### Biennial monitoring and evaluation snapshot

#### **Coronado National Forest**

2018-202

# Are we meeting our goals?

In the last three years (2018-2021), Coronado National Forest staff faced a global pandemic, increasing frequency and intensity of wildfires, and extreme drought. In spite of these challenges, we continued to protect the tremendous species diversity of our "sky islands" and to deliver culturally and economically important resources.

- We implemented 34 watershed improvement projects, including over 1,000 acres of **invasive plant removal**, and created several new wetland areas for native species.
- Fire behavior modeling showed us that there are areas at risk of potential active crown fire, where further management is needed.
- Upland monitoring revealed that **shrub encroachment** is increasing the probability of uncharacteristic wildfire in these areas.
- We made significant improvements to the administration of special use permits. As a result, the Coronado was the top Forest for special use permit's administered in the Southwestern Region of the Forest Service.
- Access continues to be a major issue, and given our available resources it is unlikely that we can meet the
  current target of resolving 4-5 access issues per year. Visitation dropped nearly one million in 2017, but
  we completed a Sustainable Recreation Action Plan to improve outdoor recreation.

**Recommended changes**— Monitoring revealed no areas where Forest Plan revision should be considered. There was only one indicator—distribution and relative abundance of American bullfrogs—where the current status is uncertain due to COVID-19 considerations.

## **Summary of monitoring results**

#### Watershed conditions

Available natural water on the landscape is declining. Wet and dry mapping of large river systems over time illustrates fewer and smaller stretches of open water during dry times of the year.

In the last three years (2018-2021) we implemented 34 projects to improve streams and springs, such as invasive plant removal, native vegetation planting, structures to reduce erosion issues, livestock exclusion fencing, bullfrog removal, and native species restoration.

## American Bullfrogs versus native frogs

Bullfrog populations have been increasing proportionally to the native Chiricahua leopard frog. The distribution of bullfrogs did not increase dramatically from 2018 to 2019: their range has not expanded into many new sites. Instead, bullfrogs appear to be dominating sites previously cohabitated by Chiricahua leopard frogs.

We completed several wetland construction projects to create new habitat for Chiricahua leopard frog.

### **Uplands**

Woody vegetation, in the form of shrub encroachment or small trees, has increased in many vegetation communities. This correlates to an increased probability of uncharacteristic wildfire in these areas. **Treatments to remove ladder fuels can mitigate this risk.** 

Climate change could turn these grass/ shrub mix areas into permanent type conversions.



#### Crown fire danger

All vegetation communities except spruce-fir indicate the potential for active crown fire. Areas of potential active crown fire will need to be assessed to determine what management is needed to fully achieve the desired conditions for these vegetation communities and protection of the resources.

### Social and economic sustainability

**Special use permits** — The Coronado NF currently administers over 820 special use authorizations. We made significant improvements to the staffing and administration of these permits in 2019 and new procedures were developed. As a result, the Coronado was the top forest for special use permits administered in the Southwestern Region of the Forest Service.

**Livestock grazing** — A decline in cattle stocking corresponds with inconsistent rainfall since 2017 across the Forest. The large reduction in authorized cattle in 2021 was due to extreme drought conditions that the southwestern portion of the U.S. experienced in 2020 and into 2021.

#### Recreation and visitor satisfaction

We performed at an acceptable but not exemplary level. **Visitation to the Coronado National Forest dropped by nearly one million in 2017**. We recently completed a Sustainable Recreation Action Plan (2021-2025) for the Coronado NF that identifies 23 specific, measurable, and impactful actions to improve outdoor recreation.

#### Access

Public access to national forest lands is becoming increasingly restricted as traditional routes through adjacent private lands are gated. While we have worked diligently to try and obtain written title authorizing vehicular travel, the situation continues to deteriorate. The Forest has successfully reestablished two vehicular access points since approval of the Forest Plan in April 2018. As of September 2021, an additional nine access projects are currently being pursued.

