

THIS PLAN HAS NOT YET BEEN ADOPTED OR APPROVED AND SHOULD NOT BE RELIED UPON TO PROVIDE REGULATORY CERTAINTY FOR THE POTENTIAL MITIGATION FOR IMPACTS TO VERNAL POOLS OR SENSITIVE SPECIES.

Ramona Vernal Pool Conservation Strategy

Historically, vernal pools have been found in the entire Ramona valley, including what is now the residential and commercial center (“downtown area”) of Ramona. About 50 – 70 vernal pools still exist on vacant lots and backyards throughout downtown Ramona. The majority of the remaining vernal pools are now found west of the downtown area in the Ramona grasslands surrounding the Ramona Airport.

For the downtown properties, there is an issue of providing reasonable use of property while addressing endangered species that exist in many vernal pools. For this reason the County of San Diego received \$75,000 in grant funds from the U.S. Environmental Protection Agency Wetlands Protection Development Program to hire a consultant to develop maps, profiles and protection plans for vernal pools in Ramona that will enhance California’s protection of these rare aquatic ecosystems. The goal of the Ramona vernal pool study was to determine which vernal pools have reasonable prospects for long-term viability and those that are vulnerable to uncontrollable external disturbance and therefore could be impacted in exchange for appropriate mitigation.

Vernal pools in Ramona have been altered from their natural condition from the onset of human settlement in Ramona. Agriculture and non-native grasses have altered many of these pools, sometimes eliminating certain species or altering the pools’ hydrology. In the downtown area there have been impacts to the remaining pools by frequent pedestrian and vehicle traffic, pesticide use, pollution, trash dumping, grading, stockpiling of dirt, and urban stormwater runoff. However, the Federally listed endangered San Diego fairy shrimp persists in a number of pools there. It is likely that taking no action will create a more difficult situation for both vernal pool species and economic uses of affected properties.

The results from the EPA-funded study provided a rank of all the vernal pools in the Ramona area based on current knowledge of biological resources, surrounding land uses, and proximity to other vernal pools. Each pool was grouped into one of three levels of relative conservation value. These rankings can help guide the priority for conservation of individual pools and can be updated as new information is uncovered. However, the modeled conservation values are not the only consideration for preservation.

To adequately conserve genetic diversity of Ramona vernal pools two more factors should be considered: basin topography, accessibility to pollinators, and soil type. Representation of different types of basins (e.g., deep and shallow, large and small) is important to assure adequate conservation of the sensitive species found in these pools since different basin types support different assemblages of species. Accessibility to pollinators is also important to assure the continued survival of vernal pool plant species by assuring adequate gene flow and seed set. It is also important to preserve an adequate number of pools on representative soil types. Placentia soils, which probably formed the majority of Ramona vernal pools historically, are now represented mainly by most of the remaining pools in the downtown area

and about 20 pools south of Ramona Airport. Many of the Placentia soil pools were also associated with mima mound topography (alternating hummocks and depressions), as seen in historical aerial photographs, which is quite different than the more typically preserved swale pools throughout much of the rest of Ramona.

To adequately address the conservation needs of vernal pool species in downtown Ramona (not including impacts to vernal pools on lands outside the land use jurisdiction of the County of San Diego), it is proposed that a conservation site or sites be set up to adequately protect and restore a representative and viable sample of this habitat type. The conservation sites should total about 20-30 acres and have vernal pools throughout the sites (or single site if one is available). The conservation sites will almost certainly require more detailed planning for restoration of vernal pool habitat and should initially meet the following minimum characteristics:

- Located in the vicinity of downtown Ramona (i.e., within about one mile of Highway 67);
- Currently or historically supported vernal pools;
- Soils are predominantly of the Placentia type; and
- The total area of the undeveloped portion of any one site should be at least 8 acres (this can include off-site areas that can be assured to remain in open space).

If land exists that can be acquired from willing sellers, to the maximum extent practicable the following conditions should also be met on the conservation sites:

- Sites currently or historically exhibited mima mound topography;
- Total area of the natural, contiguous land on the site is 20 acres or more, or can be restored to this condition (if one conservation site can be found to meet this criterion and the minimum requirements above, it will be sufficient to meet all vernal pool mitigation needs for downtown Ramona);
- Sites currently contains vernal pools supporting vernal pool indicator species; and
- Sites does not have above or below ground utilities over the core portion of the sites, nor does it have utility or other easements across the core of the sites.

This conservation sites would enhance the current situation of vernal pools in the downtown Ramona area where vernal pools are quickly degrading without protection. The sites would also provide habitat mitigation needs under CEQA for projects in the downtown Ramona area, allowing them to legally pursue economic uses of their properties. It is currently estimated that of the 50 – 70 vernal pools remaining in the downtown area, 40 – 50 would require some type of off-site mitigation.

There are several sites that could fulfill the requirements for this conservation site. The vacant lots north of Highway 67 on either side of Kalbaugh Street (currently surrounding the small commercial center) could provide a fragmented 8-acre site and is currently supporting vernal pools with San Diego fairy shrimp. The vacant lots north of Highway 67 along 16th Street could provide a nearly continuous site of approximately 8 acres; however, this site is currently crossed by several utility lines (including a major water line) and easements. A 1.4-acre piece of land is also isolated by 16th Street from the rest of the site. Preservation of these downtown properties may be possible but faces several serious obstacles, including high land prices, low relative habitat values, high management costs, and considerable community opposition. The vacant land north of Ramona High School and Olive Pierce Middle School is approximately 41

acres and supports 20 vernal pools; however, this land is owned by the State of California and is not subject to the land use jurisdiction of the County of San Diego. This site meets or exceeds all of the criteria above currently; however, the status of utility lines or easements is currently unknown and the Ramona School District has circulated an environmental assessment for their plans to expand their facilities onto this site. Participation by the Ramona School District in this conservation program would be entirely voluntary.

Other vacant sites known to be comprised of Placentia soils and are near the stated minimum size are located in north Ramona along Olive Street, north of Sonora Way, as well as south Ramona around Ashley Way and Rancho Maria Lane. These last two areas have presently or historically been used for agriculture. None of these sites are known to have present or historical occurrences of vernal pools.

Vernal pools in the grasslands would benefit from some restoration efforts such as reshaping of the pool basins and watersheds, reintroducing native vernal pool species, controlling non-native weeds, and controlling access of livestock and human traffic. Vernal pools proposed to be lost due to permitted development activities should be surveyed for vernal pool species and these individuals scientifically evaluated to determine if they could make a meaningful contribution to the inoculation or augmentation of populations in other conserved vernal pools within the Ramona area. Care must be taken not to disrupt the genetic composition of conserved vernal pools by the introduction of foreign (from a micro-geographic standpoint) biota.

The County will consider all these options to create a viable and valuable preserve system for vernal pools in the Ramona area.