

## CALIFORNIA COASTAL COMMISSION

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# Th8a

LCP Amendment Number LCP-2-SON-**23**-0058-2 (Sonoma  
County Land Use Plan Update)

November 14, 2024

CORRESPONDENCE

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**LCP-2-SON-23-0058-2 (Land Use Plan Update) Hazards and Misc Comments from Permit Sonoma**

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**From** Cecily Condon <Cecily.Condon@sonoma-county.org>

**Date** Fri 11/8/2024 3:47 PM

**To** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>; Rexing, Stephanie@Coastal <Stephanie.Rexing@coastal.ca.gov>

**Cc** Scott.Orr@sonoma-county.org <Scott.Orr@sonoma-county.org>; Tennis.Wick@sonoma-county.org <Tennis.Wick@sonoma-county.org>; Claudette Diaz <Claudette.Diaz@sonoma-county.org>; Gary Helfrich <Gary.Helfrich@sonoma-county.org>

 1 attachment (298 KB)

MEMO Permit Sonoma\_Hazards Comments.pdf;

Luke,

We would like to add the attached staff comments to the record for your consideration. We do expect to continue reviewing the document but this is the last of the three major topic areas initially identified. Very much looking forward to seeing you next week.

Thank you,  
Cecily Condon



**Cecily Condon**  
**Project Review Planning Manager**  
2550 Ventura Avenue, Santa Rosa, CA 95403  
www.PermitSonoma.org  
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Lobby hours: Monday, Tuesday, Thursday, Friday 9:00 AM to 4:00 PM. Wednesday 10:30 AM - 4:00 PM.



MEMO

DATE: November 8, 2024  
TO: Coastal Commission ATTN: Luke Henningsen  
FROM: Cecily Condon, Permit Sonoma  
SUBJECT: LCP-2-SON-23-0058-2 (Land Use Plan Update)

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***Open Space and Resource Conservation Element***

**Policy C-OSRC-7c** Proposed edits (Herbicides)

**Staff Comments:** These changes align Policy C-OSRC-7c with case law regarding the City of Malibu LCP policy regulating pesticide use. The Board of Supervisors adopted LCP used the original Malibu policy language. This policy is intended to duplicate the City of Malibu pesticide policies and Permit Sonoma staff support these changes.

***Water Resources Element***

**Policy C-WR-1o:** (New)

**Policy C-WR-1o:** Drainage facilities located adjacent to beaches and bluffs shall direct such drainage inland and away from beaches and bluffs.

**Staff Comment:** This policy is inconsistent with the topography of the Sonoma Coast, especially north of the Russian River. Most drainage facilities adjacent to beaches and bluffs serve SR1 and steep slopes on both sides of the road make draining inland a physical impossibility. If this policy is retained, it should include an exception where compliance is infeasible.

**Staff Proposed Policy C-WR-1o:** Drainage facilities located adjacent to beaches and bluffs shall direct such drainage inland and away from beaches and bluffs, **except where there is no feasible way to effectively divert water inland.**

***Public Safety Element***

**Policy C-PS-1h: (Proposed Edits)**

**Policy C-PS-1h:** For development proposed in a flood hazard area combining zone,  
Property owners shall be responsible for conducting their own research, and determining,



and understanding the vulnerabilities and risks to their real estate investments from hazard events. For development proposed in such areas, pProperty owners shall be encouraged required to develop an emergency response plan and mitigation plan to address those hazards before emergency conditions occur, and to carry their own hazards insurance. In developing such plans, property owners shall be encouraged to consider the FEMA's National Flood Insurance Program and Community Hazard Rating System, as well as the State of California Multi-Hazard Mitigation Plan.

**Staff Comment:** This policy was written to identify the responsibility of Property owners to conduct research related to all hazards the proposed revision limits this to Flood Hazard Combining areas which are only one of several potential hazards on the coast (Floodway, Flood Plain, Geologic Hazards, Fire Severity Zones, Tsunami Risk...ect were all considered in development of the initial policy language) . Permit Sonoma proposes the following:

**Policy C-PS-1h:** Property owners shall be responsible for conducting their own research, and determining, and understanding the vulnerabilities and risks to their real estate investments from hazard events. For development proposed in such areas, pProperty owners shall be encouraged required to develop an emergency response plan and mitigation plan to address those hazards before emergency conditions occur, and to carry their own hazards insurance. In developing such plans, property owners shall be encouraged to consider the FEMA's National Flood Insurance Program and Community Hazard Rating System, as well as the State of California Multi-Hazard Mitigation Plan.

*Alternatively Staff would support: **Policy C-PS-1h:** For development proposed in identified hazard areas, pProperty owners shall be responsible for conducting their own research, and determining, and understanding the vulnerabilities and risks to their real estate investments from hazard events. pProperty owners shall be encouraged required to develop an emergency response plan and mitigation plan to address those hazards before emergency conditions occur, and to carry their own hazards insurance. In developing such plans, property owners shall be encouraged to consider the FEMA's National Flood Insurance Program and Community Hazard Rating System, as well as the State of California Multi-Hazard Mitigation Plan.*

### **Public Safety Element Continued**

#### **Redevelopment:**

Definition of Redevelopment:

Redevelopment includes (1) Additions to an existing structure; (2) Exterior and/or interior renovations; and/or (3) Demolition or replacement of an existing home or other principal

Structure ....

The amended definition of "Redevelopment" includes the addition of the term "In all cases, policies that apply to 'new development' shall also apply to 'redevelopment'"

**Staff Comment:** It would appear redundant to have a definition for redevelopment that states that it is to always be treated the same as new development. For example, renovations, especially interior



renovations, should not be prohibited if an existing structure is within setbacks of a coastal bluff (Policy C-PS-2f). Another example is the requirement for a geologic hazards report (Policy C-PS-2b) for development in hazard areas. While redevelopment is still subject to the provisions of this plan we would not, for example, increase setback for existing structures. Staff sees the potential for reuse of existing structures as would be applied for redevelopment as an opportunity in some cases to allow their continued use or rehabilitation with a more limited environmental impact than a new structure would have, even if the structure does not fully comply with the modern requirements.

LCP Policies **C-PS-2h** (was -2j in the submitted LCP), and **C-PS-4g** have standards that specifically apply to *redevelopment only*. Additionally, Appendix G “Bodega Bay Focused Sea Level Rise Vulnerability Assessment and Adaption Strategies” identifies a number of actions specific to redevelopment and would not apply to new development. New development and redevelopment are repeatedly referenced together in all LCP policies to identify the intent to apply the same standards to new development and redevelopment. The addition of the proposed language would undermine the purpose of even defining redevelopment.

**Staff Recommendation:**

In addition to proposing removal of the proposed language staff would suggest further modification and inclusion of the following:

Permit Sonoma changes of Coastal Commission Staff Recommendation are in **bold text**:

**Coastal Redevelopment: Development, other than maintenance activities identified by Section 30610 of the Coastal Act as being authorized without permit, located between public trust lands and a point 100 feet inland of the top of a coastal bluff, adjoining or near the ocean and land interface, or at very low lying elevations along the shoreline that consists of alterations including:**

- (1) Additions to an existing structure;
- (2) Exterior and/or interior renovations; and/or
- (3) Demolition or replacement of an existing coastal bluff top home or other principal structure, or portions thereof, which results in either:
  - (a) Alteration and/or replacement (including demolition and renovation) of 50 percent or more of one or more major structural components including exterior walls, floor and roof structure, and/or foundation; or a 50 percent increase in gross floor area. Alterations are not additive between individual major structural components; however, changes to individual major structural components are cumulative over time from the effective date of the Coastal Act (January 1, 1977).
  - (b) Demolition, renovation, alteration, or replacement of less than 50 percent of a major structural component where the proposed alteration would result in cumulative alterations exceeding 50 percent% or more of that a major structural component, taking into consideration previous alterations/replacement work undertaken and/or approved on or after the effective date of the Coastal Act (January 1, 1977); or an alteration that constitutes a less than 50 percent increase in gross floor area



where the proposed alteration would result in a cumulative addition of greater than 50 percent of the floor area, taking into consideration previous additions undertaken and/or approved on or after the effective date of the Coastal Act(January 1, 1977).

**Section 30610 Developments authorized without permit. (Addition)**

Notwithstanding any other provision of this division, no coastal development permit shall be required pursuant to this chapter for the following types of development and in the following areas:

(a) Improvements to existing single-family residences; provided, however, that the commission shall specify, by regulation, those classes of development which involve a risk of adverse environmental effect and shall require that a coastal development permit be obtained pursuant to this chapter.

(d) Repair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities; provided, however, that if the commission determines that certain extraordinary methods of repair and maintenance involve a risk of substantial adverse environmental impact, it shall, by regulation, require that a permit be obtained pursuant to this chapter.



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## County of Sonoma LUP Update LCP-2-SON-23-0058-2 (Land Use Plan Update) Wildfire Comments

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**From** Cecily Condon <Cecily.Condon@sonoma-county.org>

**Date** Thu 11/7/2024 12:24 PM

**To** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>; Rexing, Stephanie@Coastal <Stephanie.Rexing@coastal.ca.gov>

**Cc** Tennis.Wick@sonoma-county.org <Tennis.Wick@sonoma-county.org>; Claudette Diaz <Claudette.Diaz@sonoma-county.org>; Gary Helfrich <Gary.Helfrich@sonoma-county.org>; Robert Aguero <Robert.Aguero@sonoma-county.org>; district5 <district5@sonoma-county.org>

 1 attachment (300 KB)

MEMO Permit Sonoma\_Wildfire Comments.pdf;

Luke,

Please find our Staff Comments on proposed modifications to OSRC and Public Safety Elements related to wildfire risk reduction activities. We truly appreciate all your work on this and hope to continue working cooperatively as the hearing approaches. As we had discussed this issue was of significant local importance and we believe in the attached that we can still achieve our local goals resulting in both improved ecological values and public safety protections.

Thanks again,  
Cecily Condon



**Cecily Condon**  
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SONOMA COUNTY  
AGRICULTURE  
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Lobby hours: Monday, Tuesday, Thursday, Friday 9:00 AM to 4:00 PM. Wednesday 10:30 AM - 4:00 PM.



MEMO

DATE: November 7, 2024  
TO: Coastal Commission ATTN: Luke Henningsen  
FROM: Cecily Condon, Permit Sonoma  
SUBJECT: LCP-2-SON-23-0058-2 (Land Use Plan Update) Wildfire Comments

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***Open Space and Resource Conservation Element***

Coastal Commission staff proposed the following edits to Policy **C-OSRC-7o**:

**Policy C-OSRC-7o:** The identification of native trees and woodlands through site assessment, and their preservation and protection of native trees and woodlands shall be required. To the maximum extent practicable, the removal of native trees and fragmentation of woodlands and forests shall be minimized; any trees removed shall be replaced, preferably on the site at a greater than 1:1 ratio (and at a greater than 3:1 ratio for riparian trees); and permanent protection of other existing woodlands and forests shall be provided where replacement planting does not provide adequate mitigation. ~~This policy shall not apply to fire risk reduction projects, restoration projects, or forestry projects overseen by a Registered Professional Forester.~~

County Comments: Development of this policy was accomplished through significant stakeholder participation and outreach. County staff appreciate the edits to clarify grammar in the first sentence. The requirement to mitigate tree removal is intended to focus on development that would permanently remove native trees and woodlands to accommodate built environment. County staff added the last line in the policy to ensure that beneficial activities that remove native trees within forests and woodlands would not be burdened by mitigation requirements. Fire risk reduction projects, restoration projects, and forestry projects overseen by a Registered Professional Foresters were identified as a broad genre of project types that may need to remove native trees within woodlands and forests, while simultaneously maintaining or enhancing woodlands and forests.

Activities that need to remove native trees to restore the ecological value of the project area or as authorized for fire risk reduction would be rendered ineffective if required to mitigate by planting. Restoration projects may be required to remove native trees within forests or woodlands to enhance the environment or restore environmental conditions that were otherwise impacted by a lack of land management or previous fire suppression. Forests and woodlands in the North Coast are typically overstocked due to a lack of management and disrupted fire regime. Forestry activities overseen by a Registered Professional Forester would be required to meet the definition of forestry on a forested landscape, per PRC 750 through 781 (Professional Forester's Law) and overseen by



a licensed professional forester. Requiring a licensed forester to oversee these types of operations would achieve the goal of protecting coastal resources while balancing thoughtful resource management, due to the requirements on licensed foresters to protect the forest resources of California. The Sonoma County categorical exclusion for prescribed fire would remain, but many forests and woodlands in Sonoma County require site preparation that involves native tree removal to reduce the initial stand density prior to reintroducing fire as a management tool, otherwise fire risk conditions would be exacerbated by increased fuel loads not conducive to prescribed fire.

**Recommendation:**

County staff would recommend retaining the clarifying statement that replanting is not required mitigation for fire risk reduction projects, restoration projects, or forestry projects overseen by a Registered Professional Forester or appropriate qualified professional. If needed we would request that the policy allow the Director to accept a report prepared by a qualified professional that identifies case specific replanting ratio for such projects, up to no replanting in the case of overstocked forest conditions. Alternatively, additional specification may be added to this policy, creating a specific criteria of projects that could remove native trees in forests and woodlands that should not be required to mitigate by replanting, for example:

*Mitigation shall not be required for the following types of projects:*

- *Tree removal no more than necessary to comply with fire safety laws and regulations, including tree removal required to comply with state or local defensible space requirements, including Sonoma County Code Chapter 13A and California Public Resources Code Section 4291.*
- *Tree removal that is no more than necessary to obtain or maintain property insurance coverage, when required by an insurance company that insures an occupied dwelling or occupied structure, and when in accordance with the requirements and restrictions of state law, including Public Resources Code section 4291.*
- *Fire risk reduction activities that results in tree removal when the activity or tree removal is documented to be directed, ordered, overseen, recommended, or approved by the public agency having fire protection responsibility for the area. This includes prescribed or cultural burning projects.*
- *Fire risk reduction activities that results in tree removal when the activity or tree removal is undertaken by the county, CAL FIRE, or other public agencies. This includes prescribed or cultural burning projects.*
- *Tree removal authorized by a plan, program, project, or entitlement subject to direct oversight of the tree removal work by a governmental agency.*
- *Tree removal or activities that may result in protected tree removal undertaken by public agencies during emergency operations or in post-disaster remediation.*
- *Tree removal for soil, water, wildlife, or other resource conservation, restoration, or enhancement projects where a public agency takes full responsibility for the work or has approved or funded the work.*
- *The tree removal occurs as part of activities that are the subject of a valid timber harvesting permit approved by the State of California*



- *The tree removal occurs as part of activities that meet the definition of timber management on RRD or TP zoned parcels.*
- *The tree removal occurs as part of activities defined in California Public Resources Code Sections 750 through 781 as forestry conducted on forested landscapes overseen by a registered professional forester.*

### **Removal of Policy C-OSRC-11g**

Coastal Commission staff struck the following policy:

~~Policy C-OSRC-11g: Consistent with Public Resources Code section 30106, no coastal development permit shall be required for (1) any timber harvesting permit approved by CALFIRE through the Forest Practice Rules, or (2) vegetation management that does not amount to the removal or harvesting of major vegetation. This includes projects for the treatment of forest cover or vegetation on forested landscapes, together with all the incidental work including, but not limited to, fire hazard abatement and site preparation, as well as removal of vegetation not resulting in type conversion of existing vegetation community.~~

*County Comments:* State Parks has an exclusion to conduct vegetation management activities on their land so long as it does not conduct such work in the non-excludable area. Private landowners and other agency landowners do not have this exclusion. The existing exclusion, applied based on ownership rather than physical environmental conditions creates discontinuity in management across the landscape, resulting in a higher fire risk.

The definition of “development” in the Coastal Act includes, “...removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973.” A timber harvest plan is a defined permit type for the harvesting of timber in the Forest Practice Act, with operational and environmental conditions outlined in the forest practice rules. This definition in the Coastal Act, enacted in 1976, does not include the host of other timber harvesting permits included in the Forest Practice Rules, including non-industrial timber management plans, 1038 exemptions, and other permits that are subject to the same operational and environmental protection requirements of timber harvest plans which have been created since the Coastal Act was written. The inclusion of the language “any timber harvesting permit approved by CALFIRE through the Forest Practice Rules” was included to clarify that any timber harvesting permit subject to the Forest Practice Act and Forest Practice Rules would be allowed in the Coastal Zone without a Coastal Development Permit.

The second half of the policy surrounding timber operations was included to allow for incidental forest management activities that otherwise would be required for forest health maintenance and forestry maintenance on a private, forested parcel. This also includes activities that are often funded by federal, state, or local grant programs for forest health, environmental protection, or fire risk reduction grants. These activities would always be overseen by a Registered Professional Forester, subject to the licensing



standards in the Professional Forester's Law. When public funding is involved, additional environmental review would also be required.

**Recommendation:**

*County staff would recommend that the policy be unstruck and included in the final version of the LCP. If Coastal Commission staff still would like to strike this policy, County staff recommend it be revised to include the following language, including language adapted from the Board of Forestry's Program EIR for the California Vegetation Treatment Program (CaIVTP) for work that could impact ESHA:*

*The following activities are not considered development:*

- 1) *Any timber harvesting permit approved by CALFIRE through the Forest Practice Rules;*
- 2) *Vegetation management that does not amount to the removal or harvesting of major vegetation. This includes projects for the treatment of forest cover or vegetation on forested landscapes, together with all the incidental work including, but not limited to, fire hazard abatement and site preparation, as well as removal of vegetation not resulting in type conversion of existing vegetation community., provided the following conditions are met:*
  - *The treatment will be designed to protect the habitat function of any affected ESHA, protect habitat values, and prevent loss or type conversion of habitat and vegetation types that define the ESHA, or loss of special-status species that inhabit the ESHA.*
  - *Treatment actions will be limited to eradication or control of invasive plants, removal of uncharacteristic fuel loads (e.g., removing dead, diseased, or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the vegetation types present in ESHA.*
  - *A qualified biologist or RPF familiar with the ecology of the treatment area will monitor all treatment activities in ESHAs.*
  - *Appropriate no-disturbance buffers will be developed for treatment activities in the vicinity of ESHAs to avoid adverse direct and indirect effects to ESHAs.*

**Public Safety Element**

Coastal Commission staff made the following edits to **Policy C-PS-5c**:

**Policy C-PS-5c:** Where otherwise inconsistent with Policy C-PS-5a, ~~Removal of major vegetation adjacent to lawfully existing structures development~~ for fire safety purposes shall be allowed upon a finding that fuel modification and brush clearance techniques are required in accordance with applicable defensible space and fire safety regulations and are being carried out in a manner which reduces coastal resource impacts to the maximum feasible extent, and mitigates for unavoidable such impacts. In addition to the foregoing requirements, removal of environmentally sensitive habitat, or removal of materials in an environmentally sensitive habitat areas buffer shall only be allowed ~~for fire safety purposes to protect~~ lawfully existing structures and must demonstrate that:



(1) Removal does not conflict with any prior terms and conditions of applicable CDPs and/or other authorizations that affect the area in question, approval

(2) There are no other feasible alternatives for achieving compliance with required fire safety regulations,

(3) All ESHA/ESHA buffers are avoided as much as possible, and allowable measures take place outside of and as far away from ESHA itself as much as possible,

(34) All ESHA impacts are commensurately mitigated at a minimum 3:1 ratio and in a manner that leads to no net loss of ESHA resource habitat values.

*County Comments: County staff appreciate the edits made to this policy.*

**Recommendation:**

*County staff recommend that the policy remain applicable to lawfully existing development, and not just structures, as local and state fire code have vegetation treatment standards that also applies to roads and driveways, not just structures. Staff would recommend that the requirement to mitigate ESHA impacts at a 3:1 ratio be removed, for the following reasons:*

- 1) Requiring mitigation on activities that otherwise would not require permits creates an issue for tracking and implementing monitoring of mitigation.*
- 2) Defensible space standards as a legal obligation on the landowner via PRC 4291 or Sonoma County Code 13A. Creating mitigation requirements or permitting requirements for this legally required activity creates a disincentive to manage defensible space. When defensible space is not managed, it creates further hazards by not reducing fire risk around structures. When structures burn, the environmental impact is worse for the habitat than a managed defensible space. Defensible space activities adjacent to roads and structures would generally be considered a maintenance of that area, including the ESHA, which would result in either no net impacts or an enhancement by creating a more fire resilient ESHA.*

Coastal Commission staff struck the following policy and added a similar replacement policy:

~~Policy C-PS-5j: Exclude vegetation removal associated with defensible space activities consistent with state or local guidelines from the requirements of a Coastal Development Permit, when such activities are done in conjunction with an allowed or permitted use and will not result in type conversion of the existing vegetation community.~~

Coastal Commission staff added the following policy:

**Policy C-PS-5k: Some vegetation removal activities may qualify for exemptions or exclusions from permitting requirements (see LCP Implementation Plan: Section 26C-340.1). (...)**

**Recommendation:**

County staff would recommend the removal of the word “some” from this policy, and removal of the specific code citation of the LCP Implementation Plan Coastal Zoning Code, due to potential for the code



references to change with the adoption of an updated zoning code. If a citation is required, then a more general reference to the Implementation plan is preferred. The revised policy would then read:

***Policy C-PS-5k:*** *Vegetation removal activities may qualify for exemptions or exclusions from permitting requirements. (...)*

If this change is made, then the striking of **Policy C-PS-5j** and insertion of the new policy would still reasonably accomplish local goals.



**FW: LCP Coastal Commission Recommendation Response- Table C-AR-2**

**From** Cecily Condon <Cecily.Condon@sonoma-county.org>

**Date** Wed 11/6/2024 5:27 PM

**To** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>

**Cc** Rexing, Stephanie@Coastal <Stephanie.Rexing@coastal.ca.gov>; Claudette Diaz <Claudette.Diaz@sonoma-county.org>; Gary Helfrich <Gary.Helfrich@sonoma-county.org>; Tennis.Wick@sonoma-county.org <Tennis.Wick@sonoma-county.org>

Good evening,

See following suggestion for Table C-AR-2: Agricultural Uses and Support Uses Allowed and Permit Thresholds

**Discussion:**

Permit Sonoma suggests including “**Potentially Excluded<sup>4</sup>**” or “**Potentially Excludable**” to Table C-AR-2 to provide clarification that the use of “Grazing, Row Crops” is a use that may be excluded through Exclusion Order E-81-5 provided the use meets with the terms and conditions for Exclusion Order G- Planting and Harvesting of Crops. While we understand the use of the Footnote 4 currently provides the appropriate policy direction we would request additional clarity in the table to better reflect our stakeholder engagement related to agricultural uses.

Permit Sonoma also suggests revising one of the activities listed in *Footnote 4* for the list of *Ongoing Agriculture* to read “Preparation or planning of land for viticulture **or orchards**” to match the listed uses found in Table C-AR-2 since both are considered to have similar intensities.

**CCC Recommendation:**

<b>Use</b>	<b>Planning Permits Required</b>	<b>Permit Type<sup>4</sup></b>
<b>Allowed</b>		
Grazing, Row Crops	Principally Permitted <sup>3</sup> <del>“By-Right” Coastal Permit<sup>4</sup></del>	<del>Discretionary<sup>2</sup> none required</del>
Vineyard, Orchard	Principally Permitted <sup>3</sup> Coastal Permit <sup>1,4</sup>	Discretionary <sup>2</sup>

**Permit Sonoma Response:**

<b>Use</b>	<b>Planning Permits Required</b>	<b>Permit Type<sup>4</sup></b>
<b>Allowed</b>		
Grazing, Row Crops	Principally Permitted <sup>3</sup> <del>“By-Right” Coastal Permit<sup>4</sup></del>	<b>Potentially Excluded<sup>4</sup></b> , <del>Discretionary<sup>2</sup> none required</del>

Vineyard, Orchard	Principally Permitted <sup>3</sup> Coastal Permit <sup>1,4</sup>	Discretionary <sup>2</sup>
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Notes:

1

VESCO permit also required from Sonoma County Agricultural Commissioner 2 May be appealable to California Coastal Commission if within their jurisdiction or the mapped appealable area (per map on file at Permit Sonoma) or if otherwise appealable per the PPU criterion

3 See Land Use Element for definition and description of Principally Permitted Use.

4 Permits are not required for any activities that meet the terms and conditions of exclusion order E-81-5 (adopted 1981),

or if not excluded legally established ongoing agricultural activities, which are defined as the cultivation and tillage of the soil,

dairying, the production, irrigation, frost protection, cultivation, growing, harvesting, processing, and storing of any

agricultural commodity, including viticulture, horticulture, timber, or apiculture, the raising of livestock, fur bearing animals,

fish, or poultry, and any commercial agricultural practices performed incident to or in conjunction with such operations,

including preparation for market, delivery to storage or to market, or delivery to carriers for transportation to market..

The following types of activities are not considered ongoing agriculture:

- Development of new water sources (such as construction of a new or expanded well or surface impoundment)
- Installation of new irrigation systems or the extension of existing irrigation systems,
- Terracing of land for agricultural production
- Preparation or planting of land for **viticulture or orchard**
- Preparation or planting of land with an average slope exceeding 15%
- Other agricultural production activities that the Director of CDA determines will have significant impacts to coastal resources.

Thank you,  
Cecily



**Claudette Diaz**

**Planner III**

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Claudette.Diaz@sonoma-county.org



Lobby hours: Monday, Tuesday, Thursday, Friday 8:00 AM to 4:00 PM. Wednesday 10:30 AM to 4:00 PM.

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**Fw: Public Comment on November 2024 Agenda Item Thursday 8a - Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update).**

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**From** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>  
**Date** Mon 11/11/2024 1:20 PM  
**To** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>

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**From:** McDougal, Jeff <J419@pge.com>  
**Sent:** Friday, November 8, 2024 4:48:21 PM  
**To:** NorthCentralCoast@Coastal <NorthCentralCoast@coastal.ca.gov>  
**Cc:** Gray, Shana@Coastal <Shana.Gray@coastal.ca.gov>; Prahler, Erin@Coastal <Erin.Prahler@coastal.ca.gov>  
**Subject:** Public Comment on November 2024 Agenda Item Thursday 8a - Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update).

**Classification:** Public

State Coastal Commission and Sonoma County,

In support of the critical work associated with Wildfire risk mitigation, I respectfully request consideration of the following amendments that are designed to protect public safety.

1. In C-PS-5c add "including utility infrastructure" to read "*removal of major vegetation adjacent to lawfully existing structures including utility infrastructure*".
2. In C-PS-5c in subsection 1 strike "~~and/or other authorizations that affect the area in question,~~"
  1. It is unclear how our organization would find out about or determine what type of outside (non-PG&E) authorizations might affect the large swaths of area our facilities cover.
3. In C-PS-5c strike subsection 3 "~~All ESHA/ESHA buffers are avoided as much as possible, and allowable measures take place outside of and as far away from ESHA itself as much as possible~~".
  1. The vegetation work associated with wildfire mitigation is mandated by where the fixed location of the facilities are.
4. In C-PS-5c in subsection 4 strike "~~at a minimum 3:1 ratio~~".
  1. This would be more appropriately defined in the implementation plan of the LCP.

Thank you for your consideration,

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**Jeff McDougal**

Director Environmental Management,  
Pacific Gas and Electric Company

**Mobile:** 925.348.2159

**Email:** [jeff.mcdougal@pge.com](mailto:jeff.mcdougal@pge.com)

You can read about PG&E's data privacy practices at [PGE.com/privacy](https://www.pge.com/privacy).


**Letter submittal for CCC hearing 11.14.24 Item 8a**

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**From** Rue <rmf@sonic.net>

**Date** Fri 11/8/2024 4:02 PM

**To** NorthCentralCoast@Coastal <NorthCentralCoast@coastal.ca.gov>

 1 attachment (225 KB)

SOS\_Ltr to CCC re LCP 11.8.24.pdf;

Thank you for your careful consideration of Sonoma County citizen input on the proposed Local Coastal Plan. We are very grateful for the time and attention we've received and for your dedication and expertise.

From the birthplace of the Coastal Act, representing the multiple organizations and individuals who have participated in many years of engagement, and in producing the attached letter, we thank you.

Rue

November 8, 2024

TO: Dr. Caryl Hart, Chairperson  
and California Coastal Commissioners  
455 Market Street, Suite 300  
San Francisco, California 94105

SUBMITTED: NorthCentralCoast@coastal.ca.gov

FROM: Save Our Sonoma Coast (SOS) and partners

ITEM: 8a Local Coastal Programs (LCPs)  
Sonoma County Local Coastal Program  
Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update)

Sonoma County is the proud birthplace of the Coastal Act and we shoulder the responsibility with great care and awareness, acknowledging those before us who recognized the unique characteristics of our fragile, rural coastal areas.

We urge the Coastal Commissioners as guardians of the California Coast to preserve our coastal zone by approving the well-considered recommendations of California Coastal Commission (CCC) staff. We agree with the amendments and we offer some additional considerations that your staff may not have been aware of.

Many of us have engaged in the Sonoma County Local Coastal Plan (LCP) update for over a decade and are very familiar with the evolution of the proposal. Sonoma County's 'Permit Sonoma' (Planning Department) has worked diligently over those years which included multiple staff changes, and the pandemic. Our Planning Commission dedicated many months of deliberation to careful consideration of amendments in order to recommend the LCP to the Board of Supervisors, who also seriously weighed the proposed plan. We are grateful for the work done to get us to this point.

California Coastal Commission staff has also diligently worked with Permit Sonoma staff, and been very helpfully responsive to citizen questions and input. We want to acknowledge your staff for their professionalism, and for the serious commitment to assure compliance with the Coastal Act.

Our recommendations for further consideration are briefly listed as follow. Please feel free to ask questions or request clarification.

- Intensification of uses in Class 3 or 4 Water Availability Areas should be prohibited unless independent study proves no impact to neighboring or downstream users and/or beneficial uses, and water supply is sustainable for all uses. (See Sonoma County map of Water Availability Classes 1 - 4 Areas - attached)
- ESHA Maps
  1. Section 8 ESHA states Fig 2a-2k are not a full inventory or intended as an exhaustive compilation....any area that meets ESHA "is" ESHA, the mapping is still very important to alert developers and individuals. Section 8-2 Program says the maps are to be updated every 5 years, which means they should be made more complete now.

2. ESHA map corrections:

- a. Correction to Map 2 Subarea 3. Labels Black Point, which is actually Bihler Point. Black Point is the point to the North of that, at the South end of Black Point Beach. Bihler Point is the one directly out from the Lodge.
- b. Subarea maps 1 and 2 use SN for seabird nesting. Then only on Subarea 8 it changes to SR for seabird rookery. Should be consistent and use SN all the way through.
- c. Subarea map 9 enlargement of Bodega Bay\* vicinity
  1. uses SN for seabird nesting but it is not defined on the key as seabird nesting

\* In 2001, Bodega Bay was designated in 2001 as an Important Bird Area (IBA) by the American Bird Conservancy, one of 500 Globally Important Bird Areas

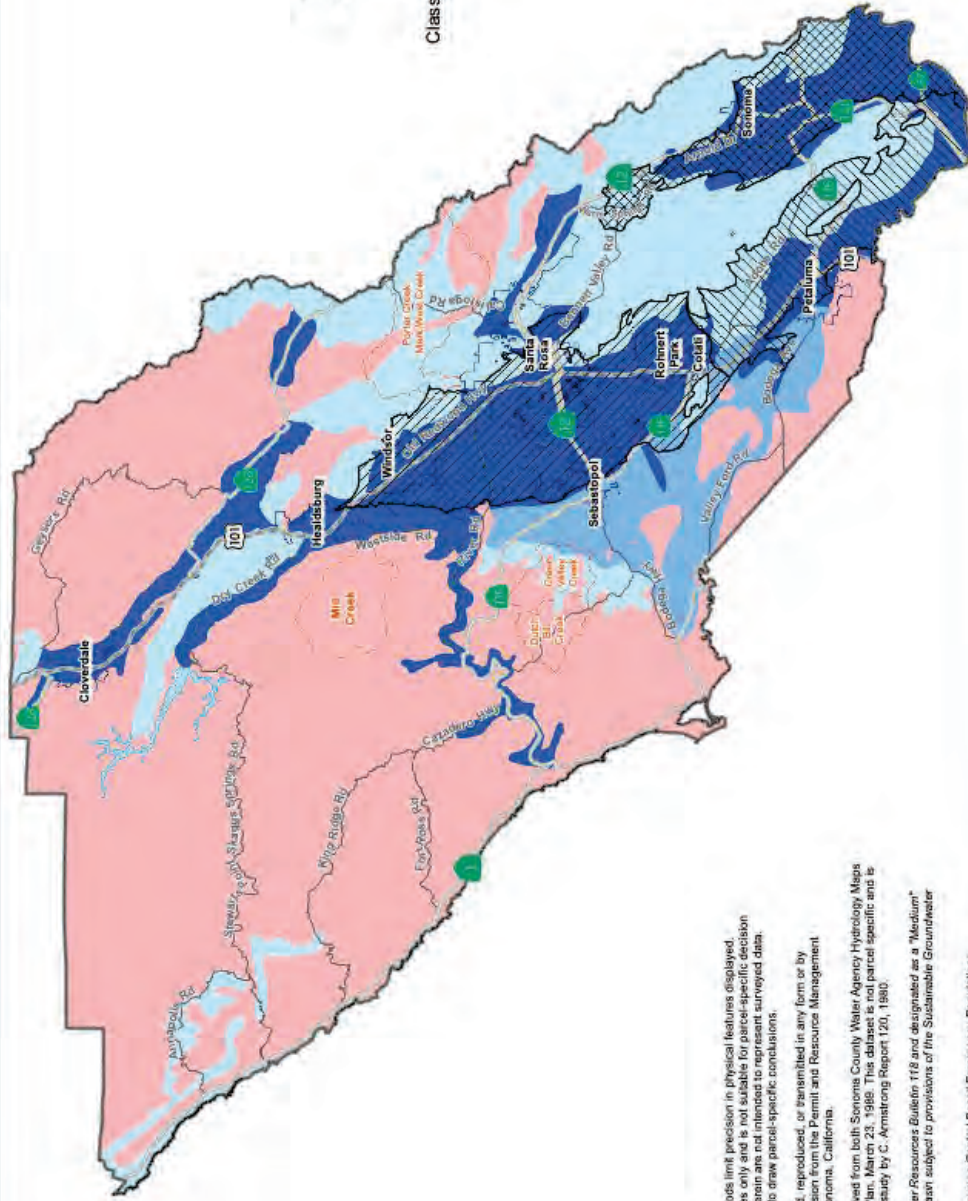
2. has a long note about Biotic Resources found as of a certain date. It is missing any note of Bodega Bay as a Globally Important Bird Area, which was designated 20 years ago. That designation covers the entire Bay, even though hunting is allowed (in a high density area used by people and boats this is inappropriate).
3. Page OSRC-37, ESHA, Policy C-OSRC-8a(2) should include potential habitat connectivity corridors, watercourses, nesting, prey habitat and mating areas, wildlife corridors and areas that contribute to the viability of Listed Species or those of impending rarity.

- Section 30240 of the Coastal Act states policy that require buffers, generally 100' for ESHA and wetlands. (Can reduce from 100' to 50' with mitigations). The proposed update states creating a 50' minimum buffer for development near an ESHA. This should be 100' and should be 100' on the map(s).
- Mineral Extraction: Section 30233 (a) item (5) pages OSRC 5 – OSRC 6: the Commission staff draft definition is broad, which could appear to permit “mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.” We suggest a more targeted wording of this section such as “....mineral extraction, limited to sand for restoring beaches, except in environmentally sensitive areas.” We point out this need for specificity since mineral extraction in and around the world’s oceans is rapidly emerging as a damaging issue.
- Coastal Zone Industrialization: Section 30233 - OSRC pages 54-55: Sonoma County’s coastal offshore waters lie within the Greater Farallones National Marine Sanctuary, which, as a federally-protected jurisdiction, permanently prohibits leasing for oil and gas and the construction of cables, pipelines, and other appurtenances associated with oil and gas and unconventional energy development (such as now being proposed outside of this Sanctuary). Studies now underway indicate that subsea electrical cable landfalls are one type of unanticipated use currently being considered by the energy industry for the Sonoma County coastline. We continue to stress that such industrialization of our only available commercial and sport fishing port, Bodega Bay, would be inappropriate. Shoreline coastal electrical substations and terrestrial transmission lines in the Coastal Zone such as cable landfalls are also inappropriate. In addition, seafloor mining of the Gorda Ridge Polymetallic Sulfide deposits off the coast of Northern California and Southern Oregon has been targeted before, during the early 1980’s, and appears to be poised to re-emerge as a leasing and extraction target by the U.S.

Department of Interior Hard Minerals Leasing Program. We wish to ensure that the citizens of Sonoma County maintain primary local control over any proposal for coastal industrial facilities that may derive from any type of energy development or subsea mining activities offshore.

- Environmental Justice
  - a. In addition to people of color, disabled and seniors must be included. ADA accommodations for disabled and elderly should be available to allow beach access, at least at some of the public beaches
  - b. For discovery of certain Tribal cultural resources such as human remains/burial grounds and significant sites as advised by Tribal consultants should be avoided and declared undevelopable. Mitigations cannot allow development at those sites.
  - c. Require that residences allowed in the coastal zone, especially for farmworkers, meet all standards for human habitation. Work with Permit Sonoma, Code Enforcement to ensure livable housing.
- Agriculture Element: must include protections for small farms where locally grown food is essential for food security, increases jobs, fuels the local economy and reduces traffic impacts. Like smaller fishing boats, small farms have a proportionately small overhead, and the economic benefits are far greater than some larger scale operations per acre.
- Housing should be scaled to family or "worker" use to avoid conversion to tourism uses.
- The current County Farm Stay Ordinance had significant input from, and was supported by those working for the viability of small, diverse ag. Farm Trails and CAFF worked to ensure that the requirement for an Agricultural Promotion Plan was included. We support including this ordinance as written in the Coastal Zone.
- Policy C-LU-5e: Encourage the provision of modest scale overnight accommodations which have minimal impacts on the coastal environment, including campgrounds, bed and breakfast accommodations in existing homes, guest ranches, inns, and motels. Guest ranches in agricultural areas shall be compatible with continued ranch operations and shall be limited to the allowable residential density. All camping on agriculturally zoned land in the Coastal zone shall be limited to "low-impact camping" as defined by SB620.

# Groundwater Availability



**\*Priority Groundwater Basins**  
 Petaluma Valley  
 Santa Rosa Plain  
 Sonoma Valley

**Groundwater Availability Classifications**  
 Class 1 - Major Groundwater Basin Area  
 Class 2 - Major Natural Recharge Area  
 Class 3 - Marginal Groundwater Area  
 Class 4 - Low/Highly Variable Water Yield Area  
 \*\*Critical Habitat Area

**Base Map Data**  
 City Limits  
 Lake Sonoma  
 US Federal Highway  
 State Highway  
 Street

Map scale and reproduction methods limit precision in physical features displayed. This map is for illustrative purposes only and is not suitable for parcel-specific decision making. The parcels contained herein are not intended to represent surveyed data. Site-specific studies are required to draw parcel-specific conclusions.

No part of this map may be copied, reproduced, or transmitted in any form or by any means without written permission from the Permit and Resource Management Department (PRMD), County of Sonoma, California.

The original boundaries were derived from both Sonoma County Water Agency Hydrology Maps and County of Sonoma General Plan, March 23, 1998. This dataset is not parcel specific and is based on surface geology from a study by C. Armstrong Report 1261, 1980.

\*As defined in Department of Water-Resources Bulletin 118 and designated as a "Medium" or a "High" priority groundwater basin subject to provisions of the Sustainable Groundwater Management Act.

\*\* As defined by State Water Resources Control Board Emergency Regulations.



County of Sonoma  
 Permit and Resource Management Department  
 2550 Ventura Avenue, Santa Rosa, California 95403  
 707-565-1900 FAX 707-565-1100

**Richard A. Charter**  
**Box 583, Bodega Bay, CA**



November 8, 2024

California Coastal Commission  
455 Market Street, Suite 300  
San Francisco, CA 94105

Re: County of Sonoma LCP Amendment # LCP-2-SON-23-0058-2 (Land Use Plan Update)

Dear Commissioners:

Thank you for this opportunity to provide written comments on the Sonoma County LCP Update # LCP-2-SON-23-0058-2 (Land Use Plan Update) in concurrence with your November 1, 2024 Commission staff recommendations that build on the work of thousands of coastal citizens over the course of the past several years. As you know, Sonoma County is the original birthplace of the Coastal Act and today remains emblematic of the enduring success of Prop 20 and the Coastal Act itself. Our original Local Coastal Plan served as a model for other coastal counties as they subsequently prepared their own LCP's. The Sonoma Coast remains intact today only because of relentless public pressure and, since the Coastal Act, the dedicated work of your predecessors on the Coastal Commission.

The Sonoma Coast has survived proposals for a massive nuclear power plant, the dredging of Jenner's Penny Island for gravel to build BART, a shoreline port to stage federal offshore oil and gas drilling, efforts to close large swaths of our coast to public access, uncontrolled subdivision of agricultural open space lands, and, most recently, an industrial pumped-storage energy facility that would have virtually obliterated iconic Fort Ross Historic State Park. Because the California coast, in the memorable words of Peter Douglas, "...is never saved, it's always in the process of being saved", our coast still faces exploitive development pressures for inappropriate urbanization of our fragile coastal headlands ESHA in locations without supportive infrastructure. Our coast is still threatened by future onshore industrial facilities associated with seafloor power cable landfalls that would come ashore from offshore floating wind development to our north - as well as expansion of what has long been prioritized as a commercial fishing harbor to instead support deep seabed mining.



Updates of the kind being brought before your Commission at this time are needed because our coast faces these and other emerging issues, thus our LCP must, by necessity, continue to serve as a living document. We have therefore worked with Commission staff and our local officials for more than a decade to get it right, and we encourage your adoption of the strongest possible protections.

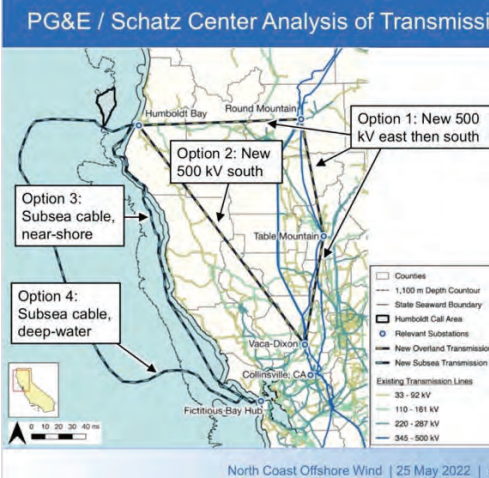
Our topic-specific comments are as follows:

1. Mineral Extraction: Section 30233 (a) item (5) in the Commission staff draft appears to be somewhat broadly defined, so as to appear to permit “mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.” We suggest a more targeted wording of this section such as “...mineral extraction, limited to sand for restoring beaches, except in environmentally sensitive areas.” We point out this need for specificity since mineral extraction in and around the world’s oceans is rapidly emerging as a damaging issue. The State of Oregon, for example, has long had to deal with extraction of metallic minerals from its beaches.

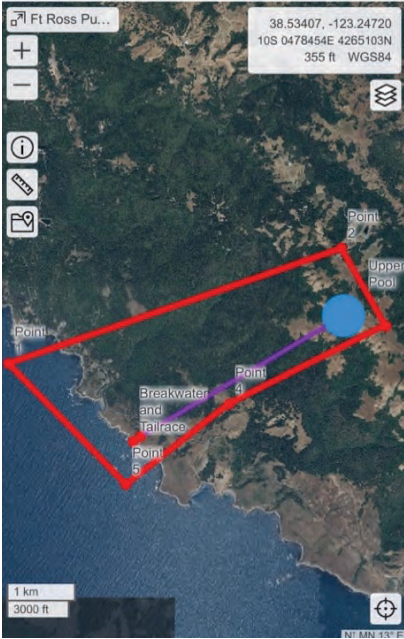


2. Coastal Zone Industrialization: Although Sonoma County’s coastal offshore waters lie within the Greater Farallones National Marine Sanctuary, which, as a federally-protected jurisdiction, permanently prohibits leasing for oil and gas and the construction of cables, pipelines, and other appurtenances associated with oil and gas and unconventional energy development (such as now being proposed outside of this Sanctuary). Studies now underway indicate that subsea electrical cable landfalls are one type of unanticipated use currently being considered by the energy industry for the Sonoma County coastline. Such industrialization of our only available commercial and sport fishing port, Bodega Bay, would be inappropriate and any associated shoreline coastal electrical substations and terrestrial transmission lines in the Coastal Zone that such cable landfalls would necessitate are also inappropriate. In addition, seafloor mining of the Gorda Ridge Polymetallic Sulfide deposits off the coast of Northern California and Southern

Oregon has previously been targeted, during the early 1980’s, and appears to be poised to re-emerge as a leasing and extraction target by the U.S. Department of Interior Hard Minerals Leasing Program. Our LCP, therefore, needs to provide the citizens of Sonoma County with primary local control over any proposal for coastal industrial facilities that may derive from any type of energy development or subsea mining activities offshore.

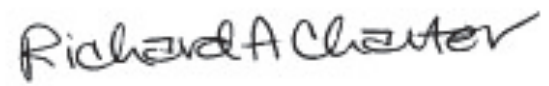


Local jurisdiction over facilities such as the proposed Fort Ross pumped storage facility in the Coastal Zone has also been our policy focus. What would have been the first-ever domestic saltwater pumped-storage power facility, proposed within Fort Ross State Historic Park and the Greater Farallones National Marine Sanctuary, was wisely defeated before FERC during the fall of 2023, but only after substantial public backlash from local citizens and unanimous opposition from our local and state elected officials. This proposal led us to the addition of a “geologic hazard avoidance” stipulation to our LCP update, since lateral ground ruptures of ten feet or more are known to have taken place within Fort Ross during the 1906 earthquake.



Thank you for your kind attention to these matters and for your dedication to preserving the global treasure that is the Sonoma Coast.

Sincerely,

A handwritten signature in black ink that reads "Richard A Charter". The signature is written in a cursive, slightly slanted style.

Richard Charter  
Senior Fellow  
The Ocean Foundation  
waterway@monitor.net  
<http://TheDeepMovie.org>

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**Agenda item Th8a Local Coastal Programs (LCPs), November 14, 2024, Sonoma County Local Coastal Program, Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update)**

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**From** billkrawetz@comcast.net <billkrawetz@comcast.net>  
**Date** Fri 11/8/2024 11:30 AM  
**To** NorthCentralCoast@Coastal <NorthCentralCoast@coastal.ca.gov>  
**Cc** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>

TO: California Coastal Commissioners and Dr. Caryl Hart, Chairperson  
455 Market Street, Suite 300  
San Francisco, California 94105  
[NorthCentralCoast@coastal.ca.gov](mailto:NorthCentralCoast@coastal.ca.gov)  
CC: [luke.henningsen@coastal.ca.gov](mailto:luke.henningsen@coastal.ca.gov)

FROM: NOW (Neighbors of West County)

ITEM: Agenda item Th8a Local Coastal Programs (LCPs), November 14, 2024  
Sonoma County Local Coastal Program  
Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update)

Dear California Coastal Commissioners,

Please find below the following comments and recommendation on the proposed update to Sonoma County Local Coastal Program. Our comments are mainly targeted to the Agricultural Element.

1. Recommendations of California Coastal Commission (CCC) staff- We agree with the suggested changes by staff and urge the Coastal Commissioners approval of such. Their changes to the Ag Element are few but significant especially by requiring "Coastal Permit" and not automatic permitting "by right" as proposed by Sonoma County. This assures a proactive review of new activities ("Discretionary") to assure these meet the requirement of the CCA.
2. Agricultural Tourism - Too broadly defined by the County proposal, leaving it open for abuse and unintended consequences.

Agricultural Visitor-Serving Uses (Agricultural Tourism) – Page AR-11 to AR-14

Issue/Problem/Concern: The County proposal/definition of Ag tourism is too broad and lacks the controls and limitation to avoid the long-term problems as seen with excess vacation rentals and which would undermine both the CCA and agriculture in Sonoma County. The County proposal allows for "farmstays" and "hosted rentals" but provides no evidence how this would achieve their stated goal of "directly promotes ag sales" and does not provide any hard limits on these non-ag operations. As seen in other parts of Sonoma County and throughout the State, vacation rentals/ABNB/second homes have created massive problems unforeseen just a few years ago. Sonoma LCP should incorporate protections against such occurring on Ag parcels.

Background: The County proposal correctly recognizes that "agricultural tourism could support the Coastal agricultural industry economically provided that agricultural tourism directly promotes the sale of agricultural products grown onsite..." Their proposal correctly provides the examples of "farmstands" and "retail sales of products grown on site"; the direct tie between Ag production and sales is clear with these. The County errors by including "farmstays" and "hosted rentals". There is no discussion on the Ag element as to a) the

type, scale, volume, location of these and b) how these activities promote/support Ag operations. The County “Table C-AR-2: Agricultural Uses and Support Uses Allowed and Permit Thresholds” on Pages AR-12 & 13 do not include these (but do include Retail sales and Farm stands), so the CC and the public have no way of understanding the impacts or how these would be managed.

Farmstay is defined in the Glossary (exhibit 2, Page 322 of 708, actually page 324): “Transient lodging accommodations containing five or fewer guestrooms in a single- family dwelling or guest quarters provided as part of a farming operation, with an on-site farmer in residence, that includes all meals provided in the price of the lodging, and that meets all of the standards in the County Code.” This definition does not indicate there is any connection to the direct promotion of onsite ag products which is the County’s stated goal. And the County proposed plan doesn’t not provide a limit or volume on this type of vacation rental. Hosted Rental is defined in the Glossary (exhibit 2, Page 323 of 708, actually page 325): “A single family dwelling, with an owner in residence, where no more than one (1) bedroom, sleeping area or guest quarters, is available, used, let or hired out for transient use, subject to standards in the County Code. See also Vacation Rental.” This definition does not indicate there is any connection to the direct promotion of onsite ag products which is the County’s stated goal. And the County proposed plan doesn’t not provide a limit or volume on this type of vacation rental.

Suggested solution: Preferred solution is to disallow all farmstays, hosted rentals and similar activities on Ag land. Less desirable option: Allow these but with strict limits that both a) a clear definition (how tied to Ag goal and size of operation) and b) a hard cap on quality and locations.

Thank you for allowing the public to comment and we trust you’ll take our concerns into consideration.


Thanks  
Bill Krawetz  
NOW (Neighbors of West County)

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**FW: Public Comment on November 2024 Agenda Item Thursday 8a Sonoma County Local Coastal Program Amendment Number LCP-2-Son-23-0058-2 (Land Use Update) Map series - Figure C- PA- K Public Access Sub Area 10 Valley Ford**

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**From** Travis, Galen@Coastal <Galen.Travis@coastal.ca.gov>  
**Date** Fri 11/8/2024 2:39 PM  
**To** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>

 1 attachment (1 MB)

Scanned Document 2024-11-07 at 11.06.14 AM.pdf;

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**From:** Denny <tibbsx4@comcast.net>  
**Sent:** Friday, November 8, 2024 11:12 AM  
**To:** NorthCentralCoast@Coastal <NorthCentralCoast@coastal.ca.gov>  
**Subject:** Public Comment on November 2024 Agenda Item Thursday 8a Sonoma County Local Coastal Program Amendment Number LCP-2-Son-23-0058-2 (Land Use Update) Map series - Figure C- PA- K Public Access Sub Area 10 Valley Ford

Dear Coastal Commissioners,

I am Denise Tibbetts. Our family owns property on Estero Lane in Bodega Bay, adjacent to the Estero Americano Preserve, owned by Sonoma Land Trust. I have comments regarding the public access maps in the Sonoma County LCP. I have been involved in the LCP process for years and have been concerned with the proposed public access maps, in particular the sub area 10 Valley Ford map on which the access point/trailhead point J2 is illustrated.

\*The Estero Americano Preserve consists of three parcels acquired in 1997 and 2001, surrounded by five additional parcels that all share and abide by them same road easement of July 14, 1988. There was no public access component to the acquisitions, only an agricultural and conservation easement. See attached Sonoma County Open Space Acquisition document.

\* Access to SLT parcels is limited by the road easement agreement of JULY 14, 1988. That easement does not allow public access to get to any part of the property, one would have to cross private property.

\* Whatever funds SLT has received do not change the terms of the easements it is subject to, or relieve SLT of its obligations to be respectful towards the neighbors' private properties.

\* "Infrequent guided activities by SLT", as described in preserve information, is not "public access".

\* There has been historical trespassing and vandalism on the property. Having a published access point/trailhead listed on the public access map encourages trespassing and confuses the public.

\* The rolling hills and wetlands adjacent to the Estero Americano are considered “Environmentally Sensitive Habitat Area” by the California Coastal Commission. Marin County which shares the border of the Estero Americano, in some places just feet across, has the policy in their LCP of non development of the shoreline and environs to ensure the pristine nature and conservation values. It is counter intuitive that the same body of water and shoreline are treated differently.

\* There was a community grassroots mass mailing to the county officials and board supervisors to “Erase the Dots” on the public access map sub area 10 Valley Ford and Protect the Estero Americano. At the July 18, 2023 Sonoma County BOS meeting, neighbors provided comment requesting removal of the public access/trailhead J2. Several environmentalists, including Richard Charter, (executive director of Sonoma Land Trust at the time of the 1997 acquisition) also supported removing J2 for environmental reasons.

In summary, this proposed access location should be removed from the map. When the public sees a public access point on a LCP public access map, they perceive it as a place that is open to the public, like a public beach. Protect the Estero Americano. Protect private property rights.

Thank you for your consideration.

Denise Tibbetts

Sent from my iPad

## Acquisitions of the Sonoma County Agricultural Preservation and Open Space District

for the 5th Supervisorial District through January 1999; data provided by SCAPOS

### DISTRICT FIVE

PROPERTY NAME, Location	ACREAGE	ACQUISITION PLAN CATEGORY	OPEN SPACE/RESOURCE CONSERVATION DESIGNATION	PROPERTY CHARACTERISTICS	TYPE OF TRANSACTION	RECREATION COMPONENT	BOARD OK	ESCROW CLOSED	PRICE	BARGAIN? (a/c SCAPOS)
BODEGA BAY FIRE PROTECTION DISTRICT Town of Bodega Bay	0.51	THREE	Hwy 1 Scenic Corridor	Scenic Resource (frontage on Highway 1) - Visual Promontory above Bodega Harbor	Conservation Easement		7/14/98	(escrow in proc)	\$50,000.00	
CARINALLI Vicinity of Laguna de Santa Rosa	245	TWO	Adjacent to Hwy 12 South Community Separator - Scenic Landscape Unit - Critical Habitat Area	Scenic Agricultural Lands - Biotic Resource - Rare and Endangered Species - Mature Oak Forest - Various Agricultural Operations	Agricultural/Forever Wild Conservation Easement		5/2/95	6/16/95	\$760,000.00	
CRAMER Occidental Rd, W of Fulton Rd	173	ONE	Scenic Landscape Unit - Scenic Corridor	Wetland Resource - Joint project with Dept. of Fish and Game/Wildlife Conservation Board	Fee	Irrevocable Trail Offer	12/3/96	1/21/98	\$1,650,000.00	
DUTTON RANCH S of Graton, Hwy 116 and Occidental Rd SCs	68.8	TWO	Scenic Landscape Unit - Scenic Corridor	Agricultural Resource - Apple Orchard	Agricultural Conservation Easement		8/15/95	9/15/95	\$315,000.00	Below mkt
GRATON RAILROAD RIGHT-OF- WAY Between Occidental Road, S of Graton to Kay Ln, S of Forestville	15.75	TWO	Santa Rosa/Forestville Trail - Riparian Corridor - Scenic Corridor (portion)	Continuation of 10- mile Trail for Recreation and Alternative Transportation Purposes.	Conservation Easement Regional Parks Holds Fee	West County multi-use trail	5/16/95	5/31/95	\$174,356.00	
GUSTAFSSON (GRAY CREEK) Austin Creek State Rec. Area, W of Healdsburg	30.56	THREE	Critical Habitat Area	Remnant old growth redwood forest; Gray Creek	Forever Wild Conservation Easement	Addition to Austin Creek State Park	1/27/98	3/11/98	\$134,000.00	
HEPPER Estero Americano, near Bodega Bay	86.8	TWO	Scenic Landscape Unit - Critical Habitat - Riparian Corridor	Scenic Agricultural Land - Biotic Resource - Estero Americano - Riparian Habitat	Agricultural Conservation Easement	Land Trust may consider limited access	7/15/97	9/5/97	\$285,000.00	
LORENZINI Between Salt Point SP and Stillwater Cove RP	221	THREE	Scenic Landscape Unit	Forestland Between Stillwater Cove Regional Park and Salt Point State Park	Forever Wild Conservation Easement	Agreement by landowner to donate Fee Title as part of Option Agreement to be exercised by Regional Parks	8/2/94	8/22/94	\$500,000.00	Bargain
MAGERS (GRAY CREEK) Gray Creek Watershed - W of Healdsburg	61.54	THREE	Critical Habitat Area	Remnant old growth redwood forest; Gray Creek	Forever Wild Conservation Easement	Addition to Austin Creek State Park	1/6/98	1/15/98	\$80,000.00	
MONTE RIO SCHOOL DISTRICT 9725 Main St, 1/4 mile S of Monte Rio	4	THREE	Bpheman Hwy Scenic Corridor	Dutch Bill Creek and associated riparian plant communities	Conservation Easement Monte Rio Recreation and Park District holds Fee	Community center and other recreation	9/1/98	(escrow in proc)	\$188,000.00	

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**FW: Public Comment on November 2024 Agenda Item Thursday 8a - Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update).**

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**From** Travis, Galen@Coastal <Galen.Travis@coastal.ca.gov>  
**Date** Thu 11/7/2024 12:57 PM  
**To** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>

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**From:** Eric Fraser <truthintourism@gmail.com>  
**Sent:** Thursday, November 7, 2024 11:38 AM  
**To:** NorthCentralCoast@Coastal <NorthCentralCoast@coastal.ca.gov>  
**Cc:** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>  
**Subject:** Public Comment on November 2024 Agenda Item Thursday 8a - Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update).

Date: November 7, 2024

To: California Coastal Commission

From: Eric Fraser, [TruthinTourism@gmail.com](mailto:TruthinTourism@gmail.com)

RE: [November 2024 Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2 \(Land Use Plan Update\).Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2](#)

Dear Chair Hart and California Coastal Commissioners,

We request that the Commissioners vote to extend the time to approve (or amend) the Land Use Plan Update for Sonoma County.

We are government watchdogs, and a fact-pattern we have discerned regarding the permitting, regulations, and enforcement of “short-term rentals”, “vacation rentals”, “lower cost accommodations”, “bed and breakfast inns”, and the like makes us raise a red flag and issue this warning. Please confirm receipt of this email.

On 11/1/24, a trove of public documents was released that appeared to show conflict of interest connected to the third-party contractors who oversee STR regulations in Santa Rosa, and a public official who was responsible for oversight and management. Despite Ms. Flores’ sardonic illustration, this case may discover a high level of complicity that government fraud would require using public money, now laid out using public documents. <https://adinaflores.substack.com/p/santa-rosas-interim-city-manager>

The FPPC has declined further investigation for now, and allowed corrections to the record as of 11/7/24, but other Federal and State investigations are just taking shape, so we have more to learn about this specific case and how "revolving door relationships" may create self-dealing and an abusive environment for the people. (FPPC Update: 11/7/24, "It appears that Jeff Kolin’s LinkedIn profile is

not up-to-date and their employment with Avenu Insights and Analytics ended in 2020, prior to assuming office as General Manager of the City of Santa Rosa. Additionally, Kolin's employment with Avenu Insights and Analytics was through their S Corporation, which was reported on their Statements of Economic Interests." - Re: FPPC Complaint No. COM-11012024-04638; Jeff Kolin)

But it should come as no surprise to any commissioner that the temptation to profit from recurring income schemes tied to outside govtech services that process fees for governmental licenses, permits, complaints, and other "essential" services may be too much to resist. This in turn creates regulations intentionally designed for "revenue enhancement".

The "tells" evident in our research shows that the County of Sonoma and the Coastal Commission have also engaged in questionable behaviors, seen generally as "bad faith" posturing over the issues concerning STR regulations, like what we observed in Santa Rosa.

These behaviors at both the County of Sonoma (and the CCC where applicable) include:

- Misinformation about STRs, that when brought to their attention remains uncorrected.
- Lack of responsive documents for legally issued PRA requests.
- Gaslighting the people over claims of negative community impacts.
- Refusing to study aspects of STRs' positive impacts including economic, equity-focus, environmental, and more.
- Utilizing regulatory schemes that denigrate constitutional rights (e.g. due process)
- Reporting out robust public participation in the regulatory process when the opposite was experienced.
- Regulatory schemes that have no fact-basis.
- Misuse of Urgency Ordinances, Exclusion Zones, etc.
- Collaboration with the media to broadcast propaganda.
- Tax schemes with inadequate oversight (BIAs).
- A history of defective code enforcement actions.
- Politicization of transient occupancy disbursements (TOT).
- Supervisors who hide their participation in the STR economy.

Because of this discovery, the people would be best served if the Commission extended the time for the Sonoma County LCP, to develop better guidelines for govtech participation in permit, license, and enforcement schemes within the Coastal Zones.

I'm not certain how the CCC should cure the defects listed above. For policies regarding STRs, maybe a fresh start is needed, absent the incessant corruption and self-dealing. Maybe try to be more transparent and perform the people's business with good faith dealing from your lips, facts on your mind, honor in your soul, and an honest heart.

November 8, 2024

TO: Dr. Caryl Hart, Chairperson  
and California Coastal Commissioners  
455 Market Street, Suite 300  
San Francisco, California 94105

SUBMITTED: [NorthCentralCoast@coastal.ca.gov](mailto:NorthCentralCoast@coastal.ca.gov)

FROM: The Friends of Jenner Creek, P. O. Box 1, Jenner CA 95450  
Michelle Irwin, chairperson, [michelle.irwin@gmail.com](mailto:michelle.irwin@gmail.com)

ITEM: 8a Local Coastal Programs (LCPs)  
Sonoma County Local Coastal Program  
Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update)

Sonoma County is the proud birthplace of the Coastal Act and we shoulder the responsibility with great care and awareness, acknowledging those before us who recognized the unique characteristics of our fragile, rural coastal areas. In 1970 a campaign initiated by the village of Jenner, represented by the Jenner Coastside Conservation Coalition, stopped dredging of the Russian River and development of the surrounding acres that now make up Sonoma Coast State Park.

We urge the Coastal Commissioners as guardians of the California Coast to preserve our coastal zone by approving the recommendations of California Coastal Commission (CCC) staff. We wish to offer some additional considerations that your staff might have overlooked.

Many of us have engaged in the Sonoma County Local Coastal Plan (LCP) update for over a decade and are very familiar with the evolution of the proposal. Sonoma County's 'Permit Sonoma' (Planning Department) has worked diligently over those years which included multiple staff changes, and the pandemic. Our Planning Commission dedicated months of deliberation to amendments in order to recommend the LCP to the Board of Supervisors. We are grateful for the work done to get us to this point.

California Coastal Commission staff has diligently worked with Permit Sonoma staff, and been very helpfully responsive to citizen questions and input. We applaud your staff's commitment to assure compliance with the Coastal Act.

We request further consideration of the following:

- 1. Mineral Extraction: Section 30233 (a) item (5) pages OSRC 5 – OSRC 6 :** the Commission staff draft defines too broadly, so as to appear to permit “mineral extraction, **including** sand for restoring beaches, except in environmentally sensitive areas.” We suggest a more targeted wording of this section such as “...mineral extraction, **limited to** sand for restoring beaches, except in

environmentally sensitive areas.” We point out this need for specificity since mineral extraction in and around the world’s oceans is rapidly emerging as a damaging issue.

**2. Coastal Zone Industrialization: Section 30233 - OSRC pages 54-55:** Sonoma County’s coastal offshore waters lie within the Greater Farallones National Marine Sanctuary, which, as a federally-protected jurisdiction, permanently prohibits leasing for oil and gas and the construction of cables, pipelines, and other appurtenances associated with oil and gas and unconventional energy development (such as now being proposed outside of this Sanctuary). Studies now underway indicate that subsea electrical cable landfalls are one type of unanticipated use currently being considered by the energy industry for the Sonoma County coastline. We continue to stress that such industrialization of our only available commercial and sport fishing port, Bodega Bay, would be inappropriate and that shoreline coastal electrical substations and terrestrial transmission lines in the Coastal Zone that such cable landfalls would necessitate are also inappropriate. In addition, seafloor mining of the Gorda Ridge Polymetallic Sulfide deposits off the coast of Northern California and Southern Oregon has been targeted before, during the early 1980’s, and appears to be poised to re-emerge as a leasing and extraction target by the U.S. Department of Interior Hard Minerals Leasing Program. We wish to insure that the citizens of Sonoma County maintain primary local control over any proposal for coastal industrial facilities that may derive from any type of energy development or subsea mining activities offshore.

**3. Agricultural Visitor-Serving Uses (Agricultural Tourism) Section 30250 – pages AR-11 to AR-14:**


The definition of Ag tourism is too broad and lacks the controls and limitation to avoid the long-term problems associated with excess vacation rental which would undermine both the Coastal Act and agriculture in Sonoma County. The County proposal allows for “farmstays” and “hosted rentals” but provides no evidence how this would achieve their stated goal of “directly promotes ag sales” and does not provide any hard limits on these non-ag operations.

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**FW: Public Comment on November 2024 Agenda Item Thursday 8a - Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update).**

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**From** Travis, Galen@Coastal <Galen.Travis@coastal.ca.gov>  
**Date** Fri 11/8/2024 7:44 AM  
**To** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>

 2 attachments (6 MB)  
Outlook-x23zc0fp; sonoma\_lcp 07112023.docx.pdf;

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**From:** Sarah Jones <Sarah.Jones@MarinCounty.gov>  
**Sent:** Thursday, November 7, 2024 2:44 PM  
**To:** NorthCentralCoast@Coastal <NorthCentralCoast@coastal.ca.gov>  
**Subject:** Public Comment on November 2024 Agenda Item Thursday 8a - Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update).

Dear Coastal Commissioners:

Thank you for the opportunity to comment on the proposed Sonoma County Local Coastal Program Amendment. Marin County provided comments to the Sonoma County Board of Supervisors on March 8, 2021 and July 11, 2023. Our submitted comments to the County of Sonoma are attached.

The most important point for the Coastal Commission's consideration is the continuity of the coastal access route at the the county line. Namely, Sonoma County proposes a coastal access route at Estero Americano which is not linked to Marin County's planned access. Our adopted LCP recommends a trail alignment along Highway 1.

In addition, it has been brought to my attention that one or more of the maps in the draft LCP might contain an error regarding the location of the county line. The entirety of the south bank of the Estero Americano should appear within Marin County. This issue might have already been corrected so this point may no longer be relevant.

Thank you for your consideration.

. . . . .

**Sarah Bernstein Jones** (she, her)

Director

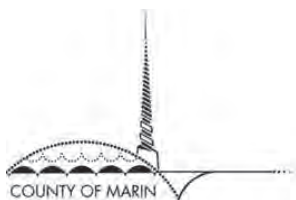
Marin County Community Development Agency

3501 Civic Center Drive Room 308

San Rafael, CA 94903

(415) 473-7001 T

[sarah.jones@marincounty.gov](mailto:sarah.jones@marincounty.gov)



Email Disclaimer: <https://www.marincounty.gov/privacy-policy>



## COMMUNITY DEVELOPMENT AGENCY

July 11, 2023

Claudette Diaz  
Sonoma County Permit and Resource Management Department  
2550 Ventura Ave  
Santa Rosa, CA 95403  
SENT VIA EMAIL

RE: Sonoma County Local Coastal Plan Update

Dear Ms. Diaz:

Thank you for the opportunity to comment on the proposed Sonoma County Local Coastal Plan. Marin County provided comments on the LCP Public Access Plan in the attached letter dated March 8, 2021. I am writing at this time to ensure that the Sonoma County Board of Supervisors is aware of points raised in that letter. Namely, the Marin County LCP does not continue Sonoma County's proposed coastal access route at Estero Americano. Our adopted LCP recommends a trail alignment along Highway 1.

In addition, it has been brought to my attention that one or more of the maps in the draft LCP might contain an error regarding the location of the county line. The entirety of the south bank of the Estero Americano should appear within Marin County. It is my understanding that you are already aware of this, and it is being addressed.

If you have any questions regarding this matter, you may reach me at (415) 473-7001 or by email at [sbjones@marincounty.org](mailto:sbjones@marincounty.org).

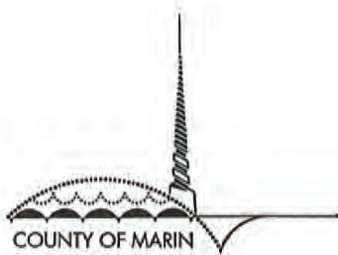
Sincerely,

Sarah B. Jones  
Director

Attachment: Letter from Tom Lai to Cecily Condon (March 8, 2021)

cc (by email):

Supervisor Dennis Rodoni  
Supervisor Katie Rice  
Tennis Wick, Director, Permit Sonoma  
Kathleen Kilgariff, Planner, Marin County Community Development Agency  
Ms. Nichola Spaletta



COMMUNITY DEVELOPMENT AGENCY  
PLANNING DIVISION

March 8, 2021 (Sent Via Email to [PRMD-LCP-Update@sonoma-county.org](mailto:PRMD-LCP-Update@sonoma-county.org))

Cecily Condon  
Sonoma County Permit and Resource Management Department  
2550 Ventura Venue  
Santa Rosa, CA 95403

RE: Sonoma County Draft Local Coastal Plan Update - Public Access Plan

Dear Ms. Condon:

I am writing in response to concerns raised by the Spaletta Families in their comment letter dated November 28, 2020 regarding the 2019 Public Review Draft of Sonoma County's Local Coastal Plan Update. Specifically, Section J-1 (Valley Ford Subarea 10) states:

"The coastal route follows the shoreline of the Bodega Harbor subdivision from Doran Regional Park to the Marin County line at the Estero Americano. This pedestrian only route is limited to use during low tides, although portions can be accessed anytime from Doran Beach, Pinnacle Gulch, and Short Tail Gulch Trail."

The recommended coastal route is depicted in Figure C-PA-1K which shows an access point (K-2) at the Estero Americano Preserve. Please note that Marin County does not identify existing, proposed, or continuation of a coastal access alignment from Sonoma County across the county line at the Estero Americano. The Marin County Local Coastal Program identifies the proposed coastal trail alignment inland along Highway 1, which provides a seamless transition into the proposed alignment at Valley Ford, as depicted in Figure C-PA-1k. Our Local Coastal Program identifies the inland (Highway 1) alignment for the proposed coastal trail in recognition of the difficult terrain, sensitive ecosystem, and potential conflict with agricultural uses associated with a coastal alignment.

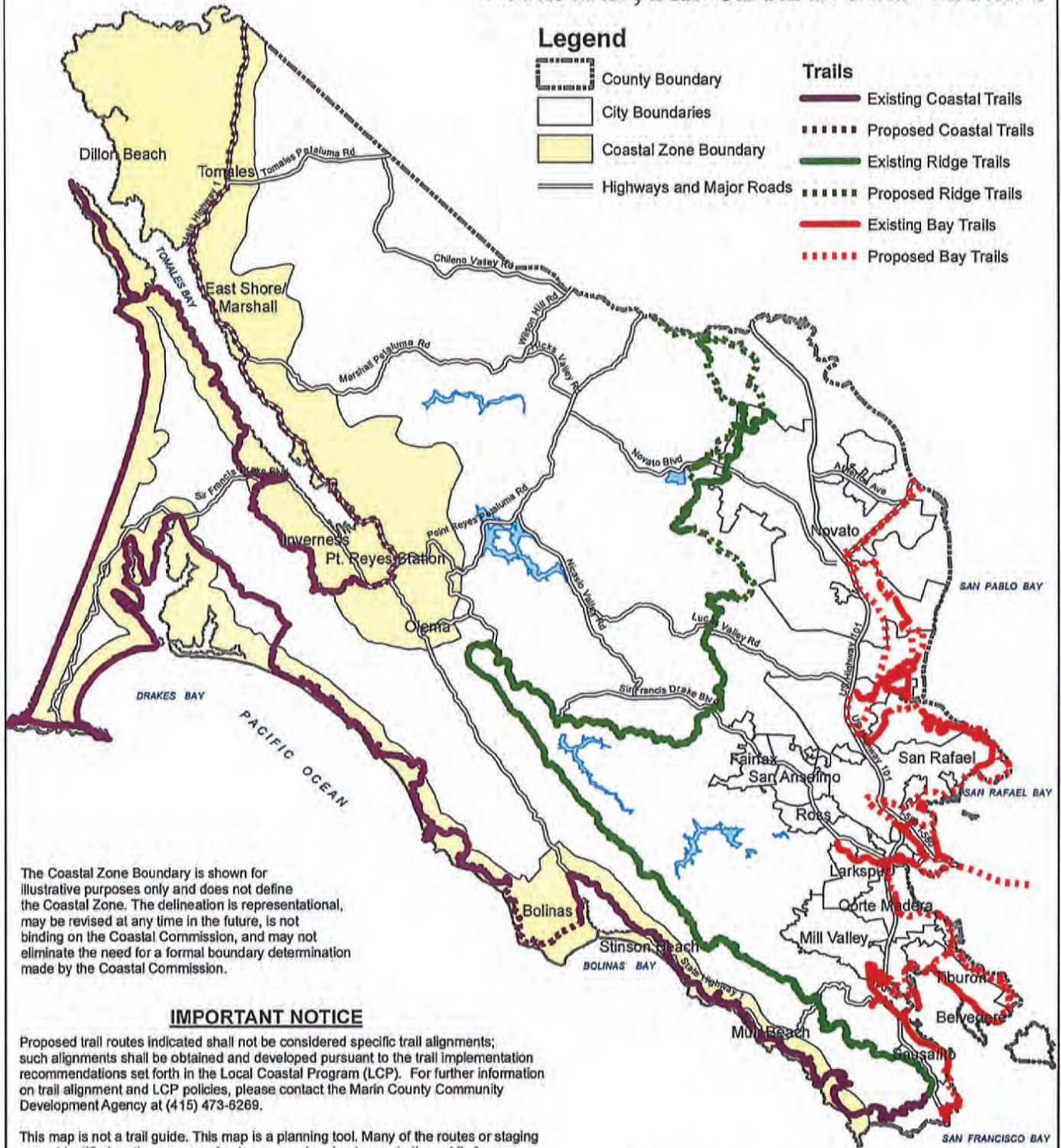
Please let me know if you have any questions regarding this matter. I can be reached at (415) 473-6292 or by email at [tlai@marincounty.org](mailto:tlai@marincounty.org).

Sincerely,

Tom Lai, Interim Director

Attachment: Marin County Local Coastal Program Map 25

# MAP 25 COASTAL, RIDGE AND BAY TRAILS



### Legend

- County Boundary
- City Boundaries
- Coastal Zone Boundary
- Highways and Major Roads
- Trails**
- Existing Coastal Trails
- Proposed Coastal Trails
- Existing Ridge Trails
- Proposed Ridge Trails
- Existing Bay Trails
- Proposed Bay Trails

The Coastal Zone Boundary is shown for illustrative purposes only and does not define the Coastal Zone. The delineation is representational, may be revised at any time in the future, is not binding on the Coastal Commission, and may not eliminate the need for a formal boundary determination made by the Coastal Commission.

### IMPORTANT NOTICE

Proposed trail routes indicated shall not be considered specific trail alignments; such alignments shall be obtained and developed pursuant to the trail implementation recommendations set forth in the Local Coastal Program (LCP). For further information on trail alignment and LCP policies, please contact the Marin County Community Development Agency at (415) 473-6269.

This map is not a trail guide. This map is a planning tool. Many of the routes or staging areas identified on the map are simply proposed and not open to the public for any purpose. This map does not convey any rights to the public to use any trail routes shown on this drawing; nor does this map exempt any person from trespassing charges. For copies of maps about existing trails that are available for public use, contact the Marin County Department of Parks and Open Space at (415) 473-6387.

Note: For questions or comments on these State and Regional trails, please contact the appropriate agency.

SOURCE: Association of Bay Area Governments (Bay and Ridge Trails), California State Coastal Conservancy, California Coastal Commission (Coastal Trails).

0 1.25 2.5 5 7.5 10 Miles

THIS MAP WAS DEVELOPED FOR PLANNING PURPOSES AND IS ILLUSTRATIVE ONLY. THE COUNTY OF MARIN IS NOT RESPONSIBLE OR LIABLE FOR USE OF THIS MAP BEYOND ITS INTENDED PURPOSE. THIS MAP IS REPRESENTATIONAL ONLY. DATA ARE NOT SURVEY ACCURATE.

Date: 12/22/2016 File: Map 25\_Coastal Ridge Bay Trails.mxd

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**Public Comments - Nov 14, 2024, Agenda Items 8 and 10c**

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**From** Carmen Estrada <cestrada.bhha@gmail.com>

**Date** Fri 11/8/2024 12:41 PM

**To** NorthCentralCoast@Coastal <NorthCentralCoast@coastal.ca.gov>

**Cc** Stevens, Eric@Coastal <eric.stevens@coastal.ca.gov>; Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>

To: Members of the California Coastal Commission:

Thank you for forwarding the notice regarding the CCC hearing on 11/14/2024. Please consider this as public comments on the two items below.

**I. Comments Opposing Appendix B Public Access Plan, I-35 Estero Ranch Preserve, Sonoma County Local Coastal Plan – Coastal Commission Agenda Item 8; November 14, 2024**

**II. Comments Opposing The Wildlands Conservancy CDP Application 2-24-0867; Agenda Item 10c; November 14, 2024**

I am the President of the Bodega Harbour Homeowners Association (BHHA). The first item is a planned "future" public access entry to the Wildlands' ranch in the draft Local Coastal Plan, Public Access, Appendix B, I-35 Estero Ranch Preserve; the second item is the Wildlands CDP application which includes the installation of the gate on the boundary of our property at the Shorttail Gulch trail easement. Many Association members, owners, and residents are concerned about these items, and oppose approval of the Wildlands' proposal to install a gate on Shorttail Gulch trail for entry to their property. Any public comments in opposition related to either item should be understood as an opposition to both.

Both agenda items relate to Sonoma County and The Wildlands Conservancy seeking future public access to Estero Ranch through our community, and installing a gate on BHHA property (Shorttail Gulch Trail). Both concern the single issue whereby Wildlands seeks public access to their property through our association's *public access trail to the beach* that has been in existence for nearly 50 years. That public access trail is to the Shorttail Gulch beach area as stated in the grant deed given to the county by the developer of our community in 1977. The Shorttail Gulch trail public access does not grant access to a neighboring ranch property.

The BHHA Board opposes both propositions for many reasons already presented to the county, Wildlands, and the Commission. As long ago as April, 2021 our counsel wrote to the Wildlands Executive Director, Frasier Haney, and opposed the gate installation. Nonetheless Mr. Haney and the Wildlands staff continue to present this proposed public entry as a viable option to the Commission, the Sonoma County Parks Department, the county planning department, and the county Board of Supervisors. You have been misled.

The BHHA has a volunteer Board of Directors and the past Presidents have all opposed the installation of a gate on Shorttail Gulch for entry to a neighboring ranch development. Most recently former President Kim Kilkenny communicated our position to Luke Henningsen in the Commission's San Francisco office. As local residents and neighbors, we have always understood that the proposed public entry at Shorttail Gulch is not a viable option. Nor is it a legal one.

As President of the Bodega Harbour Homeowners Association, I am proud to represent the interests of my neighbors, most of whom are retirees, including former teachers, social workers, small business owners, and others. We support our community and are committed and excellent stewards of the precious coast, including the public access that has been part of our community since it was founded. We watched as Wildlands had to relinquish its original plan for direct access from Highway One for their ranch development because those plans disregarded the legal rights of neighboring landowners. Wildlands is now turning to Plan B, pushing all daily public access to their property through our residential community, again disregarding the legal rights of the neighboring landowner, here the BHHA.

Thank you for your consideration.

Carmen Estrada  
President  
Bodega Harbour Homeowners Association

Spaletta Family  
PO Box 506 – 1250 Estero Road  
Valley Ford, CA 94972

California Coastal Commission  
45 Fremont Street, Suite 2000  
San Francisco, CA 94105

Subject: Opposition to Sonoma County Local Coastal Program Amendment No. LCP-2-SON-23-0058-2 (Land Use Plan Update)

Dear California Coastal Commissioners,

I am writing to formally express my opposition to the proposed Sonoma County Local Coastal Program (LCP) Amendment No. LCP-2-SON-23-0058-2, also known as the Land Use Plan (LUP) Update. My concerns center on the potential environmental and safety risks posed to the Estero Americano by the proposed development, including boat ramps, pull-outs, put-ins, picnic areas, restrooms (including port-a-potties), and related infrastructure. Additionally, the California Coastal Trail alignment raises serious questions about feasibility, public safety, and consistency with the Coastal Act in light of evolving environmental conditions.

The Estero Americano is home to a rich diversity of rare and sensitive species, including the sea otter (*Enhydra lutris*), the western pond turtle (*Actinemys marmorata*), and the silver spot butterfly (*Speyeria zerene*). These species, along with the salt marsh bird's-beak (*Chloropyron maritimum*), California tiger salamander (*Ambystoma californiense*), and western snowy plover (*Charadrius nivosus*), depend on the Estero's undisturbed ecosystem for their survival. Development near or within this sensitive area would irreparably harm these species through habitat destruction, contamination, and disturbance. Protecting this critical habitat is paramount to preserving California's unique coastal biodiversity.

Marin County has already recognized the importance of preserving and protecting the Estero Americano in its Local Coastal Program. It is essential that Sonoma County adopt a consistent approach to safeguard this shared and fragile body of water for the future. Keeping the Estero Americano undeveloped aligns with the broader goals of the Coastal Act and ensures the continued survival of these rare species.

Regarding the California Coastal Trail, there is currently **no continuous coastline connection** into Marin County at the Estero Americano Marin County Line on any California maps. Marin County's Local Coastal Program has prudently directed the trail alignment inland along Highway 1, reflecting the challenging terrain, sensitive ecosystems, and conflicts with agricultural uses. The steep cliffs, rocky shorelines, and dynamic nature of the estuary—where the mouth opens and closes with

storm events—make a coastal trail alignment impractical, unsafe, and unsustainable, especially given rising sea levels and climate change.

Furthermore, it is crucial to review braided segments of the California Coastal Trail that were established over 40 years ago. Due to changing coastal conditions, including sea level rise, hazardous terrain, and increased risks to public safety, revisiting these alignments is necessary to ensure they comply with the California Coastal Act. Future trail alignments must prioritize public safety, environmental preservation, and long-term sustainability.

I respectfully urge the California Coastal Commission to:

1. Reject any proposed development of boat ramps, pull-outs, put-ins, picnic areas, restrooms (including port-a-potties), and related infrastructure near or within the Estero Americano to protect the sensitive plant and animal species that rely on this ecosystem.
2. Direct Sonoma County to align its LUP with Marin County's inland placement of the California Coastal Trail along Highway 1 to avoid the hazardous and environmentally sensitive coastal alignment.
3. Initiate a review of braided segments of the California Coastal Trail established over 40 years ago, with a focus on adapting these alignments to address sea level rise, hazardous conditions, and public safety, in accordance with the Coastal Act.

The Estero Americano is an irreplaceable resource for California's coastal environment. Protecting it from harmful development and ensuring safe, sustainable public access through thoughtful planning is essential for preserving this unique coastal ecosystem and the rare species that depend on it. I trust the Commission will act to uphold the principles of the Coastal Act and protect this area for generations to come.

Thank you for your attention to this critical matter.

Sincerely,

*The Spaletta Family*

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**FW: Comments. LCP-2-SON-23-0058-2**

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**From** NorthCentralCoast@Coastal <NorthCentralCoast@coastal.ca.gov>

**Date** Mon 11/11/2024 3:31 PM

**To** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>

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**From:** Kimberly Burr, Esq. <kimlarry2@comcast.net>

**Sent:** Friday, November 8, 2024 4:23 PM

**To:** NorthCentralCoast@Coastal <NorthCentralCoast@coastal.ca.gov>

**Cc:** Mike McGuire <senator.mcguire@senate.ca.gov>; damon@damonconnolly.com; Jason Liles <jason.liles@sen.ca.gov>

**Subject:** Comments. LCP-2-SON-23-0058-2

Dear Coastal Commission:

Thank you for your important and conscientious work.

I am writing to relay my concerns related to the draft's treatment of environmentally sensitive habitat areas (ESHA).

The paragraph below found in the summary of the draft plan, perpetuates subjective language that undermines protections for natural communities.

““The proposed buffer policies for ESHA mandate a 100-foot minimum buffer, which is the same as the currently certified LCP ESHA buffer requirement. However, the proposed Update has a buffer reduction allowance for instances when a biological assessment, the nature of the proposed development, and appropriate mitigation is included so as to dictate that a smaller buffer would offer **adequate** protection. Appendix E lays out circumstances and considerations that may allow such buffer reductions, so long as such reductions protect the resources to the maximum extent **feasible**. Further, in no case, per the proposed Update, can the buffer to ESHAs be reduced to less than 50 feet, regardless of any potentially mitigating circumstances. As proposed, the policies regarding ESHA buffers assure *adequate* protection of the resources and **reasonable reduction** allowances when appropriate given the relevant circumstances.”” (Emphasis added)

““Proposed policies also provide that development shall be sited and designed to prevent impacts that would degrade adjacent habitat areas, significantly alter landforms, substantially remove vegetation, or lead to impacts from excessive noise and light. ““

Language like “where feasible” and “significant” and “substantial” undermine staff’s ability to protect areas. They are vague and introduce too much leniency. Likewise words like reasonable and adequate are not protective but set up our coast for subjective and vague opinions and decisions.

The standards must reflect our current situation which is dire.

ESHA need maximum protections not minimal and not only when some high threshold like substantial or significant is crossed.

PLEASE remove all these qualitative words.

The standard should be if an impact is "potentially adverse", then the activity must not be allowed.

This modification to the policies meant to protect ESHA as intended, therefore would simply remove such vague and subjective terminology. Please substitute quantitative standards and maximum protections.

ESHA can be considered to be the coastal prairie in its entirety. Also the migration, feeding, hunting, sheltering, breeding, areas important to species that are being squeezed and are becoming more scarce and threatened by the day. Being proactive is essential.

All habitat conservation plans, restoration, critical habitat, corridors, and like, all habitat for sensitive and special status species, must be fully protected as ESHA. This is unfortunately not what the proposed ESHA maps reflect. They must be modified to properly protect the coastal zone's rare, sensitive, and limited natural space in this relatively unspoiled geographical zone.

Please give staff constructive feedback and direction that properly and effectively protects ESHA broadly defined.

Thank you.

Kimberly Burr  
Green Valley Creek  
Forestville - Sonoma County

**LAW OFFICES OF THOMAS D. ROTH**  
**1900 S. Norfolk Street, Suite 350**  
**San Mateo, CA 94403**  
**(415) 508-5810**  
**Rothlaw1@comcast.net**

November 8, 2024

**By E-Mail**

Kate Huckelbridge  
Executive Director  
California Coastal Commission  
455 Market Street, Suite 300  
San Francisco CA 94105  
Kate.Huckelbridge@coastal.ca.gov

Stephanie Rexing  
North Central Coast District Manager  
California Coastal Commission  
North Central Coast Office  
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Eric Stevens  
Transportation Program Analyst  
California Coastal Commission  
301 E. Ocean Blvd, Suite 300  
Long Beach, CA, 90802  
[eric.stevens@coastal.ca.gov](mailto:eric.stevens@coastal.ca.gov)

Board of Supervisors (by overnight)  
Sonoma County  
2550 Ventura Avenue  
Santa Rosa, CA 95403

Tennis Wick (by overnight)  
Director  
Permit Sonoma  
Sonoma County  
2550 Ventura Avenue  
Santa Rosa, CA 95403

Bert Whitaker (by overnight)  
Director  
Sonoma County Regional Parks  
400 Aviation Blvd., Suite 100  
Santa Rosa, CA 95403

**Re: Bodega Harbour HOA Comments on Consolidated CDP Application No. 2-24-0867 by The Wildlands Conservancy (“TWC”); Agenda Item No. 10c, Nov. 14, 2024; and**

**Bodega Harbour HOA Comments on Sonoma County Local Coastal Program Amendment No. LCP-2-SON-23-0058-2 (Land Use Plan Update), Agenda Item 8a, Nov. 14, 2024**

Dear Government Officials:

This law firm represents Bodega Harbour HOA (“Bodega Harbour”).

On behalf of Bodega Harbour, we submit the following comments on the consolidated coastal development permit (“CDP”) application No. 2-24-0867, submitted to the California Coastal Commission (“CCC”) by The Wildlands Conservancy (“TWC”) for recreational use of the old Estero Ranch, and a related public access plan. The Bodega Harbour subdivision borders the Estero Ranch that is the subject of the CDP application and is directly and adversely impacted by TWC’s proposal.

In addition, Bodega Harbour submits comments on Sonoma County Local Coastal Program Amendment No. LCP-2-SON-23-0058-2 (Land Use Plan Update).

Bodega Harbour also submits in support of these comments via hand delivery two (2) USB sticks containing supporting and backup documentation that should be included in the administrative record for each of the agenda items listed above.<sup>1</sup>

**1. Overview: Neither TWC Nor Sonoma County Have Any Legal Right to Use the Shorttail Gulch Trail to Access Estero Ranch, or to Allow Public Access Via the Shorttail Gulch Trail.**

TWC’s application includes a public access plan that proposes allow access to the Estero Ranch via the Shorttail Gulch trail, with a new access gate, an information kiosk, restrooms and picnic tables. TWC’s application states “The Wildlands Conservancy

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<sup>1</sup> Bodega Harbour submitted Public Records Act requests to the CCC (on September 5, 2024) and Sonoma County (on August 14, 2024). Neither entity completed their response by the date these comments were due. Instead of providing responsive documents electronically, the CCC sent a email to Tom Roth late on November 7, 2024 stating that the “paper file” could be reviewed in the CCC’s office if a visitation was scheduled. The CCC response was more than two months after the PRA request. Given that the CCC is not open on weekends, and Monday, November 11, 2024 is a holiday, and given that the CCC hearing is November 14, 2024, there is inadequate time to schedule a visit, travel to the CCC office, review the files, obtain copies and review and analyze the information prior to November 14, 2024. Since some relevant information has not been produced by these agencies, Bodega Harbour reserves the right to supplement the record during court proceedings since Bodega Harbour exercised reasonable diligence to obtain the information and the agencies failed to provide all documentation in a timely or easily accessible manner, thus foreclosing the possibility to review, analyze and submit all relevant documentation to the CCC prior to the November 14, 2024 hearing. CCP § 1094.5(e).

intends to install a fabricated metal pedestrian gate along the western fence line of the property adjoining Regional Park's Shorttail Gulch Trail. This gate will be used to provide public access and passive recreation activities to the general public. Initially the gate will be used only for staff led events, but will ultimately be open for daily use and hiking opportunities free of charge."<sup>2</sup> TWC ". . . acknowledge[s] that pedestrian access may also occur from the public road system and dedicated public areas within the Bodega Harbour Homeowners Association."

The CCC's staff report further states that "once the trail system is in place, public access to the trails on the preserve will begin at a gate on the property connected to the Shorttail Gulch Trail that connects public streets in the adjacent Bodega Harbour residential subdivision." (CCC Staff Report at 2.)

There is a serious problem with TWC's public access proposal. Such public access using the Shorttail Gulch trail would be unlawful because it:

- exceeds the scope of underlying easements held by Sonoma County;
- would result in an unlawful surcharge of the underlying easements held by Sonoma County;
- violates and breaches a 1977 Stipulated Judgment and Settlement Agreement;
- contradicts representations made over the years by Sonoma County, which is estopped from any type of approval of the proposed Estero Ranch public access using the Shorttail Gulch easement; and
- would result in substantial adverse, unmitigated impacts to the Bodega Harbour subdivision.

The Shorttail Gulch trail is located entirely within Bodega Harbour, and Bodega Harbour has **not authorized** the proposed access to the Estero Ranch using that trail. While the trail includes a public easement for limited pedestrian traffic, the easement exists expressly and solely for the limited purpose of accessing **the beach, not for accessing the adjacent private property owned by TWC**. TWC's proposal to make Shorttail Gulch trail the primary public access to Estero Ranch far exceeds the purpose and scope of the easement, as articulated in a 1977 Stipulated Judgment and associated Settlement Agreement, as well as in the grant deed conveying the easement to Sonoma County.<sup>3</sup>

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<sup>2</sup> A survey prepared for Bodega Harbour indicates that the gate would be next to Easement G.

<sup>3</sup> A lawyer for TWC characterizes Bodega Harbour's argument as: "once members of the public have used the public Shorttail Gulch hiking trail to access the beach (which is also public property) they must not then continue onto any other public property or public hiking trails." (CCC Staff Report, Ex. 6.) TWC and its lawyer are confused. That's not what Bodega Harbour argues. Bodega Harbour does not assume that once the public uses the easement to access the beach, he or she will then seek to access the new 5-mile trail system. There is no evidence in the record that is how the public will use the trail. More logically, the public will use Easement G to simply access the Estero Ranch trail system and *won't go to the beach at all*. That's why this CDP application expands the purpose and scope of the existing public easements. Taking it from the other direction, public access from the coast to the Estero Property is less of a problem

Neither TWC, Sonoma County nor the CCC has any lawful authority to authorize public access to the Estero Ranch via the Shorttail Gulch trail, as proposed. For this reason, **the CCC must deny the CDP application, or, at least, deny any authorization for public access to the Estero Ranch via the Shorttail Gulch trail, or otherwise place restrictions on that access that are consistent with the underlying easements and Stipulated Judgment.**

Another problem with TWC's application is that TWC proposes an additional public access point from the Pinnacle Gulch trailhead. (See CCC Staff Report at 11 ["The Pinnacle Gulch Trail . . . includes a public parking lot . . . . Users of the future trails on [Estero Ranch] . . . could park at the Pinnacle Gulch Trail head parking lot and walk . . . to Estero Ranch.].")

That separate Pinnacle Gulch easement is likewise dedicated for beach access, not as an access route to the Estero Ranch. Thus, that proposal also exceeds the scope of that separate easement held by Sonoma County; would result in a surcharge of the easement; violates and breaches the 1977 Stipulated Judgment and Settlement Agreement, and would result in substantial adverse impacts to the Bodega Harbour subdivision.

The CCC's conclusion that the Pinnacle parking lot would provide public parking for access to the Estero Ranch again ignores that the lot was intended to serve public access to the Pinnacle Gulch trail and that lot is fully used for that purpose. There is no excess capacity. Nor is there excess capacity on public streets within Bodega Harbour. The study submitted by TWC is essentially worthless. (CCC Staff Report, Ex. 7.) That study admits that its conclusion as to whether there will be adequate parking is based on "observations during a [singular] site visit as well as *anecdotal information* about parking usage, the existing on-street and off-street parking supply . . ." (Id. at 7.) That is not substantial evidence. In addition, the study tacitly admits that its authors did not speak to or interview a single resident or Board member from Bodega Harbour – people who have first-hand knowledge of the parking situation. The parking study is not substantial evidence. Also, other experts with trail system experience question whether the methodology used by TWC's expert is a proper methodology for determining adequate parking for a trail system. (Nov. 8, 2024 letter from Paul Kephart.) It is an abuse of discretion to employ a methodology that lacks substantial evidence in the record to support it. *Tsakopoulos Investments, LLC v. County of Sacramento* (2023) 95 Cal.App.5th 280, 306. The parking space need methodology used for this project is not supported by substantial evidence.

Bodega Harbour has previously raised these concerns directly with TWC and Sonoma County, but neither entity has responded in any substantive way. In its application, TWC does not assert that it or the County has any legal authority to authorize or use the easement for public access to the Estero Ranch, nor does it even acknowledge the issue.

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because the natural landscape, distance from other parking areas, and tide conditions that frequently block access provide a natural limit on public access from that direction. TWC doesn't seek to limit access from the beach but rather seeks to open new access from the Bodega Harbour subdivision. The consequence is that the public will use Easement G not for beach access but rather as a primary public access to the Estero Ranch property, which was never intended by the grant of easement.

## 2. Background on Estero Ranch Access

Estero Ranch consists of 547-acres. In late 2015, TWC bought the ranch and the Sonoma County Agricultural Preservation and Open Space District simultaneously acquired a conservation easement and recreation covenant over the property.

At that time, it was represented that “the property is accessed from Estero Lane about two miles from Highway One.” (Nov. 17, 2015 County of Sonoma Agenda Item Summary Report.) The Estero Ranch is only accessible by vehicle via Estero Lane.

However, during due diligence for the sale of the ranch to TWC, the title company opined that the State had agreed that Estero Lane should be private and thus warned that “there is no public access over Estero Lane.” As a result, when it purchased the property in December 2015, TWC recorded a conservation easement on Estero Ranch agreeing that “public access to the Property will be from the coast”, i.e., not from public roads leading to Shorttail Gulch trail, but rather *from the coast up the trail to Estero Ranch*. (p. 3.) But even that requirement is unlawful because the Shorttail Gulch trail was created to provide public access to and from the beach from the Bodega Harbour subdivision, **not** from Estero Ranch. **Nothing** in the conservation easement suggests that the public could use the Shorttail Gulch trail or connector easement from public roads within the Bodega Harbour subdivision to access Estero Ranch.

In 2020, local ranchers settled a lawsuit with TWC, wherein TWC agreed that only limited public access to the Estero Ranch via Estero Lane is allowed. That apparently has compelled TWC to find other public access points to the ranch. (See also CCC Staff Report at 15-16, and 11 [“TWC is currently unable to provide general public access to the Preserve via Estero Lane.”].)

Sonoma County has represented that the Shorttail Gulch trail merely provided an “opportunity” for future access to the Estero Ranch **from a public beach**. (Nov. 17, 2015 County of Sonoma Agenda Item Summary Report.) That representation of an “opportunity” for “future access” confirms that as of 2015 **no public access to Estero Ranch from Shorttail Gulch trail actually existed**. A 2021 Sonoma County report likewise noted that there would be several “potential” public access points, meaning that as of 2021 **no such legal access had been secured**. (Feb. 9, 2021 County of Sonoma Report.)

## 3. Special Condition 4 Is Inadequate, Illusory, Contradictory and Unreasonable Given the CCC’s Erroneous Legal Assertions Throughout the Staff Report That No Additional Approval Is Necessary to Expand the Use of the Easements.

The CCC staff report repeatedly opines that Bodega Harbour’s concerns about the legality of expanding the public pedestrian easements are “meritless,” and that there is no limitation of any kind on the public using those easements. In the same breath, the CCC includes Special Condition No. 4 that purports to require that TWC provide to the CCC Executive Director (without any public review or input) evidence that it has obtained any authorizations from other entities or “evidence that no such authorizations are needed, “including any necessary agreement from Sonoma County to use the

Shorttail Gulch Trail.” (CCC Staff Report at 8.) Special Condition 4 is illusory and circular.<sup>4</sup> Indeed, TWC could claim to comply by doing nothing more than submitting the erroneous CCC staff report itself as “evidence” that no authorizations are needed because that is the conclusion that the CCC reaches. (See CCC Staff Report at 19 [“public pedestrians making use of the trail do not need to seek out specific permission from Sonoma County to make use of the trail, even if they are diverting onto the TWC property.”] Special Condition 4 is not a real condition, but rather window dressing intended to try to insulate the CCC from legal challenge. It won’t work.

Special Condition 4 also renders the consolidated CDP application noncompliant with Pub. Res. Code § 30601.3 because it substantially impairs public participation. Because the so-called evidence is submitted directly to the CCC Executive Director out of public view and without any opportunity for public input, public participation is substantially impaired. Special Condition 4 is specifically designed to exclude the public and Bodega Harbour from contesting any assertion by Sonoma County that the public easements may be expanded as proposed by TWC.

#### **4. A Consolidated CDP Is Unlawful in this Situation.**

As a preface, it must be noted that the CCC’s effort to hear this permit application as a consolidated CDP application is unlawful. Public Resources Code § 30601.3 provides, in relevant part,

“(a) Notwithstanding Section 30519, the commission may process and act upon a consolidated coastal development permit application if both of the following criteria are satisfied:

(1) A proposed project requires a coastal development permit from both a local government with a certified local coastal program and the commission.

(2) The applicant, the appropriate local government, and the commission, which may agree through its executive director, consent to consolidate the permit action, provided that public participation is not substantially impaired by that review consolidation.”

Section 30601.3 contains two key prerequisites, but neither have been met here.

First, the CCC must establish that both a CCC permit and a Sonoma County permit would be required in this case. The CCC has failed to establish that in the record. There is no evidence in the record that “the proposed project involves development in both the Commission’s retained coastal development permit (CDP) jurisdiction, as well as in areas in Sonoma County’s CDP jurisdiction under the County’s LCP.” (See CCC Staff Report at 12, failing to cite any evidence.)

Second, while TWC, Sonoma County, and the CCC, may consent to a consolidated CDP that is allowed only if “public participation is not substantially impaired by that review consolidation.” Public participation has been substantially impaired here. Bodega Harbour, over the course of years, has repeatedly alerted Sonoma County that TWC’s proposed public access plan is unlawful. Just prior to a County hearing, the County shifted gears and announced there would be no County hearing but rather only a CCC hearing on a consolidated permit.

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<sup>4</sup> Pub. Res. Code § 30607 mandates that CDP terms and conditions be “reasonable.” Special Condition 4 does not meet that standard.

The CCC hearing is being held in San Francisco, nearly 60 miles from the Sonoma County Board of Supervisors, and nearly a 2-hour drive (with morning traffic coming into the City) (4-hours round trip). That imposes a significant burden on the public and residents of Bodega Harbour to attend the hearing to oppose the public access plan.

Also, it should be noted that when the application was pending before Sonoma County (prior to the coastal development permit consolidation), the County failed to provide notice of this CDP application to Bodega Harbour even though Bodega Harbour immediately borders the Estero Ranch property.

#### **5. TWC's Public Access Plan Would Exceed the Purpose and Scope of the Existing Public Access Easement from Bodega Harbour to the Beach.**

In 1968, the Sonoma County Planning Commission approved the Bodega Harbour subdivision. With the passage of the California Coastal Zone Conservation Act in 1972, a dispute arose as to whether any part of the development was subject to the new coastal laws. In June 1977, Transcentury Properties, Inc. and the California Coastal Zone Conservation Commission agreed on a Stipulated Judgment that settled litigation stemming from that dispute. (*Transcentury Properties, Inc. v. California Coastal Zone Conservation Commission*, Case No. 73865, Sonoma County Superior Court ["1977 Stipulated Judgment"].)

The Stipulated Judgment included a binding Settlement Agreement.<sup>5</sup>

Section XI.4 of binding Settlement Agreement required the creation of certain easements, including "a **reasonable public pedestrian easement** between the existing public easement in Shirt-tail Gulch and Osprey Drive shall be dedicated to Sonoma County prior to the close of the escrow provided for herein." That Settlement Agreement paragraph contains a typo – the reference to the existing public easement should have been to the "Short Tail Gulch" easement. All references in the settlement documents to "Shirt-tail Gulch" should read as "Short Tail Gulch."

The Settlement Agreement required the creation of a "connecting" public pedestrian easement between the then-existing "Short Tail Gulch" easement and Osprey Drive. The then-existing easement was a drainage and pedestrian easement leading to the beach that was created in 1973 (and confirmed in 1977) as part of an approved subdivision map.

The connecting easement referred to in the Settlement Agreement is known as **Easement G**. Easement G is located entirely on Bodega Harbour's private property. Nothing in the Settlement Agreement suggests that Easement G would or could be used by private parties or the public to access the Estero Ranch, or was being created for such a purpose. Rather, Easement G connected Osprey Drive to the existing beach access easement. Easement G therefore was intended to facilitate public pedestrian access *from Osprey Drive to the beach via the existing pedestrian easement*, and nowhere else.

The Settlement Agreement included an "Exhibit B." Exhibit B is a grant deed of

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<sup>5</sup> Sonoma County also was a party to that litigation and is bound by the Stipulated Judgment.

open space and easements, including Easement G. The grant deed conveyed to Sonoma County for park and public recreational use beach and bluff property within the development, known as Tract A. It also conveyed to Sonoma County an easement for a public parking area, known as Tract B, to facilitate beach access. As expressed by the grant deed, "Grantor desire[d] to insure reasonable **public access to and full public use of all beach areas** in the Bodega Harbour Development . . . ." The grant deed also provided that Sonoma County was granted a "pedestrian access easement" "to connect a presently dedicated easement through Shirt [sp] Tail Gulch **to the beach** with public roads as planned under the new development plan agreed to by the parties hereto."

Clearly then, the easements being granted to Sonoma County were expressly for the purpose of providing public access from public roads within Bodega Harbour to the "beach." They are expressly for *that purpose*. The grant deed expresses no other purpose.

Because the purpose of the grant deed with regard to "public access" is to "insure reasonable public access to and full public use of all **beach area** within the Bodega Harbour Development," the grant deed establishes the purpose of Easement G as accessing the beach by connecting Osprey Drive with the Shorttail Gulch trail, which, in turn connects to Tract A, which is the beach and bluff face.

Neither the Stipulated Judgment, the Settlement Agreement, nor the grant deed suggest that Easement G's purpose was to provide public or private access to Estero Ranch.

Despite this, TWC's proposed public access plan and CDP seek to create an access point and gate off of Easement G, for the purposes of accessing a trail system (not existing, but to be developed) on the Estero Ranch. That flatly exceeds the purpose of Easement G.

The purpose of Easement G cannot now be converted to public access to the Estero Ranch. *State ex rel. Rich v. Wolfe* (1959) 80 Idaho 563, 565 [The reservation of a "farm crossing" only allowed use for agriculture and uses allowing a crossing for a new motel were a surcharge on the easement].)

The California Coastal Zone Conservation Commission was a party to the Stipulated Judgment and is bound by it. The CCC is the successor-in-interest to the California Coastal Zone Conservation Commission and, therefore, is likewise bound by the Stipulated Judgment and Settlement Agreement. Pub. Res. Code, § 30331 ["The commission is designated the successor in interest to all remaining obligations, powers, duties, responsibilities, benefits, and interests of any sort of the California Coastal Zone Conservation Commission . . ."]. The CCC must live by the terms of that judgment and settlement.

Likewise, Sonoma County was a party to *Transcentury Properties, Inc. v. California Coastal Zone Conservation Commission*, Case No. 73865, Sonoma County

Superior Court, and is bound by the 1977 Stipulated Judgment.<sup>6</sup>

**6. The CCC Has Misinterpreted the Term “Reasonable Public Pedestrian Easement,” and Ignores Fundamental Principles of Easement Law.**

The CCC and TWC contend that the term “reasonable public pedestrian easement” in the Settlement Agreement authorizes the use of the trail easements to allow unlimited public access via public roads and those easements to the Estero Ranch. (CCC Staff Report at 18.) The CCC argues that the Settlement Agreement does not define the word “reasonable,” and “the prohibition on the use of a public easement to facilitate public access is clearly an unreasonable interpretation.” (Id.) The CCC is mistaken. The CCC is seeking to apply the word “reasonable” in a way that is wholly untethered from easement law. That is both unreasonable and unlawful.

An easement may be “appurtenant,” or “in gross.” An appurtenant easement is one where the right to use the easement is dependent upon a right held in a particular parcel of land. *Committee to Save Beverly Highlands Homes Assn. v. Beverly Highlands Homes Assn.* (2001) 92 Cal.App.4th 1247, 1269 [“An easement appurtenant to the land is ‘attached to the land of the owner of the easement, and benefits him as the owner or possessor of that land.’”].

Easement G is an easement *appurtenant* to Tracts A, B and the subdivision’s dedicated roads. Tract A is a beach on the edge of the Bodega Harbour subdivision, and Tract B is a parking area adjacent to Mockingbird Road for the public to access the Pinnacle trail directly to the beach. In other words, Easement G benefits the Bodega Harbour development and access to the beach. Even though it is also appurtenant to the public roads, public access to those roads was intended to facilitate the public’s access *to the beach in Tract A, not to the Estero Ranch*. Nothing in the Stipulated Judgment, the Settlement Agreement or the grant deed indicate that Easement G is appurtenant to the Estero Ranch.

The CCC is erroneously, *sub silentio*, assuming that Easement G is appurtenant to the Estero Ranch. Neither the CCC, TWC nor the County has presented any evidence that in the record.

Likewise, the 1973/1977 pedestrian easement also is not appurtenant to the Estero Ranch. Neither the CCC, TWC nor the County has presented any evidence of that in the record. The original map and grant also indicates that the 1973/1977 pedestrian easement is appurtenant to the Bodega Harbour subdivision land. Again, the purpose

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<sup>6</sup> TWC proposes to “phase in” the new public access. (See CCC Staff Report at 11 [“TWC intends to provide general public access . . . as quickly as possible, but also proposes to phase in such access over time as a means of attempting to appease the concerns of the HOA . . . .”]; see also id. at 16.) The HOA is not appeased. Phased implementation (delaying about 1-year) doesn’t make the actions legal, or reduce the burdens of the unlawful action. At most, it merely delays the burdens. It also constitutes an anticipatory breach of the Settlement Agreement, Stipulated Judgment and easement grants by the CCC and the County. TWC also proposed to remove some existing buildings and farm infrastructure but does not indicate if it plans to use the new access gate or the pedestrian easements to accomplish that. (CCC Staff Report at 12.)

was to provide public access to the beach on Tract A.

The CCC misinterprets the modifier “reasonable” because it disregards the required “appurtenance” analysis that is required by easement law.

The CCC further argues that because the easement is described as a “pedestrian” access easement” that public pedestrians may use the easement for any purpose and anyway so long as they are pedestrians. (CCC Staff Report at 18.) That analysis is also in error. Public pedestrian use must be consistent with the purpose and scope of the easement. The purpose was to facilitate public access to the beach and not the Estero Ranch. The new uses exceeds the purpose of the easement grant.

Additionally, the expanded proposed use would greatly increase the public traffic since the easement would now be used not only to access the beach but to access a new 5-mile trail system that extends inland. Thus, the new use exceeds the original scope of the easement. There is not requirement that the easement specify a numerical limit in order to conclude that the easement contemplated a limited number of people using it. The easement grant clearly did not contemplate that the easement would be used by thousands if not tens of thousands of additional people per year to access a new trail system that did not exist at the time of the grant, and that does not provide access to the beach.

#### **7. Post-Grant Actions and Representations by Sonoma County and Sonoma County Regional Parks Confirm That the Purpose of the Shorttail Gulch Trail is to Provide Beach Access, and the County Is Estopped from Changing Its Interpretation of the Easement After 50 Years.**

The grant deed conclusively establishes that the purpose of Easement G and the Shorttail Gulch easement are to connect the development, and to ensure public access, to the beach (Tract A).

Sonoma County has consistently supported that interpretation. County approvals post-dating the 1977 Stipulated Judgment, Settlement Agreement and associated grant deed confirm that the purpose of the 1973/1977 pedestrian and drainage easement known as Shorttail Gulch (and Easement G) was to provide public access to the beach.

For example, in 2002, Sonoma County Regional Parks obtained a CDP to construct the public access trail along the Shorttail Gulch easement leading to the beach in Tract A. In Resolution No. 02-0546, Sonoma County approved the CDP and found that the pathway “will make **the beach** available to all citizens . . . .” The Resolution did not conclude that the trail or the connector (Easement G) was intended to provide public access to the Estero Ranch. In fact, the County staff report stated that “when developed, the proposed Short Tail Gulch Trail would provide the primary public access to Short Tail Gulch **Beach**.” It stated that the trail would begin at Osprey Drive and end at the **beach**. There was no indication that it would provide access to Estero Ranch. The maps in the 2002 application showed no trail access, or any connection to, Estero Ranch. The County staff report noted the adjacent cattle ranch (Estero Ranch) and again failed to

conclude that the trail was intended to provide public access to the Ranch, *or even future access to the ranch.*

Similarly, the 2002 Notice of Intent to Adopt a Mitigated Negative Declaration issued by Sonoma County Regional Parks stated the trail would end at the beach. It stated the purpose of the project was to provide a "public access trail to the coast," and to "Short Tail Gulch Beach." The 2002 Initial Study for the trail CDP also described the purpose as to provide a "public access trail to the coast."

In 2003, Sonoma County Regional Parks obtained an extension of time to commence construction of the trail and the County again found the purpose of the trail was to "make the beach available to all citizens . . . ."

This shows that in 2002-2003 the County continued to stand by the interpretation that the easement was for beach access and not for Estero Ranch public access.

Bodega Harbour has relied on these representations by Sonoma County and the County is estopped from now asserting that the Shorttail Gulch easements authorize access to the Estero Ranch from public roads within the Bodega Harbour subdivision.

Four elements are required to apply equitable estoppel: (1) the party to be estopped must be apprised of the facts; (2) the party to be estopped must intend that his conduct be acted upon, or must so act that the other party had a right to believe it was so intended; (3) the other party must be ignorant of the true state of facts; and (4) the other party must rely upon the conduct to its injury. *Feduniak v. California Coastal Com.* (2007) 148 Cal.App.4th 1346, 1359; *Driscoll v. City of Los Angeles* (1967) 67 Cal.2d 297, 305 .

Sonoma County repeatedly represented that the purpose of the trail over the subject easements was to allow access to the beach, not access to Estero Ranch. Bodega Harbour had a right to believe that was the intent of the pathway/easement, and relied upon those representations. If the County actually believed that the easement authorized access to Estero Ranch it should have advised the public and Bodega Harbour of that position when the easement was created and during the last 50 years of the easement's existence. Any shift in the County's position directly injures Bodega Harbour by expanding the purpose and scope of the easements, resulting in increased traffic, parking conflicts, pedestrian use, trash, and noise when there are inadequate facilities to accommodate that new and expanded use.

## **8. Post-Grant Actions and Representations by the State Coastal Conservancy Confirm That the Purpose of the Shorttail Gulch Trail is to Provide Beach "Loop" Access to the Public, Not Inland Access to the Estero Ranch.**

In 2002, the State Coastal Conservancy provided a grant to the Sonoma County Regional Parks Department to construct the pathway along the Shorttail Gulch pedestrian and drainage easement. The Coastal Conservancy described the trail as "the final segment of a two-mile regional trail loop . . . ." (p. A-4.) The Coastal Conservancy

never indicated in any way that the trail or the easement was intended to provide access to Estero Ranch.

The Coastal Conservancy described the original 1973 pedestrian easement as standing alone “without any connection to the subdivision or inland to Bodega Bay.” (p. A-6.) That further confirms that the easement was never intended to provide access to the Estero Ranch, nor was it appurtenant to the ranch.

Bodega Harbour had a right to believe that was the intent of the pathway/easement, and relied upon those representations. If the State actually believed that the easement authorized access to Estero Ranch it should have advised the public and Bodega Harbour of that position when the easement was created and during the last 50 years of the easement’s existence. Any shift in the State’s position directly injures Bodega Harbour by expanding the purpose and scope of the easements, resulting in increased traffic, parking conflicts, pedestrian use, trash, and noise when there are inadequate facilities to accommodate that new and expanded use.

**9. Neither TWC, the CCC, Nor Sonoma County Has Any Legal Authority to Modify, Change, Expand or Surcharge Easement G or the Shorttail Gulch Easement to Authorize Public Access to the Estero Ranch.**

There have been no written or oral modifications, changes or expansions of Easement G since its creation in 1977. Bodega Harbour has never authorized anyone to use Easement G to access the Estero Ranch. Historically, there has been no access from Bodega Harbour to the Estero Ranch using Easement G or any other access along the property boundary with Bodega Harbour. Nor has there ever been access to Estero Ranch from the 1973/1977 dedicated Shorttail Gulch beach trail. Presently, there are no existing trails or paths of any kind on Estero Ranch at TWC’s proposed gate/access point. The CCC staff report claims that the “the trails would run primarily along existing former agricultural roads and cattle paths . . . ,” but that statement is false and there is no substantial evidence in the record supporting it. (CCC Staff Report at 10.) In fact, the vast majority of the trails would be constructed where no trails currently exist.

Maps submitted as part of the 2002 CDP application to construct the trail along the 1973/1977 easement make clear there is no connection from the trail or Easement G to Estero Ranch. (Fig. 4, Short Tail Gulch Trail Site Map, 2002 CDP application packet.) No access from Bodega Harbour to Estero Ranch can be implied from any historical map. The County’s public access plan submitted with that CDP application described the Shorttail Gulch as access to the **beach**. (p. 87.)

Under the law, the easement holder’s use of the easement cannot substantially modify or increase the burden on Bodega Harbour. *Winslow v. City of Vallejo* (1906) 148 C 723; *Wall v. Rudolph* (1961) 198 Cal.App.2d 684, 686.

The easement holder is not entitled to interfere unreasonably with enjoyment of the Bodega Harbour subdivision or cause it unreasonable damage. *Wright v. Austin* (1904)

143 C 236, 239; *Thorstrom v. Thorstrom* (2011) 196 Cal.App.4th 1406, 1421. An unreasonable increase in the burden on Bodega Harbour resulting an increase or change of use of the easement is sometimes called a "surcharge," and is unlawful. *Hewitt v. Perry* (1941) 309 Mass. 100, 105.

#### 10. **TWC and the CCC Are Incorrect in Their Assertion That the Existing Easements Authorize Unlimited Public Access, Or Are Automatically Expanded to Encompass New Development.**

A lawyer for TWC argues that an easement for public use can't ever overburden Bodega Harbour because such an easement presently allows **unlimited** public access use. The basis for this argument is that public rights-of-way are vested in every member of the public. (CCC Staff Report, Ex. 6; see also CCC Staff Report at 19 [CCC argues that easement does "not set *any limits* on the number of users."].) TWC's lawyer misstates the law. First, *Bello v. ABA Energy Corp.* (2004) 121 Cal.App.4th 301, does not support the argument that there are *no limits* to public access easements. Second, the citation provided by the TWC's lawyer is incorrect and does not exist.

Likewise, TWC's assertion that the public use is automatically expanded due to new development or uses at Estero Ranch is also wrong and flawed. *Bello* addressed the "scope of roadway rights-of-way," not a pedestrian easement like here. The thrust of the easement expansion doctrine discussed in *Bello* is that a public easement may be expanded to account for changes *in technology*, i.e., an electric interurban railway must be interpreted to allow the operation of equivalent motorbus service. *Id.* at 311. TWC isn't seeking to expand the use of the public pedestrian easement to technological advancement, but rather to serve an entirely **new**, very-large **land area and new use**. That's very different. Also, *Bello* and the line of cases it relies upon interpreted the meaning of the term "right-of-way." That is not the operative term here.

The TWC lawyer also cites *Norris v. State* (1968) 261 Cal.App.2d 41, for the idea that a public easement may be expanded even for unknown future uses. But the case itself shows that it is inapposite to this. First, *Norris* concerned a public road easement not a pedestrian trail. Second, *Norris* clarified that any such expansion must not be detrimental to the abutting property, and the expansion proposed here would be. Third, the expansion must be consistent with the character of the easement. Here, the easement was for beach access. TWC's proposed expansion is not for beach access but rather for "general public access" to its property. Fourth, *Norris* clarifies that ". . . the holder of a dominant tenement may not unduly increase the burden of the holder of the servient tenement." *Id.* at 48. "The rule that the right of way cannot be used to burden the servient tenement to an extent greater than was *contemplated at the time of the grant has been applied* as a test in determining the reasonableness of particular uses, both in terms of their extent and their manner. . . ." *Id.* at 49. By expanding the use to accessing a new 5-mile trail system on Estero Ranch, TWC is substantially increasing the burden on Bodega Harbour that existed and was contemplated at the time the grant was made in 1977. That is not reasonable nor lawful.<sup>7</sup>

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<sup>7</sup> Even if for some reason a court authorized the expanded use of the easements at issue, that would amount to a judicial taking, resulting in the Court and the State to be liable for damages and attorney's fees. *Stop the Beach Renourishment, Inc. v. Fla. Dep't of Env'tl. Prot.* (2010) 560

TWC's proposal would substantially increase Bodega Harbour's burden. TWC seeks to expand the use of Easement G and the Shorttail Gulch easement beyond mere public pedestrian beach access to allow unlimited public access through the Bodega Harbour subdivision to the Estero Ranch's proposed 5-mile trail system. That exceeds the purpose and scope of Easement G, as expressed in the grant deed, the Stipulated Judgment and the Settlement Agreement, and exceeds the purposed and scope of the Shorttail Gulch easement. Doing so substantially increases the burden on Bodega Harbour.

Presently, approximately 6,900 people per year access the beach via Easement G and the Shorttail Gulch trail on weekends. (Average of IDAX weekend data submitted herewith, multiplied by 52 weekends.)<sup>8</sup> If the TWC project is approved, visitation will certainly increase. The addition of the 5-mile trail system will make the site akin to the Tennessee Valley trail system within Golden Gate National Recreation Area. In 2023, that trail system experience about 204,000 visitors. Even accounting for the more remote location in Sonoma County the Estero Ranch hiking trails could easily experience between 68,000 and 102,000 annual visitors – **between ten and nearly fifteen times current visitation rates.** (Mary O'Hara-Devereaux, Ph.d, Global Foresight, November 5, 2024 Report.)

That enormous increase will bring additional substantial adverse impacts. Presently, only a few parking spaces serve the Shorttail Gulch trail. (Mary O'Hara-Devereaux, Ph.d, Global Foresight, November 5, 2024 Report.) Those are nearly fully used on weekends, and thus, there is minimal or **no existing additional capacity** to accommodate such a large influx of cars. Nor would street parking fully accommodate such a large increase in traffic, creating public safety hazards due to likely illegal parking by visitors.

A 2002 County staff report determined that the 18 parking spaces at Pinnacle Gulch trailhead and 16 additional street parking spots would be adequate to serve the public traffic to the beach. The staff report indicated that the trail would be Class III hiking trail that would be "lightly used," as did the CEQA Initial Study. Expanding the use of

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U.S. 702, 715 [". . . the Takings Clause bars the State from taking private property without paying for it, no matter which branch is the instrument of the taking."]; *Surfrider Foundation v. Martins Beach 1, LLC* (2017) 14 Cal.App.5th 238, 262 [invalidation of property right by court is unconstitutional under takings or due process clause.] CCP § 1036. The public easements granted as a result of the Stipulated Judgment are not limitless. Indeed, the Coastal Act restricts CDP conditions to those that are "reasonable." PRC § 30607. Mandating a limitless easement for public access as part of a Coastal Act settlement would likewise be unreasonable and thus is not a fair interpretation. Even after the settlement, Bodega Harbour retained property rights in the fee underlying the easement and an excessive use of the public easement beyond the purpose and scope of the easement invades those private property rights. Any effort by any branch of government to now eliminate or restrict those rights is a taking and/or a due process violation. (See CCC Staff Report at 2 ["Although Sonoma County holds and manages the public easement, which has been providing for public pedestrian access trail use for over 20 years, the Bodega Harbour HOA remains the underlying property owner of the easement area . . .".])

<sup>8</sup> The greater of the two weekends measured by IDAX showed a weekend tally of 238 visitors.

Easement G and the Shorttail Gulch trail for access to Estero Ranch would increase public use without any additional parking when the existing parking is fully used to accommodate the Pinnacle Gulch Trail.<sup>9</sup>

No restrooms or other public facilities are near the entrance to the Shorttail Gulch trail, and the great influx of additional visitors will result in trash problems, noise problems, and potential crime. In fact, TWC fails to specify in its application where any proposed restrooms would be located. (CCC Staff Report at 16.)

The entrance to the Shorttail Gulch trail is very close to existing homes and private property.

### **11. TWC's Proposed Unauthorized or Excessive Use of Easement G Would Constitute Trespass.**

"The extent of a servitude is determined by the terms of the grant . . ." Civ. Code § 806. Since Easement G was created by a grant deed, the purposes expressed in the grant deed are conclusive and binding.

The purpose of Easement G is expressly to allow public access from Osprey Drive to the previously dedicated Shorttail Gulch beach access trail, and nothing more. There have been no written modifications of Easement G that changed the 1977 grant deed.

The precise location of Easement G is defined by the grant deed's legal description and it does not provide access to the Estero Ranch. An easement may be relocated only with the consent of both parties, here, Bodega Harbour and Sonoma County. *Youngstown Steel Prods. Co. v. City of Los Angeles* (1952) 38 Cal.2d 407, 410. Sonoma County has admitted that changes to the Shorttail Gulch easement would require the consent of Bodega Harbour. (Apr. 29, 2002 Memo from Michelle Julene, Sonoma County, to Sigrid Swedenborg, Sonoma County, p. 3.) Indeed, as part of the conservation easement between TWC and the Sonoma County Agricultural Preservation and Open Space District, those parties agreed that modification of any existing easements would need District approval. (Dec. 24, 2015 Conservation Easement deed, § 5.7.) Bodega Harbour has never agreed to relocate the location of Easement G or the 1973/1977 easement, or expand their respective purposes or uses.

Unauthorized uses and excessive use of Easement G and the 1973/1977 easement is trespass. *Wall v. Rudolph* (1961) 198 Cal.App.2d 684. TWC's proposal constitutes an unauthorized use of Easement G, and/or an unlawful and unreasonable expansion of the two easements' purpose and scope of use. If the CDP is approved, TWC, the CCC and Sonoma County will be liable for damages caused by the public and private trespass,

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<sup>9</sup> To repeat, the study submitted by TWC is essentially worthless. (CCC Staff Report, Ex. 7.) That study admits that its conclusion as to whether there will be adequate parking is based on "observations during a [singular] site visit as well as anecdotal information about parking usage, the existing on-street and off-street parking supply . . ." (Id. at 7.) That is not substantial evidence. In addition, the study tacitly admits that its authors did not speak to or interview a single resident or Board member from Bodega Harbour – people who have first-hand knowledge of the parking situation. The parking study is not substantial evidence.

including interference with quiet enjoyment, annoyance, discomfort, traffic impacts, etc.

**12. The CCC's or Sonoma County's Purported Authorization for Unlawful or Excessive Use of Easement G Would Constitute a Taking and/or Damage in Violation of the U.S. and California Constitutions.**

To the extent that the CCC (and Sonoma County as a facilitator of the consolidated permit process [Pub. Res. Code § 30601.3]), purport to authorize the use of Easement G for public access to the Estero Ranch, such action is unlawful and constitutes a taking under the U.S. and California Constitutions, and damage under the California Constitution. See also *Nollan v. California Coastal Commission*, 483 U.S. 825, 828 (1987) [appropriation of an easement constitutes a physical taking]; *Hendler v. United States* 952 F.2d 1364 (Fed.Cir. 1991) ["It is no defense to a charge of authorizing someone to violate another's rights that the perpetrator might have done so on his own."] <sup>10</sup>

In addition to paying just compensation for the actual condemnation of property, a condemner is also liable for precondemnation damages when the owner can demonstrate "unreasonable conduct prior to condemnation; and (2) as a result of such action the property in question suffered a diminution in market value." *Klopping v. City of Whittier* (1972) 8 Cal.3d 39, 52. Such purported authorization by either the CCC or the County constitutes *Klopping* damages.

**13. There Is No Legal Authority to Modify, Change or Expand Easement G on the Basis of Necessity.**

No expansion of Easement G is authorized on the basis of necessity. Bodega Harbour was not created from a larger Estero Ranch or vice versa.<sup>11</sup> Estero Ranch is not land-locked as some access and public access is authorized from Estero Lane. California requires "strict" necessity and that does not exist here. *Roemer v. Pappas* (1988) 203 Cal.App.3d 201, 206. No easement of necessity will be implied or found if there is another possible means of access, even if that access is inconvenient, difficult or costly. *Kripp v. Curtis* (1886) 71 C 62; *Pipkin v. Der Torosian* (1973) 35 Cal.App.3d 722. Estero Ranch can be accessed from Estero Lane for private purposes and, within the limitations of the settlement between TWC and local ranchers, for limited public purposes.

Additionally, because the Sonoma County Agricultural Preservation and Open

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<sup>10</sup> The CCC lacks statutory authority to hold title to property. Pub. Res. Code §§ 30330-344; *McAllister v. California Coastal Com.* (2008) 169 Cal.App.4th 912, 939.

<sup>11</sup> There never was common ownership of Bodega Harbour and Estero Ranch at the time Estero Ranch was conveyed, which forecloses an easement by necessity.

Space District is a governmental entity and part owner of the Estero Ranch, there can be no easement of necessity.<sup>12</sup> *Murphy v. Burch* (2009) 46 Cal.4<sup>th</sup> 157.

**14. There Is No Legal Authority to Modify, Change or Expand Easement G on the Basis of Prescription.**

No expansion of Easement G is authorized on the basis of prescription. Prescriptive rights are established by judicial decree and TWC has obtained no such judgment. There is no evidence of any historical public access from Easement G to the Estero Ranch. In fact, there are no existing paths or trails on the Estero Ranch side where TWC wants to install a gate. There is a long-existing fence that prevents, and has historically prevented, public access to Estero Ranch.

**15. There Is No Legal Authority to Modify, Change or Expand Easement G on the Basis of an Implied Dedication.**

No expansion of Easement G is authorized on the basis of implied dedication. There is no evidence of public access from Easement G to the Estero Ranch at all, or sufficient to establish an implied dedication.

**16. There Is No Legal Authority to Modify, Change or Expand Easement G on the Basis of Any License by Bodega Harbour.**

No expansion of Easement G is authorized on the basis of any license. Bodega Harbour has never granted any license or consent or any kind to TWC or the public to use Easement G or any portion of Bodega Harbour to access the Estero Ranch.

**17. There Is No Legal Authority to Modify, Change or Expand Easement G on the Basis of Any Subdivision Map.**

No expansion of Easement G is authorized on the basis of any dedication on a subdivision map. No such map establishes or reflects any access, public or otherwise, from Bodega Harbour to the Estero Ranch, especially in the area of the Shorttail Gulch trails.

**18. There Is No Legal Authority to Modify, Change or Expand Easement G As an Equitable Easement.**

No expansion of Easement G is authorized on the basis that an equitable easement exists. Any hardship to the trespasser must be greatly disproportionate to the hardship to Bodega Harbour to justify the grant of an equitable easement. *Shoen v. Zacarias* (2015) 237 Cal.App.4<sup>th</sup> 16, 21.

As mentioned, Estero Ranch is not land-locked. The public has some lawful access via Estero Lane per its settlement with the ranchers. TWC has had full knowledge that Easement G does not authorize public or private access to the Estero Ranch even when it made its proposals to Sonoma County and the CCC.

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<sup>12</sup> The State Coastal Conservancy also contributed \$ 1 million towards the acquisition. (CCC Staff Report at 14, fn 5.)

## **19. No Coastal Act Public Access Policies Override Bodega Harbour's Private Property Rights.**

Both the California Constitution and the Coastal Act protect private property rights. The Legislature codified the application of Article 1, Section 19 of the California Constitution into the Coastal Act in Public Resources Code § 30010, which states:

"The Legislature hereby finds and declares that this division is not intended, and shall not be construed as authorizing the commission...or local government...to exercise their power to grant or deny a permit in a manner which will take or damage private property for public use, without the payment of just compensation therefor."

The CCC's approval of this CDP with the purported expansion of public access on Easement G and the 1973 easement violate these provisions.

None of the Coastal Act's public access policies override the protection of private property rights, even where public access must be "maximized."

Pub. Res. Code § 30210 constrains its policy of public access to access consistent with "public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse."

Pub. Res. Code § 30211 does not apply because there is no new development on Bodega Harbour's property that is at issue.

Pub. Res. Code § 30212 does not apply because there is no new development on Bodega Harbour's property that is at issue. In addition, even if it did apply, the statute does not mandate public access where it is inconsistent with public safety.

Pub. Res. Code § 30213 does not grant authority to expand the purpose and scope of a public easement on adjacent property.

Pub. Res. Code § 30220 does not grant authority to expand the purpose and scope of a public easement on adjacent property.

Pub. Res. Code § 30221 does not grant authority to expand the purpose and scope of a public easement on adjacent property.

Pub. Res. Code § 30223 does not grant authority to expand the purpose and scope of a public easement on adjacent property.

Pub. Res. Code § 30224 does not grant authority to expand the purpose and scope of a public easement on adjacent property.

In its analysis of the Coastal Act's public access policies, the CCC completely fails to even mention these policies co-equal mandate to provide access only in a way that protects private property. Thus, the analysis is legally flawed and erroneous. It fails to consider an important factor and therefore reaches the erroneous conclusion that the CDP application is consistent with these policies.

## **20. The CCC's Environmental Justice Arguments Are Blatantly False.**

The CCC argues that “the Bodega Harbour HOA . . . seek to raise barriers to coastal public access and deter visitors that are not residents of the wealthy HOA community . . . .” (CCC Staff Report at 21.) “. . . [B]y virtue of their opposition they essentially seek to deny and diminish coastal access based on socio-economic status . . . .” (Id. at 21.)

That statement by CCC staff is false and has no support in the record. Bodega Harbour has done nothing to “raise barriers.” On the contrary, TWC and the CCC seek to **expand** the scope of the existing easements from their level use for the past 50 years.

The HOA’s opposition has nothing to do with wealthy landowners seeking to diminish access based on socio-economic status. It is simply a dispute about whether TWC and the CCC have the right to expand the purpose and scope of a public easement over Bodega Harbour’s property.

When Bodega Harbour prevails in this dispute, visitors from anywhere in the County, the State, the United States or the world, still may use Easement G and the 1973 easement trail to access the beach on Tract A.

## **21. The Project Violates the Coastal Act’s ESHA Policies.**

Pub. Res. Code § 30240 provides:

“(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.”

The CCC asserts that the “project generally follows existing ranch roads or existing cattle trails . . . .” (CCC Staff Report at 22.) That statement is false and is not supported by substantial evidence in the record. TWC asserts that the “trails will utilize existing ranch roads to the greatest extent possible . . . .” (CCC Staff Report, Ex. 4 at 4.) Yet, TWC presents absolutely no evidence that is the case. It doesn’t specify what “the greatest extent possible” means, or what percent of the trail system is allegedly existing cattle trails and roads. The way the assertion is phrased it could be as little as one-foot.

The CCC admits that “some of the trail project would involve mowing of existing lands that include . . . . [ESHA].” (Id.) The Proposed LCP update declares the entire Estero Ranch as grassland ESHA. (Fig. C-OSRC-2i.)

The CCC admits that the mowing of trails in the ESHA grassland is considered an ESHA impact. (CCC Staff Report, Ex. 4 at 4 [“TWC recognizes that by mowing portions of our proposed trail system we will have some limited impact on the sensitive ecology of the region.”].) But staff fails to provide detail on what percentage of the trail system exists within ESHA.

In fact, there are no existing ranch roads or existing cattle trails near the proposed gate entrance to the Estero Ranch from Easement G or the 1973 easement. All the proposed trails would be newly created, and many of them will be created *in ESHA*.

Under § 30240, the hiking trails do not qualify as “resource dependent.” Hiking trails can be created anywhere and on other locations on the site that are not ESHA. The CCC has a history of interpreting that phrase to mean that the activity cannot occur elsewhere. (See March 2021 CCC Staff Report re Oceano Dunes SVRA at 51 [“Coastal Act Section 30240(a) protects ESHA by prohibiting uses within it, **except those that are dependent on the habitat to be able to occur at all, such as restoration and nature study**, also referred to as resource-dependent uses.”]; id. at 62 [“ . . . simply because some activities are enjoyed . . . in coastal areas does not make them ‘resource dependent’ . . . .”].)

Nor is it relevant that the area is currently used to graze cattle. *Bolsa Chica Land Trust v. Superior Court* (1999) 71 Cal.App.4th 493, 508, *overruled in part on other grounds*, *Dhillon v. John Muir Health* (2017) 2 Cal.5th 1109, 1116, fn. 2 [“ . . . under the statutory scheme, ESHAs, whether they are pristine and growing or fouled and threatened, receive uniform treatment and protection.”].

Nor is it relevant that the CCC “has a long history of allowing such projects in ESHA,” or that the CCC has mitigation measures to mitigate some impacts. (CCC Staff Report at 23, and fn 12.) Past violations of § 30240, or a pattern and practice of such violations is no justification for future violations. Also, ESHA impacts must be avoided not merely mitigated. *Bolsa Chica, supra*, 71 Cal.App.4th 493.

Further, making the trail “as minimal as possible,” (CCC Staff Report at 23), doesn’t eliminate significant impacts to ESHA. Mowing and removing ESHA grassland on a sustained basis causes significant disruption to the ESHA and thus is not permitted under § 30240.

The CCC’s assertion that “the trail project is sited and designed to prevent impacts that would significantly degrade ESHA” is false given the CCC’s admission that portions of the trail project will be placed in ESHA and the ESHA will be significantly disrupted via mowing on a sustained basis.

The CCC proposes “compensatory mitigation,” (CCC Staff Report at 23), but that is not authorized under the Coastal Act as a way to address impacts to ESHA. *Bolsa Chica, supra*, 71 Cal.App.4th 493.

## **22. Even Assuming That the Expanded Use of the Trail Is Lawful (Which It is Not), the Proposed Project Is Inconsistent with the Existing, Certified LCP.**

Even assuming that the expanded use of the trail is lawful (which it is not), the proposed project conflicts and is inconsistent with the following LCP provisions contained in the existing, certified LCP:

The LCP Access Plan described the Shorttail Gulch “accessway” as “undedicated” and a pathway to the beach and a trail to the shoreline. (p. 87, ¶ 67.) It did not describe it as an access point to Estero Ranch, which is what TWC now seeks to make it (unlawfully).

### **23. Notwithstanding Ambiguities in the County's Various Drafts of the Proposed LCP Amendment, None of the Drafts Established That Lawful Public Access Exists from Bodega Harbour to the Estero Ranch.**

The County's various drafts of the LCP amendment over a 9-year period never clearly established that any public access exists from Bodega Harbour to Estero Ranch.

In September 2019, the County issued a proposed "Public Access Plan," as an appendix to the draft LCP amendment. In that attached plan, the County identified as "I-34," the Shorttail Gulch Trail. The County did **not** indicate in that plan that the Shorttail Gulch Trail provided any access or any public access to the Estero Ranch. Under "J-6," that plan stated the need to "develop" public access to the Estero Ranch, meaning it did not exist. As an attachment to the draft LCP the County included "FIGURE C-PA-1j," which listed the Shorttail Gulch Trail, but did not indicate in any way that it provided access to the Estero Ranch.

In June 2021, the County issued a new draft of the LCP amendment. Again, FIGURE C-PA-1i listed the Shorttail Gulch Trail, but did not indicate in any way that it provided access to the Estero Ranch.

In May 2022, the County issued a new draft of the LCP amendment. Again, FIGURE C-PA-1i listed the Shorttail Gulch Trail, but did not indicate in any way that it provided access to the Estero Ranch.

In August 2022, the County issued a new draft of the LCP amendment. The County modified the attached proposed public access plan, under I-34, to state: "Future trail access may connect Short-Tail Gulch Trail to Estero Ranch." By using the term "future," that statement indicated that no trail access existed between Bodega Harbour and the Estero Ranch. The County developed a new map identified as FIGURE C-PA-1j, where the County listed the Shorttail Gulch Trail as an existing public access point but did not elaborate. That same figure listed under I-35 a "proposed" "private" access point to Estero Ranch, but the map was unclear on where that would be located. The County's articulation side-stepped the elephant in the room which was the issue that there was no legal right to access Estero Ranch using either of the Shorttail Gulch easements.

In February 2023, the County issued a draft "Policy Options" document. That document included a discussion of access to Estero Ranch:

**"Currently, public access to the Estero Americano is only available at the mouth of the Estero or via an informal accessway at Marsh Road in Marin County.** The Marsh Road accessway is on land owned by Marin County, but not identified as an accessway by the Marin County Local Coastal Program. Marin County has requested that the informal accessway adjacent to the county line on Marsh Road not be referenced in the Sonoma County Local Coastal Plan. The mouth of the Estero can be accessed by walking along the shoreline from Shorttail Gulch Trail, use of this route would be limited to low tide and the route would be challenging and hazardous in some conditions. The mouth of the Estero Americano could also be accessed by boat.

**To expand existing public access, the Planning Commission**

**recommended adding a new proposed accessway at property owned by Sonoma Land Trust and a second proposed accessway on parcel further inland using an existing easement purchased by the Sonoma County Ag + Open Space District.**

**Planning Commission Action:**

The Planning Commission supported Marin County's request to remove references to an accessway at Marsh Road and the staff recommendation to add a new proposed accessways at property owned by Sonoma Land Trust, and another accessway using an existing easement purchased by the Sonoma County Ag + Open Space District across an agricultural parcel adjacent to the Estero Americano.

In addition to these two new proposed accessways, the Planning Commission recommended adding an alternative alignment of the California Coastal Trail along Highway 1, and a water trail for canoes, kayaks, and similar watercraft, accessed from public trust lands at the mouth of the Estero Americano.

In response to some landowners' concerns that existing mapping and policy language encouraged trespassing, the Planning Commission added new text to the public access maps and the public access plans stating:

**"Undeveloped (Proposed) access points are not available for public use until developed. Do not use Proposed access points without permission of the landowner."**

The Planning Commission also recommended changes to access point labeling on Figure C-PA-1k to clarify that the California Coastal Trail and Estero water trail are general alignments that are not associated with a specific parcel or property owner."

Thus, this document also acknowledged that no public access exists from Bodega Harbour to Estero Ranch.

In July 2023, the County issued new maps once again. FIGURE C-PA-1i suddenly listed access point I-35 at the Estero Ranch as "existing."

However, also in July 2023, the County issued a correction paper indicating that the maps were being corrected. That document noted:

**"Mapping of public access has been a continued topic of public comment throughout the Local Coastal Plan Update process, particularly as it relates to the Estero Americano, but also for proposed public access points on private property throughout the Coastal Zone. Currently, public access to the Estero Americano is only available at the mouth of the Estero or via an informal accessway at Marsh Road in Marin County.** The Marsh Road accessway is on land owned by Marin County, but not identified as an accessway by the Marin County Local Coastal Program. Marin County has requested that the informal accessway adjacent to the county line on Marsh Road not be referenced in the Sonoma County Local Coastal Plan.

The mouth of the Estero and Estero Americano Water Trail can be accessed by walking along the shoreline from Shorttail Gulch Trail, use of this route is limited to low tide and the route would be challenging and hazardous in some conditions. The mouth of the Estero Americano could also be accessed by boat."

The document stated that "I-35: Estero Ranch Preserve dot updated to 'existing' to reflect current trail status." That designation was in error.

In any event, the current draft LCP amendment appears to have included revised maps that changed access point I-35 back to "proposed." (Fig. C-PA-1i.) The LCP fails to specify what actions that the County believes are necessary to make the access to Estero Ranch at I-35 valid. As such, the proposed LCP fails to adequately notify the public what processes are required.

Thus, as of July 2023, the County appears to have conceded that there is no "existing" lawful public access point from the Shorttail Gulch Trail to the Estero Ranch.

#### **24. The Proposed LCP Update Appendix B Public Access Plan Appears to Confirm That Shorttail Gulch Trail Does Not Provide Access to Estero Ranch.**

The proposed LCP Update, Public Access Plan, is unclear with respect to the legality of an expanded pedestrian easement over Easement G and the 1973 easement at Shorttail Gulch. The discussion under I-34 fails to discuss the issue at all.

The discussion of access to Estero Ranch under I-35 states "Trail access is either via the California Coastal Trail segment between Bodega Harbour and the mouth of the Estero Americano running along the Pacific Ocean. *Future* trail access may connect Short-Tail Gulch Trail to Estero Ranch Preserve."

What this appears to state is that no access to Estero Ranch presently exists via the Shorttail Gulch trail. That would include both Easement G and the 1973 pedestrian easement.

If the provision is not saying that but is saying that the 1973 pedestrian easement provides access to Estero Ranch, that is incorrect for the reasons described in this comment letter.

#### **25. Even Assuming That the Expanded Use of the Trail Is Lawful (Which It is Not), the Proposed TWC Project Conflicts with the County's Proposed Updated LCP.**

Even assuming that the expanded use of the trail is lawful (which it is not), the

proposed project conflicts and is inconsistent with the following LCP provisions contained in the County's proposed, but uncertified, LCP:

*Objective C-PA-3.3: Provide adequate facilities at public accessways.* The proposed project fails to provide adequate facilities, or any facilities at all (including parking and restrooms) to serve the expanded use of Shorttail Gulch trail. The proposed project adversely and significantly impacts adjacent properties in a residential neighborhood by increasing public vehicle and foot traffic in the neighborhood, resulting in increased traffic, parking conflicts and congestion, noise, trash and litter, and other issues due to the lack of public restrooms servicing the trail. The additional parking will impede emergency and fire access to the neighborhood. The proposed project contains no discussion of the increased policing and monitoring of the trail, which will be needed with the increased use.

*Objective C-PA-3-4:* the proposed project conflicts with this objective which expressly provides that public accessways should be developed and maintained to "prevent adverse impacts on adjacent properties." The proposed project adversely and significantly impacts adjacent properties in a residential neighborhood by increasing public vehicle and foot traffic in the neighborhood, resulting in increased traffic, parking congestion, noise, trash and litter, and other issues due to the lack of public restrooms servicing the trail. The additional parking will impede emergency and fire access to the neighborhood.

*Objective C-PA-4.1:* this objective mandates that each new or expanded public facility have adequate parking facilities. As discussed herein, the increase demand for parking that will result from the expanded trail use will create parking shortages and conflicts, especially on weekends.

*Policy C-PA-3c:* this policy mandates that the distance between coastal access trails and residences should be as large as possible to protect the privacy of the homes. They should be designed and managed to minimize conflicts with the residential development. The proposed project is inconsistent with this policy because the distance between the trailhead and homes is about 80 feet (35 feet from the lot line), adversely affecting the privacy of the occupants of the homes. The expanded use of the trail will exacerbate this adverse impact.

*Policy C-PA-4a:* this policy mandates that adequate parking facilities be developed to serve new public access facilities. The proposed project fails to provide additional parking that will be necessary to serve the expanded public trail use.

## **26. Previous Proceedings Before the Sonoma County Board of Supervisors Indicate That the County Is Aware That Neither Easement Associated with the Shorttail Gulch Trail Provides Public Access to the Estero Ranch.**

In a hearing before the Sonoma County Board of Supervisors on October 4, 2022, the County acknowledged that there is **no legal public access from Bodega Harbour to Estero Ranch using the Shorttail Gulch Trail:**

**"Public Access at the Estero Americano:**

Many comments have been received concerning access to the Estero Americano, both in support and in opposition to public access to the coast in this area. Opponents have raised issues of trespassing, vandalism, damage to Environmentally Sensitive Habitat Areas (ESHA) and requested that all references to public access to the Estero Americano be removed from the Local Coastal Plan. Proponents have argued that access to the coast is a right protected by the California Constitution and the Coastal Act, and further, that existing environmental impacts have to do with agricultural operations and not visitors. There are also disputes regarding access easements that go well beyond the scope of the Local Coastal Plan.

The Estero Americano is located within the Valley Ford Subarea on Figure C-PA-1k and three proposed accessways and well as an alternative alignment of the California Coastal Trail are shown on this map.

**Currently, there is no public access to the Estero Americano.** The California Coastal Trail alignment is Highway 1, and does not provide access to the Estero Americano. One of the three accessways (J-2) is owned by the Sonoma County Land Trust, who supports limited supervised public access to their property. Accessway J-4 is associated with an easement purchased by the Sonoma County Ag + Open Space District. The final accessway is a water trail associated with canoeing and kayaking in the Estero Americano and adjoining public trust lands.

Trails are resource dependent development and are not prohibited in ESHA, provided that measures are taken to protect “against significant disruption of habitat values.” The Coastal Act specifically contemplates that recreation areas can be in, adjacent to, or near ESHA. With the exception of an accessway outside of the County’s jurisdiction on the Marin County side of the Estero, the Planning Commission did not recommend removing accessways to the Estero Americano. **The Planning Commission also recommended that Public Access maps (Figures C-PA-1a through C-PA-1k) clearly identify which public accessways are existing and which ones are proposed for future development and provide notice that proposed accessways are not available for public use until developed.**

...

### **Policy Option: Estero Americano Access**

1. Adopt access plan and associated map as recommended by the Planning Commission with language and symbols **clarifying that no access exists at this time**, and use of the accessway required landowner permission. Add a new symbol and language clarifying that the Estero Americano Water Trail (J-3) refers to the Estero and public trust lands within the intertidal zone and that access at the Valley Ford Estero Americano Road Bridge on the Sonoma County side is **privately owned and will require acquiring an easement to allow use of this**

**location to launch canoes and kayaks.** Development of this accessway will not be necessary if Marin County opens the Marsh Road access to public use.

2. Remove all points identifying accessways on the map associated with the Estero Americano and add a policy to the Open Space and Resource Conservation Element acknowledging the public right to access public trust lands and strongly supporting development of accessways in locations where landowners have expressed an interest in providing access or where easements have been acquired that would allow development of public access.

Staff recommends Option 1. Accessway J-1 (Coastal trail along Highway 1) and accessway J-3 are intended to identify use of existing public rights-of-way or use of public trust lands. Only accessway J-2 and J-4 identify accessways across private property. As discussed above, Sonoma Land Trust (J-2) intends to allow limited supervised public access and accessway J-4 is across an easement purchased by the Sonoma County Ag + Open Space District.

(Oct. 4, 2022 staff report to Board of Supervisors.)

## **27. Neither the California Constitution, the Coastal Act Nor the Public Trust Doctrine Provide an Unqualified Right to Coastal Access.**

Neither the California Constitution, the Coastal Act nor the public trust doctrine provide an unqualified right to coastal access.

Public Resources Code § 30210 alludes to the public trust doctrine in its reference to article X, section 4 of the California Constitution, but it recognizes that “maximum access” is to be provided “consistent with” **public safety and private property interests.**

Any effort to expand Easement G or the 1973/1977 pedestrian easement 50 years after-the-fact to the extent sought by TWC is not consistent with Bodega Harbour’s private property interests and rights, and also is contrary to public safety. The area does not possess adequate facilities to accommodate the expansion of purpose and use sought by TWC.

## **28. Based on the Absence of Any Lawful Public Access from Bodega Harbour to Estero Ranch, the Proposed LCP Amendment Should Be Modified.**

Based on the discussion and analysis in this comment letter, and previous submissions to the County, the proposed public access plan (as part of the LCP amendment), should be modified as follows:

**(I-35) Estero Ranch Preserve**

In 2015 The Wildlands Conservancy acquired a 547-acre preserve at the mouth of the Estero Americano and ocean. The acquisition secured a conservation easement that included public funding and the requirement for public access. Road access is limited by easement restrictions that prohibit public use of Estero Lane. ~~Trail Access is either via the California Coastal Trail segment between Bodega Harbour and the mouth of the Estero Americano running along the Pacific Ocean. Future trail access may connect Short Tail Gulch to Estero Ranch Preserve.~~ A management plan under development will balance appropriate public access to the bluff, estuary, and coast with ecological protection.

**Proposed Improvements and Programs:**

1. Plan and develop appropriate public access, education, and research compatible with the site's fragile ecosystem.
2. Maintain agriculture and related infrastructure on the preserve to support grassland health.

**29. CCC Approval of the Proposed CDP Would Violate the California Environmental Quality Act (CEQA).**

CEQA applies to the CDP application and the CCC's certification of an LCP or amendment thereto. 14 Cal. Code Regs. § 15265(b).

The purpose of the CEQA is to ensure that an agency regulating activities "that may" affect the environment give primary consideration to preventing environmental damages. *Save Our Peninsula Committee v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 117. CEQA applies to "discretionary projects proposed to be carried out or approved by public agencies." PRC § 21080(a). A project may be exempted from CEQA, or part of CEQA, by statute.

Here, the CCC evaluated the proposed CDP under a "certified regulatory program" exemption to CEQA, allowing the CCC to sidestep a few procedural aspects of CEQA such as preparing an EIR. *POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 709. However, PRC § 21080.5(c) exempts certified regulatory programs only from a limited number of CEQA provisions, namely – §§ 21100–21108, 21150–21154, and 21167. *Sierra Club v. State Bd. of Forestry* (1994) 7 Cal.4th 1215, 1231; *EPIC v. Johnson* (1985) 170 Cal.App.3d 604 [not a "blanket exemption."]. Thus, the CCC is still "subject to the broad policy goals and substantive standards of CEQA." *Pesticide Action Network North America v. Dep't of Pesticide Reg.* (2017) 16 Cal.App.5th 224, 242; 14 CCR §§ 15250; 13096(a); 13057(c).

One broad CEQA policy is that "noncompliance with [CEQA's] . . . **information disclosure** provisions . . . , or noncompliance with [CEQA's] substantive requirements . . . , may constitute a prejudicial abuse of discretion . . . regardless of whether a different outcome would have resulted if the public agency had complied with those provisions." PRC § 21005(a). PRC § 21006 states that CEQA "is an integral part of any public agency's decisionmaking process, including, but not limited to, the issuance of permits, . . . ." Another CEQA policy is that "public agencies should not approve projects as proposed if there are . . . feasible mitigation measures . . . which would substantially lessen the significant environmental effects . . . ." *Id.*, § 21002. PRC § 21001.1. also states

that public projects are “subject to the same level of review. . . [as] private projects . . . .” As discussed below, the CCC failed to meet these basic CEQA standards.

**30. The CCC Failed to Consider Feasible Mitigation Measures and a Reasonable Range of Alternatives to the Proposed Shorttail Gulch Access.**

But because the CCC must avoid significant adverse effects on the environment where feasible, it prepares a document functionally equivalent to an environmental impact report (EIR) when evaluating the environmental impact of activities, such as an LCP amendment or a CDP. 14 Cal. Code Regs. §§ 15250, 15252. The CCC’s staff report, as the functional equivalent of an EIR, must identify and analyze feasible mitigation measures and feasible alternatives that could avoid or substantially lessen the project’s significant environmental impacts. PRC § 21002, 21002.1(a), 21100(b)(4), 21150. The CCC must consider and analyze a reasonable range of alternatives to the proposed project or to its location that would feasibly attain most of the project’s basic objectives while reducing or avoiding significant impacts.

Based on the nature and scope of the dedicated easement, the Shorttail Gulch was never intended to be an access point to the Estero Ranch. It was certainly never intended to be the *primary public access* to the ranch. Yet, that’s exactly what TWC proposes, ignoring the purpose, scope and breath of the easement, as well as the surcharge of the easement that would occur in making Shorttail Gulch the primary public entrance to Estero Ranch.

The CCC concludes that “there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects . . . .” (CCC Staff Report at 4, 28.) That is erroneous. In fact, the CCC did not analyze or consider any feasible alternatives or feasible mitigation measures before making its decision.

Potentially feasible alternatives may include other access points from areas other than the private Bodega Harbour subdivision, or legal constraints on the time, place and manner of the access in order to ensure that the easement is not surcharged. Likewise, possible mitigation measures may include different access points and legal constraints on the time, place and manner of the access in order to ensure that the easement is not surcharged.

**31. In violation of CEQA, the CCC Made No Effort to Forecast the Increase in Visitation and Use of the Shorttail Gulch Easements That Would Result from the New Estero Ranch Trail System, and Thus, Ignored and Failed to Analyze Direct and Indirect Effects of the Project.**

The CCC must identify and describe the project’s significant environmental effects, including direct, indirect and long-term effects. Pub. Res. Code § 21100(b)(1); 14 Cal. Code Regs. § 15126.2(a) § 15128.

CEQA Guidelines § 15358 defines “effects” and “impacts” (used synonymously) to

include “[d]irect or primary effects which are caused by the project and occur at the same time and place” and “[i]ndirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable.” 14 Cal. Code Regs. § 15358, subd. (b).

The CCC asserts, without evidence, that “does not appear there will be excessive traffic, parking, or pedestrian use that would burden the HOA in any case.” (CCC Staff Report at 2.) Yet, the CCC made no effort to estimate or forecast the additional use of the Shorttail Gulch easements that would result from the new 5-mile trail system on Estero Ranch. The CCC also failed to consider that Shorttail Gulch would be the only public entrance to Estero Ranch except for the limited public access four times a year through Estero Lane.

In other words, the CCC’s analysis doesn’t have any idea of how many additional visitors will use the new trail system or Shorttail Gulch to access the system. More people on the trail is obviously a physical impact.

Accordingly, there is no substantial evidence in the record that supports the idea that there would be no additional burdens on the easement and the Bodega Harbour neighborhood resulting from that increased use. (See Mary O’Hara-Devereaux, Ph.d, Global Foresight, November 5, 2024 Report.)

The CCC has failed to comply with CEQA because it failed to analyze the impacts that would be created by additional recreational users because its analysis fails to even consider how many additional users will access Estero Ranch.

### **32. In violation of CEQA, the CCC Failed to Analyze Cumulative Impacts of the Project.**

The CCC must analyze significant cumulative impacts.

CEQA defines “cumulative impact” as an impact produced by combining a proposed project’s impacts with other projects causing related impacts. 15 Cal. Code Regs. § 15130(a)(1). CEQA analyses must examine a project’s cumulative impacts when the project’s possible environmental impacts are “cumulatively considerable.” *Id.*

“Cumulatively considerable” means that a project’s incremental effects are significant when combined with the effects of past, present, and reasonably foreseeable future projects. 14 Cal. Code Regs. §15065(a)(3). If an agency concludes that a project’s incremental effect is not cumulatively considerable, it must still discuss this effect by explaining how it reached that conclusion, including why a project’s incremental effect plus other projects’ effects do not have a significant combined cumulative impact. *Id.*, §15130(a), (a)(2).

The CCC has failed to consider, or discuss, the cumulative impact of adding the new trails project to the present use and burden of the Shorttail Gulch trail.

**33. Incorporation by Reference of Previous Comments and Submissions.**

Bodega Harbour hereby incorporates by reference all previous letter, comments and submissions to the CCC and the County.

Thank you.

Sincerely,

/s/

Tom Roth

Cc: Bodega Harbour HOA Board of Directors  
USB stick with supporting documentation



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[mohara@global-foresight.net](mailto:mohara@global-foresight.net)

November 5, 2024

Tom Roth  
Law Office of Thomas D. Roth  
1900 S. Norfolk Street  
Suite 350  
San Mateo, CA 94403

**Re: Forecast of Additional Shorttail Gulch Trail Users Resulting from the Creation of a New 5-Mile Trail System at the Former Estero Ranch; California Coastal Commission Agenda Item 10c; November 14, 2024**

Mr. Roth:

You have asked me to respond to the following California Coastal Commission statement in its staff report for The Wildlands Conservancy's application for a coastal development permit for a new trail system, set for hearing before the Commission on November 14, 2024:<sup>1</sup>

“The HOA has also not submitted any evidence demonstrating there will be an excess number of users or any associated problems with that increase, and indeed, a traffic study conducted by TWC concluded that the new trail use will not significantly increase parking or traffic issues in the HOA area. Any increased parking use, it should be noted, would take place on public roads in areas with open public on-street parking. Lastly,

---

<sup>1</sup> I have attached my CV. I have more than 25 years' experience in preparing a wide range of socio-economic forecasts for a range of global corporations.

the responsibility for trail maintenance resides with the easement holder, Sonoma County, and there would thus be no increase in the burden of trail maintenance on the HOA.”

The Bodega Harbour HOA commissioned IDAX Data Solutions to monitor pedestrians entering the Shorttail Gulch trailhead for two weekends: September 13-15, 2024 and Oct. 12-14, 2024.

Taking an average of those two weekends, which included a Holiday weekend, multiplied by 52 weekends, Shorttail Gulch presently experiences about 6,900 visitors annually on weekends. While there is no data on weekday usage (other than Fridays), I live in Bodega Harbour (adjacent to the trail) and I have observed that weekday usage is typically substantially less than on a weekend. For analytical purposes, weekend usage is more relevant because the increased usage during weekends has the greatest potential to create impacts to the neighborhood.

Forecasting future visits by recreational users due to the new 5-mile trail system is difficult given the wide range of variables. However, TWC’s consultant, W-Trans, appears focused only on additional vehicular traffic, not the overall use of the easement access by pedestrians.

W-Trans admits that its conclusion as to whether there will be adequate parking is based on “observations during a [singular] site visit as well as anecdotal information about parking usage, the existing on-street and off-street parking supply . . . .” (CCC Staff Report, Ex. 7 at 7.) Generally, a single data point is insufficient to forecast future conditions. It also appears that W-Trans did not speak to or interview any residents or Board members from Bodega Harbour – people who have first-hand knowledge of the parking situation.

My personal observations and those of other Bodega Harbour residents is that the parking lots for Pinnacle Gulch and Shorttail Gulch are often at capacity on weekends presently – meaning that there is no excess capacity. On weekends, there is also significant street parking use near

Shorttail Gulch, meaning there is limited excess capacity to accommodate additional use from the TWC trails project. I estimate that there are only a few excess capacity street parking spots available on non-Holiday weekends.

In terms of forecasting future use of the Shorttail Gulch trail easement in order to access the TWC trail system, one approach is to identify another park that has a similar trail system near the coast. One such example is the Tennessee Valley trail system at Golden Gate National Recreation Area in Marin County. According to National Parks Service data, annual recreational visitation to those trails in 2023 was approximately 204,000.

However, it is not reasonable to assume that the TWC visitation would reach that level. The former Estero Ranch property is more remote and is not near the Bay Area, which generates extensive traffic at Tennessee Valley.

It is reasonable to predict that within the medium-term, visitation to the Estero Ranch trails would reach one-third to one-half of the Tennessee Valley numbers – between 68,000 and 102,000 per year.

That forecast is consistent with the County’s forecast of 56,000 annual visitors to the Pinnacle Gulch trail.

It is also a reasonable forecast because under TWC’s proposal, Shorttail Gulch would be the **only public entrance** for the 600-acre property, except for very restricted public access four times a year on Estero Lane. In other words, if the public wants to access the former Estero Ranch, it must use Shorttail Gulch.

68,000 to 102,000 would be an order of magnitude increase from the current annual visitation level of 6,900.

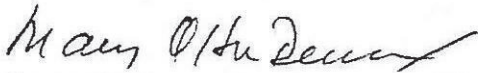
Obvious adverse impacts from such a large increase in use would

include litter, impacts from using the area as an outside toilet, impacts from people taking short cuts across private property, conflicts over parking spaces, inadequate parking, potential vandalism, and illicit drug use. Osprey is a narrow street in front of the proposed entrance to the new trail area, and excess parking will create obstacles for first responders for medical care or other emergencies.

While the Coastal Commission notes that Sonoma County would be responsible for trail maintenance, no one claims that Sonoma County would address impacts to the neighborhood itself, thus burdening the HOA and residents of Bodega Harbour.

Nor is there any claim or evidence that Sonoma County has the personnel, resources or budget to maintain the trail in light of a ten to fifteen-fold increase in use.

Sincerely,



Mary O'Hara-Devereaux., Ph.D  
Global Foresight LLC

**MARY O'HARA-DEVEREAUX, PH.D.**

Founder and President, Global Foresight

**A trusted and respected advisor to Chief Executives (CE)**, Mary O'Hara-Devereaux has more than 25 years of global experience providing private companies, government entities, and non-profits with long-term socio-economic forecasts, trend analysis, strategy, and innovation support to support them making better decisions and make sense out of the future.

**Known for her steady-eyed forecasting**, Mary's ability to analyze emerging trends and translate them into profitable business opportunities is legendary. She is known for finding targets no one else can see.

**Mary's skill at helping executives thrive in turbulent times** has been honed by more than 25 years of global experience in over 66 countries on 6 continents. Her deep cross-industry expertise includes work for well-known companies in the technology, entertainment, media, biotech, financial services and accounting, consumer products, energy, health care/ pharmaceuticals, food and beverage, and staffing industries. Areas of business expertise include business forecasts, corporate strategy, innovation "skunk works," competitor analysis, business development, and strategic human resources.

**She has delivered keynotes and executive briefings** to a list of global blue-chip clients. Additionally, she has provided future's briefings to U.S., China, and other global governmental agencies, foundations and forums, and speaks at Public not-for-profit entities.

**As former Director of the Institute for the Future in Silicon Valley** (a spin-off of The Rand Corporation), Mary led the emerging technologies program providing forecasts and analysis to multinationals around the globe and led conferences and institutes exploring the future and disruptive impacts of technology, as well as, the future of work and education.

**An internationally known futurist and sought-after speaker**, Dr. O'Hara-Devereaux is the author of the best-selling books 'Navigating the Badlands: Thriving in the Decade of Radical Transformation' and 'Global Work—Bridging Distance, Culture and Time'. Two other books, 'China Five-Year Forecast: Creating the New Marketplace' and 'China's Generations: The Transformation of Daily Life', are considered must-reads for business leaders who want to engage successfully with the world's most important emerging market. She is currently finishing her next book, a forecast of the global business environment over the next 10 years out to 2030.

**Mary's work has been featured on Bloomberg TV** and Fox TV in the U.S. and on CCTV in China; on National Public Radio, AARP Radio, and other regional and local radio shows; in The Wall Street Journal Asia and the Los Angeles Times; and in other prominent magazines and journals.

**Dr. O'Hara-Devereaux has served on a number of boards**; she has been on the faculty of the University of California, Davis, UC San Francisco, the University of Hawaii, and Beijing University; founded the Center for the Future of China at Beijing University where she lead forecasts and research for global and Chinese clients; and has served as visiting professor at many universities around the world. She holds degrees from the University of Michigan, the University of California, and Fielding Graduate University.



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Forecaster/Futurist  
Keynote Speaker  
Best Selling Author  
Founder of 3 Companies

**Clients****Global**

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**Corporate**

HMC Architects, Kaiser Permanente, Erickson, Scripps Networks, Sempra Energy

**Government Agencies**

NASA, DARPA, Health and Human Services

**Foundations/Forums**

Robert Wood Johnson, Archstone Foundation, Rockefeller Foundation, Pew Charitable Trust, Milken Global Institute, Harvard's Kennedy School, The Conference Board, World of Work

**Public Not-for-Profit**

ASAE, SHRM, Geoprofessional Business Association, Senior Researcher

**Leadership, Innovation, Strategy**

# Golden Gate NRA

*Current calendar year data are preliminary and subject to change. Data will be finalized by the end of the first quarter of next calendar year.*

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Total
<b>TRAFFIC COUNT AT TENNESSEE VALLEY ROAD</b>													
2024	16,665	10,902	15,326	13,275	0	0	0	0	0				56,168
2023	17,390	9,823	12,491	18,011	16,276	17,106	23,457	34,222	17,093	10,630	16,064	12,116	204,679
2022	18,206	15,769	14,847	16,997	16,009	12,093	12,093	18,819	11,497	14,862	15,917	12,709	179,818
2021	20,452	20,551	23,043	16,567	15,952	39,565	15,438	28,026	14,092	14,092	13,945	17,214	238,937
2020	18,350	17,148	15,928	16,024	16,901	17,340	18,241	24,576	15,981	18,608	23,622	22,588	225,307
2019	15,164	11,126	15,293	18,092	15,002	16,838	20,365	16,668	14,788	17,291	14,673	11,839	187,139
2018	16,475	15,051	16,416	16,416	16,142	16,100	19,428	21,535	17,421	17,421	2,838	14,102	189,345
2017	15,384	15,444	16,104	15,247	15,325	16,567	15,737	15,796	15,734	18,105	16,388	16,352	192,183
2016	21,466	18,633	18,733	21,799	20,753	20,135	20,874	21,531	18,554	20,389	14,854	14,447	232,268
2015	22,728	21,174	21,578	21,623	19,967	19,852	20,075	22,884	17,681	17,953	17,420	16,074	239,009
2014	23,701	15,244	16,347	17,169	19,967	16,978	15,185	22,715	15,800	18,563	16,333	17,911	215,913
2013	19,957	16,616	15,428	20,001	16,571	14,628	15,623	19,734	18,020	14,301	14,822	22,676	208,377
2012	24,403	12,151	0	14,395	13,858	17,287	16,051	19,677	23,779	16,466	16,234	0	174,301
2011	14,711	15,123	16,473	10,940	16,348	16,488	14,254	15,068	14,489	13,790	14,816	18,799	181,299
2010	0	1,347	1,388	0	16,732	6,161	839	0	16,319	12,079	15,584	8,436	78,885
2009	20,633	13,775	12,633	19,123	15,902	15,902	10,960	22,574	11,000	14,000	16,000	12,000	184,502
2008	9,728	18,558	14,642	19,962	15,648	15,431	15,829	18,000	11,958	14,828	17,624	10,778	182,986
2007	21,974	0	17,965	13,213	0	34,903	18,751	18,498	0	0	13,008	14,478	152,790
2006	0	0	17,202	0	0	0	0	0	0	0	10,961	0	28,163
2005	15,140	11,485	0	0	25,827	7,012	16,308	0	0	14,770	14,963	0	105,505
2004	16,411	13,314	17,430	9,886	0	6,492	18,203	18,203	12,482	12,210	12,412	9,736	146,779
2003	0	8,271	20,101	15,607	17,146	0	17,739	15,801	15,309	18,390	12,713	10,189	151,266
2002	10,877	0	0	8,914	20,446	20,276	0	37,648	199,113	0	0	0	296,274
2001	28,056	9,911	21,816	0	0	0	0	64,820	17,172	21,635	0	31,105	194,515
2000	0	44,482	26,960	0	19,655	25,552	0	9,227	14,448	11,576	19,651	14,438	185,989
1999	9,602	13,512	17,040	19,871	17,848	24,763	16,018	18,663	19,502	15,296	19,585	0	191,700



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November 8, 2024

Tom Roth  
Law Offices of Thomas D. Roth  
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Suite 350  
San Mateo, CA 94403

Dear Mr. Roth:

I have received and reviewed the Transportation Impact Study for Estero Americano Coast Preserve by W-Trans that discussed potential transportation impacts associated with the proposed Estero Americano Coast Preserve Trails Project in Sonoma County.

The stated purpose of the letter is to set forth anticipated trip generation, address potential impacts related to CEQA and detail the projects effect on traffic operation.

However, the letter also proposed and used a methodology for assessing parking space demand and stated findings for the number of parking spaces that firm believes the trail project warrants. My comments below focus solely on W-Trans' findings of parking demand in relation to potential impacts of the proposed project.

Utilizing traffic rates and two existing parking lots parking spaces and correlating this data to miles of trails -- as the W-Trans firm did -- doesn't properly support the parking demand analysis.

Hours of use per parking space during peak hours would be a more accurate way of establishing demand. W-Trans failed to provide this analysis, which is necessary to obtain an accurate parking demand forecast.

W-Trans' methodology is not appropriate given the nature of the project being analyzed, and is not the industry standard. It does not matter how many miles of trail a park has; what matters is how long a visitor stays there and uses the trailhead parking. It also matters what the trail/park capacity is.

A handwritten signature in black ink that reads "Paul Kephart". The signature is fluid and cursive, with a stylized "A" at the end.

Paul Kephart  
Ecologist/Founder Rana Creek

## **Paul Kephart**

RANA- Founder and Principal Ecologist

(831) 659-3811

paul@ranacreekdesign.com

Paul has a keen ability to see the geologic, natural and cultural history embodied in a landscape, and simultaneously imagine its most vibrant future. For thirty years, Paul has given himself to observation, scientific understanding and intimate relationship with the great diversity of natural systems. As the principal ecologist for Rana Creek, Paul applies his comprehensive consulting experience pertaining to CEQA, NEPA, botanical survey, biological assessment, project mitigation, land stewardship programs, and land management planning. Paul is a licensed landscape contractor and often implements restoration plans. As a land use & zoning expert, Paul can offer insight into issues related to land use regulations, zoning laws, and planning and development.

### **AFFILIATIONS**

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- American Society of Landscape Architects
- California Native Plant Society California
- Native Grass Association
- Society for Ecological Restoration
- Special Consultant for the Monterey Peninsula Open Space Trust at CSUMB
- Society of Environmental Professionals

### **PUBLICATIONS**

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- Stromberg, Kephart, Yadon, 2002 Coastal Grasslands, Madrono
- Kephart, Paul, 2005 Bring back Native Grasses, Restoration and Management Demonstration Russian Ridge, Grasslands
- Stromberg, Mark R. and Paul Kephart, "Restoring native grasses in California Old Fields" Restoration and Management Notes, 14(2), Winter, 1996

### **RELEVANT EXPERIENCE**

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#### **Founder and Principal Ecologist of *Rana Creek Habitat Restoration***

##### **1987- current**

- Applies comprehensive consulting experience pertaining to botanical survey, biological assessment, project mitigation, land stewardship programs, land management planning, and habitat restoration
- Licensed landscape contractor
- Endangered Species Work
  - California red-legged frog relocation and habitat creation. Carmel River Reroute and Dam Removal (2023-current)
  - Monterey spineflower restoration and monitoring. Monterey Bay Aquarium Research Institute (2021-current)
  - California red-legged frog, foothills yellow-legged frog, southwestern pond turtle, and nesting birds surveys. Mattos Wetland Restoration (2021-current)
  - Design, Permit, and Construction of Two Lakes and Restore Riparian Habitat for San Francisco Garter Snake for Fandango Ranch, San Gregorio (2007-2014)
  - Rare and Endangered Species Mitigation Plan -Trifolium Polyodon, Clint Eastwood, Cañada Woods North, Carmel Development Co (1997)
  - Vegetation Management Plan for Tipton kangaroo rat, Blunt-nosed leopard lizard,

and San Joaquin kit fox, Kern Water Bank Authority (1996)

- Land Use, Restoration Planning and Implementation
  - Rocky Point Restaurant Restoration Plan (2024-current)
  - Rocky Point Restaurant California Coastal Commission Cease and Desist Orders Settlement Agreement (2024-current)
  - Coastal Development Permit, State Lands Commission Lease Agreements – Boathouse, Inverness, California (2019-Current)
  - UC Berkeley Coastal Prairie Assessment, Restoration and Mitigation Planning, UC Berkeley (2019-current)
  - UC Berkeley Richmond Field Station EPA Meadow (2023-current)
  - Rancho Cañada Floodplain Restoration (2023)
  - Monterey Bay Aquarium Research Institute, Moss Landing, CA (2021-current)
  - Knoop Residence Revegetation Plan (2021-current)
  - DeSantis Residence Revegetation Plan Implementation Project (2021-current)
  - Restoration Implementation Design, Biological Monitoring and Implementation: *for* San Clemente Dam Removal and Carmel River Reroute Project
  - Redberry Ridge Portola Valley, California (2013-2018)
  - Great Tidepool Restoration, City of Pacific Grove, (2008-2018)
  - Front Runner, Topanga, California: Erosion Control Plan, Removal Plan, Remedial Grading Plan, Revegetation Plan, Monitoring Plan, and Reporting (2017-current)
  - Oak Woodland Mitigation and Restoration Plan, City of Portola Valley (2017)
  - Coastal Dunes, City of Marina (1999)
  - Monterey Pine Forest Restoration, PG&E (1999)
  - Coastal Bluff Restoration Plan, Pebble Beach Company (1999)
  - Revegetation Plan of Julia Pfeiffer Burns Landslide, CALTRANS District Five (1996)
  - Native Grassland, Diablan Sage Scrub, and Oak Woodland, Granite Rock Company (1996)
  - 1996: San Bruno Mountain, County of San Mateo (1996)
  - Public Education Interpretive Trail, PG&E City of Seaside (1996)
  - Bill and Roxanna Keland, Monterey California (1995)
  - Garland Ranch, Monterey Regional Park District (1995)
- Biological Assessments and Monitoring
  - Rocky Point Biological Assessment, Big Sur (2024)
  - Linda Flora Mountain Lion Corridor Survey and Mapping, Santa Monica, CA (2024)
  - Sunset Drive, Pacific Grove, CA (2024)
  - Calvary amphitheater and pavilion, Monterey, CA (2023)
  - Boathouse wetlands, Inverness, CA (2023)
  - 1359 Lighthouse Avenue, Asilomar Dunes, Pacific Grove, CA (2023)
  - Golden Hind Passage, Corte Madera, CA (2022)
  - Wetland Restoration and Mitigation, Design, Biological Monitoring and Assessment, Permitting: *for* Diamond D Dairy, Marshal California (2017-current)
  - San Clemente Dam Removal and Carmel River Reroute Project (2013 – 2023)
  - Wilson Quarry SMARA compliant Restoration for Granite Rock, Aromas CA (2008 – current)
  - Palassou Ridge, The Nature Conservancy and Santa Clara County Open Space Authority (1999)
  - Desert Alkaline Scrub Habitat: *for* Kern Water Bank Authority (1999)
  - Vegetation Monitoring, Kern Water Bank Authority (1998)
  - Clint Eastwood Cañada Woods North, Carmel Development Co (1997)
  - Coastal Terrace Prairie, The Nature Conservancy (1996)

- Diana Fish of the Palo Corona Ranch, Monterey County (1996)
- Off-site Coastal Terrace Prairie mitigation, Elkhorn Slough Nature Conservancy property (1995)
- Coastal Terrace Prairie Restoration, East Bay Utility District, Richmond, CA (1995)
- Grazing Management
  - Fish Ranch, Carmel (2013-14) and Dianna Fish (2018)
  - SunPower Corporation, Multiple locations, California (2010-2017)
  - Diana Fish of the Palo Corona Ranch, Monterey County (1996)
- Resource Management Planning
  - Unger Park, Santa Clara County Parks (1999)
  - Bear Property Transition, Santa Clara County Parks and Recreation (1997-1998)
  - Native Grassland, Mid-Peninsula Open Space Russian Ridge Preserve (1997)
  - Native Grass Establishment, PG&E Diablo Canyon (1995)
  - Native Grassland and Diablan Sage Scrub, Granite Rock (1994)

### **Landscape Design and Implementation for Rana Creek**

- Pioneer and innovator of living architectural systems, a thought-leader in ecological design, and a dedicated horticulturalist
- Consulted on many groundbreaking and iconic projects, including large-scale living roofs and living walls, site master plans, and cumulative restoration of many thousands of acres of grassland, wetland and coastal landscapes in the Western US

### **EDUCATION**

---

- Master of Architecture: San Francisco Institute of Architecture

### **RESEARCH**

---

- State-wide classification, collection, and propagation of native grasses, wildflowers, shrubs, and trees for agronomic, restoration, and nursery production

---

**FW: Public Comment on November 2024 Agenda Item Thursday 8a - Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update).**

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**From** Travis, Galen@Coastal <Galen.Travis@coastal.ca.gov>  
**Date** Tue 11/12/2024 2:01 PM  
**To** Henningsen, Luke@Coastal <luke.henningsen@coastal.ca.gov>


 4 attachments (15 MB)

Exhibit 2--Estero Americano Public Access Biological Assessment 022322.pdf; Exhibit 3--SLT On The Land.pdf; Exhibit 4--guided outing are not public access per SLT.pdf; Exhibit 5--SLT report on public access harming environment.pdf;

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**From:** Peter Prows <pprows@briscoelaw.net>  
**Sent:** Tuesday, November 12, 2024 11:43 AM  
**To:** NorthCentralCoast@Coastal <NorthCentralCoast@coastal.ca.gov>  
**Subject:** Fw: Public Comment on November 2024 Agenda Item Thursday 8a - Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update).

Dear Coastal Commission:

I am resending this message as it is not included in the "Correspondence" supplemental for this item.



**PETER PROWS**

235 Montgomery Street, Suite 935  
San Francisco, California 94104  
Direct: [\(415\) 402-2708](tel:(415)402-2708) Cell: [\(415\) 994-8991](tel:(415)994-8991)

---

**From:** Peter Prows <pprows@briscoelaw.net>  
**Sent:** Friday, November 8, 2024 8:53:48 AM  
**To:** [NorthCentralCoast@coastal.ca.gov](mailto:NorthCentralCoast@coastal.ca.gov) <[NorthCentralCoast@coastal.ca.gov](mailto:NorthCentralCoast@coastal.ca.gov)>  
**Subject:** Public Comment on November 2024 Agenda Item Thursday 8a - Sonoma County Local Coastal Program Amendment Number LCP-2-SON-23-0058-2 (Land Use Plan Update).

Dear Coastal Commissioners:

I represent the environmental group Concerned Citizens for Estero Americano, which expressed repeated concerns to the Sonoma County Board of Supervisors and Planning Commission (copying Coastal Commission staff) about the incompatibility of the proposed public access point at "J-2" (previously labeled "K-2"), in Figure C-PA-1k, with the ESHA policies of the Coastal Act.

Concerned Citizens has two comments on the current draft LCP.

1) Public access in this ESHA area is inconsistent with Coastal Act sections 30230, 30231, and 30240(a). The Estero Americano is a remarkable estuary, teeming with protected fish and

wetland species, rare birds, endangered plants, and precious eelgrass. The operative LCP, at page III-11, deems the “[m]arsh, riparian and open water areas of Estero Americano from the mouth to Valley Ford” as “Sanctuary-Preservation Areas” and “Rare and/or endangered plant site”. The entire Estero Americano is an environmentally sensitive habitat area entitled by these sections of Coastal Act to being “protected” and “enhanced” rather than “disrupted” in “any” way.

Citizens provided the written opinion of a qualified biologist (attached as Exhibit 2) that “The proposed Public Access Point is in a remote and sensitive area and is inappropriate for public use”:

> Encouraging and facilitating public access at the proposed Public Access Point could result in direct and indirect impacts to nesting birds, eelgrass beds, special-status fish species, California red-legged frog, and sensitive plants. Increased public access could also result in the degradation of critical habitat for California red-legged frog, tidewater goby, and Central Coast steelhead. Trampling the sensitive near shore mudflats and emergent wetlands would increase sedimentation of the Estero Americano and gatherings would generate noise and activity that could disrupt nesting birds and other wildlife, and also impact the quality of life of nearby residents. Increased traffic along the access road from Estero Lane could result in increased erosion along the road and associated sedimentation of the watershed, degradation of eelgrass beds, direct vehicle impacts to California red-legged frog (i.e., take), and indirect impacts to nesting birds. Development of parking areas, trails, restroom facilities, or other amenities at the proposed Public Access Point could also result indirect and indirect impacts to these same resources.

>

Public access to the Estero Americano tramples habitat, increases turbidity, and causes harm, as photographs published by Sonoma Land Trust (included in the biologist’s report) plainly show.

Unfortunately, Concerned Citizens’ concerns were ignored by the County, and they are also not acknowledged or addressed by the Coastal Commission staff report. The proposed LCP amendment contains no acknowledgement of, or protections for, the risk of harm that public access to ESHA can cause. The LCP amendment gives no assurances that the proposed public access in this location will respect these Coastal Act ESHA requirements. Unless and until the LCP builds in absolute and enforceable assurances that these Coastal Act protections will be complied with, this proposed public access location should be removed from this map.

2) Sonoma Land Trust does not really propose public access in this location. Sonoma Land Trust is not providing public access—it is in the business of selling access for its private members. Internal Sonoma Land Trust documents reveal that its “outings model” is a “mostly fee-based program where members receive a discount”. (Exhibit 3.) Access that requires a fee or membership in a private organization is not public access. Sonoma Land trust also does not consider its “guided outings” to be “public access”. (Exhibit 4.) Sonoma Land Trust public access reports conclude that “human recreation activity negatively affects wildlife individuals, populations, and communities on every continent and in every major ecosystem.” (Exhibit 5 at 5.) The LCP should not be misleading the public into believing that the private, paid access that Sonoma Land Trust wants to encourage in this area is really public access, or that such access won’t harm ESHA in violation of the Coastal Act.

Thank you for your consideration of these comments.



# MOORE BIOLOGICAL CONSULTANTS

February 23, 2022

Mr. Peter Prows  
Briscoe, Ivester & Bazel, LLP  
235 Montgomery Street, Suite 935  
San Francisco, California 94104

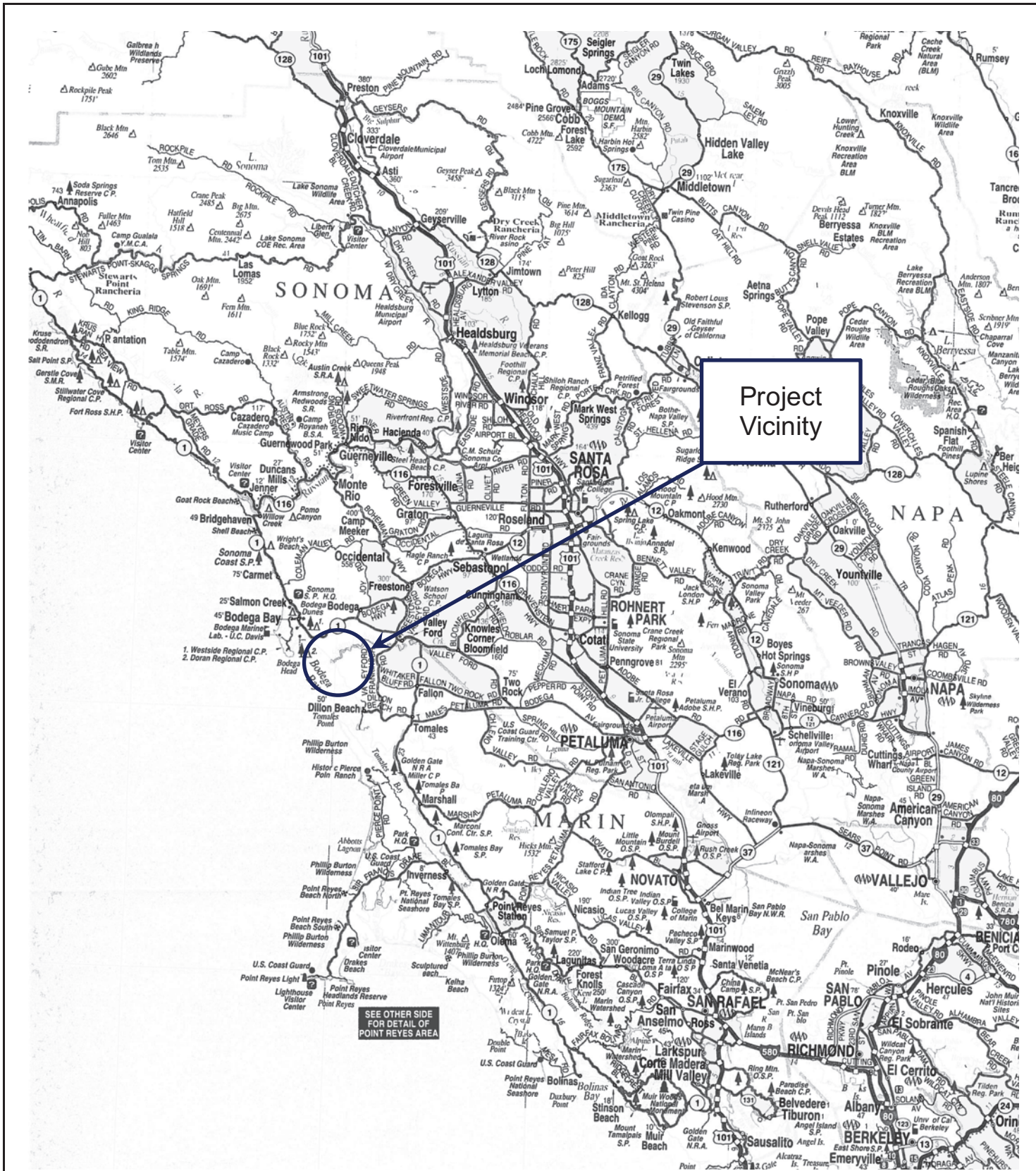
Subject: PROPOSED ESTERO AMERICANO PUBLIC ACCESS POINT “K-2”,  
SONOMA COUNTY, CALIFORNIA: BIOLOGICAL ASSESSMENT

Dear Peter:

I understand that Sonoma County is proposing a Public Access Point along the Estero Americano, approximately 4 miles west of Valley Ford, in Sonoma County, California (Figure 1). The proposed Public Access Point is in an area of unnumbered sections in Township 5 North, Range 10 West of the USGS 7.5-minute Valley Ford topographic quadrangle (Figure 2).

The proposed Public Access Point is mapped as “Access Point/Trailhead K-2” in the public review draft Sonoma County Local Coastal Plan (SCLCP) update (Sonoma County, 2021) (Attachment A). This assessment addresses potential impacts of public access to wetlands, sensitive habitats, and sensitive species in and near the proposed Public Access Point.

On October 6, 2021, I conducted a reconnaissance level survey of the proposed Public Access Point. This assessment provides an overview of sensitive biological resources in the area and identifies potential impacts to biological resources resulting from increased public access.



Source: California State Automobile Association

**Moore Biological Consultants**



**FIGURE 1**

**PROJECT VICINITY**



**Figure 2**

Moore Biological  
Consultants



Map Date: 02/23/2022

**USGS**

**Estero Americano -  
Potential Public Access Point K-2  
Sonoma County, CA**

## Project Location and Setting

The proposed Public Access Point is along the north bank of the Estero Americano, approximately 4 miles west of Valley Ford, in Sonoma County, California (Figure 1). The proposed Public Access Point is mapped on a steep hillside in the southwest part of a 46+/- acre parcel adjacent to the Estero Americano (Figure 2 and Attachment B).

A private road along the east edge of APN 103-04-012 provides access to a few parcels to the east, the Sonoma Lant Trust (SLT) parcel containing the proposed Public Access Point, the eastern SLT parcel, and the adjacent parcel to the west (APN 103-04-031) (Figure 3). Access to the adjacent parcel to the northeast (APN 102-040-012) and SLT Parcel 103-04-014 is from Estero Lane, along the north side of the parcels.

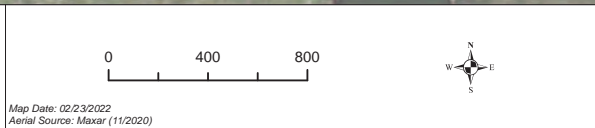
The SLT owns three parcels along the north side of the Estero Americano encompassing 126.8 acres (APNs 103-04-010, 103-04-014, and 103-04-032) (Figure 2 and Attachment B). The SLT parcels primarily consist of steep hills sloping overall to the south toward the Estero Americano. The western two SLT parcels and adjacent parcels 103-04-012 and 103-04-031 comprise a topographic “amphitheater” facing the Estero Americano, with sweeping views of the Estero from numerous locations on each of the parcels. An intermittent creek with two headwater branches flows generally north to south through this four-parcel cluster, flowing in to the Estero Americano in the parcel to the west of the proposed Public Access Point. The easternmost SLT parcel (APN 103-04-010) faces southeast and drains in to the Estero Americano both directly, and via a creek further east.

The majority of the SLT parcels and adjacent lands are coastal prairie and chaparral habitats, with several notable rock outcrops (Figure 3 and photographs in Attachment C). There are also clusters of planted Monterey cypress (*Hesperocyparis macrocarpa*) trees and some widely scattered Monterey pines



**Figure 3**

Moore Biological  
Consultants



**AERIAL**

**Estero Americano -  
Potential Public Access Point K-2  
Sonoma County, CA**

(*Pinus radiata*) on most of the SLT parcels. Adjacent parcels, and parcels in the greater project vicinity, are primarily open space and rangeland, with widely scattered ranch style homes.

The Estero Americano bounds the south edge of two of the SLT parcels (Figure 3). A private gravel and dirt road provides access from Estero Lane to a few homes near Estero Lane, through the parcel containing the proposed Public Access Point, and in to an adjacent parcel. The south end of this road appears to terminate on a private parcel to the southwest of the proposed Public Access Point.

For approximately 2,000 feet south of Estero Lane, the private road is relatively flat and wide and appears well maintained. Further south, the road is steep and narrow as it winds down the hillside through the southwest SLT parcel toward the proposed Public Access Point. There are numerous water bars along the steep sections of the road to convey run-off from the roadway and reduce the potential for gullies and erosion of the roadbed and adjacent slopes.

The Estero Americano is a tidally influenced estuary, with the mouth of the Estero opening up to the Pacific Ocean during some years. There are expansive emergent wetlands and mudflats subject to tidal influence along the edge of the Estero Americano in the southwest SLT parcel near the proposed Public Access Point and on the parcel to the west (Figure 3 and photographs in Attachment C). Riparian wetlands dominated by willows (*Salix* spp.) bound the intermittent creek that flows in to the Estero Americano west of the proposed Public Access Point, especially along the western headwater branch.

## **Sonoma County Local Coastal Plan**

Several “Environmentally Sensitive Habitat Areas” are mapped in the vicinity of proposed Public Access Point “K-2” in the draft SCLCP update maps (Attachment A) (Sonoma County, 2021). The Public Access Element of the draft

SCLCP update supports distributing recreational facilities where compatible with the sensitivity and suitability of an area. With respect to environmental sensibility, the draft SCLCP describes impacts on the environment, including determining the environmental carrying capacity of the land, protecting wildlife habitat, protection of views, and the “psychological and social” capacity of the land, as key factors in the evaluation of public access points. The draft SCLCP also discusses the need for park facilities (parking, restrooms, water, etc.) at public access points and encourages use of existing park service centers to support additional dispersed recreation. The Public Access Element draft SCLCP update describes the need to prevent overuse and damage to the coastal environment and that “substantial modifications of the natural environment for a specific activity” should be minimized and avoided if possible in planning recreational facilities.

### **Estero Americano Watershed Management Plan**

The proposed Public Access Point is situated in the west part of the Estero Americano, which is described in the Estero Americano Watershed Management Plan (EAWMP) (GRRCD, 2007) as an environmentally sensitive watershed supporting numerous special-status plant, wildlife, and fish species that has been degraded over time by agriculture and other land use activities. Due to sedimentation, siltation, and nutrient pollution, the Estero Americano is listed as an impaired waterbody by the State Water Resources Control Board (SWRCB), which provided funding for the EAWMP.

The steep topography of the hillsides and the erosive qualities of many of the soils in the Estero Americano watershed facilitate erosion that has reduced the open water areas of the Estero over time. A substantial portion of the watershed is mapped in the EAWMP as having either a “high” or “moderately high” erosion hazard, with large gullies being some of largest contributors of sedimentation. Ten notable gullies in the watershed, including the steep bowl-shaped hillsides encompassing the two western SLT parcels, are identified in the EAWMP as

warranting field assessment as a potential “Priority Gully Restoration Site” for potential management activities that could mitigate soil erosion in the area.

### **Estero Americano State Marine Recreational Management Area**

The western portion of the Estero Americano, including the portion adjacent to Public Access Point is within the boundaries of the Estero Americano State Marine Recreational Management Area (SMRMA), which was adopted by the California State Fish and Game Commission in 2010. Marine Managed Areas, such as the SMRMA, were set aside by the Commission primarily to protect or conserve marine life and associated habitats. The boundaries of the SMRMA are depicted in mapping of “Environmentally Sensitive Habitat Areas” in the public review draft SCLCP update (Sonoma County, 2021) (Attachment A).

### **Waters of the U.S. and Wetlands**

The Estero Americano is a jurisdictional Water of the U.S. and includes wetlands as defined by the U.S. Army Corps of Engineers (ACOE, 1987). The Estero Americano is a navigable tidal water, and the wetlands along the edges of the Estero are “adjacent wetlands”, also falling under ACOE jurisdiction. The intermittent creek that flows in to the Estero Americano west of the proposed Public Access Point and riparian wetlands adjacent to the creek are also potentially jurisdictional Waters of the U.S.

In the vicinity of the proposed Public Access Point, the open waters of the Estero Americano are mapped as “Estuarine and Marine Deepwater” and “Riverine” features in the National Wetland Inventory (NWI) (Attachment D). The expansive mudflats and wetland habitats situated between the open waters of the Estero Americano and dry land near the proposed Public Access Point are mapped as “Freshwater Emergent Wetland” and “Freshwater Forested/Shrub Wetland” in the NWI. The creek that flows in to the Estero Americano just west of the proposed

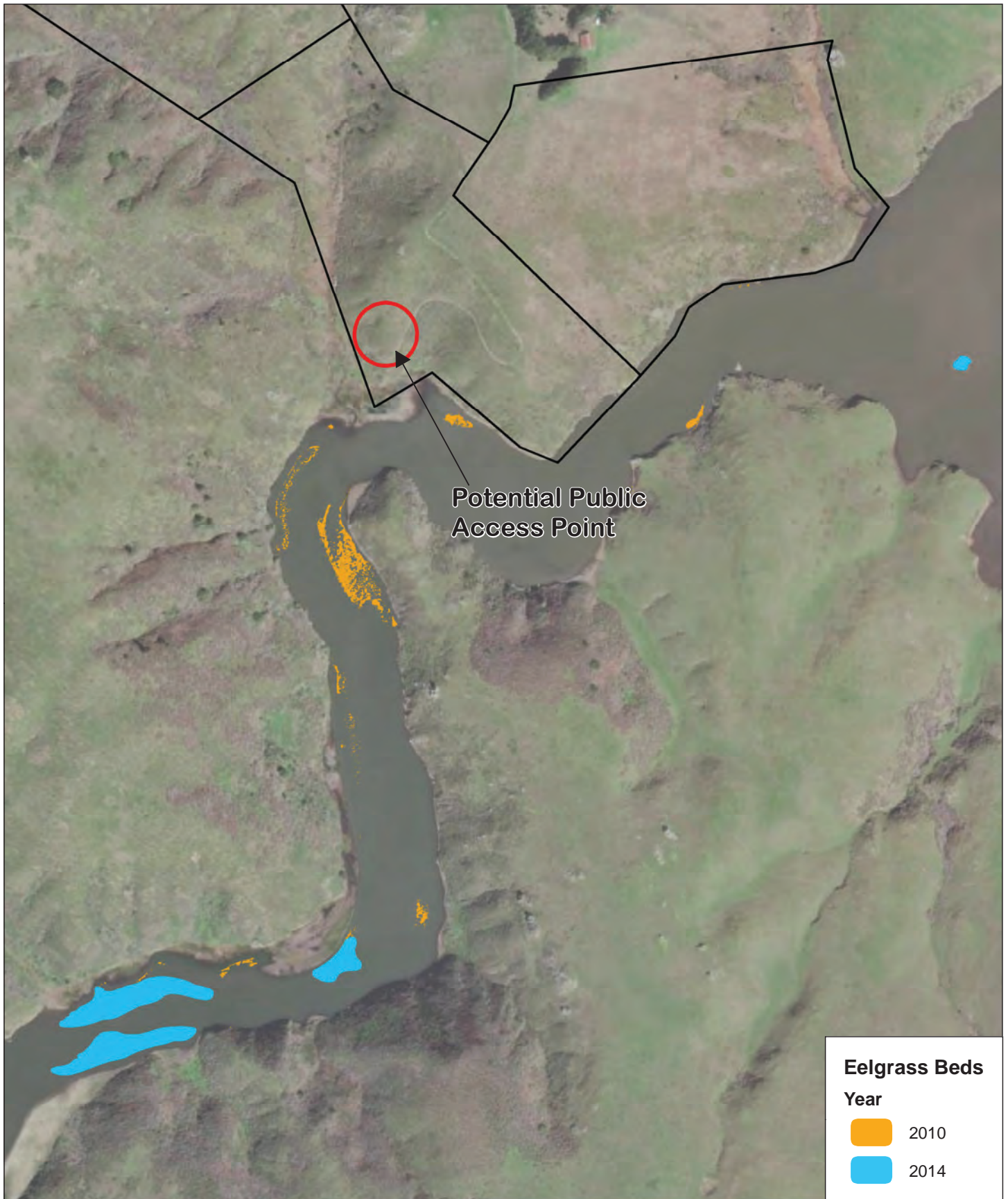
Public Access Point is also mapped as a “Freshwater Forested/Shrub Wetland” in the NWI.

The downstream section of the tributary in to the Estero Americano and the mudflats and wetlands near the proposed Public Access Point are mapped as environmentally sensitive “Freshwater Herbaceous Wetlands” in the public review draft SCLCP update (Sonoma County, 2021) (Attachment A). The SCLCP Environmentally Sensitive Habitat Areas map also depicts patches of “Riparian Woodlands” further upstream along the tributary.

### **Eelgrass Beds**

The open waters of the Estero Americano support California eelgrass (*Zostera marina*), which is considered a “keystone species” in north California estuarine environments upon which many other species, especially juvenile fish and invertebrates depend (SLT, 2016). In addition to its biotical functions and values, eelgrass beds are important in improving water quality through filtering polluted runoff, stabilizing sediments, and nutrient recycling. Eelgrass also functions in carbon sequestration and may offset carbon emissions (SLT, 2016; NOAA, 2014). Due to its importance to the marine ecosystem and the overall environment, the National Marine Fisheries Service (NMFS) “California Eelgrass Mitigation Policy” is the recommendation of no net loss of eelgrass habitat function in California (NOAA. 2014).

The Estero Americano is one of a limited number of estuarine habitats along the coast known to support California eelgrass. During surveys in 2010 and 2014, CDFW documented California eelgrass beds in the Estero Americano adjacent to the proposed Public Access Point (Figure 4). The eelgrass beds in the vicinity of proposed Public Access Point “K-2” are also mapped as one of the “Environmentally Sensitive Habitat Areas” in the draft SCLCP update maps (Attachment A) (Sonoma County, 2021).



**Figure 4**

Moore Biological  
Consultants

0 250 500



Map Date: 02/23/2022  
Source Data: California Department of Fish and  
Wildlife (CDFW); 2010 and 2014

**Eelgrass Beds**

**Estero Americano -  
Potential Public Access Point K-2  
Sonoma County, CA**

**Eelgrass Beds**

**Year**

 2010

 2014

## Resident and Migratory Birds

The expansive mudflats and emergent wetland habitats situated between the open waters of the Estero Americano and dry land near the proposed Public Access Point provide foraging and breeding habitat for a variety of shorebirds. The Estero Americano is identified in the Southern Pacific Shorebird Conservation Plan (SPSCP) (Hickey, et. al., 2003) as one of only two “wetlands of importance” for migratory shorebirds and waterfowl in Sonoma County, providing habitat to thousands of shorebirds during peak periods of occurrence. The Estero Americano is in the heart of the Pacific Flyway and supports a very large and diverse winter and migratory bird community. The SPSCP describes how growing recreational use of beaches, mudflats, and wetlands appears to be causing increased disturbance of roosting and foraging shorebirds. Erosion and sedimentation in wetlands are also identified in the SPSCP as a threat to shorebirds.

A variety of resident and migratory birds, including a few special-status species, use upland habitats in the Estero Americano Preserve. Point Reyes Bird Observatory (PRBO) Conservation Science (PRBO, 2012) conducted grassland bird monitoring at the Preserve in 2010 to 2011, with funding and support from SLT. A total of 44 species of birds was documented at nine point count stations during the 2011 breeding season, with grasshopper sparrow (*Ammodramus savannum*), which is special-status bird classified as a “Species of Concern” by CDFW, being the most abundant bird on the preserve. Other special-status birds observed in during study include northern harrier (*Circus hudsonius*) and Bryant’s savannah sparrow (*Passerculus sandwichensis alaudinus*). Breeding during the 2011 breeding season was confirmed for grasshopper sparrow, western scrubjays (*Aphelocoma californica*), and savannah sparrow (*Passerculus sandwichensis*). An additional 20 bird species are described in the study as “likely breeders”, while 15 more were considered as potentially breeding in the area. The study noted that low intensity seasonal grazing at the Estero Americano Preserve appears to promote grassland bird habitat.

## Special-Status Species

The proposed Public Access Point is situated in and adjacent to habitats providing suitable habitat for several special-status plant, wildlife, and fish species. California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB, 2021) (Attachment D) contains records of 44 special-status species documented within the USGS 7.5-minute Bodega Head and Valley Ford topographic quadrangles, which is an area encompassing approximately 120+/- square miles surrounding the site. An additional 7 federally listed or candidate wildlife and plants species are identified in the United States Fish and Wildlife Service (USFWS) IPaC Trust Resource Report of Federally Threatened and Endangered species that may occur in or be affected by projects in the project vicinity (Attachment D).

The federally threatened Central Coast steelhead (*Oncorhynchus mykiss irideus*) has been documented in the Estero Americano in the immediate vicinity of the proposed Public Access Point and the Estero Americano is designated as critical habitat for Central Coast steelhead (Attachment E). The CNDDDB also contains a record of longfin smelt (*Spirinchus thaleichthys*), a State threatened and federal candidate species, in the Estero Americano just southwest of the proposed Public Access Point. Tidewater goby (*Eucyclogobius newberryi*), also a federally threatened species, has been documented in the Estero Americano just southeast of the proposed Public Access Point. Further, the Estero Americano is designated critical habitat for tidewater goby (USFWS, 2008) (Attachment E).

California red-legged frog (*Rana aurora draytonii*), a federally threatened species, has been documented in several locations within a few miles of the proposed Public Access Point and the Estero Americano and lands to the south are designated critical habitat for California red-legged frog (USFWS, 2006) (Attachment E). The creek that flows in to the Estero Americano just west of the proposed Public Access Point provides potentially suitable breeding habitat for

California red-legged frog and adjacent wetland and upland habitats may be used for frog movement and/or aestivation.

The CNDDDB (2021) contains 3 records of California red-legged frog that appear to be in very close proximity to the proposed Public Access Point, although the specific location information of these records is “suppressed”. Based on the location of the labels on the CNDDDB map (Attachment E), one of the 3 suppressed records appears to be on the north side of the Estero Americano, possibly on one of the SLT parcels. The remaining 2 suppressed records appear to be in the Estero Americano or on the north side of the Estero Americano just east of the proposed Public Access Point.

Four special-status plants are documented in the CNDDDB within approximately 0.5 miles west and southwest of the private parcel to the west of the proposed Public Access Point (Attachment E); there is also designated critical habitat for yellow larkspur (*Delphinium luteum*) less than one mile northwest of the proposed Public Access Point. Another patch of designated yellow larkspur critical habitat is located across the Estero Americano to the south (USFWS, 2002). Based on habitat types present, one of more special-status plant species may occur in habitats in or near the proposed Public Access Point.

The federally endangered Myrtle’s silverspot butterfly (*Speyeria zerene myrtleae*) is also documented in the CNDDDB along Estero Lane, just northwest of the proposed Public Access Point. This butterfly may occur in habitats in or near the proposed Public Access Point.

### **Proposed Public Access Point Activities**

The proposed Public Access Point is expected to facilitate kayak traffic coming and going across the shore to the Public Access point. The proposed Public Access Point might be used as a launch or landing site, which would involve the transport of boats to the launch site, either overland across the private road or by

barge on the Estero Americano. As the private road appears to terminate on private property not owned by SLT, it is unclear where the vehicles would park and what route the kayakers would traverse to get to the water. Scrambling down the extremely steep hill from the proposed Public Access Point to the water would be treacherous, even without carrying a kayak. Absent development of a dock in the open waters (which would trigger the need from permits from several agencies), any kayakers launching or coming ashore at the proposed Public Access Point would need to wade through expansive mudflats and traverse sensitive wetland habitats situated between the open waters of the Estero Americano and dry land. It is anticipated large groups of kayakers may congregate at the proposed Public Access Point, for picnics or other gatherings that could generate noise impacting both wildlife and nearby residential parcels.



Source: Estero Americano Preserve website (SLT, 2022).

### **Potential Impacts to Biological Resource from Increased Public Access**

There are numerous potential impacts to biological resources resulting from increased public access along the Estero Americano. Because it is a navigable waterway, the Estero Americano is already used to some degree by the public for boating and other recreation, but existing use should be limited to the open water

navigable areas. Unless kayakers or other boaters are coming ashore, which would involve trespass, the sensitive mudflats and emergent wetlands at and near the proposed Public Access Point are not subject to human trampling and the species that utilize these habitats are not subject to noise disturbance.

Encouraging and facilitating public access at the proposed Public Access Point could result in direct and indirect impacts to nesting birds, eelgrass beds, special-status fish species, California red-legged frog, and sensitive plants. Increased public access could also result in the degradation of critical habitat for California red-legged frog, tidewater goby, and Central Coast steelhead. Trampling the sensitive near shore mudflats and emergent wetlands would increase sedimentation of the Estero Americano and gatherings would generate noise and activity that could disrupt nesting birds and other wildlife, and also impact the quality of life of nearby residents. Increased traffic along the private road from Estero Lane could result in increased erosion along the road and associated sedimentation of the watershed, degradation of eelgrass beds, direct vehicle impacts to California red-legged frog (i.e., take), and indirect impacts to nesting birds. Development of parking areas, trails, restroom facilities, or other amenities at the proposed Public Access Point could also result indirect and indirect impacts to these same resources.

Biologically, the encouragement and facilitation of public access at the proposed Public Access Point is contrary to “preserving the coastal estuary, upland environments, and other sensitive resources” which are described as several of the primary objectives of SLT’s Estero Americano Preserve (SLT, 2022). The Estero Americano Preserve website describes the Estero Americano as “one of the most biologically dynamic areas along the entire Northern California coastline”. Coastal prairie management, vegetation monitoring, invasive plant control, road rehabilitation, and erosion control efforts to protect water quality along the Estero are described as focal “stewardship activities” at the preserve. Trampling the sensitive near shore mudflats and emergent wetlands, habitat degradation, erosion and sedimentation, potential direct impacts to California

red-legged frog, and noise disturbance to nesting birds don't align with preservation of sensitive biological resources at and near the proposed Public Access Point.

## **Conclusions**

The proposed Public Access Point is in a remote and sensitive area and is inappropriate for public use. It is not accessible to the public via a public road there are no existing facilities such as parking areas, water, or restrooms for the public to use. Dedicated public access, or even development of recreational facilities on the steep hillsides, would likely involve substantial modifications of the natural environment, contrary to one of the key public access siting standards of the draft SCLCP update (Sonoma County, 2021). The proposed Public Access Point is a highly environmentally sensitive area that will only be adversely impacted by increased public access. The Estero Americano has suffered significant habitat degradation and truly deserves better stewardship.

Please call me at (209) 745-1159 with any questions.

Sincerely,



Diane S. Moore, M.S.  
Principal Biologist

## References

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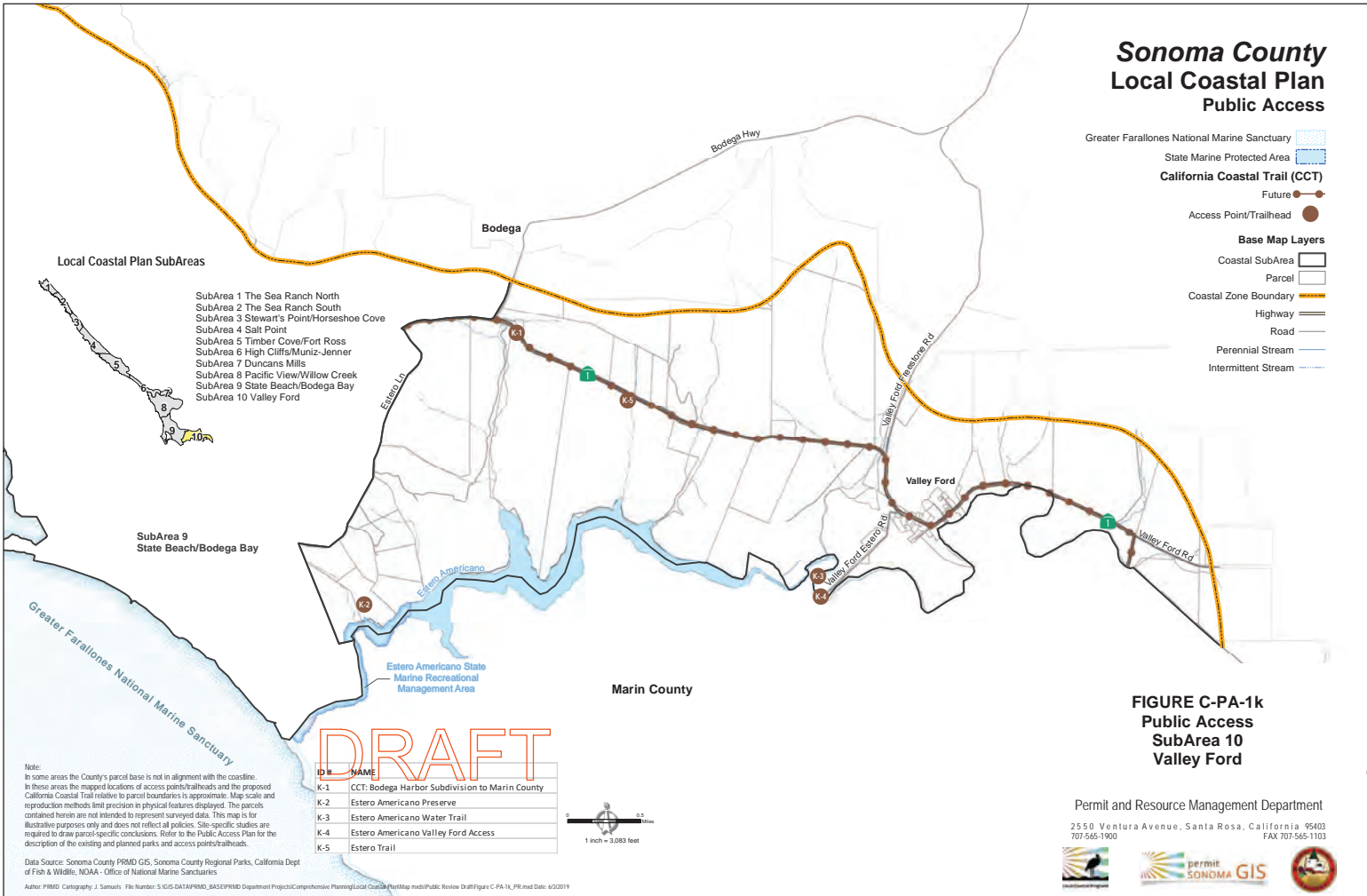
USFWS. 2008. Part II, Department of the Interior, Fish and Wildlife Service. 50 CFR Part 17: Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Tidewater Goby (*Eucyclogobius newberryi*), Final Rule. Federal Register Vol. 73, No. 21, January 31.

Attachment A

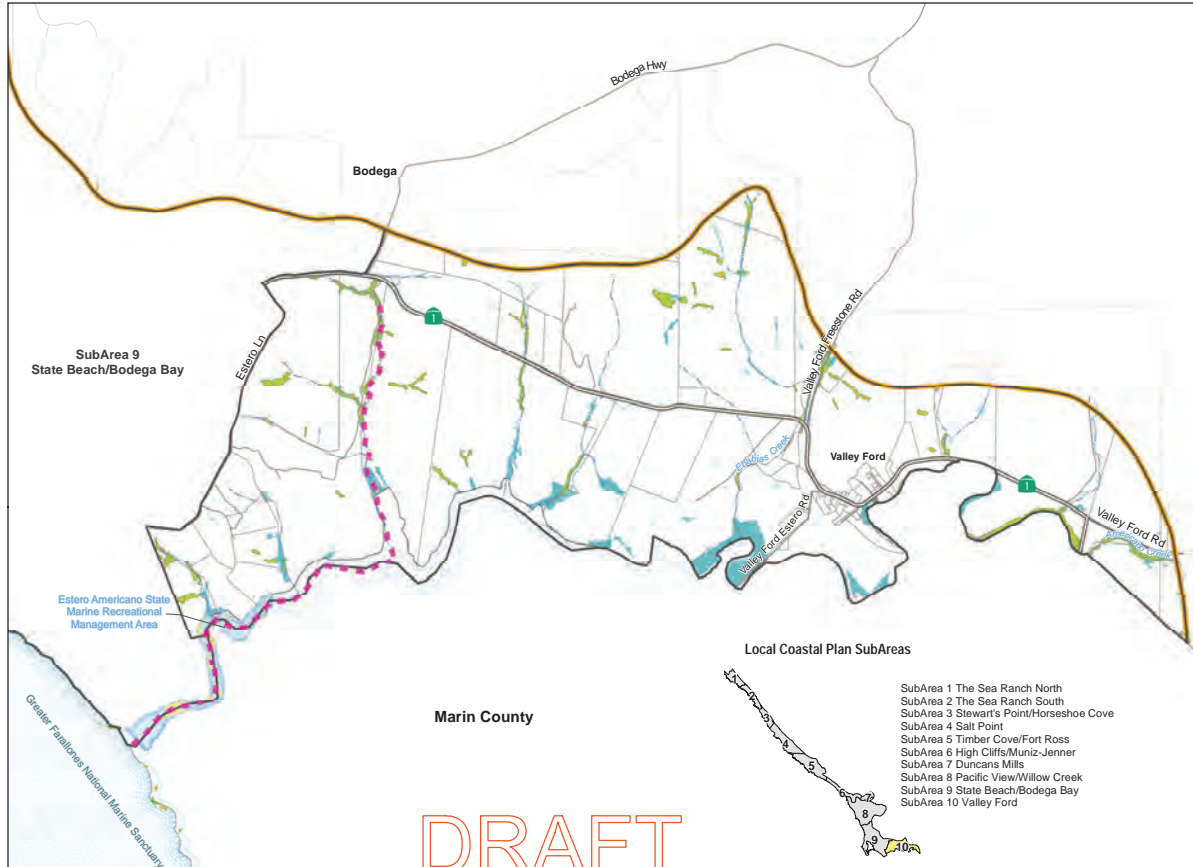
Sonoma County Local Coastal Plan  
(SCLCP) Public Review Draft Update

Maps – Subarea 10 (Valley Ford)

# Sonoma County Local Coastal Plan Public Access



# Sonoma County Local Coastal Plan Environmentally Sensitive Habitat Areas (ESHA)



- Steelhead Trout
  - Eelgrass Bed
  - Freshwater Herbaceous Wetland
  - Pond or Reservoir
  - Tidal Salt Marsh
  - Riparian Woodland
  - Greater Farallones National Marine Sanctuary
  - State Marine Protected Area
  - Kelp Canopy
  - Kelp Subsurface
  - Riparian Corridor
- Base Map Layers**
- Coastal SubArea
  - Parcel
  - Coastal Zone Boundary
  - Highway
  - Road
- Special Status Species Habitat Present in SubArea**
- |                               |                                    |
|-------------------------------|------------------------------------|
| <b>Animals</b>                | <b>Plants</b>                      |
| American Badger               | Baker's Goldfields                 |
| Burrowing Owl                 | Congested-headed Hayfield Tarplant |
| California Red-legged Frog    | Fragrant Frillary                  |
| Great Egret                   | Golden Larkspur                    |
| Longlin Smeat                 | Point Reyes Checkerbloom           |
| Myrtle's Silverspot Butterfly | Two-fork Clover                    |
| Tidewater Goby                |                                    |
| Tricolored Blackbird          |                                    |
| Western Pond Turtle           |                                    |

- Local Coastal Plan SubAreas**
- SubArea 1 The Sea Ranch North
  - SubArea 2 The Sea Ranch South
  - SubArea 3 Stewart's Point/Horseshoe Cove
  - SubArea 4 Salt Point
  - SubArea 5 Timber Cove/Fort Ross
  - SubArea 6 High Cliffs/Muniz-Jenner
  - SubArea 7 Duncans Mills
  - SubArea 8 Pacific View/Willow Creek
  - SubArea 9 State Beach/Bodega Bay
  - SubArea 10 Valley Ford

**FIGURE C-OSRC-2k  
Environmentally Sensitive  
Habitat Areas (ESHA)  
SubArea 10  
Valley Ford**

Permit and Resource Management Department  
2550 Ventura Avenue, Santa Rosa, California 95403  
707-565-1900 FAX 707-565-1103



**DRAFT**

**Note:**  
Biotic resources shown on this map include only known habitat areas as of a certain date. There may be other biotic resources identified or found through field surveys and studies or reviews. Consultation with the California Natural Diversity Data Base and field surveys or studies may be necessary to determine potential biotic resources on a given site. The location of reported habitat and occurrences of special status plant and animal species are not shown on this map due to the non-specific nature of the data. For information on the reported habitat and occurrences of special status species in this SubArea, consult the California Natural Diversity Database.

Map scale and reproduction methods limit precision in physical features displayed. The parcels contained herein are not intended to represent surveyed data. In some areas the County's parcel base is not in alignment with the coastline. This map is for illustrative purposes only and does not reflect all policies. Site-specific studies are required to draw parcel-specific conclusions.

Data Source: Sonoma County PRMD GIS; Sonoma County Agricultural Preserve and Open Space District (SCAP/OSD); California Dept. of Fish & Wildlife Biogeographic Data Branch (BDB); California Natural Diversity Database (CNDD); The Nonpoint Legacy Fund Foundation (contract); the Marine Protected Areas Monitoring Enterprise (coordination); Ocean Imaging (data collection and processing); The California Department of Fish and Game (database management); U.S. Dept of Agriculture, Forest Service, NOAA, Office of National Marine Sanctuaries



Attachment B

Parcel Map

Provided by:



# COUNTY ASSESSOR'S PARCEL MAP

TAX RATE AREA  
96-013 96-014  
96-035

103-04

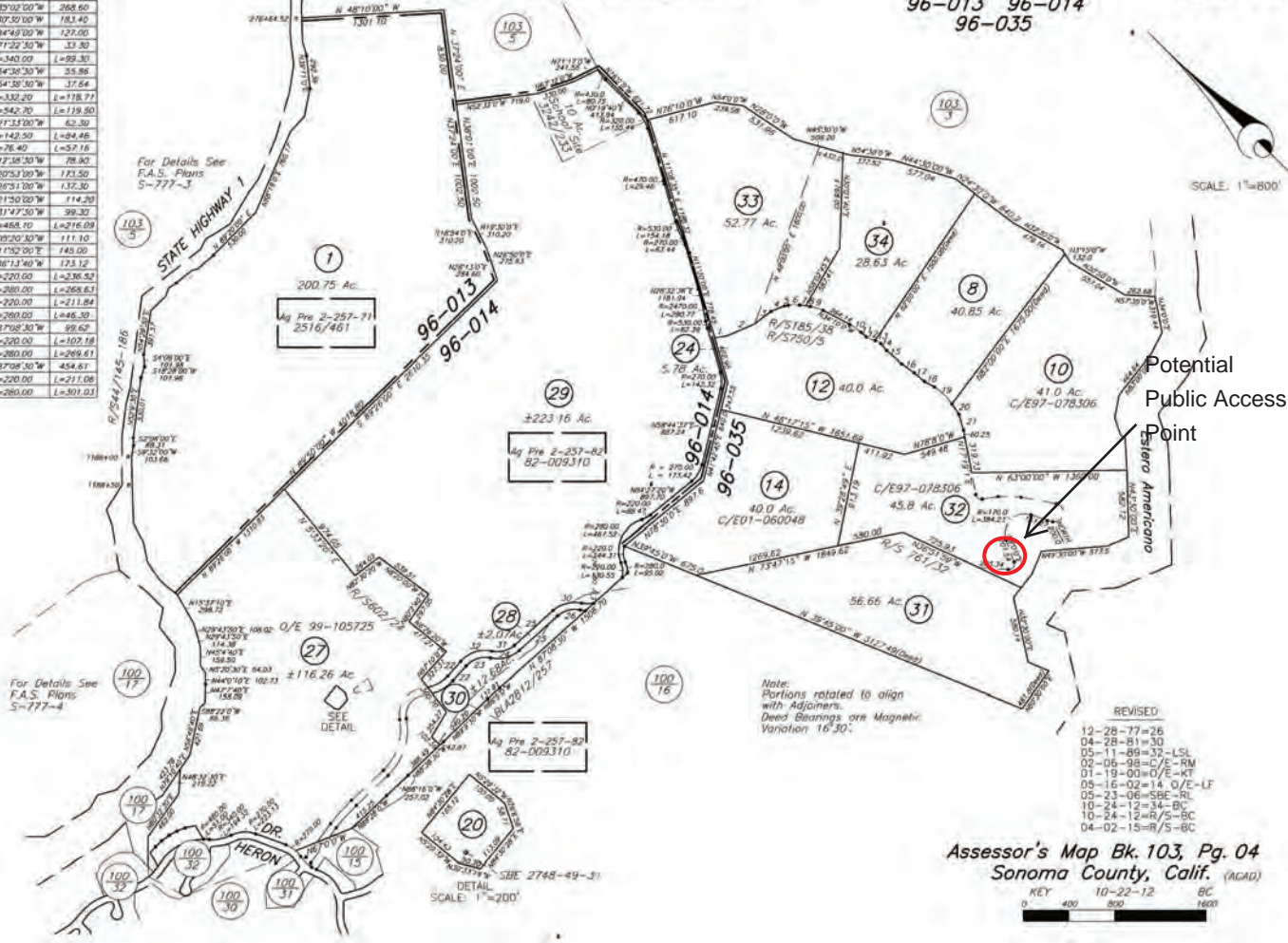
1	N70°06'30"W	100.80
2	N83°02'00"W	268.60
3	S20°30'00"W	183.40
4	N84°43'00"W	127.00
5	N71°22'30"W	33.30
6	R=340.00	L=89.30
7	N54°36'30"W	35.86
8	N54°36'30"W	37.64
9	R=332.20	L=118.71
10	R=342.70	L=119.50
11	N01°13'00"W	62.30
12	R=142.50	L=84.46
13	R=76.40	L=57.16
14	N12°38'30"W	78.90
15	N20°53'00"W	173.30
16	N20°13'00"W	132.30
17	N07°50'00"W	114.50
18	N31°47'30"W	99.30
19	R=488.10	L=216.09
20	N20°20'30"W	111.10
21	N11°52'00"E	145.00
22	S86°13'40"W	173.12
23	R=220.00	L=236.52
24	R=280.00	L=288.63
25	R=220.00	L=211.84
26	R=260.00	L=446.30
27	N87°08'30"W	99.62
28	R=220.00	L=102.18
29	R=280.00	L=269.61
30	N87°08'30"W	454.61
31	R=220.00	L=211.08
32	R=280.00	L=301.03

For Details See  
F.A.S. Plans  
S-777-3

For Details See  
F.A.S. Plans  
S-777-4

NOTE: This map was prepared for Assessment purposes only. It is not intended to constitute a legal description of any parcel. The Assessor assumes no liability for the accuracy of the data furnished. The Assessor is not responsible for the accuracy of the data furnished. The Assessor is not responsible for the accuracy of the data furnished. The Assessor is not responsible for the accuracy of the data furnished.

NOTE: Assessor's parcels do not necessarily constitute legal lots. To verify legal parcel status, check with the appropriate city or county community development or planning division.



SCALE: 1"=800'

Potential  
Public Access  
Point

Note:  
Portions related to align  
with Adjainers.  
Dead Bearings are Magnetic  
Variation 16'30'.

REVISED:

- 12-28-77=26
- 04-28-81=30
- 05-11-89=32-LSL
- 02-06-98=C/E-RM
- 01-19-00=O/E-KF
- 05-16-02=14 O/E-LF
- 05-23-06=SBE-RL
- 10-24-12=34-BC
- 10-24-12=R/S-BC
- 04-02-15=R/S-BC

Assessor's Map Bk. 103, Pg. 04  
Sonoma County, Calif. (AGAD)

KEY 10-22-12 BC  
0 400 800 1600

Attachment C

Photographs



View of the Estero Americano, looking southwest from the hillside north of the potential public access point; 10/06/21.



Dirt and gravel road providing access from Estero Lane to a few homes, the potential public access point, and a private parcel just west of the potential public access point, looking south; 10/06/21. Further south, the road steepens and winds down the hillside.



View of the Estero Americano, looking southwest from the potential public access point toward the sensitive wetland area along the edge of the Estero; 10/06/21.



Tributary to the Estero Americano, just southwest of the potential public access point, looking southwest; 10/06/21. This tributary meanders through emergent wetlands adjacent to the open waters of the Estero.



Tributary to the Estero Americano just west of the potential public access point, looking northeast; 10/06/21. The tributary has two forks further to the north, each of which flows through private parcels and Sonoma Land Trust parcels.



After a rainy weekend a few weeks later, the tributary was flowing; 10/25/21. This stream provides suitable breeding habitat for California red-legged frog and adjacent wetland and upland habitats may be used for frog movement and/or aestivation.



Potential public access point, looking southeast from near the south end of the dirt access road; 10/06/21. There is an expansive emergent wetland area between the open water of the Estero and dry land.



Open waters of the Estero Americano just west of the potential public access point, looking southwest; 10/06/21. This area supports eelgrass beds, a very sensitive and diminishing habitat that is important to numerous species.

Attachment D

National Wetland Inventory

Estero Americano



September 20, 2021

**Wetlands**

- |   |   |  |
|---|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland       |  Lake     |
|  Estuarine and Marine Wetland   |  Freshwater Forested/Shrub Wetland |  Other    |
|   |  Freshwater Pond                   |  Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Attachment E

CNDDDB Summary Report and Exhibits

& USFWS IPaC Trust Report



Selected Elements by Scientific Name  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Query Criteria: Quad (Valley Ford (3812238))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
<i>Agrostis blasdalei</i> Blasdale's bent grass	PMPOA04060	None	None	G2	S2	1B.2
<i>Anodonta californiensis</i> California floater	IMBIV04220	None	None	G3Q	S2?	
<i>Anodonta oregonensis</i> Oregon floater	IMBIV04110	None	None	G5Q	S2?	
<i>Arborimus pomo</i> Sonoma tree vole	AMAFF23030	None	None	G3	S3	SSC
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Bombus caliginosus</i> obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
<i>Bombus occidentalis</i> western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
<i>Callophrys mossii marinensis</i> Marin elfin butterfly	IILEPE2207	None	None	G4T1	S1	
<i>Calystegia purpurata ssp. saxicola</i> coastal bluff morning-glory	PDCON040D2	None	None	G4T2T3	S2S3	1B.2
<i>Chorizanthe cuspidata var. villosa</i> woolly-headed spineflower	PDPGN04082	None	None	G2T2	S2	1B.2
<i>Cirsium andrewsii</i> Franciscan thistle	PDAST2E050	None	None	G3	S3	1B.2
<i>Coastal Brackish Marsh</i> Coastal Brackish Marsh	CTT52200CA	None	None	G2	S2.1	
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Coelus globosus</i> globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
<i>Cypseloides niger</i> black swift	ABNUA01010	None	None	G4	S2	SSC
<i>Danaus plexippus pop. 1</i> monarch - California overwintering population	IILEPP2012	Candidate	None	G4T2T3	S2S3	
<i>Delphinium bakeri</i> Baker's larkspur	PDRAN0B050	Endangered	Endangered	G1	S1	1B.1
<i>Delphinium luteum</i> golden larkspur	PDRAN0B0Z0	Endangered	Rare	G1	S1	1B.1



Selected Elements by Scientific Name  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Dicamptodon ensatus</i> California giant salamander	AAAAH01020	None	None	G3	S2S3	SSC
<i>Dirca occidentalis</i> western leatherwood	PDTHY03010	None	None	G2	S2	1B.2
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eucyclogobius newberryi</i> tidewater goby	AFCQN04010	Endangered	None	G3	S3	
<i>Fritillaria liliacea</i> fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
<i>Gilia capitata ssp. chamissonis</i> blue coast gilia	PDPLM040B3	None	None	G5T2	S2	1B.1
<i>Gilia capitata ssp. tomentosa</i> woolly-headed gilia	PDPLM040B9	None	None	G5T2	S2	1B.1
<i>Hemizonia congesta ssp. congesta</i> congested-headed hayfield tarplant	PDAST4R065	None	None	G5T2	S2	1B.2
<i>Hesperevax sparsiflora var. brevifolia</i> short-leaved evax	PDASTE5011	None	None	G4T3	S3	1B.2
<i>Horkelia marinensis</i> Point Reyes horkelia	PDROS0W0B0	None	None	G2	S2	1B.2
<i>Lasthenia californica ssp. bakeri</i> Baker's goldfields	PDAST5L0C4	None	None	G3T1	S1	1B.2
<i>Lasthenia californica ssp. macrantha</i> perennial goldfields	PDAST5L0C5	None	None	G3T2	S2	1B.2
<i>Lasthenia conjugens</i> Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1
<i>Leptosiphon rosaceus</i> rose leptosiphon	PDPLM09180	None	None	G1	S1	1B.1
<i>Lichnanthe ursina</i> bumblebee scarab beetle	IICOL67020	None	None	G2	S2	
<i>Microseris paludosa</i> marsh microseris	PDAST6E0D0	None	None	G2	S2	1B.2
<i>Oncorhynchus kisutch pop. 4</i> coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	G5T2T3Q	S2	
<i>Oncorhynchus mykiss irideus pop. 8</i> steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
<i>Pelecanus occidentalis californicus</i> California brown pelican	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC
<i>Rana draytonii</i> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC

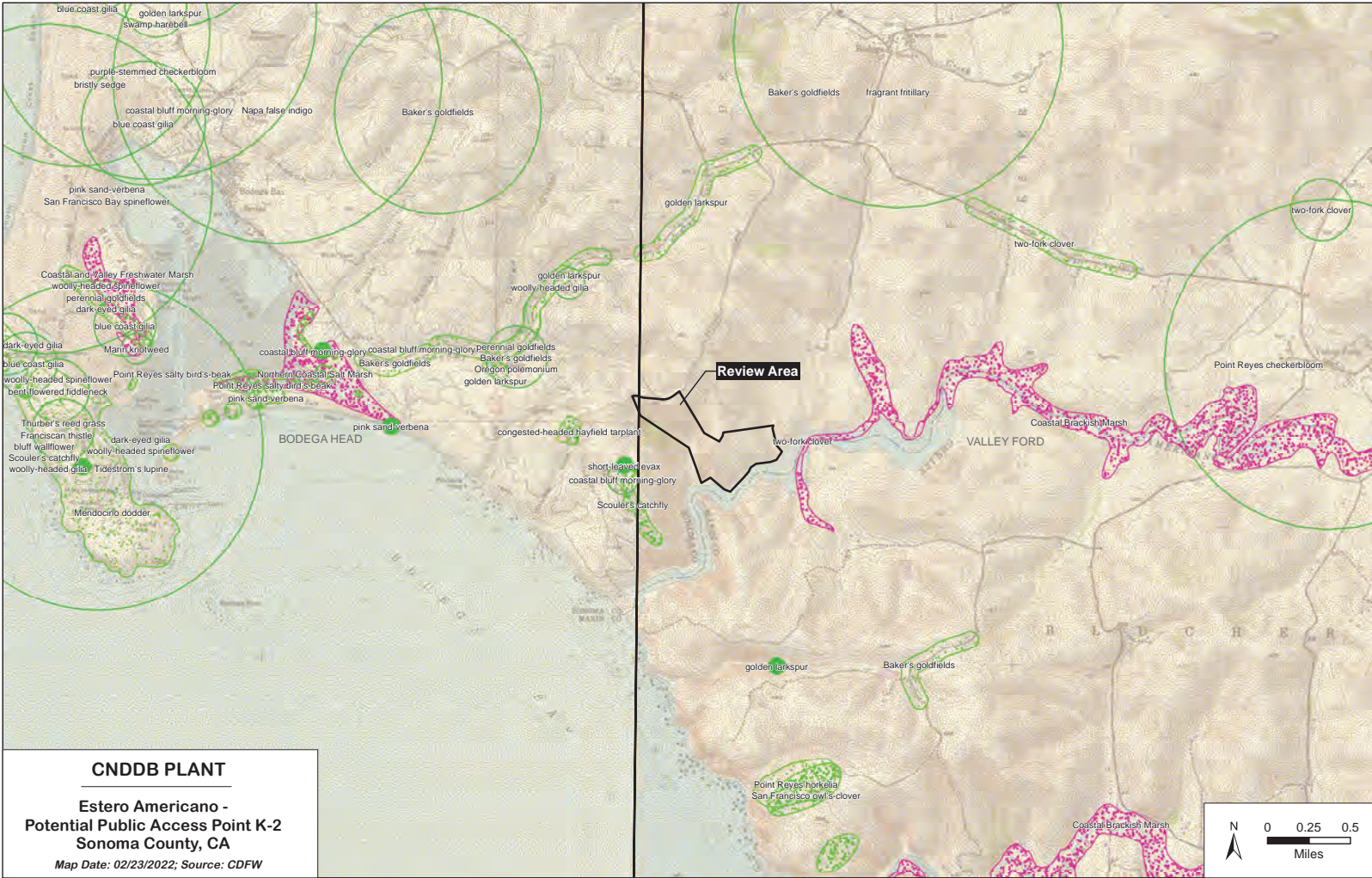


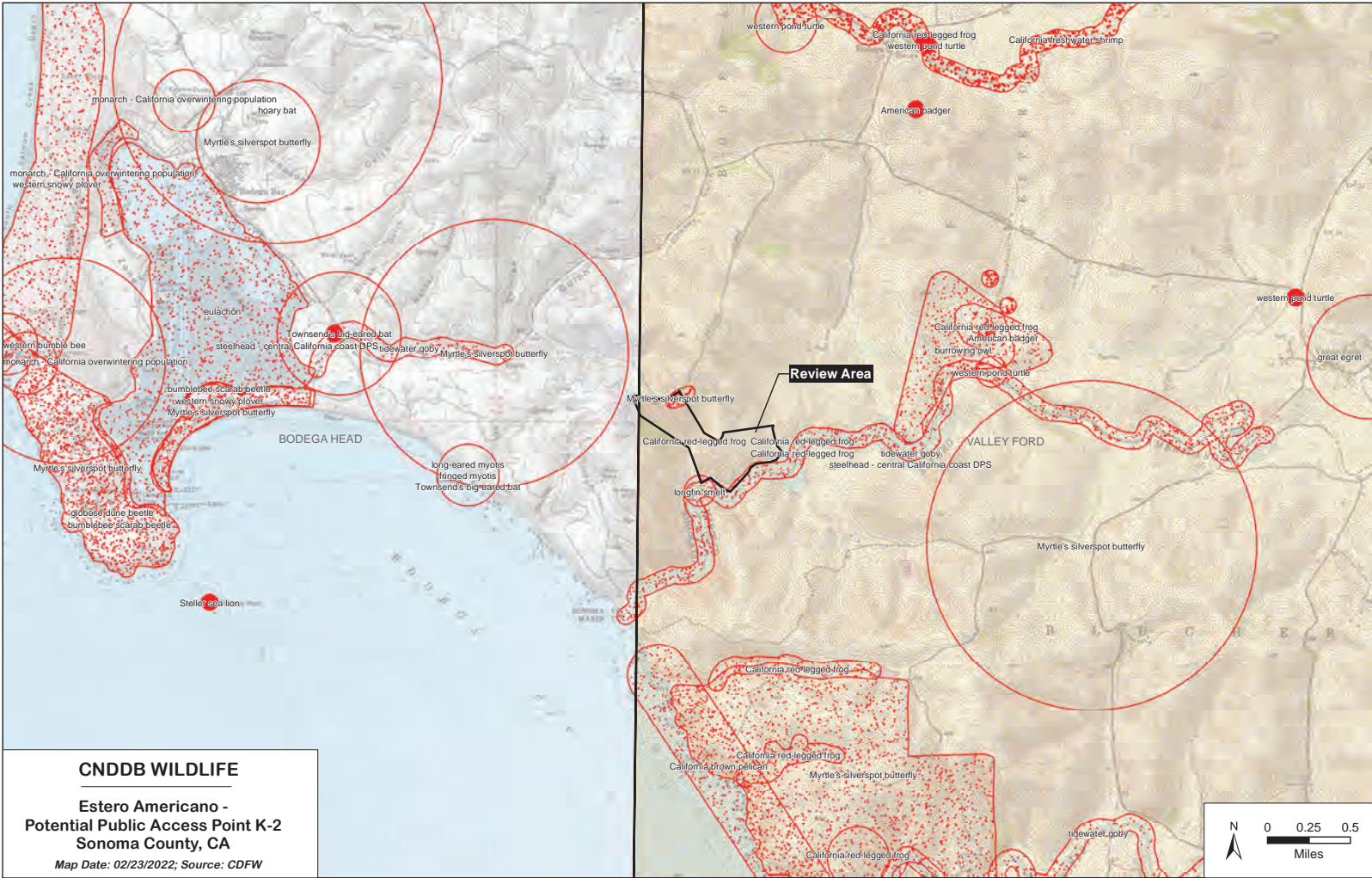
Selected Elements by Scientific Name  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Sidalcea calycosa ssp. rhizomata</i> Point Reyes checkerbloom	PDMAL11012	None	None	G5T2	S2	1B.2
<i>Sidalcea malviflora ssp. purpurea</i> purple-stemmed checkerbloom	PDMAL110FL	None	None	G5T1	S1	1B.2
<i>Silene scouleri ssp. scouleri</i> Scouler's catchfly	PDCAR0U1MC	None	None	G5T4T5	S2S3	2B.2
<i>Speyeria zerene myrtleae</i> Myrtle's silverspot butterfly	IILEPJ608C	Endangered	None	G5T1	S1	
<i>Spirinchus thaleichthys</i> longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
<i>Syncaris pacifica</i> California freshwater shrimp	ICMAL27010	Endangered	Endangered	G2	S2	
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Thamnotia vermicularis</i> whiteworm lichen	NLTES43860	None	None	G5	S1	2B.1
<i>Trifolium amoenum</i> two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1
<i>Triphysaria floribunda</i> San Francisco owl's-clover	PDSCR2T010	None	None	G2?	S2?	1B.2
<i>Triquetrella californica</i> coastal triquetrella	NBMUS7S010	None	None	G2	S2	1B.2
<i>Vespericola marinensis</i> Marin hesperian	IMGASA4140	None	None	G2	S2	

Record Count: 53





# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Marin and Sonoma counties, California



## Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

NAME	STATUS
------	--------

**Marbled Murrelet** *Brachyramphus marmoratus* Threatened  
 There is **final** critical habitat for this species. The location of the critical habitat is not available.  
<http://ecos.fws.gov/ecp/species/4467>

**Northern Spotted Owl** *Strix occidentalis caurina* Threatened  
 Wherever found  
 There is **final** critical habitat for this species. The location of the critical habitat is not available.  
<http://ecos.fws.gov/ecp/species/1123>

**Short-tailed Albatross** *Phoebastria (=Diomedea) albatrus* Endangered  
 Wherever found  
 No critical habitat has been designated for this species.  
<http://ecos.fws.gov/ecp/species/433>

**Western Snowy Plover** *Charadrius nivosus nivosus* Threatened  
 There is **final** critical habitat for this species. The location of the critical habitat is not available.  
<http://ecos.fws.gov/ecp/species/8035>

**Yellow-billed Cuckoo** *Coccyzus americanus* Threatened  
 There is **final** critical habitat for this species. The location of the critical habitat is not available.  
<http://ecos.fws.gov/ecp/species/3911>

## Reptiles

NAME	STATUS
------	--------

<b>Green Sea Turtle</b> <i>Chelonia mydas</i> No critical habitat has been designated for this species. <a href="http://ecos.fws.gov/ecp/species/6199">http://ecos.fws.gov/ecp/species/6199</a>	Threatened
---	------------

## Amphibians

NAME	STATUS
------	--------

<b>California Red-legged Frog</b> <i>Rana draytonii</i> Wherever found There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. <a href="http://ecos.fws.gov/ecp/species/2891">http://ecos.fws.gov/ecp/species/2891</a>	Threatened
---	------------

## Fishes

NAME	STATUS
------	--------

**Tidewater Goby** *Eucyclogobius newberryi* Endangered

Wherever found

There is **final** critical habitat for this species. Your location overlaps the critical habitat.

<http://ecos.fws.gov/ecp/species/57>

## Insects

NAME

STATUS

**Monarch Butterfly** *Danaus plexippus* Candidate

Wherever found

No critical habitat has been designated for this species.

<http://ecos.fws.gov/ecp/species/9743>

**Myrtle's Silverspot Butterfly** *Speyeria zerene myrtleae* Endangered

Wherever found

No critical habitat has been designated for this species.

<http://ecos.fws.gov/ecp/species/6929>

## Crustaceans

NAME

STATUS

**California Freshwater Shrimp** *Syncaris pacifica* Endangered

Wherever found

No critical habitat has been designated for this species.

<http://ecos.fws.gov/ecp/species/7903>

## Flowering Plants

NAME

STATUS

**Baker's Larkspur** *Delphinium bakeri* Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<http://ecos.fws.gov/ecp/species/5031>

**Clover (tidestrom's) Lupine** *Lupinus tidestromii* Endangered

Wherever found

No critical habitat has been designated for this species.

<http://ecos.fws.gov/ecp/species/4459>

**Contra Costa Goldfields** *Lasthenia conjugens* Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<http://ecos.fws.gov/ecp/species/7058>

## Showy Indian Clover *Trifolium amoenum* Endangered

Wherever found

No critical habitat has been designated for this species.

<http://ecos.fws.gov/ecp/species/6459>

## Sonoma Sunshine *Blennosperma bakeri* Endangered

Wherever found

No critical habitat has been designated for this species.

<http://ecos.fws.gov/ecp/species/1260>

## Yellow Larkspur *Delphinium luteum* Endangered

Wherever found

There is **final** critical habitat for this species. Your location overlaps the critical habitat.

<http://ecos.fws.gov/ecp/species/3578>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
California Red-legged Frog <i>Rana draytonii</i> <a href="http://ecos.fws.gov/ecp/species/2891#crithab">http://ecos.fws.gov/ecp/species/2891#crithab</a>	Final
Tidewater Goby <i>Eucyclogobius newberryi</i> <a href="http://ecos.fws.gov/ecp/species/57#crithab">http://ecos.fws.gov/ecp/species/57#crithab</a>	Final
Yellow Larkspur <i>Delphinium luteum</i> <a href="http://ecos.fws.gov/ecp/species/3578#crithab">http://ecos.fws.gov/ecp/species/3578#crithab</a>	Final

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Allen's Hummingbird *Selasphorus sasin*

Breeds Feb 1 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<http://ecos.fws.gov/ecp/species/9637>

<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="http://ecos.fws.gov/ecp/species/1626">http://ecos.fws.gov/ecp/species/1626</a>	Breeds Jan 1 to Aug 31
<b>Black Oystercatcher</b> <i>Haematopus bachmani</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="http://ecos.fws.gov/ecp/species/9591">http://ecos.fws.gov/ecp/species/9591</a>	Breeds Apr 15 to Oct 31
<b>Black Scoter</b> <i>Melanitta nigra</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
<b>Black Storm-petrel</b> <i>Oceanodroma melania</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Nov 15
<b>Black Tern</b> <i>Chlidonias niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="http://ecos.fws.gov/ecp/species/3093">http://ecos.fws.gov/ecp/species/3093</a>	Breeds May 15 to Aug 20
<b>Black Turnstone</b> <i>Arenaria melanocephala</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
<b>Black-footed Albatross</b> <i>Phoebastria nigripes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="http://ecos.fws.gov/ecp/species/8033">http://ecos.fws.gov/ecp/species/8033</a>	Breeds elsewhere
<b>Black-legged Kittiwake</b> <i>Rissa tridactyla</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
<b>Black-vented Shearwater</b> <i>Puffinus opisthomelas</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere

- Brown Pelican** *Pelecanus occidentalis* Breeds Jan 15 to Sep 30  
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
- California Spotted Owl** *Strix occidentalis occidentalis* Breeds Mar 10 to Jun 15  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<http://ecos.fws.gov/ecp/species/7266>
- California Thrasher** *Toxostoma redivivum* Breeds Jan 1 to Jul 31  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
- Clark's Grebe** *Aechmophorus clarkii* Breeds Jun 1 to Aug 31  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
- Common Loon** *gavia immer* Breeds Apr 15 to Oct 31  
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  
<http://ecos.fws.gov/ecp/species/4464>
- Common Murre** *Uria aalge* Breeds Apr 15 to Aug 15  
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
- Common Yellowthroat** *Geothlypis trichas sinuosa* Breeds May 20 to Jul 31  
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  
<http://ecos.fws.gov/ecp/species/2084>
- Double-crested Cormorant** *phalacrocorax auritus* Breeds Apr 20 to Aug 31  
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  
<http://ecos.fws.gov/ecp/species/3478>

<p><b>Golden Eagle</b> <i>Aquila chrysaetos</i>  This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  <a href="http://ecos.fws.gov/ecp/species/1680">http://ecos.fws.gov/ecp/species/1680</a></p>	Breeds Jan 1 to Aug 31
<p><b>Long-eared Owl</b> <i>asio otus</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="http://ecos.fws.gov/ecp/species/3631">http://ecos.fws.gov/ecp/species/3631</a></p>	Breeds Mar 1 to Jul 15
<p><b>Long-tailed Duck</b> <i>Clangula hyemalis</i>  This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  <a href="http://ecos.fws.gov/ecp/species/7238">http://ecos.fws.gov/ecp/species/7238</a></p>	Breeds elsewhere
<p><b>Marbled Godwit</b> <i>Limosa fedoa</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="http://ecos.fws.gov/ecp/species/9481">http://ecos.fws.gov/ecp/species/9481</a></p>	Breeds elsewhere
<p><b>Nuttall's Woodpecker</b> <i>Picoides nuttallii</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="http://ecos.fws.gov/ecp/species/9410">http://ecos.fws.gov/ecp/species/9410</a></p>	Breeds Apr 1 to Jul 20
<p><b>Oak Titmouse</b> <i>Baeolophus inornatus</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="http://ecos.fws.gov/ecp/species/9656">http://ecos.fws.gov/ecp/species/9656</a></p>	Breeds Mar 15 to Jul 15
<p><b>Olive-sided Flycatcher</b> <i>Contopus cooperi</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="http://ecos.fws.gov/ecp/species/3914">http://ecos.fws.gov/ecp/species/3914</a></p>	Breeds May 20 to Aug 31
<p><b>Pink-footed Shearwater</b> <i>Puffinus creatopus</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds elsewhere
<p><b>Pomarine Jaeger</b> <i>Stercorarius pomarinus</i>  This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p>	Breeds elsewhere

<b>Red Phalarope</b> <i>Phalaropus fulicarius</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
<b>Red-breasted Merganser</b> <i>Mergus serrator</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
<b>Red-necked Phalarope</b> <i>Phalaropus lobatus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
<b>Red-throated Loon</b> <i>Gavia stellata</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
<b>Ring-billed Gull</b> <i>Larus delawarensis</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
<b>Short-billed Dowitcher</b> <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="http://ecos.fws.gov/ecp/species/9480">http://ecos.fws.gov/ecp/species/9480</a>	Breeds elsewhere
<b>South Polar Skua</b> <i>Stercorarius maccormicki</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere
<b>Surf Scoter</b> <i>Melanitta perspicillata</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds elsewhere

**Tricolored Blackbird** *Agelaius tricolor*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<http://ecos.fws.gov/ecp/species/3910>

**White-winged Scoter** *Melanitta fusca*

Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

**Willet** *Tringa semipalmata*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

**Wilson's Storm-petrel** *Oceanites oceanicus*

Breeds elsewhere

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

**Wrentit** *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence

across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

- The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

**Breeding Season (■)**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

**Survey Effort (|)**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

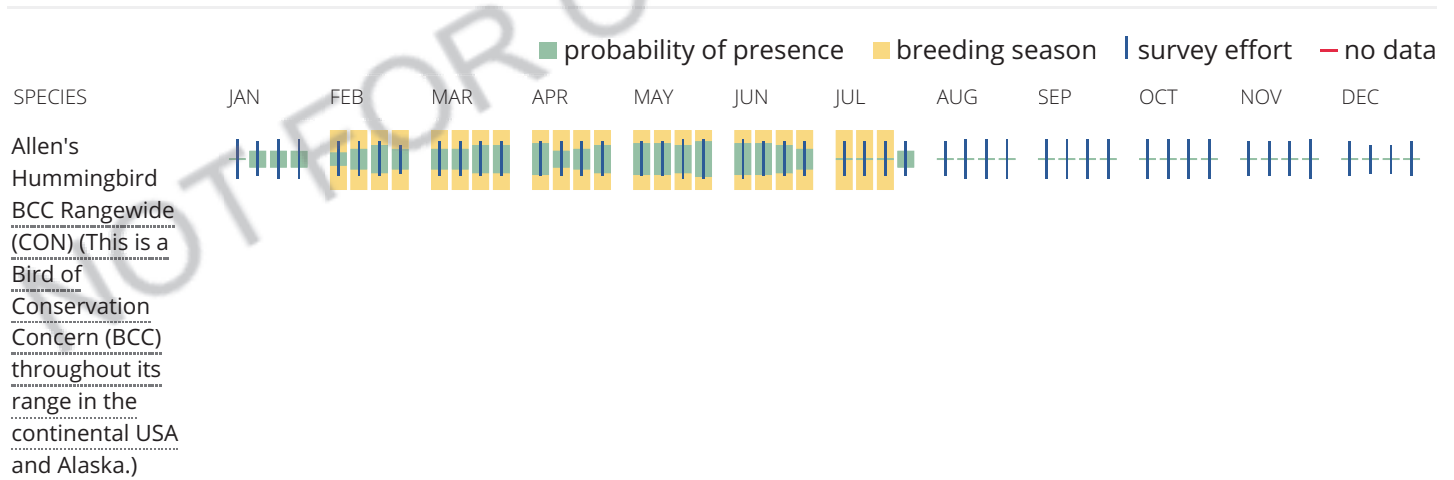
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

**No Data (—)**

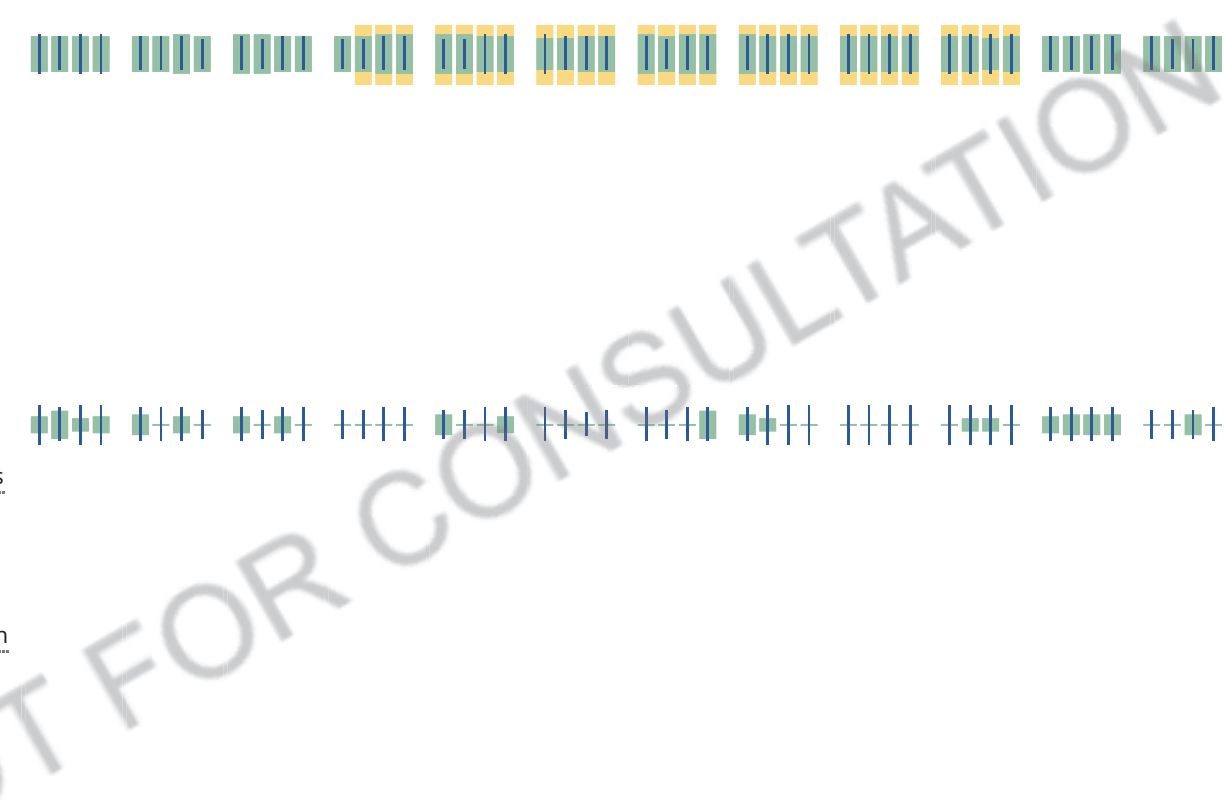
A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



<p>Bald Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)</p>	
<p>Black Oystercatcher BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)</p>	
<p>Black Scoter Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)</p>	
<p>Black Storm-petrel BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)</p>	



Black Tern  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental USA  
 and Alaska.)



Black Turnstone  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental USA  
 and Alaska.)



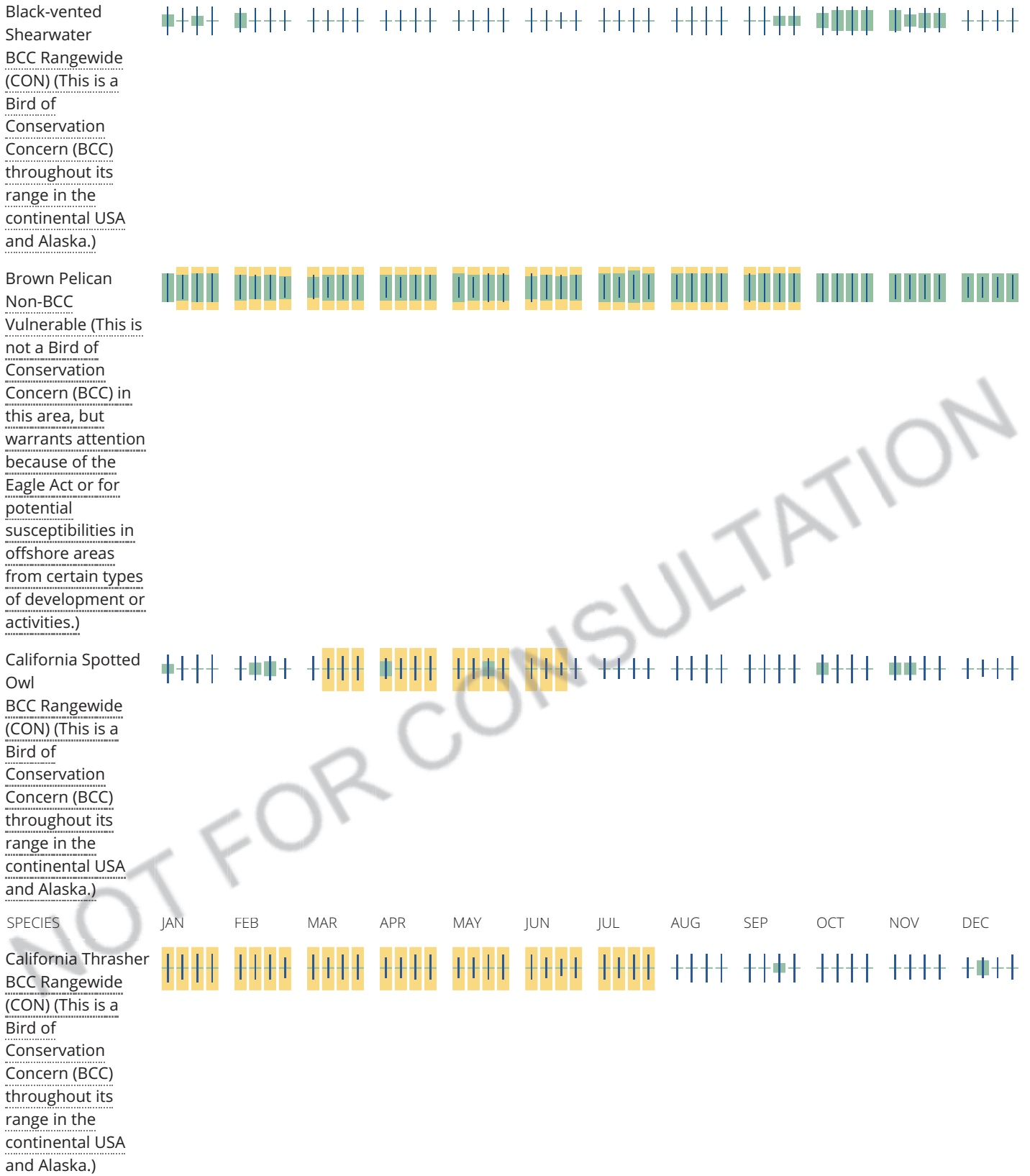
Black-footed  
 Albatross  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental USA  
 and Alaska.)



Black-legged  
 Kittiwake  
 Non-BCC  
 Vulnerable (This is  
 not a Bird of  
 Conservation  
 Concern (BCC) in  
 this area, but  
 warrants attention  
 because of the  
 Eagle Act or for  
 potential  
 susceptibilities in  
 offshore areas  
 from certain types  
 of development or  
 activities.)



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Clark's Grebe  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental USA  
 and Alaska.)



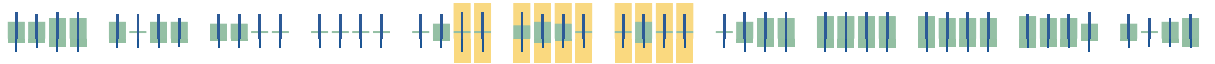
Common Loon  
 Non-BCC  
 Vulnerable (This is  
 not a Bird of  
 Conservation  
 Concern (BCC) in  
 this area, but  
 warrants attention  
 because of the  
 Eagle Act or for  
 potential  
 susceptibilities in  
 offshore areas  
 from certain types  
 of development or  
 activities.)



Common Murre  
 Non-BCC  
 Vulnerable (This is  
 not a Bird of  
 Conservation  
 Concern (BCC) in  
 this area, but  
 warrants attention  
 because of the  
 Eagle Act or for  
 potential  
 susceptibilities in  
 offshore areas  
 from certain types  
 of development or  
 activities.)



Common  
 Yellowthroat  
 BCC - BCR (This is a  
 Bird of  
 Conservation  
 Concern (BCC) only  
 in particular Bird  
 Conservation  
 Regions (BCRs) in  
 the continental  
 USA)



NOT FOR CONSULTATION

<p>Double-crested Cormorant</p> <p>Non-BCC</p> <p>Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)</p>	
<p>Golden Eagle</p> <p>Non-BCC</p> <p>Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)</p>	
<p>Long-eared Owl</p> <p>BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)</p>	
<p>Long-tailed Duck</p> <p>Non-BCC</p> <p>Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)</p>	

NOT FOR CONSULTATION

Marbled Godwit  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental USA  
 and Alaska.)



Nuttall's  
 Woodpecker  
 BCC - BCR (This is a  
 Bird of  
 Conservation  
 Concern (BCC) only  
 in particular Bird  
 Conservation  
 Regions (BCRs) in  
 the continental  
 USA)



Oak Titmouse  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental USA  
 and Alaska.)



SPECIES

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Olive-sided  
 Flycatcher  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental USA  
 and Alaska.)



Pink-footed  
 Shearwater  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental USA  
 and Alaska.)



Pomarine Jaeger  
 Non-BCC  
 Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Red Phalarope  
 Non-BCC  
 Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Red-breasted Merganser  
 Non-BCC  
 Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



NOT FOR CONSULTATION

Red-necked Phalarope



Non-BCC  
 Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Red-throated Loon

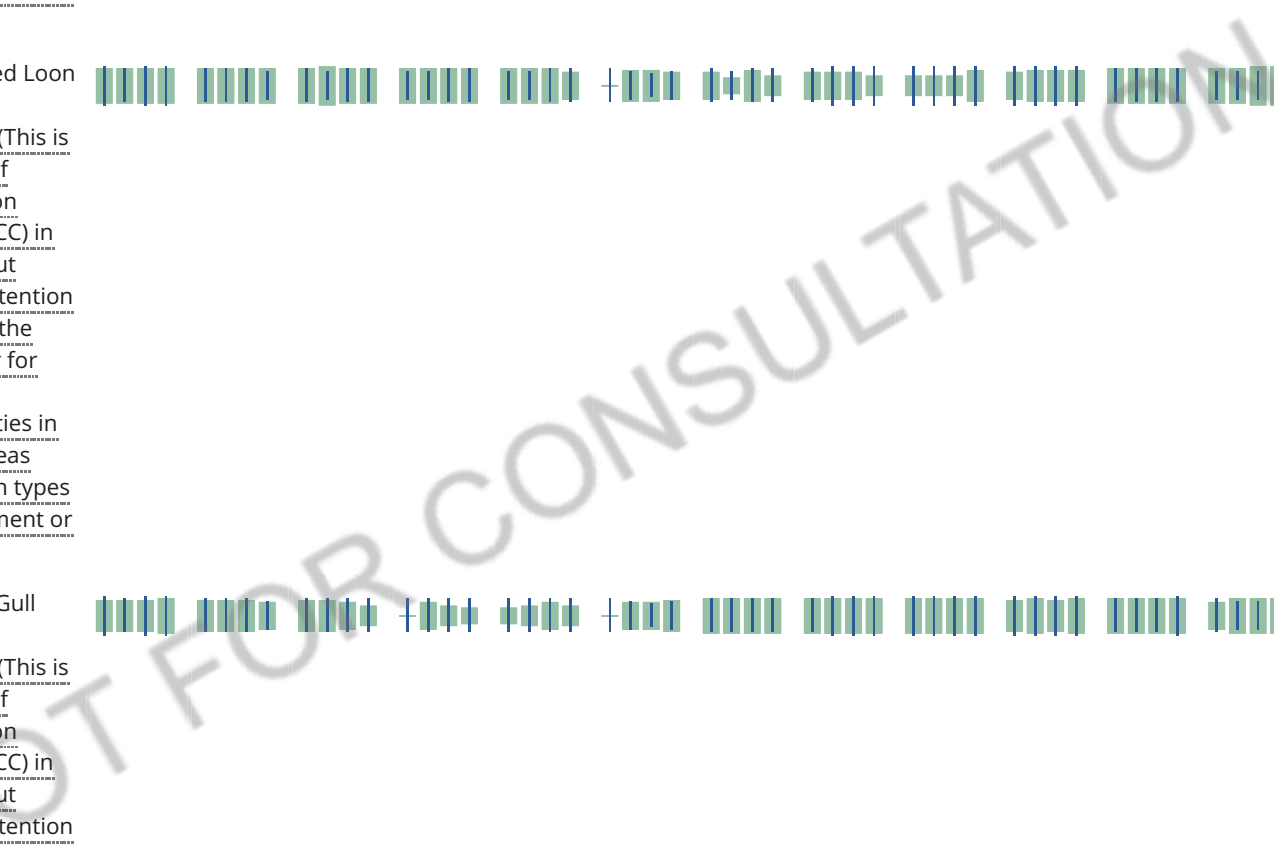


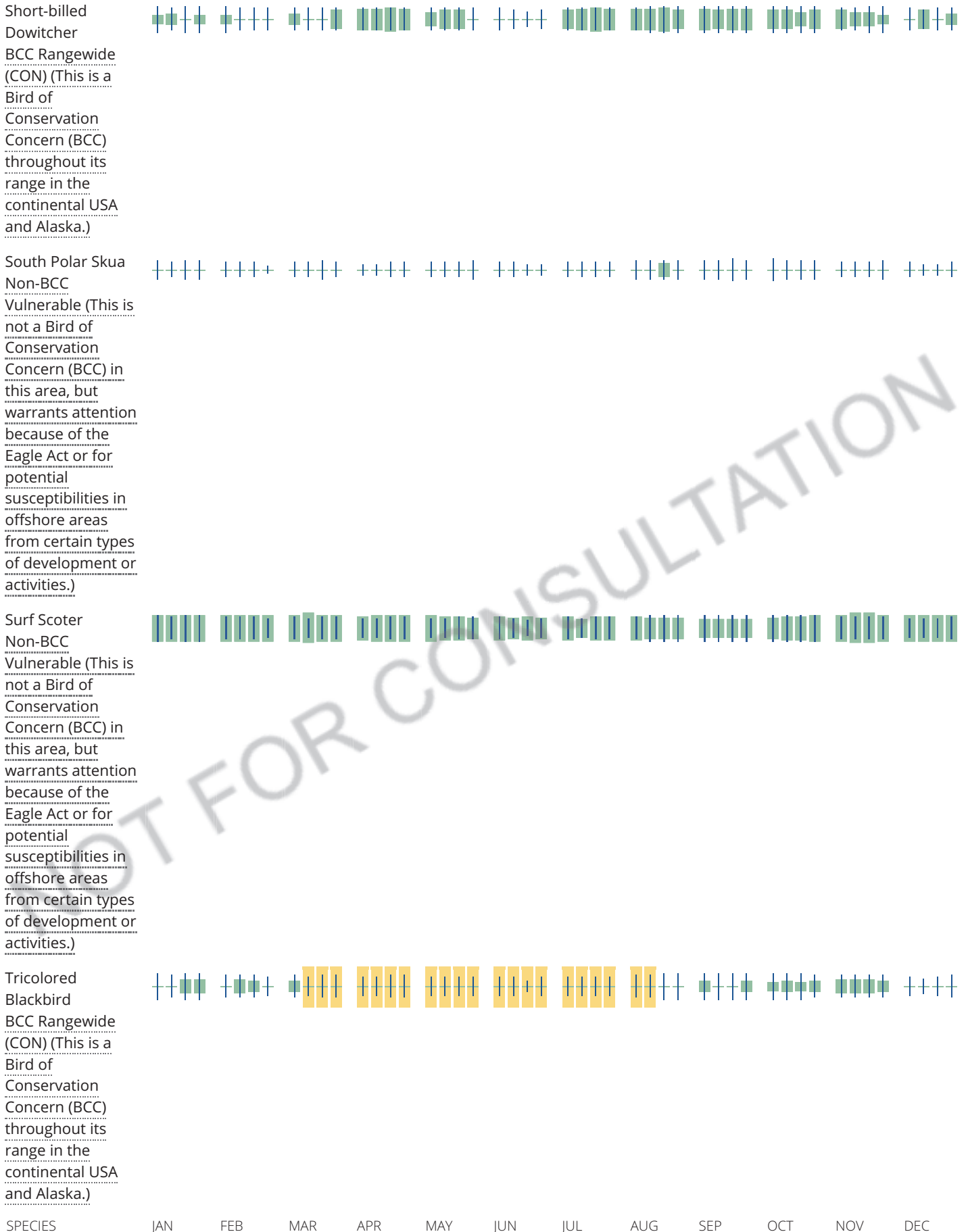
Non-BCC  
 Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Ring-billed Gull



Non-BCC  
 Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)





White-winged  
 Scoter  
 Non-BCC  
 Vulnerable (This is  
 not a Bird of  
 Conservation  
 Concern (BCC) in  
 this area, but  
 warrants attention  
 because of the  
 Eagle Act or for  
 potential  
 susceptibilities in  
 offshore areas  
 from certain types  
 of development or  
 activities.)



Willet  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental USA  
 and Alaska.)



Wilson's Storm-  
 petrel  
 Non-BCC  
 Vulnerable (This is  
 not a Bird of  
 Conservation  
 Concern (BCC) in  
 this area, but  
 warrants attention  
 because of the  
 Eagle Act or for  
 potential  
 susceptibilities in  
 offshore areas  
 from certain types  
 of development or  
 activities.)



Wrentit  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental USA  
 and Alaska.)



NOT FOR CONSULTATION

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

### What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern \(BCC\)](#) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

# Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

## Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

## Data exclusions

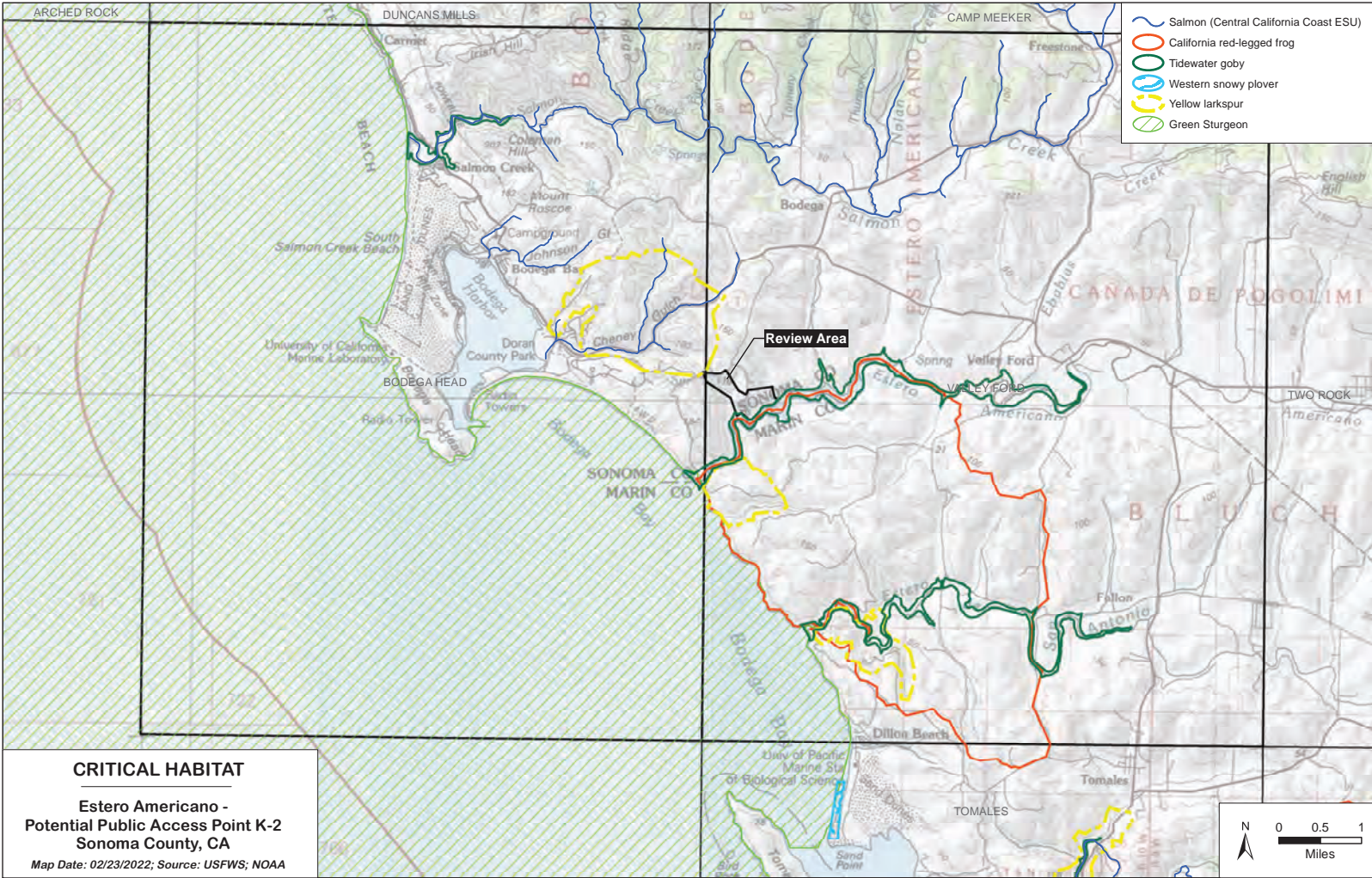
Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

## Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment F

Designated Critical



- Salmon (Central California Coast ESU)
- California red-legged frog
- Tidewater goby
- Western snowy plover
- Yellow larkspur
- Green Sturgeon

**Review Area**

**CRITICAL HABITAT**  
**Estero Americano -**  
**Potential Public Access Point K-2**  
**Sonoma County, CA**  
 Map Date: 02/23/2022; Source: USFWS; NOAA



## **PART 7 – ON THE LAND**

On the Land has had another successful and highly-participated-in outings program this winter and spring. Member outing signups are higher than they have ever been, and we have been expanding our offerings in an attempt to meet the demand.

In the first half of 2015, the On the Land program hosted 39 outings and events with 1071 attendees: 2 public open days with 393 participants; 11 public hikes with 248 participants; 11 member outings with 295 participants; 12 volunteer workdays with 69 participants; and 3 partner hikes with 66 participants. Through the public outings registrations, we brought in 55 donations for a total of \$1380, including 10 new members at the \$50 level.

We offered a hike to the Cedars to our general membership for the first time, and now have a waitlist of about 80 people for future hikes to the Cedars. We will keep these hikes off the advertised schedule until we are ready to accommodate additional requests.

Outings to Pole Mountain continued this spring, with three public hikes, two member hikes, and two partner hiking group hikes, all of which were filled at 30+ hikers. We will continue offering hikes from Little Black Mountain to Pole Mountain in the fall.

### Upcoming program highlights:

We are in the process of transitioning our outings model from a format of separate public and member programs to a combined, mostly fee-based program where members receive a discount. This will enable us to advertise the outings all together, rather than running a separate (and rather complicated) registration process for our member outings. Our transition into this model begins with the summer program starting in mid-July.

Along those lines, and serving as a trial run for this fee-based/discount model, we have redesigned our Glen Oaks Ranch Open Days into a series of one event per month running July through October featuring the wildlife corridor, with a special theme each day. These are designed to be welcoming to people of all ages, including families with children. The cost will be \$15 for nonmembers, \$5 for kids, and members receive a \$5 discount on all tickets.

In preparation for the closing of Estero Ranch and the anticipated interest in access to the property, we are planning for a series of hikes this fall along the coastal trail from Doran Beach to Estero Ranch, which is the expected future public access approach.

We are in the beginning phases of preparing for open access to Pole Mountain through the Jenner Headlands property, which is expected to begin upon completion of the parking lot in spring of 2016. Our strategy is to engage the leaders of hiking groups whose norms are doing this type of strenuous hike (15 mile roundtrip with a total 3,600 foot elevation gain) and use their groups as test hikers for us to evaluate this hike in comparison to what is normal for people of that capacity. Until camping is established on the Jenner Headlands, hikers will need to go up and back within the same day, so we want to know what people can realistically expect and what they need to prepare for when they embark upon that journey.

Finally, on October 17 we are partnering with the Open Space District in celebration of their 25<sup>th</sup> anniversary for a hike from Little Black Mountain to the top of Pole Mountain.

\* \* \*end of report \* \* \*

---

**From:** Shanti Edwards  
**Sent:** Thursday, April 07, 2016 11:24 AM  
**To:** Dave Koehler; Ingrid Spetz; Amy Chesnut  
**Cc:** Bob Neale; Reta Lockert; Deirdre Holbrook; Sheri Cardo  
**Subject:** RE: Invitation - Estero Ranch

Hi all,

I appreciate the head's up given the sensitivity of neighbor relations in the region. Estero Ranch is outside of the subdivision covered by the road easement and thus there are no neighbor notification requirements. I'm not aware of any other scheduling conflicts that weekend, SLT or otherwise.

Will Estero Lane or the Coastal Trail be the access point for the event? If using Estero Lane, please be mindful of the number of vehicles in the caravan and carpool as much as possible. If there is broad internet outreach for the event, that will trigger neighbor interest. They've been told that Estero Lane will not be used for public access and they consider guided outings "public access" even if we don't. We need to be prepared for a bit of neighbor consternation if Estero Lane is used for recreational events at Estero Ranch.

My two cents,  
Shanti

Shanti Edwards | Stewardship Project Manager  
Sonoma Land Trust  
822 Fifth Street, Santa Rosa, CA 95404  
(707) 526-6930 ext. 116  
[www.sonomalandtrust.org](http://www.sonomalandtrust.org)  
Regular hours: W-F, SLT office: Wednesdays

Preserving what we all love most about Sonoma County

---

**From:** Dave Koehler  
**Sent:** Thursday, April 07, 2016 9:26 AM  
**To:** Ingrid Spetz; Amy Chesnut  
**Cc:** Bob Neale; Reta Lockert; Deirdre Holbrook; Shanti Edwards; Sheri Cardo  
**Subject:** RE: Invitation - Estero Ranch

Ya, I think the essentials are Amy and me; and perhaps somebody from development and/or communications.

When Amy's back in the office we'll get together and get in touch if we need any help.

My email was intended to just to let you know its happening and also to provide a vehicle to warn us if that's the day when the prize bulls from Spain arrive that are looking for a tasty snack of looky-lou hikers with bright colored knap sacks etc.

Dave Koehler, Executive Director  
Sonoma Land Trust  
Mobile: (559) 978-1294



Adaptive Management Strategy for Science-Based Stewardship  
of Recreation to Maintain Wildlife Habitat Connectivity

*A report to the Sonoma Land Trust*

Jeremy S. Dertien<sup>1,2</sup>, Courtney L. Larson<sup>2</sup> and Sarah E. Reed<sup>1,2</sup>

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*August 24, 2018*

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## Executive Summary

Non-consumptive human recreation activity negatively affects wildlife individuals, populations, and communities on every continent and in every major ecosystem (Larson et al. 2016). To effectively balance goals for outdoor recreation access and species conservation, protected land managers need robust and locally-relevant monitoring of recreation visitation rates, activity types, and wildlife impacts to guide decisions regarding public access, trail design, and permitted uses. The purpose of this report is to communicate an adaptive management strategy to minimize the negative effects of recreation on wildlife species and maintain the ecological function and permeability of the regionally significant Marin Coast to Blue Ridge Critical Linkage (Penrod et al. 2013). Our specific objectives were to: 1) review the scientific literature for evidence regarding quantitative thresholds and management guidelines for reducing or mitigating negative effects of recreation on wildlife; 2) map recreation infrastructure and monitor current visitation rates to three target properties (Glen Oaks Ranch, Sonoma Developmental Center, Santa Rosa Creek Headwaters) and six comparison properties in Sonoma Valley; 3) recommend guidelines for stewardship of recreation to maintain wildlife habitat connectivity at the target properties; 4) describe a monitoring approach to assess future changes in recreation activity and detect potential effects on wildlife; and 5) recommend future research and other information needed to balance the public access and species conservation goals of protected lands.

Although the publication rate on the effects of recreation on wildlife has increased exponentially (Larson et al. 2016), quantitative thresholds of recreation effects are lacking for many species, taxonomic groups, and sources of disturbance (Chapter 2). Given important gaps in available knowledge, we recommend a precautionary approach that adopts maximum threshold values observed for relevant taxonomic groups, while excluding extreme outliers. Specifically, we recommend minimum thresholds for distance to trails of 75 m for passerine birds (e.g., pygmy

nuthatch), 200 m for ungulates (e.g., mule deer), 400 m for apex predators (e.g., mountain lions), and 600 m for birds of prey (e.g., golden eagles) (Chapter 4). We also recommend that land managers should allow dogs only on leash and consider restricting dogs from trails near sensitive habitats to create larger buffers for wildlife.

Recreation visitation rates to the three target properties varied from no recreation detected on Santa Rosa Creek Headwaters to >56 visitors per day at the Sonoma Developmental Center (Chapter 3). As expected, recreation activity in each target property was lower than in their comparison properties, with the exception of Jack London State Historic Park. Current visitation to Sonoma Developmental Center is likely at or above sustainable levels to maintain wildlife habitat connectivity, especially in the eastern half of the property (Chapter 4). We recommend that recreation management of the western portion of SDC should follow current management of JLSHP and include efforts to reduce trail density and revegetate duplicative and social trails. The area of greatest concern for wildlife movement appears to be the boundary between the northeastern portion of SDC and southeastern portion of Sonoma Valley Regional Park (SVRP), where recreation visitation rates are currently higher than in any other properties investigated. In this area, we recommend restricting access across the boundary between the two properties, closing and revegetating duplicative trails, increasing enforcement of dog leash laws, and limiting visitation as needed through seasonal closures or restricted dog access.

For Glen Oaks Ranch, we recommend that visitation should no more than double, no new trails should be added, and access should be minimized in areas near Stuart Creek. Trail planning for Santa Rosa Creek Headwaters should consider effect-distance thresholds for wildlife and minimize the creation of social trails. Monitoring should continue for all study properties, to document whether recreation activity levels and wildlife habitat use are changing, and to inform adaptive

management decisions to maintain the ecological function of the Sonoma Valley Wildlife Corridor (Chapter 5).

We conclude with recommendations for future research and other information needs to balance public access with wildlife conservation, particularly on lands that are managed for habitat connectivity (Chapter 6). Specifically, we recommend that protected area managers: 1) complete accurate maps of official trail networks and recreation infrastructure, plus unofficial social trails; 2) monitor recreation visitation patterns, including overall numbers of visitors, activity types, spatial distribution, and timing of visits; 3) compare the effects of different recreation activities on wildlife, to address user conflicts and inform decisions regarding permitted uses; 4) include reference conditions or control sites (i.e., protected lands with no public access) in study designs to establish a baseline for detecting potential effects of recreation on wildlife; and 5) empirically test or simulate realistic management alternatives, to assess their effectiveness for reducing or mitigating negative effects of recreation on wildlife.

## **1. Introduction: Effects of Recreation on Wildlife**

Beginning with the U.S. National Park Service Organic Act (1916), most protected areas operate under a dual or multiple-use mandate to provide public access for outdoor recreation and other human activities, while also protecting wildlife species, habitats, and other natural resources. As a result, the vast majority of protected areas—95% of protected land area in North America, and a similar percentage around the world—are open to public access (Dudley 2008). Although it is reasonable to assume that smaller proportion of protected land is currently used for outdoor recreation and nature-based tourism, just 5% is formally closed to future use.

Access for outdoor recreation plays an essential role in generating political support and revenue for land conservation and management, and it generates important human health and economic benefits for local communities. The dual mandate of public access and resource protection is echoed in government programs (e.g., Land and Water Conservation Fund; Walls 2009) and local referenda (e.g., open space tax or bond initiatives; Kroetz et al. 2014). Proximity to and visitation of natural open spaces is positively associated with people's physical, psychological, and social well-being (Shanahan et al. 2015), and outdoor recreation generates \$887 billion in consumer spending annually, supporting 7.6 million jobs and \$125 billion in federal, state, and local tax revenue (OIA 2017).

Globally, protected areas receive an estimated eight billion visits per year, and visitation is increasing rapidly (Balmford et al. 2015). In the United States, outdoor recreation activity (i.e., visitor-days to federal public lands) increased by 40% in the last decade (Cordell 2012), and visitation to developed recreation sites is projected to increase from 190 to 246 million participants per year by 2030 (White et al. 2014). Protected areas are the primary strategy for conservation of global biodiversity. Consequently, because recreation and conservation objectives have been combined in

the missions, management, and funding of protected areas, conservation success depends on the assumption that public access and species protection are compatible goals for conserved lands.

Over the past four decades, a growing body of research has demonstrated that quiet, non-consumptive recreation activities (e.g., hiking, bicycling, and wildlife viewing) can impact the behavior, habitat use, reproduction, and ultimately survival of individual animals and persistence of wildlife populations. A recent global systematic review of the effects of recreation on wildlife documented widespread and broadly negative effects on a wide variety of animal species in many different environments around the world (Larson et al. 2016). Most (93%) published studies documented at least one statistically significant effect of recreation on wildlife, and nearly two-thirds (60%) of those effects were clearly negative. Negative effects included declines in species diversity (Miller et al. 2003), increased flight or stress responses (Jayakody et al. 2008; Maréchal et al. 2011; Deng et al. 2014), decreased survival and reproduction (Iverson et al. 2006; Baudains & Lloyd 2007; Uyarra & Côté 2007; Kerbiriou et al. 2009), and decreased population abundance (Miller et al. 1998; Bejder et al. 2006; Patthey et al. 2008; Zhou et al. 2013; Cowling et al. 2015). Many animal species react to human disturbance from recreation in a similar manner as predation risk, meaning that animals may exhibit increased stress hormones in their blood or reduce time spent on important behaviors such as foraging or caring for young (Frid & Dill 2002; Lenth et al. 2008).

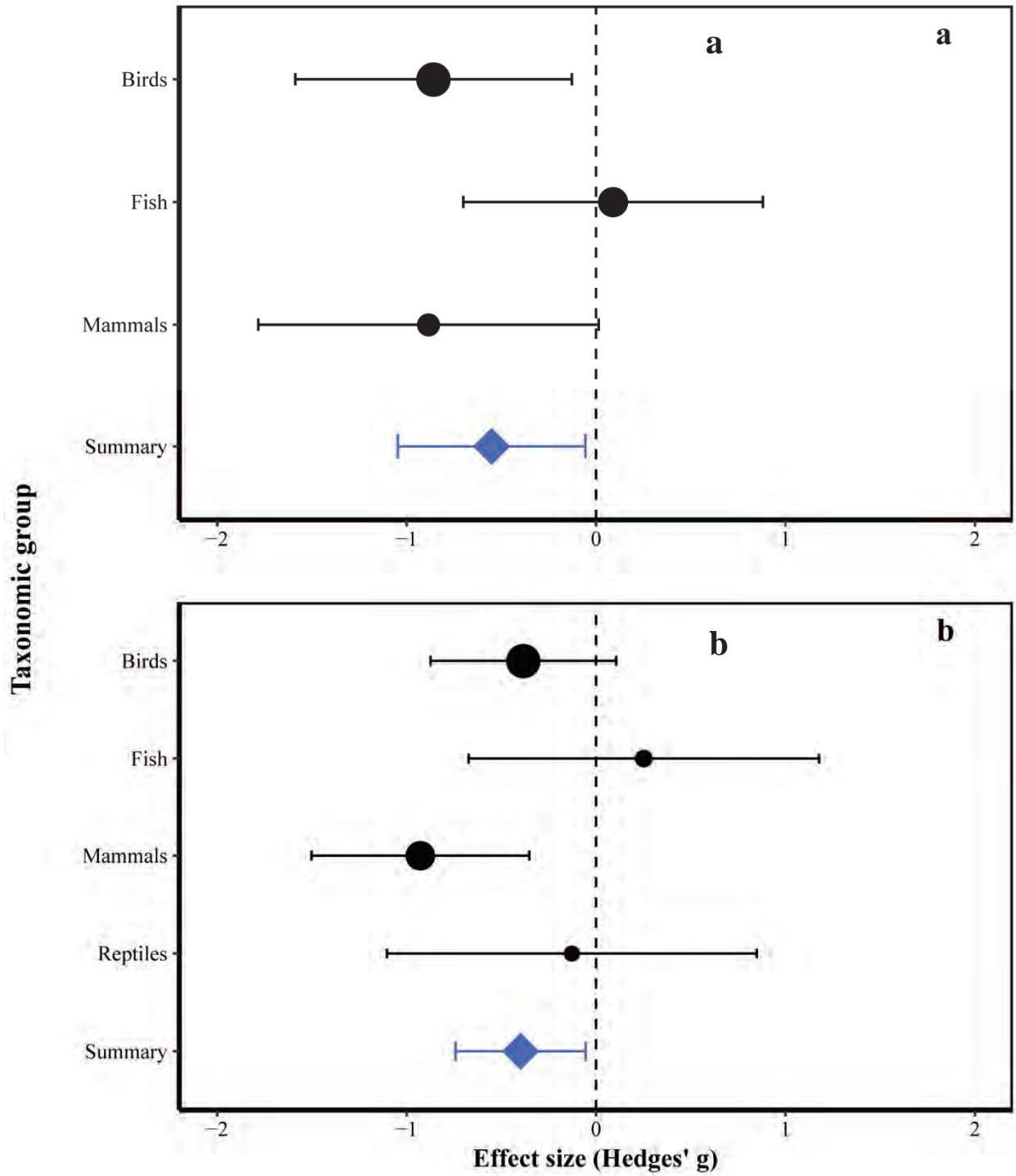
All recreation activities included in the systematic review exhibited greater evidence for negative effects versus positive or unclear effects (Larson et al. 2016). However, one surprising result was that studies of hiking and other non-motorized recreation activities observed negative effects on wildlife more frequently than studies of motorized activities. Although this review may not fully capture the impacts of motorized recreation on other resources (e.g., soils or vegetation), it reveals that non-motorized activities have a similar if not greater potential to disrupt individual animals and wildlife populations as do motorized activities. A second intriguing result was that studies of snow

sports observed negative effects on wildlife more frequently than studies of other terrestrial or aquatic recreation activities. However, relatively few studies have been conducted of snow sports, suggesting a need for more research to understand how animals respond to recreation in alpine environments or during sensitive winter seasons.

Although there are important knowledge gaps about several taxonomic groups and regions of the world, what is clear from the preponderance of articles reviewed by Larson et al. (2016) is that non-consumptive recreation is not simply a neutral form of human land use, but has wide ranging and at times profound effects on wildlife individuals, populations, and communities. Negative effects of recreation on wildlife have been observed on every continent and in major ecosystem on Earth, and these impacts are increasingly recognized as a threat to global biodiversity. However, findings vary widely among individual studies that focus on a single ecosystem, group of species, or type of impact, including some recent studies that have observed limited effects of recreation on animal communities (e.g., Kays et al. 2017; Reilly et al. 2017). Accordingly, questions remain about the consistency and magnitude of the effects of recreation across species and among different types of recreation activities.

To address this knowledge gap, Larson et al. (unpublished data) are currently conducting a meta-analysis to examine the magnitude of differences in vertebrate richness and abundance in response to variable levels of recreation use. Meta-analysis is increasingly popular in ecology and conservation as a tool to synthesize evidence across many individual studies and explore large-scale patterns (Stewart 2010; Haddaway 2015). Meta-analyses combine data from similar individual studies to determine an overall effect size, which can increase precision of existing estimates or detect previously undetected effects because of the larger sample size of the combined dataset (Stewart 2010). This can be particularly useful in situations where variability among studies is high and can help to identify trends that transcend geographic areas or species (e.g., Gardner et al. 2003).

Preliminary results of the meta-analysis indicate statistically significant and negative overall effects of recreation activity on vertebrate species richness and abundance (**Fig. 1.1**). Within taxonomic groups, significant negative effects of recreation were observed for bird species richness and mammal population abundance. Additionally, effect sizes were much larger for negative effects of recreation on vertebrate species richness in terrestrial ( $-0.86 \pm 0.57$ ) than in aquatic environments ( $-0.29 \pm 0.78$ ), and larger for negative effects of recreation on vertebrate abundance in terrestrial ( $-0.52 \pm 0.38$ ) than in aquatic environments ( $0.25 \pm 0.86$ ). These findings build upon a previous meta-analysis of the effects of winter recreation, which documented significant negative effects of recreation on species richness and diversity but not on abundance (Sato et al. 2013).



**Figure 1.1** Effect sizes (Hedges'  $g \pm 95\%$  CI) of recreation on a) species richness of birds ( $n=7$  studies), fish ( $n=8$ ), mammals ( $n=3$ ), and all vertebrates ( $n=18$ ); and b) population abundance of birds ( $n=29$ ), fish ( $n=12$ ), mammals ( $n=29$ ), reptiles ( $n=4$ ), and all vertebrates ( $n=74$ ).

To successfully balance the public access and species conservation goals of protected lands, landowners and managers need locally-relevant scientific information at appropriate spatial and temporal scales (Hadwen et al. 2007). This information is important to guide decisions regarding recreation access and permitted uses, and to increase support for and compliance with management decisions by recreationists. Understanding the frequency, timing, and location of visitors in protected lands can help managers to identify areas with high levels of use, establish thresholds for management, and monitor compliance with regulations (Cessford & Muhar 2003; Hadwen et al. 2007). Together with scientific expertise regarding the impacts of recreation on wildlife, this information can be used to minimize negative effects of recreation and improve the permeability of protected lands.

The purpose of this report is to communicate an adaptive management strategy to minimize the negative effects of recreation on wildlife species and maintain the ecological function and permeability of the regionally significant Marin Coast to Blue Ridge Critical Linkage (Penrod et al. 2013). In addition, the report provides a starting point for generating science-based recommendations for how to balance public access with wildlife conservation, particularly on lands that are managed for habitat connectivity. Results of the project will be communicated broadly to landowners, land trusts, and natural resource management agencies for application to protected lands within and outside of the study region.

## 2. Literature Review of Quantitative Thresholds

### Introduction

Human disturbance to wildlife is widely recognized for its deleterious effects on the physiology, behavior, and demography of individual animals, wildlife populations, and communities (Steven & Castley 2013; Coetzee & Chown 2016). Sources of these impacts vary widely and include direct effects such as mortality from hunting and road kill (Scillitani et al. 2010) and indirect effects such as avoidance of hikers, dogs and boat traffic (Cowling et al. 2015; Tarjuelo et al. 2015).

Whereas the direct effects of human disturbance on animal populations and communities are more apparent, indirect effects are less easily identified or separated from other environmental factors. An increasing body of research has focused on the indirect effects of human disturbance from outdoor recreation (Larson et al. 2016).

To avoid or mitigate the negative effects of recreation on wildlife, land managers require explicit recommendations for how to design trail systems and manage public access. Quantitative information about how wildlife respond to varying levels of recreation is especially important for land managers attempting to make decisions regarding the construction of recreation infrastructure or designation of permitted recreation uses (Braunisch et al. 2011; Rösner et al. 2014), which will affect the total number and spatial and temporal distributions of visitors to protected lands.

Studies of recreation activities can be used to estimate quantitative thresholds of negative effects on wildlife. Thresholds can be measured as effect distances (e.g., the distance at which wildlife species avoid trails or other infrastructure), trail densities (e.g., the density at which wildlife habitat use is altered), or visitation rates (e.g., the number of visitors per day at which wildlife abundance is reduced). However, detection of threshold effects, if present, can be constrained by the spatio-temporal extent and overall design of a study. For example, if the study design focuses on

categorical differences between treatment effects or relies on too coarse a measure of wildlife response, threshold effects may not be detectable. In addition, the lower limit of the effect of human presence or infrastructure may be outside the boundaries of the study area or may be difficult to disentangle from correlated effects of other variables.

We conducted a review of the published scientific literature of human recreation effects on wildlife in terrestrial environments. We analyzed articles to determine if the authors detected a quantitative threshold or if the authors included management recommendations with thresholds drawn from the study's results. First, we summarize the findings descriptively, reviewing the species and ecosystems that have been studied, and identifying gaps in the available literature. Second, we highlight the findings of multiple articles on three frequently studied genera as case studies. Finally, we discuss how future research should consider study designs that explore the quantitative thresholds of systems as a means of providing the best recommendations for natural resource professionals.

## Methods

We used a database of 274 articles from a recent systematic review of the effects of recreation on wildlife species with articles published from 1981 to 2015 (Larson et al. 2016). We supplemented this database with 24 additional articles published through February 2017 that matched the criteria of Larson et al. (2016), plus 30 articles on the effects of recreation infrastructure. The systematic review criteria identified articles that focused on non-consumptive human recreation activities (i.e., did not include hunting or fishing), studied one or more animal species, and assessed recreation effects using statistical tests. For our review of quantitative thresholds, we included only studies of terrestrial species or interactions that occurred while an

animal was on land (e.g., marine mammals disturbed while on a beach). After excluding aquatic species, 268 articles remained in our database.

We defined a quantitative threshold as the point at which  $\leq 10\%$  individuals or observations of a wildlife population indicate a deleterious effect (e.g., flushing, reduced survival) in response to recreation disturbance. For example, we included papers if the results quantified the trail-effect distance where the upper 90% quantile of passerine habitat use occurred, or if logistic model results indicated a point at which  $\leq 10\%$  of deer were disturbed by human proximity. We chose this definition because of the frequency of articles that identified a threshold at or above the 90% value. We also recorded the value at which the least number of individuals were disturbed, including the value at which no wildlife individuals were disturbed. We did not include articles that reported only the mean effect or level of disturbance (e.g., mean flush distance, mean recreation group size, etc.), as this value does not represent the full distribution of disturbed animals (i.e., does not allow for estimation of the value at which the minimum effect occurs). We did include articles that presented figures or graphs that allowed for estimation of a threshold of effect, even if that threshold was not explicitly stated in the article's text.

We read all remaining articles to determine if the study results presented a quantitative threshold and/or if they stated a threshold management recommendation. We classified each article into one of seven different ecosystem classifications adapted from Larson et al. (2016): coast/shoreline, desert, forest, polar, rangeland, scrub/shrub, and wetland. Rangeland included grassland, alpine, tundra, and savanna ecosystems. In addition, we extracted details on the measure of recreation disturbance (e.g., number of visitors, distance to people, etc.), study type (e.g., observational or experimental), species of interest, and publication information (Larson et al. 2016).

Once a paper was determined to have identified a quantitative threshold, we recorded the details of the threshold including the measure of wildlife response, and the value at which the

disturbance threshold was observed (e.g., < 14 visitors/day, <100 meter from people, etc.). Some articles recorded multiple threshold effects per species that varied by season or recreation type; therefore, several articles resulted in multiple database inputs.

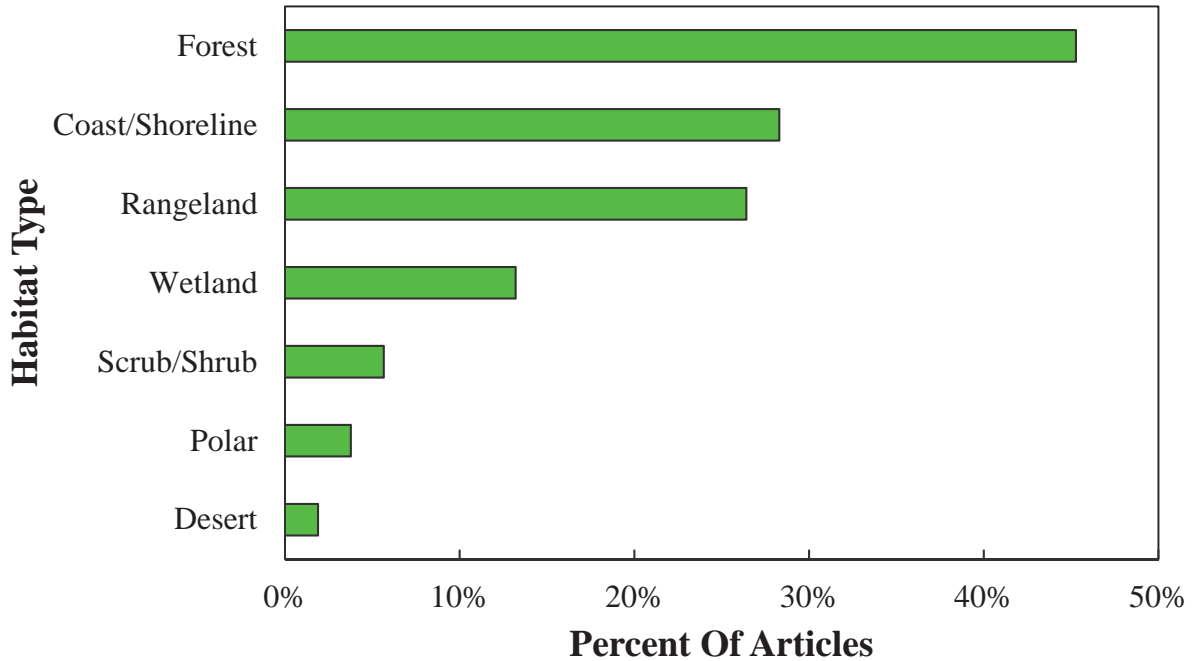
We recorded whether an article both identified quantitative threshold(s) of recreation effects and recommended specific strategies for managing recreation. Management recommendations included suggested distances to separate people from animals and limits on visitor numbers. More general recommendations (e.g., people should be kept away from wildlife or a preserve area should be closed seasonally), were not included in our review if they did not specify an empirically-derived quantitative value (but see Larson et al. [2016] for a summary).

## Results

We reviewed 268 full-text journal articles, of which 50 articles (18.7%) met our requirements for quantitative threshold effects and three articles (1.1%) included a quantitative management recommendation. Thus, we extracted data from a total of 53 articles.

Studies that identified threshold effects were conducted predominately in forest (45.3% of articles,  $n = 24$ ), coastal/shoreline (28.3 %,  $n = 15$ ), and/or rangeland ecosystems (26.4%,  $n = 14$ ) (**Fig. 2.1**). There was limited representation of recreation studies in wetland (13.2 %,  $n = 7$ ), scrub/shrub (5.7%,  $n = 3$ ), polar (3.8%,  $n = 2$ ) or desert (1.9%,  $n = 1$ ) ecosystems.

The majority of the 53 articles focused on bird (58.2%,  $n = 30$ ) or mammal (36.4%,  $n = 19$ ) species, with little representation of invertebrates (3.6%,  $n = 2$ ) or amphibians (1.8%,  $n = 1$ ). We did not find a paper that identified thresholds for reptiles. Studies of birds focused primarily on species in the Orders Charadriiformes (e.g., wading birds and gulls; 26.9%), Accipitriformes (e.g., hawks, eagles, and vultures; 11.3%) and Passeriformes (i.e., perching birds; 11.3%) (**Fig. 2.2a**). Mammal

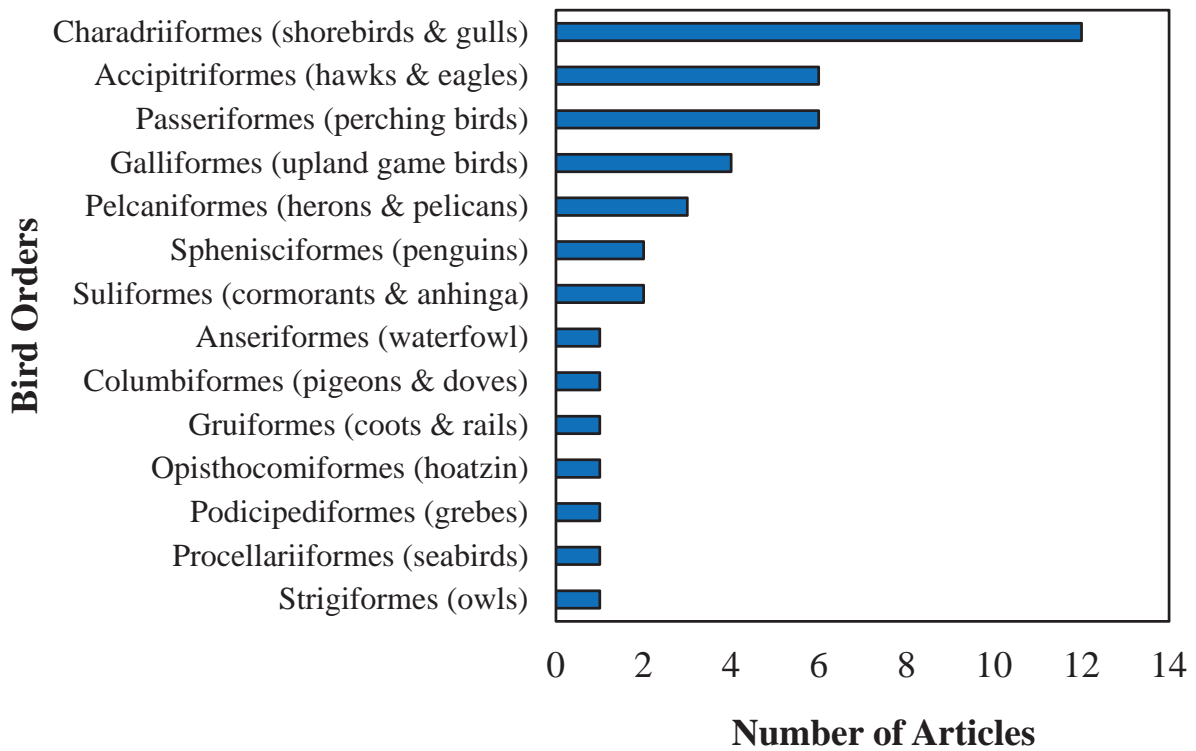


**Figure 2.1.** Summary of habitat types represented by papers that demonstrated threshold effects. Forest, rangeland, and coast/shoreline habitats made up the vast majority of studied ecosystems. Percentages sum to greater than 100% because some studies were conducted in more than one habitat type.

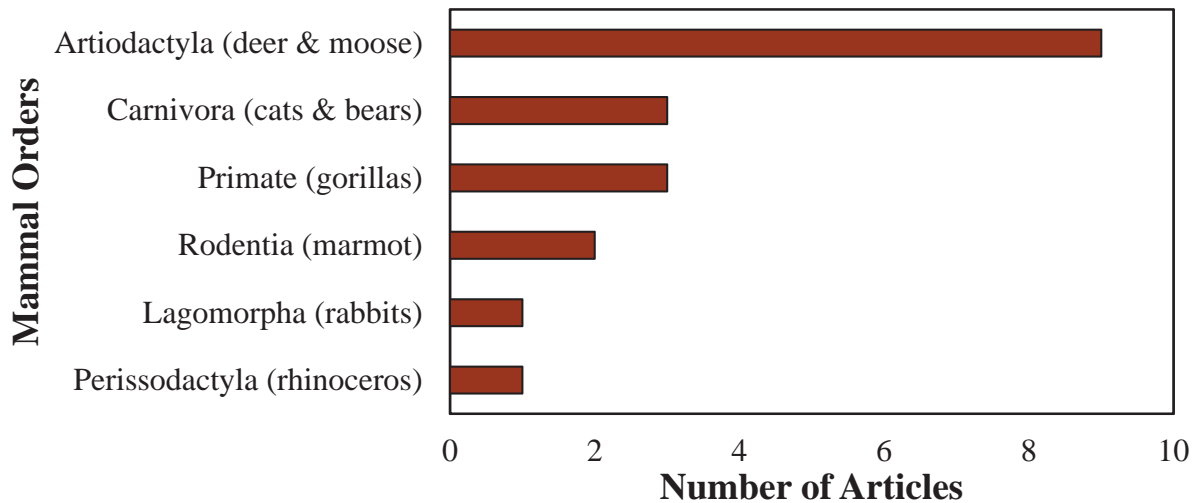
studies primarily focused on species in the Orders Artiodactyla (i.e., even-toed ungulates; 19.2%) and Carnivora (e.g., cats, bears, and seals; 11.3%) (**Fig. 2.2b**).

Hiking (30.0% of articles), wildlife viewing on land (11.3%), and dog-walking (11.3%), were the most commonly studied recreational activities (**Fig. 2.3**). Nearly half (45.3%) of the articles examined two or more recreation activities, most of which (73.9%) included hiking as one of the activities. Beach use (10% of articles) was typically associated with studies examining human disturbance to shorebirds.

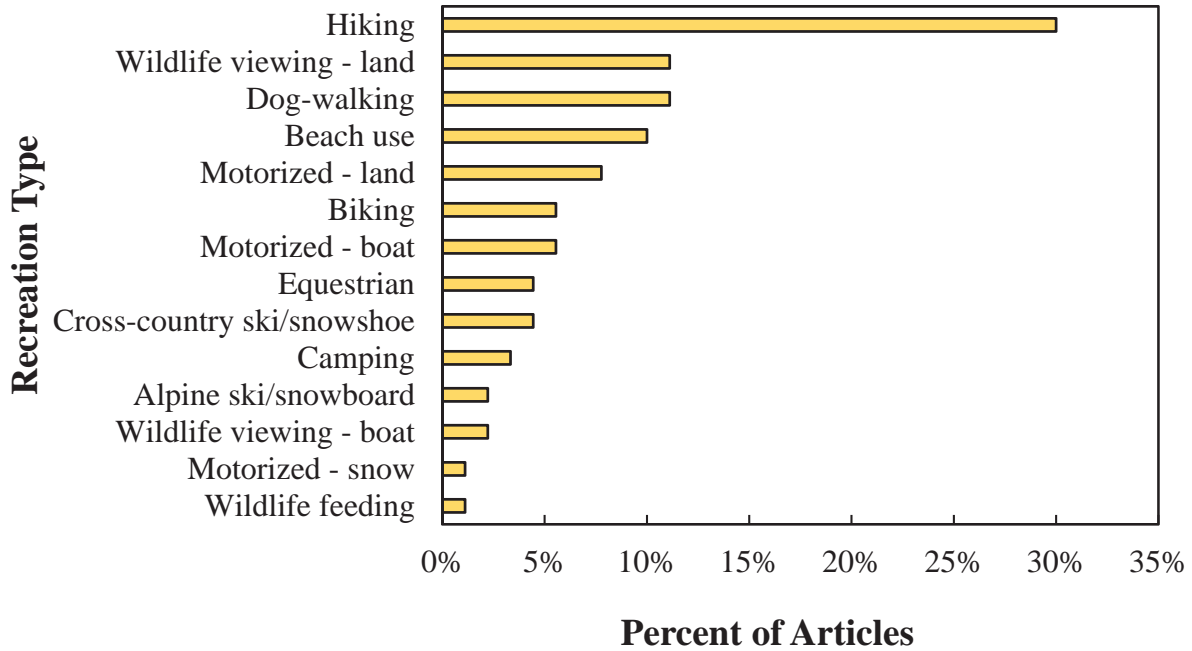
a.



b.



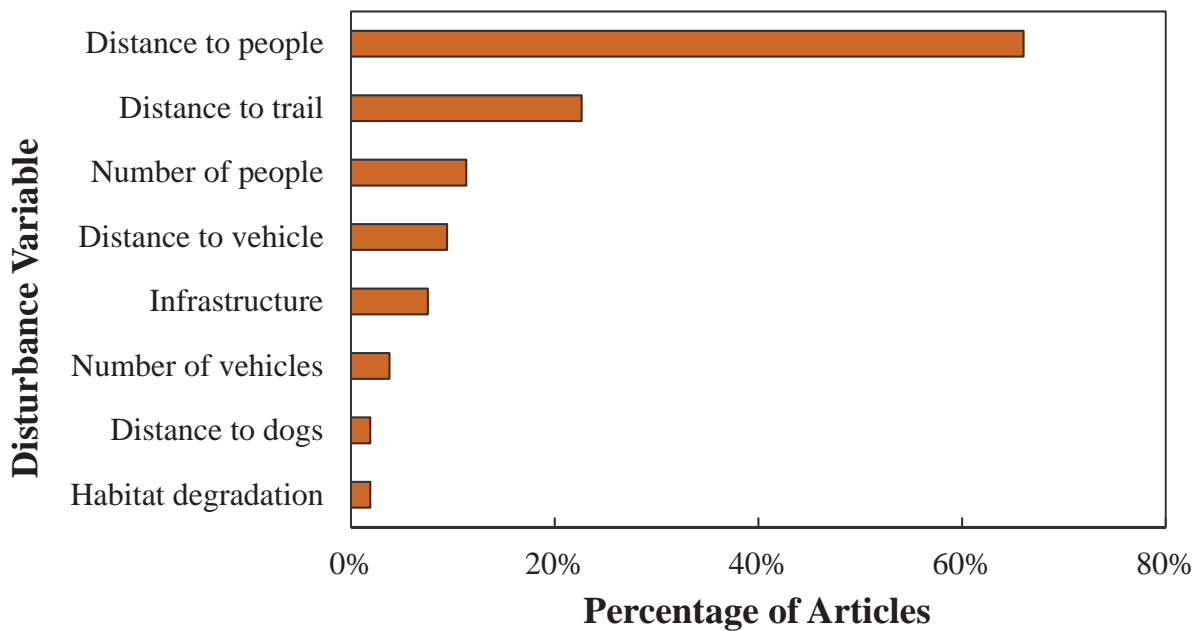
**Figure 2.2.** Orders of (a) bird and (b) mammal species studied in papers that identified an effect threshold. Several articles contained more than one order thus the total number of articles sums to more than all the threshold effects papers.



**Figure 2.3.** Forms of recreation across all articles that found a threshold effect. An article could measure multiple recreation types, therefore, the percent of articles sums to greater than 100%.

Quantitative thresholds were measured for a variety of recreation disturbance variables, including distance to people, distance to a trail or road, and number of people (**Fig. 2.4**). The greatest percentage of studies focused on measures of distance to the nearest people (66.0% of articles). Studies that focused on the distance to people included observational studies in coastal ecosystems where trails are less well defined ( $n = 10$ ) and quasi-experimental studies in which researchers directly or adjacently approached an individual animal to measure alert and flight initiation distances ( $n=10$ ).

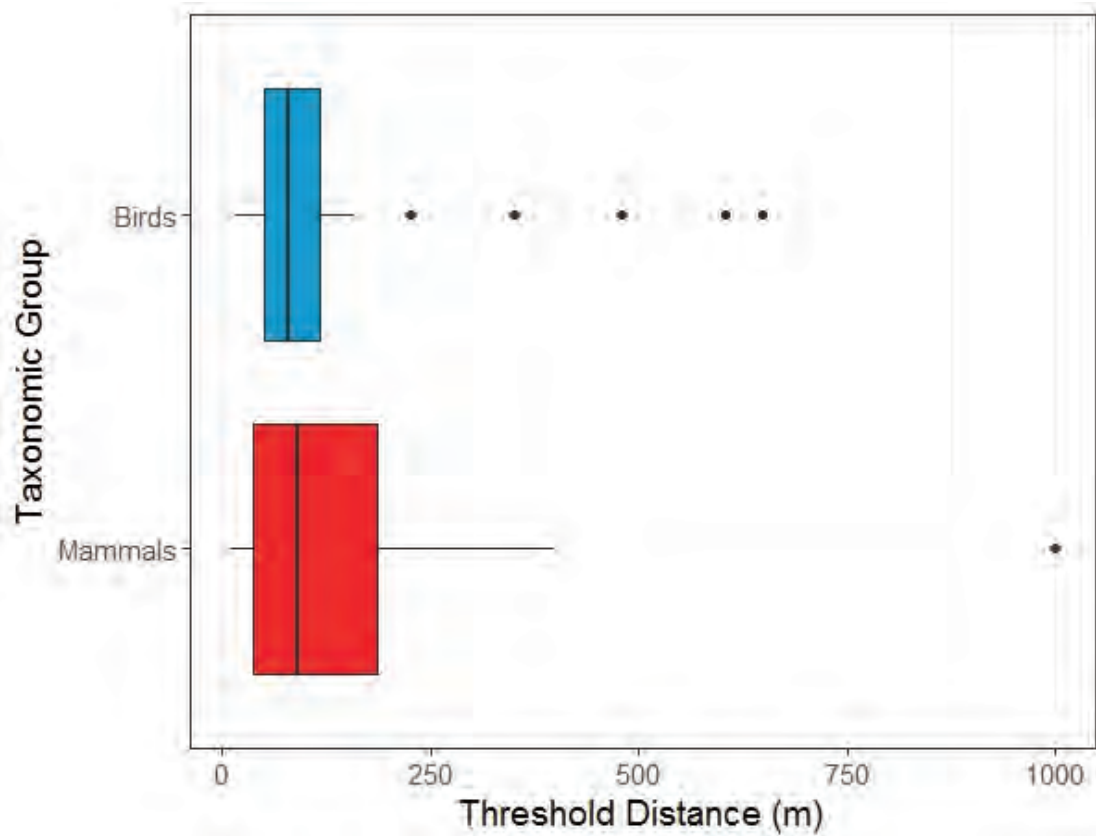
Distance to trail was the second most frequently studied measure of recreation disturbance (22.6% of articles) (**Fig. 2.4**). Quantitative thresholds for distance to trail were identified in studies of birds ( $n=6$ ), mammals ( $n=3$ ), and invertebrates ( $n=1$ ). Several studies were precluded from finding a threshold effect because the researchers focused on categorical differences between trail types or



**Figure 2.4.** Disturbance variables for which threshold effects were measured in articles on impacts of recreation on wildlife species. Infrastructure refers to either distance (km) to human structures or density of human built structures. Distance to trail includes all forms of human recreation trails including motorized, non-motorized, dogs, and no dogs. Number of vehicles and number of people were measured daily or on a per survey time basis.

presented only mean distances of apparent trail effects. In addition, one study focused on the threshold distance of habitat degradation on the periphery of trails due to human traffic and its effects on the occurrence of a butterfly’s host plant (Bennett et al. 2013).

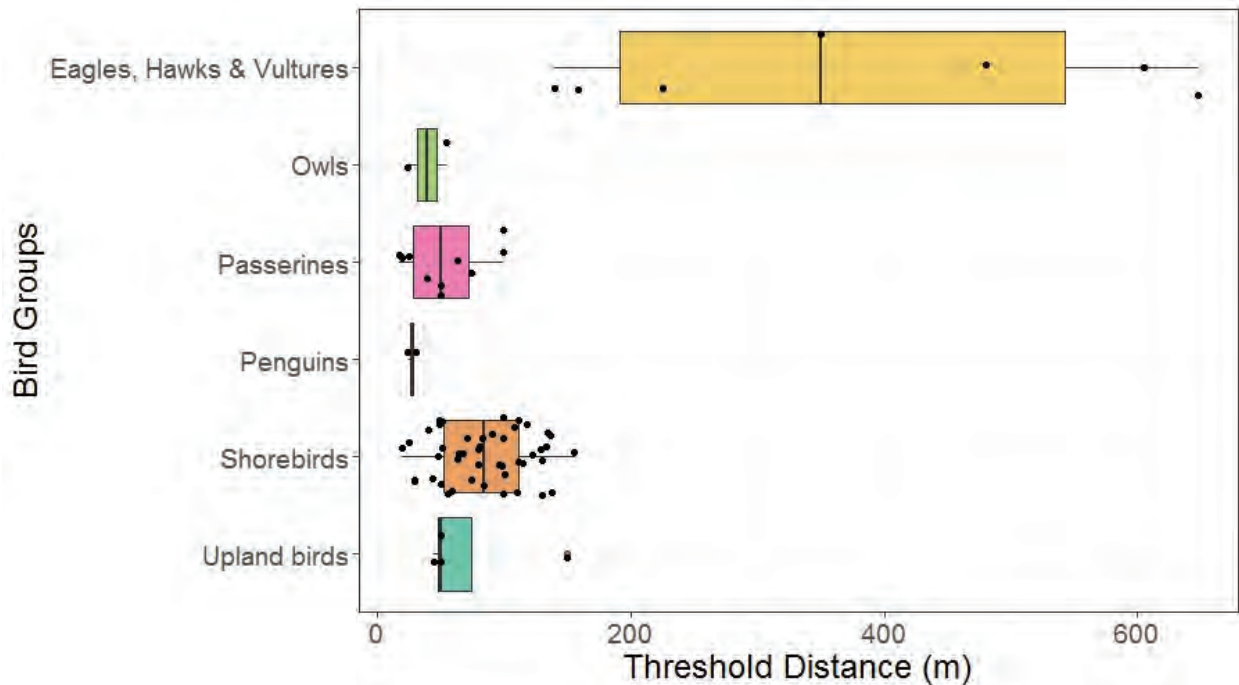
Median threshold distances at which the presence of people, trails, or vehicles affected a target species was 80 m for birds and 90 m for mammals; maximum threshold distances exceeded 600 m for birds and 1000 m for mammals (**Fig. 2.5**). However, effect distances varied substantially among orders and species. Wading birds and passerines were generally affected at distances less than 100 m (Miller et al. 1998; Thomas et al. 2003; Lafferty et al. 2006), whereas larger-bodied species



**Figure 2.5.** Minimum effect distance thresholds across all mammal ( $n=28$ ) and bird ( $n=71$ ) species studied for the impacts of recreation on wildlife. Thresholds included observed distances of direct human disturbance to wildlife and disturbance from recreation infrastructure. Outliers for mammals are effect distances for larger ungulates, including caribou and elk. Outliers for birds are effect distances for raptors, including hawks and eagles. The dark line through each box represents the median threshold distance, and the whisker lines correspond to 95% of the range of distance values.

such as hawks and eagles had threshold effect distances greater than 400 m (Zuberogoitia et al. 2008; Keeley & Bechard 2011) (**Fig. 2.5**). Regression analysis found evidence of a positive correlation between increasing bird body mass and effect distance (**Fig. 2.7a**).

Estimates of minimum effect distances for mammals were more variable, but appeared to follow a similar pattern to those of birds. Smaller rodent species avoided areas within 50-100 m of trails or people (e.g., Lenth et al. 2008), whereas some carnivores and ungulates had minimum effect



**Figure 2.6.** Threshold distances of different bird groups. Black dots represent individual data points that were used in estimating the box plot. Shorebirds had by far most threshold data, more than all other bird groups combined. Birds of prey, not including owls, had the highest variation in threshold distances and were impacted by recreation at much further distances.

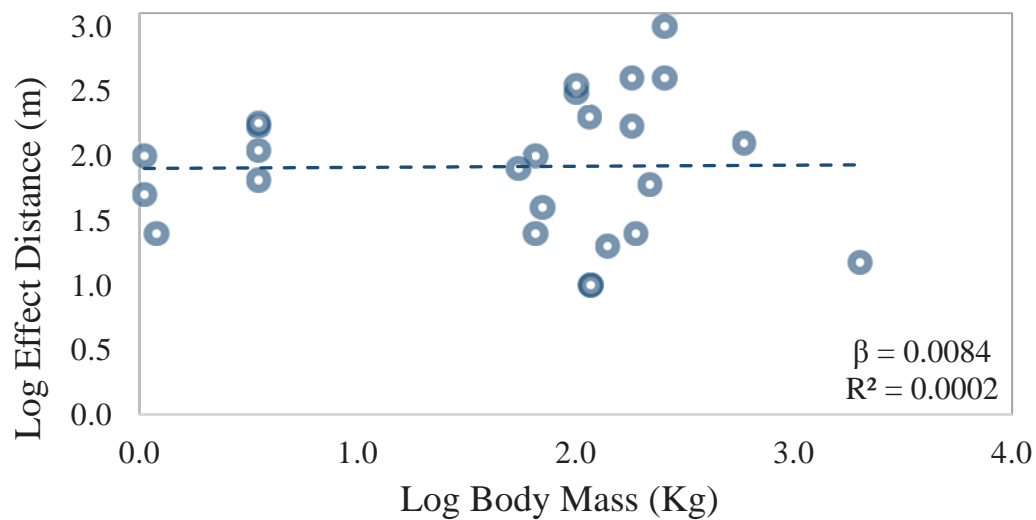
distances up to 350-1000 m from trails and people (Preisler et al. 2006; Reimers et al. 2006; Coleman et al. 2013). However, regression analysis did not find evidence of a correlation between mammal body size and minimum effect distance (**Fig. 2.7b**).

Effect-distance thresholds also varied depending on the likely habituation of the species. Studies that examined western lowland gorilla (*Gorilla gorilla*) groups that had frequent tourist contact noted behavioral differences when humans approached within 10 meters (Blom et al. 2004; Klailova et al. 2010). A study of habituated Asian rhinoceros (*Rhinoceros unicornis*) recommended maintaining a buffer of greater than 15 m between tourists and rhinos, especially given the behavioral disturbance when people were within 10 m of an animal (Lott & McCoy 1995).

**a. Birds**



**b. Mammals**



**Figure 2.7.** Correlation of animal body size versus threshold effect distance for (a) birds and (b) mammals. We excluded two flightless bird examples given differences in mass and life history compared to flying birds. Effect distances include distance to people, vehicle, and trails.

Articles examining thresholds of the number of people or vehicles per unit time were comparatively less well represented (11.3%,  $n = 6$  articles) (**Fig. 2.4**). Thresholds on numbers of people included studies focused on human visitation effects on primate group behavior ( $n=2$ ), decreasing wildlife sign or detection correlated with increasing magnitude of visitation ( $n=4$ ), and

behavioral disturbance to animals from tourist group visits to wildlife concentrations ( $n=3$ ).

Measurement units regarding the number of people present varied between studies; units included the number of people per day, people per month, people present at a survey, and people per km per visit.

Four articles (7.5%) found different threshold effects of recreation infrastructure (**Fig. 2.4**). The two articles concerning effects of human infrastructure other than trails (e.g., campgrounds, tourist buildings) demonstrated threshold effects an order of magnitude greater than effect distances to trails or people. Steller's jays (*Cyanocitta stelleri*) that supplemented their diet with human food from campgrounds used habitat up to 2 km from the campground infrastructure (i.e., the campground had a 2 km effect distance) (West et al. 2016). Interactive effects of human recreation and animal habituation led to significantly higher poaching of Barbary macaque (*Macaca sylvanus*) juveniles within 20 km of a tourist site (Ménard et al. 2014).

## Discussion

There are numerous gaps in the scientific literature regarding quantitative thresholds of effects of recreation on wildlife. While the publication rate on this topic has increased exponentially, science-based recommendations for management of recreation are lacking (Larson et al. 2016). Further, certain taxonomic groups, including amphibian, reptile, and invertebrate communities, are substantially underrepresented in this body of research. In this review, amphibian and invertebrate species were each included in only one article, and no articles identified effect thresholds for reptile species. However, quantitative information about how wildlife respond to recreation activity and infrastructure, and management recommendations of researchers studying similar ecosystems or species of interest, can assist land managers to design trail systems and manage public access to avoid or mitigate the negative effects of recreation on wildlife.

Most studies were excluded from our review because they considered only categorical differences in recreation variables. Further, some of studies identified only means or medians of recreation effects, which precluded an estimation of the threshold value at which the minimum effect occurs. Although studies that identified means or medians did not meet our review's criteria, they can still contribute valuable insights for wildlife management. For example, studies such as Sibbald et al. (2011), which observed that GPS-collared red deer (*Cervus elaphus*) will stay an average of 371 meters from busy trails, or Mallord et al. (2007), which found that woodlarks (*Lullula arborea*) the probability of colonization was < 50% in areas with greater than eight human disturbance events per hour, both contribute useful information on the impacts of human presence on species behavior and habitat use. Including mean or median values is a common method for reporting such data; however, an average value does not indicate to a wildlife manager or researcher the level of human disturbance at which a negative effect actually begins. Moreover, depending on the distribution of disturbance values, an average result excludes a major portion of the sampled wildlife population.

We did find numerous examples of minimum effect thresholds from certain taxa, especially shorebirds and ungulates. Studies of plover species (genera *Charadrius* and *Pluvialis*) provided some of the clearest examples of minimum effect thresholds. Western snowy plovers (*Charadrius nivosus*) were rarely disturbed when humans were more than 30 m away (Lafferty 2001), whereas a study of piping plovers (*Charadrius melodus*) demonstrated that the minimum distance for flight initiation was greater for a person walking a dog (100 m) than for a person walking alone (50 m) (Jorgensen et al. 2016). Results for piping plovers aligned closely with those for Kentish plovers (*Charadrius alexandrinus*), which fled when humans were less than 80 m away (Martín et al. 2015), and for golden plovers (*Pluvialis apricaria*), which avoided areas within 50 m of a pedestrian trail (Finney et al. 2005). Separating humans and shorebirds by a minimum distance of 100 m appears to be the best practice to reduce potential negative effects of human disturbance on these species.

Ungulates of the order Artiodactyla (even-toed ungulates) were also well represented in this review. Estimates of minimum flight initiation distances for ungulates varied more broadly than those for birds. Studies found threshold distances of 25-60 m for species such as sika deer (*Cervus nippon*), sable antelope (*Hippotragus niger*), and greater kudu (*Tragelaphus strepsiceros*) in areas with high levels of human visitation (Borkowski 2001; Muposhi et al. 2016). Alternatively, reindeer (*Rangifer tarandus tarandus*) were disturbed up to 350 m from approaching humans (Reimers et al. 2006), and Rocky Mountain elk (*Cervus elaphus*) exhibited a flight response up to 1000 m from all-terrain vehicles (Preisler et al. 2006). Guanacos (*Lama guanaco*) had a similar flight initiation distance and reduced sightings by researchers with greater than 250 visitors per day to the study site (Malo et al. 2011). Given the wide variability of threshold estimates for species in this order, a precautionary recommendation for separating humans (excluding vehicles) and ungulates would be a minimum distance of 350 m to reduce potential negative effects of human disturbance.

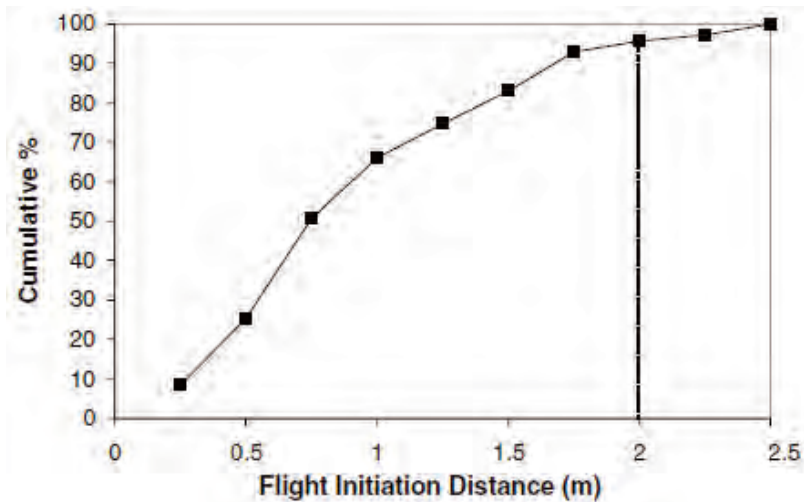
Examples of recreation infrastructure thresholds, beyond those describing distance to trail, were lacking in our review. What appears from our low sample size is that infrastructure even at low levels can be a contributing factor to altering the habitat use of birds and mammals (Braunisch et al. 2011; Harris et al. 2014; Richard & Côté 2016). At a regional scale, recreation infrastructure may also further exacerbate underlying human-wildlife conflicts (Ménard et al. 2014). Better understanding of how building installations or the density of trails influences the behavior and survival of wildlife species is paramount for the creation of informed regulatory guidelines.

The availability of science-based management recommendations that include quantitative thresholds was lower than our initial expectations. We found relatively few accessible and practical recommendations for land and wildlife managers. Studies that focused on categorical variables (e.g., low and high recreation, hikers versus mountain bikers) to examine the potential effects of a recreation treatment rarely identified the threshold at which the recreation activity may begin to or

no longer affects an animal species. Although researchers should not provide a quantitative recommendation that is not justified by their results, where possible, researchers should provide resource managers with clear guidance and conservative estimates to support science-based management decisions.

During the study design process, future researchers should consider how their design could support detection of a quantitative threshold. Rodríguez-Prieto & Fernández-Juricic (2005) provide a valuable example demonstrating how to estimate a quantitative threshold of the effect of recreation activity on the Iberian frog (*Rana iberica*). Their study design incorporated systematic exposure of the species of interest to human disturbance, which provided direct and measurable flight initiation distances of individual animals from humans. Their results clearly demonstrated that beyond 2 m, human approaches rarely result in the movement of frog individuals (**Fig. 2.8**).

Although this study system is likely easier to control and observe than studies of large mammal species, it provides a useful example of implementing an experimental design to quantify a threshold effect of recreation disturbance.



**Figure 2.8.** Example of estimate minimum effect distance taken from Rodríguez-Prieto & Fernández-Juricic (2005). The graph depicts the estimated of minimum approaching distance for Iberian frogs based on the relationship between the cumulative number of individuals fleeing from humans at different flight initiation distances.

While there remains a need to understand when and where recreation activities are affecting species negatively, to inform future designation and management of recreation use, researchers must move beyond simple hypothesis testing. Asking how and when a species is being disturbed, and measuring well beyond the spatial extent, temporal duration, or other value at which disturbance is expected to begin or end, will allow investigators to identify important thresholds of recreation disturbance. Ultimately, these thresholds allow for more informed and effective management decisions and a higher probability of conservation success.

### 3. Recreation Mapping and Monitoring in the Sonoma Valley Linkage

#### Introduction

Land management agencies are often mandated to allow human recreation access to parks, open spaces, and other protected lands, while also conserving natural resources. As demonstrated in the previous chapters, human recreation activity can have negative effects on a variety of wildlife species and in a variety of environments (Larson et al. 2016). However, quantitative measurement of recreation disturbances (e.g., visitation rates) is relatively uncommon and often limited by the staff and financial resources of a management agency (Cole & Wright 2004; Hadwen et al. 2007). With the increased recognition of human recreation impacts on wildlife, there is the need to accurately quantify spatial and temporal visitation patterns for different types of recreation activities.

Monitoring of visitation rates and types of recreation serves multiple purposes in the management of protected areas. Accurate information on visitor numbers and spatial patterns can assist in park planning decisions, such as the design of infrastructure and allocation of staff and resources (Cessford & Muhar 2003). In addition, it is difficult to assess potential human impacts without a complete and accurate map of the recreation infrastructure of a property; therefore, it is important to use remote-sensing and ground-truthing to inventory the locations of buildings, designated and undesignated trails, and any other recreation infrastructure. Although admissions data, if available, can be used as a proxy for visitation rates, it misses variation in spatial patterns of visitation and assumes no illicit use of the protected area. Utilizing expert opinion to define areas as categories of high or low use recreation does not provide detailed information of sufficient resolution to assess wildlife response to visitation magnitude; it also limits comparison of results among studies. Further, quantifying human recreation should go beyond simply counting people and include different types of recreation activities (e.g., hiking, cyclists, etc.). Considering different types

of recreation across different properties and studying each factor independently allows researchers to correlate potential impacts of a recreation activity on wildlife. In summary, spatially detailed and temporally continuous visitation data is needed for researchers to study wildlife dynamics in response to varying types and magnitudes of recreation disturbance and identify thresholds of recreation effects.

The objective of our study was to quantify recreation on properties in California's Sonoma Valley that varied in type and intensity of human recreation activity. Sonoma Valley is a popular tourist destination for its long-established wine industry in addition to historic attractions such as author Jack London's homestead and the Sonoma Mexican Mission. Conservation of lands for wildlife habitat is therefore at a premium due to the extensive residential and urban development in the region and the extremely high land values. Undeveloped lands that provide connectivity for wildlife movement across the valley are restricted to one continuous linkage in the southeastern portion of the valley, the Sonoma Valley Wildlife Corridor (SVWC). With the changing management of some of these lands, including the potential for expanded access for human recreation, comes the concern for maintaining the permeability of the corridor.

We mapped existing recreation infrastructure and monitored recreation visitation patterns on nine properties in Sonoma Valley, to estimate baselines of current visitation levels to three target properties: Sonoma Developmental Center (SDC), Glen Oaks Ranch (GOR), and Santa Rosa Creek Headwaters (SRCH). We also monitored visitation at six nearby comparison properties, to quantify visitations levels that are similar to what could be expected for the three target properties in the future. We also analyzed two existing datasets to test for potential relationships between recreation visitation patterns and detections of wildlife species. These monitoring data and analyses will inform our recommendations for managing recreation access and permitted uses on properties within the

SVWC (Chapter 4), and for a monitoring design to assess future changes in recreation activity and potential effects on wildlife (Chapter 5).

## Methods

### *Study Areas*

Sonoma Valley is a north-south undulating valley 2-3 km wide situated between the Mayacamas and Sonoma Mountains in southeastern Sonoma County, California. Predominate land uses of the valley include vineyards and wineries, housing, and conserved open spaces. Study areas were dominated by open oak (*Quercus* spp.) woodlands with interspersed grasslands and Pacific madrone (*Arbutus menziesii*), and higher elevation areas with dense Douglas fir (*Pseudotsuga menziesii*), black oak (*Quercus kelloggii*), and coast redwood (*Sequoia sempervirens*) stands. The Sonoma Valley has a Mediterranean climate with warm, dry summers and mild, wet winters.

We monitored recreation activity from April to May 2017 on three target properties (SDC, GOR, and SRCH) and six nearby comparison properties (**Table 3.1**). The Sonoma Developmental Center (SDC) is a 380-ha State of California in-patient mental health facility comprised of an approximately 80 ha campus of buildings surrounded by approximately 300 ha of open oak woodlands and two reservoirs. We selected Jack London State Historical Park (JLSHP), which borders SDC to the west, and Sonoma Valley Regional Park (SVRP), which borders SDC to the northeast, as comparison properties of SDC given the proximity and contiguity of trails among the three properties; we also expected that JLSHP and SVRP would have similar levels of recreation visitation that could be anticipated for SDC in the future. Glen Oaks Ranch (GOR) is a 95-ha Sonoma Land Trust-owned property in the southeastern portion of the Sonoma Valley. Glen Oaks Ranch is closed to the public, but occasionally hosts school groups and philanthropic events, group and individual hikes, and receives frequent visitation by staff and volunteers. We chose Bouverie

Preserve (BP) and Fairfield Osborn Preserve (FOP) as comparison properties to GOR given their proximity and similar size, as well as similar management of public access and human recreation activity. We anticipated that both properties currently have higher visitation levels than GOR, but could be representative of GOR if visitation increases. Finally, Santa Rosa Creek Headwaters (SRCH) is a 66-ha new addition to Hood Mountain Regional Park that is not yet open for public

**Table 3.1** Study areas in Sonoma Valley and their recreation restrictions. Dogs are permitted as on-leash only, but are often illicitly off-leash at many of these study areas.

Study Area	Code	Access	Area (ha)	Permitted Uses	Dog Access	Operator
Glen Oaks Ranch	GOR	Closed w/ access by appt.	94.7	Hikers	No Dogs	Sonoma Land Trust
Bouverie Preserve	BP	Closed w/ access by appt.	183.0	Hikers, school groups	No Dogs	Audubon Canyon Ranch
Fairfield Osborn	FOP	Closed w/ access by appt.	182.0	Hikers, students and research	No Dogs	Sonoma State University
Sonoma Developmental Center	SDC	Open	382.2	Hikers, Cyclists & Equestrians	Dogs	CA Dept. of Developmental Services
Jack London State Historical Park	JLSHP	Open	601.3	Hikers, Cyclists & Equestrians	Dogs (cultural areas only)	CA Dept. of Parks & Recreation
Sonoma Valley Regional Park	SVRP	Open	93.2	Hikers, Cyclists & Equestrians	Dogs	Sonoma County Regional Parks
Santa Rosa Creek Headwaters	SRCH	Closed	65.6	N/A	No Dogs	Sonoma County Regional Parks
Hood Mountain Regional Park and Open Space	HMRP	Open	786.0	Hikers, Cyclists & Equestrians	Dogs	Sonoma County Regional Parks
Sugarloaf Ridge State Park (McCormick)	SRSP	Open	374.4	Hikers, Cyclists & Equestrians	No Dogs	CA Dept. of Parks & Recreation

access. We chose Hood Mountain Regional Park (HMRP) and Sugarloaf Ridge State Park (SRSP), which directly border SRCH, as comparison properties to estimate potential visitation levels when SRCH is opened to recreation activity. Although it represents a snapshot of just one season of one year, the timing of recreation monitoring was chosen to capture an optimal time for recreation visitation in the Sonoma Valley, immediately following the rainy season and before the hot, dry summer, and during the school year to capture student group visits to several of the properties.

### *Mapping Recreation Infrastructure*

We collected available geographic information system (GIS) data layers on the nine study areas including property boundaries, trails, and structures. We used satellite imagery displayed in ArcGIS and Google Earth to digitize property boundaries and trails for study areas in which we could not collect GIS layers. We ground-truthed digitized trails to check for accuracy of the remotely-sensed data.

### *Monitoring Design & Data Collection*

We used remotely-triggered cameras (“camera traps”) to measure the types and intensity of recreation use occurring at the study areas. In a prior study, we found that remotely triggered cameras were the most efficient and cost-effective technique currently available for counting visitors to recreation areas (Reed et al. 2014). We installed remotely triggered cameras (Bushnell TrophyCam with infrared flash) along the target trail and set them to record continuously day and night for a minimum of 14 days at each location. Camera traps were installed 0.5–1.0 m above the ground on trees ( $n=37$ ) or fence posts ( $n=1$ ) and positioned low enough to avoid capturing human facial images and maximize opportunistic detections of wildlife species. All camera traps were programmed to take two photos for each triggering event followed by a ten-second silent period to reduce multiple triggers from the same individual. We operated all camera traps from April to May 2017.

We selected camera trap locations by creating a spatially balanced-random design in ArcGIS (ArcGIS v10.5; Environmental Systems Research Institute, Redland, CA, USA), which creates a random but spatially distributed set of sampling locations across a study area. To ensure an adequate sample of all target and comparison properties, we created a unique sampling design using the trail shapefile for each study area. The number of cameras per study area was proportional to land area; we also increased the number of cameras located on the three target properties. We placed three cameras each at FOP and SRCH, four cameras at BP, GOR, SLSP, SVRP, five cameras at JLSHP and HMRP, and six cameras at SDC. All camera sites in SDC were in woodland hiking trails away from campus buildings, specifically located to avoid capturing images of resident clients.

Sampling locations were selected in the sequential order created by the ArcGIS spatially balanced points tool. If two sampling locations were generated on the same trail within 500 m of each other, we selected the lower numbered (i.e., higher-priority) point of the pair. When installing cameras in the field, if we determined that it was not logistically feasible to position a camera within 100 m of the generated point, then we would go to the next unselected sampling location in the list of generated points.

We analyzed the collected photos to obtain an estimate of visitation by recreation activity type. We subsampled the collected photos as needed to obtain a continuous 14-day sample at each study site, and we viewed each photo to count the number of individual hikers, cyclists, equestrians, and domestic dogs. We also noted whether dogs were leashed. We calculated separate estimates of total mean daily visitation and daily visitation by hikers, cyclists, equestrians, and dogs for each sampling location and summarized them by study area. We also recorded all mammal and bird detections for each sampling location. Given our single survey period and low sample size, we summarize the data as mean daily detections per sampling location and study area.

### *Existing Data*

We analyzed two additional camera trap datasets for possible correlations between human recreation and wildlife detections. These data were collected in open spaces of Sonoma Valley prior to our data collection, and both used different study designs that were not focused on human recreation. The first dataset was provided by Sonoma Land Trust (SLT), which installed 44 cameras in a grid system throughout lands within the SVWC. These cameras were situated on average  $\sim 680$  m apart and operated for 8 seasons or two years (Gray 2017). Duration of data collection varied among cameras; therefore, detection rates were normalized (detections/100 trap nights). The second dataset came from Sonoma County Regional Parks (SCRP), which used an array of eight camera traps in SCRPP properties installed between June and December 2016. Four cameras were positioned at HMRP, three cameras were positioned at SDC/SVRP, and one camera at Taylor Mountain Regional Park, on the southeastern border of Santa Rosa, CA. All SLT and SCRPP camera trap photos were identified to species, including domestic animals and humans. We analyzed deer and bobcat detections from both organizations since these were some of the most frequently detected species in both studies and correspond to the species that we analyzed with our monitoring data.

### *Analysis of Recreation and Wildlife Detections*

We used simple linear regression to analyze correlations between the mean hikers detected at a camera location per day and the number of wildlife detections at a camera location across the sampling period. Mean detections of humans and total wildlife detections were log-transformed prior to regression analysis to meet assumptions of normality. We analyzed our data, SLT data, and SCRPP data separately to determine if similar relationships held between studies for species with the largest detection sample sizes.

We used single-season occupancy models in Program MARK (White & Burnham 1999) to estimate the species richness of native mammals at our study sites. Detection histories were created for each camera location with the number of occasions equaling the number of plausibly detectable mammals in the Sonoma Valley (i.e., each column of the detection history is assigned to a species). If a species was detected at a camera location during any period of sampling it was recorded as a “1” in the detection history or if it was not detected as a “0.” Species that were never detected during the study were still represented in the detection history as a column of zeros. Occupancy probabilities ( $\psi$ ), the proportion of camera locations occupied, were fixed to one since at least one species was detected at each camera location. Detection probabilities ( $p$ ), typically interpreted as the probability of detecting a species given that it is present, are rather interpreted as the proportion of potential mammal species present at a camera location. Therefore, all model variation was placed on the detection probability parameter. We constructed models that tested if species richness varied between study sites, target/comparison property groups, and by the intensity of recreation visitation. For this analysis, we used a list of 19 plausibly detectable mammal species across our study sites.

We ranked models using Akaike’s Information Criterion adjusted for small sample size (AICc), an information theory metric for comparing the relative quality of a set of statistical models. Models with the lowest AICc value are considered the “best” model that neither under- or over-fit the data (i.e. the most parsimonious model). In addition, we used AICc weights, a measure of the relative likelihood of the model being closest to truth in comparison to other models, to gage the uncertainty in model selection.

## Results

### *Recreation Activity*

We established 38 camera locations from April to May 2017 at nine study areas. One camera failed to work after installation and two cameras did not operate for the full two weeks. Camera traps collected approximately 30,000 photos and detected human recreation activity at 33 of 37 functioning camera trap locations (**Appendix I**). Sonoma Valley Regional Park had three times more hiker, dog, and cyclist detections than any other study area. Human recreation was highest at sampling locations on the paved Valley of the Moon trail in SVRP, along Orchard Road and around Suttonfield Lake within SDC, and near the start of the JLSHP hiking trails. We did not detect human recreation at SRCH or along the GOR southern border. On and off-leash dogs were detected with hikers on four of the nine properties, including JLSHP and SRSP where dogs are not permitted. In addition, dogs were detected on GOR and BOUP, although these animals appeared to be a feral pack of three dogs (**Table 3.2**).

Detection of cyclists and equestrians were relatively low on all nine properties. Sonoma Valley Regional Park had the highest number of cyclists per day, predominately concentrated on the Valley of the Moon trail. Jack London State Historic Park had by far the most equestrians, which is likely attributable to the equestrian outfitters located in the park taking visitors on several of the wider hiking trails. Sonoma Developmental Center was moderately popular for both cyclists and equestrians, with cyclist detections being highest on the paved Orchard Road and equestrian detections occurring predominately to the east of Suttonfield Lake (**Appendix I**).

**Table 3.2:** Mean daily detections of human recreation activity per study area. Study areas (rows) are listed by target property followed by its two comparison properties.

Study Area	Code	Hikers	On-Leash Dogs	Off-Leash Dogs	Cyclists	Equestrians
Glen Oaks Ranch	GOR	2.78	0.00	0.01*	0.00	0.00
Bouverie	BP	14.41	0.00	0.35*	0.00	0.00
Fairfield Osborn	FOP	5.50	0.00	0.00	0.00	0.00
Sonoma Developmental Center	SDC	55.35	9.93	6.85	0.80	0.28
Jack London	JLSHP	45.41	0.23	0.45	0.65	4.02
Sonoma Valley	SVRP	171.03	38.94	5.31	2.01	0.90
Santa Rosa Creek Headwaters	SRCH	0.00	0.00	0.00	0.00	0.00
Hood Mountain	HMRP	49.38	6.22	3.21	0.45	0.35
Sugarloaf Ridge	SRSP	4.68	0.09	0.37	0.12	0.03

\* Appeared to be a feral pack of three dogs

### *Wildlife Detections*

We detected 11 mammal species during our sampling (**Table 3.3**). Black-tailed deer (*Odocoileus hemionus columbianus*) constituted the greatest number of mammalian detections, and they were particularly prevalent on properties closed to the public and with lower human use. We detected four mesopredators: bobcat (*Lynx rufus*), gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*) and two apex predators: black bear (*Ursus americanus*) and mountain lion (*Puma concolor*). Bobcat and gray fox were the only carnivore species which we had more than ten unique detections. In addition, we detected domestic cats (*Felis catus*) at HMRP and SVRP at camera locations that were on trails within 200 m of houses.

We captured only two detections of mountain lions, one detection at GOR to the north of Stuart Creek (Fire Road) and one detection on the eastern portion of the Valley of the Moon Trail in SVRP. The detections were 1.25 hours apart, images were of a collared lion, and in the first

**Table 3.3.** Mean wildlife detections per sampling location at nine study areas. Study areas (columns) are listed by target property followed by its two comparison properties.

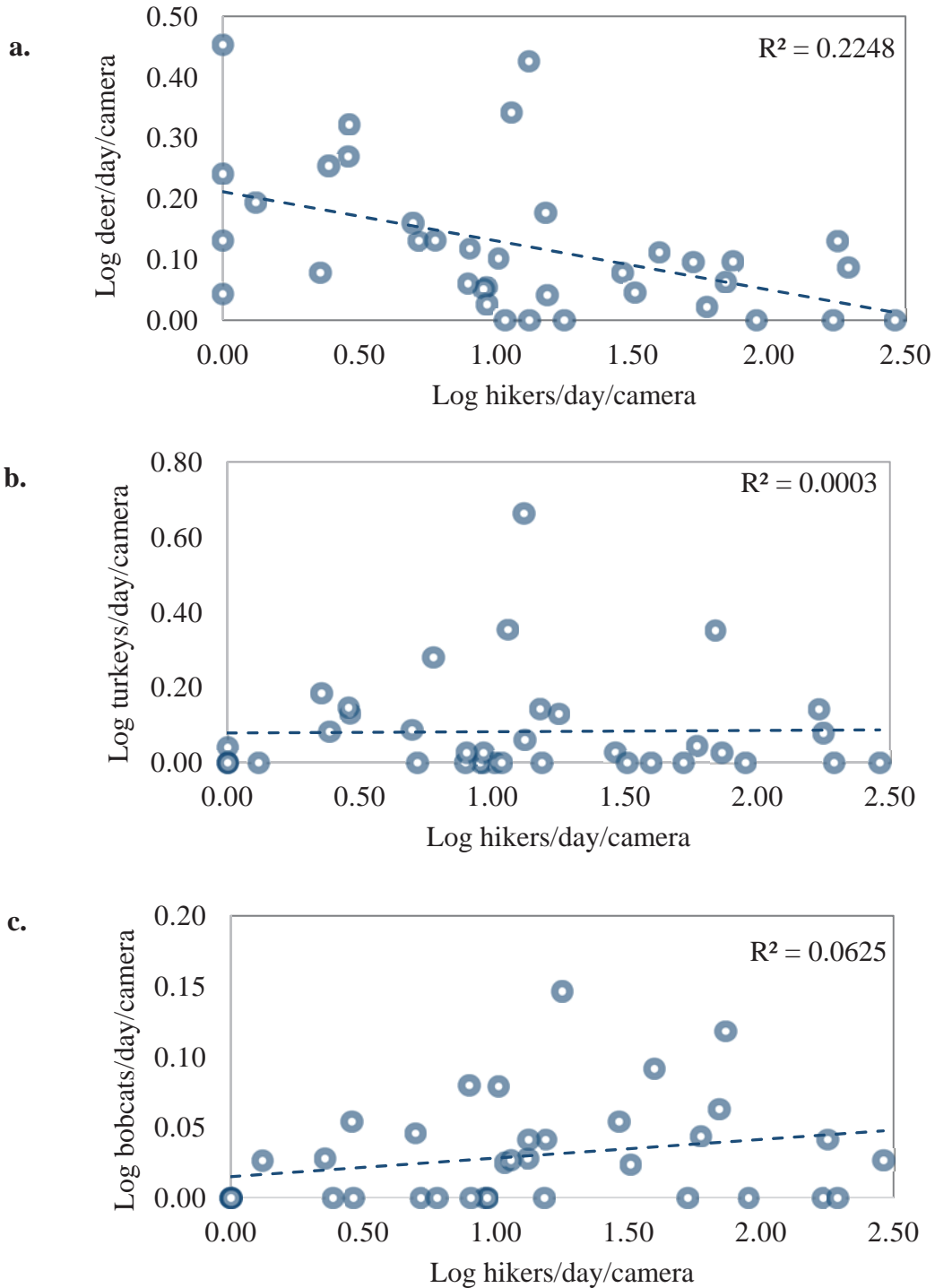
Species	GOR	FOP	BOUP	SDC	JLSHP	SVRP	SRCH	HMRP	SRSP
Black-tailed deer	10.75	4.00	8.50	6.33	2.40	2.00	17.00	1.60	10.00
Wild turkey	6.75	0.33	13.75	7.17	2.80	0.00	0.00	0.40	6.25
Bobcat	0.00	0.33	1.50	1.67	3.60	0.67	0.00	1.40	0.75
Western gray squirrel	0.50	0.00	3.00	0.17	2.60	0.00	0.67	2.20	0.25
Gray fox	0.00	0.00	1.75	0.17	0.00	1.00	0.00	2.00	0.50
Virginia opossum	1.50	0.00	0.25	0.33	2.00	0.00	0.67	0.20	0.00
Black-tailed Jackrabbit	0.25	0.00	0.75	1.83	1.00	0.00	0.00	0.20	0.00
Domestic cat	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.40	0.00
Coyote	0.50	0.00	0.25	0.33	0.00	0.00	0.00	0.40	1.00
Striped skunk	0.75	0.00	0.00	0.33	0.00	0.00	0.00	0.20	0.25
Black bear	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.20	0.25
Mountain lion	0.25	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00

detection the lion was moving in the direction of the second detection location. If these photos were of the same individual mountain lion, it may have been captured in the process of using the wildlife corridor to cross Highway 12 and the valley.

Further analysis of our most detected species black-tailed deer, wild turkey (*Meleagris gallopavo*) and bobcat detections per day by camera location and by study area exhibited mixed results. At the sampling point level, hiker and deer detections were negatively correlated ( $R^2=0.225$ ,  $p<0.005$ ) (**Fig. 3.1a**). We did not observe correlations between hiker and bobcat detections ( $p=0.136$ ) or between hiker and wild turkey detections ( $p=0.920$ ) at the sampling point level (**Figs. 3.1b,c**). At the study area level, hiker and bobcat detections were positively, but uncertainly correlated ( $R^2=0.371$ ,  $p=0.082$ ) (**Fig. 3.2c**). We did not observe correlations between hiker and deer

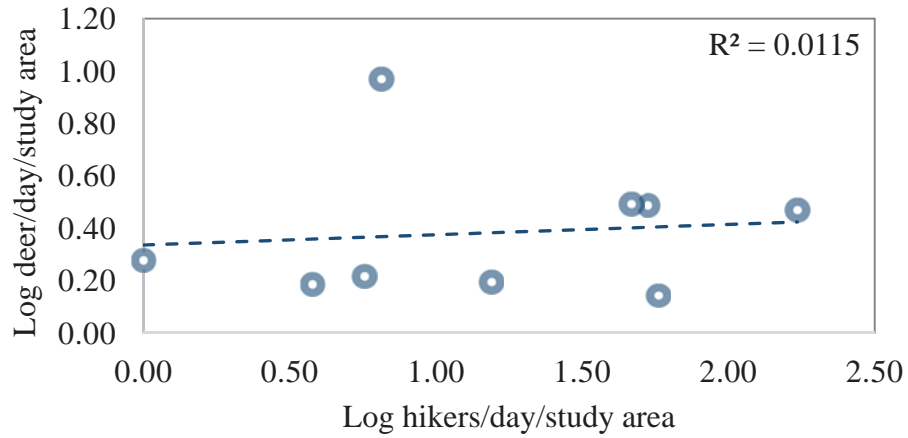
detections ( $p=0.783$ ) or between hiker and wild turkey detections ( $p=0.985$ ) at the study area level (Figs. 3.2a,b).

Species richness analysis found the highest support for the null model  $p(\cdot)$   $\Psi = 1$  and models that contained one of the two dog covariates (e.g.,  $p(\text{Off Leash})$   $\Psi = 1$ ). We found a weak negative correlation between species richness of native mammals and off-leash dogs/day ( $\beta = -0.029$ , SE 0.027) and on-leash dogs/day ( $\beta = -0.006$ , SE 0.008); however, there is substantial overlap of zero with these beta estimates indicating a non-statistically significant result. We did not find differences in species richness between study sites or when we compared the three target properties with comparison property groups. Due to model uncertainty, we model-averaged our estimate of species richness across all models. Model averaged estimates found a low proportion of mammal species richness across all sites ( $p=0.163$ , SE 0.015) compared to the available pool of mammal species.

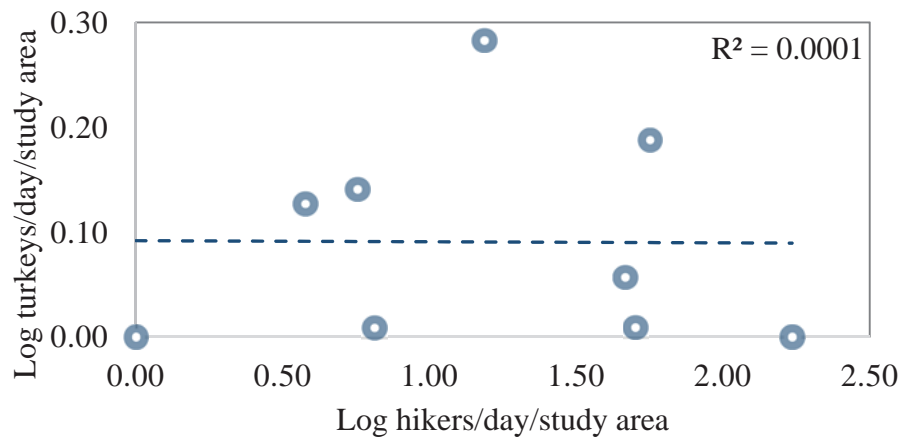


**Figure 3.1.** Linear regression of (a) deer, (b) wild turkey, and (c) bobcat detections versus hikers per day at the sampling point level. Deer detections were correlated negatively with increasing detections of hikers. Wild turkey and bobcat detections were not correlated with hiker detections. All data points were  $\log(x+1)$  transformed to meet the assumption of normality.

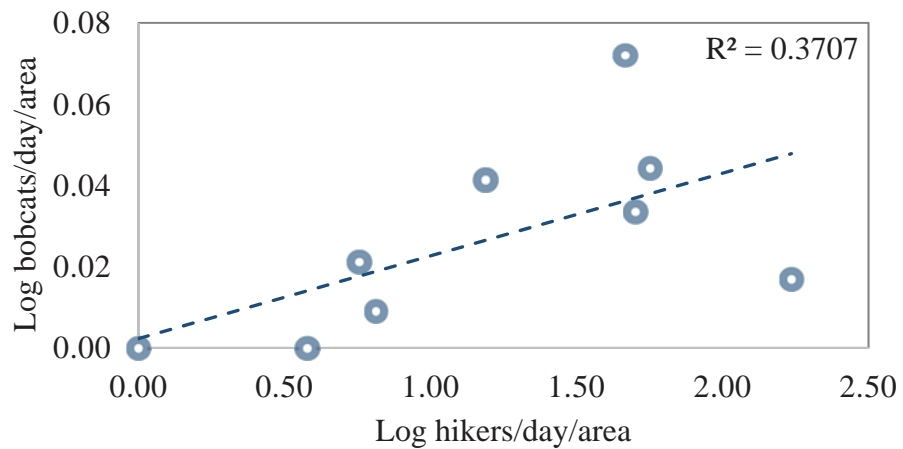
a.



b.



c.



**Figure 3.2.** Linear regression of the mean (a) deer, (b) wild turkey, and (c) bobcat detections versus the mean hikers per day at the study area level. Deer and wild turkey detections were not correlated with hiker detections. Bobcat detections were correlated positively with hiker detections. All data points were  $\log(x+1)$  transformed to meet the assumption of normality.

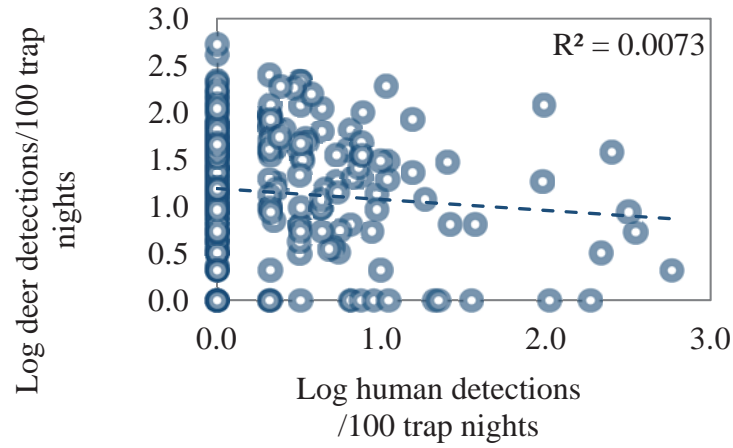
**Table 3.4.** Model results of species richness analysis for all study sites in the Sonoma Valley. The null model found the most support with some support for a weak negative correlation between the rate of dogs off or on leash and species richness.

Model	$\Delta$ AICc	AICc Weights	$K$
p(.) Psi=1	0.000	0.335	1
p(OffLeash) Psi=1	0.912	0.212	2
p(OnLeash) Psi=1	1.706	0.143	2
p(Hikers) Psi=1	2.133	0.115	2
p(Cyclists) Psi=1	2.228	0.110	2
p(SuperGroup) Psi=1	4.096	0.043	3
p(SuperGroup+OffLeash) Psi=1	4.493	0.035	4
p(SuperGroup+Hikers) Psi=1	6.271	0.015	4
p(Group) Psi=1	13.818	0.000	9

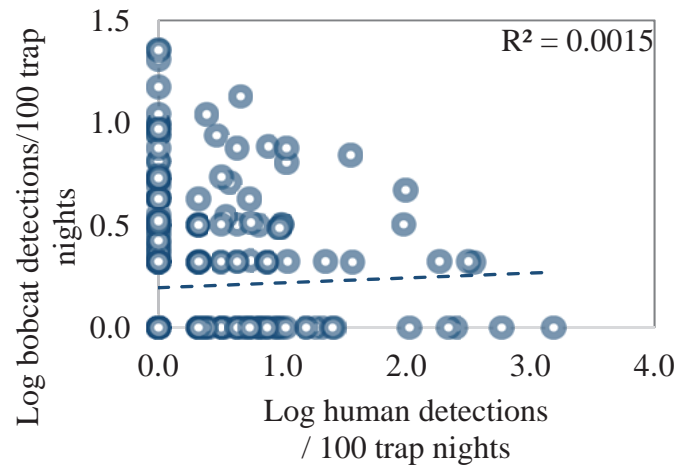
### *Existing Data*

Analysis of existing data did not find strong correlations between the human detections and wildlife detections. It is important to note that these prior studies were focused on maximizing detections of wildlife, and they were not designed to capture human detections. We analyzed SLT and SCRP data for correlations between human and wildlife detections per 100 trap nights. We did not observe correlations between human and deer detections ( $p=0.111$ ) or between human and bobcat detections ( $p=0.455$ ) in the SLT dataset (**Fig. 3.3**). However, the data for bobcats were zero-inflated; there were > 170 sampling occasions where neither bobcats nor humans were detected, a potential contributing factor to the lack of correlation in the simple regression. We also did not observe correlations between human and deer detections ( $p=0.724$ ) or between human and bobcat detections ( $p=0.599$ ) in the SCRP dataset (**Fig. 3.4**). However, the number of cameras was very low ( $n=8$ ); therefore, possible inference from these findings is limited.

a.

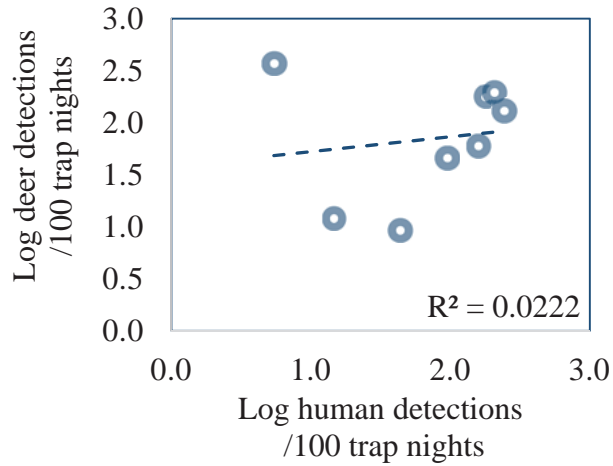


b.

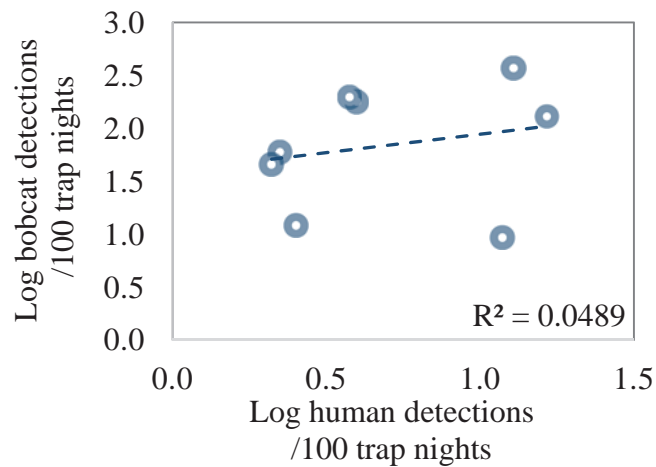


**Figure 3.3.** Sonoma Land Trust data of (a) deer and (b) bobcat detections versus human detections per 100 trap nights. Deer and bobcat detections were not correlated with detections of humans. All data was  $\log(x+1)$  transformed to meet the assumption of normality.

a.



b.



**Figure 3.4.** Sonoma County Regional Parks data of (a) deer and (b) bobcat detections versus human detections per 100 trap nights. Deer and bobcat detections were not correlated with detections of humans. All data was log (x+1) transformed to meet the assumption of normality.

## Discussion

We sought to monitor human recreation and detect wildlife species on nine properties within the Sonoma Valley. As we expected, Sonoma Developmental Center and its two comparison properties (JLSHP and SVRP) had the highest current levels of human recreation activity, whereas GOR and SRCH had the lowest levels. Our use of passive camera traps created a visual record of human presence, including illicit activity such as off-leash dogs and park use during restricted hours.

However, it is important to note that we sampled a very narrow window of 14 days within one season. This sampling effort achieved our goal of estimating visitation levels on these properties during a period that we predicted would have some of the highest annual rates of human recreation activity, but it limits inference to other seasons (e.g., fall or rainy seasons).

Human recreation activity in each target property was lower than their comparison properties, apart from SDC and JLSHP. Recreational use of SVRP was much higher than all other properties, and is concerning as a barrier of recreation disturbance within the SVWC and for potential impacts on the eastern section of SDC. Glen Oaks and SRCH are both facing pressures of increased recreation, which, given our results and if they follow patterns of their comparison properties, could negatively influence mammal occupancy and corridor movement.

Camera traps captured detections of 11 mammal species at three different trophic levels. Analysis of our data and existing data showed mixed results between rates of wildlife and human detections. Detections of deer appeared to be negatively correlated with higher rates of human detections at the sampling point level (**Fig. 3.1a**); however, this relationship did not hold at the study area level, possibly because deer adjusted their habitat use to avoid busier trails within a study area. A recent study pre- and post-opening of a recreation trail in the North Sonoma Mountain Regional Park did find declines in deer detections following opening of the trail (Townsend et al. 2017), which is consistent with our findings.

We detected bobcat in seven of nine study areas, but analysis of these data and the SLT and SRP data found no correlations between the rates of human and bobcat detections. This is potentially due to bobcats' ability to increase use in areas where apex predator use is diminished (i.e., mesopredator release). It could also be attributable to our narrow sampling window, which may have resulted in few detections of higher trophic level, low-density, and elusive species.

Gray (2017) conducted a more thorough occupancy analysis using the same SLT dataset. This analysis found that human and dog detections were not an important covariate related to the occupancy of any mammal species; rather habitat covariates and proximity to human population densities were the most important drivers of species occupancy (Gray 2017). Although the SLT study was not designed to investigate effects of human recreation, these results are consistent with those of another recent study in the San Francisco Bay Area (Reilly et al. 2017), which found that environmental covariates such as land cover, precipitation, and elevation were more strongly associated with mammal occupancy than recreation activity levels. However, both studies contrast with earlier research in the ecosystem, which recorded more than five times fewer detections of native carnivores in protected lands open to recreation access (Reed & Merenlender 2008) and observed decreasing detections of native carnivores with increasing levels of human and dog visitation (Reed & Merenlender 2011).

There are several possible explanations for the contrasting results of these prior studies; these explanations may also be useful for interpreting relationships between recreation activity and wildlife detections and planning for future monitoring efforts in Sonoma Valley. In addition to differences in field research methods (i.e., transect-based scat surveys vs. point-based camera traps) and statistical analyses (i.e., paired-sample t-tests vs. occupancy models), the studies also differed in several fundamental aspects of research design. First, Reed and Merenlender (2008) compared recreation paired sites selected to be similar in habitat characteristics and landscape context, whereas Reilly et al. (2017) studied recreation across a gradient of sites encompassing multiple habitat types and land uses. Second, Reed and Merenlender (2008, 2011) modeled effects of recreation at the reserve level, using individual survey transects as replicates, whereas Reilly et al. (2017) modeled effects of recreation for individual camera stations assumed to be independent of one another. Third, Reed and Merenlender (2008) collected data during only one season of one year, whereas

Reilly et al. (2017) surveyed their sites once each over a period of three years. All of these differences may have contributed to the greater variability observed by the Reilly et al. (2017) study. Strong variability in other factors that are well-known to influence mammal distributions (e.g., habitat type, human development, or seasonal effects) make it difficult to conclude whether the potential effects of recreation on the target species were truly absent or simply undetected. As a result, we recommend that future researchers consider carefully how to design studies to assess possible effects of recreation activity at appropriate spatial and temporal scales and to isolate measures of recreation disturbance from other confounding factors (Chapter 6).

In conclusion, using camera traps to monitor humans and wildlife, land managers and researchers can estimate the levels of human recreation, the types of recreation activities, and how recreation varies spatio-temporally across the landscape. We have shown that even with narrow sampling windows researchers can capture general estimates of recreation rates and types, while also detecting a majority of the mammal species in a region. With the growing popularity of and greater ease in acquiring camera traps, more land managers and researchers can gather an informative dataset on the recreational use of protected lands.

## 4. Guidelines for Stewardship of Recreation and Wildlife at Target Properties

Management for both recreation and wildlife conservation is challenging given the multiple-use mandates of protected areas and the varying responses of species to different types and intensities of recreation activity. Hundreds of research articles have demonstrated that human recreation has a myriad of negative impacts on wildlife individuals and populations (Larson et al. 2016). When considering the impacts of recreation, managers must focus on different possible sources of disturbance, including infrastructure (e.g., trails, campgrounds, lights), the number of people participating in different activities, their spatial and temporal distribution, and the presence of human-commensal animals (e.g., dogs, cats, horses). Considering empirical evidence for effects of these disturbances on one or more focal species or taxonomic groups, although not ideal because it does not represent the full wildlife community, can provide the most straightforward answers for decisions such as where to place a trail or how to regulate domestic dogs.

Recommendations for quantitative thresholds of recreation effects are lacking for many species, taxonomic groups, and sources of disturbance (Chapter 2). Thresholds for apex predators and mesopredators are especially lacking (**Table 4.1**); this is likely attributable to the difficulty of observing these species and the broad spatiotemporal scale at which they interact with their environment. Information regarding impacts of trail density is also noticeably deficient. Future studies that focus on apex predators and mesopredators, especially in relation to trail density or visitor numbers, would be particularly useful for infrastructure development and protected area management in northern California and worldwide.

Given these important gaps in our knowledge, we recommend a precautionary approach that adopts maximum values of quantitative thresholds observed for relevant taxonomic groups, while excluding extreme outliers. Specifically, we recommend minimum thresholds for distance to trails of 75 m for passerine birds (e.g., pygmy nuthatch), 200 m for ungulates (e.g., mule deer), 400 m for

**Table 4.1** Recommended thresholds of three measures of recreation disturbance for five taxonomic groups. Threshold values are maximum observed thresholds, excluding extreme outliers. Data is sparse for threshold effects for most taxonomic groups, especially mammalian and avian predators, and many recommendations are derived from a small number ( $n$ ) of studies. A dash (—) indicates insufficient information to recommend a threshold.

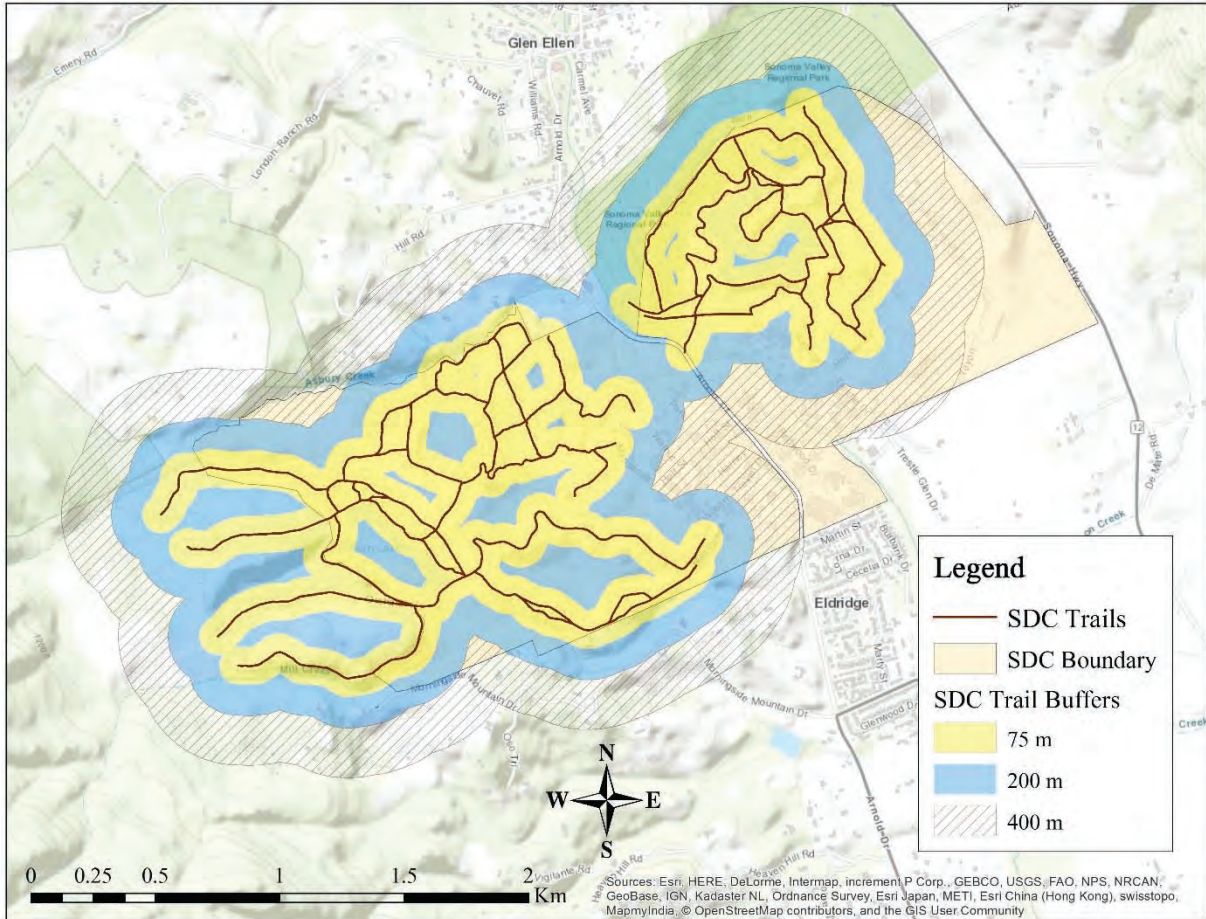
<b>Taxonomic Group</b>	<b>Distance to trails</b>	<b>Visitation level</b>	<b>Distance to dogs</b>
Apex predator (e.g., mt. lion)	400 m ( $n = 2$ )	—	—
Mesopredator (e.g., bobcat)	—	—	—
	Hikers:		
Ungulate (e.g., mule deer)	100 - 200 m ( $n = 6$ ) ATVs: 400 m ( $n = 1$ )	250 visitors/day ( $n = 1$ )	100 - 150 m ( $n = 2$ )
Bird of prey (e.g., eagles)	400 - 600 m ( $n = 4$ )	1 ORV/day; < 20 groups of people/day ( $n = 2$ )	—
Passerine bird (e.g., pygmy nuthatch)	75 m ( $n = 4$ )	< 800 visitors/day ( $n = 1$ )	100 m ( $n = 1$ )

apex predators (e.g., mountain lions), and 600 m for birds of prey (e.g., golden eagles). Based on our review, threshold distances appear to increase with increasing trophic level and body size for birds, with smaller avian species having threshold distances an order of magnitude lower than distances for larger species (**Table 4.1**). The ability for some mammal species to habituate to human presence may explain why we did not observe similar trophic level or body size relationships for mammals (**Fig. 2.6**).

Research examining the effects of total recreation trail system length or density on wildlife population dynamics and habitat use is lacking. Harris et al. (2014) provides one of the clearest examples of trail density thresholds on wildlife. They observed decreased habitat use by moose (*Alces alces*) in areas of >5% snowmobile tracks covering; however, it is important to note that off-

trail snowmobile use is different from other recreation activities, which occur along defined trails. Beyond this one study's estimate, guidance for trail system design can be derived from the numerous studies examining effects of distance to trail on wildlife habitat use and behavior. For example, a land manager could use GIS software to generate buffers around all trails in a park or protected area using the recommended threshold distances (**Table 4.1**). These maps can be used to identify areas where recreation effects are likely to be minimized (i.e., beyond threshold distances) for a species or taxonomic group of concern. If buffers are widespread throughout the park or protected area, then the maps can be used to explore opportunities to close or reroute trails to allow adequate areas for wildlife habitat use and movement. For example, applying the recommended threshold distances to buffer existing trails at SDC shows that there are few areas within the property where there are likely to be minimal effects of recreation on perching birds, ungulates, or apex predators (**Fig. 4.1**).

Finally, the presence of dogs is a well-known disturbance for both wildlife and other recreational visitors (Lenth and Knight 2008; Ettema 2015). Estimates for the distance from or number of dogs at which predators will avoid dogs is lacking, but research has shown that habitat use of ungulates decreases near trails where dogs are present, and off-leash dogs have a greater potential to disturb wildlife than on-leash dogs (Lenth and Knight 2008). There is evidence that passerine birds are impacted by the presence of dogs (Banks and Bryant 2007); however, quantitative thresholds regarding the number of dogs or the distance from dogs are lacking. From a precautionary perspective, we recommend that land managers should allow dogs only on leash and consider restricting dogs from trails near sensitive habitats to create larger buffers for wildlife, and because human visitation rates are higher in protected areas that allow dogs (Reed and Merenlender 2011).



**Figure 4.1.** Threshold buffers for perching birds (75 m), ungulates (200 m) and apex predators (400 m) applied to recreation trails of the Sonoma Developmental Center and eastern Jack London State Historical Park. Trail buffers overlap most of the property resulting in no contiguous areas across the property free from potential recreation effects. This map only takes into consideration the effects of recreation and does not include the effects of human presence in Glen Ellen, Eldridge and other surrounding properties.

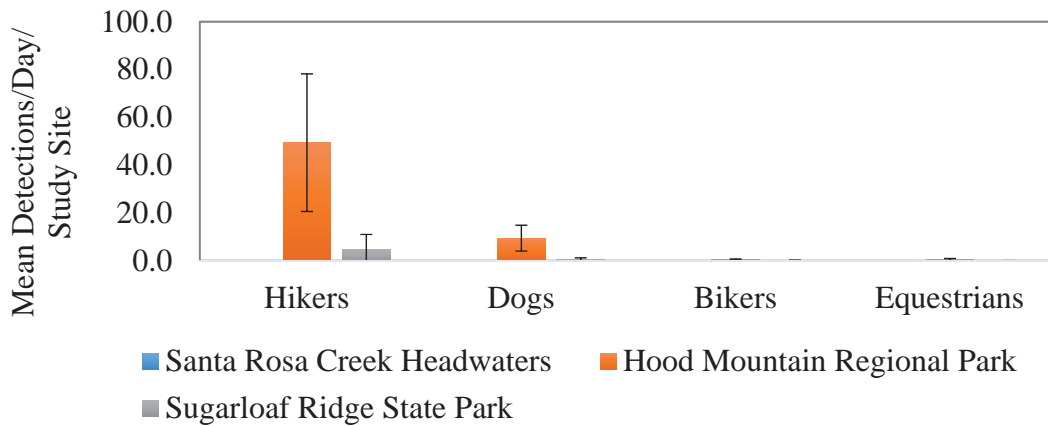
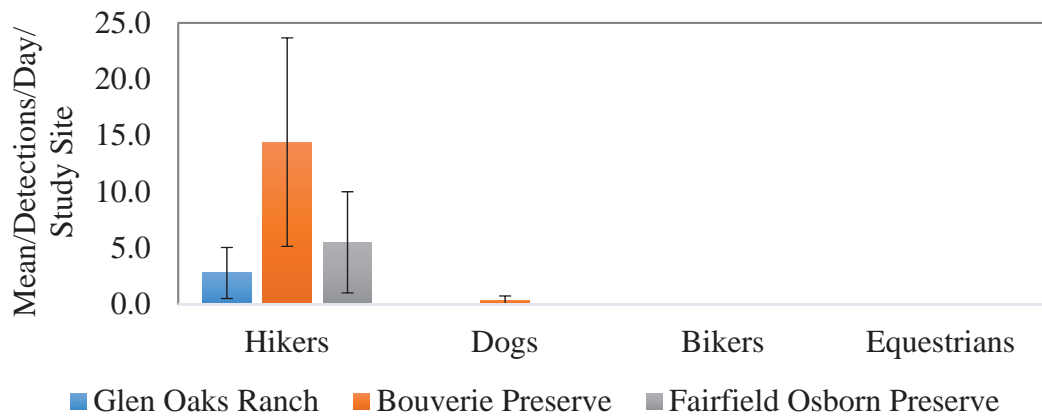
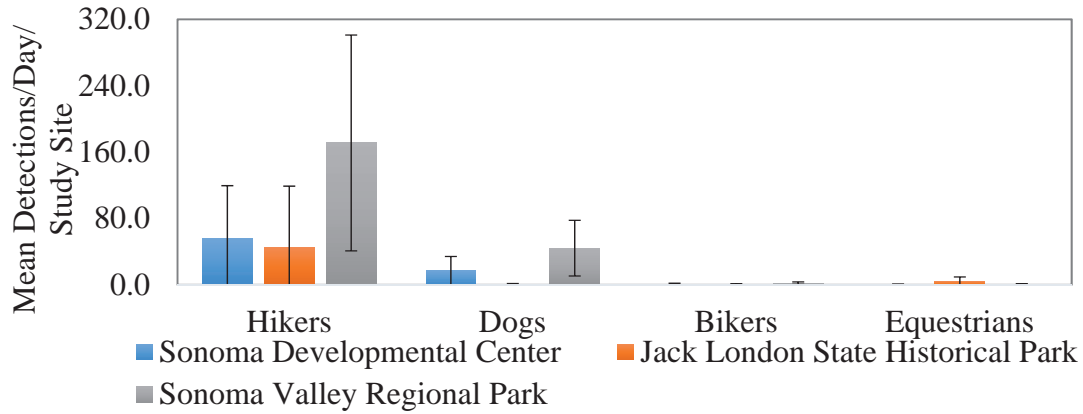
### *Sonoma Developmental Center*

The Sonoma Developmental Center (SDC) is a key pinch point in the wildlife corridor that connects Jack London State Historic Park (JLSHP) and Sonoma Mountain with the eastern face of the Sonoma Valley. Recreation use of SDC is already relatively high in comparison to the other two target properties (Glen Oaks Ranch and Santa Rosa Creek Headwaters; **Fig. 4.2**). Jack London State Historic Park, which is less developed and at slightly higher elevation than SDC, had marginally fewer hikers, whereas SVRP had three times the total visitors as the other two properties. SDC and

JLSHP had comparable levels of mammal species detections (**Table 3.3**), with more detections of deer and wild turkey on SDC and more detections of bobcat on JLSHP. In comparison, SVRP had substantially fewer detections of all mammal species except domestic cats. With a limited sample size and a lack of pre-disturbance data, it is difficult to state definitively that the much lower level of mammal detections on SVRP is attributable to the high levels of recreation activity; however, the proximity of the three properties and the strong reduction in wildlife detections suggests a possible relationship between human recreation and wildlife activity.

Sonoma Developmental Center is divided easily into western and eastern halves, due to the positions of the campus buildings and Arnold Drive bisecting the property. In addition, human recreation activity on the two sides of the property has different sources. In the western half of SDC most of the recreation appears to be cyclists and hikers venturing to Fern Lake or into JLSHP. In the eastern half of SDC recreation pressure is a result of Suttonfield Lake and the proximity to SVRP. Social trails, unofficial trails created by visitors walking off established trails, are present across both halves of the property and appear to be used heavily by cyclists and hikers.

Heavy use of Orchard Road, in the western section of SDC, already exists and creates seamless trail connections between SDC and JLSHP. There were numerous repeat visitors of the main road within the two-week sampling period. It is unknown whether these visitors were employees of SDC; however, SDC administrators did inform us that employees often walk some of the trails during breaks or after work. Therefore, hiker volumes from this group of people may reduce after SDC's planned closure. For the easiest transition, management of the natural resources of the western portion of SDC should follow the current recreation management of JLSHP. Efforts should be made to reduce the trail density and revegetate social and duplicative trails (trails within 200-400 m of each other) throughout the western section (**Fig. 4.1**). Permanent barricades with



**Figure 4.2.** Mean ( $\pm$  95% CI) detections per day across study sites for the Sonoma Developmental Center, Glen Oaks Ranch, and Santa Rosa Creek Headwaters property and their associated comparison properties. Hiking was substantially higher than any other recreation activity. Note that y-axes scales are different.

messaging concerning trail closures should be positioned in front of all trails that are being closed (Lawhon et al. 2016).

The eastern section of SDC currently has higher levels of recreation activity than the western section. A porous boundary between SVRP and eastern SDC allows for easy movement between the two properties. There are at minimum six spots where fencing does not exist (e.g., fencing holes and gaps) and/or where trails move continuously across the boundary. However, despite these existing connections, we do not recommend transitioning the eastern half of SDC to management similar to SVRP, given concerns previously stated regarding high recreation levels and low wildlife detections.

The pinch point and area of greatest concern for movement of wildlife appears to be the northern and northeastern portions of SDC and the south and southeastern portions of SVRP. Recreation levels are higher in these areas than any other properties that we investigated and they are among the narrowest swaths of contiguous natural lands for animal movement within the entire corridor. Higher recreation in the eastern section of SDC could create a barrier for some wildlife attempting to travel through the corridor. In this area, we recommend restoring natural vegetation, limiting visitation of these areas, increasing enforcement of dog leash laws, and closing and revegetating duplicative trails in the eastern section of SDC to reduce human impacts on wildlife (**Fig. 4.1**). If recreation were to increase to levels similar to SVRP, then we would recommend seasonal closures of some trails and restricted dog access. Finally, the boundary between SDC and SVRP should be enforced, allowing only human movement at the far western and eastern ends of the common boundary. This should reduce the impact area for wildlife and minimize disturbance to animals moving through the area.

## *Glen Oaks Ranch*

Glen Oaks Ranch is a SLT-owned preserve consisting primarily of open oak woodland and scrubland with a small area of human infrastructure near Highway 12. As anticipated, we detected low recreational use of GOR (**Table 3.2**). The two comparison properties, BP and FOP, had 2–6 times more detections of hikers per day (**Fig. 4.2**). We did not find a relationship between higher levels of visitation by hikers on BP and reduced mammalian detections or species richness compared with GOR. Conversely, FOP had lower detections and species richness of mammals. Fairfield Osborn is on the western slope of the Sonoma Mountains, whereas BP is directly adjacent to GOR within the Sonoma Valley; the greater separation between the properties and associated habitat differences could be a partial explanation for the differences in mammal detections. We also had a lower sampling effort of three cameras at FOP, which could contribute to greater variability in wildlife detections.

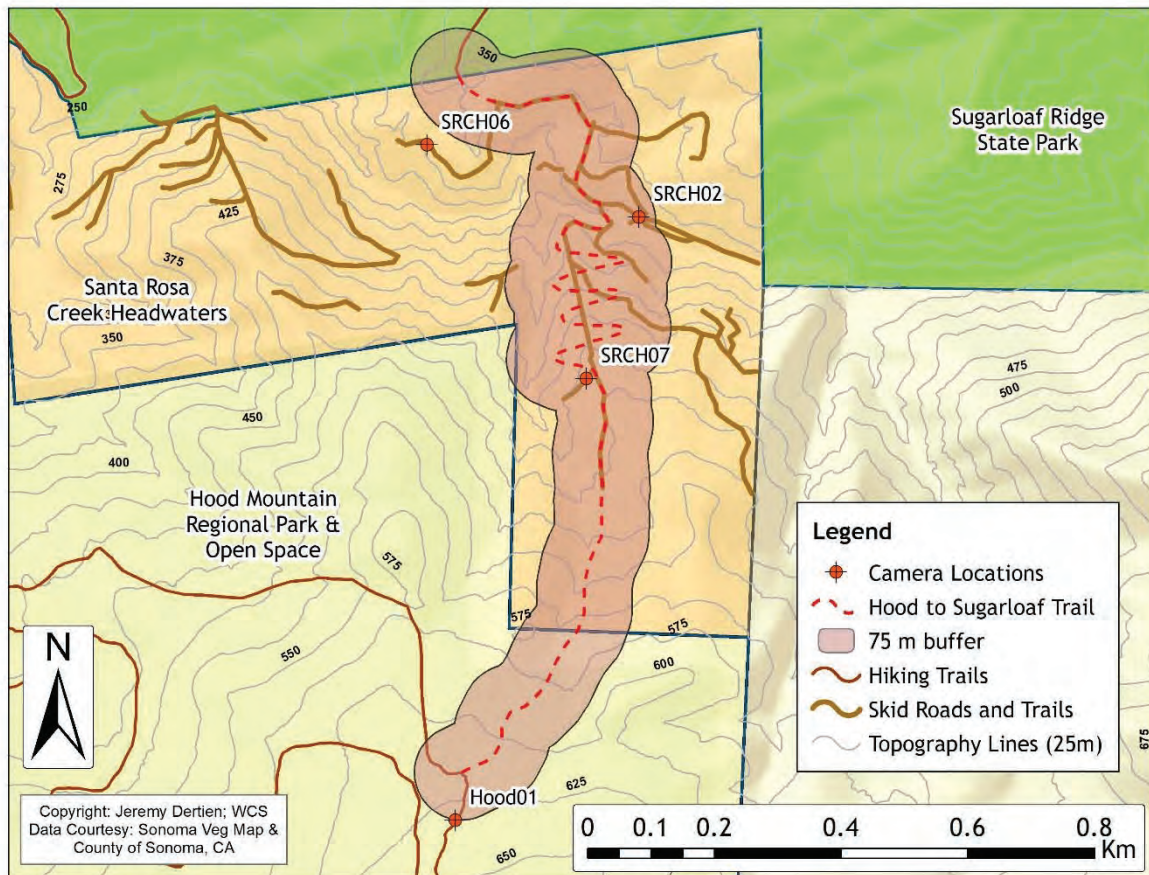
Given our findings from BP, a modest increase in hiker use ( $\leq 2x$ ) on GOR is likely sustainable for the purposes of the property acting as a key linkage in the wildlife corridor. Extrapolating from the daily visitor numbers that we detected, this means that SLT should allow fewer than 200 visitors to GOR per month. However, we recommend that no new trails should be added to GOR, and increases in hikers or other forms of recreation (e.g., mountain biking) on GOR and BP should continue to be closely monitored and restricted (Chapter 4), especially given the narrow width of woodland cover connecting the west side of Highway 12 to GOR and BP via Stuart Creek. In addition, the high density of GOR and BP trails along the narrow corridor surrounding Stuart Creek is a concern for mammals and perching birds, given the quantitative thresholds of 75–400 m derived from our literature review (**Table 4.1**). Three trails and one road are located  $<70$  m from Stuart Creek, well within the threshold effect-distances documented for ungulates and

passerines. Therefore, if visitation by hikers were to increase, it should be concentrated on trails to the north of Stuart Creek and avoided on the Phyllis Ellman Trail (**Fig. A.3**).

### *Santa Rosa Creek Headwaters*

The Santa Rosa Creek Headwaters (SRCH) property is a unique inholding within HMRP that is currently closed to the public. We did not detect any human recreation activity on SRCH. Hood Mountain Regional Park (HMRP) had recreation activity levels similar to those of SDC (**Table 3.2**), but visitation was concentrated on the southern trails of the park, and specifically on routes leading to the summit of Hood Mountain. Sugarloaf Ridge State Park (SRSP) McCormick Addition had much lower levels of human recreation activity than HMRP (**Table 3.2**), potentially due to the more remote access to the property. If SRCH were to be opened to the public, trail use would likely be lower than on the southern trails of HMRP, but potentially higher than SRSP, given the attractiveness of a backpacking campsite. Addition of a trail that connected either the Summit Trail or the Hood Mountain Trail to the Headwaters Trail via SRCH would likely require a tightly switch-backing route exacerbating the recreation effect-zone across the property (i.e., more area within an 80 m buffer of the trail) (**Fig. 4.3**).

Wildlife detections on SRCH were unexpectedly low given detection rates on HMRP and SRSP (**Table 3.3**). This could be attributable in part to the small size of the property and lower sampling effort on SRCH. Deer detections were much higher on SRCH, slightly lower on SRSP, and lowest on HMRP, which would follow the overall patterns that we observed, and results of the North Sonoma Mountain Regional Park study (Townsend et al. 2017). The proposed camping and hiking infrastructure on SRCH will likely decrease wildlife detections and richness levels as compared to eastern sections of SRSP.



**Figure 4.3.** Potential route of a trail to connect the Summit Trail in Hood Mountain Regional Park and Open Space with the Headwaters Trail in Sugarloaf Ridge State Park via the Santa Rosa Creek Headwaters property. The 75 m buffer is representative of the recommended effect-distance threshold for perching birds.

Reducing the creation of social trails is an important consideration for the construction of this and any trail system. Social trails expand the negative effects of human recreation on the flora and fauna of any conserved land (e.g., wildlife avoidance, soil erosion) (Bay & Ebersole 2006; Wimpey & Marion 2010; Monteiro 2015). A potential connection trail through SRCH would likely intersect historic logging skid roads that are distributed sporadically across the southern woodlands of the SRCH property (**Fig. 4.3**). At these intersections, permanent barriers should block access from the constructed trail to skid roads. In addition, skid roads should be revegetated in areas that are easily accessible and visible from the constructed trail to dissuade visitors from leaving the

official trail. Minimizing social trails would also reduce the risk of falls and other accidents in the rugged and steep areas of the property.

Keeping SRCH closed to the public would obviously maintain the lowest impacts of human recreation. As this may not be feasible, recreation activity should be restricted to hiker use only to minimize possible effects of recreation on wildlife. As stated, we would anticipate relatively low recreational use of the property given our observations on surrounding properties. However, it is difficult to predict the attractiveness to hikers, cyclists, and equestrians to campsites and a new large loop trail extending across HMRP, SLSP, and SRCH, but potentially significant increases in visitation may occur and possible wildlife responses should be closely monitored and managed if these infrastructure developments occur (Chapter 4). If recreation levels were to elevate to magnitudes similar to those of HMRP (**Table 3.2**), then additional restrictions should be considered such as seasonal hiking closures, increased enforcement of dog leash regulations, or the closure of the property to dogs entirely.

## 5. Monitoring to Assess Future Changes in Recreation and Wildlife

Continued monitoring of human recreation activity and wildlife habitat use is vital for the long-term management of the Sonoma Valley Wildlife Corridor (SVWC). With our study design, we were able to gather a snapshot of the relative levels of human recreation on properties in the Sonoma Valley. However, our data encompasses only a brief survey period during one season in one year, prior to anticipated changes in recreation access and management. Thus, it is important to continue to collect data to ensure that human recreation levels are measured accurately and managed effectively to ensure the continued function of the wildlife corridor. A longer time series of data would be needed to document whether wildlife detections, habitat use, or species richness are changing in correlation with increasing or decreasing human recreation and to inform adaptive management decisions.

### *Sampling Strategy*

Since our project has established a baseline for recreation levels, camera traps should be deployed in the same spatial configuration as the original design. This will make comparisons across seasons and years easier to interpret. We conducted our sampling near the beginning of the dry season (April-May), when we hypothesized that conditions would be optimal for outdoor recreation in the Sonoma Valley. However, it is important to gather data across multiple seasons to understand seasonal fluctuations in recreation activity and wildlife habitat use. Therefore, camera traps should initially be deployed year-round to fully track the highs and lows of recreation levels and to increase detections of mammal species. Increased wildlife detections should ultimately produce more accurate estimates of habitat use (i.e., occupancy) probability. Recreation monitoring could then be restricted to narrower sampling windows to save time and funding if distinct seasons of recreation use are detected, but sampling should be conducted for  $\geq$  two weeks per sampling site.

Properties within the Sonoma Valley Wildlife Corridor should be sampled first if all study areas are unable to be sampled each year, since the focus of this monitoring protocol concerns the wildlife corridor. Ideally, all nine properties in this study design, plus North Sonoma Mountain Regional Park, will be sampled each year. As additional properties are acquired in Sonoma Valley, or opened to public access for recreation, similar methods could be used to incorporate more study areas into the monitoring design.

### *Guidelines for Camera Traps*

Field implementation of camera traps to monitor human recreation activity will vary depending on the region and ecosystem of interest. Depending on the recreation activity, placement of the camera trap set back slightly from the trail will be important to avoid missing detections, or detections of individuals in a group. For example, if sampling a multi-use trail with hikers and cyclists, the camera should be placed at least 2 - 3 meters from the trail or positioned at an angle to the trail, and not perpendicular to the trail. If the camera is too close to the trail, it will be activated by a cyclist, but will not take the picture quickly enough to capture an image of the cyclist. Continued research into the effectiveness of camera traps and suggestions on camera trap placement will provide valuable insight for recreation and natural resource managers (Miller et al. 2017).

In open spaces with high levels of human recreation activity or in regions where there is wariness towards cameras, efforts may be made to avoid capturing facial images. Identification of individual humans is rarely necessary, unless the managing agency is concerned about positively identifying people engaging in illicit behavior. Positioning cameras low to the ground can reduce facial images, but this could increase the chance of false triggers from ground vegetation and cyclists may not trigger the thermal detector on a camera due to the lack of heat coming from the bike.

Off-trail camera traps may not be as useful as on-trail camera traps because wildlife movement can be diffuse and harder to predict. Wildlife habitat use may be higher away from humans or recreation trails, but wildlife detection rates at off-trail sampling locations are typically lower than on-trail sampling locations (Dertien et al. 2017). Low detection rates off trail can lead to the erroneous conclusion that wildlife use is higher in human areas, when in fact the detection probability is much lower off trail. Further, if the data is being collected for occupancy analysis, there is the concern that low detection probabilities ( $p < 0.20$ ) can produce biased occupancy estimates (MacKenzie et al. 2002). Off-trail camera traps can be useful for asking questions about threshold distances to human disturbance, but researchers and managers need to consider the potential differences in detection rates in the analysis of such data.

#### *Leveraging Other Data*

Beyond the continued use of camera traps to monitor levels of recreation activity, and collect opportunistic detections of wildlife species, external data should be leveraged to better estimate and monitor possible changes in wildlife habitat use. Multiple organizations within Sonoma County, including Sonoma County Regional Parks and Audubon Canyon Ranch (ACR) collect recreation and wildlife data. Combining camera trap data from these different entities may help to elucidate broader-scale or longer-term trends in wildlife habitat use, or provide further evidence to justify the need for changes in recreation management. In addition, leveraging mountain lion GPS collar data from ACR in combination with camera data from the monitoring protocol and others could help to evaluate the effectiveness of recreation management in maintaining the permeability of the wildlife corridor.

### *Adaptive Action*

The obvious concern with the introduction of more recreation into the Sonoma Valley is the potential for disturbance to wildlife, especially within the narrow SVWC. Monitoring will continue to provide estimates of human recreation activity, but they are not useful if action is not taken before recreation visitation reaches unsustainable levels (i.e., current levels at SVRP). If recreation activity levels increase rapidly, especially on the target properties and properties with restricted access, management actions should be taken to decrease either the number of visitors, types of recreation activities, or spatial footprint of recreation trails and infrastructure.

If rapid changes occur on properties with restricted access (i.e., those properties that are open only by appointment), the number of people allowed on site should be decreased, or tours and public events should be concentrated to certain days or times of year. Parks and open spaces that are open to the public should first consider reducing access by cyclists or dogs, then potentially increasing admissions fees to create economic disincentives. Closure of duplicative and social trails on all protected lands will also decrease the disturbance potential across the landscape. It is too late to wait until wildlife detections or estimates of habitat use decrease, since we can anticipate from other studies that some species will be affected (Larson et al. 2016).

### *Post-fire Monitoring*

The expansive Sonoma County fires of October 2017 will undoubtedly impact the human recreation activity in open spaces and preserves. Protected areas that were partially or completely burned within this study including BOUP, GOR, HMRP, SDC and SVRP will be indefinitely closed or have reduced recreation activity. Monitoring human recreation will continue to be important as these protected areas reopen and recreators return. Continued camera trap monitoring post-fire will

track trends in mammalian detections and human use. This will be an important time to ensure that only official trails are being used and that social trails are being revegetated.

## 6. Research and Other Information Needs

### 1. Complete trail maps

More accurate conclusions will be derived from a study that considers the full spatial footprint of human recreation activity on the landscape. It is easier than ever to access maps of parks and open space trails. Visitors can download maps online, pick up a paper map at a trailhead, or take a digital picture of a large map display. However, trail databases are often inconsistent or incomplete. Therefore, prior to creating a study design, it is important to conduct heads-up digitizing of aerial photos, validated by on-the-ground mapping, of all designated recreation trails and undesignated social or informal trails (Wimpey & Marion 2011). It may also be important to map game trails, especially those that cross designated recreation trails and that could be used mistakenly used by visitors. Conclusions regarding human impacts on flora and fauna of protected lands may be flawed if there is a network of unmapped social trails not considered in a study's design.

### 2. Monitor human recreation patterns

As increasing research correlates non-consumptive recreation activities, such as hiking and biking, to negative effects on wildlife populations, there is a growing need for robust data on human recreation activity in protected lands. Few protected land managers collect reliable information on how many visitors enter protected areas (Newsome et al. 2013), or when they visit, where they go within reserves, or which activities they participate in during their visit (Hadwen et al. 2007). In addition, most (>80%) studies of recreation impacts measure recreation as a categorical variable; for example, researchers compare sites with and without recreation, or compare sites with low versus high levels of recreation activity (Larson et al. 2016). Instead, by measuring recreation as a continuous variable, scientists can specify response relationships and identify thresholds of recreation disturbance, in terms of the number of visitors, their spatial distribution, or the timing of

their visits (Monz et al. 2013). These relationships can then be translated into appropriate management thresholds.

Monitoring of wildlife habitat use via camera traps is prevalent and increasingly popular among researchers, conservation organizations, and even private citizens. The collection of these data often includes detections of human visitors to protected lands that may be ignored in favor of wildlife detections. However, these data on human activity provide an important covariate to correlate with wildlife habitat use, especially when analyzed within a mark-recapture or occupancy framework. Beyond camera traps, the use of on-the-ground technicians directly observing human recreation activity, social surveys of visitors, or expert opinion surveys of land managers can provide valuable information to guide future management decisions.

### 3. Compare recreation activities

Types of permitted human recreation activities often vary among parks and open spaces, and these different activities may have variable effects on target wildlife species. Relatively few studies to date have directly compared the effects of different activities at the same time, in the same place, and on the same target species (e.g., Taylor and Knight 2003). Understanding the relative effects of different types of recreation activities is an important research need, especially as recreation preferences among reserve managers change, or as new types of recreation activities emerge (e.g., nighttime endurance events).

Therefore, it is important to fully map the different combinations of permitted recreation for each open space or trail before creating a study design. It is also important to create a study design that incorporates the full range of permitted recreation activities, and different combinations of those activities, so that a researcher or manager can study if recreation activities vary in effect on wildlife habitat use or survival and to monitor for non-permitted or illegal activities. These

comparisons will be useful for resolving conflicts among user groups and creating a plan that balances visitor preferences with wildlife conservation.

#### 4. Include reference conditions

It is important to include a reference condition or treatment in a study design to establish a baseline to detect potential effects of human recreation activity. For a study of the effects of recreation in general, a reference condition would be protected lands with no public access. For a study of the effects of dog management policy, a reference condition would be protected lands that do not permit dogs.

In addition to reference conditions, it is important to isolate the effects of different permitted recreation activities (or other management provisions) within a factorial design, which is a study design that incorporates all possible combinations of factors. This allows a researcher to isolate the effect of individual factors (e.g., cyclists) on the target wildlife species, as well as possible interactions among factors. However, researchers should be wary of attempting to study too many recreation activities within the same study design, since the addition of each activity will reduce statistical power to detect a difference among treatments.

#### 5. Assess management options

The fundamental question of interest to land managers seeking to balance public access for outdoor recreation with wildlife conservation is: What are the management options for avoiding or reducing the negative effects of recreation on wildlife, and are they effective? Very few published studies address this question, for example, by manipulating management activities or creating an experimental design that simulates realistic management alternatives (Larson et al. 2016). Yet, these are the studies that will be most useful for resolving management challenges and providing rigorous scientific evidence to support decisions to permit recreation uses or restrict public access.

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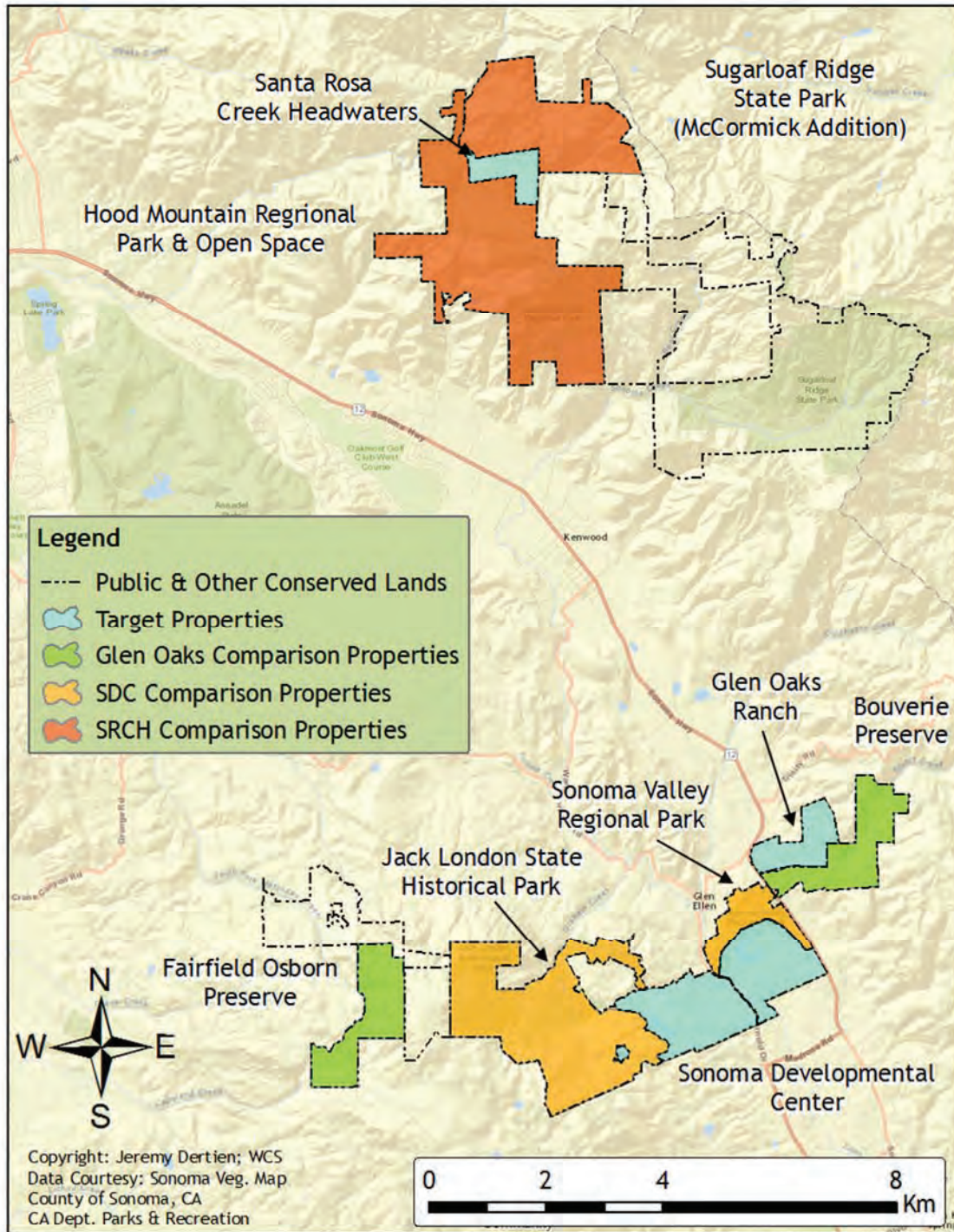
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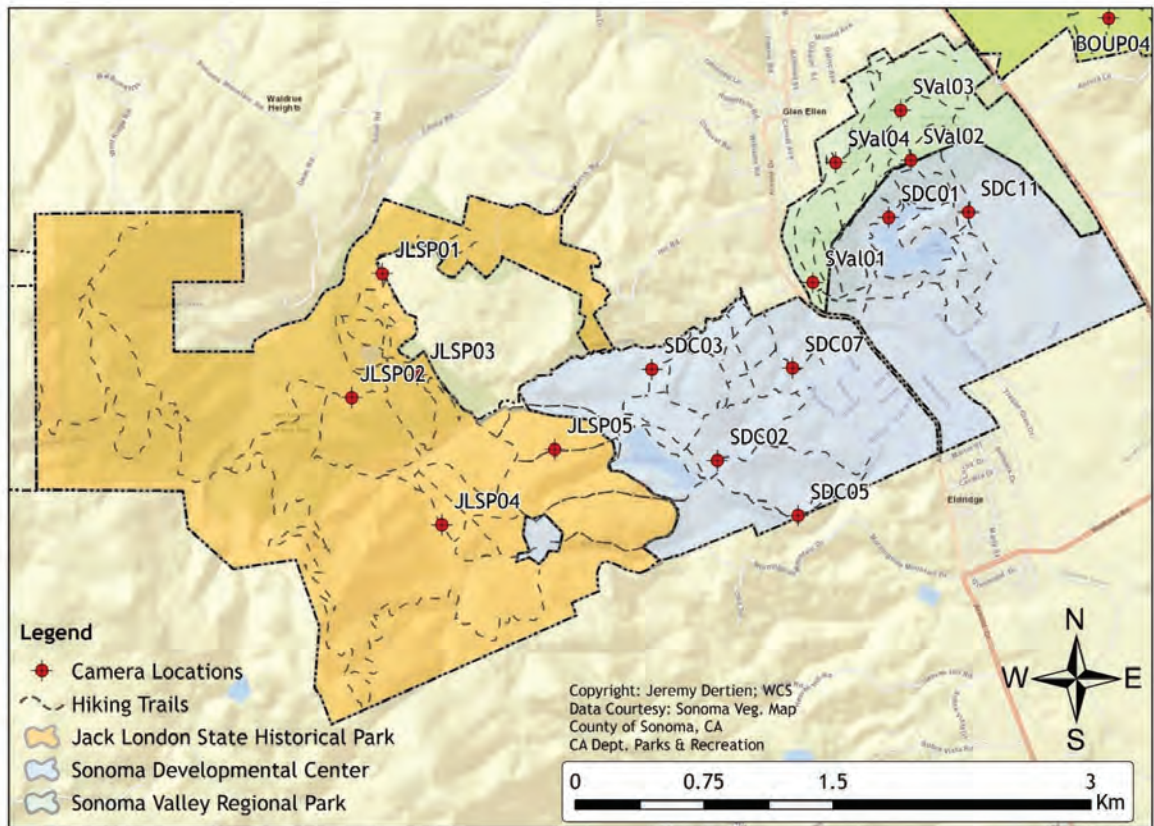
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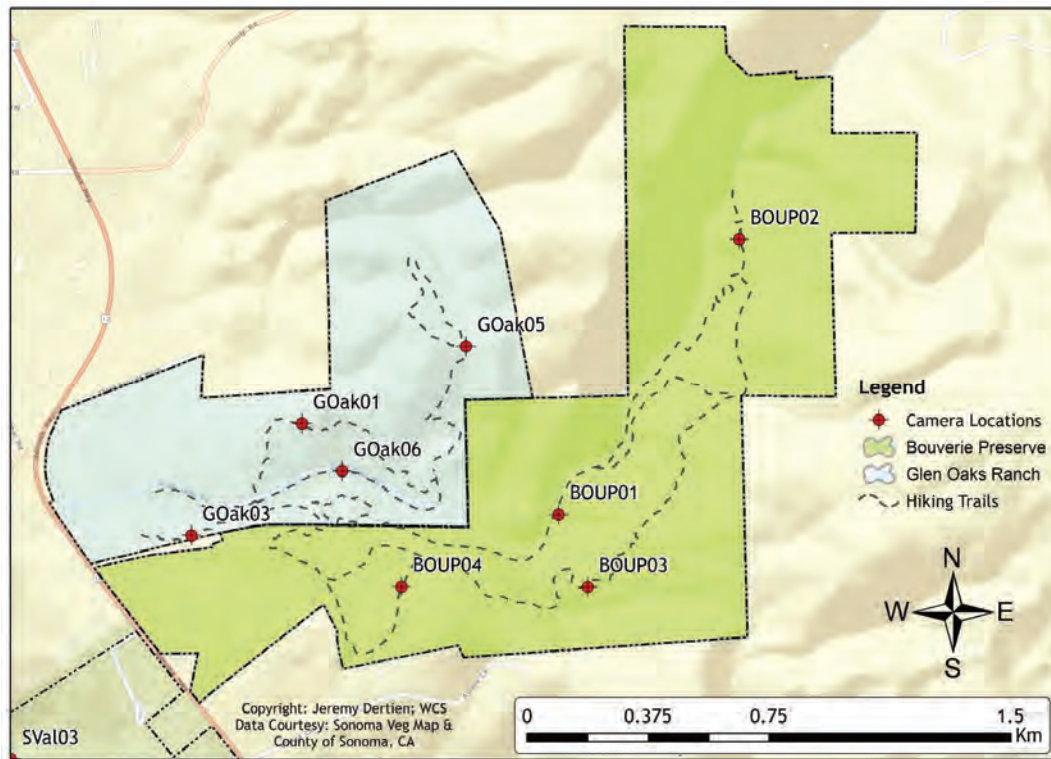
## Appendix I. Maps



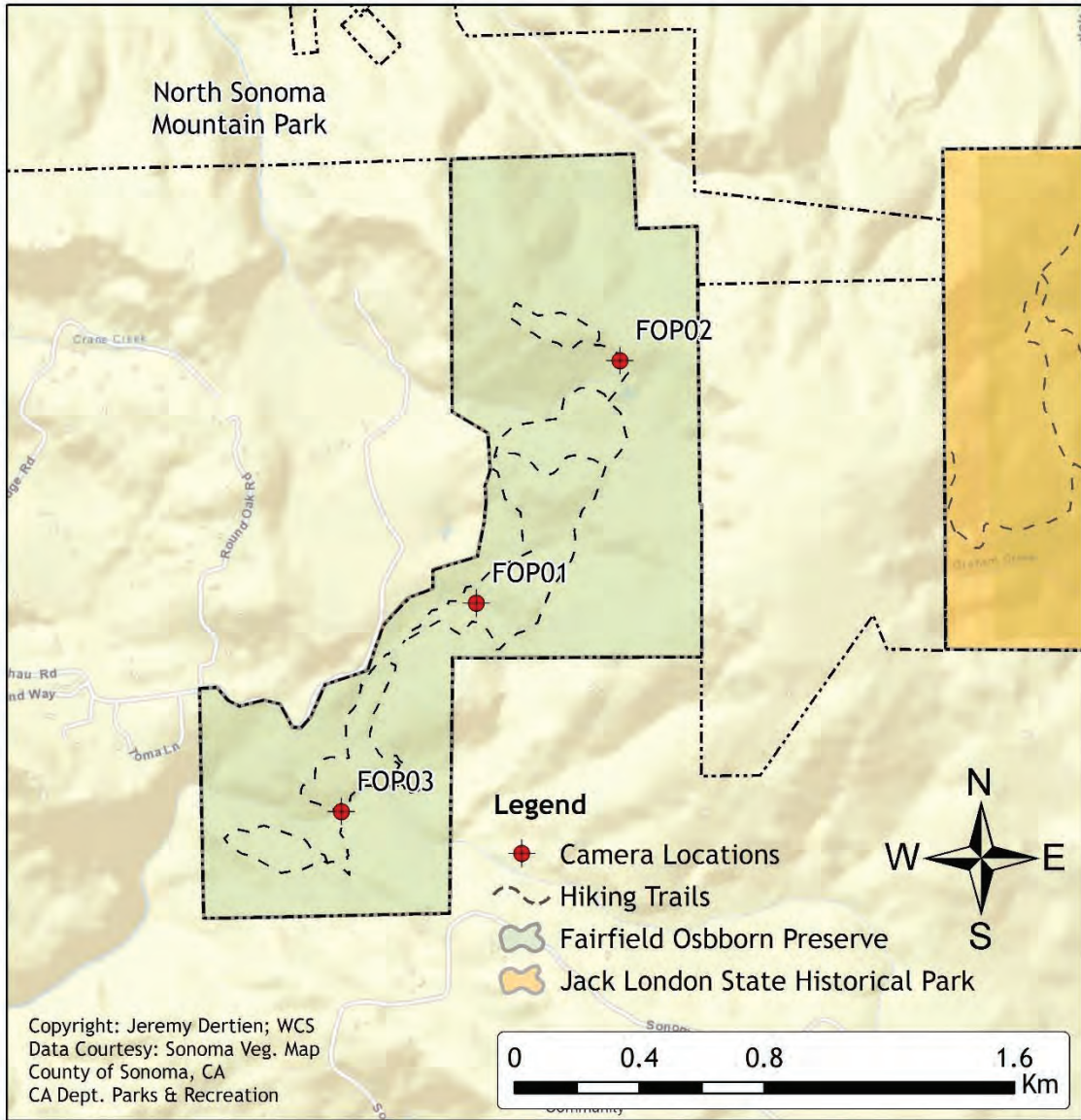
**Figure A.1.** All nine study areas across Sonoma Valley. Target properties are depicted in light blue with paired comparison properties in similar color groupings.



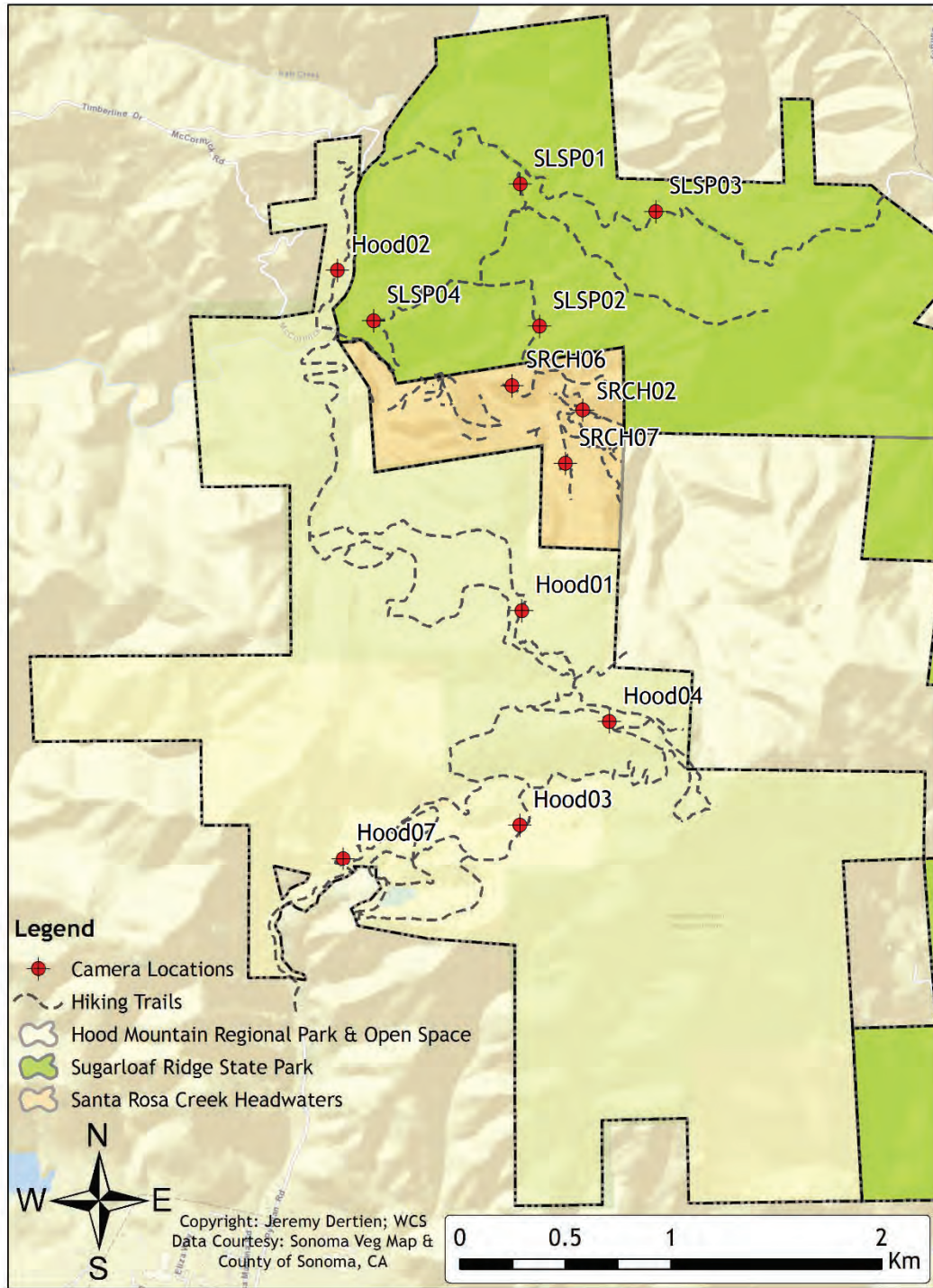
**Figure A.2.** Jack London State Historical Park, Sonoma Developmental Center and Sonoma Valley Regional Park are in south Sonoma Valley and constitute some of the narrowest portions of the Sonoma Valley Wildlife Corridor. Bouverie Preserve appears in the top right corner of the map.



**Figure A.3.** Glen Oaks Ranch and Bouverie Preserve are located in southern Sonoma Valley to the east of Sonoma Valley Regional Park and Sonoma Developmental Center. Glen Oaks Ranch’s Phyllis Ellman trail is located on the southern boundary of Glen Oaks Ranch in especially concentrated area of human disturbance.



**Figure A.4.** Fairfield Osborn Preserve to the west of Jack London State Historical Park and Sonoma Mountain. It was studied as a paired comparison to Glen Oaks Ranch in the Sonoma Valley.



**Figure A.5.** Study areas of northern Sonoma Valley. Santa Rosa Creek Headwaters property is situated between Sugarloaf Ridge State Park and Hood Mountain Regional Park and Open Space.

## Appendix II. Recreation Monitoring Results

Trail Name	Location Name	Hikers/ Day	OnLDogs/ Day	OffLDogs/ Day	Cyclists/ Day	Equestrians/ Day
Canyon	BOUP01	28.07	0.00	0.86	0.00	0.00
Waterfall Overlook	BOUP02	8.20	0.00	0.13	0.00	0.00
Rim	BOUP03	9.20	0.00	0.40	0.00	0.00
Woodland	BOUP04	12.15	0.00	0.00	0.00	0.00
Madrone Spur	FOP01	0.31	0.00	0.00	0.00	0.00
Ridge Loop	FOP02	7.96	0.00	0.00	0.00	0.00
Creek Trail	FOP03	8.23	0.00	0.00	0.00	0.00
George Ellman	GOak01	1.90	0.00	0.00	0.00	0.00
Phyllis Ellman	GOak03	0.00	0.00	0.00	0.00	0.00
Manzanita Loop	GOak05	4.22	0.00	0.00	0.00	0.00
Fire Road	GOak06	4.99	0.00	0.00	0.00	0.00
Summit Trail	Hood01	9.80	0.65	1.18	0.00	0.00
Hood Mountain (North)	Hood02	58.11	8.39	3.93	0.27	0.00
Pond Hood	Hood03*	51.69	6.80	4.08	0.62	0.00
Mountain (South)	Hood04	38.55	3.11	3.59	0.71	0.47
Lower Johnson Ridge	Hood07	88.74	12.15	3.29	0.65	1.29
Lake	JLSP01	176.83	0.10	0.25	1.65	13.71
Mountain	JLSP02	14.37	0.00	0.00	0.00	1.50
Quarry	JLSP03	12.22	0.00	0.00	0.05	3.28
Apple Tree	JLSP04	6.90	0.45	0.50	0.40	0.60
Fern Lake	JLSP05	16.75	0.60	1.50	1.15	1.00
N. Suttonfield	SDC01*	169.95	20.08	27.42	0.77	0.00

Orchard Road	SDC02	73.38	20.73	0.75	2.82	0.06
N. Boundary	SDC03	7.01	0.69	3.13	0.06	0.00
Eldridge	SDC05	10.41	2.08	2.08	0.69	0.00
Wagner	SDC07	3.96	0.67	2.45	0.11	0.00
E. Suttonfield	SDC11	68.38	15.32	5.24	0.31	1.64
Headwaters (North)	SLSP01	1.86	0.07	0.13	0.27	0.00
Headwaters (South)	SLSP02	1.43	0.00	0.05	0.00	0.00
Maple Glen	SLSP03	1.27	0.00	0.13	0.00	0.00
Quercus	SLSP04	14.16	0.28	1.18	0.22	0.11
Riparian Road	SRCH02	0.00	0.00	0.00	0.00	0.00
Overlook Road	SRCH06	0.00	0.00	0.00	0.00	0.00
Logging Skid Road	SRCH07	0.00	0.00	0.00	0.00	0.00
Valley of the Moon (West)	SVal01	193.59	41.26	6.76	1.90	1.28
Woodland Star	SVal02*	.	.	.	.	.
Valley of the Moon (East)	SVal03	288.32	69.95	5.59	3.58	0.69
Black Canyon Creek	SVal04	31.17	5.60	3.58	0.56	0.73

## Appendix III: Data Products

### Sonoma Developmental Center hiking trails

(SDC\_FinalTrailMerge.shp)

- This dataset includes hiking trails within the boundaries of the Sonoma Developmental Center (SDC) outside of the SDC building campus and those trails that connect to eastern Jack London State Historical Park. Except for portions of the Northern Boundary trail, all presented trails were ground-truthed.
- Metadata
  - ID: Unique identification number assigned for each trail.
  - Shape: Type of feature class.
  - Name: Route name used on previous maps or a trail name created by the author.
  - Hist\_Name: Yes = name used on previous maps; No = name generated by dataset author as an identifying placeholder.
  - Shape\_Leng: Length of each trail in kilometers.

### Hiking trails of all study areas

(FullTrailMerge.shp)

- This dataset includes all hiking trails within the nine parks and protected areas studied for this report. Trail names were assigned by the managing organization of each park or protected area, except for the aforementioned SDC trail names assigned by the dataset author.
- Metadata:
  - FID: Unique identification number assigned for each trail.
  - Shape: Type of feature class.

- Name: Route name created and assigned by the managing organization of each park or protected area.
- StudyArea: Full name of the park or protected area where the trail is located.
- Shape\_Leng: Length of each trail in kilometers.

Hiking trails of all study areas with freely accessible trail data

(OpenSourceTrailMerge.shp)

- This dataset includes all hiking trails within the six parks or protected areas that have remotely sensed data freely available on the internet. This dataset does not include trail data on Bouverie Preserve, Glen Oaks Ranch, or Santa Rosa Creek Headwaters.
- Metadata:
  - FID: Unique identification number assigned for each trail.
  - Shape: Type of feature class.
  - Name: Route name created and assigned by the managing organization of each park or protected area.
  - StudyArea: Full name of the park or protected area where the trail is located.
  - Shape\_Leng: Length of each trail in kilometers.