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Biological Study
(ECP #01-222)

MUSCI Natural Resource Assessment

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BIOLOGICAL RESOURCES RECONNAISSANCE REPORT SPECIAL STATUS PLANT REPORT CHRIS TILLEY VINEYARD CONVERSION (ECP 01-222)

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INTRODUCTION

Biological Reconnaissance and Special Status Plant surveys were conducted on the proposed Chris Tilley Vineyard Conversion project (ECP #01-222) property at 3199 St. Helena Highway, St. Helena (APN 022-080-025) on 13 April by Glenn Clifton and on 17 April 2002 by Stephen P. Rae of MUSCI. The purpose of the survey was to determine the occurrence of significant biological resources, including special status plants. The field survey covered 100% of the approximately 3.1 acre project area (see map below). The center point of the survey area is UTM 10S/0543177/4264813.

The property has been previously managed intensively for agricultural and residential use. Approximately 100% of the pre-existing native vegetation within the area dedicated to residential and orchard use was removed many years ago. Prior to conversion of the orchard to vineyard, the property produced walnuts and supported residential uses. The walnut orchard was removed for vineyard conversion. Native vegetation was not removed. Removal of native vegetation is not proposed.

BIOLOGICAL RESOURCES RECONNAISSANCE

The surveyors covered the entire project area during two separate on-foot field examinations. In addition, the biological reconnaissance extended to contiguous lands to the north and west which supported native vegetation.

The project area is vegetated with an annual grassland, with some perennial herbaceous plant species. Along the west and northern boundaries of the project area there are several mature native trees together with several planted trees. Several walnut trees remain from the original orchard.

The native vegetation west of the project area is Mixed Evergreen forest, composed of Douglas fir, redwood, Interior live oak, and big-leaf maple. Along

the north boundary of the northernmost vineyard block there are California bay, alder, and buckeye along an unnamed dry stream. Previous disturbance related to removal of the walnut orchard and preparation for vineyard conversion have not impacted the existing riparian vegetation canopy.

The unnamed stream borders the northernmost boundary of the parcel, and is within 30 m of the northernmost vineyard block. The stream is currently dry, but conveys water during the winter and following rains. The stream channel is composed of cobbles, with few fines or pools evident. The adjoining property owner to the north has placed obstructions to normal flow and reconfigured the channel.

A review of available records (California Natural Diversity Data Base and Napa County Sensitivity maps) reveals that there are no special status animals reported on the project parcel or contiguous parcels. The Northern Spotted Owl is currently reported within the Bothe Napa Valley State Park approximately one mile to the north (Bill Grummer, State Park Ranger, personal communication). The territory of the owl probably does not extend to the project area as the mix of nesting, roosting, and foraging within one mile of the recorded nest site satisfies life history requirements.

During the field survey, no special status plants or animals were observed, nor were there potential habitats encountered.

The herbaceous vegetation is representative of old field succession, that is, a species mix that results following the abandonment of agricultural or other intensive land use. There were about 34 species of plants observed. Among these there were a number of introduced plants from the Pea Family that have been planted to enhance the soil. All but 5 of the species observed were introduced weeds. A partial list of plant species is presented in Table 1. The plant list does not include horticultural materials outside of the project area that were introduced consequent to residential and other uses.

Bird species observed during the survey were red-tailed hawk, turkey vulture, red-breasted sapsucker, scrub jay, common bushtit, American robin, brown towhee, and song sparrow. Taller trees adjacent to the project area were inspected for raptor and squirrel nests. The ground surface below the tree canopy within 50 m of the project area was inspected for bird and small mammal nest. Nests for raptors, squirrels, and woodrats were not observed. Three songbird nests within redwood and willow were observed. The one occupied nest in a redwood appeared to be inhabited by American robins.

There were no significant concentrations of birds observed. There were no mammals, reptiles, or amphibians observed within the project area.

SPECIAL STATUS PLANTS

A review of available records (California Natural Diversity Data Base and Napa

County Sensitivity maps) reveals several listed plants that occur within several miles of this site. These include Amorpha californica var. napensis, Napa false indigo, List 1B; Astragalus clarianus, Clara Hunt's milkvetch, List 1B; Micropus amphibolus, Mount Diablo cottonweed, List 4; and Calochortus uniflorus, Large-flowered star-tulip, List 4. The indigo occurs within openings in Oak woodland and mixed evergreen forest. The milkvetch occurs within annual grassland especially on serpentine derived soils and within Cismontane woodland. The cottonweed occurs within annual grasslands and broadleaved evergreen forest. The star-tulip occurs within annual grasslands and broadleaved evergreen forests. The annual grassland on the project area is primarily of introduced species and is the result of intensive land management; such habitat is not comparable to the known habitat of the milkvetch, cottonweed, and star-tulip. Habitat for the listed plants was not observed within the project area.

Within the project area and the immediate contiguous area already dedicated to residential use, there is no unique or unusual habitat that could support special status plants which have been reported elsewhere in the County.

CONCLUSIONS

The management history of the property has resulted in a significantly disturbed site which exhibits little natural biological habitat features. The mix of plant species is primarily introduced, and the plant cover has not developed into any recognizable category of native vegetation classified in California. Habitat for special status plant species does not occur within the project area.

The mix of animal species observed within the project area is representative of annual grasslands and sites under residential or other landscaped use in Napa Valley. There are no unique or special status animals known on the site. The closest occurring sensitive animal species (Northern Spotted Owl) has little likelihood of using the project area. There are no unusual habitats within the project area that could support special status animals which could occur in other seasons, in low numbers, or are difficult to observe.

The likelihood of observing special status plants or animals if additional survey work were to be scheduled (at other seasons or times or over additional years) is low. The conversion of the walnut orchard to vineyard should have no effect on special status plant and animal species. In addition, due to the extent of similar habitat within the surrounding area, the conversion of this parcel should have an insignificant effect on non-special status plants and animals.

Table 1. Plant Species
(Introduced plants are denoted by *)

APIACEAE

*Torilis arvensis var. purpurea

APOCYNACEAE

*Vinca major

ASTERACEAE

*Carduus pycnocephalus

*Hypochoeris glabra

*Lactuca serriola

*Silybum marianum

BRASSICACEAE

Cardamine oligosperma

*Raphanus sativus

*Sisymbrium officinale

CARYOPHYLLACEAE

*Cerastium glomeratum

FABACEAE

Lotus purshianus var. purshianus

*Medicago polymorpha

*Vicia faba

*Vicia sativa var. angustifolia

*Vicia villosa var. glabrescens

GERANIACEAE

*Erodium cicutarium

*Erodium moschatum

Geranium dissectum

LAMIACEAE

*Lamium amplexicaule

*Lamium purpureum

ONAGRACEAE

Epilobium brachycarpum

PLANTAGINACEAE

*Plantago lanceolata

POACEAE

*Avena barbata

*Bromus diandrus

*Bromus hordeaceus

*Hordeum murinum

*Poa annua

*Vulpia bromoides

Vulpia microstachys var. pauciflora

*Vulpia myuros var. myuros

PRIMULACEAE

*Anagallis arvensis

RANUNCULACEAE

*Ranunculus muricatus

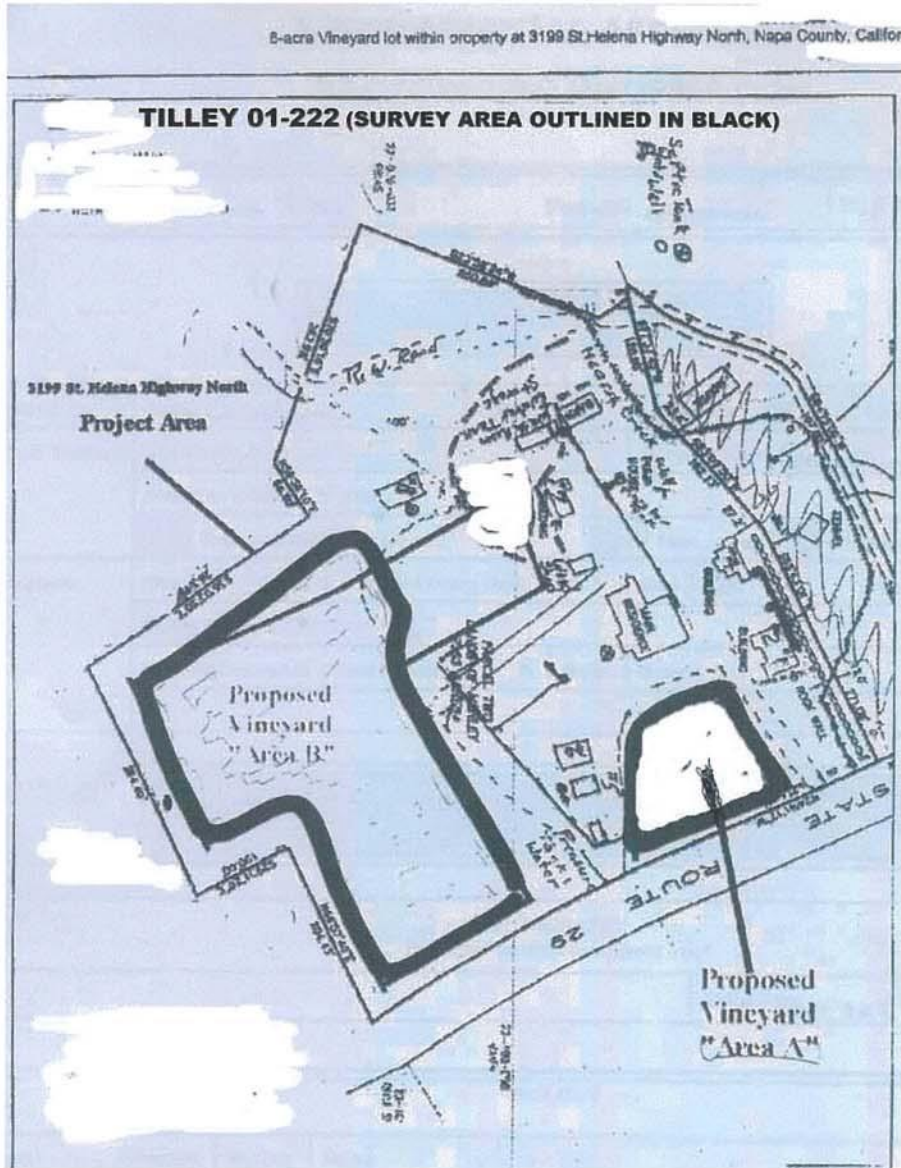
RUBIACEAE

*Galium parisiense

SCROPHULARIACEAE

*Kickxia spuria

MAP: TILLEY VINEYARD CONVERSION SURVEY AREA



REFERENCES

California Native Plant Society. Inventory of Rare and Endangered Vascular Plants of California. Special Publication 1.