

Vernal Pool Bank

Overview

The Vernal Pool Mitigation/Conservation Bank (VPMCB) is being used for compensatory mitigation and/or conservation for unavoidable impacts to waters of the United States and/or Oregon, for impacts to species listed under the federal Endangered Species Act (ESA), and for impacts from other activities. The VPMCB contains critical habitat for the Vernal pool fairy shrimp (*Branchinecta lynchi*, LT), large-flowered woolly meadowfoam (*Limnanthes floccosa* ssp. *grandiflora*, LE) and Cook's lomatium (*Lomatium cookii*, LE) and is a mosaic of bottomland wetlands and uplands. The VPMCB is part of one



of the largest and highest functioning vernal pool complexes on the Rogue River Plains. The size of the vernal pool complex and the diversity of habitats at the VPMCB contribute to exceptional plant species and wildlife diversity. The 80.23 acre VPMCB is adjacent to the west boundary of The Nature Conservancy's Whetstone Savanna Preserve. Together, the adjoining tracts contain 224 acres of protected habitat, including roughly 160 acres of vernal pool complex.

Vernal pool wetlands exhibit seasonal intermittent/ephemeral perched groundwater derived hydrology. Inter-pool surface water connections are frequent via vernal swales during the wet season. Seasonal direct precipitation is the predominant hydrologic input for Agate Desert vernal pool complex systems. The hydrology of the pools is influenced by evapotranspiration, the topography of the surrounding mounds, the size of depression, connectivity to other pools, position in the flow gradient, surface slope, and slope of the underlying duripan. The mounds comprise the immediate micro-watershed for the adjoining pools and their plant community composition and structure presumably influence nutrient delivery to the vernal pools. The Bank contains open prairie, woodland and wetland prairie habitats among vernal pool complex which supports intact native ecological resources.

Alterations of Bank site hydrology include construction of the historic irrigation canal in the wetland swale abutting Coker Butte Creek, the construction of the existing Coker Butte Lateral irrigation canal between 1967 and 1973, placement of a berm within the swale abutting Coker Butte Creek, partial soil scraping over nearly 25 acres of open grassland including vernal pools on the western fringe of the site, as well as other minor surface scars and apparent relic burn piles presumably resulting from historic vegetation clearing. The majority of the alterations were likely a result of intended agricultural improvements. Restoration is underway.