

Coronado Forest Plan Administrative Changes

Administrative Change per 2012 Planning Rule Monitoring Transition to Focal Species

Administrative Change #2

December, 2019

Introduction

This Administrative Change #2 to the 2018 Land and Resource Management Plan (Forest Plan) for the Coronado National Forest (NF) brings the Forest Plan's Monitoring Strategy into alignment with the monitoring requirements of the 2012 Planning Rule (36 CFR 219).

The 2012 Rule provides directions for a set of monitoring questions and associated indicators that must be part of every plan monitoring program (USDA Forest Service 2012). The Coronado Forest Plan approved in 2018 incorporated all but the focal species required monitoring plan element: the status of focal species to assess the ecological conditions required under § 219.9.

In the 2012 Planning Rule, Management Indicator Species (MIS) monitoring has been replaced with monitoring of focal species. The concept of MIS as a surrogate for the status of other species is not supported by current science, and population trends are difficult and sometimes impossible to determine within the lifespan of a plan. The concept of focal species, however, is well supported in the scientific literature and community. Focal species monitoring provides information regarding the effectiveness of the plan in providing the ecological conditions necessary to maintain the diversity of plant and animal communities and the persistence of native species in the plan area.

Identification of Focal Species

When the Coronado National Forest (Coronado NF) revised its plan in 2018, it identified three MIS: Mexican spotted owl (*Strix occidentalis lucida*), acorn woodpecker (*Melanerpes formicivorus*), and Sonora mud turtle (*Kinosternon sonoriense sonoriense*). After reviewing the purposes for monitoring focal species and the key considerations, the Coronado NF is recommending that the three MIS be carried forward as focal species as they each meet the focal species definition: Mexican spotted owl as a good representative for specific ecological conditions within mixed-conifer, Ponderosa pine-evergreen shrub (oak), and Madrean pine-oak woodland habitats; acorn woodpecker as a good representative for Madrean pine-oak and Madrean encinal woodland habitats; and Sonora mud turtle as a good representative for natural and constructed water sources in grassland, Madrean encinal woodland, and Madrean pine-oak woodland habitats.

Mexican Spotted Owl

On the Coronado NF, the Mexican spotted owl (MSO) serves as an indicator of mixed-conifer, Ponderosa pine-evergreen shrub (oak), and Madrean pine-oak woodland habitats. In general, MSO prefer late seral forests containing mature or old-growth, complex, uneven-aged, multistoried stands with high canopy cover that offer habitats for nesting, roosting, and foraging (Corman and Wise 2005, U.S. Fish and Wildlife Service 2012). Throughout the species' range, it is often, but not always, associated with steep topography, although the MSO also occurs in areas of gentle terrain, as long as suitable forest structure

exists. The proposed treatments in combination with the varied desired conditions for the habitat types in which the MSO occurs on the Coronado NF should result in the return to the diversity of habitats and structures that MSO prefer: for dry mixed-conifer, moving to mature/old with regeneration, open structural classes; for wet mixed-conifer, increased aspen/mixed deciduous and old mixed-conifer with regeneration structural classes; for Ponderosa pine-evergreen shrub (oak), moving to more old with grass, closed and young with grass, moderate cover structural classes; and for Madrean pine-oak woodland, maintaining old pine-oak with the addition of understory. Although these vegetation treatments may have short-term impacts to MSO, these treatments are expected to result in long-term sustainability and increased resilience to stand-replacing fires and insect outbreaks. As the Coronado NF moves forward with vegetation treatment efforts, monitoring the MSO will help evaluate the persistence of ecological conditions of mixed-conifer, Ponderosa pine-evergreen shrub (oak), and Madrean pine-oak woodland habitats that support nesting MSO.

Acorn Woodpecker

The acorn woodpecker is recommended as a focal species for the Madrean encinal and Madrean pine-oak woodlands vegetation communities and, to a lesser extent, Ponderosa pine-evergreen shrub (oak). This species requires mature oaks for food sources and for nest cavities in snags. The acorn woodpecker is widespread and common across the Coronado NF. The proposed treatments in combination with the varied desired conditions for the habitat types in which the acorn woodpecker occurs on the Coronado NF should result in the return to the diversity of habitats and structures that acorn woodpecker prefer: for Madrean encinal woodland, moving from late- to more mid-seral closed structural classes; for Madrean pine-oak woodland, maintaining old pine-oak with the addition of understory; and for Ponderosa pine-evergreen shrub (oak), moving to more old with grass, closed and young with grass, moderate cover structural classes. Although these vegetation treatments may result in a reduction of mature oaks in Madrean encinal woodlands, these treatments are expected to maintain the old structural classes in Madrean pine-oak woodland and Ponderosa pine-evergreen shrub (oak) and result in long-term sustainability and increased resilience to stand-replacing fires and insect outbreaks. As the Coronado NF moves forward with fuels vegetation treatment efforts, monitoring the acorn woodpecker will help evaluate the persistence of ecological conditions of Madrean encinal and Madrean pine-oak woodlands and Ponderosa pine-evergreen shrub (oak) that support acorn woodpeckers.

Sonora Mud Turtle

The Sonora mud turtle is recommended as a focal species for natural and constructed water sources in grassland, Madrean encinal woodland, and Madrean pine-oak woodland vegetation communities because it can be found in a variety of habitat settings where permanent water is found. Although it is associated with permanent waters, it may be restricted to perennial pools during droughts. The proposed treatments in combination with the varied habitat types in which the Sonora mud turtle occurs on the Coronado NF is expected to result in: minimized input of sediment to streams; protected or enhanced water quality, quantity, soil function and structure, and wildlife habitat (including aquatic species habitat) at natural springs and seeps; and reduced fuel buildup around natural water sources to protect them from uncharacteristic fire effects. Although these vegetation treatments may result in minimal, short-term, temporary impacts to natural and constructed water sources (e.g., increased sedimentation and decreased water quality), they are expected to result in long-term sustainability and increased resilience to stand-replacing fires and insect outbreaks and, hence, healthier watersheds that feed into waters. As the Coronado NF moves forward with vegetation treatment efforts and activities that promote resiliency of natural and constructed water features, monitoring the Sonora mud turtle will help evaluate the persistence of ecological conditions of natural and constructed water sources that support Sonora mud turtles.

Administrative Change for Monitoring Transition

Interested parties were notified and received copies of this proposed monitoring transition to focal species. Comments were requested for thirty days from August 12 to September 11, 2019. Four comment letters were received: requesting that Chiricahua leopard frogs, lowland leopard frogs, grassland sparrows, invertebrates and the Montezuma quail be included as focal species, asking that species be identified for monitoring in the desert and grassland communities, that Mexican spotted owl habitat elements be monitored both pre and post treatment, more collaborative efforts between the Forest and Arizona Game and Fish Department and to fill or cap open-topped pipes across the Forest. We reviewed the comments and are considering some important changes to our monitoring strategy as a result of the insights provided. The changes we have made are described and listed below by document section and page number.

Changes to General Description

On pages 36, 42, 58 and 61 the term management indicator species is replaced with focal species for the Mexican spotted owl, the acorn woodpecker and the Sonora mud turtle.

Changes to Management Approach

Management Approach 2 – Animals and Rare Plants, page 68.

1. Using results from the monitoring of ~~management indicator~~ focal species to design adaptive management strategies to meet species conservation needs.

Changes to Monitoring Strategy

Pages 178-179 of the Revised Plan (Pages 178 -180 of the updated Revised Plan)

1. Monitoring Questions, Metric and Data Source(s) for Resource Area: Wet and Dry Mixed Conifer are replaced as shown:
 - Questions:** Are post-treatment conditions and plan components guiding fuels reduction and forest restoration activities consistent with and moving toward desired ecological conditions within mixed conifer, Ponderosa pine-evergreen shrub (oak), and Madrean pine-oak woodland habitats that contribute to stable or increasing MSO populations? How have populations and distributions of MSO changed?
 - Metric:** Site occupancy; pre- and post-project implementation monitoring of occupancy of Protected Activity Centers and reproductive success.
 - Data Source(s):** Regional BCOR MSO site occupancy data (given funding); forest data on occupancy of Protected Activity Centers and reproductive success.
2. Monitoring Questions, Metric and Data Source(s) for Resource Area: Madrean Pine Oak Woodland are replaced as shown:
 - Questions:** Are post-treatment conditions and plan components guiding fuels reduction and forest restoration activities consistent with and moving toward ecological conditions within Madrean encinal and Madrean pine-oak woodlands, and Ponderosa pine-evergreen shrub (oak) habitats that contribute to stable or increasing acorn woodpecker populations? How have populations and distribution of acorn woodpeckers changed?
 - Metric:** Trends in occupancy, frequency, abundance, and density.
 - Data Source(s):** Arizona IBA, eBird, and BCOR (given funding).
3. Monitoring Questions, Metric and Data Source(s) for Resource Area: Natural Water Sources, Constructed Waters are replaced as shown:

Questions: Are post-treatment conditions and plan components guiding management activities consistent with and moving toward ecological conditions within natural and constructed waters found in grassland, Madrean encinal woodland, and Madrean pine-oak woodland habitats that contribute to stable or increasing Sonora mud turtle populations? How have populations and distribution of Sonora mud turtles changed?

Metric: Trends in occupancy, frequency, abundance, and density.

Data Source(s): Data collected by AGFD during CLF surveys; via eDNA through partnership with DoD and RMRS (given funding).