Memo

To Demian Hardman, Planner, Contra Costa County Department of Conservation & Development

From Angie Harbin-Ireland, Senior Biologist, AMEC

Date 15 October 2012

Subject **Biological Resource Update for Creekside Memorial Park, Corrie Development Corp., in Contra Costa County, California.**

INTRODUCTION

Creekside Memorial Park, a proposed new cemetery to be developed by Corrie Development Corp., encompasses a total area of approximately 221 acres located in the Tassajara Valley in unincorporated Contra Costa County, California. The proposed project site is located along Camino Tassajara about 1 mile south of the intersection with Highland Road. Elevation of the site ranges from about 540 to 950 feet above mean sea level. Current usage is rural residential and grazing, with the majority of site being non-native grassland with scattered valley oaks, and with ephemeral riparian drainages along Camino Tassajara (including a section of Tassjara Creek), the south side of the property, and along the northern boundary.

Biological surveys were conducted by Sycamore Associates on the project site for sensitive resources between 2002 and 2006 as reported in numerous technical reports that were utilized to prepare the project environmental impact analyses. Contra Costa County circulated a Draft Environmental Impact Report (DEIR) for the proposed project in September 2011. A complete list of biological surveys and summary of technical reports is provided in the Biological resources section of the DEIR. Comment letters from resource agencies including the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) were received in October 2011. The County is currently preparing the Final EIR document for the project.

A draft biological assessment (BA) was prepared by EDAW/AECOM for the project in 2008 in accordance with Federal Endangered Species Act (FESA) Section 7 consultation guidelines. This was submitted and discussed at on-site meeting on 12 June 2008 with representatives from the USFWS, the biological consultant (including Angie Harbin-Ireland), P/A Design Resources, Inc. as the project planner/engineer, and the developer. A biological resources summary report was prepared by EDAW/AECOM in 2009 to support the County CEQA analysis. The report was included as an appendix to the DEIR. The purpose of this letter is assess the continued validity of biological resource information provided in the DEIR relative to present circumstances of the proposed project site, and whether those circumstances may have changed since the biological studies and DEIR were prepared.

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AMEC biologist Angie Harbin-Ireland has studied the development of this project since 2002, first as biologist with Sycamore Associates, then EDAW, then AECOM, and most recently conducted a site visit on 14 and 15 September 2012 to ascertain current circumstances and address agency comments on the DEIR. She has participated in several of the field survey efforts and all reporting aspects of the biological resources work and was responsible for providing information about biological resources in the on-site meeting with USFWS on 12 June 2008.

CURRENT CONDITIONS AND CONTINUED VALIDITY OF BIOLOGICAL RESOURCES ASSESSMENTS

The site was visited on 14 and 15 September 2012 by AMEC biologist Angie Harbin-Ireland to provide an update of existing conditions. The site was observed to be in similar condition to that observed in previous years. Little additional development has occurred on lands surrounding the site since 2008, the exceptions being some continued build out anticipated with existing developments along Windemere Parkway and Bollinger Canyon Road, and the widening and slight realignment of Camino Tassajara in fall of 2011 (County project no. 0662-6R4023). The project site is still in use as a rural residence on the western portion adjacent to Tassajara Road, with minimal horse and cattle grazing. Natural areas remain largely non-native grassland with scattered valley oak and riparian areas; all vegetation communities and their areas of coverage are still present as described in the BA and CEQA document. All tributaries, including Tassajara Creek, are still intact as previously described and were observed to be dry at the time of visit, as was the southern stock pond. The northern stock pond had a receding trace of water remaining. The site visit was made during daylight hours, and outside of the breeding season for most animals and plants. Species observations during the site visit included common avian and mammal species that have been previously observed on site.

The biological environment of the site has not been altered since biological surveys were done and reports were prepared between 2002 and 2009. The regulatory environment has had minor changes. Since the BA and biological resources summary document were prepared in 2008 and 2009 respectively, Critical Habitat for California red-legged frog (*Rana aurora draytonii*), federally listed Threatened and a California Species of Special Concern, has been designated that includes a portion of the project site and the California tiger salamander (*Ambystoma californiense*), federally listed Threatened, was formally listed as threatened under the California Endangered Species Act in 2010.

In response to comments by USFWS on the DEIR, a protocol valley elderberry longhorn beetle survey was conducted during the September site visit, in which every elderberry shrub (*Sambucus nigra* ssp. *caerula*) onsite was inspected for the presence of adult beetle exit holes. No evidence for the presence of beetles was noted, as had been expected in the conclusions of all previous biological reports. Focused surveys for other special-status species were not conducted as the timing was not the appropriate season however habitat suitability is unchanged. Therefore it is expected that previously documented special-status species including California red-legged frog, California tiger salamander, burrowing owl (*Athene cunicularia hypugaea*), a California Species of Special Concern, and special-status plants still inhabit the site. It is not expected that additional species which were not previously discussed in the BA or DEIR have any potential to occur onsite.

SPECIAL-STATUS PLANT MITIGATION

Botanical surveys of the site in 2002 identified two special status plant species, both CNPS 1.2B listed plants (rare and endangered in California). These were Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*) and San Joaquin spearscale (*Atriplex joaquiniana*). Both are annual endemics and were found growing together on a flat area identified as being alkali meadow and grassland habitat on the valley bottom. Alkali meadow/grassland covers 2.25 acres onsite, and most of this (2.01 acres) is inhabited by tarplant. This community is recognized as rare and is tracked by the CNDDB. An estimated 2,700 individuals of tarplant were present in scattered groupings of variable size and density, and 24 individuals of spearscale were found in two distinct locations, both associated with tarplant.

The area where these plants are found will be directly impacted by development of the site, requiring mitigation. Proposed mitigation includes assigning an equal area within the proposed conservation easement for habitat relocation (a 1:1 area mitigation), or utilizing an off-site mitigation area that both species currently inhabit. Monitoring and maintenance of these mitigation areas will continue for a period of five years with annual reporting to Contra Costa County. If success criteria are not met at the end of that term, additional offsite mitigation/preservation of existing populations will be required.

Onsite habitat relocation is the preferred mitigation measure, and would begin with salvaging topsoil (including much of the existing seedbank) and as many whole plants as possible from the 2.01 acre area currently inhabited by Congdon's tarplant. These would be relocated to two proposed mitigation areas. Both proposed mitigation areas are outside of the permanent disturbance areas of the project, and lie within the same soil mapping unit that contains the existing habitat. Both sites are not currently known to support populations of either Congdon's tarplant or San Joaquin spearscale, and are assumed to be less alkaline than the existing habitat. The larger, more upland location does not currently support alkaline vegetation, and about 0.57 acres would be subject to grading for the lower garden area but would be returned to a natural vegetated state. The smaller area is proximal to the existing habitat, and appears to be slightly alkaline. Congdon's tarplant tolerates a broad range of alkalinity, and may readily re-establish itself after relocation. Spearscale, however, requires highly alkaline sites, and it may be more difficult to establish for the long-term.

Traditional seeding or re-seeding operations have proven very successful with Congdon's tarplant (*i.e.*, the Wrigley Creek Improvement Project, Milpitas, CA (http://www.vta.org/projects/Habitat/WrigCreekYr1.pdf), Cisco Site 6, Alviso, CA (http://www.sanjoseca.gov/planning/eir/MMR/cisco_site6/CiscoMitigation.pdf). Seeding is often used to mitigate on sites that have existing Congdon's tarplant populations. To our knowledge, habitat relocation has not yet been utilized to mitigate for impacts to this species, though it has been used with varying degrees of success for others. For example, at Otay Ranch near San Diego, CA, relocation of a soil seed bank from a development site to a mitigation area very successfully created another rare plant community, marine succulent scrub, including establishment of a population of the federally threatened Otay tarplant (*Deinandra otayensis*) and other native species on heavy clay soils (from Mark Dodero of Recon Environmental: http://consbio-static.s3.amazonaws.com/media/content/files/Dodero.pdf). A search of literature and the web found no references pertaining to the success of mitigation measures for San Joaquin spearscale.

Comments by CDFG on the DEIR suggest that habitat relocation, particularly with alkali habitats, may be problematic and has a low probability of success. They suggest that the mitigation ratio should be raised to 3:1 in order to avoid a permanent net loss of alkali habitat. At this ratio, there is insufficient suitable area for on-site mitigation as designed. Additionally, the collection of a seed bank to preserve local genetic material was advised for use either on or off site. The proposed habitat relocation has been successful with other rare plant species and seeding of tarplant in unoccupied area has a proven track record as described above. If the on-site mitigation approach does not meet performance standards after five years, additional off site preservation is required by Mitigation Measure 3.41a of the DEIR.

ATTACHMENTS

Site photos from September 14-15, 2012 field survey

cc: Jim Parsons, PA Design Resources
Pete Klein, Corrie Development Corp.

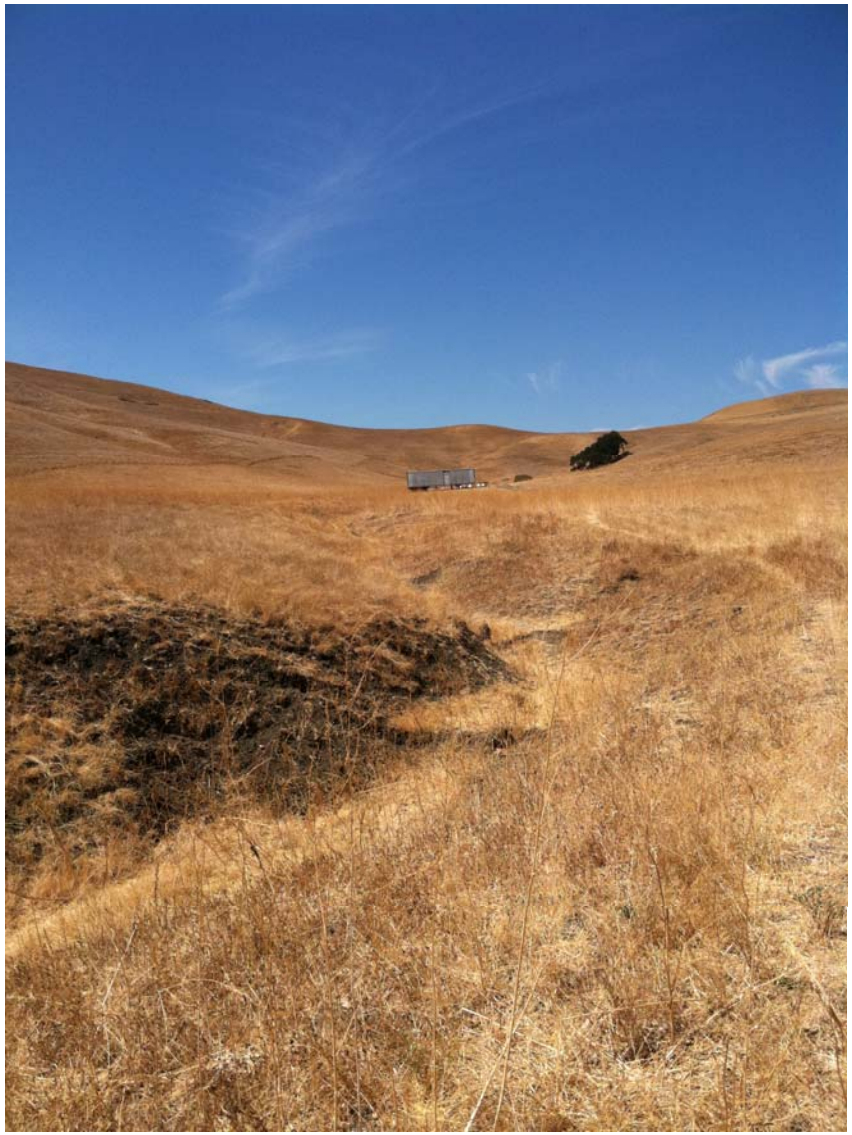

Figure 1. Unnamed tributary on southern portion of site.

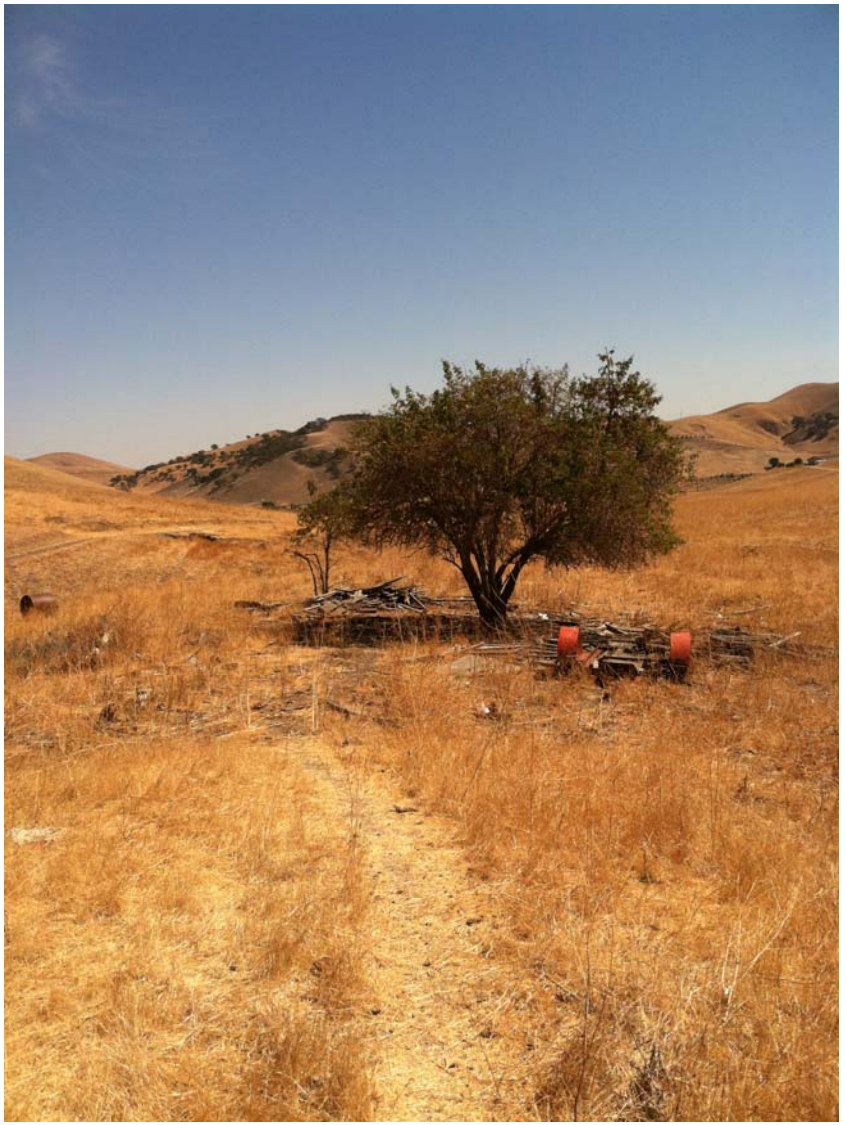

Figure 2. Elderberry shrub no. 3.

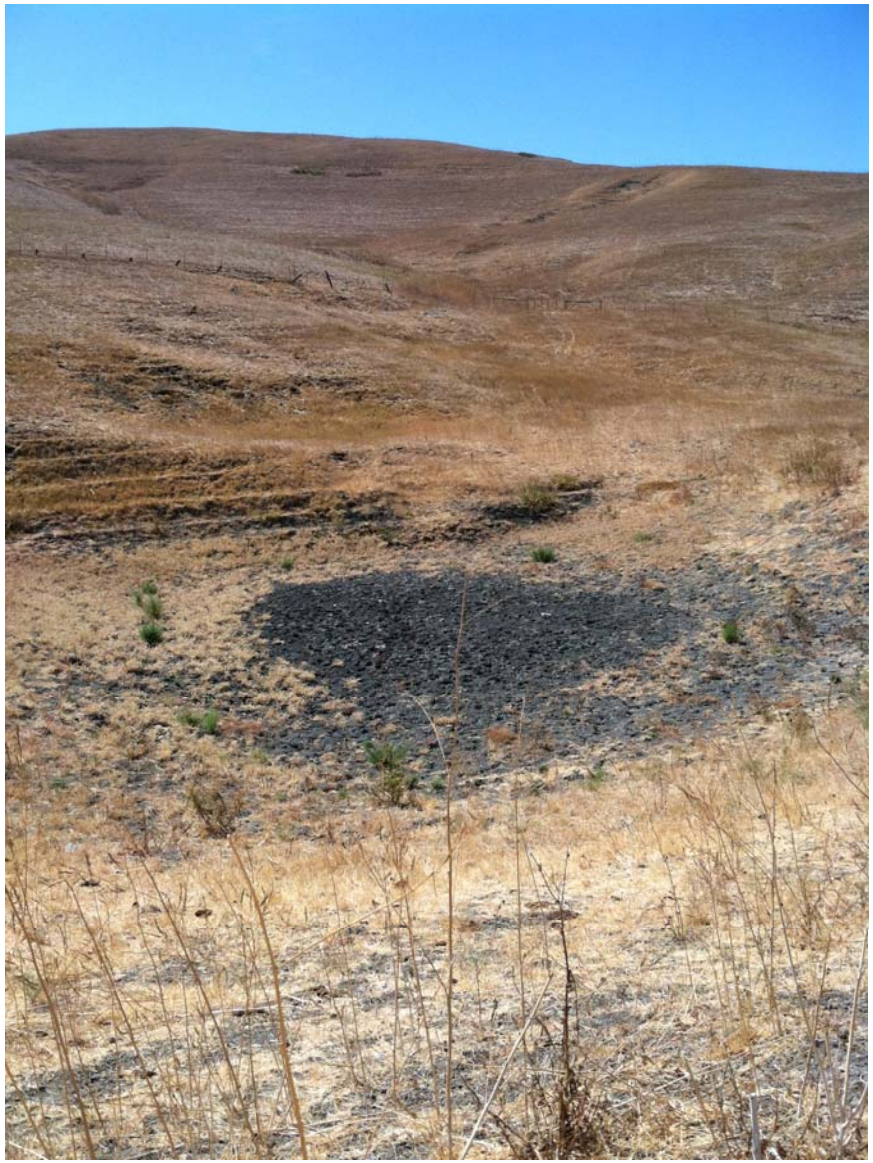

Figure 3. Pond 1 along southern drainage.

Figure 4. Pond 2 on northwestern portion of site.

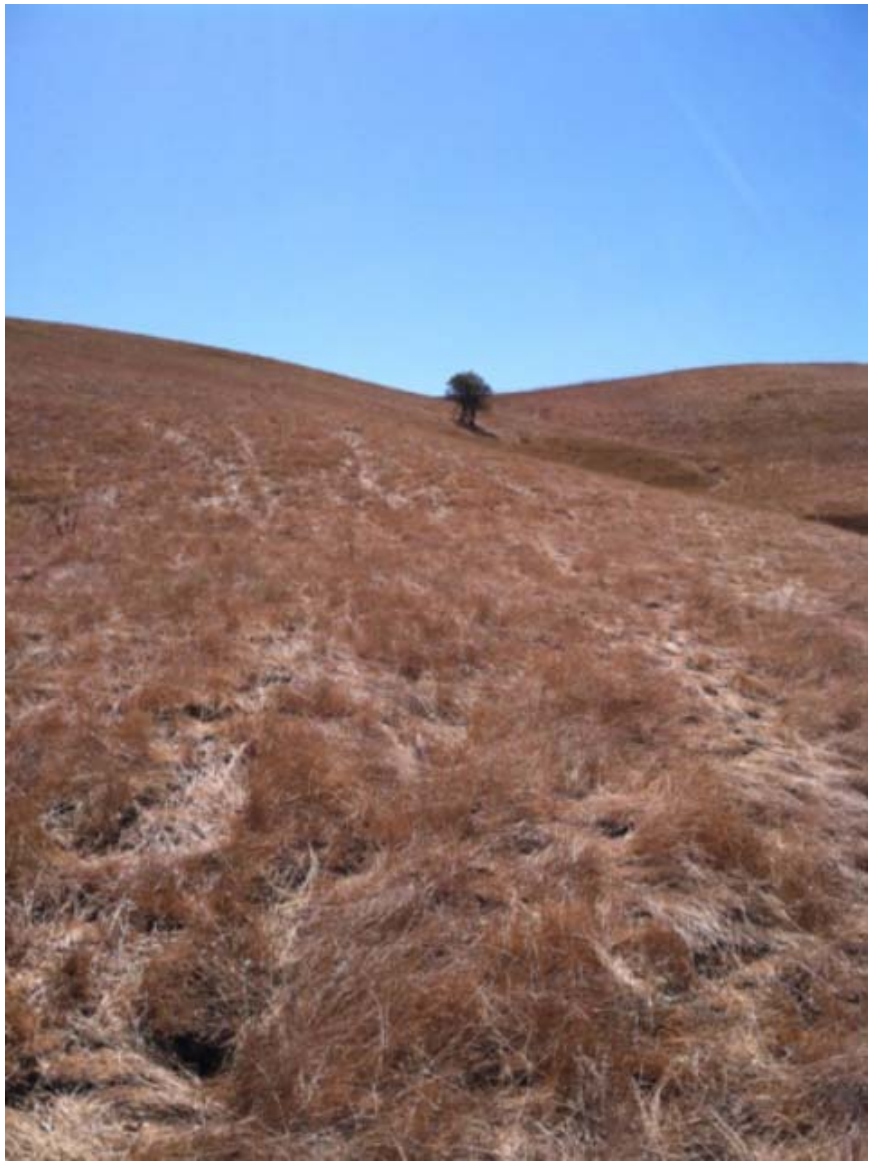

Figure 5. Elderberry shrub on northern hillside.

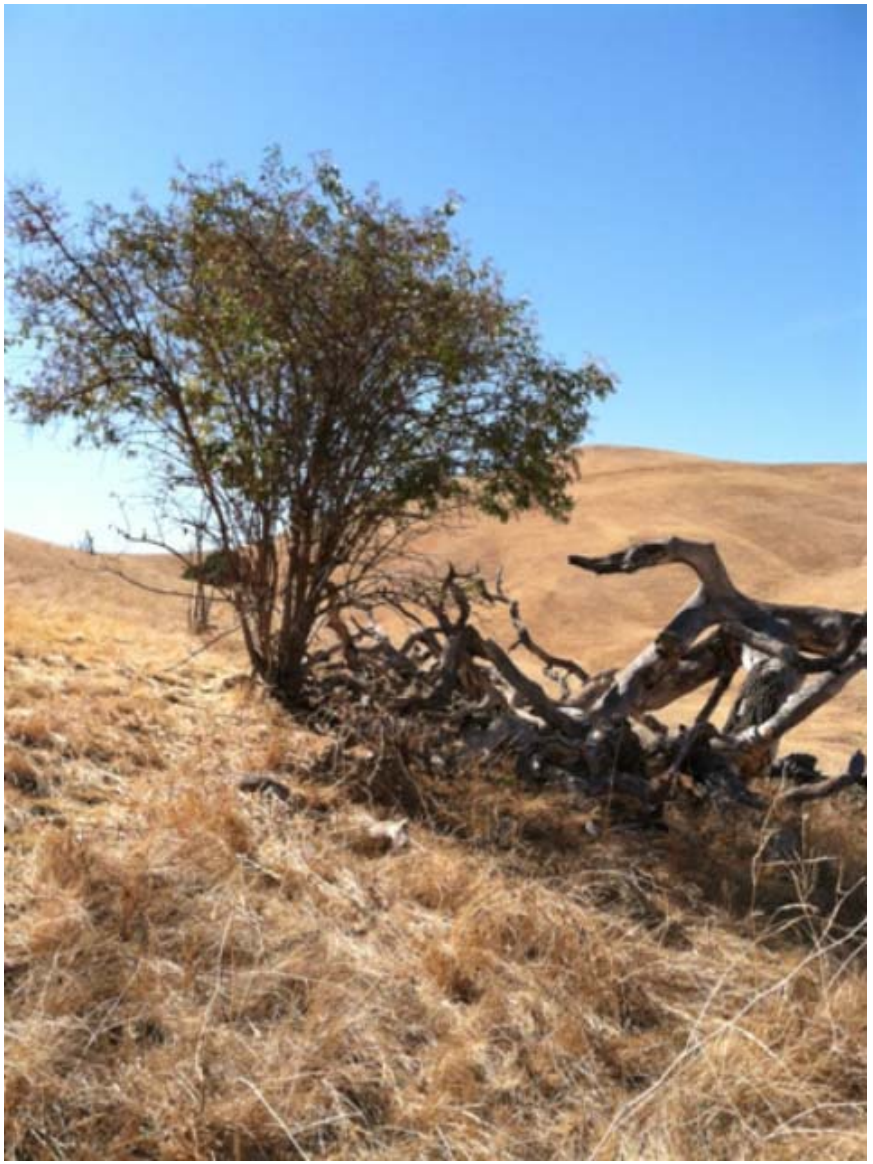

Figure 6. Elderberry shrub no. 11.

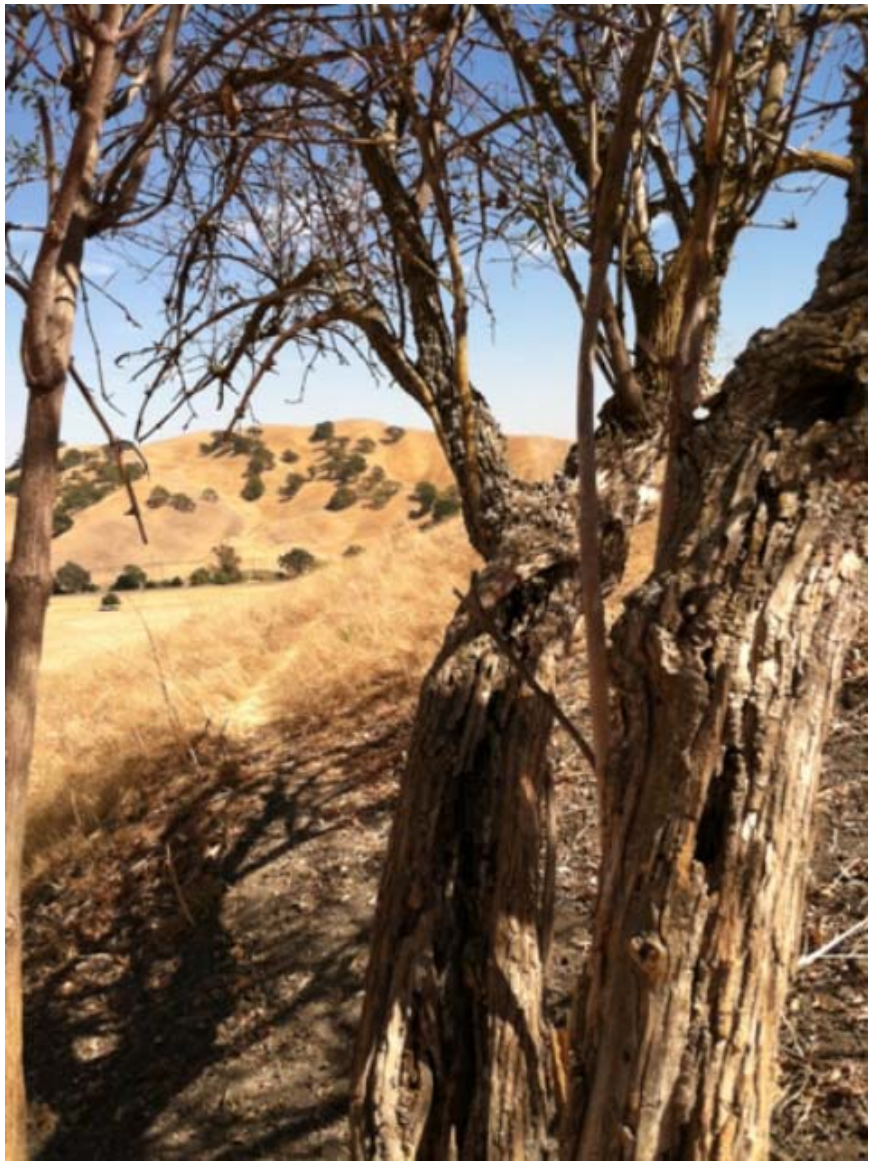

Figure 7. Elderberry shrub no. 13.

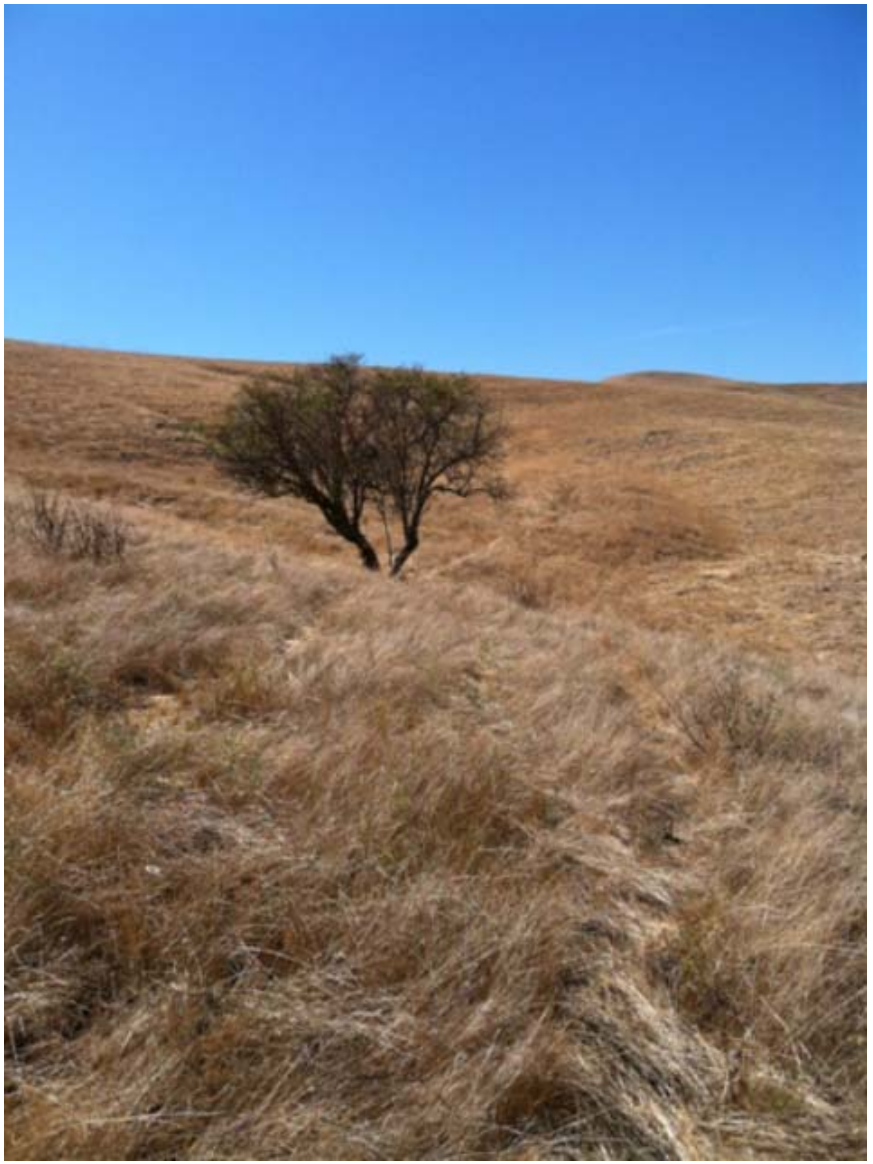

Figure 8. Elderberry shrub on northern hillside.

Figure 9. Elderberry shrub no. 1.

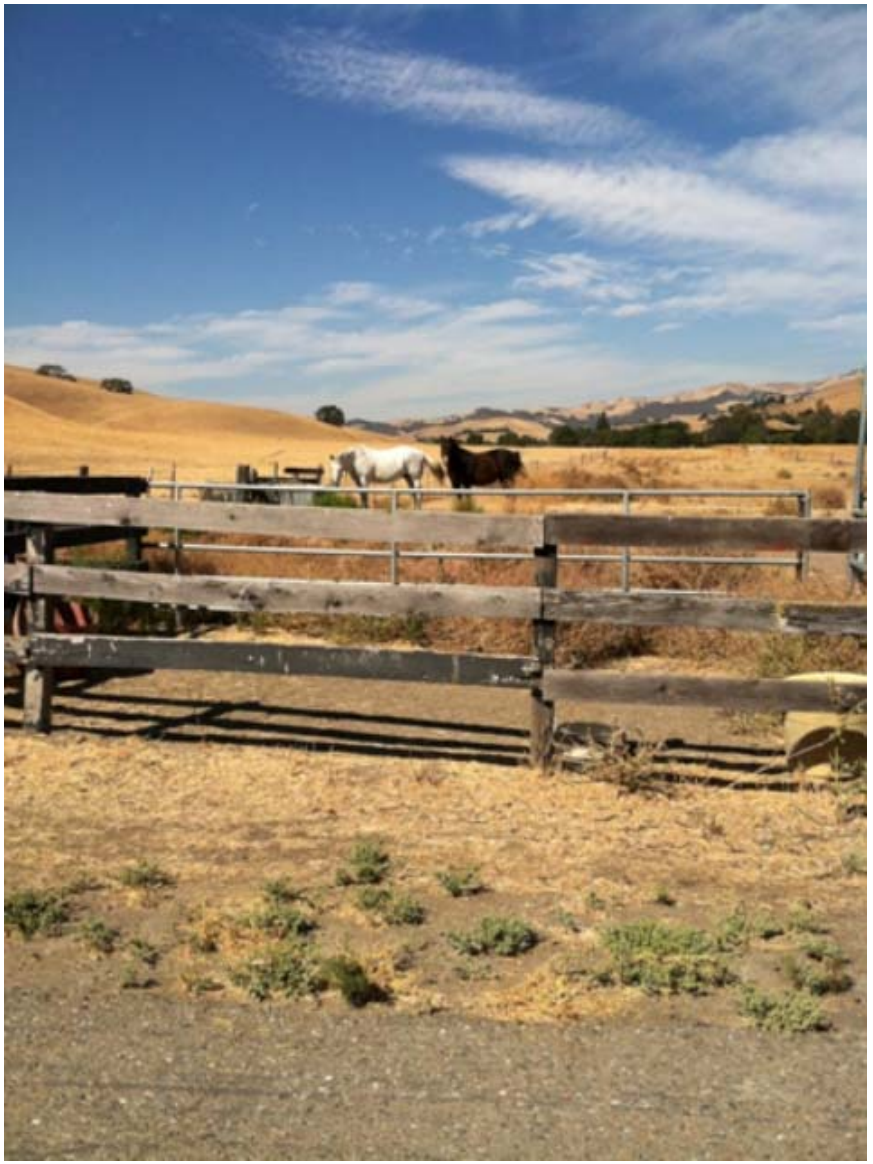

Figure 10. Eastern portion of site with grazing horses.

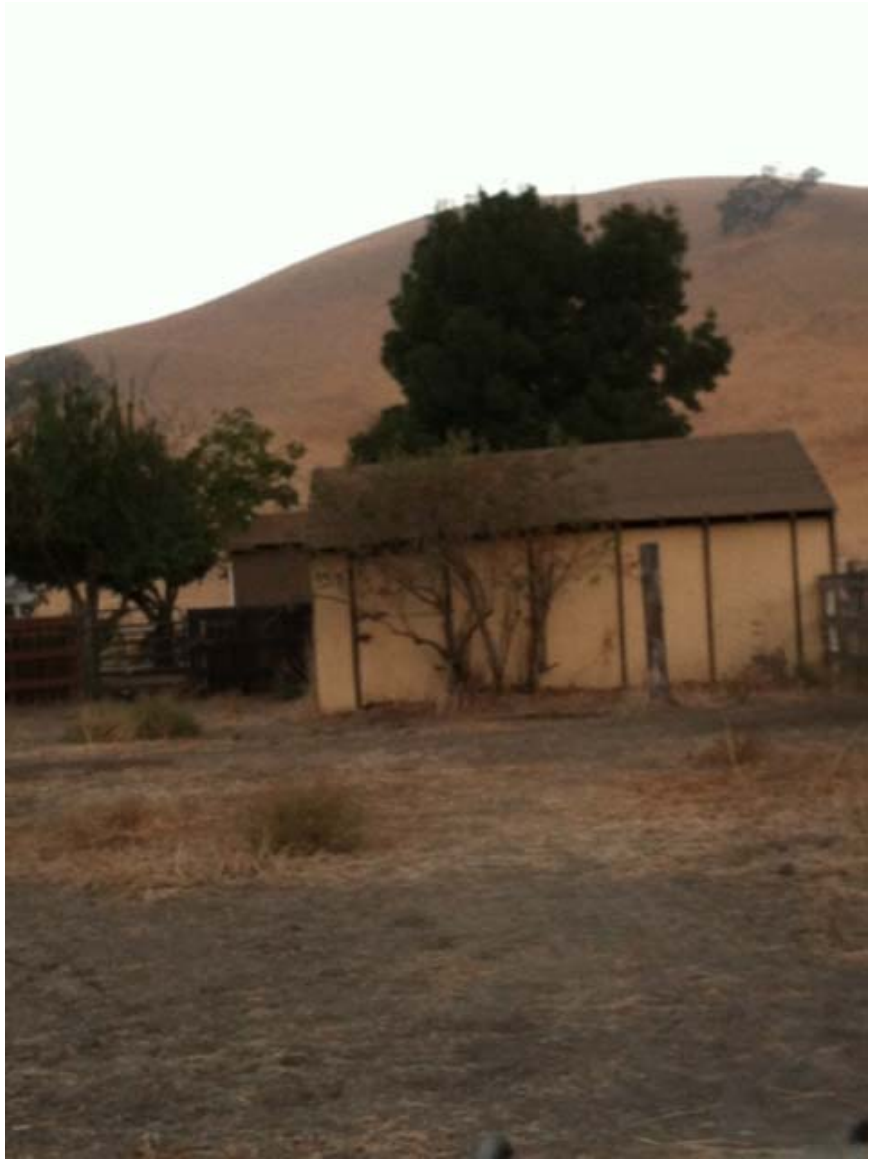

Figure 11. Elderberry shrub no. 15 in horse paddock near Tassajara Road.

Figure 12. Elderberry shrub in Tassajara Creek on site.