

Flagstaff Watershed Protection Project
Mexican Spotted Owl (*Strix occidentalis lucida*)
Monitoring Report

USDA Forest Service –Coconino NF, Flagstaff Ranger District

2015



*Picture courtesy of R. Greer

Introduction

Over the last several years the Coconino National Forest has been coordinating with the City of Flagstaff and United States Fish and Wildlife Service personnel (USFWS) to move forward with the Flagstaff Watershed Protection Project (FWPP). FWPP is the result of the 2012 passage of a bond measure by the voters of the City of Flagstaff to fund work on Coconino National Forest and Arizona State lands. The project involves work in the Rio de Flag watershed above the city of Flagstaff to reduce the risk of post-wildfire flooding into the City, as well as work in the Mormon Mountain area to reduce the potential sedimentation of Lake Mary, an important water supply for the City of Flagstaff and State land parcels within the City. The work is expected to be ongoing for the next five to ten years. A complete description of the project can be found online at www.fs.usda.gov/goto/FWPP.

The project proposes landscape scale restoration that has the potential to affect more than 15 known Mexican Spotted Owl (MSO) protected activity centers (PACs). PACs are intended to sustain and enhance areas that are presently, recently or historically occupied by breeding MSOs, and must be at least 600 acres (USFWS 2012). A PAC is not intended to encompass the entire home range of an owl (USFWS 2012). For more information about the MSO, please refer to the 2012 Recovery plan for the Mexican Spotted Owl (*Strix occidentalis lucida*), First Revision, (USFWS 2012).

Included in this report are the results of the Flagstaff Ranger District 2015 MSO monitoring and inventory for the FWPP project area.

Methods

All surveys were conducted according to the USFWS Mexican Spotted Owl Protocol (2012). These surveys allow us to determine the presence or absence of MSO and to determine reproductive status. Calling points were positioned along roads and walking routes to ensure complete coverage of the survey areas. If calling points existed from previous years, they were retained for consistency. Call points were placed approximately 0.30 – 0.50 miles apart, and a minimum of 4 complete surveys were conducted at appropriate times during the breeding season (March 1 to August 31). Nighttime surveys were conducted and any detections were followed up within 48 hours by a daytime follow-up survey. Mousing was used to determine the reproductive status when an owl was located. For the complete protocol, please refer to the 2012 Recovery Plan mentioned above.

2015 FWPP PAC Monitoring Results

During consultation with the USFWS and later resolutions, the Coconino NF agreed to a monitoring plan involving 15 MSO PACs. PACs will be designated as treatment and reference. Through consultation with USFWS, it was decided that the treatment PACs; Mt. Elden, Shultz Creek, Orion Spring, Mormon Mountain North, DeToros, and Weimer Spring, as well as the reference PACs; Little Springs, Snowbowl Road, East Bear Jaw, Dairy Spring, Red Raspberry

and Moore Well-Rock Dike would be monitored one year prior to treatment, during treatment and one, three and five years post treatment, in an effort to help understand the effects of thinning and burning on Mexican spotted owls and their habitat. Through the resolution it was also agreed that (given acceptable weather and crew availability) the Lockwood, Mormon Mountain, and Weatherford 2 PACs would be monitored the year prior to treatment, the year of treatment, and one year post treatment. More information can be found in the FWPP Biological Opinion (USFWS 2015) and the FWPP Record of Decision (USFS 2015a).

Table 1. FWPP- Mormon Mountain Treatment and Reference PACs to be Monitored

Treatment	Reference	Requirement
Mormon Mountain North	Moore Well-Rock Dike	Biological Opinion
DeToros	Dairy Springs	Biological Opinion
Weimer Springs	Red Raspberry	Biological Opinion
Lockwood (partial treatment)		Resolution Agreement
Mormon Mountain (partial treatment)		Resolution Agreement

Table 2. FWPP- Dry Lake Hills Treatment and Reference PACs to be Monitored

Treatment	Reference	Requirement
Mt. Elden	Little Springs	Biological Opinion
Orion Spring	Snowbowl Road	Biological Opinion
Shultz Creek	East Bear Jaw	Biological Opinion
Weatherford 2 (partial treatment)		Resolution Agreement

Table 3. Survey results for PACs monitored in 2015 for FWPP.

Mormon Mountain PACs	2015 Survey Results
Dairy Spring	Male occupancy, No Young Produced, Nesting status Unknown
DeToros	Not Surveyed
Lockwood	Pair Occupancy, No Young Produced, Non-nesting
Moore Well-Rock Dike	Pair Occupancy, 1 Young Produced, Nesting
Mormon Mountain North	Pair Occupancy, No Young Produced, Nesting status Unknown
Mormon Mountain	Not Surveyed
Red Raspberry (Overlaps 4FRI)	Pair Occupancy, No Young Produced, Non-nesting
Weimer Spring	Not Surveyed

Dry Lake Hills PACs	2015 Survey Results
Aspen Spring	Pair Occupancy, No Young Produced, Nesting status Unknown
East Bear Jaw	Single, No Young Produced, Nesting status Unknown
Little Spring	Pair Occupancy, No Young Produced, Non-nesting
Mt. Elden	Pair Occupancy, No Young Produced, Nesting status Unknown
Orion Spring	Pair Occupancy, No Young Produced, Nesting status Unknown
Schultz Creek	Pair Occupancy, No Young Produced, Nesting status Unknown
Snowbowl Road	Pair Occupancy, No Young Produced, Non-nesting
Weatherford 2	Pair Occupancy, No Young Produced, Non-nesting

2015 FWPP Project Inventory

As stated in the FWPP EIS (USFS 2015b), MSO surveys will be conducted in MSO habitat within implementation areas (Task Order or Timber Sale) plus a half mile beyond the perimeter the year of implementation or one year prior to determine occupancy in new areas. These are referred to as inventory areas and are surveyed according to the MSO Survey protocol (USFWS 2012). Detections of previously unknown breeding MSO will likely result in the establishment of a new PAC.

Table 4. Inventory area that was surveyed in 2015 for the FWPP project area and the corresponding acreage.

Inventory Acres

Inventory Name	Acres
Dry Lake Hills	5,177

Literature Cited

- U.S. Department of Agriculture, Forest Service. 2015a. Record of Decision for the Flagstaff Watershed Protection Project. MB-R3-04-29. Coconino National Forests. October 2015. Available online at www.fs.usda.gov/goto/FWPP.
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