

Frequently Asked Questions: Jackson County Vernal Pools

What are Vernal Pools and why are they special?

Vernal pools are an unusual wetland type found in Jackson County. In the Agate Desert area north of Medford there is a bumpy patterned ground landform leftover from the ice age. This area has a hardpan layer under shallow soil that holds back winter rains, leaving pools that dry up in late spring and bake in the summer heat. Unique plants and animals have evolved to survive these harsh conditions, including the federally threatened vernal pool fairy shrimp and two federally endangered plant species, Cooks Desert Parsley and Large-flowered Woolly Meadowfoam. Nearly 80% of the historic extent of Jackson County vernal pools and the range of these species have been lost to development, incompatible land uses, or invasive weeds.



Rings of flowers show the different water levels of a vernal pool near White City. DSL photo.

How are Vernal Pools regulated?

Vernal pools are wetlands that are regulated under both the Removal-Fill Law administered by DSL and the federal Clean Water Act administered by the US Army Corps of Engineers. Both of these laws have a goal of no net loss of wetlands. Development is also regulated under the federal Endangered Species Act, administered by the US Fish and Wildlife Service. A land developer must secure permits from each of these three agencies to develop vernal pool land, and may need city or county development permits as well. The vernal pool General Permit was created to provide a predictable and coordinated pathway for an applicant to secure permits from the state and federal agencies. The General Permit specifies criteria to offset wetland losses based on the scale and condition of the sites to be impacted and the sites to be used as mitigation. A developer may apply for separate individual permits from each agency, or may choose to apply for the General Permit and the related federal programmatic permits from the Corps and the US Fish and Wildlife Service.

What is mitigation, and how is mitigation of Vernal Pool loss different from other wetland types?

Under both the state and federal wetland laws, wetland losses must be avoided and minimized to the extent practicable, and unavoidable losses must be replaced. The Agate Desert vernal pools have an important function of supporting habitats for rare species. It is nearly impossible to create new vernal pools on disturbed sites, so preservation and ongoing management of existing large tracts of high-quality habitat is the preferred mitigation method. Large tracts are most likely to support the long-term survival of rare species. Long-term survival of the species is also the goal of the Endangered Species Act, so the mitigation for wetlands and species can use the same sites.



Vernal pools near White City during the winter.



The same vernal pools near White City during the summer. Google Earth.