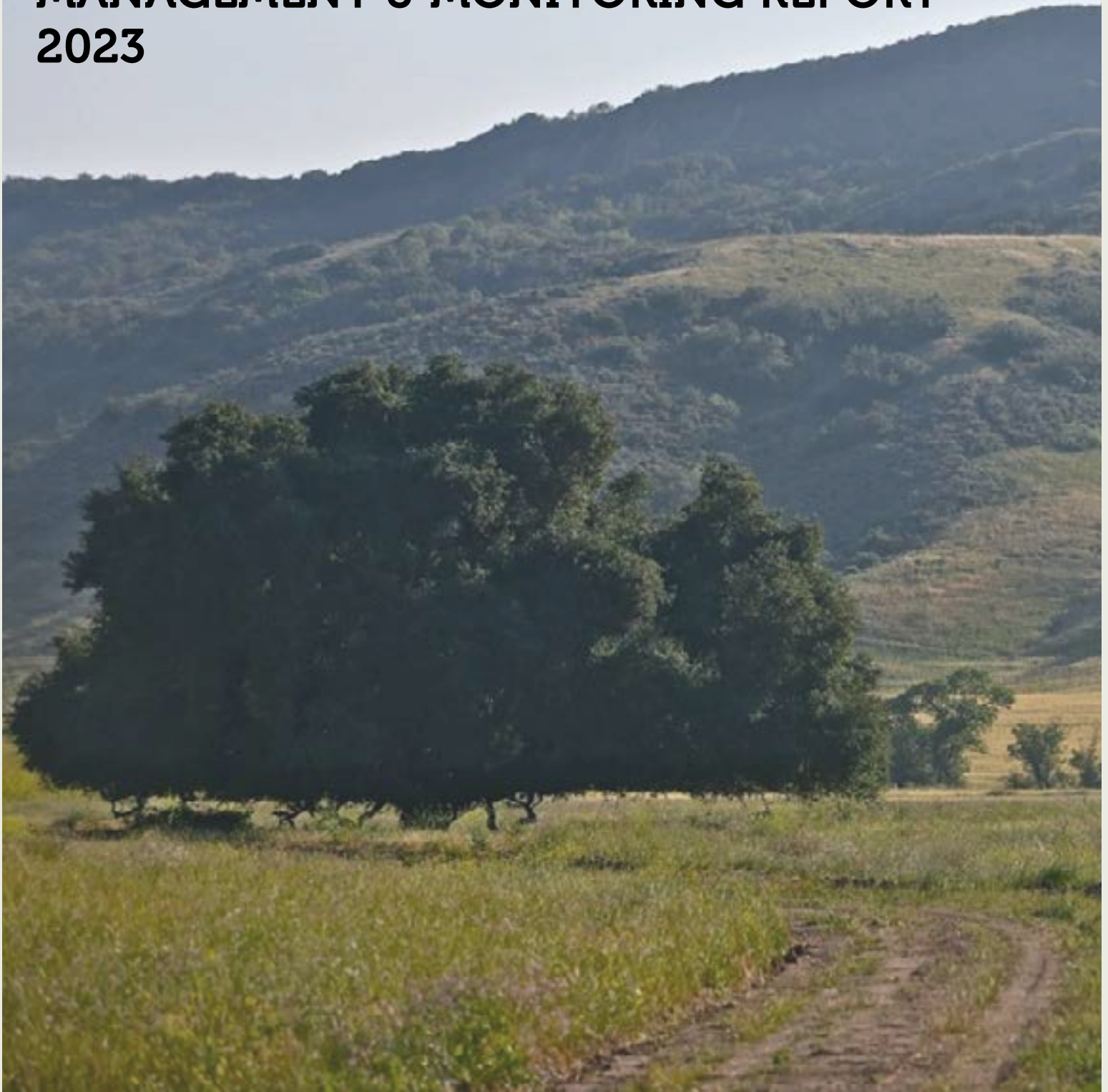




THE NATURE RESERVE
at Rancho Mission Viejo

MANAGEMENT & MONITORING REPORT 2023



The Nature Reserve at Rancho Mission Viejo (TNR) is a growing habitat reserve located in south Orange County. Over time TNR will grow to include over 20,000 acres of Rancho Mission Viejo lands, inclusive of The Richard & Donna O'Neill Conservancy. This protected open space is managed by the Rancho Mission Viejo Land Trust, a non-profit 501(c)(3) organization whose mission is to "preserve and enhance Reserve lands for ecological, educational, charitable, conservation, open space, scientific, and recreational uses."

HABITAT RESERVE ASSEMBLAGE

The Nature Reserve (TNR) grows bigger through implementation of the Rancho Mission Viejo (RMV) Open Space Phased Dedication Program. This program requires RMV to dedicate certain open space areas as it develops its approved development areas. In addition to prior conserved lands such as the Ladera Open Space and the Richard and Donna O’Neill Conservancy, RMV has dedicated open space associated with the villages of Sendero and Esencia. Dedications in Verdugo Canyon associated with the Village of Rienda have begun and will continue as development of this village progresses. Currently, there are 8,092 acres enrolled in TNR.



Image: Paul Galvin

SPECIES SURVEY

In 2023, species-specific surveys were completed for arroyo toad (*Bufo californicus*), western spadefoot (*Spea hammondi*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), Riverside fairy shrimp (*Streptocephalus woottoni*), Coulter’s saltbush (*Atriplex coulteri*), thread-leaved brodiaea (*Brodiaea filifolia*), southern tarplant (*Centromadia parryi* var. *australis*), and many-stemmed dudleya (*Dudleya multicaulis*). Riparian bird point-count surveys were also completed on TNR focusing on least Bell’s vireo (*Vireo bellii pusillus*), willow flycatcher (*Empidonax traillii*), yellow warbler (*Setophaga petechia*), and yellow-breasted chat (*Icteria virens*).

HABITAT MONITORING

Monitoring activities conducted in 2023 included oak woodland tree-based monitoring, oak woodland plot-based surveys, and visual decline surveys as part of the ongoing rapid assessment of oak and riparian woodland communities on TNR. Due to the sufficient amount of rainfall received in 2022-2023, monitoring of the Chiquita Ridge vernal pools was also conducted throughout the aquatic and drying phase. Monitoring results showed that overall species diversity within the vernal pools was broadly consistent with patterns of previous years and current populations of western spadefoot, San Diego fairy shrimp, and Riverside fairy shrimp appear to be stable.



INVASIVE SPECIES CONTROL AND MANAGEMENT

TNR continued work on the San Juan Creek Invasives Control Program and conducted routine maintenance and monitoring in previous removal areas on Rancho Mission Viejo and Caspers Wilderness Park. Other invasive/exotic management efforts were also implemented including control of exotic African-clawed frog (*Xenopus laevis*), American bullfrog (*Lithobates catesbeianus*), red swamp crayfish (*Procambarus clarkii*) populations, and annual maintenance of previously treated areas of pampas grass (*Cortaderia selloana*) in Chiquita Creek.

WILDFIRE PREVENTION AND MANAGEMENT

The South County Fire Watch Program was initiated in 2009 and continued in 2023. Although no deployments occurred during this years reporting period, RMV partnered with the Orange County Fire Authority (OCFA) to provide fire watch training to 22 new volunteers. Additionally, RMV actively coordinated with adjacent land stewards in the County of Orange Area Safety Task Force (COAST) Fire Prevention Network and Invasive Pest Groups on issues related to fire management, monitoring priorities and protocols, management priorities, and native seed collection.

