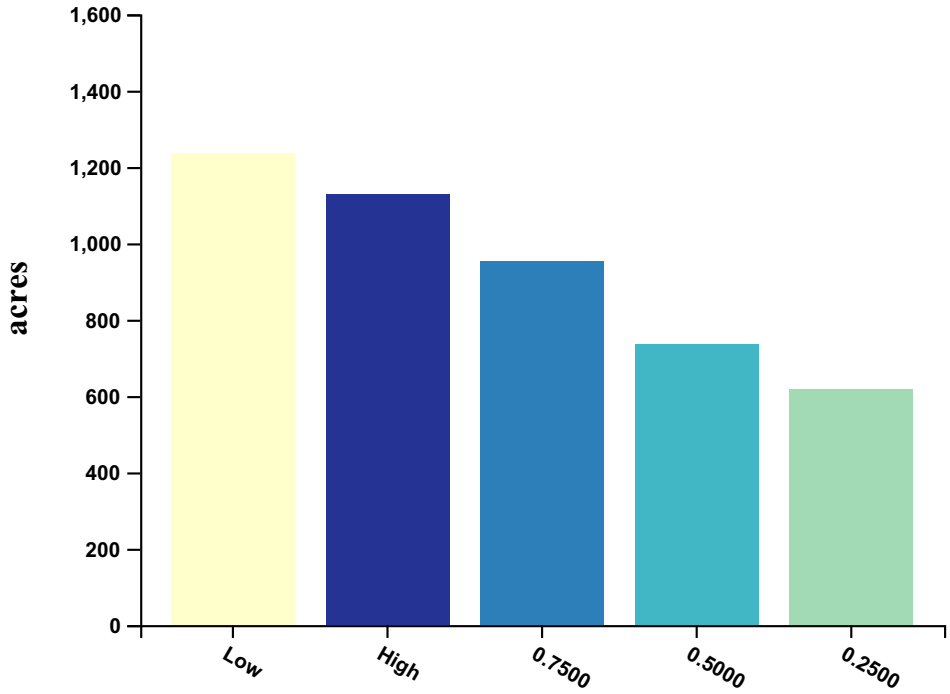
Biodiversity

Calculated Acres : 4669.80

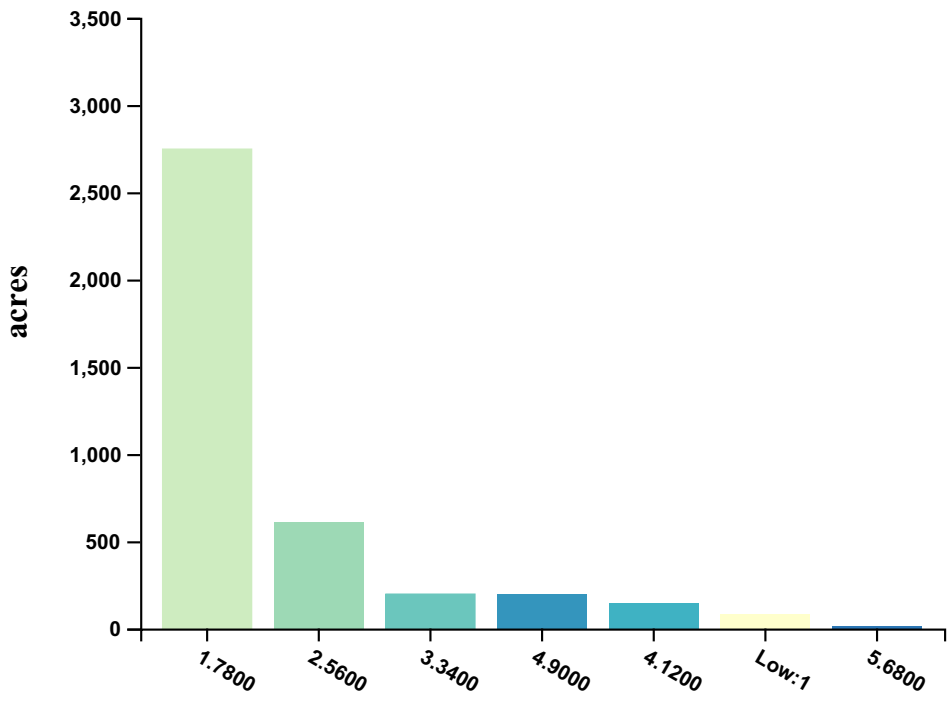
CA Spotted Owl Suitable Habitat

California spotted owl is continuously distributed on the western slope of the Sierra and inhabits elevations ranging from 1,000 to over 7,000 feet, it is a Region 5 Forest Service â€œSensitive Speciesâ€ and a â€œManagement Indicator Speciesâ€ (representing late seral closed canopy coniferous forest). In November, 2019, the USFWS issued a 12-month finding on a petition to list the California spotted owl under the Endangered Species Act and determined listing to be not warranted at this time (USDI Fish and Wildlife Service 2019). Although the species is declining throughout much of its range and faces continued threats due to wildfire, habitat loss, and competition from barred owls, the USFWS determined that existing regulatory mechanisms are sufficient (USDI Fish and Wildlife Service 2019). This species is also recognized as a California â€œSpecies of Special Concern and a Species of Greatest Conservation Need.â€\r\n\r\nThis raster has been modified from the base 30m version in the following ways:\r\n - It has been aggregated from a 30m to a 300m scale by averaging across the 30m values\r\n\r\n- Unit Of Measure: Continuous, 0 (Low Suitability) to 1 (High Suitability)



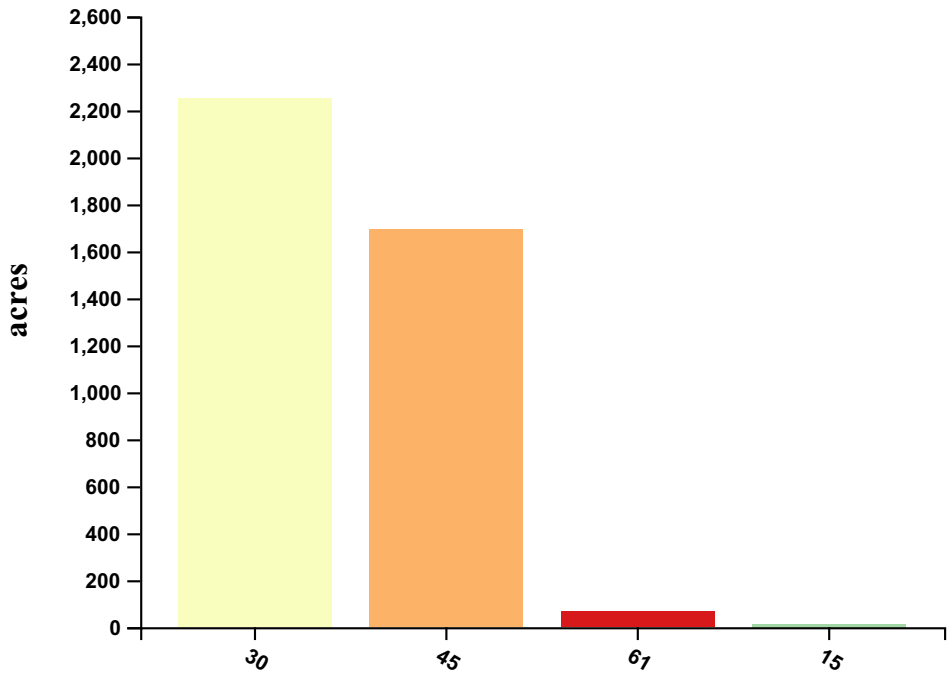
Threatened & Endangered Species Richness

Native species richness is estimated based on high suitability reproductive habitat for a given species. Reproductive habitat is used to represent suitability because it is critical for species persistence and for most native species it has the most limited requirements. If a habitat is identified as high for a given species, it is considered suitable (1), and habitat identified as moderate, low or not suitable, it is considered unsuitable (0). Species richness values are used as a relative measure of biodiversity value; as such, areas with lower species richness based on these criteria may still have high biodiversity value, but not as high as areas with higher richness values. The total number of federally threatened/endangered native species per spatial unit (30m pixel) can be useful for assessing change in number/composition over space.\r\n\r\nThis raster has been modified from the base 30m version in the following ways:\r\n - It has been aggregated from a 30m to a 300m scale by averaging across the 30m values\r\n\r\n- Unit Of Measure: Number of Species



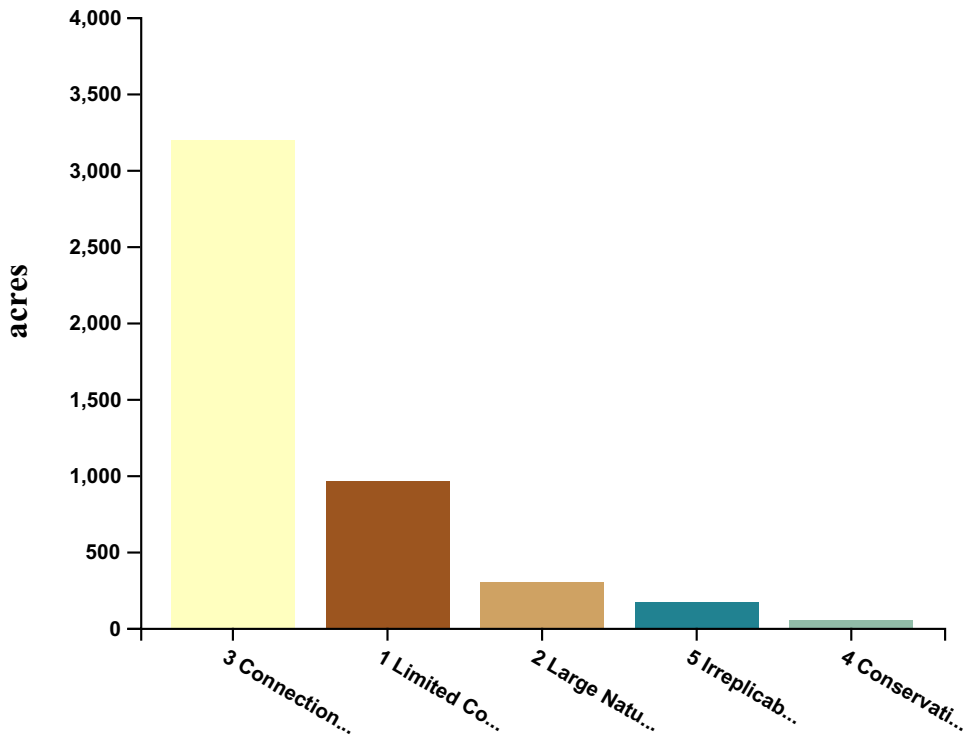
Wildlife Species Richness

Native species richness is estimated based on high suitability reproductive habitat for a given species. Reproductive habitat is used to represent suitability because it is critical for species persistence and for most native species it has the most limited requirements. If a habitat is identified as high for a given species, it is considered suitable (1), and habitat identified as moderate, low or not suitable, it is considered unsuitable (0). Species richness values are used as a relative measure of biodiversity value; as such, areas with lower species richness based on these criteria may still have high biodiversity value, but not as high as areas with higher richness values. The number of native species per spatial unit (30m pixel) presented as simply the total number; this can be useful for assessing change in number/composition over space.\r\n\r\nThis raster has been modified from the base 30m version in the following ways:\r\n - It has been aggregated from a 30m to a 300m scale by averaging across the 30m values\r\n\r\n- Unit Of Measure: Number of Species



Terrestrial Habitat Connectivity 300m

The Terrestrial Connectivity dataset is one of the four key components of the California Department of Fish and Wildlifeâ€™s (CDFW) Areas of Conservation Emphasis (ACE) suite of terrestrial conservation information. The dataset summarizes the relative ability of a species to move across the landscape between patches of suitable habitat. It shows a compilation of linkages, corridors, and natural landscape blocks identified in statewide and regional connectivity studies. Each hexagon (2.5 mi2) is ranked into one of the following categories based on the identification of corridors and linkages in statewide, regional, and species-movement studies:\r\n\r\n\r\n- Unit Of Measure: Categorical; 5 (listed above)



Fisher Suitable Habitat Combined 300m

The Pacific fisher population in the southern Sierra is federally listed as a threatened population and resides primarily on National Forest System lands. Habitat management for this species is determined based on a Conservation Strategy developed by the US Forest Service and augmented by a recovery strategy developed by the US Fish and Wildlife Service. Suitable habitat is defined by a model developed by US Pacific Southwest Research Station and the Conservation Biology Institute. This metric evaluates the 1000 ac around each 30m pixel to determine if it meets minimum habitat requirements to support a territory. This raster has been modified from the base 30m version in the following ways: - It has been aggregated from a 30m to a 300m scale by averaging across the 30m values - Unit Of Measure: Continuous, 0 (Low Suitability) to 1 (High Suitability)