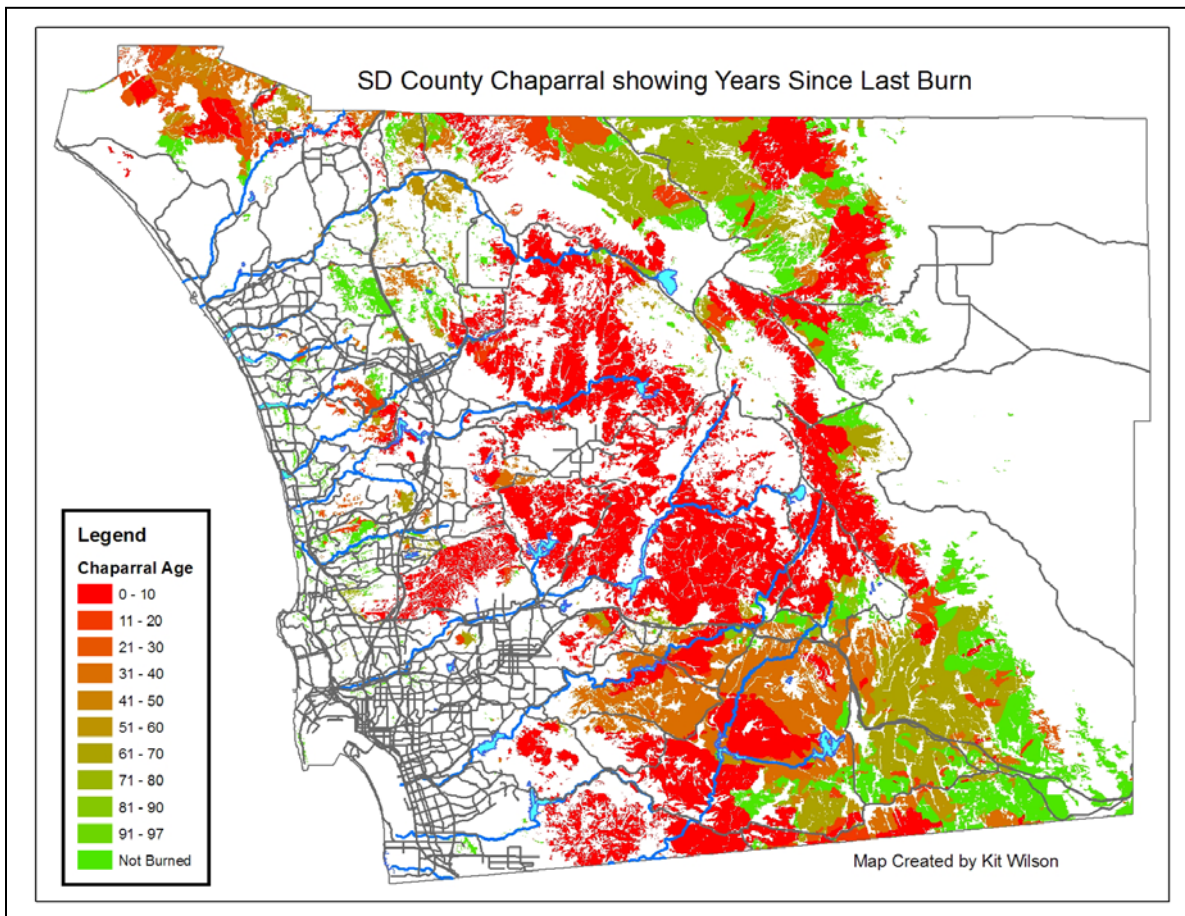


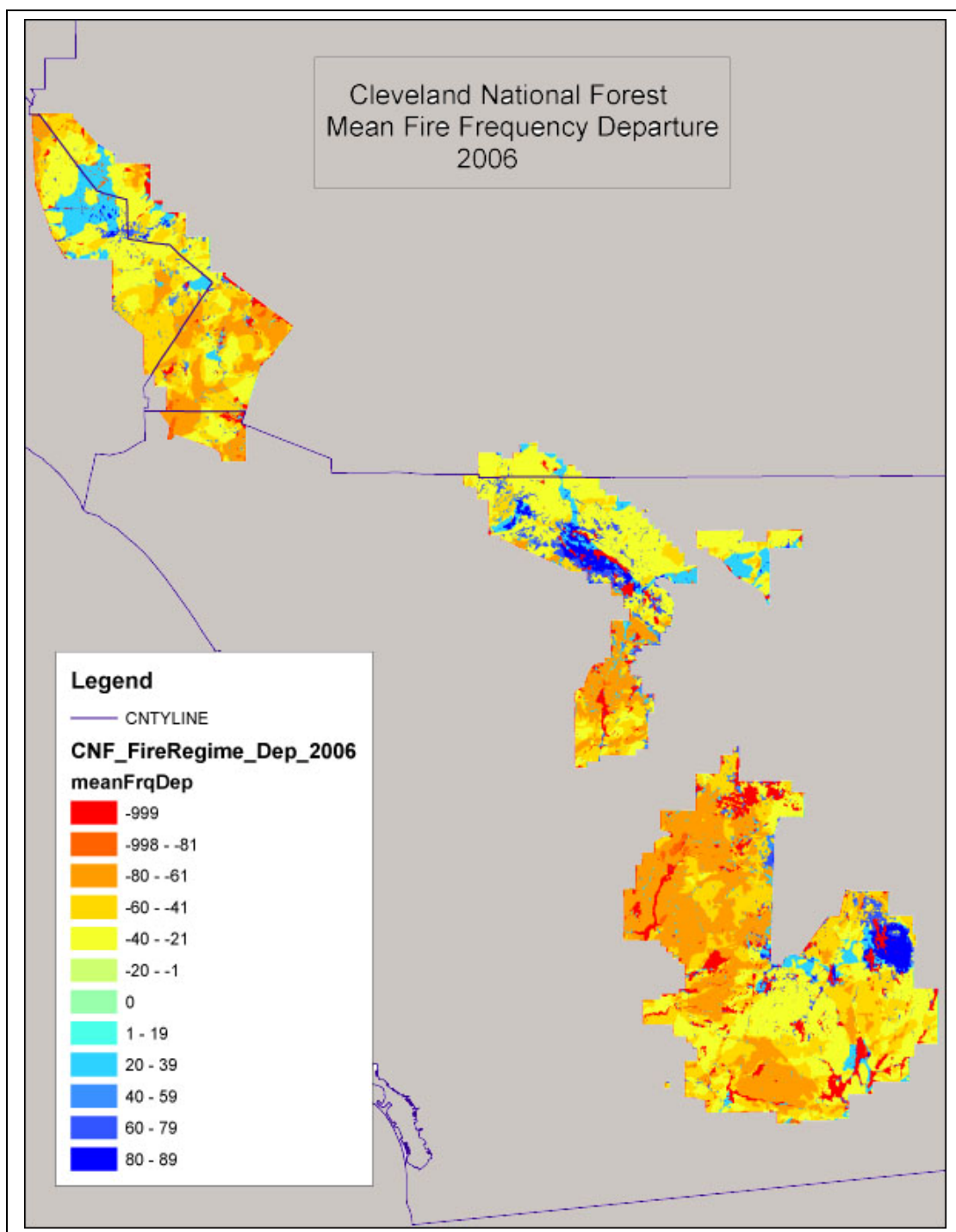
# Too many fires, no chaparral



**Chaparral being type-converted to weedy, non-native grassland.** This site is east of Alpine off Interstate 8 in San Diego County. The far left shows 38-year-old chaparral last burned during the 1970 Laguna fire. The middle/left of the picture shows an area recovering from the 2001 Viejas fire. It is composed primarily of chamise, deerweed, and several other native shrub species. To the right is a portion of the Viejas fire scar re-burned in the 2003 Cedar fire. This area is now filled with non-native grasses. The majority of the re-sprouting shrubs have been killed and no obligate seeding species, such as *Ceanothus*, are present. The interval between the two fires was too short, causing the elimination of the chaparral plant community.



A significant amount of San Diego County's chaparral and coastal sage scrub habitat has burned over the past 5 years. Few old-growth chaparral stands have survived. In order to maintain a sustainable level of protection for the region's native species, it is essential that fire be kept out of the remaining old-growth shrubland ecosystems and areas that have burned over the past 30 years.



**Most of the Cleveland National Forest has experienced more fire than its ecosystems can handle.** Map above shows percent departure of current mean fire return interval (1910-2006) from reference mean fire return interval (pre-Euroamerican settlement). Areas with negative departures (e.g. red to green) are experiencing more fire today than in the pre-settlement period. Areas with positive departures (e.g., blue) are experiencing less fire today than in the pre-settlement period. Source: Hugh Safford, USFS.



# What's at risk?

Native chaparral and sage scrub ecosystems.



**The consequence of type-conversion.** Chaparral and sage scrub ecosystems are replaced by non-native, weedy grasslands. Clevenger Canyon, east of Escondido, Highway 78.

