

ATTACHMENT 1

Guidelines for the identification and evaluation of suitable habitat for Western yellow-billed cuckoo in Utah

The purpose of this guidance is to assist federal agencies and project proponents in identifying areas that provide suitable, occupied habitats for Western yellow-billed cuckoos (cuckoo) in Utah, and should be further evaluated for potential effects from proposed project activities.

Step 1: Identify and delineate all riparian habitats within 0.5 mile of the proposed action, below the elevation of 8,500 feet. Step 2: Identify suitable cuckoo breeding, nesting habitat, including associated foraging areas.

Riparian habitat patches used by breeding and nesting cuckoos vary in size and shape, ranging from a relatively contiguous stand of mixed native/exotic vegetation to an irregularly shaped mosaic of dense vegetation with open areas. The following parameters characterize suitable breeding and nesting cuckoo habitat:

1. Vegetation that is predominantly multi-layered, with riparian canopy trees and at least one layer of understory shrubby vegetation;
 - a. Riparian overstory and understory vegetation that supports suitable cuckoo habitat may include: cottonwood (*Populus spp*), willow (*Salix spp*), alder (*Alnus spp*), walnut (*Juglans spp*), boxelder (*Acer spp*), sycamore (*Plantanus spp*), ash (*Fraxinus spp*), mesquite (*Prosopis spp*), tamarisk (*Tamarix spp*), and Russian olive (*Elaeagnus angustifolia*). Suitable understory vegetation does not include grasses or forbs although herbaceous vegetation is often present alongside shrubby understory.
 - b. Western yellow-billed cuckoo nest in tamarisk, consequently, the presence of tamarisk should not eliminate a vegetation patch from a suitability determination. However the potential for cuckoo occurrence decreases rapidly as the amount of tamarisk cover increases.
2. Patches of multi-layered vegetation (as described above) that are at least 12 acres (5 ha) or greater in extent and separated from other patches of suitable habitat by at least 300 meters;
3. Somewhere within a patch, the multi-layered riparian vegetation (as described above) should be at least 100 meters wide by 100 meters long. This is to avoid patches that maybe long enough to meet the minimum area (12 acres) but are so narrow that they are unsuitable-- 750 m x 75 m (length x width) for example; and,
4. Open areas, or gaps of multi-layered vegetation within a patch are less than 300 meters. Breeding and nesting cuckoos will forage in riparian patches that have a single layer overstory canopy and are within 300 meters (m) of the edge of suitable breeding and nesting habitat.

Step 3: Suitable cuckoo breeding, nesting, and foraging habitats within 0.5 mile of project activities should be surveyed to determine if a habitat patch contains cuckoos.

Step 4: Habitats determined to be occupied by cuckoos should be evaluated for potential effects from project activities. If adverse effects to cuckoos are anticipated, federal agencies should initiate section 7 consultation with the U.S. Fish and Wildlife Service under the Endangered Species Act.

REFERENCES

Halterman, M., M.J. Johnson, J.A. Holmes and S.A. Laymon. 2016. A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo. Draft May 2016: U.S. Fish and Wildlife Techniques and Methods, 45 p.

Laymon, S. 2015. Personal Communication. Senior Wildlife Biologist, Sacramento Fish & Wildlife Service Office.

U.S. Fish and Wildlife Service. 2014. Final rule determining threatened status for the western yellow-billed cuckoo. Federal Register 79: 59992-60038.