



SONOMA ECOLOGY CENTER

Protecting the beauty and biodiversity of Sonoma Valley

April 3, 2022

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To Brian Oh and Permit Sonoma:

This letter covers two related topics:

- A. Empirical, recent biodiversity observations made by SEC for consideration in the SDC Specific Plan
- B. Recommendations on policy and programs for the SDC Specific Plan

A. Biodiversity Observations

The Sonoma Developmental Center (SDC) property, in addition to its well-known placement at the narrowest point of the Sonoma Valley Wildlife Corridor, is a center of biodiversity. Because of continuous state ownership over the last century, it contains much of the least-disturbed habitat in Sonoma Valley.

Since January 2019, community scientists and Sonoma Ecology Center (SEC) have been working on a project to document the biodiversity throughout the SDC. Organized by SEC biologist Dr. Dan Levitis, community members have used an app called iNaturalist to record observations of species throughout the 945 acres of SDC. **The project has identified 1,175 species of animal, insect, plant, and fungi** based on 14,805 observations. There is no sign that we are running out of new species to find. **We are still collecting observations, which we will share with you.** The findings reinforce the need to preserve the sensitive habitat and rare species throughout SDC. Major findings include the high biodiversity of the entire property, several protected species living on the property which had not been previously documented, and the vital importance of the under-documented wetland features on the east end of the property. Much of the protected biodiversity we found on the property were in either riparian areas or wetlands.

We are providing these publicly available data so that the SDC Specific Plan can comply with CEQA and protect SDC's natural resources.

1. Observers using eBird have documented 114 bird species on the property.

<https://ebird.org/hotspot/L5410092/>

2. Almost 15,000 photo observations uploaded to the citizen science platform, iNaturalist, by 278 community members and SEC staff have thus far documented 1,175 wild species (including animals, plants, fungi, and microorganisms) across SDC. Observations include data from camera trapping by SEC along Sonoma Creek within the Sonoma Valley Wildlife Corridor. These thousands of photo observations have been reviewed and confirmed by experts, and are geo-located, providing a fine-scale understanding of what is living where, and thus which parts of SDC require the greatest protection.

<https://www.inaturalist.org/projects/sonoma-developmental-center-umbrella-project>

Below please find a list of protected species the SDC property shelters, with a link to an iNaturalist observation of each.

Animals

Specially Protected Mountain Lion <https://www.inaturalist.org/observations/107081516>

Vulnerable White-tailed Kite <https://www.inaturalist.org/observations/21885630>

Special Concern Vaux's Swift <https://www.inaturalist.org/observations/51438474>

Vulnerable Olive-sided Flycatcher <https://ebird.org/species/olsfly/L5410092>

Special Concern Western Pond Turtle <https://www.inaturalist.org/observations/72065647>

Special Concern California Giant Salamander

<https://www.inaturalist.org/observations/36579284>

Vulnerable Foothill Yellow-legged Frog <https://www.inaturalist.org/observations/110535841>

Threatened California Red-legged Frog <https://www.inaturalist.org/observations/37283513>

Endangered California Clam-shrimp <https://www.inaturalist.org/observations/24482413>

Critically Endangered Sonoma Shoulderband Snail

<https://www.inaturalist.org/observations/21959054>

Critically Endangered California Lancetooth Snail

<https://www.inaturalist.org/observations/45612842>

Threatened Steelhead Trout <https://www.inaturalist.org/taxa/47516-Oncorhynchus-mykiss>

Threatened Chinook Salmon <https://www.inaturalist.org/observations/110551445>

Endangered California freshwater shrimp, <https://www.inaturalist.org/observations/39258047>

Additional protected birds reported on or over the property include Bald and Golden Eagles, Peregrine Falcon, Osprey, and American White Pelican.

Plants

Endangered Coast Redwood <https://www.inaturalist.org/observations/109504361>

Vulnerable Hornwort, *Anthoceros fusiformis*

<https://www.inaturalist.org/observations/21766069>

Fungi

Endangered Golden-gilled Waxycap <https://www.inaturalist.org/observations/21562391>

Protected species documented on adjoining parcels, but not on SDC itself include:
Critically Endangered Sonoma Sunshine
Endangered Northern Spotted Owl
Special Concern Red-bellied Newt

B. Recommendations on policy and programs for the SDC Specific Plan

B1. Water and wildlife

1. Conduct a full wetland delineation in the eastern portion of the property, and protect wetlands that are likely not currently mapped. Wetlands on the SDC property are generally under-mapped. Surveys for the WRT assessment were conducted late in September. Our staff and volunteers found multiple seasonal ponds and pools that are not on the maps the county has shared, and diverse wetland-dependent wildlife.
 - a) Western Pond Turtles (a California species of special concern) breed in the degraded wetlands that run from the northern to the southern edges of the property east of Lake Suttonfield, including the old horse corral. Further, these wetlands on the east end of the property were, prior to development, in many ways similar to, and connected to, wetlands in Sonoma Valley Regional Park where Sonoma Sunshine (*Blennosperma bakeri*) finds one of its few remaining homes.
 - b) We were surprised to find the California Clam-shrimp, an Endangered crustacean that specializes in seasonal pools. We found these in unmapped seasonal ponds near the southern proposed route for a road linkage to Hwy 12.
2. Make policy that the wildlife corridor, at its narrowest point along the north side of the campus, shall only ever be widened, not narrowed. Specifically, the developed footprint shall not go north past the location of the current ballfield on the east (removing current buildings Bane, Thompson, and the two houses between the bridges), shall not go northwest onto the hillside above the current kitchen (removing Goddard, Paxton, Industrial), and shall not go northeast beyond Snedeger (removing Roadruck and Bentley).
3. Make policy that paths and recreational areas shall not be placed in the northern areas where the wildlife corridor is narrowest. Remove the pedestrian access point in the narrowest part of the corridor (yellow asterisk on the maps in the 2021 alternatives).
4. Make policy that trails will not occur in riparian corridors except for short distances (these are habitat areas first, recreation areas second).
5. Make policy that there shall be no new pedestrian bridges over Sonoma Creek.
6. Make policy that setbacks along Sonoma Creek will be at least 100 feet, and larger where green infrastructure projects are planned, in accordance with the [Upper Sonoma Creek Restoration Vision](#).

7. Make policy that setbacks along Hill/Mill Creek will be 50' on the north side, and more than 50' on the south side.
8. Make policy that Lake Suttonfield, Fern Lake, Eldridge Marsh, and all mapped wetlands will have development setbacks of 100' or greater.
9. Make policy that connectivity between water features (lakes, creeks, vernal pools, intermittent streams) shall be enhanced and maintained. Connectivity means presence of vegetated native plant cover, absence of roads, ditches, and other barriers to water or animal movement, and absence of human presence.
10. Make policy that water-related features, including swales, intermittent drainages, and seasonal waterways shall not be undergrounded, but instead shall be daylighted and enhanced as visual amenities and wildlife habitat.
11. Make policy that scientific research and monitoring will be permitted freely on the entire property.
12. Make policy that invasive species will be managed proactively to reduce fire risk and enhance biodiversity. This effort needs to increase, starting immediately—SEC is doing some of this work with grant funding—and continue in perpetuity.
13. Make policy that Eldridge Marsh will be restored hydrologically and biologically, including retaining more water by blocking the ditches that currently drain it.
14. Make policy that development will face away from natural and protected areas to reduce interactions that might impact natural systems.
15. Make policy that Dark Sky standards will be adhered to in all development and maintenance activities. Institute an ongoing compliance program to retain dark skies during operations.
16. Make policy that all large healthy trees will be retained.
17. Make policy that regionally native plants, selected for tolerance of climate conditions during the species' lifespan, will make up at least 80% of landscaping, during both initial construction and ongoing operation.
18. Make policy mandating the use of Integrated Pest Management, both for construction and ongoing operation.
19. Set a program to regrade and revegetate the area immediately around the Jim Berkland bridge so that animals can get down to and across Sonoma Creek, to aid wildlife passage east-west across this narrowest section of the property.
20. Make policy that any owner(s) of the property will participate agreeably with any surrounding properties to improve wildlife habitat and permeability across property boundaries, up to and including the eventual construction and maintenance of a wildlife overpass or underpass across Hwy 12.
21. Make policy that fencing inside and outside the campus shall be removed and only used in new projects to direct movement and reduce hazards to wildlife.
22. Make policy that any new or enhanced road connecting to Hwy 12 shall not be paved or lighted, and shall only be accessible during emergencies. Both proposed road linkages from the new campus to Hwy 12 would cross unmapped wetland, endangering wildlife and encumbering any efforts at wetland restoration. The northern route (along Sunrise) in particular cuts through habitat where Western Pond Turtles lay their eggs.

23. Make policy that fire fuels management activities, such as the proposed “buffers,” adopt and use standards that achieve multiple objectives including enhancing biodiversity, reversing weed invasion, and protecting water resources.
24. Make policy that multi-benefit water resources projects shall be an acceptable use of land inside and outside the campus. "Multi-benefit" here is defined as projects that protect or create habitat and recreation benefits, and don't impede wildlife passage, while delivering water benefits to people and nature.
25. Set in place a permanent program, starting before demolition or construction begins, to monitor wildlife use patterns, abundance of protected and indicator species, and streamflow.

B2. Urban design

1. Make policy that the developed campus shall be visually and functionally integrated with the surrounding natural environment. Sight lines shall preserve and invite connections to open space. Trails shall link developed areas to natural spaces.
2. Make policy that existing buildings will be retrofitted and reused to the degree that re-use can be shown to have greater or equal life-cycle environmental benefits than replacing them. Where cherished buildings are to be replaced, replace them with new buildings that are of similar style, in similar locations.
3. Make policy that collectively the buildings and spaces on the campus shall mirror the diversity seen in the historic buildings: a complexity of angles, materials, styles, and ages.

B3. Climate and emissions

1. Make policy that the site will be net zero energy, net zero or better emissions, as measured during operations, on an island-able, crisis-ready microgrid.

B4. Housing

1. Make policy that, in perpetuity, the proportion of housing at SDC that is below-market-rate will be maximized through use of private and public funding, and innovation in funding, ownership structures, design such as clustering and greater building heights, and construction materials and techniques.
2. Include a program that requires future landowners and/or lessees to partner and facilitate potential projects and programs to increase below-market-rate housing.

B5. VMT, Traffic, Transit, and Roads

1. Make policy that developers are required to go beyond conventional Sonoma County requirements to assure increased local and regional transit availability, headways, and actual use, including innovative transit such as car sharing, regional bikeways, and other alternatives to single occupancy vehicles.

2. Make policy that a bike path should be linked to Sonoma County Regional Parks' Sonoma Valley Trail.
3. Make policy that workplaces and community services shall be promoted at SDC in order to reduce vehicle trips, reduce driving time for residents, and create a sense of place.

B6. Safety

1. Make policy that buildings, roads, and spaces within the developed area shall be designed to be ready for wildfire, including clustered buildings, roads to the outside, and power lines underground. For reference see "Building to Coexist with Fire: Risk Reduction Measures for New Development" at <https://anrcatalog.ucanr.edu/Details.aspx?itemNo=8680>.
2. Make policy that development shall be designed with spaces and resources to function as a local emergency resource hub, a place that area residents can evacuate to, not just evacuate from.

B7. Governance

1. Make policy that the entire SDC site shall be governed by an entity with a public-benefit mission, governed by representatives for an array of public and private interests, using clear guiding principles. This entity could seek, receive, and spend money to increase the public benefits produced by the site. It would provide an ongoing guide for future development and operations of the entire site, assuring that key principles remain throughout the development of the site and beyond.
2. Set a program to design and create the governance entity described above.

We would be happy to discuss these recommendations and datasets with your team.

Thank you for your consideration,



Richard Dale
Executive Director