



August 7, 2020

Steve Kowalski
Town of Moraga
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Subject: Biological Resources Study
Moraga Country Club Project

Dear Steve:

This letter report presents the results of a biological resources survey of a portion of the Moraga Country Club property proposed for the construction of a fitness center, a casual dining facility (courtside grill), a new recreation pavilion and the conversion of two tennis courts to pickleball and bocce ball courts. Approximately 33 parking spaces between the north side of the existing clubhouse/pool area and Moraga Creek will be removed for the construction of the fitness center. Forty six new parking spaces will be built north of Moraga Creek in an area currently occupied by a putting green, turf and landscaping.

The purpose of this survey was to determine existing habitat conditions, observe plant and wildlife species present on and in the vicinity of the proposed work area (specifically Moraga Creek), determine habitat suitability for special-status species, assess whether any biological resources that are, or potentially are, present could affect proposed development and to provide information on the CEQA Checklist Biological Resource questions.

METHODS

An LSA biologist surveyed the proposed development area and Moraga Creek on July 17 and July 30, 2020. This entire area was surveyed by walking. Plant and wildlife species observed were recorded in field notes and habitat conditions were noted on copies of the Existing Conditions plans (sheets CI.O and AS-100 prepared by Ratcliff dated 5/4/2020). The California Natural Diversity Database (CDFW 2020) was searched for occurrence records of special-status plants and animals in the project site vicinity. A similar records check was made with the California Native Plant Society's Inventory of Rare and Endangered Plants (CNPS 2020) for rare plant occurrence records from the site vicinity. We reviewed an official species list from the U.S. Fish and Wildlife Service of federally listed species known from the San Francisco Bay Region. We also reviewed two studies of the aquatic resources of Moraga Creek.

EXISTING CONDITIONS

The entire project area has previously been developed and contains no natural habitat. This developed area consists of asphalt parking lot, tennis courts, a small building being used as a tennis center, turf, landscaping, and miscellaneous paths/hard surface areas. The northern boundary of the

clubhouse/pool parking lot adjacent to Moraga Creek is defined by a cinderblock wall, averaging approximately 42 inches high that is covered by Boston Ivy (*Parthenocissus tricuspidata*) a climbing vine. Wildlife use of the developed area consists of urban adapted species that can tolerate high levels of human activity or species that move into this developed area at night in search of food. Bird species observed in the developed area include mourning dove, California scrub jay and house finch. Mammals that likely enter the developed area at night include striped skunk, raccoon and opossum.

Moraga Creek flows along the north boundary of the clubhouse/pool area parking lot and is southwest of the smaller proposed parking lot on the north side of the creek. The course of Moraga Creek adjacent to the work area has been modified in the past. The lower half of the channel adjacent to the portion of the parking lot that will remain was channelized in the past. The vegetation present reflects this. Native riparian species which were once present were removed. A few coast live oak and California bay are present on the south bank and appear to have been planted. Three California buckeye, growing together, are present on the north bank and could be naturally established. One small white alder has been able to establish along the live channel. Understory vegetation is composed of introduced weedy species.

The upper half of the channel, which is adjacent to the proposed fitness center has a different character. It does not appear both banks have been channelized. The south bank is largely in a natural condition and supports willow riparian woodland. The willows (*Salix* sp.) are native and grow on a terrace above the low flow channel and part way up the stream bank. The willows stop abruptly where channelization begins at its downstream end. Understory vegetation is composed of weedy herbaceous species and one native, scouring rush (*Equisetum* sp.). The north bank appears to have been channelized and is similar in character to the downstream channelized reach.

Wildlife use of the willow riparian habitat is more diverse than the downstream channelized section. Small songbirds including warbling vireo, chestnut-backed chickadee, and bushtit are present and focused surveys would detect many more species. In addition to the mammals likely to enter the site at night described above, the riparian zone which includes upstream and downstream areas is likely used by gray fox, black-tailed deer, fox squirrel and dusky-footed woodrat. No woodrat houses were observed in the adjacent riparian habitat.

Moraga Creek is a low gradient perennial stream with summer flows sustained by landscape and golf course irrigation adjacent to the site. Cattail is present in many portions of the channel. The creek was not sampled for aquatic organisms but is known to contain mosquito fish. Rainbow trout pass through this reach to access upstream spawning areas in the Lost Valley neighborhood. Western pond turtles and red-eared sliders (an introduced turtle) are present in Upper San Leandro Reservoir and could move upstream to the project vicinity.

SPECIAL-STATUS SPECIES

Based on the CNDDDB and CNPS searches and USFWS species list, 19 special-status species (9 plant and 10 animal species) have been observed within 2 miles of the project site and/or within the USGS Las Trampas Ridge Quad. Attachment A is a list of these species. Suitable habitat is not present on the site for any of them. The federally listed California red-legged frog and California Species of

Special Concern dusky-footed woodrat and western pond turtle are discussed in more detail below due to their potential to occur in the adjacent Moraga Creek corridor.

California Red-Legged Frog

The California red-legged frog (CRLF) is federally listed as threatened. Critical Habitat for CRLF was designated in 2010 and the project site is not located within a Critical Habitat unit.

Adult CRLF are primarily aquatic, although adjacent upland habitats are also important since they are used by adults and juveniles for escaping high water during flood events, aestivating and dispersing to other aquatic habitats. During times of dispersal, CRLF are known to move more than one mile through upland habitats to reach other sources of water.

CRLF are known to occur in Laguna Creek, a tributary of Moraga Creek. There are no records of this species from Moraga Creek. The closest extant site is from Laguna Creek on the grounds of the Town of Moraga’s Hacienda de Las Flores approximately 1.25 miles north of the project site (Table A).

Table A: Regional Occurrence Records of California Red-Legged Frog

Distance from Site	Location/Notes/Year
1.25 miles	Laguna Creek, grounds of Hacienda de Las Flores (2007)
2.3 miles	Laguna Creek at Campoliado Dr.
2.7 miles	Palos Colorados project site, stock ponds, yearly observations since 2000 ¹
2.7 miles	Las Trampas Creek behind Lafayette Community Center (1994)
3.1 miles	Wilder, Brookside Dr. Habitat eliminated (1997)
4.4 miles	Carr Ranch (2015)
4.6 miles	Carr Ranch (2015)

¹ CRLF have been observed at six other locations on Palos Colorados.

Moraga Creek adjacent to the project site could serve as a movement corridor for CRLF if they were present either upstream or downstream. The disturbed condition of the channel (channeled) and the high level of adjacent human activity minimizes the potential for CRLF presence in the creek. The project site contains no habitat suitable for use by CRLF and they are not present in the development area.

Western Pond Turtle

The western pond turtle is a California Species of Special Concern. They are found in permanent and intermittent ponds and creeks and also occur in larger lakes and reservoirs. In creeks they are most often found in deep pools. Important habitat features include basking sites and aquatic retreat areas such as undercut banks, logs, large rocks and dense aquatic vegetation. In order to be resident at a site upland nesting areas are needed. Female turtles excavate nests on grass covered sunny slopes near aquatic habitat.

Pond turtles are present in Upper San Leandro Reservoir and a wandering turtle could move upstream in Moraga Creek. Habitat conditions adjacent to the project site are not suitable for a

turtle to be resident. There are no deep pools or suitable basking sites. The creek could serve as a movement corridor. No pond turtles were observed during site surveys.

San Francisco Dusky-Footed Woodrat

The San Francisco dusky-footed wood rat is a California Species of Special Concern. The range of this subspecies extends from the southern side of the Golden Gate, San Pablo Bay and Carquinez Straits south through the Santa Cruz Mountain, Berkeley/Oakland Hills and Diablo Range to the Pajaro River, southern Santa Clara County. In the Moraga area, woodrats are commonly found in woodland and shrub dominated plant communities including riparian corridors, where coast live oak and poison oak are present. They are also occasionally present in well-vegetated suburban yards, which are adjacent to natural habitat in Lamorinda.

San Francisco dusky-footed woodrats are present both upstream and downstream of the project site along Moraga Creek (Canyon Road Bridge, Del Rey Elementary School). The habitat they are inhabiting at these locations contains an overstory composed primarily of coast live oak with an understory dominated by poison oak. Similar habitat conditions occur immediately upstream of the project area. The willow riparian habitat was surveyed for woodrat houses and none were detected. The project site contains no suitable woodrat habitat and none were detected in the development area.

Wetlands and Riparian Areas

As described in the Existing Conditions section of this report, the entire project site has previously been developed and no natural habitat remains. There are no areas of wetland or riparian vegetation within the project site boundaries.

The adjacent Moraga Creek is a jurisdictional feature subject to the jurisdiction of the U.S. Army Corps of Engineers, California Department of Fish and Wildlife and Regional Water Quality Control Board.

CEQA CHECKLIST

Responses to the Biological Resources portion of the CEQA checklist are included in attachment B.

CONCLUSIONS

Project site development as proposed will have no significant impacts on biological resources. The retention of the existing cinder block wall along the northern side of the clubhouse/pool area parking lot will serve as a physical barrier preventing direct impacts to the Moraga Creek riparian corridor.

If project site development is initiated between February 1 and July 31, a preconstruction survey for nesting birds should be conducted. Buffers should be established and maintained for any nest found during the preconstruction survey until the young have fledged. The size of the buffer should be determined in consultation with the survey biologist.

Please let me know if you have any questions about the information presented in this report.

Sincerely,

LSA Associates, Inc.



Malcolm J. Sproul
Principal

Encl.: Attachment A: Special-Status Species within Two Miles of Project Site (Tables)
Attachment B: CEQA Checklist

ATTACHMENT A

Special-Status Species within Two Miles of Project Site

Plants	Status
Bent-flowered Fiddleneck <i>Amsinckia lunaris</i>	CNPS 1B
Mount Diablo fairy lantern <i>Calochortus pulchellus</i>	CNPS 1B
Western leatherwood <i>Dirca occidentalis</i>	CNPS 1B
Jepson's coyote thistle <i>Eryngium jepsonii</i>	CNPS 1B
Loma Prieta Hoita <i>Hoita strobilina</i>	CNPS 1B
Diablo Helianthella <i>Helianthella castanea</i>	CNPS 1B
Northern California Black Walnut <i>Juglans hindsii</i>	CNPS 1B
Woodland woollythreads <i>Monolopia gracilens</i>	CNPS 1B
Oval-leaved Viburnum <i>Viburnum ellipticum</i>	CNPS 2B

Animals	Status
Obscure Bumble Bee <i>Bombus caliginosus</i>	State Candidate Endangered
Western Bumble Bee <i>Bombus occidentalis</i>	State Candidate Endangered
California Red-legged Frog <i>Rana draytonii</i>	Federal Threatened
Foothill Yellow-legged Frog <i>Rana boylei</i>	State Threatened
Western Pond Turtle <i>Actinemys marmorata</i>	Species of Special Concern
California Legless Lizard <i>Anniella pulchra</i>	Species of Special Concern
Alameda Striped Racer <i>Masticophis lateralis euryxanthus</i>	Federal and State Threatened
San Francisco Dusky-footed Woodrat <i>Neotoma fuscipes annectens</i>	Species of Special Concern
Pallid Bat <i>Antrozous pallidus</i>	Species of Special Concern
American Badger <i>Taxidea taxus</i>	Species of Special Concern

ATTACHMENT B

CEQA CHECKLIST

BIOLOGICAL RESOURCES

Would the Project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (Wildlife) or U.S. Fish and Wildlife Service?

As described in this report, there are no candidate, sensitive or special-status species as determined by any agency or plans and policies present on the project site and the project site contains no habitat suitable for use by such species. **No impact.**

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game (Wildlife) or U.S. Fish and Wildlife Service?

The project site is adjacent to willow riparian habitat. Proposed site development occurs entirely within previously developed area and will not result in any direct impact to or loss of riparian vegetation. Indirect impacts (noise, lighting, human presence) are already occurring adjacent to the willow riparian habitat and will continue with the proposed use. **Less-than-significant impact.**

- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The proposed project has no impact on federally protected wetlands as defined by Section 404 of the Clean Water Act. The entire project site has previously been developed and is located in an upland area. **No impact.**

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project site does not serve as a movement corridor for native resident or migratory fish or wildlife. Existing development on the entire site results in minimal wildlife use and movement. **No impact.**

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Town to evaluate.

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is not located within the plan area of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local regional or state habitat conservation plan. **No impact.**