visitors.

## **Recreation**

The proposed LRMP has 10 objectives (Obj-8 through Obj-17) that direct the Recreation program activities. None of the objectives is specifically relevant to YBC proposed critical habitat. Any recreation projects potentially impacting YBC proposed critical habitat would be developed per Guide-WL-2 discussed above to alleviate or eliminate impacts to YBC proposed critical habitat by providing for the continuance or maintenance of YBC PCEs.

Ongoing activities within the Recreation program include developed recreation, dispersed camping, recreation special use permits for a variety of activities, and outfitter/guide permits for hunters, organizational camps, and several schools, and the non-motorized trail system on the forest. The developed recreation is contained within particular areas, none of which occur in or near YBC proposed critical habitat. Dispersed camping occurs forest-wide with only a few exceptions. Dispersed camping is not allowed within a recreation area boundary surrounding developed recreation facilities and is confined to designated dispersed campsites within the Prescott Basin. The special use permits are all reviewed by resource specialists and designed to comply with law, policy and direction. These can occur forest-wide and are in compliance with LRMP standards and guidelines.

Ongoing camping and OHV use in the Yellow Jacket area along Little Ash Creek is occurring within YBC proposed critical habitat and is adversely affecting the vegetative components of the proposed PCEs. Possible actions to address and manage the situation would be developed using Guide-WL-1 and Guide-WL-2 to implement project design for YBC proposed PCEs. Some short term adverse effects could occur to the vegetation within the YBC habitat that may affect the proposed PCEs but would not adversely modify the habitat. These would be designed to have long term beneficial effects to the habitat. Non-motorized trails occur forest-wide, including within YBC proposed critical habitat. During trail maintenance, some short term adverse effects could occur to the vegetation within the YBC proposed critical habitat that may affect the proposed PCEs but would not adversely modify the habitat.

## **Transportation**

The proposed LRMP has three objectives (Obj-20 through Obj-22) that direct the Transportation program activities. All of these Transportation objectives are proposed for the purpose of improving watershed integrity. While implementing any of these projects may have localized, short term impacts including changing of current upland or riparian vegetation habitat features, the site specific projects would all be designed with the long term objective and intent of improving physical characteristics as either a means or a result of improving watershed integrity. The end effect would inherently be improved vegetative habitat quality as uplands and riparian areas are moved towards desired conditions. These would inherently and eventually improve the quantity and quality of YBC PCEs where they occur in riparian corridors.

Implementing Obj-20 through Obj-22 would likely improve any riparian vegetation habitat features associated with the project for all wildlife species. None of the objectives is specifically relevant to the YBC proposed critical habitat. Any of the objectives could have site specific projects that occur within YBC proposed critical habitat. All of the objectives are designed to improve the physical condition of watershed integrity and alleviate or eliminate any negative impacts from transportation facilities to other resources including riparian and terrestrial habitat components. Some short term adverse effects might be expected to occur to proposed PCEs during project implementation as vegetation is impacted. However, it would be expected that the projects would be designed to avoid long term adverse effects to YBC proposed critical habitat PCEs.

None of the Transportation guidelines is specifically relevant to the YBC proposed critical habitat. Any transportation project potentially impacting YBC proposed critical habitat would be developed per Guide-WL-2 discussed above to alleviate or eliminate impacts to YBC proposed critical habitat. By including design features specific to the YBC habitat needs, YBC PCEs would be maintained or improved by projects occurring in YBC proposed critical habitat. Some short term adverse effects might be expected to occur to PCEs during project implementation as vegetation is impacted. However, it would be expected that the projects would be designed to avoid long term adverse effects to YBC proposed critical habitat PCEs.

Ongoing activities within the Transportation program include the operation and maintenance of the transportation system on the Prescott NF which consists of roads and trails that provide access to areas on the forest including private land, structures and improvements under special use permit, recreational opportunities, and facilities that support land and resource management activities.

Open roads and trails occur within YBC proposed critical habitat. Important aspects of YBC proposed critical habitat PCEs would be considered and provided for in projects involving YBC proposed critical habitat also through Guide WL-2. Any future new roads, trails, or changes in type of use or location would be site specifically assessed for effects to YBC proposed critical habitat. Some short term adverse effects might be expected to occur to proposed PCEs during project implementation as vegetation is impacted. However, it would be expected that the projects would be designed to avoid long term adverse effects to YBC proposed critical habitat PCEs.

### **Wilderness and Special Areas**

The proposed LRMP has no objectives that direct the Wilderness and Special Areas program activities. The selected alternative recommends 23,000 acres for future wilderness designation adjacent to the existing 8 wilderness areas. The ongoing program includes 8 designated wilderness areas, totaling over 100,000 acres.

None of the standards or guidelines for this program area is specifically relevant to the YBC proposed critical habitat. There is no YBC proposed critical habitat within wilderness or special areas on the Prescott NF.

The Sycamore Canyon Contiguous A Potential Wilderness Areas contains and is adjacent to current YBC habitat locations on the Prescott NF as well as proposed critical habitat along the Verde River. Any future designation of the potential areas as wilderness would not be expected to have any impacts to YBC proposed critical habitat.

## **Lands and Special Uses**

The proposed LRMP has two objectives (Obj-29 and Obj-30) that direct the Lands and Special Uses program activities. Both of these objectives could potentially be located in YBC proposed critical habitat. Obj-29 is particularly relevant in the Verde Valley and could have beneficial effects to YBC proposed critical habitat where lands are acquired in YBC proposed critical habitat. Obj-30 could have mixed impacts to YBC proposed critical habitat as access across private parcels to NFS lands is acquired. Providing additional public access to areas currently not accessed could increase impacts to YBC proposed critical habitat from dispersed camping. Meanwhile, acquiring access to these same areas would provide additional USFS presence and opportunities to actively manage the areas for the improvement or protection of the resources. Any Lands and Special Uses project occurring in or impacting YBC proposed critical habitat would be developed per Guide-WL-2 discussed above to alleviate or eliminate impacts to YBC proposed critical habitat.

Program guidelines relevant to the YBC proposed critical habitat include Guide-Lands-2 through Guide-Lands-5. These all include some facet of considering the importance of wildlife habitat or some aspect of wildlife needs in the purpose, need or design of Lands projects. These guidelines would all contribute to alleviating or eliminating undesirable impacts to any YBC proposed critical habitat as well as providing for all of the YBC PCEs. However, some adverse effects could occur to the PCEs of proposed critical habitat as the result of vegetation manipulation, utility or road construction, or increased use or activity authorized through a legally mandated permit, right-of-way, or easement issued in YBC proposed critical habitat. There could be the potential for adverse habitat modification depending on the nature of the permit or right-of-way.

## **Minerals Management**

The proposed LRMP has no objectives that direct the Minerals Management program activities. Ongoing activities within the program area include various types of mining activities described previously.

None of the minerals standards or guidelines is specifically relevant to the YBC proposed critical habitat. Some may be indirectly relevant in as much as they provide direction for associated riparian habitat (Guide-Locatable Minerals-1, Guide-Locatable Minerals-2, Guide-Mineral Materials-1). Minimizing disturbance to riparian vegetation, avoiding disturbance to upland vegetation and avoiding adverse effects to riparian dependent resources would protect riparian habitat and provide for maintaining or improving all of the YBC PCEs. Any Minerals project with a potential to impact YBC proposed critical habitat would be developed per Guide-WL-2 discussed above, including design features with details relevant to the species' habitat, to alleviate or eliminate impacts to YBC proposed critical habitat and YBC PCEs. However, if a request for a plan of operation were submitted for a claim in YBC proposed critical habitat, under the 1872 Mining Law, the Prescott NF would be required to process and grant a plan of operation to the claimant, potentially having adverse effects to the PCEs of proposed critical habitat for YBC.

## **Rangeland Management**

The proposed LRMP has no objectives that direct the Rangeland Management program activities.

There is currently ongoing livestock grazing on the Prescott NF. Areas where grazing is excluded include: Prescott Municipal watershed (Goldwater Lake), Lane Mountain watershed, Lynx Lake and Granite Basin Recreation Areas, and the designated wild and scenic segments of the Verde River. Portions of YBC habitat occur within the wild and scenic portions of the Verde River. None of the management area direction for the upper Verde is relevant to the YBC proposed critical habitat. Livestock grazing is

currently occurring in YBC proposed critical habitat in the Agua Fria tributaries along Sycamore Creek, Ash Creek, and Little Ash Creek near Dugas, AZ on the Verde Ranger District. Proper livestock grazing that incorporates direction from the LRMP may have some short term adverse effects to PCE-1 of proposed critical habitat for YBC, which would also impact PCE-2. However, per Std-Range-2, any livestock grazing in riparian habitat would avoid yearlong grazing to prevent adverse impacts to water quality and riparian habitat in those areas.

Standards and guidelines for Rangeland Management Program are not specifically relevant to YBC proposed critical habitat. However, Std-Range-2, Guide-Range-1, Guide-Range-5, and Guide-Range-6 do address protecting or providing for riparian habitat and other wildlife habitat needs which would indirectly protect or improve all of the YBC PCEs associated with riparian habitat for YBC and their prey species. This direction, in concert with the design features for the YBC, would provide a framework for developing grazing strategies to provide for YBC proposed critical habitat.

### **Forestry and Forest Health**

The proposed LRMP has three objectives (Obj-3, Obj-5, and Obj-6) that direct the Forest Health program activities. Obj-3 and Obj-5 are not relevant to the YBC proposed critical habitat as they apply to upland PNVT vegetation types where the YBC habitat is not found. If applied to any riparian situations, Obj-6 could be relevant to the YBC proposed critical habitat. In the process of removing nonnative plants or organisms, some short term adverse effects could occur to the YBC proposed critical habitat PCEs and would not be expected to adversely modify the habitat. Guide WL-2 would apply, and thus, design features developed for YBC proposed critical habitat PCEs would ensure YBC critical habitat needs are met and incorporated into the project designs. Thus, long term effects would be expected to be beneficial for the habitat.

None of the Forest Products standards or guidelines is specifically relevant to the YBC proposed critical habitat.

Ongoing activities within the Forest Health program include site specific projects with site specific NEPA analyses for hazardous fuels reduction and forest health. Any Forest Health project impacting YBC proposed critical habitat would be developed per Guide-WL-2 discussed above.

### **Cumulative Effects**

The USFWS have identified three facets of proposed critical habitat for the YBC: dense riparian vegetation for nesting, abundant insect and tree frog prey base, and dynamic riverine systems to provide the nesting and prey habitat through time.

The USFWS have identified the following threats for YBC PCH: disruption of hydrological processes that are necessary to maintain a healthy riparian system, loss of riparian habitat regeneration caused by poorly managed grazing, loss of riparian habitat from development activities and extractive uses, degradation of riparian habitat as a result of expansion of nonnative vegetation, destruction of riparian habitat by uncontrolled wildfire, and reduction of prey insect abundance by the application of pesticides (USFWS 2014a).

Impacts from the LRMP include short term adverse effects to riparian habitat components, long term adverse effects to YBC habitat, as well as long term beneficial effects to YBC habitat.

Non-Federal activities or actions contributing to these cumulative effects would include adverse modification of YBC riparian habitat on private land in both the short and long terms. With regard to

beneficial cumulative effects, where private land owners are returning their property to native riparian species, there would be short term adverse and long term beneficial impacts to YBC habitat where it occurs on or adjacent to the private property.

### **Summary of Impacts to YBC Proposed Critical Habitat by Program**

While most program areas would strive for long term beneficial effects to YBC proposed critical habitat, some short term adverse effects may occur in the process of moving toward desired conditions. Some of the other programs may have long term adverse effects to the proposed PCEs of YBC proposed critical habitat through permit issuance required by law.

**Table 2. Summary of impacts to yellow-billed cuckoo proposed critical habitat by program**

<b>Program</b>	<b>Determination of Impacts</b>
Watershed and Soils	Short term adverse and long term beneficial impacts
Wildlife/Fish/Rare Plants	
Wildland Fire and Fuels Management	
Recreation	Potential for both short and long term adverse impacts
Transportation	
Wilderness and Special Areas	No impacts
Lands and Special Uses	Potential for both short and long term adverse impacts
Mineral Management	
Rangeland Management	Short term adverse and long term beneficial impacts
Forestry and Forest Health	

## Determination of Effects (Proposed critical Habitat)

There is the possibility that certain facets of implementing the LRMP could have adverse effects to the proposed primary constituent elements of YBC proposed critical habitat. Therefore, the Prescott NF LRMP would result in a “May Affect, Likely to Adversely Affect” determination to yellow-billed cuckoo proposed critical habitat.

### Signatures:

#### Prepared by:

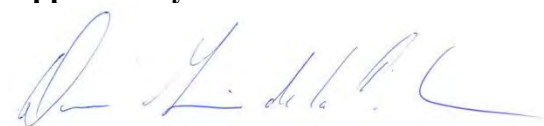


*November 24, 2014*

Noel Fletcher  
Wildlife Biologist  
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Date

#### Approved by:



*November 24, 2014*

Dan Garcia de la Cadena  
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Prescott NF

Date

## Literature Cited

### Yellow-Billed Cuckoo

Arizona Game and Fish Department. (2011). Yellow-billed cuckoo (*Coccyzus americanus*). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. 6 pp.

Fish and Wildlife Service, U.S. Department of the Interior. (2014a). Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Western Distinct Population Segment of the Yellow-Billed Cuckoo (*Coccyzus americanus*); Proposed Rule. *Federal Register*, 79(158), 48548-48652. August 15, 2014.

Fish and Wildlife Service, U.S. Department of the Interior. (2014b). Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Western Distinct Population Segment of the Yellow-billed Cuckoo (*Coccyzus americanus*); Final Rule. *Federal Register*, 79(192), 59992-60038. October 3, 2014.