

5. LAKE-NAPA VERNAL POOL REGION

Only the vernal pool fairy shrimp is known to occur within the Lake-Napa Vernal Pool Region.

5.1. Species Occurrences

5.1.1. Vernal Pool Fairy Shrimp

There is one occurrence record of the vernal pool fairy shrimp documented within the Lake-Napa Vernal Pool Region on the southern edge of the Napa County Airport (**Figure 5.1**). The vernal pool fairy shrimp was documented in one vernal pool during the 2002-2003 wet season, and other surrounding pools were sampled and had no detections (Diversity Database 2022). The vernal pool fairy shrimp was not detected during subsequent wet-season surveys in 2004 and 2005 (J. Wallace, pers. comm. 2007 as cited in Service 2007a). To our knowledge, the species has not been found anywhere else in the region.

5.2. Vernal Pool Core Areas

There is one Core Area within the Lake-Napa Vernal Pool Region that is designated in the Recovery Plan for the vernal pool fairy shrimp: Napa River.

5.2.1. Napa River

This is a zone 2 core area with a goal of protecting 85% of vernal pool habitat for the vernal pool fairy shrimp. The core area is located near the end of the Napa River where the grassland begins transitioning into marshland.

This core area contains the Napa County Airport, the Fagan Marsh (a.k.a., Fagan Slough) Ecological Reserve (including Bull Island), and Ponds 9 and 10 of the Napa-Sonoma Marshes Wildlife Area. The latter two sites are owned by CDFW and mainly composed of tidal marsh habitat, so the vernal pool fairy shrimp is not expected to be found throughout the majority of these properties. Because there is currently no precise mapping of how much vernal pool habitat existed within the core area in 2005, how much still exists today, and how much has been preserved, the exact amount of progress towards meeting the 85% protection goal is not known.

5.2.1.1. Vernal Pool Fairy Shrimp Occurrences

The one known vernal pool fairy shrimp occurrence is located at the southern end of the Napa County Airport property (see **Figure 5.1**; Diversity Database 2022). Although the vernal pool fairy shrimp is only known from one pool within the Napa Airport, the entire airport property is designated as critical habitat for the vernal pool fairy shrimp, so airport projects that may affect vernal pool habitat anywhere onsite go through section 7 consultation. As a result of one such consultation, the airport agreed to set aside 18 acres of vernal pool grassland at the southern end of the property and manage it for long-term preservation of vernal pool habitat and species (Service 2006a), although this preservation has not occurred as of 2022 (K. Bales, Napa County, *in litt.* 2022).

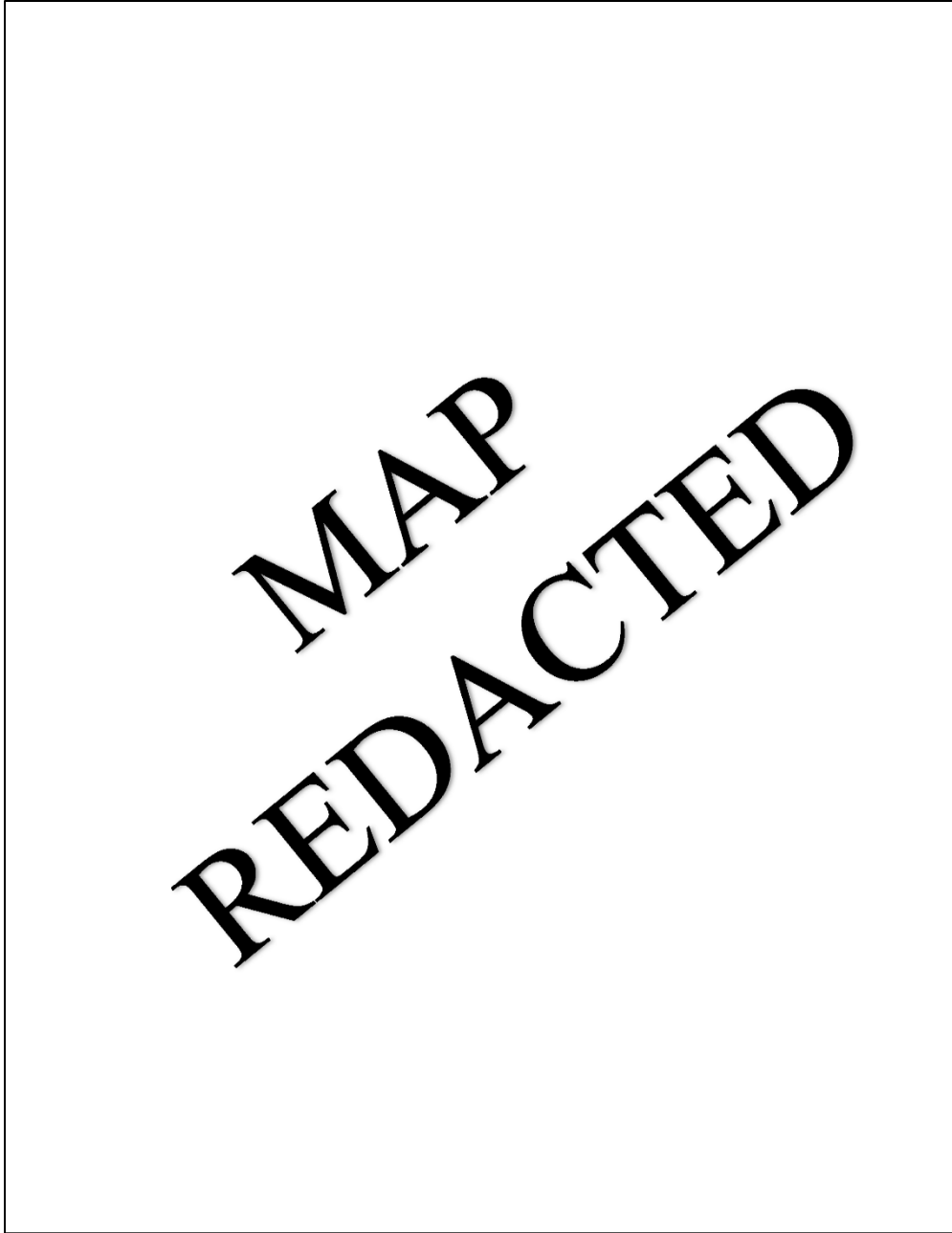


Figure 5.1. Map of known occurrences of vernal pool fairy shrimp recorded in the Diversity Database (2022) within the Napa River Core Area.