



Lake Herman Solar Landscape Plan Narrative



Executive Summary

This document provides a narrative discussion and detailed description of the criteria used for plant selection associated with the landscape plan for Renewable Properties' (RP) Lake Herman Solar Project. This was prepared in response to comments from the public and Planning Commissioners at the February 13th, 2020 Planning Commission Hearing. RP has selected three California native plants (Coffeeberry, Interior Oak, and Scrub Oak) to provide visual screening, as requested by Staff and in response to comments related to the landscape plan, plant selection and viability.

Background

During the May 6th, 2019 preapplication meeting, Staff requested RP prepare a landscape plan as part of the Use Permit application. The purpose of the plan was to provide a vegetative buffer along Lake Herman Road to screen the project to motorists traveling along Lake Herman Road.

Prior to the February 13th Planning Commission Hearing, the landscape plan was circulated five times for comment and review. The review process included the City Planning Department, Parks and Recreation Department, and members of the public. In response to comments from the Parks and Recreation Department, trees and certain varieties were added. Each review cycle the landscape plan was updated to incorporate and address additional comments.

Most recently, RP engaged with a neighboring property owner and amended the plan yet again based on their feedback. Revisions made pursuant to this discussion include the following:

- A vegetative buffer was added to the northwest border of the project site to ensure the array would not be visible from the neighboring property owner's home
Plant selection was augmented to ensure plant types would not have adverse or unintended consequences to domestic ungulates / grazing animals.

In addition to the above revisions, RP has agreed to allow the neighboring property owner to continue grazing cattle on the remaining undeveloped portion of the parcel (outside the project area). Continuing to allow grazing on the property will support fire management objectives by naturally controlling vegetation growth and maintaining defensible space in support of wildland fire prevention.

Plant Selection Criteria

RP performed a rigorous analysis of the site and vegetation / landscaping options. In preparing the analysis, several factors were considered including:

Criteria	Rationale
Native to California	Plants native to California provide habitat for other native species (wildlife and pollinators), and are adapted to the region’s soil, hydrology and climate.
Fast Growing	To expedite the objective of screening the site, plant varieties that reach full maturity within 3 years were selected.
Fire Resistant	California grass lands are susceptible to wildland fires. All plants must be consistent with fire ecology of the region, and fire resistant or retardant.
Drought resistant	California and the City of Benicia is prone to periods of drought. Selection of drought tolerant plants saves water and resources.
Compatible / non-toxic to ungulates and other grazing animals	Compatible with cattle grazing.

Plant Selection & Viability

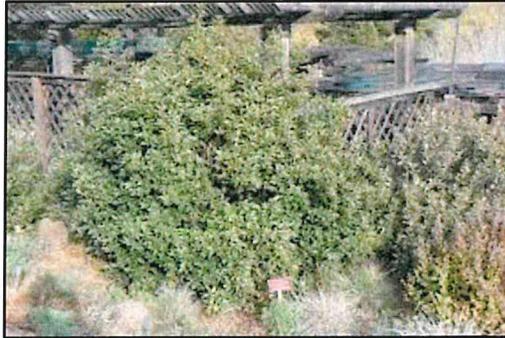
Based on the screening criteria above and the initial request from Staff to provide vegetative screening, RP selected the following species¹: Coffeeberry, Interior Oak, and Scrub Oak. The section below describes the individual attributes of each.

Scrub Selection

Coffeeberry

- **Latin Name:** Rhamnus californica
- **Common Name:** Coffeeberry
- **Photo:**

¹ Common names

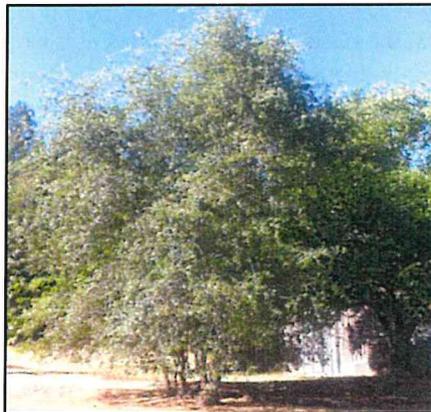


- **General Information:** A perennial evergreen shrub in the buckthorn family with a native range from Oregon Coast through most of California into Arizona and Baja. They are fast growing and average between six to eight feet tall, sometimes reaching ten feet. They thrive in sun or partial shade, have a very low water requirement. The plants are nearly drought resistant and almost always deer proof.
- Per the California Native Plant Society, Coffeeberry is considered a fire-resistant shrub (Calscape, 2020). Additionally, several local communities (e.g., Oakland, Sant Mateo County) recommend the plant due to its fire-retardant nature.
- According to the USDA Forest Service (USFS), Coffeeberry leaves and fruit are edible to native fauna and domestic livestock. Coffeeberry leaves provide suitable fodder for grazing ungulates. Birds, bees, insects and bears utilize Coffeeberry for habitat (USDA, Plant Guide, n.d.)

Tree Selection

Interior Live Oak

- **Latin Name:** *Quercus wislizenii*
- **Common Name:** Interior Live Oak
- **Photo:**



- **General Information:** A perennial evergreen shrub in the buckthorn family with a native range from Oregon Coast through most of California into Arizona and Baja, Mexico. They are fast growing and average between six to eight feet tall, sometimes reaching ten feet. They thrive in sun to part shade, have a very low water requirements, and are nearly drought resistant while almost always deer proof.
- The California Native Plant Society reports that Interior Live Oaks are well adapted to fire. Further they note that mature trees can withstand fire more readily than seedlings (CNPS, 2020).
- According to the USFS, Interior Live Oaks can provide important food and cover for a wide variety of birds and mammals including black-tailed jackrabbit, Audubon cottontail, brush rabbit, Beechy ground squirrel, Sonoma chipmunk, beaver, porcupine, and elk. Acorns can be a valuable food source for deer and other wild ungulates, birds, and small mammals at certain times of the year. The species is not toxic to domestic livestock (USDA, NRCS, n.d.)

Scrub Oak

- **Latin Name:** Quercus berberidifolia
- **Common Name:** Scrub Oak
- **Photo**



- **General Information:** A small evergreen or semi-evergreen shrubby oak. It is a native of California. Scrub Oak is a hardy varietal that is extremely drought tolerant. Scrub Oak can reach heights of between three to fifteen feet tall, with a width of between six to fifteen feet at maturity. Scrub Oak does well in full sun and is generally deer resistant; although, deer may still eat the white oak acorns.
- “Fire Safe Marin” categorizes Scrub Oak as a fire-resistant plant (Fire Safe Marin, 2019).
- According to the USFS, California scrub oak is an important browse species for ungulates. Similar to the Interior Oak, the leaves provide fodder for livestock and native grazing animals, while acorns and flowers provide habitat and fodder for insects, birds, and other animals, Scrub oak is not toxic to livestock (USDA, Quercus berberidifolia, Q. dumosa, 2012)

Conclusion

Through review, feedback, and several rounds of edits, RP has prepared a landscape plan that responds to staff, Planning Commissioners, and community concerns. This good faith effort and resulting plant selection seeks to provide visual screening, habitat value, and livestock compatible forage that is both fire resistant and drought tolerant.

References

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<https://www.fs.fed.us/database/feis/plants/shrub/quespp2/all.html#ImportanceToWildlifeAndLivestock>

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