

**APPENDIX E**  
*Biological Constraints Letter*





CARLSBAD  
FRESNO  
IRVINE  
LOS ANGELES  
PALM SPRINGS  
POINT RICHMOND  
RIVERSIDE  
ROSEVILLE  
SAN LUIS OBISPO

June 29, 2018

Chris Zaballos  
MLC Holdings, Inc.  
2603 Camino Ramon, Suite 140  
San Ramon, CA 94583

Subject: Biological Constraints Assessment for the Eldredge Property near Vacaville in Solano County, CA

Dear Chris:

Per your request, LSA presents this letter regarding the results of a reconnaissance-level biological constraints assessment for the above-referenced property (Assessor's Parcel Number 0125-040-110). LSA understands that you are exploring the construction of approximately 112 residential units and a park on the approximately 20-acre property. The primary objective of the biological assessment was to identify potentially significant biological resource constraints regarding development of the property, especially related to the potential presence of federal and State protected wildlife and plant species.

## **METHODS**

### **California Native Plant Society (CNPS) Online Inventory**

LSA accessed the CNPS Online Inventory of Rare and Endangered Vascular Plants of California for all rare plant records on the United States Geological Survey (USGS) *Fairfield North* Quadrangle.

### **California Natural Diversity Database (CNDDDB)**

LSA queried the CNDDDB for occurrences of all wildlife and plant species subject to CEQA within a 1-mile radius of the property boundary.

### **United States Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) Online System**

LSA used the USFWS IPaC online system to see if the property is in any designated critical habitat. The IPaC online system was also used to generate a list of special-status plant and wildlife species that the USFWS says may occur within or near the property, or be affected by a project on the property. The search area was defined by drawing the property boundaries onto the IPaC online mapper.

## Other Sources

LSA reviewed the public draft of the Solano Habitat Conservation Plan (HCP) for information on protect biological resources that could potentially occur on the property. The Environmental Impact Report (EIR) for the City of Vacaville's General Plan was also reviewed.

## Reconnaissance-level Survey

LSA biologist John Kunna conducted a reconnaissance-level survey on October 19, 2017. Before walking the property, the biologist spoke at length with the landowner, Mary Eldredge, about the history of the land use on the property and her wildlife observations. A follow-up plant survey was also conducted on June 28, 2018.

The survey was conducted by using meandering pedestrian transects, allowing for 100 percent visual coverage of the property. Plant and wildlife species observed were recorded in field notes. Digital photographs were taken to document site conditions.

LSA conducted the survey to assess current habitat conditions and evaluate the potential for the property to support special-status species and sensitive natural communities. Focused rare plant and protocol-level wildlife surveys were beyond the scope of this reconnaissance-level survey. LSA also noted any potentially jurisdictional water features (e.g., wetlands, swales). A formal wetland delineation was beyond the scope of this reconnaissance-level survey.

## RESULTS

### CNPS Online Inventory

The query of the CNPS Online Inventory produced a list of nine plant species with a Rare Plant Rank of 1A, 1B, 2A, or 2B that have been found on the *Fairfield North USGS Quadrangle*.

They are:

- Alkali milk-vetch (*Astragalus tener* var. *tener*)
- Pappose tarplant (*Centromadia parryi* ssp. *parryi*)
- San Joaquin spearscale (*Extriplex joaquinana*)
- Contra Costa goldfields (*Lasthenia conjugens*)
- Legenere (*Legenere limosa*)
- Slender-leaved pondweed (*Stuckenia filiformis* ssp. *alpina*)
- Suisun Marsh aster (*Symphotrichum lentum*)
- Saline clover (*Trifolium hydrophilum*)
- Oval-leaved viburnum (*Viburnum ellipticum*)

### CNDDDB

The CNDDDB contained occurrences for two special-status plant species within 1 mile of the property.

They are:

- Two fork clover (*Trifolium amoenum*)
- Baker's navarettia (*Navarretia leucocephala* ssp. *bakeri*)

The CNDDDB contained occurrences for only one special-status wildlife species (valley elderberry longhorn beetle [*Desmocerus californicus dimorphus*]) within 1 mile of the property.

### USFWS IPaC

The property is not located within any designated Critical Habitat. The IPaC query is a preliminary tool that the USFWS uses to automatically generate a list of species under USFWS jurisdiction that might occur in the general vicinity of a site, without regard to the actual land use or habitats currently on that site.

The query returned a list of two plant species under USFWS jurisdiction that the USFWS considers to be potentially present near the Eldredge Property.

The two plant species are:

- Contra Costa Goldfields (*Lasthenia conjugens*)
- Showy Indian Clover (*Trifolium amoenum*)

The IPaC query returned a list of 12 wildlife species that are under USFWS jurisdiction that the USFWS considers to be present near the Eldredge Property. They are:

- California clapper rail (*Rallus longirostris obsoletus*) (=Ridgway's rail, *Rallus obsoletus*)
- Northern spotted owl (*Strix occidentalis caurina*)
- Giant garter snake (*Thamnophis gigas*)
- California red-legged frog (*Rana draytonii*)
- California tiger salamander (*Ambystoma californiense*)
- Delta smelt (*Hypomesus transpacificus*)
- Steelhead (*Oncorhynchus* [=Salmo] *mykiss*)
- Delta green ground beetle (*Elaphrus viridis*)
- Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)
- California freshwater shrimp (*Syncaris pacifica*)
- Conservancy fairy shrimp (*Branchinecta conservatio*)
- Vernal pool fairy shrimp (*Branchinecta lynchi*)

These lists include species that occur outside of the property, but that the USFWS thinks could potentially be directly or indirectly affected by activities on the property. Determining the likelihood and extent of effects a project may have on biological resources on the IPaC list requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

## Other Sources

The City of Vacaville's General Plan EIR discusses Swainson's hawk (*Buteo swainsoni*). EIR Figure 4.4-6 indicates that the Eldredge property is not within a Swainson's Hawk Conservation Area. However, at least three Swainson's hawk nests have been documented within 3 miles of the site.

## Reconnaissance-level Survey

### Site Conditions

A cluster of buildings is located near the center of the southern side of the property. These buildings include one occupied single-story residence, another single-story residence that is currently unoccupied, garages, barns, and agricultural equipment storage and processing buildings.

A derelict structure with an associated gravel parking lot that was used as a retail fruit stand is located in the northwestern corner of the property.

### Vegetation

The majority of the property is used for agricultural activities and is regularly disked. Trees on the property include oaks, bay laurel, California buckeye, Japanese maple, pines, palms, eucalyptus, bald cypress, magnolia, walnut, fig, olive, persimmon, and plum. Very large pecan trees that Ms. Eldredge said were planted by her grandfather line Orchard Avenue on the property's western boundary. Several of the pecan trees had numbered metal tags and plastic flagging on them. Based on the condition of the flagging, the pecans were inventoried and tagged within a few months prior to LSA's field survey.

Smaller plants on the property include common weedy species, such as fennel, pampas grass, bamboo, thistles, bindweed, and non-native annual grasses. A small fenced rose garden and other ornamental flowers are near the residences. The driveway is lined with rosemary shrubs and bougainvillea.

No elderberry (*Sambucus* sp.) shrubs were detected, but Ms. Eldredge said elderberries do sprout from bird droppings occasionally and are removed during regular weeding activities.

### Wildlife

No special-status wildlife species were detected.

LSA saw two domestic housecats (*Felis catus*) on the property. Three live black-tailed deer (*Odocoileus hemionus*) were seen and one dead deer was found on the north side of the property. Ms. Eldredge confirmed that she has seen common human-adapted species, such as raccoons (*Procyon lotor*) and Virginia opossum (*Didelphis virginiana*) on the property.

Several common species of bird were observed, including American crow, California scrub jay, California towhee, white-crowned sparrow, Anna's hummingbird, and northern flicker. LSA did not detect any stick nests that may have been built by raptors in the trees on the property. The large pecan trees on the western property boundary likely have cavities which some bird species nest in.

No California ground squirrels (*Otospermophilus beecheyi*) or their characteristic burrows were seen and Ms. Eldredge confirmed she has never seen them on the property. A few small burrows that were likely created by gophers were seen.

A bat house is attached to a barn, but cobwebs on its entrance indicate it was not being used by bats at the time of the survey. LSA did not see any guano or staining under the bat house or anywhere else on the property.

#### *Wetlands and Other Jurisdictional Waters*

No vernal pools or other potential wetlands are located on the property. Two small plastic-lined goldfish ponds near the residences are not jurisdictional.

An approximately 630-foot-long, 20-foot-wide drainage ditch runs north-south along the eastern property boundary. The ditch has culverts at each end. The ditch had some flowing water at the time of the survey and supported hydrophytic plants. Ms. Eldredge said the ditch is maintained by the Solano Irrigation District, which holds an easement. We understand the ditch is not on the property and would be avoided by the proposed project.

## **ANALYSIS**

### **Vegetation**

Due to its disturbed nature, the site is unlikely to support any special-status plant species. Most of the special-status plant species in the area have very specific habitat needs (e.g., vernal pools, brackish marshes) that are not present on the site. Showy Indian clover is only known from one wildland location in coastal Marin County and is considered extirpated from all other localities. There is a very limited potential for Pappose tarplant to occur on the property. Pappose tarplant is often found in wetlands with alkaline soils and only occasionally occurs in non-wetlands. To confirm absence of pappose tarplant on the property, a qualified botanist conducted a focused rare plant survey on June 28 during the species' blooming period (May through November); no pappose tarplants were observed.

### **Wildlife**

Due to its disturbed nature, the site is unlikely to support any special-status wildlife species. Most of the special-status species in the Solano County area require specific habitat features (e.g., vernal pools, streams, riparian habitat, tidal marshes) that are absent from the property.

The drainage ditch does not provide suitable aquatic habitat for giant garter snake, California red-legged frog, California tiger salamander, Delta smelt, steelhead, California freshwater shrimp, Conservancy fairy shrimp, or vernal pool fairy shrimp.

There is low potential for Swainson's hawks, which are State-listed as threatened, to nest or forage on the property. Swainson's hawks generally do not forage in orchards, but the currently fallow fields in the northern portion of the property are potentially suitable. The property's relatively small size and surrounding residential development limit the property's suitability for the species. The nearest known Swainson's hawk nest site is located over 2 miles to the east of the property

boundary. During the breeding season, Swainson's hawks may travel up to 18 miles to forage. The CDFW requires that projects consider impacts to Swainson's hawk if there are nests within 10 miles of the project.

Terrestrial wildlife species would not be able to reach the site from known populations in the area because of the surrounding suburban development. In addition, there is no potential for valley elderberry longhorn beetle to occur, because the species is dependent upon large stands of mature elderberry shrubs, which are not present on the site.

Many common bird species that are protected during nesting by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code likely nest on the property. Birds may nest in the trees and shrubs, as well as on buildings. Other species, such as the California quail, nest on the ground.

### **Wetlands and Other Jurisdictional Waters**

The only potentially jurisdictional feature near the property is the irrigation drainage ditch. The U.S. Army Corps of Engineers generally does not take jurisdiction over man-made drainage ditches constructed wholly in uplands. However, the ditch will be avoided by the proposed project.

### **Potential Biological Constraints**

There is some potential for Swainson's hawk to nest and/or forage on the property. Given its setting in an urban area, the property is not high-value foraging habitat for Swainson's hawk. However, their presence on the property cannot be fully ruled out. The City of Vacaville General Plan (adopted August 11, 2015) lists avoidance and minimization measures for this species that are applicable to almost all development activities in the city. These measures are primarily intended for compliance with the MBTA and California Fish and Game Code, Sections 3503 and 3503.5, regarding protection requirements for active bird nests. The City of Vacaville General Plan also calls for project applicants to comply with the draft HCP, which identifies mitigation for loss of agricultural land and therefore loss of Swainson's hawk foraging habitat.

Section 3503 of the Fish and Game Code makes it unlawful to take, possess, or needlessly destroy the nests or eggs of any bird. Section 3503.5 makes it unlawful to take or possess birds of prey (e.g., hawks, eagles, vultures, and owls), or destroy their nests or eggs. Removal of known Swainson's hawk nest trees may also require an incidental take permit from the California Department of Fish and Wildlife (CDFW).

Numerous other bird species that are protected by the MBTA and California Fish and Game Code likely nest on the ground, on buildings, and in trees and shrubs on the property every year. Presence of nesting birds is not a significant constraint, because it can be dealt with by restricting activities, such as vegetation trimming and removal, initial grubbing and grading, and building demolition, to occur outside of the nesting season for birds. The generally accepted timeframe for the nesting bird season in Solano County is February 1 through September 15.



**CONCLUSION**

There are no significant or insurmountable constraints related to biological resources on the Eldredge Property. Development of the property will most likely require mitigation for loss of Swainson's hawk foraging habitat at a 1:1 ratio under the City's General Plan policies. We understand that the development of the site will also require mitigation for the conversion of agricultural land.

Please contact me or Ross Dobberteen, Principal in Charge, if you have any questions and/or require further information regarding the results of this biological constraints analysis.

Sincerely,

**LSA, Inc.**



John Kunna  
Senior Biologist