

SONOMA DEVELOPMENTAL CENTER: SUMMARY OF NATURAL RESOURCES **(From Sonoma Developmental Center Draft Resource Assessment, April 2015)**

Physical Features

The Sonoma Developmental Center (SDC) is located within the Sonoma Valley at the northern edge of the unincorporated community of Eldridge and immediately south of the historic town of Glen Ellen in southern Sonoma County. The property comprises approximately 945 acres. The SDC property extends from Highway 12, on the valley bottom, west for approximately two miles, reaching about one quarter of the way up the eastern side of Sonoma Mountain. The property is bisected by Arnold Drive, as well as by Sonoma Creek, which both run approximately north-south through the property. SDC is part of the Sonoma Creek watershed, which encompasses 170 square miles throughout the Sonoma Valley. SDC supports oak woodlands, mixed evergreen forests, riparian woodlands, grasslands, and wetlands.

Biological Diversity and Habitat Connectivity

Sonoma County is recognized as one of the most biologically diverse regions in California and the entire U.S., and SDC supports a cross-section of this diversity. Plant communities present on SDC support an abundance and diversity of animals, all with a complex suite of life history requirements. The property itself is large and diverse enough to sustain a wide variety and abundance of wildlife species through part or all of their life cycle.

At a larger regional scale, SDC is positioned in a critical linkage corridor for wildlife. The Sonoma Valley Wildlife Corridor (Corridor), running through SDC, encompasses approximately 10,000 acres, and stretches from the top of Sonoma Mountain across Sonoma Creek and the valley floor to the Mayacamas Mountains to the east. The Corridor is part of a much larger network of linkages connecting habitats in Marin County to those in the Blue Ridge Mountains/Lake Berryessa area in eastern Napa County. This corridor is a vital connection for wildlife movement within the Bay Area and ensures the region is connected to large undeveloped landscape blocks to the north and south.

Groundwater Recharge

Permeable landscape is essential for capturing precipitation and storing it as groundwater. With over 700 acres relatively undeveloped, much of it on gentle slopes, SDC provides an expansive recharge area. Slowly released into streams long after the rainy season ends, groundwater is critical for maintaining sufficient summer flows in Sonoma Creek and its tributaries to support steelhead, riparian habitat, and a host of wildlife that depend on cool, clean, abundant summer water. Groundwater also supplies half of the commercial and residential water demand in Sonoma Valley. The Sonoma County Water Agency's Technical Memorandum "Review of Water Resources for Sonoma Developmental Center" recommends that "care should be taken to limit the potential for any additional groundwater development to impact spring and stream flows at the SDC property".

Climate Change Mitigation and Adaptation

North Bay Climate Adaptation Initiative projects that Sonoma, Marin, and Napa counties "should anticipate summer temperatures increasing by approximately 6 to 8°F, on average, in our region by approximately the end of the century...with a likelihood of an increase in the frequency and intensity of extreme events such as droughts and floods". These projected changes could result in a wide assortment of deleterious effects including more need for groundwater and surface water with either smaller total precipitation or extreme, short duration storm events with more runoff and less

rainwater infiltration, increased fire risk, changes in pests and disease vectors due to reduced frost frequency, etc. In its current state as relatively unfragmented open space, SDC has tremendous capacity to contribute to the region's resilience to these projected changes.

Scenic Beauty and Open Space

The SDC property is a central component of a large swatch of land with minimal development that creates a natural, open landscape integral to the character of the valley and Sonoma County. The boundaries between SDC and the adjacent Jack London State Historic Park and Sonoma Valley Regional Park are invisible, as trees and grasslands grow uninterrupted by buildings and roads. From the property itself, residents and visitors get magnificent views and vistas. As seen from Highway 12 and the Calabazas Creek and Montini Open Space Preserves, the SDC property forms a significant portion of the remaining contiguous natural vegetation still visible from across the valley. Drivers, bicyclists and pedestrians passing through the property also enjoy these views of Sonoma Mountain and can savor a taste of an earlier time.

Human Health Benefits, Recreation, and Education

The diverse outdoor environments of the SDC Core Campus and undeveloped lands provide a wealth of opportunities for various recreational pursuits that positively affect the social, mental, and physical health of the residents and employees as well as the larger community. In addition, the environmental education potential inherent in the property could provide significant enrichment opportunities and long-term positive impacts on how people understand and care for their landscape and its resources.

Regional Significance

With its span from mountain slope to floodplain, diversity of habitats, and key location as a wildlife corridor, the SDC property is central to sustaining the ecological integrity of Sonoma Valley and the greater North Bay. In addition to its importance for native plant and wildlife species, the property provides stunning views, accessible recreational opportunities, groundwater recharge, moderation of local climate change effects, and a beautiful and enriching setting for SDC's residents, families, and staff.