



# San Bernardino National Forest

## Summary of monitoring results from 2021-2022

### Are we meeting our goals?

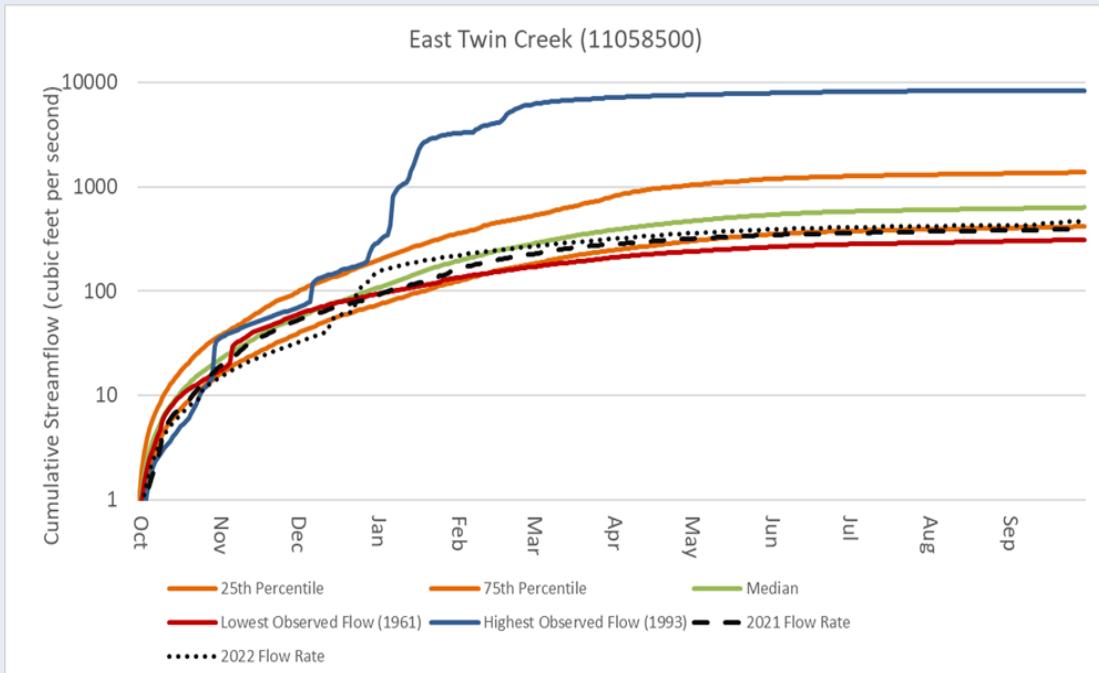
The San Bernardino National Forest supports unique, biologically rich, and ecologically diverse habitats, including one of the few alpine forests left in southern California. Southern California is home to 25 million people and has the nation's highest concentration of high-risk firesheds. The southern California landscape has been selected as a U.S. Forest Service [Wildfire Crisis Strategy \(WCS\) Priority Landscape](#) which will facilitate an increase in the pace and scale of treatments.

- The forest conducted about 9,775 activity acres of fuels treatments on about 4,895 footprint acres. Activity acres are the total acres of treatment regardless of geographic overlap. Footprint acres are the geographic area of treatment activities.
- When compared to presettlement conditions, 25 percent of our shrublands and chaparral ecosystems are burning more frequently than under historical conditions due largely to human-caused ignitions.
- Conversely, 91 percent of conifer forests are burning too infrequently and becoming less resilient to fire, insects and disease, and drought.
- Wildfire acres burned and insect and disease-related conifer mortality were lower this monitoring period than previously.
- The forest treated about 73 acres of invasive plants during 2021–2022. These treatments and feral pig eradication and aquatic invasive species removal have contributed to improved riparian conditions.
- Santa Ana River flows were relatively high in 2021-2022, near 75th percentile. East Twin Creek flows relatively low, around the 25th percentile of historic flows.

### Summary of monitoring results

#### Watershed and riparian function

When comparing flows on select southern California streams to historical records from 1950-1980, East Twin Creek on the San Bernardino NF experienced relatively low flows in 2021. East Twin Creek flows were higher in 2022 but still below median for most of the water year. Flows on the Santa Ana River were around 75<sup>th</sup> percentile levels in both 2021 and 2022.



## Invasive species

Non-native invasive grass cover has been increasing, driven by precipitation and drought, although the total percentage remains low.

All three ranger districts of the San Bernardino NF treated a total of 73 acres of invasive plants during this monitoring period; 51 acres were treated in 2021 and 22 acres were treated in 2022. Most of the treatments were mechanical and the rest were pesticide applications.

### Invasive species treated

(2021-2022)

Spanish broom

Garlic mustard

Bull thistle

Saltcedar

Crimson fountaingrass

Tall tumblemustard

Asian mustard

Shortpod mustard

Perennial pea

Dalmatian toadflax

## Community protection and fire regime change

The San Bernardino NF treated 1,962 and 2,933 footprint acres in the wildland urban interface in 2021 and 2022, respectively. Most common treatments were invasive control using pesticides, creating and burning piles, and thinning for hazardous fuel reduction.

Roughly 25 percent of the chaparral habitats on the San Bernardino NF are burning more frequently than under presettlement conditions—frequent fire in shrublands can lead to type-conversion from native woody species to non-native highly flammable grasses. 80 percent of desert scrub is *burning with far greater frequency* than historically.

Conversley, approximately 91 percent of montane conifer forests are *burning less frequently* compared to historical fire frequencies. In the absence of regular, low intensity wildfires, these areas become less resilient to wildfire, insects and disease, and drought. The forest is emphasizing treatments in these areas to reduce fuels and restore resilience.

