







September 16, 2025

Re: Notice of Preparation for the Eldridge Renewal Project at the Sonoma Developmental Center

Greetings,

On Friday August 29, Sonoma County released a Notice of Preparation (NOP) of an environmental impact report for both a Specific Plan (Plan) and a mixed-use development project (Project) at the former Sonoma Developmental Center (SDC). The release of the NOP kicks off a 30-day comment period, with comments due by September 29, 2025.

We are reaching out because we have identified specific direct and indirect impacts that the proposed Plan and Project may have on resources under your agency's jurisdiction. We have also drafted proposed alternatives and mitigation measures. Although our suggestions are not comprehensive, our hope is that your agency will request the EIR include a Natural Resources Alternative that will lessen the severity or eliminate direct and indirect impacts on natural resources.

The NOP states the EIR will only evaluate one potential biological impact: impacts on wildlife connectivity. The focus on wildlife corridors is good; however, our letter provides information on many other biological and natural resource impacts. A Natural Resources Alternative will provide decision-makers with an opportunity to understand how impacts may be reduced by means other than the implementation of mitigation measures, which may or may not reduce impacts to less than significant levels.

Unfortunately, the NOP fails to serve its most basic purpose to provide the public and reviewing agencies "with sufficient information describing the project and the potential environmental effects to enable the responsible agencies to make a meaningful response." *CEQA Guidelines § 15082(a)(1)*. At a minimum, this information must include a description of the project, a description of the project location, and a description of the project's probable environmental effects. Instead, the NOP fails to describe any of these facets of the Plan or Project in sufficient detail to facilitate meaningful comments as to the scope of the EIR or potential impacts.

CEQA makes clear that an EIR must (i) scrutinize in detail the Project's significant environmental effects, many of which are already known; (ii) develop feasible alternatives that would avoid obvious impacts; (iii) develop meaningful thresholds of significance for identifiable impacts, and (iv) adopt appropriate mitigation.

The NOP worryingly suggests that the EIR will not meet this burden. For example, the Lead Agency has proposed to limit the EIR analysis to the core SDC campus, despite the fact that the Project proposes significant activities on additional SDC lands now owned by State Parks or CalFire. Under CEQA, a lead agency may not piecemeal analysis of a project. All foreseeable development related to the Plan and the Project must be analyzed in the EIR.

Your agency's input is critical to ensuring that the Plan and the Project minimize and mitigate adverse impacts and adhere to the law, including critical policies promoting biodiversity and climate resilience. Your agency's comments on this Project will be especially impactful because the applicant has proposed this Project as a "Builder's Remedy" project under the Housing Accountability Act. If the Project proceeds under the Builder's Remedy, the County may not be able to deny approval or apply certain conditions that make the Project infeasible. Your agency's input could be key to crafting mitigating conditions that are impactful and that the County can actually enforce.

We have attached the following information to this letter:

- A high level summary of likely and potential Project impacts, highlighting issues that concern your agency.
- Non-exhaustive suggestions for Project Alternatives that avoid or minimize certain impacts, and a list of other mitigation and avoidance measures
- Photos, maps and figures, to give context and detail to the identified potential impacts.

After reviewing these materials, we hope that your team will respond to the Notice of Preparation to insist that the EIR analysis, project alternatives, permit requirements, and mitigation measures be environmentally sound, legally sufficient, and supportive of outcomes that promote biodiversity and climate resilience.

We recognize that housing, and especially affordable housing is needed, but not at the avoidable expense of ecosystem and community resiliency. There are many alternatives and design improvements that could make this Project more sustainable while meeting housing goals.

Sonoma Land Trust is working in partnership with Sonoma Ecology Center, Audubon Canyon Ranch, and Jack London Park Partners. Each of our organizations have significant concerns and questions over this Project's potential impacts to resources that we have been working for decades to steward and protect.

If you or colleagues have any questions at all about the Project, our involvement, or our analysis, please reach out.

For the land.

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Attached:

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Exhibit 1: Links and Resources

1. History of the SDC:

https://permitsonoma.org/regulationsandlongrangeplans/longrangeplans/sonomadevelopmental center/sitehistory

- 2. Current CEQA documents: https://ceqanet.opr.ca.gov/Project/2025081410
- 3. CEQA documents from 2022 EIR: https://ceqanet.opr.ca.gov/Project/2022020222
- 4. Most recent (4th revision) Project documents submitted to Sonoma County (Feb. 2025) https://share.sonoma-county.org/link/7NXJIdFZm-A/

<u>Look for</u>: <u>Draft project description</u>, <u>tentative map digitized by this project</u> (links open pdf downloads).

5. Sonoma Area Fire Evacuation Study, by KLM Associates, sponsored by Valley of the Moon Alliance. https://votma.org/evac-study

<u>Look for:</u> Figure C-3 and C-4 (pg. 165) showing a graph of modeled increase in evacuation times as result of this Project.

- 6. Georeferenced Tentative Map plan sets dated January 28, 2025, submitted with final application for development to the County. Four plan sets: Existing Condition Plan, Site and Dimension Plan, Grading and Drainage Plan, and Utility Plan. https://tinyurl.com/yb54x4v2 (files are pdfs, and can be added to ArcGIS).
- 7. Digitized elements of the Tentative Map, as described in Exhibit 4: Methods. (file is a "layer package" for use with ArcGIS). https://tinyurl.com/3s7bdahk
- 8. Available upon request:
 - Cost-for-movement GIS layers for mountain lion, black tailed deer, grey fox, bobcat, redlegged frog, and western pond turtle, spanning Sonoma Valley, with methods and validation statistics

Exhibit 2: High-level summary of potential Project impacts and appropriate alternatives

Summary

Our top concerns about the proposed Project include the items listed below. Figures and Maps are available in Exhibit 3.

- 1) The NOP is insufficient to understand probable impacts of the Project.
- 2) Probable impacts we've identified, and how the EIR should analyze these impacts.
- 3) The EIR needs to develop Project alternatives and mitigation measures to avoid and reduce impacts to resources.

The Notice of Preparation is insufficient to understand probable impacts of the Project

In order for agencies and interested parties to provide comments, it is imperative that the NOP contains a description of the Project, a description of the Project location, and a description of the Project's probable environmental effects. Although the NOP provides some of this information, there are major omissions.

<u>Project Description</u> The major omission from the Project Description and Location, is that it does not include portions of the Project that would occur outside of the Core Campus Area defined in the NOP. It is critical that the EIR analyze all proposed activities, not just those impacts within the Core Campus and wildfire buffer. In particular the Project proposes to:

- Repair, Replace, Reconstruct, and Operate an extensive water system, which is mostly located on SDC Open Space lands outside the Core Campus managed by State Parks. Figure 8 in the NOP shows the existing water distribution system, but does not show the existing system of surface water diversions, reservoirs, and pipelines located on SDC Open Space lands, nor does it show the proposed water system. Previous reports (Sherwood Hydrology and Site Infrastructure Report 2018 and 2023 System Report) note that many features of the water system (raw lines, treated lines, inlets, diversions, siphons, settling ponds, pump stations, etc.) "need replacing" or "are near the end of their useful life". Operating the water system will involve maintaining many pieces of infrastructure, changing reservoir water levels, renewing or increasing water diversions from wetlands, flushing of tanks, and maintenance. The water system is critical to the feasibility of the project, and must be considered in the EIR.
- Construction of an emergency-only road and bicycle connector to highway 12, across SDC land proposed for a CalFire Headquarters. Figure 12 of the NOP shows this road leaving the proposed Project Area.
- Construction of a multi-use path along Arnold Drive, north of campus (Figure 7 of NOP).

Another failure of the Project Description is that it doesn't describe a stable project. In a number of places, the Project Description describes project components that "could" be included, especially in regards to a water/wastewater treatment plant, which would effectively increase Project water supply.

<u>Permits required:</u> The NOP lists a variety of permits required, but given the impacts that we've identified, we believe that the Project will also need to obtain the following permits:

- Lake and Streambed Alteration Agreement
- Domestic Water Supply Permit (State Water Resources Control Board)
- State Construction General permit (stormwater)
- Municipal Separate Storm Sewer Systems Permits (MS4)
- Construction stormwater permit
- Section 404 (Clean Water Act) for placement of fill into Sonoma Creek
- Federal Incidental Take Permit, in regards to federally listed species, after consultations with USFWS or NMFS, in regards to steelhead, California freshwater shrimp, western pond turtle, and California red-legged frog
- State Incidental Take Permit, after consultation with CDFW, in regards to California freshwater shrimp and steelhead.

Probable environmental impacts

The NOP correctly identifies some impacts, but omits many other probable environmental impacts. Below is a list of potential impacts that should have been included. We give more detail as to the nature of these impacts below.

- Biological impacts to:
 - State and Federal TES Species
 - State special status species
 - Common wildlife species
 - Sensitive vegetation types
 - Wildlife connectivity
 - o Bed and Bank of Streams
 - Hydrology of streams
- Greenhouse Gas Emissions: substantial carbon dioxide releases related to demolition (versus preservation/reuse), tree removal, and no renewable energy generation proposed
- Hydrology and Water Quality
 - Increase in stormwater runoff, due to increase in impermeable surfaces, resulting in erosion due to existing conditions and insufficient stormwater design
 - In-stream impacts to creeks
 - o In-stream impacts from construction, demolition, water system repair
- Recreation
 - Deterioration of infrastructure and natural resources on adjacent public lands including SDC Open Space, unless EIR specifies more safeguards
- Utilities

Unreliable water supply for multiple dry years

Wildfire

- increased exposure to wildfire as result of Project
- Increased risk of ignitions, due to increase in people on landscape
- o Impacts to environment from creation and operation of a shaded fuel break
- o Exposure to post-fire hazards including debris flows and water contamination

Mandatory Findings:

- <u>Environment</u>: potential for significant impacts to the health and function of Sonoma Creek, via on-site impacts to habitat quality for protected species, decreases in water quality, and blocking terrestrial species from using it as a connectivity corridor.
- <u>Cumulative impacts:</u> Two other projects are proposed for former SDC lands, including the addition of Open Space lands to the State Parks system, and the construction of a regional CalFire Headquarters to the east of the Project area, both with potentially significant impacts on similar resources (sensitive habitat, protected wildlife species, wildlife connectivity).
- <u>Safety</u>: due to slowed evacuations, increased fire risk, increased exposure to wildfire, exposure to post-fire hazards, exposure to dam failure, and exposure to multi-year drought impacts on water supply

2. Probable impacts we've identified, and how the EIR should analyze these impacts

Our coalition has undertaken detailed analysis of Project documents. The NOP provides few Project details, but the County knows much more information about the Project than presented in the NOP. Between spring 2024 and spring 2025, project developers submitted four rounds of increasingly detailed revisions and descriptions of the Project, before their application for subdivision and development was accepted as complete by Sonoma County. In this process of revisions, project proponents provided detailed plans for the Project, including detailed maps, plan sets, and reports in regards to the water system, tree removal, and other aspects of the Project.

We have no reason to believe that any of the plans or information contained in a February 2025 submittal to the county (available here: https://share.sonoma-county.org/link/7NXJIdFZm-A/) have changed in advance of the preparation of this NOP. As such, we feel confident that our below findings remain relevant, despite relying on information not contained in the NOP. More detailed information about each topic is available in the attached Exhibits.

We have found the following impacts as a result of this Project.

*See Exhibit 3 for referenced figures.

1. Removal or degradation of 35.9 acres of sensitive natural communities

Removal. Our analysis found that the Project removes 9.4 acres of sensitive habitat types (aka "sensitive natural communities" as defined by CDFW) due to grading during construction.

There are a few locations where habitat removal during grading is most egregious, and avoidable. First, the Project proposes ~27 homes along the South and West edges of campus, outside of the zone of previous development. Not only does the placement of these homes remove native forest through grading, it also increases fire risk, fire exposure, increases impacts on wildlife habitat and connectivity, and reduces the scenic resources of the site. Second, in one location (along Sonoma creek, on Railroad street), the Project proposes removal of ~1 acre of Valley Oak forest, placement of ~1 acre of fill into a stream channel, for the sake of building 3 homes along the creek. Furthermore, the Tree Protection Plan (NOP Figure 11) does not seem to address forest removals in these 2 most egregious locations, missing almost 2 acres (see Figure 4 to Figure 6 for maps and additional tables, Exhibit 3).

Habitat Type	Acres graded	Sensitive*?
Blue oak woodland	0.1	No
Non-native grassland	0.6	No
Forest sliver (Nonnative forest)	4.3	No
Mixed oak forest	4	No
Non-native forest & woodland	6.4	No
Oregon oak forest	1.9	Yes; G4S3
Riparian forest	0.2	Yes
Valley oak forest	7.3	Yes; G3S3
Total (Sensitive):	9.4	
Total (all):	24.8	

Table 1. Campus-wide grading impacts (removal), as defined and digitized from the Feb 2025 Vesting Tentative Map. This includes forested areas in the interior of campus. The proposed hotel by itself removes 2 acres of forest (0.4 acres of sensitive Oregon Oak, and 1.6 acres of Mixed Oak forest). Although not every tree will be removed within the grading envelope, many will, and the grading envelope includes areas outside of existing development, leading to this habitat removal.

<u>Degradation.</u> The Project would also disturb (or modify) another 26.53 acres of sensitive habitat types as a result of Project activities, particularly due to wildfire buffer management, enclosure of sensitive vegetation into backyards, disturbance from reconstruction of the campus water/sewer system, and potentially due to vegetation clearance within 100' of homes in common areas.

Habitat Type	Sensitive?	State Parks 15' within Water Lines acres	Fire Buffer acres	Back- yard acres	TOTAL acres
Blue oak forest	No	0.41	1.0	0.74	2.11
CA annual & perennial grassland	Unknown**	1.75	0	0.05	1.80
California bay forest	Yes; G3S3	0.21	0.6	0	0.83
Coast live oak forest	No	0.39	0.1	0	0.47
Coyote brush scrubland	No	0.16	0	0	0.16
Forest sliver	No	0.02	0	0	0.02
Native grassland	Yes	0.07	1.5	0	1.58
Mixed oak woodland	No	2.38	8.0	0.99	11.40
Oregon oak forest	Yes; G4S3	0.87	10.1	1.85	12.80
Redwood forest	Yes; G3S3	0.08	0	0	0.08
Riparian forest	Yes	0.10	3.3	0	3.36
Valley oak forest	Yes; G3S3	0.41	5.7	0.01	6.11
Water	-	0.01	0.0	0	0.01
Wetland	Yes	1.03	0.7	0.01	1.79
Non-native forest	No	-	1.0	0.19	1.21
non-native grassland	No	-	10.3	0	10.29
Total:		7.87	42.28	3.85	54.00
Total (Sensitive):		2.76	21.90	1.88	26.54

Table 2. Vegetation disturbed (or modified) by the Project in the wildfire buffer, along raw water lines on Open Space Lands, and where Project maps show intact native forest being included within backyards (not including any locations where grading is proposed).

A significant proportion of the habitat degradation would occur on lands outside the proposed Project Area, on SDC Open Space managed by State Parks.

The Project proposes the placement of structures within 100' of intact riparian vegetation along creeks, such that the Project must choose between increasing fire risk for structures, or impacting the environment, depending on whether the 100' defensible space envelope is ignored or implemented.

Although the Project proposes tree protection and mitigation activities designed to fulfill Sonoma County ordinances, it does not propose measures to avoid, or mitigate for, the removal or disturbance of sensitive natural communities, or more generally forested habitat. This level of avoidable habitat destruction is not compatible with stated Project goals. CDFW, Sonoma County Natural Resources, State Parks

2. Removal or disturbance of another 42.53 acres of vegetation

After subtracting out sensitive habitat types, our analysis found that grading **removes another 15.4 acres** of vegetation on the Core Campus, largely composed of non-native forest and mixed oak forest types. Another **27.85 acres would be potentially degraded** (or modified) by wildfire buffer management, re-constructing the water/sewer system on State Park lands, and by enclosing intact vegetation into backyards. Figure 4 to Figure 6, Exhibit 3

Although these vegetation types are not statutorily protected (nor will every tree be removed from areas marked for grading), many mature non-native trees will be removed that provide abundant habitat for many native wildlife species, and provide important ecosystem services.

Of the ~1500 trees identified in the arborist report, 547 trees are "protected" by the Sonoma County Ordinance. The Project would "mitigate" for the removal of 275 protected trees under the County, but proposes no mitigation for the removal of another 275 mature street trees that don't meet the definition of protected under County ordinance, or vegetation disturbed or removed by other Project actions. CDFW.

3. Impacts resulting from the re-construction and operation of the SDC water system

The Project proposes to re-develop a public water supply using surface water rights located largely on State Parks, using water from 2 reservoirs, 4 creeks, and 1 perennial spring complex. This water system is largely on lands outside of the Project Area described in the NOP. Existing infrastructure is in partial or total disrepair, requiring not only repair, but also re-construction of points of diversion, raw water pipelines, water treatment plant, treated water pipelines, pump stations, intakes in reservoirs, above ground ditches, and creek crossings, and associated electrical service and defensible space around infrastructure (Sherwood Hydrology and Site Infrastructure Report 2018, SDC Water System Assessment Report 2023). See Figures 3, 17-18, Exhibit 3.

There are multiple foreseeable impacts to the environment from water system re-development, due to the **1)** overlap between water infrastructure and riparian features during construction, and **2)** the presence (or suitable habitat for) protected species like pond turtles or red-legged frogs in Project water sources during operation, and **3)** reliance of the Project on a single water source. An EIR that focuses only on the Core Campus would miss evaluation of these impacts.

Overlap with riparian resources during construction: Covered in Section 5."Impacts to stream channels" where we show the Project has multiple existing or planned utilities that occur within the top of bank.

Reliance on a single water source. The Project's <u>Water and Wastewater Feasibility Study</u> (2025) shows that the available water supply during a normal year is 405 acre-feet per year (AFY), and the estimated water demand is 402 AFY. Water supply calculations rely heavily upon Roulette Springs, especially during consecutive drought years when Roulette would provide 50% of total annual water supply. This fact alone demonstrates the Project's significant

reliance on a single water source, and suggests that reservoirs would be fully drawn down during drought years, leading to potential environmental impacts. **Figure 16.**

Presence of special status species in waters to be altered by the Project Roulette Springs is a year-round "spring complex" located amongst forest/wetland vegetation, northeast of Fern Lake. It then flows 0.21 miles, joins Asbury Creek, and runs another 0.64 miles into Sonoma Creek. Water diversions from Roulette Springs ceased in 2018 when the SDC water treatment plant was shut down. Since then, Asbury Creek, which ran completely dry by late June in recent years/decades, has become a perennial creek again, at least from the Roulette Creek tributary down to Sonoma Creek. Historically a steelhead-bearing stream, but without evidence of anadromy for decades, observations of steelhead in Asbury Creek have recently been made by Sonoma Ecology Center just 6-7 years after the return of perennial flow. It is presumed that other protected species like California freshwater shrimp might eventually return to Asbury Creek, or utilize it for part of the year (red-legged frog) as well, if they haven't already. See Figure 1, Exhibit 3.

Another example: the two primary reservoirs (Fern Lake and Lake Suttonfield) both have known populations of northwestern pond turtles, proposed as threatened by USFWS. Fern Lake has suitable habitat for endangered California red-legged frog, but no focused surveys have been conducted. Full drawdown of these reservoirs during periods of drought could dramatically impact populations of species living in these reservoirs.

Given this, the EIR needs to consider the many potential direct and indirect impacts of reconstructing and operating the water system, and also explore alternatives that decrease the Project's reliance on a single water source, and avoid foreseeable impacts to species. The Project has multiple options to reduce reliance on Roulette Springs and increase system resilience including: increasing storage capacity, lowering the elevation of diversion(s), connecting to the Sonoma Aqueduct, building a greywater treatment plant, building a treatment plant sufficient to remove arsenic and boron from Lake Suttonfield water, reducing water demand, or utilizing groundwater.

At a minimum, the Project must examine impacts of water system reconstruction and operation on biological resources, including direct and direct impacts due to construction, operation, as well as impacts of re-diverting waters that have been flowing naturally since campus shutdown. CDFW, SWRCB Drinking Water, USFWS, State Parks.

4. Impacts to wildlife connectivity

The NOP describes goals for, and impacts to, wildlife connectivity, but does not incorporate the necessary design elements to protect wildlife connectivity function. One of the goals for the development plan includes: "...the plan would establish riparian setback areas along creeks to....ensure adequate riparian corridors for wildlife movement". The section on probable impacts states "The NOP also acknowledges that "there is an established regionally important wildlife corridor that adjoins the northern edge of the Project Area, linking large habitat areas of the Sonoma and Mayacamas mountain ranges. This corridor is a critical habitat connection for special-status species, as well as other local wildlife, including mountain lions. As such, the EIR will need to

evaluate potential impacts to the functionality of the wildlife corridor. Rigorous analysis will be required to identify potential impacts and inform mitigation strategies that can reduce or avoid significant environmental impacts at both the programmatic and project level"

However, the Project falsely represents the wildlife corridor as a distinct geography that can be avoided, versus designing the Project to protect wildlife connectivity especially along Sonoma Creek, Mill Creek, and in allowing wildlife to move around the edges of campus. **Figures 19-21, Exhibit 3.**

If the Lead Agency adopts our suggested threshold for defining significant impacts (below), we would find a significant impact, as the Project has the potential to prevent wildlife from moving across the Project Site, by blocking (or at least discouraging) some animals from moving along Sonoma Creek and Mill Creek. If appropriate design alternatives and mitigation measures are adopted, this impact could be avoided.

Put simply: the width of the proposed riparian setbacks along creeks is narrower than the recommended buffer for species present in those locations. As such, the Project has the potential to sever wildlife connectivity, especially along creeks. Other impacts might include:

Direct impacts

- Due to habitat removal, habitat degradation, residential activities (domestic pets, social recreation, etc.), light and noise, and recreation, the impact of this Project on individual species could include:
 - Behavioral adjustment and energetic costs such as altered foraging or hunting strategies due to human activities (many species)
 - Reduced habitat quality leading to local reduction in effective population (California freshwater shrimp, steelhead)
 - Reduced fitness and more human conflicts, leading to shorter lifespan or reduced mating opportunities (mountain lion, black bear)
 - Reduced chance for dispersal of juveniles or adults to a new habitat (yellow-legged frog)
 - Genetic isolation of breeding populations (pond turtle, red-legged frog)
 - Local extirpation due to habitat degradation and isolation

Indirect impacts

- Impacts on neighboring properties / ecosystems as a result of blocked dispersal (i.e. black bears which recently crossed the wildlife corridor)
- Cumulative effects of increased human activity throughout the wildlife corridor due to expected projects on other former SDC lands

We have more detailed information about the setting and potential impacts available upon request, and detail alternatives, and mitigation measures in the next section, but to summarize, the EIR must:

- Adequately describe the setting
 - Describe the location and nature of the wildlife connectivity and wildlife corridor at the SDC, using more sources than the 2013 *Critical Linkages* report. Identify where multiple studies indicate wildlife connectivity exists and use areas of overlap as a baseline for assessing Project impacts.

- o Identify and assemble information about the corridor and species that use it (local studies, regional studies, species responses to human activity), and fill in missing gaps about special status species locations and habitat use through focused field-based biological surveys, especially for amphibians and reptiles with potential habitat on the SDC (see "special species" for more info). CDFW and Sonoma Land Trust recommended this in 2022.
- See Figures 19, 20, 21 for mountain lion use of campus.
- Describe Project elements, activities, uses, and locations in sufficient detail to allow impact assessment, especially in riparian areas.
- Establish a threshold of impact. We suggest: "Will the Project result in changes that will significantly reduce the ability of multiple common species or a single special status species to move across or around the Project site?"
- Analyze Project impacts to wildlife connectivity, using the adopted threshold. An analysis
 would need to integrate information about actual or modeled species populations and
 movement potential on campus, species responses to human infrastructure or activities (i.e.
 noise or recreation), and the design and layout of the Project.
- Craft Project alternatives that reduce or avoid obvious impacts of the Project, especially along Sonoma and Mill Creeks.
 - Especially: Design riparian buffers with the widths and features (i.e. line of sight) that protect species who use that location for connectivity, using best available science. Best available science would include information about the distance at which animals "flee" human activities proposed adjacent to the creek, literature summarizing behavioral and population responses as compared to distance from development, and/or refer to literature that recommends buffer distances for a given species or groups of species. Figure 22.
 - o Implement a variety of best management practices to manage light, noise, sightlines, and off-trail recreation CDFW.

5. Impacts to stream channels, wetlands, and riparian setback areas

Our analyses found multiple instances where the Project proposes to directly disturb the bed and bank of streams inside and outside the Project area through: 1) demolition of existing infrastructure, 2) grading during construction, 3) connecting to and repairing water and sewer pipelines during construction, 4) installation (or re-use) of new stormwater outfalls, and anticipated repair or reconstruction of water infrastructure and points of diversion prior to the Project horizon date. See Figure 7 to Figure 14, Exhibit 3. It also seems likely that the Project would need to repair or replace one or more bridges in the Project Area, especially Harney bridge crossing Sonoma Creek.

Campus streams are known habitat for endangered and special status species, and also provide wildlife aquatic and terrestrial wildlife connectivity.

In our impact analysis, we found:

- 6 locations where new water or stormwater lines will cross the Project's top of bank line.
- 4 locations where new or replaced stormwater outfalls will be inside the top of bank.
- Many locations where past water system reports indicate water or stormwater lines cross top of bank, but are not shown on Tentative maps. Will the Project abandon this infrastructure or remove it?.
- Needed repairs to water infrastructure within top of bank of Sonoma Creek: pumphouse, point of diversion, at least 2 siphons crossing creek.
- Disturbance of small streams and wetlands resulting from raw water pipeline replacement on State Lands.
- Disturbance of wetlands.
- Placement of ~1 acre of fill inside what is arguably the bed and bank of Sonoma Creek.
- 5832 linear feet of utility lines (water, sewer, stormwater) within Project riparian setbacks, as a result of new construction or re-use. This would create initial impacts to riparian areas, and on-going impacts from repair and maintenance.
- A demolition limit that is contiguous with (or within a few feet of) the top of bank for 6000+ linear feet along Sonoma and Mill Creeks. Existing infrastructure is on or beyond the top of bank in many locations.
- The Project doesn't propose re-vegetating "demolished" infrastructure located in expanded setback zones, missing an opportunity to improve riparian function.
- Harney Bridge over Sonoma Creek is owned by the State, and has a roadway width of 20 feet, less than the recommended minimum (24 feet) for a two-lane bridge with light traffic. At a minimum, the EIR should describe what conditions would trigger widening or replacement of this bridge and any other bridge on campus, and consider environmental impacts along with those listed above. Harney Bridge information and conditions

According to the Project's Biological Analysis submitted to Sonoma County (Monk and Associates, 2024), any work within the bed and bank of Sonoma Creek or Mill Creek would trigger formal consultations and review with USFWS, NMFS, CDFW, (or other permits), due to the known presence of endangered and special status species in these waterways, and the potential for use of these creeks as connectivity and dispersal by red-legged frog. CDFW, USFWS, SF Bay RWQCB, NOAA/NMFS, Army Corps of Engineers.

6. Insufficient design and management of riparian setbacks to protect wildlife connectivity, riparian function, and water quality.

Riparian areas along Sonoma Creek and Mill Creek, and the creeks themselves, are critical for many ecosystem services. The creeks provide habitat for protected aquatic and amphibious species. Riparian areas provide critical function for wildlife who rely on the cover and habitat for movement and life history functions. They also provide critical services that directly benefit people, like shade, water filtration, biodiversity, and flood protection. More specifically, Sonoma Creek and Mill Creek provide important wildlife connectivity functions, for special status and common terrestrial animal species including mountain lions, yellow-legged frog, beaver, otter, as well as freshwater shrimp, steelhead, chinook, and many others.

Although the Project proposes "expansion" of riparian buffers by demolishing human built infrastructure, the NOP and Project documents make no mention or discussion of how riparian buffers will be restored, managed or utilized over the Project lifespan. Additionally, Project maps show clear overlap between Project uses and riparian areas, indicating that the Project will have ongoing impacts and uses in the riparian area (especially vegetation management for defensible space, social recreation, edge effects of residential uses, and maintenance of Project utilities). This is an inadequate approach to protect the valuable natural resources on Sonoma and Mill Creek.

Potential impacts of the current approach include:

- Degradation of water quality, and erosion, due to increased impervious cover, reduced number of stormwater outfalls, and re-used stormwater outfalls with known erosion issues
 - The NOP proposes vague low impact development stormwater practices
 - Certain portions of Sonoma Creek have extensive eroding banks, that are not considered
- Degradation of habitat quality through management by an unnamed entity
- Degradation through annual mowing and fuel reduction
- Impacts to wildlife habitat and connectivity from:
 - Social recreation
 - o Backyard edge effects (domestic animals, lights, noise, herbicides)
- Direct impacts to special status species living in creeks

We feel it is critical to design riparian setbacks along creeks that have the space and features needed to meet stated Project goals for riparian areas, including community benefit and property values. To be complete, the EIR must include:

- A design for riparian setbacks that details the width and features needed to meet the
 multiple functions proposed by the Project (i.e. wildlife connectivity, sense of place,
 habitat for sensitive animals, recreation, stormwater filtration), using best available
 science and best practices available (for example General Technical report SRS-109,
 USDA).
- A plan for what entity and funding source will be used to manage riparian setbacks.

See suggested alternatives and mitigation measures to the existing setback design (Exhibit 3, Section 3, page 20). CDFW, USFWS, SF Bay RWQCB, State Water Board

7. Degradation of water quality in Sonoma Creek as a result of an insufficient stormwater plan to filter pollutants, reduce peak flows, or prevent erosion.

Sonoma Creek is a "303d-listed" impaired water body under the Federal Clean Water Act and is only 8 miles upstream from wetlands and waters in San Pablo Bay. The Project seemingly proposes to use sidewalk-adjacent bioswales and stormwater, while increasing impermeable surfaces on site. This approach does not seem sized to accommodate high-intensity precipitation events that are becoming more typical as the climate warms. Furthermore, there are 43 existing stormwater outfalls in the core Project area. The Project proposes to re-utilize 9

outfalls, and install 4-5 new outfalls. By reducing the total number of outfalls from 43 to 14 and re-directing that water into existing outfalls that are already experiencing erosion, the Project is likely to increase erosion issues, and destabilize bed-and-bank where new outfalls will be constructed. The Project is also likely to increase the concentration of 6PPD-quinone, from vehicle tires, in Sonoma Creek and its tributaries; this chemical is toxic to salmonids and other aquatic species. The Project needs to 1) describe how their stormwater plans will sufficiently filter pollutants to avoid impacting water quality or erosion, and 2) design stormwater systems with multiple low-impact designs to avoid impacts on special status aquatic species living within Project waterways. CDFW, USFWS, SF Bay RWQCB, State Water Board

8. Impacts to known habitat or potential habitat for a number of protected species.

Although it is difficult to determine specific impacts, due to the limitations in the description of the Project, there are many special status species present within the area where the Project proposes activities. Figure 1 and 2, Exhibit 3

- a. *Northwestern pond turtles* (proposed for federal listing; known from the two reservoirs on site), as a result of water system operation, increased development in upland habitats, increased human and pet presence in their nesting habitat, and increased traffic.
- b. California freshwater shrimp (endangered at the state, federal level), as a result of instream construction impacts in Sonoma Creek, impacts of altered hydrology from water system operation, and due to decreased water quality from an insufficient stormwater system.
- c. California red-legged frog (federally listed as threatened, CA Species of Special Concern; potential habitat in reservoirs/creeks), as a result of water system operation, and development near creeks.
- d. Foothill yellow-legged frog (CA Species of Special Concern; known from Sonoma Creek and Asbury Creek with potential habitat elsewhere), as a result of water system operation.
- e. California giant salamander (CA Species of Special Concern; known from Asbury Creek and Fern Lake, and east of SDC in Butler Canyon Creek, with potential habitat elsewhere), as a result of water system operation and road development.
- f. *Red-bellied newt* (CA Species of Special Concern; potential habitat in the creeks and Roulette Springs), as a result of water system operation.
- g. *Steelhead* (federally listed as threatened), California freshwater shrimp (federally and State listed as endangered) and fall-run Chinook; all known from the SDC stretch of Sonoma Creek, where beds and banks will be disturbed and stormwater will be released; and water quality impacts from increased 6PPD-quinone concentrations.
- h. *Mountain lions* (a specially protected mammal in California, under the CA Wildlife Protection Act of 1990; documented to use the site extensively), as a result of increased development, defensible space clearing, human and dog presence, lighting, and traffic, reducing habitat utilization and movement opportunities.
- i. Vaux's swift (a species of special concern), known from chimneys on Campus.

j. *Bat species:* there is unknown use of built and natural vegetation by sensitive bat species. We recommend visual and audio recorder surveys.

Appropriate surveys for many species have not been conducted, despite years of opportunity to address concerns raised in the first EIR process and attempts by our organizations to obtain permission to conduct these surveys. CDFW, USFWS, NOAA/NMFS.

9. Ongoing impacts during the Project's decades of operation, on birds, other wildlife, and their habitats

The Project will have negative impacts on migratory birds, other common and special-status wildlife species, native vegetation, and water quality as a result of 1000 housing units, 150 hotel rooms, commercial businesses, 3000 residents and their dogs, cats, cars, kids, outdoor lighting, night-time activities, pesticides and herbicides, fertilizers, invasive species, and increased human presence in and around natural areas. CDFW

10. Cumulative impacts on wildlife connectivity due to proposed development on other former SDC lands adjacent to the Project,

Known nearby Projects include 1) construction of a new road from the Project area eastward to Highway 12 that would cross Butler Creek, documented to be a movement route for western pond turtle and other wildlife, as well as other smaller drainages and a large wetland, 2) a proposed CAL FIRE regional headquarters (also in the location of Butler Canyon Creek), and 3) recreation development on former SDC open space lands now owned by State Parks. CDFW

11. Recreational Impacts to adjacent State and Regional Parks,

The NOP makes no reference to the fact that the Project site controls access to SDC Open Space lands located to both sides of the Project. This approach conflicts with many goals listed in the NOP. If the Plan or Project do not take certain actions, there is likely to be Project impacts on recreation, as well as on wildlife, and fire risk due to recreation by Project residents. See Figure 23, Exhibit 3 State Parks

The EIR should either:

- Describe impacts of 3000 additional people on recreational and natural resources on SDC Open Space and Sonoma County Regional Parks, describing changes in fire ignition risk, use of social trails, issues with parking, and incompatible uses by Project residents or visitors with existing Parks management plans; or
- Add design features or mitigation measures listed in the following Section 3.

12. Impacts to wildfire exposure, risk, and post-fire hazards.

The Project recognizes that it is located in a fire prone location, adjacent to a State Responsibility Area (SRA) rated as Very High Fire Hazard Severity. Some of the wildfire buffer and much of the water system are *within* a Very High Fire Hazard Severity zone. See Figures 14-15, 24-25, Exhibit 3.

By definition, wildfire hazard is influenced by both fire risk (i.e. likelihood of fire, or ignition probability) and by fire exposure (i.e. the damage that fire would cause if it happened, influenced by the location, condition, and arrangement of human infrastructure in relation to flammable fuels).

The Project proposes to mitigate fire risk in part by manipulating intact native vegetation in a perimeter fire buffer, developing evacuation routes, and hosting a fire station. However, the NOP does not address the ways the Project might increase fire risk, nor whether the proposed fire buffer would be effective at protecting the Project from wildfire.

Our analysis found:

- Ineffectiveness of wildfire buffer despite potentially significant impacts to the environment: The 300' wildfire buffer around campus would reduce fire *risk* if well maintained, **but** it is generally uphill and more than 100' from almost every structure, suggesting the fire buffer will be ineffective at reducing wildfire risk, except for a handful of structures including the hotel. There is a total overlap of ~2 acres between the fire buffer, and 100' defensible space envelope, for a ~49 acre fire buffer.
- Increased ignition risk, exposure to fire, and impacts to environment by
 - Building ~ 27 single family homes partially outside the existing footprint of development at the bottom of a mountain where ignitions might travel quickly uphill
 - Adding ~3000 people to the landscape, given that the large majority of ignitions in this region are started by people.

Exposure to post-fire hazards through potential debris flows down Mill Creek, or contamination of Project water supplies from VOCs or other pollutants

The EIR needs to:

- Adequately describe the setting, including:
 - Describe factors influencing existing fire likelihood, fire intensity, wildfire
 exposure, and wildfire susceptibility. Although the standard CEQA checklist asks
 if the Project is within or near high or very high fire hazard severity zones (which
 it is), fire hazard maps are intended for coarse-scale planning actions. At the
 scale of a project like this, a more focused description of existing and changed
 conditions is important to describing and determining Project impacts. See
 https://wildfirerisk.org/understand-risk/
- Adequately describe Project elements, in a manner that allows analysis of effectiveness at reducing wildfire risk or environmental impacts.
 - What specific activities, prescriptions, and timing would be employed in the wildfire buffer? How often? The entire buffer, or only portions of the buffer? Will areas in the riparian buffer be treated? How will fuels be removed (pile burning, broadcast fire, chipping, transport off site)?
 - What actions will be taken in riparian buffer areas, managing vegetation in relation to fire risk? Snag removal? Invasive species management? Management within 30' of bridges and roadways?

- What fuel management activities will be conducted near water diversion, treatment, and delivery infrastructure? Along access roads to water infrastructure? Around pumping stations along Sonoma Creek, and planned or existing facilities on State Parks owned land?
- How will the following fire risk factors change as a result of this Project?
 - Likelihood of wildfire, intensity of wildfire, exposure to wildfire
- Analyze Project impacts and factors contributing to increased/reduced fire hazard, as a result of the Project, and set thresholds of significance;
- Design Project Alternatives that avoid impacts and avoid the need for the fire buffer by not building structures or private backyards outside of the existing footprint of development.
- Evaluate post-fire hazards; avoid if possible, plan for the hazard.

Because no amount of vegetation clearing or defensible space can mitigate evacuation timing, or increased exposure to wildfire if homes are built in the forest, this Project should take every available step to avoid the need to manage fuels by adopting alternatives that set back development from natural vegetation, or reduce the footprint of any development outside of the existing campus envelope. CDFW, State Parks, Sonoma County PRMD

13. No plan for management and maintenance of "common space" areas.

The Project proposes many common use areas (parks, natural areas, fire buffers), but there is no plan for what entity will be responsible for managing these areas or how this work will be funded. Without an entity to manage open space areas, which has sufficient funding, expertise, and connections to local resources, there could be additional impacts on human safety and the environment.

3. The EIR needs to develop Project alternatives and mitigation / avoidance measures to avoid and reduce impacts to resources.

3a. Project Alternatives

If the Lead Agency and Project developed Alternatives that avoided the impacts we describe here, the Project would be able to fulfill its goal of sustainability.

We urge you to tell Sonoma County that the EIR should include a Natural Resources Protection Alternative that might include:

A Project water supply that is: resilient to multi-year drought, minimizes impacts on protected species and hydrology, and ensures reliable water supply for residents

- Increase water supply resilience by:
 - increasing storage capacity, lowering the elevation of diversion(s), creating intersystem connections to the Sonoma Aqueduct or a local water district, building a treatment plant capable of producing greywater or removing boron/arsenic

present in Lake Suttonfield water, reducing water demand, utilizing groundwater, and capturing rainwater.

- Permanent cessation of dry-season water withdrawals from Roulette Springs. The
 Project is highly reliant on this single water source, but full utilization would impact
 protected species downstream in Asbury creek, and degrade the hydrology of wetlands.
- <u>Plan dry-season water releases from the water system</u> into Asbury Creek to help aquatic species survive during critical life history stages.
- <u>Develop reservoir and water management plans that protect sensitive resources</u> present (western pond turtles and potentially other herpetofauna, as well as wetlands).

A re-designed riparian setback and interface with proposed construction to avoid impacts to wildlife connectivity and special species habitat, and provide additional economic and community benefits. See Figure 22, Exhibit 3 for a mockup.

An updated design would include:

- Active ecological restoration (i.e. native vegetation planting and bank stabilization) of the
 ~12 acres where existing pavement and buildings will be removed in riparian areas, to
 deliver biodiversity, water quality, and wildlife connectivity benefits.
- Implementation of Low Impact Development stormwater features in the riparian setback, in conjunction with ecological restoration.
- Design Project to "front" on creeks, rather than homes "backing" on creeks, with benefits
 to community (increased access to nature, better filtration of water, property values),
 reduced impacts on wildlife (due to backyard lights, pets, pesticides), incorporating for
 example:
 - Habitat restoration (0-50' from Top of Bank, along Sonoma Creek)
 - Stormwater features and habitat restoration (50'-100')
 - Trails or sidewalks that provide public opportunities for recreation, versus informal recreation in setbacks behind backyards (100-175', width varies)
 - Tightly defined zones of public use, using visual barriers and plantings to discourage social use of wildlife corridors and decrease sight-lines to wildlife (100')
 - Potential for linear park features along multi-use trail
- Width of riparian setback determined by:
 - site conditions (to make room for steep eroding banks)
 - needs of wildlife species present (informed using a thorough literature and data review), recognizing that some species (i.e. mountain lion) may need larger widths than is currently proposed to protect existing function.
 - Flexibility in adjusting parcel lines while meeting minimum lot sizes, impacting feasibility of an expanded creek setback
- Resources for alternative buffer design might include:
 - HT Harvey and Associates, 2024. Light, Noise, and Development Impacts on Wildlife. Literature Review and Recommendations.
 https://drive.google.com/file/d/1282XBL9xPD-zhSp5CtfhpoHv-UHmVID/view
 - General Technical report SRS-109, 2008. USDA. Conservation Buffers. Design Guidelines for Corridors, Buffers and Greenways.

 Literature-informed wildlife buffer recommendations from Santa Clara Open Space Authority: https://www.openspaceauthority.org/sites/default/files/2025-01/Linkage%20Design%20Parameters%20%28SWCA%2C%20Aug%202024%29.p

Re-locate 3 parcels on Toyon St (GG3-11 to GG3-9) where tentative map shows grading into sensitive oak vegetation, use of the "floodplain limit" rather than "top of bank" to define appropriate setback from the creek. This would avoid the placement of fill into what is arguably the bed and bank of a stream, avoid direct impacts on habitat quality by avoiding residential activities within the riparian corridor, and avoid the need for defensible space in a riparian forest context.

Avoid wildfire related impacts by:

- Restricting development to the existing footprint on the South and West edges of campus.
 - This would reduce the need for an environmentally damaging wildfire buffer, reduce exposure to wildfire, and reduce the risk of ignitions spreading onto Open Space lands.
 - It would also avoid impacts to sensitive vegetation communities by avoiding removing vegetation during grading, and degradation by enclosure in backyards.
 - More specifically, move or reduce the footprint of:
 - Parcels BB17-BB21, since they require removing 1 acre of intact native oak forest.
 - Parcels BB21-BB28 should be reduced in size by about half, with forested areas to the south managed as an Open Space for wildlife passage and forest health (remove French broom). This design would avoid degradation of sensitive habitat types, reduce wildfire risks, allow wildlife to move around the south edge of Campus, and reduce Project impacts to neighbors.
 - Parcels K1 K17 (southwest of Manzanita street) should be reduced in size, such that grading does not expand the existing developed footprint, and that private backyards do not include intact native forest.
 - Reduce the footprint of the Hotel, or move structures away from the edge of campus, removing the need for the wildfire buffer to reduce fire risk.
- Reduce potential impacts of defensible space on riparian areas, by setting new development back at least 100' from the edge of riparian vegetation
 - This approach is what is described in Sonoma County Code Chapter 26-65-040(K) "New development located within one hundred feet (100') of any riparian corridor shall be allowed with a zoning permit only where there are no feasible alternative development locations that do not require vegetation removal for fire protection and fire resistive construction materials are used to avoid or minimize the need for vegetation removal in the riparian corridor" (underline added).
 - The Project proposes a design where roughly 8 acres of riparian area (Project riparian setback, and vegetation within top of bank) are within 100' of homes. A

re-designed riparian buffer as described above, where homes are placed across a street or trail from riparian buffers, would reduce this impact.

Provide recreational connections and opportunities to the community to protect natural resources from impacts of recreational uses and to fulfill goals related to open space, recreation, and sense of place, including:

- Align development such that it maintains public access to the 4 primary trailheads located on SDC Open Space lands (2 west and 2 east).
- Create public-use parking lots for at least 2 trailheads (1 west and 1 east of Sonoma Creek) located on the campus, not on State Park land.
- Plan infrastructure and signage to discourage off-trail recreation, within the wildfire buffer, behind the hotel, and along riparian areas.
- Consider using the north end of Railroad street (near Suttonfield Lake) as a location for an East Trailhead and Parking lot.
- Provide an opportunity for public access to Sonoma Creek, in one location with welldefined boundaries and rules for use. We recommend downstream of Harney bridge on river left (northeast bank) of Sonoma Creek.
- Instead of routing a multi-use trail along Arnold Drive, route multi-use trails along redesigned riparian setbacks, with one spur designed to get people to the economic zone of the Project, and connections/wayfinding to SDC Open Space trailheads.

Remove the development of an "emergency use only road" connecting the Project to Highway 12 from the plan.

- A recent evacuation study evaluated the utility of such a road in reducing evacuation timing for the Project, and found that the addition of this road would make no difference to overall local or regional evacuation times.
- Because this road would have unknown environmental impacts, and cannot mitigate the safety impact of increased evacuation timing, the development of this road should be removed from the Project.

3b. Baseline, Mitigation and Avoidance Measures

<u>Baseline:</u> Campus has been largely vacant since 2018. Many of the impacts to wildlife, water, and other natural resources which were present during historic periods of operation, have been absent in the last 7 years. Our best information about natural resources is information that has been obtained since 2018. As such, the EIR should use conditions at the time of the current Project application as a baseline when assessing impacts at least for natural resources. To utilize a pre-2018 baseline would require the Lead Agency to discard the best available information about wildlife habitat use, and other natural resource conditions.

<u>Mitigation and Avoidance:</u> Both the Specific Plan and the Project should consider measures to mitigate and avoid Project impacts, which might include:

Specific Plan - Mitigation and Avoidance Measures

<u>Create a sufficient and sustainable funding stream</u> overseen by trusted third parties to restore, repair, maintain, and manage use of proposed "common space" natural areas including fire buffer and riparian areas, which must be managed differently than parks and landscaped areas to maintain natural value.

Define how the Plan and Project will utilize SDC Open Space Lands, transferred to State Parks. The line between the Core Campus, and State Parks is unclear, as are the actions the Plan and Project will take to construct and manage the wildfire and water system infrastructure located on Open Space Lands. Without identifying, avoiding, or mitigating potential impacts of redevelopment on these lands, the Project may undercut the protections afforded by transfer to State Parks, contrary to enabling legislation for the disposal of the SDC. Define the legal mechanisms by which the Project or a State Agency would take jurisdiction over water system infrastructure, wildlife buffer, a water treatment plant, or any other infrastructure for purposes of construction or long-term management.

Develop a management plan for wildfire buffer focused on ecological health and wildfire resilience, versus fuel reduction. Biodiversity, stormwater management, preventing soil disturbance and weed invasion, and forest health should feature in a management plan. The plan should focus on use of natural processes (i.e. prescribed fire) versus weedwhacking, forest cleaning, or grazing. This would better align with the legislated intent of the fire buffer (it is on SDC Open Space) and State Parks approach to land management. These lands are fire adapted, but generally have not seen fire in over 100 years. By managing invasive species, using prescribed fire as a management tool, and clearing along trails and roads, the needs of both humans and ecosystems can be met. Priority activities in the wildfire buffer might be: 1) Removal and management of French broom - an invasive species that exacerbates fire severity, 2) Coordination with State Parks to utilize prescribed fire (pile burning and broadcast burning), to reduce surface and ladder fuels and encourage the health of fire-dependent species, and 3) Thinning fuels within 20-30' of existing trails and roads, to create conditions that lend themselves to wildfire suppression and use of prescribed fire. Grazing, mowing, "removing logs and stumps", and "reducing brush" are not regionally accepted best management practices for fire resilient management. Use CalVTP programmatic EIR as guidance or mechanism for describing the setting, describing management activities, and defining mitigation and avoidance measures to protect sensitive resources from fuel reduction work.

Develop a management plan and entity to manage riparian setback and other natural areas for the health of sensitive resources present. The Plan needs to have an entity, funding stream, and plan in place to manage "natural" areas on campus, with a focus on ecological health. If the Plan or Project manages riparian areas as if they were parks, instead of sensitive natural areas, there will be significant impacts to species and many other biological resources. The Plan should define what fuel reduction / defensible space activities will take place and define goals and methods for managing invasive species.

Provide specific evaluation criteria for determining significance of impacts.

Project - Mitigation and Avoidance Measures

These mitigation and avoidance measures are in addition to avoidance recommendations listed above in the "Alternatives" section.

Biological resources - sensitive vegetation communities, special species habitat, wildlife connectivity

- Consult with CDFW, USFWS, and NMFS about Project activities beyond the top of bank, water system operation, and other topics, in order to develop appropriate protective measures for protected biological resources.
- Conduct field-based focused surveys for special status amphibian and reptile species in/near aquatic resources associated with the SDC water system, including seasonally appropriate night-time surveys for California red-legged frog, California giant salamander, foothill yellow-legged frog and northwestern pond turtle at Fern Lake, Lake Suttonfield, Mill Creek, Asbury Creek, Roulette Springs, and unnamed tributaries.
 Although "construction" may not occur at Fern Lake, manipulation of water levels will, so identifying species present is critical to developing water management strategies (i.e. impacts of fluctuating reservoir levels on pond turtles).
- Mitigation for impacts to water-dependent species and habitats could include implementing restoration actions described for Site 4, or other nearby sites on Sonoma Creek, as described in the *Upper Sonoma Creek Restoration Vision*, https://sonomaecologycenter.org/wp-content/uploads/2024/08/Upper-Sonoma-Creek-Restoration-Vision-Booklet.pdf
- Use the California Handbook of Vegetation to map sensitive habitat types within any
 portion of the Project (wildfire buffer, creeks, development footprint), and work with
 CDFW to mitigate for the loss or disturbance of these areas, or for guidelines on
 appropriate management.
- Mitigation of impacts to wildlife connectivity in the Sonoma Valley Wildlife Corridor could be accomplished through an Advance Wildlife Connectivity Mitigation Program. Projects could include:
 - Working with landowners along nearby creeks (e.g. Butler, Whitman, Hooker, Asbury, other sections of Sonoma Creek) to improve wildlife connectivity through fence removal or wildlife-friendly fencing, increasing riparian setbacks, etc. thereby improving connectivity along alternate routes of passage.
 - Work with CalTrans to improve wildlife crossings along Highway 12, and reduce wildlife vehicle collisions.
 - Work with Sonoma County to improve wildlife crossings along Arnold Drive, Madrone Road, or other nearby County Roads, especially where they cross Sonoma Creek.
- Establish an educational or stewardship program on Campus, aimed at educating residents about their proximity to sensitive resources, and steps to protect them.
- Adoption of additional best practices related to Artificial Light and Noise (follow Dark Sky International's Responsible Outdoor Lighting Guidance).
- Update Arborist report to include ALL areas planned for grading / tree removal, including the approximately 2 acres of sensitive vegetation currently missing.

- Avoid enclosing intact native vegetation within private parcels, especially along the South and West edges of campus (Walnut Court, Manzanita Dr). Many parcels have lot sizes larger than required, and reducing the size of private parcels is feasible.
- See Hydrology, Wildfire (below), for additional relevant mitigation measures
- Use native species cultivars in campus landscaping, but use local seed sources when re-vegetating natural areas.
- Include a variety of pollinator and culturally significant plants in landscaping or stormwater systems (e.g. indian hemp, narrow leaf milkweed, Sonoma sage, basket sedge, purple aster)

Greenhouse Gas Emissions

- To mitigate the greenhouse gases emitted by demolition, tree removal, and additional vehicle miles driven, create renewable energy generation on the Project site, through projects such as micro-hydro, microgrid and/or rooftop solar.
- Reduce carbon emissions from demolition by re-using buildings or building materials where possible.

Hydrology and Water Quality

Stormwater

- Adopt low-impact design measures, including multiple stage treatment before stormwater is discharged into Sonoma Creek (i.e. sidewalk-adjacent bioswales, plus second stage settling ponds in the expanded riparian setback), to protect salmonids from toxic tire dust.
- Implement projects identified in the Vision for Water Management and Climate Resilience at SDD (https://sonomaecologycenter.org/wpcontent/uploads/2025/09/SEC-Vision-for-Water-Management-and-Climate-Resilience-at-SDC Final.pdf). This report identifies many places where restoration could increase infiltration, decrease erosion, increase groundwater recharge, and improve in-stream habitat on Core Campus and Open Space Lands.
- Do not place stormwater outfalls which might exacerbate existing erosion issues on Sonoma Creek or its tributaries.

• Erosion:

 Set back development by an appropriate amount to enable stabilization and restoration of steep eroding banks on Sonoma Creek and Mill Creek.

Recreation

- Provide access, parking, and signage to at least 2 trailheads originating from the Project Area.
- Establish rules and practices consistent with neighboring parks to ensure compatible uses, signage, and regulations.
- These actions will produce long-term economic benefits to the Project and community.

Utilities

• See alternatives (above) for options to improve water supply resilience to multi-year drought, and avoid impacts on special status species.

Wildfire

- Avoid necessity of wildfire buffer by limiting new development and private backyards to the existing developed envelope (see Alternatives, above).
- Avoid new development within 100' of riparian vegetation, to avoid choosing between impacts to riparian areas from fuel reduction or <u>increasing fire risk to structures near</u> riparian zones
- Evaluate post-fire hazards, then develop emergency plans or avoidance measures that could include:
 - Evaluate potential for post-fire debris flows originating in the headwaters of Mill
 Creek, and the exposure of proposed development to such occurrences
 - Evaluate options and strategies to avoid infrastructure damage during fire, and post-fire contamination of campus water supply
- If wildfire buffer is deemed necessary,
 - Avoid impacts to the environment by managing wildfire buffer for forest health and wildfire resilience (see Plan Mitigation Measures above),
 - Minimize size of wildfire buffer to the area within 100-300' of structures, depending on slope
 - Develop and adopt mitigation, monitoring, and protection measures defined in the CalVTP programmatic EIR.
- Put in place restrictions on human uses and activities in places where ignitions pose a
 risk to safety, including trailheads, riparian buffers, and backyards, addressing activities
 like smoking, fireworks, closure during red-flag warnings, etc.

Exhibit 3: Figures and Photos

Species	Sonoma Creek	Asbury Creek	Mill (Hill) Creek	Butler Creek	Suttonfiel d Lake	<u>Fern Lake</u>	Roulett e Springs	Redwoo d/ Fir Forest	Building s
California freshwater shrimp	0	Р	Р	-	-	-	1	-	-
Steelhead	0	Р	Р	-	-	-	-	-	-
California giant salamander	Р	0	P	0	-	O – just south of lake (CNDDB)	Р	Р	-
Foothill yellow- legged frog	O (SEC iNat records 2020)	0	Р	-	1	-	Р	-	-
California red-legged frog	Р	Р	Р	-	Р	Р	Р	-	-
Red-bellied newt	Р	Р	Р	-	-	-	Р	Р	-
Northern western pond turtle	Р	Р	Р	0	O (CNDDB/ SEC records)	0	Р	-	-
Northern spotted owl	-	-	-	-	-	-	-	0	-
Vaux's swift	-	-	-	-	-	-	-	-	Р
Bats*	Р	Р	Р	Р	Р	Р	Р	Р	Р

O = occupied habitat; documented occurrence of species

List of special-status species is not exhaustive. Listed special-status species may occur outside of designated habitats in nearby areas (e.g., during migration, aestivation).

Figure 1. Special-status Fish and Wildlife Species and Habitat Utilization. This table shows which sensitive species are known from different locations on the SDC. Prepared by Prunuske Chatham Inc, July 2025, utilizing iNaturalist, CNDDB, and suitable habitat surveys. Note that many locations are considered suitable habitat for special status species (indicated by a P), and that species should be assumed present within suitable habitat, until focused biological surveys have been conducted.

P = potential habitat; suitable habitat elements present

^{* =} bat occurrences refer to roosting and foraging; buildings on SDC may support bat roosts

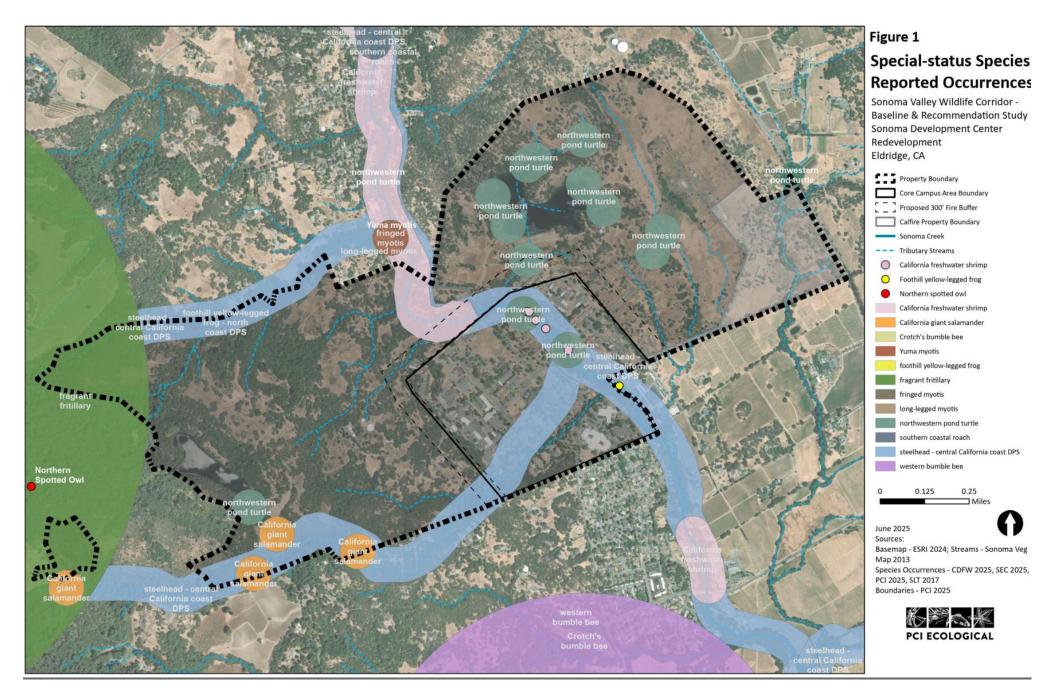


Figure 2. Special-status species reported occurrences at the Sonoma Developmental Center. There is additional suitable habitat for protected species on the SDC, especially in waterbodies (Fern, Suttonfield, Asbury, Mill Creek) that are part of the proposed water system (see Figure 1).

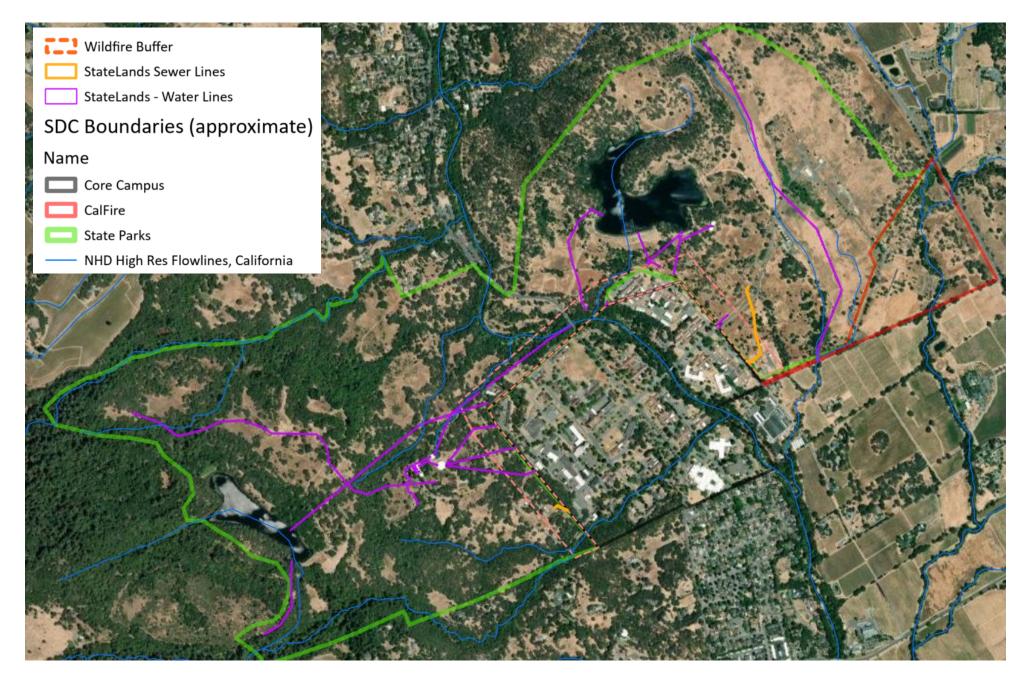
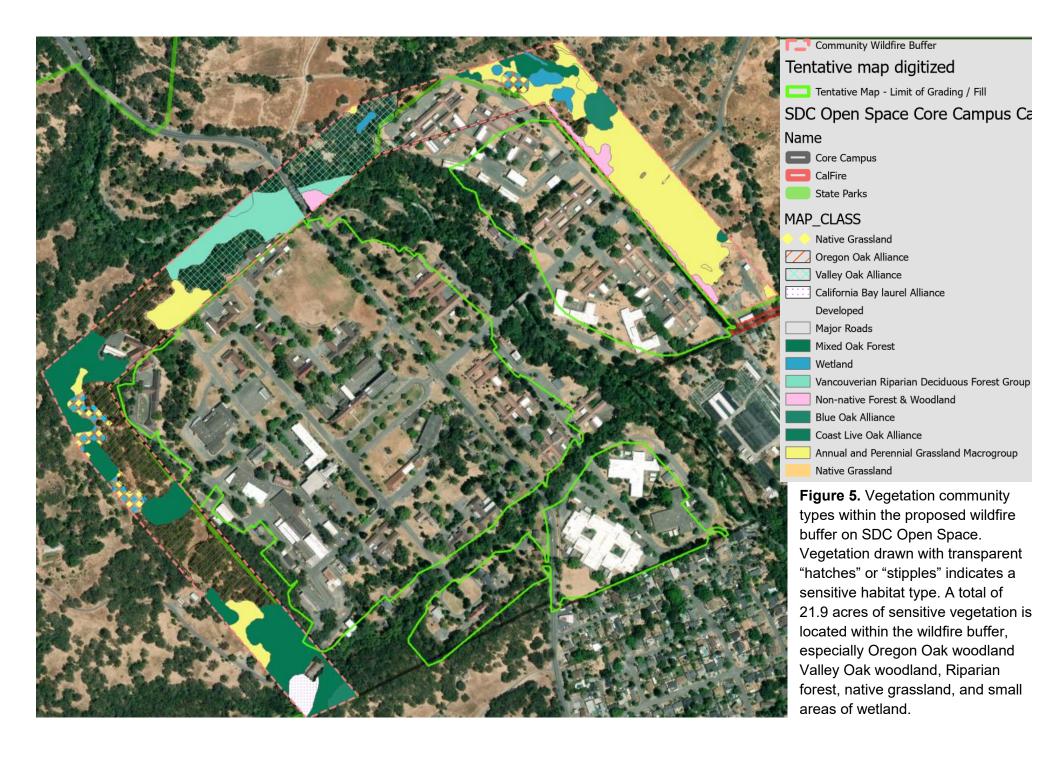


Figure 3. Location of water and sewer lines on SDC Open Space lands that would need to be replaced or maintained as part of this Project. <u>Source:</u> 2018 Sherwood Hydrology Report. The Sonoma Aqueduct is not included in impact calculations.



Figure 4. Map shows Project Grading Limits from the Vesting Tentative Map (white areas) as compared to sensitive vegetation types (yellow), overlaid on the Project Arborist report. Red circles indicate areas where grading / fill (i.e. forest removal) is proposed, but not addressed in the Arborist report. The Arborist report was prepared to fulfill Sonoma County ordinances around the removal of sensitive tree species, but does not "mitigate" for the environmental impacts of removing sensitive vegetation types, or the impacts of urban forest removal on native wildlife species.



Type of impact to Sensitive Habitat	Activity	Location	Total Acres
Removal	Grading / Fill / Demolition	Core Campus	9.4
Disturbance	Backyards	Core Campus	1.85
Disturbance	Fuel clearance within 100' of homes**	Core Campus	(8 acres, or increase fire risk)**
Disturbance	Wildfire Buffer	SDC Open Space	21.9
Disturbance	Water / sewer reconstruction	SDC Open Space	2.78
		TOTAL REMOVAL	9.4
		TOTAL DISTURBANCE	26.53

Figure 6a Summary of Project-wide removal and disturbance of CDFW designated sensitive habitat types.

*Assumes a disturbance width of 15' for water line re-construction ** Does not include ~8 acres of riparian area within 100' of buildings as an impact, as it is not described or mandated. Detailed calculations available on request, see Exhibit 5 for methods, and Figures 3, 4, and 5 for maps.

Habitat Type	Acres grading	Sensitive*?
Blue oak woodland	0.1	No
Non-native grassland	0.6	No
Forest sliver (Nonnative forest)	4.3	No
Mixed oak forest	4	No
Non-native forest & woodland	6.4	No
Oregon oak forest	1.9	Yes; G4S3
Riparian forest	0.2	Yes
Valley oak forest	7.3	Yes; G3S3
Total (Sensitive):	9.4	
Total (all):	24.8	

Figure 6b. Campus-wide grading impacts, as defined and digitized from the Feb 2025 Vesting Tentative Map. This includes forested areas in the interior of campus. See corresponding map in Figure 4.

Habitat Type	Acres within Fire Buffer	Sensitive*?
Non-native grassland	10.3	No
Native grassland	1.5	Yes

Non-native forest & woodland	1.0	No
Mixed oak woodland	8.0	No
Coast live oak forest	0.1	No
Blue oak woodland	1.0	No
Oregon oak forest	10.1	Yes; G4S3
Valley oak forest	5.7	Yes; G3S3
California bay forest	0.6	Yes; G3S3
Riparian forest	3.3	Yes
Wetland	0.7	Yes
Total (Sensitive):	21.9	
Total (all vegetation types):	42.3	
Total (w. Developed, Roads):	49.95	

Figure 6c. Vegetation overlapping with the proposed Wildfire Buffer, occurring largely on State Park Open Space Lands. Vegetation types were ground-truthed in summer 2025. *Note that these calculations were made before the NOP map was released, which indicates a 0.8 acre reduction in the area of the wildfire buffer, where a building that is part of the water treatment plant is located. See corresponding map Figure 5.

Utility	Status	Number Intersecting TOB	Figure 7. Number of places that existing, or proposed utility
Water line System (W)	Prop. New/Replaced	2	infrastructure intersects the Top of Bank as shown on the Vesting
	Retained	1	Tentative Map. This demonstrates that the Project will directly impact
	Unadd. in Sherwood**	9	Sonoma and Mill Creek as
	Unadd. in Rogal*	0	proposed.
	TOTAL:	12	*"Unadd. In Rogal" items are utilities that are depicted on the 2025
Sewer System (SS)	Prop. New/Replaced	0	Tentative Map existing conditions,
	Retained	2	but have no symbolism or notes explaining if they will be used,
	Abandoned	0	replaced, or abandoned.
	TOTAL:	2	**"Unadd. In Sherwood" items are
Storm drain system (SD)	Prop. New/Replaced	4	utilities that are depicted within the 2018 Sherwood Hydrology Report
	Retained	7	Maps as completely crossing the
	Unadd. in Rogal	8	creeks but are not depicted or addressed in the 2025 Rogal plan
	TOTAL:	19	set (no symbolism or notes explaining if they will be used,
SD Outfall	Prop. New/Replaced	4	replaced, or abandoned).
	Retained	7	
	Unadd. in Rogal*	9	



Figure 8. This is a location where the Project proposes to remove native forest, place fill within what is arguably bed and bank of Sonoma Creek, and build single family homes, This would also remove 1 acre of sensitive habitat type. These impacts could feasibly be avoided by moving these 3 homes and parcels, and maintaining this location as part of the riparian buffer.



Figure 9. Example of existing infrastructure (slated for demolition) that is congruent with the top-of-bank of Mill Creek. Mill Creek is visible in the lower left, as is a storm drain entering the creek. There are about 6000 linear feet where demolition is planned within a few feet of the top of bank. Standard construction stormwater measures won't suffice.



Figure 10 and 11. Two examples of pipes crossing Mill Creek, two of many such crossings. Project proposes to reconstruct a new grid of water/sewer pipes, but the Project does not specify whether it will leave these lines in place (abandon them) or remove them as part of demolition. We think abandoned pipes should be removed, in coordination with the appropriate agencies and protections.



Figure 12. Showing existing (water?) line running down a steep eroded bank along Sonoma Creek. Neither the NOP or Project on file with Sonoma County address how raw water lines will cross Sonoma Creek.



The Project could exacerbate erosion by putting more water into fewer pipes, during the operation of the Project, and impact habitat quality for special status species in creeks. The Lead Agency should consider Alternatives that treat stormwater with multiple methods, and avoid areas of existing erosion.

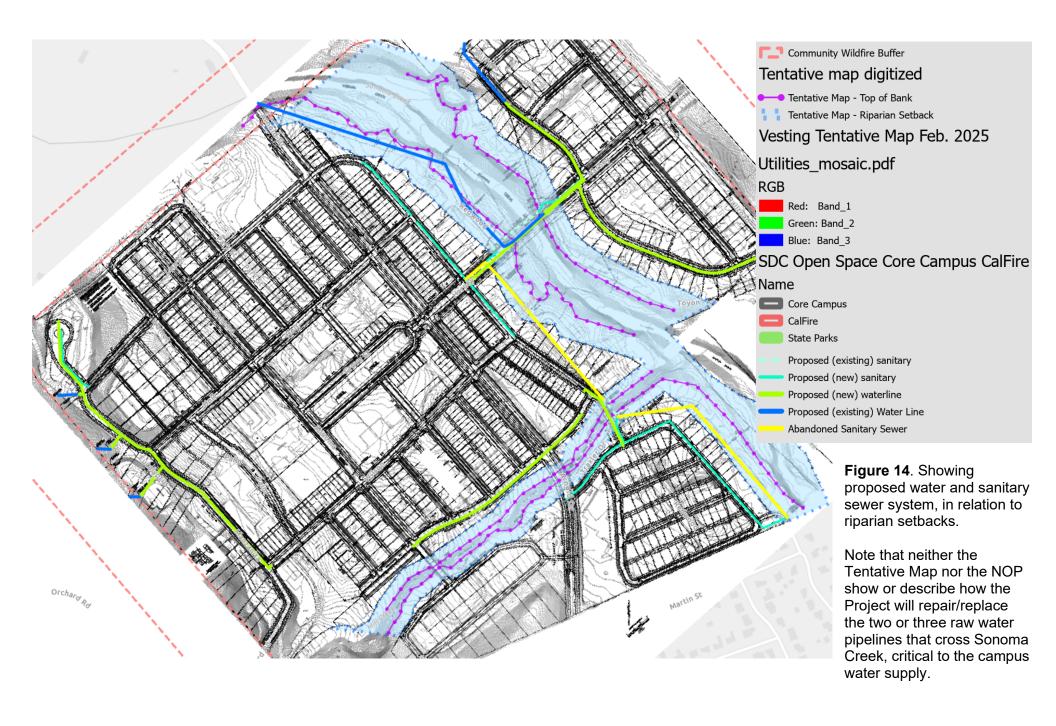
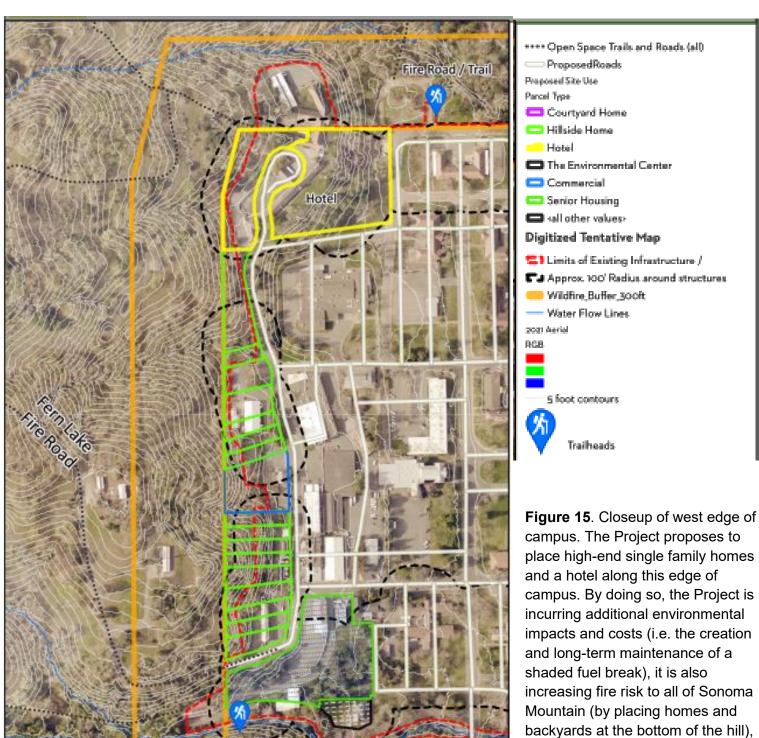




Figure 14. We utilized Project documents to digitize locations of proposed structures around edge of campus and along creeks, then buffered proposed structures by 100', and calculated the overlap between the 100' defensible space zone, the fire buffer, riparian areas, and neighboring properties.

We found very little overlap (2 acres) between 100' defensible space and the wildfire buffer, leading to the conclusion that the fire buffer will not significantly reduce fire risk for the Project. Scientific literature analyzing factors influencing structure survival provide little evidence that fuel reduction beyond 100' improves structure survival.

We also found that the 100' defensible space zone around buildings extends well into proposed riparian setbacks, and on to neighboring properties to the south. The Project must choose between 1) Increased fire risk to structures near riparian zones OR 2) impacts to riparian areas from fuel reduction, in the current Project configuration. Using a "creek facing" design, where homes are across a street or path further from riparian areas, would largely avoid this issue.



campus. The Project proposes to place high-end single family homes and a hotel along this edge of campus. By doing so, the Project is incurring additional environmental impacts and costs (i.e. the creation and long-term maintenance of a shaded fuel break), it is also increasing fire risk to all of Sonoma Mountain (by placing homes and backyards at the bottom of the hill), and exposing Project residents and structures to increased fire hazards.

An alternative approach that avoids the need for the wildfire buffer, by only planning new development

within the existing campus footprint, would avoid many costs, environmental impacts, and safety impacts. Putting highend homes in these locations will also damage scenic and aesthetic resources, and reduce the sense of connection between the Core Campus and SDC Open Space.

A similar situation is true along Walnut Court, on the South Edge of Campus (not pictured).

Cartography by Chris Carlson

Date Exported:

Table 9 Estimated Surface Water Supply at the SDC Property

Sonoma Developmental Center Specific Plan, Sonoma County, California

	Available Supplies by Year Type (2030-2045) (AFY) (a),(b)						
			Multiple Dry Years				
Water Supply Source	Normal Year (c)	Single Dry Year (d)	Consecutive Dry				
			Years (e) 1st Year	Years (e) 2nd Year	Years (e) 3rd Year	Years (e) 4th Year	Years (e) 5th Year
Roulette Springs	172	172	172	172	172	172	172
Hill/Mill Creek	81	1	79	79	80	12	1
Asbury Creek	14	0	15	12	15	0	0
Sonoma Creek	92	2	98	113	75	14	2
Unnamed Stream (Source A)	46	1	77	75	48	3	1
Total Available Diversions (f)	405	176	440	451	390	201	176
Supply from Carried Over Storage		180		-		155	180
100% Reliable Yield (g)	356	356	356	356	356	356	356

Abbreviations:

"AFY" = acre-feet per year

"SDC" = Sonoma Developmental Center

Notes:

- (a) Available supply values for each source are water year totals based on modeled supplies for water years 1956-1980 and 2002-2021.
- (b) Modeled supplies include constraints related to reservoir capacity and demands equal to the 100% reliable yield of 356 AFY.
- (c) Normal year supply values are based on the average modeled supplies during all complete water years during the period of analysis.
- (d) Single dry year supply values are based on the modeled supplies during the driest water year (1977).
- (e) Consecutive dry year supply values are based on the modeled supplies over the driest five-water year period (1973-1977).
- (f) In years where total diversions are greater than the 100% reliable yield, the surplus water is stored in the reservoirs and carried over to the following year.
- (g) The 100% reliable yield of the SDC water supply system was estimated using the SDC Diversion Model by determining the maximum demand at which no supply deficits would occur over the period of record.

Figure 16. Table 9 from *2022 Water Supply Assessment*. EKI Environment and Water._This table shows that the entire campus water supply relies on one spring complex for 50% of its water in a multi-year drought. It also shows that available water supply is 405 AFY in a normal year, while calculated demand is above 400 AFY. This table was created before the Project increased the number of housing units by approximately 30% from over 600 to 990 in the current plan. We conclude that water supply resilience for this Project is low. Furthermore, because Roulette Springs in its current condition supplies a perennial waterway (Asbury Creek) which supports protected steelhead, the Project needs to develop alternatives that don't rely so heavily on this single water source.

Figure 17. Current condition of main collection box at Roulette Springs. Infrastructure is more than leaking; it is non-functional. Water is spilling onto the forest floor. The spring complex creates insitu wetlands and provides the base flow for Asbury Creek during summer months.



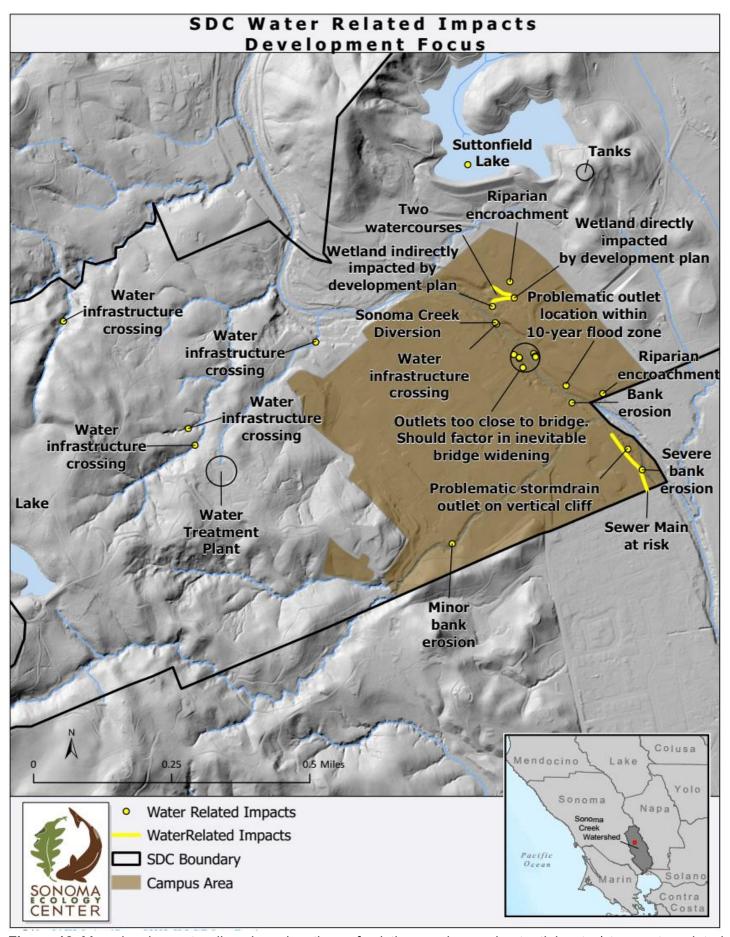


Figure 18. Map showing water diversions, locations of existing erosion, and potential water/stormwater related impacts.

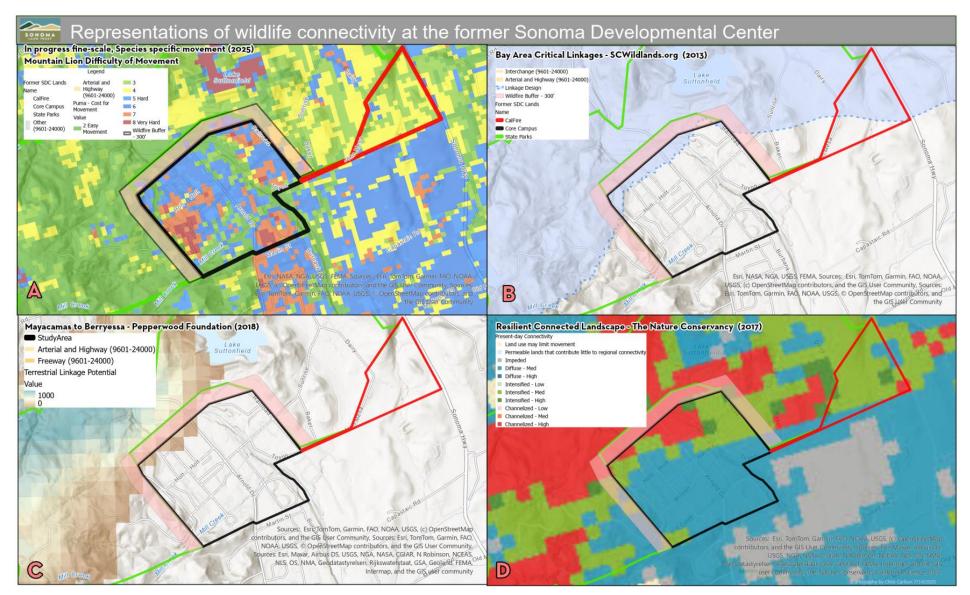


Figure 19 A to D.These maps show different representations of wildlife connectivity in and around the Core SDC. Former SDC lands are outlined in colors depending on the management agency (Green outline = State Parks, Black = Core Campus, Red = CAL FIRE). Each study has come to slightly different conclusions about what locations are most suitable for wildlife movement. All maps agree that there is more connectivity on the Core Campus, particularly along Sonoma and Mill Creek, than portrayed in the NOP. Layers for maps B, C and D are publicly available. **A**: Diamond and Sonoma Land Trust, 2025 (in progress), **B**: Penrod et al., 2013, **C**: Grey et al. 2018, **D**: McRae et al. 2016. See also Sonoma County General Plan 202 Open Space and Resource Conservation Element, Map OSRC2.



Figure 20. This map shows Mountain Lion GPS Collar data from the Living with Lions project obtained between 2016-2023, in comparison with the Core Campus, Riparian setback, Wildlife Buffer, and 'Critical Linkage' from a 2013 report. *Data Credit*: Audubon Canyon Ranch, and True Wild.

Mountain Lion GPS collars collected data every 2 hours (red circles). Yellow lines connect the dots.

Conclusions: 1. Although we can't say for sure where lions move between GPS points, it is clear that lion movement across the SDC occurs in the current condition and will likely change if the Project is constructed.

- 2. Lions prefer Sonoma Creek for movement. To protect Sonoma Creek as a movement corridor, sufficient buffers and protections need to be put in place.
- 3. The Project proposes buildings within the 2013 critical linkage.

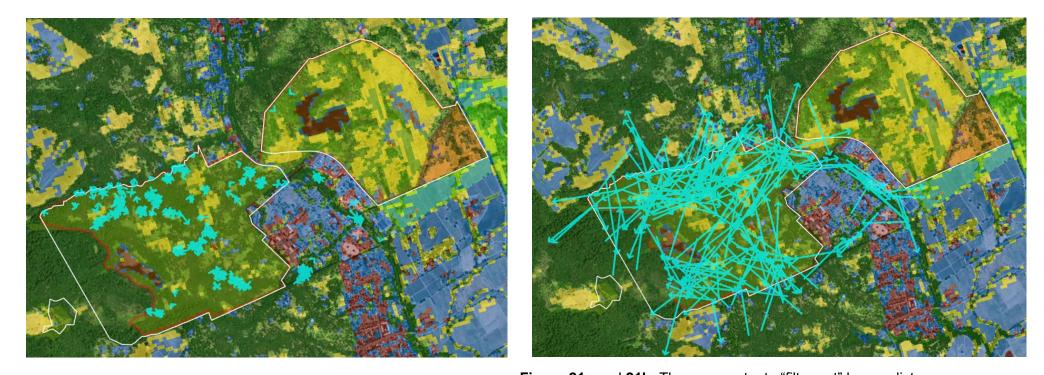


Figure 21a and **21b.** These maps try to "filter out" longer distance movements seen in Figure 20, and focus on shorter animal movements that have a higher locational accuracy. *Data Credit*: Audubon Canyon Ranch, and True Wild.

Figure 21a (top left) This map shows lion movements less than 0.06 miles long (over a 2 hour period) where they intersect the SDC. These clusters of short movements usually represent places where lions had a kill site and lingered for a period of time to feed.

Figure 21b (top right) This map shows lion movement between 0.13 and 0.40 miles long, where they intersect the greater SDC.

Taken together, these figures demonstrate some fundamental facts:

- Mountain lions are commonly utilizing SDC lands, for both feeding and movement.
- Lions seem to prefer Sonoma Creek and Mill Creek when moving through the developed portion of the SDC.

To avoid impacts to mountain lion movement, the Project must consider alternative design measures for the design and layout of riparian setbacks as described in the alternatives above.

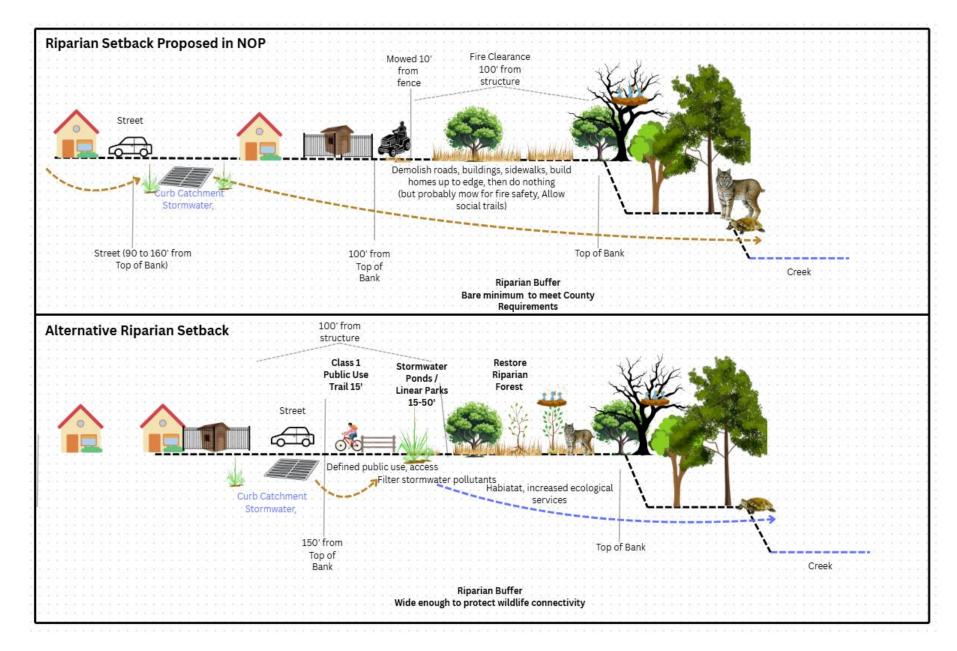


Figure 22. Design elements that might be incorporated into a riparian buffer design that protects wildlife connectivity, incorporates stormwater management, defines the area of public use, and provides community and land value benefits from a pathway or linear parks.

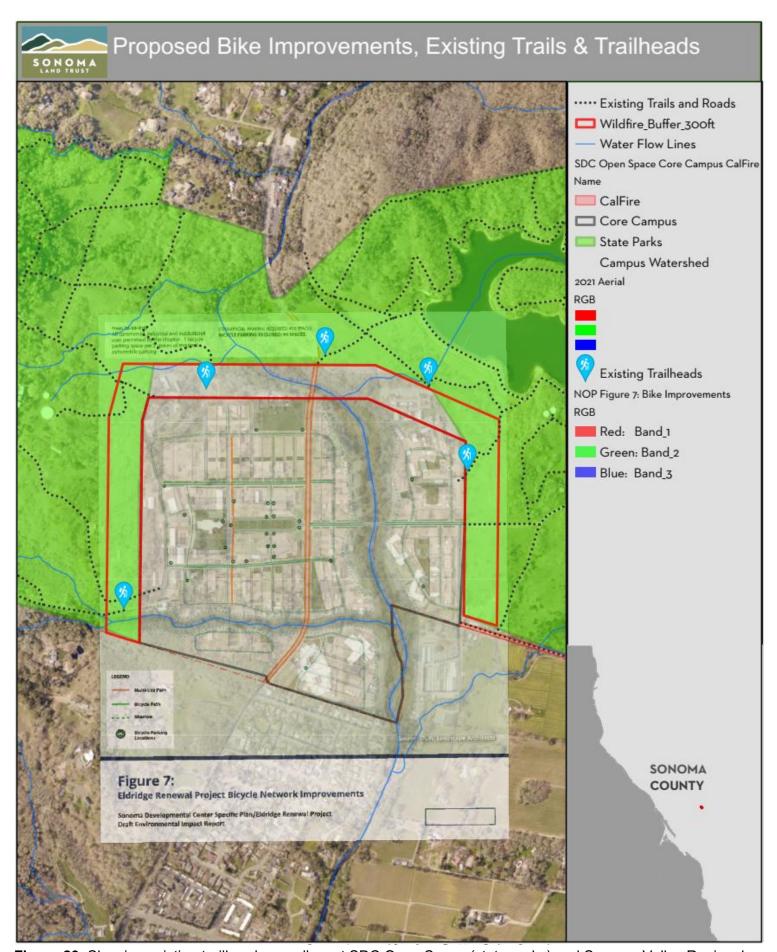


Figure 23. Showing existing trailheads on adjacent SDC Open Space (state parks) and Sonoma Valley Regional parks (along Arnold Drive), in relation to bike network improvements and bike parking in the NOP. You can see that there is no recognition in the NOP that the Campus controls access to 4 trailheads.

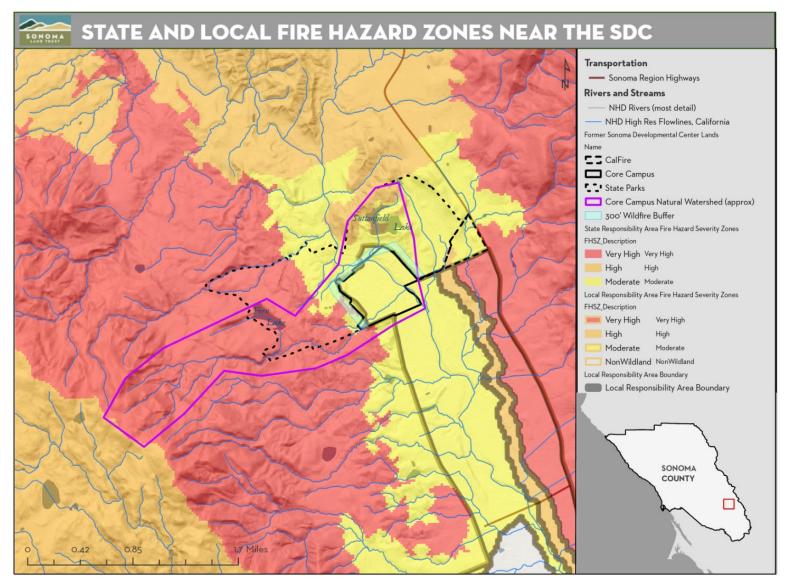


Figure 24. 2025 Fire Hazard Severity Zones in relation to the SDC. Source: CAL FIRE. SDC lands are shown in black outline . LRAs are shown with a grey outline.

Not shown: The Project proposes to use surface waters (Roulette Springs, Fern Lake, Suttonfield Lake, Mill Creek, Asbury Creek) for campus water supply.

Conclusions: 1) The Project is *near* Very High Fire Hazard Severity Zones, and most of the campus water supply is *within* a Very High Fire Hazard Severity Zone. 2) Portions of Campus and Wildfire buffer zone are in the State Responsibility Area.

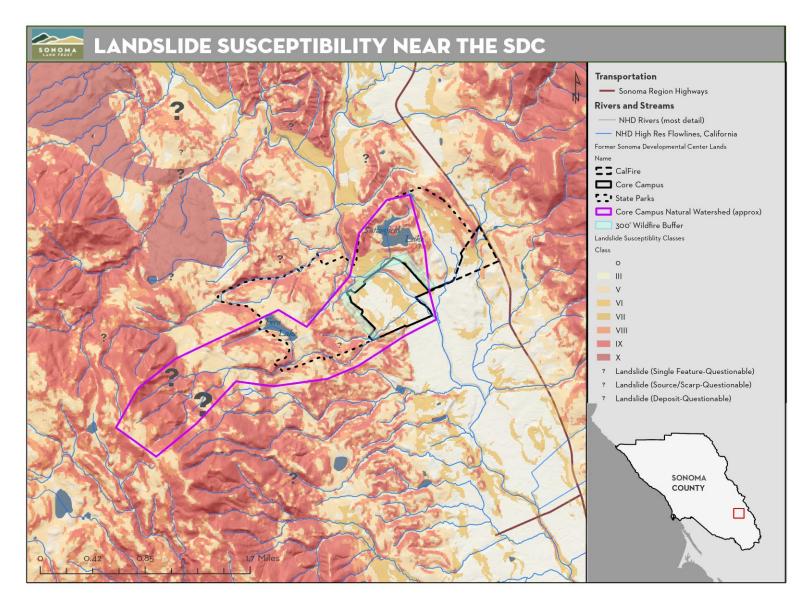


Figure 25. California Department of Conservation data related to post-fire landslide susceptibility. White to red colors show susceptibility to "deep seated landslides" based on rock strength and slope. ?? marks show geographic features that have been mapped as potential historical landslides.

Conclusion: The upper headwaters of Mill and Asbury Creeks have significant risk of post-fire landslides or debris flows, that must be explored in more detail. Similarly, geologic risk to the Lake Suttonfield dam should be examined (Suttonfield Dam condition was rated as "fair" in 2025).

A 2018 Existing Conditions assessment for the greater SDC by DGS found: "The CGS geologic map indicates a total of six landslides partially or entirely within the boundaries of the Project site. The mapped landslide includes both debris flow and block slump type landslides. Furthermore, we observed a few unmapped landslides which are not indicated on the CGS regional geologic map, including a landslide along Orchard Road and a failure along the Sonoma Creek bank. A notable landslide on the CGS geologic map is a massive landslide complex west and above Fern Lake. The majority of the massive landslide complex is within Jack London State Park; however the toe of the landslide extends to the shoreline of Fern Lake."

Exhibit 4: Methods for campus map digitization and impact analyses

Summary of Analysis

We used the Project Tentative Map, Project documents on file with Sonoma County, and existing information about the area, to understand geographic overlap between Project uses and activities, and natural resources.

The analysis provided clear examples of where the Project fails to disclose known impacts to sensitive vegetation communities, waterways, and state lands.

Description of sources, methods, and calculated statistics.

Our primary source for Project activities was documents submitted to the County of Sonoma as part of the Development application, dated February 5, 2025. https://share.sonoma-county.org/link/7NXJIdFZm-A/

We stitched together four map sets that form the Project's Vesting Tentative Map (dated January 28, 2025; RSA+ Napa, CA) into four map images: Existing Condition Plan, Site and Dimension Plan, Grading and Drainage Plan, and Utility Plan. We georeferenced these four map sets using ArcGIS Pro, obtaining a relative accuracy of approximately 3 to 20 feet.

We used georeferenced Tentative Map sets to trace map features, including:

- Area of demolition (polygon, 135.51 acres)
- Area of grading or fill (polygon, 115.29 acres)
- Proposed riparian setbacks (polygon feature)
- Top of bank proposed by Project (line feature)
- Floodplain limit proposed by Project in one area (line feature)
- Locations of utilities. We largely digitized utility features near riparian areas (versus the whole campus), to save time:
 - Stormwater outfalls (point features) classifying by a) proposed new, b) proposed re-used, c) no proposal for re-use or removal
 - Stormwater drains (lines) classifying by a) existing, b) proposed
 - Water supply (lines) a) existing, b) proposed, c) abandoned
 - Sanitary sewer (lines) a) existing, b) proposed, c) abandoned

We assembled / ground truthed the following layers to aid in analysis:

- Vegetation type (Sonoma Veg Map biologists from Prunuske Chatham Inc. utilized the CA Manual of Vegetation to ground-truth vegetation types within Core Campus and Wildfire Buffer)
- Existing water /sewer lines on Open Space Lands (2018 Sherwood Water Report)
- Wildfire buffer location (mapped in field, from Project survey stakes)

We referred to other Project maps describing general site layout, housing design, parcel locations, and site use to digitize the locations of:

- Location of proposed structures along creeks and edge of campus (polygons, using Figure 9 in the Notice of Preparation)
- Private backyards where they overlap with sensitive vegetation (using Site and Dimension Plan to find parcel lines, and Site Plan map indicating use)

Calculations and summaries: We used the assembled layers to make calculations and summaries, including:

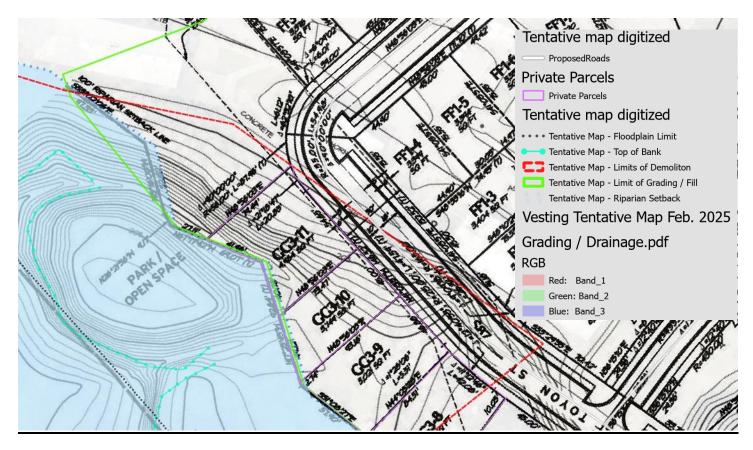
- Vegetation (ground-truthed) intersecting with:
 - Grading and filling (reporting *acr*es impacted per veg type)
 - Grading and filling outside of areas included on Arborist tree removal / mitigation map (reporting acres impacted per veg type)
 - Hotel (reporting acres impacted per veg type)
 - Private Backyards (on edge of campus with intact native vegetation reporting acres impacted per veg type)
- Vegetation on State Park lands
 - 300' Wildfire Buffer (reporting acres impacted per veg type)
 - Intersection with Water lines (reporting linear and square feet impacted per veg type, assuming a 15' wide zone of impact)
 - Intersection with sewer lines (same reporting as water lines on State Parks)
- Utilities within the proposed riparian setback (linear feet per utility type, proposed new, re-used, abandoned)
- Utilities intersecting Project Top of Bank (count of intersections)
- Demolition congruency with Top of Bank we calculated the linear feet where Project demolition limits are within 10' of Top of bank.
- Wildfire
 - 30' and 100' buffer around proposed structures
 - 10' and 30' buffer along roads passing through riparian corridors
 - Intersection between 100' buffer around houses, and the wildfire buffer
 - Intersection between the 100' buffer and Riparian Setbacks

Definitions:

A community was considered sensitive when the plant community alliance's rarity (G or S) is ranked 3 or lower by CDFW (Sensitive Natural Communities. 2025. California Department of Fish and Wildlife. Sacramento, CA. Accessed at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline)

Results

We summarized most though not all results produced by this effort in Exhibits 2 and 3 above, in the appropriate section (biological resources, water system, wildfire).



Showing a closeup of methods used to digitize tentative maps, and generate data for analysis.

Figure 1. This map shows: The "Site and Dimension" plan set from the February 2025 Vesting Tentative map, after mosaicking and georeferencing.

Figure 2. The same location, but with the "Grading and Drainage" plan set. We also used the "Existing Conditions" plan set, and the "Utilities" plan set to digitize various elements.

