

Appendix C-5  
Habitat Quality Analysis



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Glassell Park, LLC  
Attn: Nancy Johns  
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Calabasas, California 91302  
Via Email: [wildflowerdevelopment@yahoo.com](mailto:wildflowerdevelopment@yahoo.com)

**Subject: Walnut Woodland Habitat Quality Analysis for the Haverhill-Glassell Park Project, Los Angeles, California**

Dear Ms. Johns,

This report presents an analysis of walnut woodland habitat quality conducted by Rincon Consultants, Inc. (Rincon) for the Haverhill-Glassell Park Project (project) located in the City of Los Angeles (City), California. The purpose of this report is to determine existing/baseline conditions of walnut woodland within the project area.

### **PROJECT LOCATION AND DESCRIPTION**

The approximate 5-acre project site is situated within northeast Los Angeles, which is bordered to the north by the cities of Glendale and Pasadena, to the south by downtown Los Angeles, to the west by the Los Angeles River, and to the east by several cities of the San Gabriel Valley. Specifically, the project site is located in the neighborhood of Glassell Park east and north of Division Street at the southern terminus of Haverhill Drive, Sundown Drive, and Brilliant Drive. The site is depicted in Sections 2 and 3, Township 1 South, Range 13 West of the U.S. Geological Survey (USGS) *Los Angeles, California* 7.5-minute topographic quadrangle.

The proposed project site encompasses 32 vacant parcels proposed for single-family residential development. Adjacent land uses include residential development on all sides. The site is currently undeveloped.

### **REGULATORY BACKGROUND**

The proposed project will impact walnut woodland, a California Department of Fish and Wildlife (CDFW) and California Diversity Database (CNDDB) special-status vegetation community, which is also afforded protection under Los Angeles Municipal Code and by the Mount Washington /Glassell Park Specific Plan. The project calls for the removal of 129 protected trees, of which 121 are California black walnuts, 7 coast live oaks, and one western sycamore. Recommended mitigation for removal of California walnut trees is replacement of the trees at a 4:1 ratio, in accordance with the



recommendations of Carlberg Associates' arborist report, as discussed in the Biological Resources Assessment.

**METHODOLOGY**

On May 27, 2016, Rincon Senior Biologist Robin Murray conducted a site visit and collected habitat quality data to supplement the existing knowledge base of site conditions. Data collected during the site visit included the California Native Plant Society (CNPS) Vegetation Rapid Assessment form, as well as metrics developed for use during terrestrial monitoring by the United States Forest Service for their Forest Inventory and Analysis program, and several qualitative features. Data also included in the habitat quality analysis were derived from previous Rincon site visits and associated biological reports (Biological Resources Assessment [Rincon 2015a, Rare Plant Report [Rincon2015b]), arborist report (Carlberg 2015), and GIS analysis.

Table 1 below details the methods by which quantitative values were calculated. When applicable, qualitative metrics were assigned numeric values on independent scales, in an effort to facilitate easy comparison between sites. Table 1 below also details the methods by which each qualitative metric was assigned numeric values. Greater numeric value is tied to higher quality habitat value.

**Table 1. Metric Evaluation Methods**

Metric	Data Source	Methods
<b>Quantitative Metrics</b>		
Stand Size	Rincon 2015a, GIS analysis	Acreage of mapped California black walnut woodland
Plant Species Richness	Rincon 2015b	Number of plant species
Distance to nearest drainage channel	GIS analysis, National Hydrography Dataset	Distance from stand centroid to nearest drainage channel
<b>Qualitative Metrics</b>		
Tree health	Carlberg 2015	Tree health grades (A to D)
Shrub layer structure	Rincon site visit	0=Shrubs absent 1=Young shrubs present 2=Mature shrubs present
Herbaceous layer structure	Rincon site visit	1=layer < 12" 2=layer > 12"
Presence of downed wood	Rincon site visit	0=Absent 1=Present
History of fuel management	Site owners	0=Routine intensive management 1=Moderate fuel modification 2=No recent history of fuel modification
Degree of invasion by Cal-IPC ranked species	Rincon 2015b, Rincon site visit	0=Heavily degraded by invasion of exotic plant species 1=Moderately invaded by exotic plant species 2=Little invasion by exotic plant species
Wildlife connectivity	GIS analysis	0=Site isolated 1=Site in proximity to natural lands with the potential to facilitate wildlife movement 2=Site contiguous with established wildlife corridors



## RESULTS

Table 2 details the results of the habitat quality analysis.

**Table 2. Habitat Quality Analysis Results**

Metric	Findings
<b>Quantitative Metrics</b>	
Stand Size	3.44 acres
Plant Species Richness	50 species: 38 non-native, 12 native
Distance to nearest drainage channel	1.17 miles to Los Angeles River
<b>Qualitative Metrics</b>	
Tree Health	83% of trees graded A to B-, 17% of trees graded C+ to D-
Shrub layer structure	0
Herbaceous layer structure	1
Presence of downed wood	0
History of fuel management	0
Degree of invasion	1
Wildlife connectivity	1

### Discussion of selected metrics

*Plant species richness:* The number of plant species observed on a site is termed species richness. Generally speaking, sites that have been subject to disturbance and invasion by exotic species tend to have lower species richness. This metric is often used as an indicator of the health of a particular habitat. The species richness of the project site is considered low, particularly for native plant species.

*Distance to nearest drainage channel:* Wildlife species often use drainage channels as movement corridors. Areas that are in close vicinity to vegetated drainage channels would be considered more valuable as wildlife habitat than those that are farther away. The nearest drainage channel is the Los Angeles River, which is 1.17 miles away and channelized (devoid of vegetation). Given the distance and the presence of suburban development between the channel and the site, this drainage channel does not significantly enhance the habitat's value to wildlife species.

*Tree Health:* Tree health grades were derived from the arborist tree report (Carlberg 2015). These grades ranged from A to D. Walnut woodland with high average tree health is considered more valuable habitat than woodland with low average tree health. Since 83% of trees were graded A to B-, and 17% were graded C+ to D, the trees in general are in good health.

*Vegetation Layer Structure:* Mature shrub and herbaceous layers provide additional niches for wildlife species, enhancing a vegetation community's value as habitat. This habitat is further enhanced by the presence of large woody debris. However, these important features are absent from the walnut woodland within the project site.



*Fuel Management:* Due to the fuel management of the site mandated by City requirements, shrub and herbaceous layer development as well as regeneration of native tree saplings that might be expected in an unmanaged landscape have not and will not take place. This diminishes the site's theoretical potential to support wildlife in the future.

*Degree of Invasion:* The degree of a site's invasion by exotic plant species can be a significant factor in determining the site's habitat value. In general, the greater the proportion of native species present, the greater the habitat's value to wildlife. This is particularly true of tree and shrub species, which generally have the greatest impact in determining the vegetation community's structure. Numerous tree species ranked as invasive by the California Invasive Plant Council (Cal-IPC 2016) are present throughout the site, particularly invasive *Eucalyptus* species as well as tree of heaven (*Ailanthus altissima*), which has created thickets by producing abundant root sprouts, displacing native vegetation. The site's moderate level of invasion by exotic plant species has negatively impacted its value as wildlife habitat.

*Wildlife Connectivity:* A site's connectivity relative isolation or connectivity to adjacent wildlands is an important factor to determine habitat quality, particularly for wildlife species with migratory life histories or large home ranges. Sites in proximity to natural lands with the potential to facilitate wildlife movement or those that are contiguous with established wildlife corridors have higher habitat value than those that are isolated. The site is over two miles from the nearest sensitive ecological area. Due to the site's isolation, it does not serve as a wildlife connectivity feature to adjacent wildlands. This reduces the site's value to wildlife species.

## CONCLUSIONS

While the project area contains a stand of California black walnut woodland trees in generally good health, the value of this habitat has been significantly degraded due to an intensive annual fuel management regime required by the City regulations (as described in the Rincon Consultants Memorandum regarding City of Los Angeles Fuel Modification Exceptions dated August 2016), which has prevented the development of a functional shrub or herbaceous layer, both of which enhance a vegetation community's value to a range of wildlife species. The brush clearance regime does not appear to be detrimental to the health of existing trees, but it precludes the establishment of young trees that would eventually replenish aging trees on the site. The quality of the site is also negatively affected by invasion of exotic plant species as well as its close proximity to residential development. The site is adjacent to natural areas with the potential to facilitate wildlife movement; however, since the project site is bounded on three sides by existing residential land uses, development of the project would not result in fragmentation of a habitat corridor.

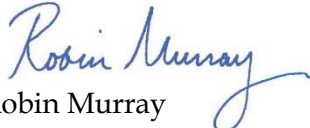
Since the habitat within the site is fragmented and significantly degraded, mitigation for impacts to California walnut trees by replacement of walnut woodland habitat acreage is not warranted. Recommended mitigation for removal of California walnut




trees is replacement of the trees at a 4:1 ratio, in accordance with the recommendations of Carlberg Associates' arborist report.

Thank you for selecting Rincon to provide you with this biological technical study. Please call if you have questions, or if we can be of further assistance.

Sincerely,  
**RINCON CONSULTANTS, INC.**

  
Robin Murray  
Senior Biologist/Project Manager

  
Steven J. Hongola  
Principal / Senior Ecologist

## REFERENCES

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