

# San Luis Valley Habitat Conservation Plan

2021 Year end updates



Photo credit: Tim Carden of RGWCD

## Overview of Core Habitat

Core habitat properties are public lands managed specifically for Southwestern willow flycatchers and Yellow-billed cuckoos. For the HCP, three core habitat properties are surveyed to determine the Habitat Quality Index (HQI), using the same methods as the private mitigation parcels. By surveying these reference sites, we can help identify whether changes in HQI over time are the result of broader environmental conditions, or land management actions on a specific property. Additionally, the HQI values of private mitigation properties need to be similar to core habitat properties to ensure we are enrolling properties with high quality habitat. The three core habitat properties surveyed are McIntire-Simpson (BLM), the Rio Grande State Wildlife Area (CPW), and the Rio Grande Natural Area (BLM).

The HQI scores several habitat attributes based on their suitability for breeding flycatchers and yellow-billed cuckoos. A score close to 1 indicates prime habitat, and 0 is unsuitable habitat. The attributes measured include habitat patch size/shape, canopy cover, live canopy cover, water sources, native vegetation recruitment (new plant growth), and disturbance levels close to the habitat.

### WHAT'S NEW IN 2021

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#### 10-YEAR MAPPING PROJECT COMPLETED

ERO Resources Inc completed the 10-year woody riparian vegetation mapping project

#### 2021 SURVEY SEASON

Habitat survey results from reference public land sites (core habitat properties)

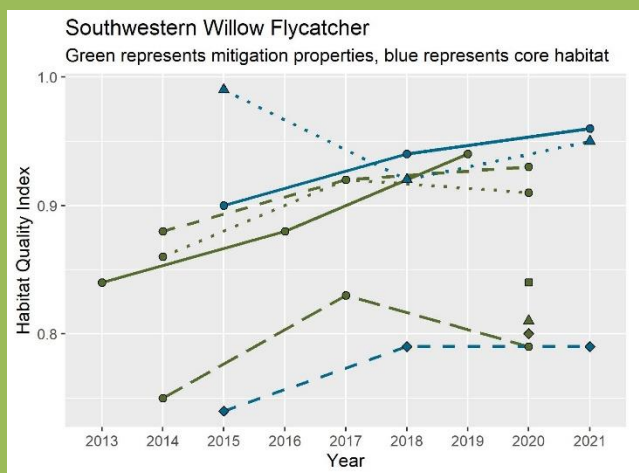
#### YELLOW-BILLED CUCKOO UPDATES

USFWS released the final rule designating critical habitat throughout their range

# 2021 Survey Results

The three core habitat properties were surveyed in early July 2021 to determine HQI values. A separate HQI is calculated for Southwestern willow flycatchers and Yellow-billed cuckoos, based on their different habitat requirements. There are four survey sites at each property that are averaged to determine overall habitat quality. The HQI values for both species on core habitat properties are remaining high or increasing slightly. This is a good sign and follows the same general trend as the private mitigation parcels (see the graph below).

While the habitat conditions are generally trending upwards, there are changes occurring within specific properties as ecosystems are not static systems. At McIntire-Simpson, habitat on the east is improving rapidly following a fire in 2013. Habitat on the west is ageing and willows are starting to lose leaf cover. These conditions are leading flycatchers to move nesting towards the east of the property, confirmed by BLM surveys in 2020. The BLM will be working on restoring habitat on the west over the next few years.



Graph credit: Tim Carden of RGWCD

# 10-Year Mapping Project



Example habitat mapping (cottonwoods are dark green, willows are light green).

In addition to the habitat monitoring on individual properties, the HCP requires a 10-year Valley-wide habitat mapping project to ensure impact estimates are accurate. ERO Resources Inc – the environmental consulting company that produced the HCP – were contracted to complete this project. Satellite imagery was used to map all woody riparian habitat (typically cottonwoods and willows) within the 100-year floodplain. The first mapping project was based on 2009 imagery, and the 10-year update used 2019 imagery. Overall, ERO Resources noted a 3.1% increase in habitat, but attributed this to improvements in satellite imagery, allowing more accurate habitat mapping. The results of the 10-year mapping project indicate that habitat is remaining constant throughout the valley, and there is no need to adjust impact estimates, or mitigation requirements.

## Yellow-Billed Cuckoo Updates

USFWS released a final rule designating critical habitat for the Yellow-billed cuckoo throughout its range in the spring of 2021. No critical habitat units were designated within the San Luis Valley. Two units were designated in Colorado near Hotchkiss and Grand Junction. For a more technical analysis of survey results and the 10-year mapping project, visit [rgwcd.org/hcp](http://rgwcd.org/hcp).