PUBLIC REVIEW DRAFT

Sonoma County
Local Coastal Plan

APPENDIX A: DESIGN GUIDELINES
September 2019

Local Coastal Program
Permit Sonoma

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX A: DESIGN GUIDELINES

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APPENDIX A: DESIGN GUIDELINES

1. COASTAL DESIGN GUIDELINES

1.1 Development

Development shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

New Development. The following design components shall be incorporated into site planning for new development:

(a) Open space for important historic and natural features

(b) Pedestrian use and movement

(c) Spaces and opportunities for social interaction with community members

(d) Visibility of access/entrances to buildings and use areas

(e) Landscaping

Design and Siting. The following guidelines shall be used for design and siting of new structures and development:

(a) Structures shall be sited and designed to preserve unobstructed broad views of the ocean and minimize visual impacts.

(b) Development in open fields shall be prohibited.

(c) In inland valleys, development outside of existing communities shall be located on the edge of the valley or within or behind existing tree stands or groupings, leaving the valley floor and agricultural land open.

(d) Structures shall be clustered to the extent feasible.

(e) Structures shall be sited behind or near existing vegetation or topographic relief to screen them from view from public roads and use areas; if not possible, native trees and shrubs which will not grow to block views to the coastline but will provide full screening of structures within 5 years shall be planted.

(f) New development shall be sited and designed to minimize removing trees. Trees shall be retained to the extent possible. Structures shall be located within or behind wooded areas, tree stands, or tree groupings to screen them from view.

(g) On ridgelines, pruning or removing tree stands or groupings shall be prohibited if doing so would make structures more visible from public roads and use areas. Removing tree Windbreaks shall be prohibited unless it is necessary to remove diseased trees.

(h) On hillsides, new structures shall be sited and designed such that they do not project above the hillside or silhouette against the skyline. On ridgelines, development which would project above the ridgeline shall be prohibited.

Development Scale. Development shall be designed to complement and be in scale with the site and the surrounding environment and community.

Building Height. The following criteria shall be used for building height:

(a) West of State Highway 1: Building height shall be limited to 16 feet. An increase in height to a maximum of 24 feet shall be permitted if (a) the structure is no higher than 16 feet above grade directly across from the building site, and (b) the structure will neither affect views to the ocean or rivers nor be out of character with surrounding structures.

(b) East of State Highway 1: Building height shall be limited to 24 feet. An increase in height to a maximum of 35 feet shall be permitted if (a) the structure is no higher than 24 feet above grade directly across from the building site, and (b) the structure will neither affect views to the ocean or rivers nor be out of character with surrounding structures.

Minimize Development Impacts. New development shall be sited and designed to minimize the impacts of noise, light, glare, and odors on adjacent properties and the larger community.

Utility Lines. All extensions of utility distribution lines to serve new development shall be placed underground.

Grading and Topography. The following guidelines shall be used for grading/topographic alteration:

(a) Roads, buildings, and other structural improvements shall be designed and constructed to fit the natural topography.

(b) Development shall be concentrated on level areas so that steeper hillsides are left undisturbed. Grading and development shall be discouraged on hillsides with a slope of more than 30 percent.

(c) Grading shall be minimized to the extent necessary to site new structures.

(d) Grading and construction shall follow the natural contours of the landscape.

(e) Alteration of natural landforms as a result of grading, cutting, or filling shall be minimized. New development which requires grading, cutting, or filling that would significantly alter or destroy the appearance of natural landforms shall be prohibited.

(f) On hillsides, structures shall be designed to fit the site rather than altering the natural landforms to accommodate buildings designed for level sites.

(g) Natural landforms shall be restored as completely as possible after any permitted temporary alteration during construction.

Passive Solar. Passive solar design should be used for new development. Passive solar design involves the use of various techniques in siting and designing new buildings to capitalize on heat and light from the sun and reduce the need for mechanical and electrical systems for internal lighting, heating, and cooling. These techniques shall include placing buildings to maximize solar orientation for both winter heating and summer cooling; placing windows or other openings and reflective surfaces so that during the day natural light provides effective internal lighting (i.e., daylighting); large south-facing windows; natural shading and ventilation; and building materials that absorb heat from the sun and slowly release it to warm the building.

Impervious Surfaces. Paved and other impervious surfaces shall be minimized to allow for infiltration of stormwater to groundwater.

Agricultural Structures. Large agricultural structures shall be sited out of view. Encourage use of designs and exterior finish materials and colors that blend with the natural vegetation.

Exterior Building Material and Finishes. The following guidelines shall be used for exterior finish materials and colors:

(a) Non-reflective, natural materials and earth colors that blend with the vegetation shall be used on the site unless the building is historic or an historic reproduction, in which case the colors shall be in keeping with the historic style.

(b) Composition shingle and shake roofs in dark natural or earthen colors compatible with the exterior finish colors of the buildings shall be used.

(c) Wood or shingle siding shall be used.

(d) Metal window frames shall not be used unless they are bronze anodized aluminum or baked enamel.

(e) Dark and non-reflective driveway materials shall be used.

Landscape Design. The following guidelines shall be used for landscaping:

(a) Landscaping shall be used to integrate the manmade and natural environments and to screen and soften the visual impact of new development.

(b) Landscaping shall be designed to blend in with the character of the site and area.

(c) Existing vegetation, topography, rock outcrops, and natural water bodies shall be incorporated into the landscaping plan.

(d) Native and drought-tolerant plant materials shall be used in landscaping, especially where it is visible from public roads.

(e) Must meet Water Efficient Landscape Ordinance.

(h) The following features shall be shown on the landscaping plan: outdoor lighting, signs, trash bins, fencing, utility equipment, paving, and outdoor furniture.

(i) Landscaping shall be used to screen parking areas from view.

(j) Planting vegetation west of State Highway 1 which could grow to block views to the coastline shall be prohibited.

Fences. Fences shall be discouraged on property lines. Fences shall be designed to be extensions of the main building, constructed of materials that complement the main building, and to be less than six feet unless they are used for screening service areas or for privacy. Fences are development subject to a coastal development permit and shall not be constructed to obstruct coastal views.

Parking. Parking areas shall be sited and designed so that they are out of view or screened from view. Screening may include planting of trees and shrubs.

Exterior Lighting. Exterior lighting shall be designed to be functional, subtle, and architecturally integrated with the style and exterior finish materials and colors of the buildings. This lighting shall be fully shielded, directed downward, and use bulbs that do not exceed 700 lumens and color temperature less than 3000 Kelvin. Light trespass shall not exceed one lux at the property line when all exterior lighting is operated. Night lighting that would increase existing ambient light levels in Environmentally Sensitive Habitat Areas (ESHAs) shall be prohibited.

1.2 Residential Building Design

The following additional guidelines shall be used for design of residential development:

(a) Traditional architectural styles of the Sonoma County coast shall be used in older development areas and contemporary styles in newer subdivisions.

(b) Structures shall be designed to be compatible with the characteristics of the community; and shall be related in size, scale, shape, and style to that of existing adjacent and nearby structures and to natural features.

(c) Non-reflective, pitched roofs shall be used, and roof slopes shall be related to those on existing adjacent and nearby structures.

(d) Accessory buildings shall be designed to be consistent with the architecture and exterior finish materials and colors of the main building.

Private Roads and Driveways. Development shall be designed for sharing of private roads and driveways.

1.3 Commercial Building Design

The following additional guidelines shall be used for design of commercial buildings:

(a) Buildings shall be compatible with the predominant design of existing buildings in the area.

(b) Building height shall be limited to 24 feet unless a greater height would not have an adverse impact on coastal views and there are overriding considerations.

(c) Wood or shingle siding and natural or earth colors shall be used.

(d) Pitched, non-reflective roofs shall be used unless the building is an historic reproduction.

(e) Exterior lighting shall be functional, subtle, and integrated architecturally with the building style, materials, and colors.

(f) Parking areas shall be screened from view through siting, design, and landscaping.

Signs. The following guidelines, in addition to coastal sign regulations found in the Coastal Zoning Code, shall be used for signs:

(a) The use of outdoor signs shall be minimized.

(b) The number of signs on a site shall be limited to one attached sign per building side which faces the site access road(s).

(c) Signs shall be designed in terms of location, size, height, shape, color, and illumination so that they relate to and are compatible with the surrounding land uses, complement the design of existing and proposed buildings, and are compatible with nearby conforming signs. Signs shall be designed to be unobtrusive.

(d) Signs shall be designed to be simple and easy to read.

(e) Signs shall be designed to be vandal-proof and weather-resistant.

(f) Signs not attached to buildings shall be of monument style and have landscaping at the base. The maximum height of monument signs shall be six feet (6′) above ground level.

(g) Signs attached to buildings shall be integral to the building design. Attaching signs on towers, spires, roofs, or roof fascias shall be avoided.

(h) On attached signs, signs comprised of individual letters applied directly to the building surface shall be preferred over attached box or cabinet signs.

(i) Use of struts, braces, kickbacks, or guy wires to support signs shall be avoided.

(j) On internally illuminated signs, illumination shall be limited to letters and graphic elements with an opaque background.

(k) On externally illuminated signs, the source of illumination shall be dark sky compliance and shielded from adjacent roads and properties.

(l) For multiple occupancy buildings a Master Sign Program shall be developed to promote design consistency and facilitate processing permits.

(m) Along designated scenic corridors signs shall be for onsite advertising purposed only.

2. BODEGA BAY DESIGN GUIDELINES

2.1 Bodega Bay Core Design Guidelines

New development located within the Bodega Bay Core Area shall be consistent with the Bodega Bay Core Design Guidelines in addition to the Coastal Design Guidelines, and **Policy C-OSRC-4e (Existing LCP Revised)** In the case of conflicts, the Bodega Bay Core Area Design Guidelines shall supersede the Coast Community Design Guidelines.

For the Bodega Bay Core Area (area including Taylor Tract and the planned residential area south of Taylor Tract; State Highway 1; and the area that was proposed for the former State Highway 1 bypass), the following design guidelines shall be used in addition to the Coastal Design Guidelines. In the case of conflicts, the Bodega Bay Core Area Design Guidelines shall supersede the Coast Community Design Guidelines.

Building Siting. Structures shall be sited and designed to take advantage of bay views without blocking bay views of neighboring structures.

Building Height. Building height shall be limited to 16 feet except that in major developments up to 15 percent of the units may exceed the height limit. Height for residential structures is measured as the vertical distance from the average level of the highest and lowest points of that portion of the lot covered by the building to the topmost point of the roof.

Building Design. The following guidelines shall be used for building design:

(a) The traditional building forms of Sonoma County coast buildings shall be used, including Greek Revival, Salt Box, and simple cottage styles similar to existing homes.

(b) Pitched roofs shall be used. Flat roofs may be appropriate where compatible with the roofs on existing structures.

(c) Where a building is between two existing structures, the design of that building should act as a transition between the two existing structures.

Exterior Building Material and Finish. The following guidelines shall be used for exterior finish materials and colors:

(a) Wood or shingle siding shall be used.

(b) Painted exteriors in colors similar to those on structures in Bodega Bay shall be used (i.e., rust, red, white, green, beige, brown, gray, yellow, and blue). The Design Review Committee must approve other colors. Natural wood exteriors may

be intermixed with painted exteriors but shall not dominate the new development ~~area~~.

(c) Wood window~~s~~ frames painted in a contrasting but harmonizing color shall be used.

Fences. Fences over three feet high shall be discouraged on property lines. Traditional picket fences shall be encouraged.

Street Width. A minimum width for paved streets shall be encouraged, consistent with circulation, safety, and parking requirements, to provide a sense of continuity between new development and the original town of Bodega Bay.

Bike Paths and Walkways. Separated bike paths and pedestrian walkways shall be required on one side of the street in areas of new development.

Setback Variation. Variation in setbacks shall be encouraged.

Detached Garages. Detached garages shall be encouraged in and adjacent to the Taylor Tract. Single-car garages may be appropriate.

2.2 Bodega Bay Non-Core Design Guidelines

Policy C-OSRC-4d: New development located within Bodega Bay outside of the Bodega Bay Core Area shall be consistent with the following Bodega Bay Non-Core Design Guidelines in addition to the Coastal Design Guidelines. In the case of conflict, these community specific guidelines shall supersede the Coast Community Design Guidelines:

(1) The exterior of structures shall be designed to reflect the nautical character of the harbor with wooden exteriors, stained or painted white or subdued earth colors.

(2) For heavy commercial structures, textured metal in subdued colors with proper architectural detailing and landscaping shall be encouraged to add visual interest and soften building lines. **(Existing LCP Revised)**

3. HEIGHT, SITE AND BULK CRITERIA FOR THE SEA RANCH

(Adopted by Board of Supervisors' Resolution #71611, April 20, 1982)

Subsection 30610.6 (e) of the Coastal Act charges the Executive Director with the duty of specifying design criteria for the height, site and bulk of any developments visible from areas where scenic view easements have been established. The purpose of such criteria is to ensure that new development will not substantially detract from the scenic view areas identified in compliance with Subsection 30610.6 (d). Below are the criteria designated pursuant to this new portion of the Coastal Act. Enforcement of these standards shall be the responsibility of the County of Sonoma.

1. Site

    a. Structures should be located upon lots to take maximum advantage of topographical features and existing tree masses. This is particularly true of those lots nearest to Highway One, since a poorly sited structure in close proximity to a public viewing area may have a substantial adverse impact on views to the coast. When sites are designated as 'tree' or 'topo' sites, this means that special attention to the noted condition of the lot shall be incorporated into the design of the project. Similarly, 'frontage' or 'low' site designations indicate that a proposed dwelling must be placed on the identified portion of the lot (generally the point furthest away from Highway One), in order to minimize obstruction of coastal views.

    b. Definitions

        i. Low Site - Designates lots on which the home shall be sited on the lowest portion of the lot.

        ii. Frontage Site - Designates lots on which the house shall be sited on the portion of the lot nearest the frontage road.

        iii. Topo Site - Designates lots on which the home shall be sited in such a manner as to promote shielding of the home from public view by the terrain.

        iv. Tree Site - Designates lots on which the home shall be sited to promote shielding of the home from public view by hedgerows and other existing trees.

2. Height

    Height is measured as follows: From the natural grade on the highest side of the improvement to the highest point of the roof or any projection therefrom.

3. Bulk

Bulk is determined by calculating the gross square footage of the proposed structure or structures (i.e., garages are included). Bulk control is basically intended to reduce visual impacts on the landscape; therefore, different categories have been developed to reflect the degree of exposure of the site under consideration. Bulk limits in each category are as follows:

Category 1: 1250 square feet (highly visually sensitive lots)

Category 2: 1760 square feet (less visually sensitive lots adjacent to Highway One)

Category 3: 2250 square feet

Absent a specific designation of either Category 1 or 2, Category 3 shall apply to all lots west of Highway One.

4. Specific Designations

Specific design criteria have been established using the definitions and policies discussed above for each lot which is both visible from a scenic view easement and subject to a design recommendation in the Commission's Overall Conditions and Findings. Subject to the exception detailed below, houses on sites for which specific design criteria have been established must conform to these designations. The County shall have the responsibility for enforcing these criteria, using whatever review process it deems most effective.

A variance to a height, site and/or bulk designation may be allowed where the County makes a written finding that the house design is consistent with Coastal Act view protection objectives. Such variances, however, shall be subject to the following restrictions:

Height and Bulk - variations in these categories shall not exceed 25% of the height or bulk limit designated for the site.

Siting - alternate siting is permissible where the designated portion of the lot is the only area feasible for installation of a septic system. However, even in this situation the siting of the house shall attempt as far as possible to conform with the site designation.

Specific Height, Site and Bulk Designations

UNIT 1	Block 1	Lots 1-4, 7-9	tree site
	Block 5	Lots 1-5	16′ height, Cat 2
	Block 6	Lots 2-5, 7, 8	16′ height
	Block 7	Lots 4, 6, 13, 14	tree site
UNIT 7	Block 1	Lots 1, 3-5	16′ height
	Block 2	Lots 1, 1, 4-9	frontage site, 16′ height, Cat 2
	Block 3	Lots 7-8	16′ height
		Lots 1-4, 6-8	tree site
	Block 4	Lots 1-4, 6-8	16′ height
	Block 5	Lots 1-4, 12-16	24′ height
		Lots 5-7	16′ height
UNIT 15		Lots 3-5	16′ height
		Lots 6-7	topo site, 16′ height
		Lots 9-10	16′ height
UNIT 17		Lots 44-46, 48	frontage site, 16′ height, Cat 2
		Lots 53-55	16′ height
		Lot 56	topo site, 16′ height
UNIT 18		Lots 14-15, 18-19	tree sites
		Lots 20-24	low site, 16′ height
		Lots 25-28, 30, 32-33, 35	16′ height
		Lot 36	24′ height
		Lots 39-42	frontage site, 16′ height, Cat 2
		Lot 43	16′ height
		Lots 44-45	topo site, 16′ height
		Lots 46-48	16′ height
		Lots 97-99	tree sites, 24′ height
		Lots 101-102	frontage site, 16′ height, Cat 2
UNIT 21		Lots 1-4	frontage site, 16′ height, Cat 2
		Lots 6-9, 12, 14, 16	16′ height
		Lots 16, 17, 19-23, 25-27	24′ height
		Lots 29-32, 34	16′ height
		Lots 36-40	frontage site, 16′ height, Cat 2
		Lot 42	tree site, 16′ height, Cat 2
		Lots 43-44	frontage site, 16′ height, Cat 2
		Lots 45-46	tree site, 24′ height
		Lots 52-58	tree sites, 24′ height
		Lots 59, 61, 65	16′ height
		Lot 68	trees site
		Lots 70, 72-75, 77-83, 85, 87-92	16′ height
		Lot 94	24′ height

UNIT 21 (cont.)		Lots 95-98, 104-107, 109, 111-117, 119, 120, 123, 125	16′ height
		Lots 127-128	16′ height
		Lot 130	tree site, 24' height
		Lots 132-141-143	topo site, 24' height
		Lot 146	24' height
		Lot 147	topo site, 16′ height
		Lot 148-152	16′ height
		Lot 154	frontage site, 16′ height
Unit 24		Lot 1	16′ height
		Lots 36, 38-42	24' height
		Lots 52-54-56, 62-67, 73-76	16′ height
		Lots 78-79	24' height
		Lots 81-87-89	16′ height, Category 2
		Lots 95-99, 101-103, 105-112, 114-118, 120, 121, 124-127, 129-131, 133-135	16′ height
		Lots 136-148	24' height
		Lots 158, 159	16′ height, Category 2
Unit 28		Lot 2	frontage site, 16′ height, Category 2
		Lots 4, 6, 7, 9-11	topo site, 16′ height, Category 2
		Lots 15-17	16′ height
		Lot 19	tree site, 24' height
		Lots 21-23, 25-28, 30-31, 33-44, 48-70, 72-78, 81-97, 99-114, 117-120	16′ height
		Lot 124	24' height
		Lot 125	tree site, 24' height
		Lot 126	topo site
		Lots 128-130, 132, 135, 136, 138	tree site, 24' height
		Lots 139, 140	frontage site, 16′ height, Category 2
		Lots 141-147	frontage site, 16′ height, Category 1
		Lots 148-150	frontage site, 16′ height

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Sonoma County
Local Coastal Plan

APPENDIX B: PUBLIC ACCESS PLAN
September 2019

Local Coastal Program
Permit Sonoma

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Adopted by Resolution No. 19-XXXX
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APPENDIX B: PUBLIC ACCESS PLAN

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APPENDIX B: PUBLIC ACCESS PLAN

THE SEA RANCH NORTH SUBAREA 1 (FIGURE C-PA-1A)

(A-1) Gualala River North Shore Access and Boat Launch

(2001 County LCP reference: page 119; Mendocino County General Plan Coastal Element (1991; Policies 4.12-19, -20, -21 on pages 8-10)

On the northwest side of the Gualala River Highway 1 Bridge in Mendocino County is a short gravel road that leads to the best informal boat launch on the Gualala River Estuary. Commercial kayak/canoe rental operators also use this site. In addition, there are other informal access points on the north shore upstream of the bridge. The Mendocino County Local Coastal Plan also supports conservation of public access at this location.

Owner/Manager: Private

Existing Status: Existing and Proposed, Undeveloped

Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Encourage maximum public access for boat launching and river trail on the north shore.

(A-2) California Coastal Trail: The Sea Ranch North SubArea

(2001 County LCP reference: pages 100 & 163; SB 908; AB 1396)

This section of the California Coastal Trail is a braided trail, including a north-south multiple use bikeway with a pedestrian-only trail closer to the ocean where feasible. There are several sections: the proposed Sea Ranch Bikeway, Gualala Point Regional Park, two public Sea Ranch Coastal Access Trails, and potentially additional routes unidentified at this time.

Owner/Manager: County Parks, State – Caltrans/Undetermined

Existing Status: Partially Acquired, Partially Developed

Acquisition Priority: II

Development Priority: II

Existing Improvements: Blufftop Trail, Walk-On Beach Trail, select trails in Gualala Point Regional Park

Proposed Improvements and Programs:

1. Designate the proposed Class I Sea Ranch Bikeway, providing safe pedestrian and bicycle facilities across the Gualala River Bridge to the southerly boundary of The Sea Ranch, as the California Coastal Trail through this subarea. See A-6 for specific proposed improvements.
2. Identify the best route from State Highway 1 through the park, to the Blufftop Trail at the southwestern boundary of Gualala Point Regional Park. The trail should be separate from the park driveway. Designate this route as California Coastal Trail. See proposed improvements for Gualala Point Regional Park (A-3).
3. Designate the existing Blufftop, and Walk-On Beach Coastal Access Trails as the California Coastal Trail.
4. Work within the provisions of the California State Resources Code (Bane Bill), and with The Sea Ranch community and other stakeholders to identify a continuous California Coastal Trail between Walk-On Beach Access Trail and the southerly boundary of the subarea.

(A-3) Gualala Point Regional Park

(2001 County LCP reference: #1, page 70; #4 page 71; and page 95)

Gualala Point Regional Park is located adjacent to the Gualala River on the northern edge of Sonoma County and The Sea Ranch. The park provides access to the coast, coastal terrace, Gualala River and estuary. Steelhead and rock-fishing, boating, picnicking, nature study, and whale watching are popular activities.

Owner/Manager: County Parks

Existing Status: Existing, Developed

Acquisition Priority: See A-4

Development Priority: III

Existing Improvements: 3.1-mile trail system, 21 vehicle and 8 walk-in campsites, informal picnic facilities, visitor center, restrooms, dump station, 104 day use parking stalls

Proposed Improvements and Programs:

1. Replace the Beach Restroom. The design should be consistent with the Visitor Center restroom.
2. Connect the park office and park residences to the existing park sewer system per existing Gualala Community Service District agreement when funding is available.

3. Upgrade the park office for accessibility per adopted Countywide ADA Transition Plan.
4. Study the feasibility of providing a paddle craft launch site to the Gualala River.
5. Identify the California Coastal Trail from State Highway 1 through the park to the Blufftop Trail. Develop new trail if needed to provide off-road connectivity and designate as California Coastal Trail once continuous. Install California Coastal Trail signage.

(A-4) Gualala Point Regional Park Expansion

(2001 County LCP reference: #4, page 71 & page 95; 2020 County General Plan)

Scenic redwood groves border the Gualala River from Gualala Point Regional Park and continuing towards upstream. Fishermen, boaters, and other day use visitors regularly use the existing informal trails on private property adjacent to the Gualala River. The Gualala River is one of the County's three largest watersheds and supports critical fisheries and other critical natural resources. The proposed park expansion includes the "Forest Trail" and "Fishing Trail" as proposed in previous County and coastal plans and provides the launch and landing sites to support the water trail. In 2016, the Sonoma County Agricultural Preservation & Open Space District, County Parks, Sonoma Land Trust, Conservation Fund, and other agency and non-profit partners have collaborated on a high priority acquisition of the subject lands from the property owner, to in part support the proposed Gualala Point Regional Park Expansion and Gualala River Water Trail (A-5), but were unsuccessful.

Owner/Manager:	Private/Proposed County
Existing Status:	Proposed, May Be Prescriptive
Acquisition Priority:	I
Development Priority:	II
Existing Improvements:	Unknown

(A-5) Gualala River Water Trail

(2001 County LCP reference: #4, page 71 & page 95; 2020 County General Plan)

The Gualala River Water Trail is a water-based route for non-motorized recreational boating that is anchored by land based launch sites, camping, and picnicking facilities. Water trails provide educational and scenic experiences and are designed to accommodate boaters of all ages and abilities. With an integrated system of facilities

and informational signs, good water trail programs encourage minimum-impact use and emphasize stewardship of the aquatic ecosystem and historic features.

The Sonoma County Agricultural Preservation & Open Space District, County Parks, Sonoma Land Trust, Conservation Fund, and other agency and non-profit partners are collaborating on a high priority acquisition of the subject lands from the property owner, to in part support the proposed Gualala Point Regional Park Expansion (A-4) and Gualala River Water Trail.

Owner/Manager: Private/Proposed County

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: I

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the Gualala River Water Trail to identify an integrated system of facilities and programs to promote increased safe and responsible maximum public access to the Gualala River. Acquire easements or fee title from willing sellers along the main stem and South Fork of the Gualala River.
2. Amend the park master plan to address the water trail and expansion and support facilities. Depending upon the size and characteristics of the available land, camping opportunities should be evaluated.

(A-6) Sea Ranch Bikeway

(2001 County LCP reference: pages 163 &166; 2010 Bikeways Plan Project)

The proposed Class I Bikeway connects the Sea Ranch Coastal Access Trails, Gualala Point Regional Park, The Sea Ranch community, and the community of Gualala. The Class I Bikeway will improve circulation, recreational opportunities, and safety. The Sonoma County Bicycle & Pedestrian Advisory Committee voted on October 20, 2010 to include the project in this Local Coastal Plan.

The approximately 600-foot long Gualala River Highway 1 Bridge has a narrow walkway on the side and has no shoulder or striped bike lanes. The bridge is a necessary link in the California Coastal Trail and is Project 204 in the County Bikeways Plan.

Owner/Manager: Caltrans/Undetermined

Existing Status: Proposed

Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Require Caltrans to provide safe and accessible pedestrian and bicycle facilities by retrofit or during bridge replacement. The pedestrian and bicycle facilities should extend south to the intersection at Highway 1 at Gualala Point Regional Park and The Sea Ranch golf course.
2. Locate the Class I Bikeway within Caltrans right-of-way as much as feasible. Pursuant to the Bane Bill section of the Public Resources Code, acquire easements parallel to Highway 1 for the bikeway if needed and when funding is available.
3. Construct the bikeway. Consider designating it as the California Coastal Trail to provide an alternative route to the other public pedestrian-only trails closer to the ocean.

(A-7) Coastal Ridge Trail

(2003 Draft County ORP: Trail AB)

This multiple use trail begins at the Gualala Point Regional Park and the Gualala River and connects to the trail system at Salt Point State Park. The proposed trail would generally follow the ridge between the ocean and the South Fork of the Gualala River.

Owner/Manager: Undetermined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the feasibility of the trail to determine if the project is viable. Work with willing sellers to acquire easement access rights where required. If necessary, manage public access within timber production zones to ensure compatibility within the land use type.

(A-8) Blufftop Sea Ranch Access Trail

(2001 County LCP reference: #5, page 71)

Access to Blufftop Trail and Walk-On Beach includes a 30-foot wide vehicular accessway to a parking area in Unit 34-A of The Sea Ranch for 10 cars; a 15-foot wide pedestrian accessway from the parking area west to the Blufftop Trail; and a 15-foot wide

pedestrian easement beginning at the southern boundary of Gualala Point Regional Park and continuing for approximately three miles in a southern direction to the sandy beach at the northern end of Unit 28 just north of Walk-On Beach, together with a 15-foot wide pedestrian easement to provide a connection to Walk-On Beach to the south.

Erosion closed the trail in 2003 just south of the intersection of Walk-On Beach and in 2004 a study was initiated to evaluate options to reopen the public access route. The County obtained a license agreement from The Sea Ranch for a temporary alignment in two places that uses existing private trails to bypass the eroded areas. The license agreements are revocable, and long-term options to protect public access should continue to be studied and pursued if feasible.

Owner/Manager: County Parks (Easement)

Existing Status: Existing, Dedicated, Developed

Acquisition Priority: None

Development Priority: I

Existing Improvements: 3-mile trail, restroom, 10 day use parking spaces

Proposed Improvements and Programs:

1. Select alternatives for implementation in the Blufftop Coastal Access Trail Study.
2. Acquire easements or license agreements from willing sellers if needed.
3. Construct improvements to reopen trail.

(A-9) The Sea Ranch Recreation Facilities

(The Sea Ranch Comprehensive Environmental Plan 2013)

The Sea Ranch North includes four undeveloped community recreation areas and the following developed community recreation areas: 1) Del Mar Center, which consists of a community hall, meeting rooms, kitchen, pool, tennis courts, sauna, community flower garden, and picnic area; 2) One-Eyed Jack's, which consists of a playground, picnic tables, barbeque area, and volleyball and petanque courts; 3) Dog Park; and 4) Children's Play Park. These facilities are only available for use by The Sea Ranch Association residents and their guests and are not publicly accessible.

Owner/Manager: Private

Existing Status: Existing, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: see description above

Proposed Improvements and Programs:

1. Support development of a publicly accessible commercial area in the vicinity of the golf course clubhouse, as shown on the 1982 Amended Precise Development Plan.

(A-10) Salal Sea Ranch Access Trail

(2001 County LCP reference: #2, page 70)

The trailhead is one-quarter mile from Gualala Point Regional Park, south on State Highway 1. The trail connects to the Blufftop Trail and to a limited pocket cove at the beach. The accessible beach area ranges from nearly non-existent to up to 500 feet in length at the lowest tide. Parking is available at The Sea Ranch Golf Course, which is publicly accessible. Erosion from surface drainage routinely damages the trail and increases the need for maintenance.

Owner/Manager: County Parks (Easement)

Existing Status: Existing, Dedicated, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.75-mile trail, bridges

Proposed Improvements and Programs:

1. Investigate options of continuing to provide a safe, low-maintenance trail to access the Bluff Top Trail.

(A-11) Del Mar Landing Ecological Reserve

(2001 County LCP reference: #3, page 70)

An access easement has been dedicated to the State Department of Fish and Wildlife to provide access to the Del Mar Ecological Reserve. The Reserve protects endangered species and includes the tidelands and submerged lands near Del Mar Point. No formal trail has been developed, and access should remain limited due to the fragile nature of the Reserve. Due to low intensity use, the restroom and parking facilities for the Gualala Point Regional Park are sufficient to serve this informal trail.

Owner/Manager: State – Fish and Game (Easement)

Existing Status: Dedicated, Undeveloped

Acquisition Priority: None

Development Priority: II

Existing Improvements: None

Proposed Improvements and Programs:

1. Develop a public trail from Highway 1 to the Reserve. Due to low intensity use, restroom and parking facilities for the Salal Trail should be sufficient to serve this trail.
2. Develop a procedure for obtaining access permits.

(A-12) Walk-On Beach Sea Ranch Access Trail

(2001 County LCP reference: #5, page 71)

This coastal access trail includes a parking area in Unit 34-A of The Sea Ranch west of State Highway 1, north of Leeward Way; and a 15-foot wide pedestrian trail over the common areas, crossing Leeward Road and continuing west to the Blufftop Sea Ranch Access Trail. Walk-On Beach is accessed by traveling south for approximately 500 feet on Blufftop Trail.

Erosion closed the trail in 2003 just south of the intersection of Walk-On Beach and Blufftop Trail. In 2004 a study was initiated to evaluate options to reopen the public access route. The County obtained a license agreement from The Sea Ranch Association for a temporary alignment in two places that uses existing private trails to bypass the eroded areas. The license agreements are revocable, and long-term options to protect the public access should continue to be studied.

Owner/Manager: County Parks (Easement)

Existing Status: Existing, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.4-mile trail, 10-day use parking spaces, restroom

Proposed Improvements and Programs:

1. See Blufftop Sea Ranch Access Trail Proposed Improvements and Programs to reestablish access to Walk-On Beach.

THE SEA RANCH SOUTH SUBAREA 2 (FIGURE C-PA-1B)

(B-1) California Coastal Trail: The Sea Ranch South SubArea

(SB 908; AB 1396)

The California Coastal Trail does not currently exist through this SubArea. The Bane Bill prohibits requiring the dedication of land in The Sea Ranch for additional public access not identified in that legislation. Senate Bill 908, Assembly Bill 1396, and other legislation direct the state to develop the California Coastal Trail as a continuous trail primarily for pedestrians as close to the ocean as feasible.

Owner/Manager: Undetermined/Undetermined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: None

Proposed Improvements and Programs:

1. Work within the provisions of the Bane Bill and with The Sea Ranch community and other stakeholders to identify a continuous California Coastal Trail through the entire The Sea Ranch South SubArea. Analyze the potential for designating The Sea Ranch Bikeway and offers to dedicate an easement at The Sea Ranch Lodge, as part of the California Coastal Trail.
2. If funding is available, acquire easements if needed and construct trail.

(B-2) Sea Ranch Bikeway

(2001 County LCP reference: pages 163 &166, Bane Bill)

The proposed Class I Bikeway connects the Sea Ranch Coastal Access Trails, Gualala Point Regional Park, The Sea Ranch community, and the community of Gualala. The Class I Bikeway will improve circulation, recreational opportunities, and safety.

Owner/Manager: Caltrans, Private/ Caltrans or County

Existing Status: Proposed

Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Identify the best alignment for The Sea Ranch Bikeway, using Caltrans right-of-way as much as possible. If needed, pursuant to the Bane Bill, acquire easements parallel to Highway 1 for a Class I Bikeway, separated from motorized traffic, when funding is available.
2. Construct the bikeway. Consider designating it a multiple use route of the California Coastal Trail.

(B-3) Coastal Ridge Trail

(2003 Draft County ORP: Trail AB)

This multiple use trail begins at the Gualala River main stem and connects to the trail system at Salt Point State Park. The proposed trail would generally follow the ridge between the ocean and the South Fork of the Gualala River.

Owner/Manager: Undetermined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the feasibility of the trail to determine if the project is viable. Work with willing sellers to acquire easement access rights where required. If necessary, manage public access within timber production zones to ensure compatibility within the land use type.

(B-4) Shell Beach Sea Ranch Access Trail

(2001 County LCP reference: #6, page 71)

The Shell Beach Sea Ranch Access Trail is a pedestrian trail that connects State Highway 1 to Shell Beach in Unit 24 of The Sea Ranch. A fifteen-foot wide trail easement connects to both the northern and southern portions of Shell Beach.

Owner/Manager: County Parks (easement)

Existing Status: Dedicated, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.5-mile trail, restroom, 6 day use parking spaces

Proposed Improvements and Programs: None

(B-5) Stengel Beach Sea Ranch Access Trail

(2001 County LCP reference: #7, page 72)

The Stengel Beach Sea Ranch Access Trail is a pedestrian trail on a 15-foot wide easement that connects Highway One with Stengel Beach at the intersection of Units 21 and 36A.

Owner/Manager: County Parks (easement)

Existing Status: Dedicated, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: 0.2-mile trail, restroom, 10 day use parking spaces

Proposed Improvements and Programs:

1. Add accessible picnic tables at the top of the stairs.

(B-6) The Sea Ranch Recreation Facilities

(The Sea Ranch Comprehensive Environmental Plan 2013)

The Sea Ranch South includes ten undeveloped community recreation areas and the following developed community recreation areas: 1) Moonraker Recreation Center, which consists of a pool, tennis court, and sauna; 2) Ohlson Ranch Center, which consists of meetings room, library, kitchen, pool, tennis courts, basketball and volleyball courts, sauna, picnic tables, and native plant demonstration garden; 3) Knipp-Stengel Bar, which consists of a meeting hall and theatre; 4) Hot Spot, a river swimming area with picnic tables and a barbeque area; 5) Equestrian Center for horse boarding including a riding ring, tack room, and pasture; and 6) Airstrip including private hangars. These facilities are only available for use by The Sea Ranch Association residents and their guests and are not publicly accessible.

Owner/Manager: Private

Existing Status: Existing, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: see description above

Proposed Improvements and Programs:

1. Support development of a publicly accessible commercial area in the vicinity of the golf course clubhouse, as shown on the 1982 Amended Precise Development Plan.

(B-7) Pebble Beach Sea Ranch Access Trail

(2001 County LCP reference: #8, page 72)

The Pebble Beach Sea Ranch Access Trail is a pedestrian trail on a 15-foot wide easement that connects Highway 1 in Unit 17 with Pebble Beach.

Owner/Manager: County Parks (easement)

Existing Status: Dedicated, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.3-mile trail, restroom, 4 day use parking spaces

Proposed Improvements and Programs: None

(B-8) Black Point Beach Sea Ranch Access Trail

(2001 County LCP reference: #9, page 73)

The Black Point Beach Sea Ranch Access Trail includes a parking area and a 15-foot wide pedestrian easement adjoining The Sea Ranch Lodge to Black Point Beach. A staircase to the beach provides access to the beach. The access trail and parking area will be relocated as part of an approved expansion of The Sea Ranch Lodge. As part of the Conditions of Approval, a connecting trail easement to Black Point was required. See B-9 for additional detail.

Owner/Manager: County Parks (easement)

Existing Status: Dedicated, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.2-mile trail, staircase, restroom, 10 day use parking spaces

Proposed Improvements and Programs:

1. Maintain scenic views from the existing or proposed relocated parking area and trail.
2. Require new leach fields to be set back from the relocated parking area and trail by a minimum of 50 feet.

3. Require adequate staff and visitor parking to avoid Sea Ranch Lodge guests from using the public access parking as overflow.
4. Create a new public parking area prior to closing the old parking area and trail.
5. Once the Black Point Loop Trail (B-9) is constructed, designate it and the Black Point Beach Sea Ranch Access Trail as the California Coastal Trail.

(B-9) Black Point Loop Trail

(2001 County LCP reference Figure V-1: None, GP2020 reference Policy OSRC-17d)

In 2009 Sonoma County approved the expansion of The Sea Ranch Lodge. Article 73 of Conditions of Approval for PLP 08-0011 requires The Sea Ranch Lodge to dedicate an easement for a loop trail that extends from the existing Black Point Beach Access Trail to Black Point.

Owner/Manager: Public/Private

Existing Status: Offer to Dedicate, Undeveloped

Acquisition Priority: I

Development Priority: II

Existing Improvements: Informal trails

Proposed Improvements and Programs:

1. Prior to the issuance of grading or building permits for the Meadow Cluster or North Cluster, the Applicant shall make an Offer of Dedication to the Sonoma County Regional Parks Department for a Black Point loop trail easement that is conceptually depicted in Attachment "K" of the Sea Ranch Lodge Expansion Initial Study. The Offer of Dedication shall be placed in escrow and released to Regional Parks simultaneously with the issuance of certificates of occupancy for the Meadow Cluster or North Cluster. Prior to occupancy of the North Cluster or Meadow Cluster, the Applicant shall cooperate with Regional Parks and the Kashia Pomo Tribe to make any needed field adjustments to the loop trial that provides safe access to the westernmost end of Black Point from the existing Black Point Trail Easement.
2. Construct the trail and provide signage.
3. Once complete, designate the Black Point Loop Trail and the Black Point Beach Sea Ranch Access Trail as the California Coastal Trail.

(B-10) Black Point Connector Trail

(2001 County LCP reference: None)

In 2009 the owner of Sea Ranch Lodge offered Coastwalk, a statewide nonprofit organization promoting the California Coastal Trail, an offer to dedicate a trail easement across The Sea Ranch Lodge property to a qualified government or nonprofit agency. The trail easement would connect the northern and southern boundary of the Sea Ranch Lodge property to provide a continuous California Coastal Trail. This offer is contingent on several conditions documented in an agreement before the trail easement can be recorded.

Owner/Manager:	Public/Private/Undetermined
Existing Status:	Offer to Dedicate, Undeveloped
Acquisition Priority:	I
Development Priority:	II
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Once the conditions of the agreement between The Sea Ranch Lodge and Coastwalk have been met, encourage an appropriate recreation provider to work with Coastwalk and the Sea Ranch Lodge to record a trail easement including provisions for realignment for coastal bluff retreat and temporary alignments due to Lodge events.
2. Construct the trail and provide signage.
3. Designate the continuous trail through Sea Ranch Lodge property as the trail as the California Coastal Trail.

STEWARTS POINT/HORSESHOE COVE SUBAREA 3
(FIGURE C-PA-1C)

(C-1) California Coastal Trail: Sea Ranch to Salt Point State Park

(SB 908; AB 1396)

The approximate 6-mile distance through this SubArea between the southerly terminus of Sea Ranch and the northerly boundary of Salt Point State Park has been identified as an important and highly scenic connection for the California Coastal Trail by the State Coastal Conservancy and other park and conservation agencies. This area includes stunning coastal views, pristine coves, unique rock formations, and historic features. An approximately 1-mile long public trail easement was acquired in 2015 along the 6-mile long area.

Owner/Manager: Private / County Parks (easement)

Existing Status: Partially Acquired, Proposed

Acquisition Priority: I

Development Priority: I

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Work with willing land owners to acquire easements or fee title to locate the California Coastal Trail as a continuous trail, separate from motorized traffic, from the southerly boundary of Sea Ranch to the northerly boundary of the public trail easement on Stewarts Point Ranch.
2. Develop the Coastal Trail on the Stewarts Point Ranch Trail Easement. Dedicate as the Coastal Trail. See Proposed Improvements for Stewarts Point Ranch and Cove (C-3). Work with willing land owners to acquire easements or fee title to locate the California Coastal Trail as a continuous trail, separate from motorized traffic, from the southerly boundary of Stewarts Point Ranch to the northerly boundary of the public trail easement on the Kashia Coastal Reserve.
3. Assess the need for trailhead and interpretive facilities at the time of dedication. Develop the trail.

(C-2) Coastal Ridge Trail

(2001 County LCP reference: none; 2003 Draft County ORP: Trail AB)

This multiple use trail begins at the Gualala River main stem and connects to the trail system at Salt Point State Park. The proposed trail would generally follow the ridge between the ocean and the South Fork of the Gualala River.

Owner/Manager: Undetermined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the feasibility of the trail to determine if the project is viable. Work with willing sellers to acquire easement access rights where needed. If needed, mitigate public access within timber production zones including temporary trail reroutes to ensure compatibility within the land use type.

(C-3) Stewarts Point Ranch & Cove

(2001 County LCP reference: #10, page 73)

The historic Stewarts Point Ranch includes the land between Sea Ranch and Salt Point State Park, much of the Stewarts Creek watershed, a portion of the South Fork Gualala River, and a very significant old growth redwood stand outside of the Coastal Zone. Many recreation and conservation entities have long identified the property as a priority location for recreation and conservation. This area has been one of the longest stretches of coast without any public access and a highly desirable destination for nature lovers and divers. The historic ranch is now in several different ownerships.

The Save the Redwoods League purchased 871 acres of the historic Stewarts Point Ranch, and in 2017 sold a conservation easement and public trail easement. They intend to sell the ranch to a private buyer while Sonoma County Regional Parks will develop the public access trail. The trail easement connects the north and south border of the property, and has a short connector trail to a small parking area.

Owner/Manager: Private / Sonoma County Regional Parks (easement)

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: I

Existing Improvements: Ranch roads, barns, private boat launch

Proposed Improvements and Programs:

1. Plan and develop the California Coastal Trail and small staging area on the existing public trail easement from the northern edge of the historic Stewart's Point townsite to the property boundary, approximately 0.8 miles to the north. Develop the Coastal Trail from the southern property boundary to the planned staging area. Develop the Coastal Trail from planned staging area to the northern property boundary once additional property rights are acquired from willing sellers to the north.
2. Identify the California Coastal Trail alignment through the historic ranch as a continuous trail to connect to the existing public access easement, separate from the motorized traffic and consistent with Coastal Commission's Coastal Trail siting guidelines. Acquire easements from willing sellers and construct trail.
3. Encourage the retention of active timber management on the historic Stewart's Point Ranch while providing for resource protection and maximum public access.
4. Encourage the retention of grazing in a manner that maximizes ecological health, supports the local agricultural economy, and provides for compatible recreation opportunities. Provide public education about recreation within grazing areas.

(C-4) Northern Red Box Coastal Access Trail 1: Fisherman Bay

(2001 County LCP reference: #11, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between The Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes where day use visitors dropped 1-2 dollars into when they visited before crossing the fence and walking an informal trail to the coast. The northern group of these coastal access trails had five locations. Fisherman Bay is the most northern of the eight and contains a scenic double cove.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: II

Development Priority: II

Existing Improvements: None

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to the coast at Fisherman Bay through purchase of fee title or easement from a willing property owner.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with retaining grazing to maximize ecological health, supports the local agricultural economy, and provides for compatible recreation opportunities. Provide public education about recreation within grazing areas.

(C-5) Northern Red Box Vertical Coastal Access Trail 2 & 3: Sandy Point

(2001 County LCP reference: #11, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between The Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped 1-2 dollars into when they visited before crossing the fence and walking an informal trail to the coast. The northern group of these coastal access trails had five locations. The second and third most northern red box access trail was located near Sandy Point.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: II

Development Priority: II

Existing Improvements: None

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to the coast at Sand Point through purchase of fee title or an easement from willing property owners.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with retaining grazing to maximize ecological health, supports the local agricultural economy, and provides for compatible recreation opportunities. Provide public education about recreation within grazing areas.

(C-6) Northern Red Box Coastal Access Trail 4: Unnamed Access Trail

(2001 County LCP reference: #11, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between The Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped one to two dollars into when they visited before crossing the fence and walking an informal trail to the coast. Prescriptive rights may exist. The northern group of these coastal access trails had five locations. The fourth most northern red box access trail was located approximately a quarter mile south of Sandy Point and a quarter mile north of an unnamed gulch.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to the coast at the coastline halfway between Sandy Point and an unnamed gulch to the south through purchase of fee title or easements from willing sellers.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with grazing to maximize ecological health and to support the local agricultural economy. Provide public education about recreation in grazing areas.

(C-7) Northern Red Box Coastal Access Trail 5: Unnamed Gulch

(2001 County LCP reference: #11, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between The Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped 1-2 dollars into when they visited before crossing the fence and walking an informal trail to the coast. Prescriptive rights may exist. The fifth most northern red box coastal access trail was located at an unnamed gulch at the south end of a broad sandy cove, approximately half of a mile south of Sandy Point.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to the unnamed gulch at the Sandy Cove coast at the coastline halfway between Sandy Point and an unnamed gulch to the south through purchase of fee title or easements from willing sellers.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with grazing to maximize ecological health and support the local agricultural economy. Provide public education about recreation in grazing areas.

(C-8) Southern Red Box Coastal Access Trail 1: Mac's Cove

(2001 County LCP reference: #11, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped 1-2 dollars into when they visited before crossing the fence and walking an informal trail to the coast. The southern group of these coastal access trails had three locations. The northerly red box coastal access trail in the southern group was located at Mac's Cove, a third of a mile long cove just north of Rocky Point.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to Rocky Point through purchase of fee title or easement from a willing seller.
2. Assess the need for related facilities at the time of dedication.

3. Provide maximum public access in a manner compatible with grazing to maximize ecological health and support the local agricultural economy. Provide public education about recreation in grazing areas.

(C-9) Southern Red Box Coastal Access Trail 2: Rocky Point

(2001 County LCP reference: #12, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped 1-2 dollars into when they visited before crossing the fence and walking an informal trail to the coast. The southern group of these coastal access trails had three locations. The middle coastal access trail of this group was located at Rocky Point, a scenic promontory.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to Rocky Point through purchase of fee title or easement from willing sellers.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with grazing to maximize ecological health and support the local agricultural economy. Provide public education about recreation in grazing areas.

(C-10) Southern Red Box Coastal Access Trail 3: Small Cove

(2001 County LCP reference: #12, page 74)

Located on very scenic private property on the historic Stewarts Point Ranch between Sea Ranch and Horseshoe Cove, eight informal coastal access trails were closed to the public years ago due to the landowner's concerns about insurance and liability. The "Red Boxes" were red boxes that day use visitors dropped one to two dollars into when they visited before crossing the fence and walking an informal trail to the coast. The southern group of these coastal access trails had three locations. The southerly-most

red box coastal access trail was located at a sheltered, unnamed small cove, on the south side of Rocky Point.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Investigate the possibility of reestablishing public access to the unnamed small cove through purchase of fee title or easement from willing sellers.
2. Assess the need for related facilities at the time of dedication. Provide maximum public access in a manner compatible with retaining grazing to maximize ecological health, supports the local agricultural economy, and provides for compatible recreation opportunities. Provide public education about recreation within grazing areas.

SALT POINT SUBAREA 4 (FIGURE C-PA-1D)

(D-1) California Coastal Trail: Kashia Coastal Reserve to Ocean Cove

(2001 County LCP reference: page 100 & #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The Coastal Trail through the Salt Point SubArea consists of an approximately 1-mile trail easement held by County Parks on the Kashia Coastal Reserve Salt Point State Park has over 9 miles coastline. The California Coastal Trail is partially identified and developed, although informal trails connect the majority of the length.

Owner/Manager: State Parks

Existing Status: Partially Developed

Acquisition Priority: None

Development Priority: I

Existing Improvements: Several trails, restrooms, and parking areas

Proposed Improvements and Programs:

1. Complete plans to align the California Coastal Trail as a continuous trail through the entire length of Salt Point SubArea. Dedicate as the Coastal Trail. See Proposed Improvements for Kashia Coastal Reserve Coastal Trail (D-2) and Salt Point State Park Unit (D-3). Develop the trail.

(D-2) Kashia Coastal Reserve Coastal Trail

(2001 County LCP reference: #13, page 74)

In 2016, the Trust for Public Lands acquired a 688-acre ranch adjacent to Salt Point State Park which includes Northern Horseshoe Cove. The land is the ancestral home of the Kashia Band of Pomo Indians of the Stewarts Point Rancheria. The purchase restores ownership of coastal lands to the Kashia which will manage the property. Public access to a future section of the California Coastal Trail was a condition of the acquisition. Sonoma County Regional Parks holds a trail easement along the western side of Highway 1 from Salt Point State Park to the ranch boundary, approximately 1 mile to the north. The trail easement includes a small parking area. The property contains vital coastal habitat, including forest and riparian woodlands, coastal meadows, and tide pools.

Owner/Manager: Kashia Band of Pomos / Sonoma County Regional Parks (easement)

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: I

Existing Improvements: None

Proposed Improvements and Programs:

1. Work with the Kashia Band of Pomos and other stakeholders to plan, develop, and open the Kashia Coastal Reserve section of California Coastal Trail. Work with Caltrans to secure an encroachment permit to locate the Coastal Trail within the Highway 1 right of way only where bluff erosion and a deep ravine provides no other option.
2. Work with the Kashia Band of Pomos and other stakeholders to create interpretive signage and programs.
3. Work with State Parks and Caltrans to connect the Kashia Coastal Reserve Coastal Trail to the planned State Park staging area approximately a quarter mile south of the Salt Point State Park boundary.

(D-3) Salt Point State Park Unit

(2001 County LCP reference: #7, page 72)

The 5,684-acre Salt Point State Park has over six miles of coastline, rocky promontories, panoramic views, kelp-dotted coves, unique geologic formations, broad coastal prairies terraces, forested hills, and pygmy forests. Popular activities include picnicking, hiking, horseback riding, mountain biking, fishing, skin and scuba diving, and camping.

The General Plan for Salt Point State Park was adopted in 1976.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: 20 miles of trail, 109 vehicle campsites, 1 group campsite, 10 hiker-biker campsites, 20 walk-in campsites, restrooms, day use parking

Proposed Improvements and Programs:

1. Update the park's 1976 General Plan. Evaluate the need for additional camping facilities.

2. Implement the planned trail realignment and related improvements for the California Coastal Trail and trailhead support facilities through Salt Point State Park.
3. Consider restoration or relocation of the environmental campground that was destroyed by fire.
4. Encourage the expansion of Salt Point State Park to the northeast and east to expand recreational opportunities and support resource protection.
5. Consider designation of a portion of the area to the east of Highway 1 as a State wilderness.
6. See individual proposed improvements for specific improvements such as parking, restrooms, and trails.

(D-4) Salt Point State Park – Horseshoe Cove and Horseshoe Point

(2001 County LCP reference: #14, page 74)

Two steep trails lead to the southern half of Horseshoe Cove, and one trail leads to Horseshoe Point on the coastal terrace.

Owner/Manager: State Parks

Existing Status: Dedicated, Partially Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: Informal trails

Proposed Improvements and Programs:

1. Develop a day use parking area and a trailhead for the California Coastal Trail. Provide trail connections to the north and south.
2. Improve access to the cove if feasible.

(D-5) Salt Point State Park – Deadman Gulch

(2001 County LCP reference: #15, page 75)

Coastal access along Deadman Gulch is available, and a mid-terrace trail connects this coastal access trail to Highway 1 near Fisk Mill Cove.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: 2-mile trail

Proposed Improvements and Programs:

1. Develop other interconnecting trails and shoreline access between Horseshoe Cove and Fisk Mill Cove. Construct bridge crossing for the California Coastal Trail.

(D-6) Salt Point State Park – Kruse Ranch Buildings

(2001 County LCP reference: #19, page 104)

The historic Kruse Ranch buildings include the Kruse Barn, old Wells Fargo office, hotel and store and are adjacent to Highway 1. There is currently no public access.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: Historic structures

Proposed Improvements and Programs:

1. Reconstruct the historic Kruse Barn, Wells Fargo office, hotel, and store structures subject to research on authenticity. Pursue adaptive reuse of these structures for interpretive facility or as a youth hostel. Relocate the trailer out of sight at the proposed park support service area to the south; or relocate it out of view of Highway 1 and use it as a park residence.
2. Develop trail connections within State lands from the historic structures to existing trails to the north, south and east.

(D-7) Salt Point State Park – Fisk Mill Cove

(2001 County LCP reference: #16, page 75)

A vertical coastal access trail from Highway 1 through a forested area leads to the rocky Fisk Mill Cove. The trail also connects to a Salt Point State Park blufftop trail that is part of the California Coastal Trail, and leads to Stump Beach to the south.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: Barbeques, picnic tables, restrooms, potable water, vista overlook, 30+ day use parking spaces

Proposed Improvements and Programs:

1. Realign and reconstruct the vertical access trails to the beach, and develop a fully accessible trail that connects to the existing Salt Point State Park Blufftop Trail as part of the California Coastal Trail. Relocate and reconstruct bridge crossings for the Coastal Trail.

(D-8) Kruse Rhododendron State Natural Reserve

(2001 County LCP reference: page 96)

Established in 1933, the 317-acre Kruse Rhododendron State Natural Reserve contains second-growth redwood, Douglas fir, grand firs, tanoaks, and an abundance of rhododendrons. Over the last several decades, Salt Point State Park has expanded to the western and southern boundaries of Kruse Rhododendron State Natural Reserve.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 5-mile pedestrian and equestrian trail, 10 day use parking spaces

Proposed Improvements and Programs:

1. Manage the vegetation succession to promote spring time Rhododendron displays.

(D-9) Salt Point State Park – Stump Beach

(2001 County LCP reference: page 96)

A coastal access trail from State Highway 1 through a forested area leads to Stump Beach, a popular sandy beach. The trail also connects to a Salt Point State Park Blufftop Trail that is part of the California Coastal Trail.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.5-mile trail, picnic tables, restroom, day use parking

Proposed Improvements and Programs: None

(D-10) Salt Point State Park – Gerstle Cove

(2001 County LCP reference: page 96)

Gerstle Cove is the largest use area within the park. Gerstle Cove provides access to the Gerstle Cove Marine Reserve, the first underwater park established in California for the complete protection of marine resources.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Visitor center, boat launch, day use parking

Proposed Improvements and Programs: None

TIMBER COVE/ FORT ROSS SUBAREA 5 (FIGURE C-PA-1E)

(E-1) California Coastal Trail: Ocean Cove to Fort Ross State Historic Park

(2001 County LCP reference: page 100, #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The California Coastal Trail is undefined through the north portion of this SubArea. State Parks is planning a realignment of the Coastal Trail through Fort Ross State Historic Park. The environmental document for the project has been adopted, and project permits will be applied for when funding becomes available.

Owner/Manager:	Private, State/ Private, County
Existing Status:	Required and Proposed Dedication, May Be Prescriptive
Acquisition Priority:	I
Development Priority:	II
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Complete the realignment and improvements to the California Coastal Trail through Fort Ross State Historic Park including new trailheads, new trail, boardwalks, bridges, restoration, signage, and restrooms.
2. Complete the Timber Cove Coastal Trail Feasibility Study which seeks to identify the California Coastal Trail in the northern half of this SubArea. Acquire easements if needed and construct trail or braided trails.

(E-2) Ocean Cove Coastal Access & Boat Launch

(2001 County LCP reference: #18, pages 75-76)

Access to Ocean Cove for pedestrians and for launching small watercraft is available for a small fee. Vehicular access to the blufftop and parking near the bluff are provided. A road from the bluff to a beach on the cove provides access.

Coastal Permit CPH00-0009 for a new single-family dwelling at 23150 (APN 109-050-012) and 23125 (APN 109-050-010) State Highway 1, Ocean Cove was approved on May 9, 2001. The Conditions of Approval included the requirement that prior to issuance of the building permit, the applicant shall offer access dedications (Offers to Dedicate or OTDs) to the Sonoma County Regional Parks Department (County Parks),

for vertical public access from State Highway 1 to the mean high tide at Ocean Cove Beach, and for horizontal public access easement along the bluff top; and the form and content of those offers are to be reviewed and approved by County Parks. The building permit for the new dwelling was issued on May 14, 2003, and final construction approval of the new dwelling was made on January 20, 2006. The two OTDs were made and recorded on October 16, 2009 almost six years since the building permit for the new dwelling was issued. However, County Parks has not consented to the content of the offers.

On March 14, 2009 the Sonoma County Board of Supervisors amended the Local Coastal Plan Land Use Map to conform to the approved General Plan Land Use Map Amendment and Zone Change for the Ocean Cove Resort to better reflect existing and potential uses and development on the affected properties. On March 8, 2012 the California Coastal Commission approved the Local Coastal Plan Amendment for Ocean Cove Resort (SON-MAJ-1-09).

Local Coastal Plan policy encourages modest expansion of existing or new visitor-serving commercial uses east of State Highway 1 near the Ocean Cove Store and adaptive reuse of the historic barn at the Ocean Cove Resort; and limits development west of State Highway 1 at the Ocean Cove Resort to controlled day use such as boat launching and picnicking. Policy also calls for any development proposal to include provisions for pedestrian safety on State Highway 1, erosion control measures, rehabilitating the degraded bluffs at Ocean Cove, and providing parking east of State Highway 1.

Owner/Manager:	Private
Existing Status:	Required and Proposed Dedication
Acquisition Priority:	I
Development Priority:	III
Existing Improvements:	Private campground, boat launch, store

Proposed Improvements and Programs:

1. Continue to provide maximum public access to the shoreline including the boat launch
2. Require the Offer to Dedicate a trail easement for pedestrians and bicyclists to connect Highway 1 with Stillwater Cove Regional Park through the campground.
3. Require the Offer to Dedicate for the boat launch to stipulate that in the event that the boat launch closes to the public, the County can exercise their easement and re-open the facility for public use.

(E-3) Bluff Trail: Ocean Cove to Stillwater Cove

(2001 County LCP reference: #19, page 76)

An existing bluff trail extends from Highway 1 at the Ocean Cove Campground south to Stillwater Cove Regional Park and crosses the private campground and four parcels owned by the State Parks. County Parks manages the four parcels as part of Stillwater Cove Regional Park under a management agreement with the State. The trail provides spectacular views and connects to two vertical access trails to the shoreline.

Owner/Manager:	Private, State/ Private, County
Existing Status:	Required and Proposed Dedication, May Be Prescriptive
Acquisition Priority:	I
Development Priority:	II
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Record the Trail Easement Offer to Dedicate required by Coastal Permit CPH00-0009. Include provisions for signage, relocating the easement due to bluff erosion, and year round hours of operation.
2. Add signage identifying the public trail, improve disabled access, and consider realigning across the trail on the State-owned parcels to reduce erosion. Connect trail to Stillwater Cove.
3. Consider designating part or the entire trail as the California Coastal Trail.
4. Use the existing restroom and parking facilities at Stillwater Cove Regional Park and Ocean Cove until use levels necessitates constructing additional facilities.

(E-4) Stillwater Cove Regional Park

(2001 County LCP reference #21, page 76 & page 96)

Stillwater Cove Regional Park offers a beautiful rocky shore, coastal terrace, and a sheltered beach well used for ocean based activities. Trails connect the lush Stockoff Creek canyon, scenic redwood groves, and the campground. There is a life estate covering 221 acres.

Owner/Manager:	County Parks
Existing Status:	Acquired, Partially Developed, Proposed
Acquisition Priority:	I

Development Priority: III

Existing Improvements: 3-miles of trail, picnic tables, restrooms, day use parking, 23 campsites, 1 walk-in/hike/bike campsites, fish cleaning station, cove suitable for boat access, ranger residence, park office

Proposed Improvements and Programs:

1. Master Plan the life estate to the east of the existing park.
2. Expand Stillwater Cove County Park to include the additional undeveloped land in the Stockoff Creek canyon. Extend the Stockoff Creek Trail to connect with Salt Point State Park.
3. Evaluate options for a long-term potable water supply.
4. Restore historic Fort Ross School when funding becomes available. Provide additional interpretation.
5. Replace three trail bridges over Stockoff Creek on the Creek Trail.
6. Evaluate options to renovate and enhance the day use parking area, damaged timber stairs to Highway 1, and picnic area to improve the user experience, provide additional amenities, signage, and picnic facilities.
7. Evaluate visitor opportunities for low-cost coastal accommodations options in accordance with the Coastal Conservancy program.
8. Identify the best continuous route for the California Coastal Trail through the park. Construct improvements.

(E-5) Stillwater Cove Regional Park – North Terrace & Coastal Access Trails

(2001 County LCP reference: #20, page 76)

These 4 parcels are across Stillwater Ranch, between Stillwater Cove and the Ocean Cove campground. Several turnouts with informal connecting trails provide access from the Highway to the bluff and the shoreline.

Owner/Manager: State Parks/County Parks

Existing Status: Dedicated, Undeveloped

Acquisition Priority: None

Development Priority: III

Existing Improvements: Informal trails, 5-7 turnout parking spaces

Proposed Improvements and Programs:

1. Develop safe trails connecting the Bluff Trail at Ocean Cove to Stillwater Cove (E-4) and the shoreline.
2. Consider constructing additional trails, including the Coastal Trail, to vistas on interior meadows and rock outcrops, and parking improvements. Use existing restroom and parking facilities at Stillwater Cove Regional Park until overcrowding necessitates constructing additional facilities.

(E-6) Stillwater Cove Regional Park – Stillwater Cove Coastal Access and Boat Launch

(2001 County LCP reference: #21, page 76 & page 97)

Stillwater Cove is a sheltered cove popular for diving, boating, fishing, tidepooling, and picnicking. The Stockoff Creek Trail on the east side of the Highway connects the cove with the campground and other trails.

Owner/Manager:	County Parks
Existing Status:	Acquired, Partially Developed
Acquisition Priority:	I
Development Priority:	III
Existing Improvements:	Paved vehicle loading area and trail, restrooms, rescue craft building, picnic tables, fish cleaning station.

Proposed Improvements and Programs:

1. Evaluate options for additional picnic facilities at the cove.
2. Develop a safe trail to connect the cove to the northern portions of the park.

(E-7) Stillwater Cove Regional Park Expansion – Pocket Cove

(2001 County LCP reference: #22, page 76)

A 10-acre parcel contains coastal terrace and rocky coastline adjacent to Stillwater Cove Regional Park. The Coastal Commission, County Regional Parks Department, and Sonoma Land Trust have identified this 10-acre parcel adjacent to the southern boundary of Stillwater Cove Regional Park known as "Pocket Cove" as a key potential addition to the park. In 1979 the Coastal Commission required the property developer to dedicate at least two acres adjacent to the existing park including Pocket Cove and provide Highway 1 frontage for a future trail connection to the south. The property was subsequently sold and has not been developed.

The Sonoma Land Trust identified the parcel as a "Tier One Opportunity" in its May 2002 *Russian River/North Coast Parcel Analysis*. As an expansion to Stillwater Cove Regional Park, it would provide access to the southern coastal terrace, spectacular views from the unnamed point, and shoreline access to Stillwater Cove. A recorded offer to dedicate is adjacent to the south side of the Pocket Cove parcel.

Owner/Manager: Private

Existing Status: Proposed Dedication, May Be Prescriptive

Acquisition Priority: I

Development Priority: III

Existing Improvements: Informal trails

Proposed Improvements and Programs:

1. Pursue one of the following: a) require dedication of a public access easement with any development approval, b) purchase an access easement, or c) acquire the property.
2. Provide connecting trails between the existing Stillwater Cove Regional Park, the blufftop and shoreline. Consider designating a part as a link of the California Coastal Trail.
3. Use the existing restroom and parking facilities in Stillwater Cove County Park until use necessitates examining facility development.

(E-8) Timber Cove Access Easements

(2001 County LCP reference: none; numerous Coastal Permits)

Eight Offers to Dedicate have been accepted at locations within the Timber Cove Subdivision by County Parks. Although they are not contiguous, they may support the eventual connection and development of the California Coastal Trail as well as a potential connection to the beach.

Owner/Manager: County (easement)

Existing Status: Dedicated, Undeveloped

Acquisition Priority: None

Development Priority: III

Existing Improvements: None

Proposed Improvements and Programs:

1. Complete the Timber Cove Coastal Trail Feasibility Study to identify the preferred alignment of the Coastal Trail through Timber Cove, using the Timber Cove access easements where feasible.

(E-9) Timber Cove Connection Trail

(2001 County LCP reference: #23, page 77)

This trail will connect an existing coastal access trail on the southern part of Ninive Drive to a coastal access trail at Timber Cove Inn. It will run from Cormorant Point along the southern end of Ninive Drive, to the west of Highway 1, to the blufftop adjacent to the Timber Cove Inn where it will connect with the Timber Cove Inn Coastal Access.

Owner/Manager:	Private/To Be Determined
Existing Status:	Required and Proposed Dedication, May Be Prescriptive
Acquisition Priority:	II
Development Priority:	II
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Acquire access as a condition of approval for new development or through purchase of easement or fee title.
2. Develop a trail from the southern end of Ninive Drive to the Timber Cove Inn to connect the coastal access trails and provide bluff access. Consider designating portions or all the California Coastal Trail.

(E-10) Timber Cove Inn Coastal Access

(2001 County LCP reference: #24, page 77)

Several trails which may be prescriptive lead from the Timber Cove Inn property to the coastline. Local Coastal Plan policy limits expansion at the Timber Cove Inn to improved parking facilities and coastal access. Vertical and lateral access supporting a continuous California Coastal Trail shall be a condition of approval for renovating the Inn.

Owner/Manager:	Private
Existing Status:	Proposed, May Be Prescriptive
Acquisition Priority:	II
Development Priority:	II

Existing Improvements: Developed and informal trails

Proposed Improvements and Programs:

1. Acquire vertical access and link with Timber Cove Connection Trail (E-9).
2. Provide public parking and restrooms either combined with or separate from the Inn.

(E-11) Timber Cove Inn – Bufano Statue

(2001 County LCP reference: none)

The State Department of Parks and Recreation owns the parcel containing the Benny Bufano statue located in the surroundings of the Timber Cove Inn. The State also owns an undeveloped trail easement and a partially developed parking easement intended to access the statue. An informal trail for viewing the ocean and statue leads from the Timber Cove Inn parking lot across the bluff to the statue.

Owner/Manager: State

Existing Status: Dedicated

Acquisition Priority: None

Development Priority: II

Existing Improvements: Statue, informal trails and parking area

Proposed Improvements and Programs:

1. Develop a trail route from the parking area to the Bufano Statue that meets accessibility guidelines. If necessary, relocate the existing trail and parking easement to follow the existing or an improved trail alignment and parking area.
2. Connect the statue to the Timber Cove Bluff Connection Trail when the bluff trail is established.
3. Install signage on Highway 1 identifying "Coastal Access" to the Bufano Statue as a State Park facility.

(E-12) Timber Cove Boat Landing & Campground

(2001 County LCP reference: #20, page 76)

A private campground south of Timber Cove Inn provides boat launching, camping, and a road to the beach. Extensively used by divers, the boat launch is particularly important.

Owner/Manager: Private

Existing Status: Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Access road to boat launch, campground office, campsites

Proposed Improvements and Programs:

1. Continue beach access and boat launching under private ownership. If the property owner closes the access, consider acquisition of the boat launch facility.

(E-13) Fort Ross Area – Offers to Dedicate

The State Coastal Conservancy accepted five Offers to Dedicate north of Fort Ross State Historical Park. Although they are not all contiguous, several are important as future links of the California Coastal Trail. The State Coastal Conservancy will eventually transfer the Offers to Dedicate to State Parks or County Parks.

Owner/Manager: Private, State/To Be Determined

Existing Status: Dedicated, Undeveloped

Acquisition Priority: None

Development Priority: III

Existing Improvements: None

Proposed Improvements and Programs:

1. Complete the Timber Cove Coastal Trail Feasibility Study to identify which of the five Offers to Dedicate can be useful to provide coastal access or to support the California Coastal Trail.

(E-14) Fort Ross State Historic Park Unit

(2001 County LCP reference: #26-31, pages 77-79 & page 105)

Fort Ross State Historic Park has over 4 miles of shoreline, 3,300 acres, multiple access points and a trail network that provides access to the coastal terrace and shoreline. The historic structures from the Russian settlement, trails, campsites, and almost all amenities are located west of the highway. Most of the property is to the east of Highway 1 and is undeveloped.

The Sonoma Land Trust identifies an expansion of Fort Ross State Historic Park as a "Tier Two Opportunity" in its May 2002 *Russian River/North Coast Parcel Analysis*.

Owner/Manager: State

Existing Status: Acquired, Developed

Acquisition Priority: III

Development Priority: II

Existing Improvements: Visitor center, historic buildings, interpretive exhibits, 21 campsites, restrooms, picnic facilities, day use parking

Proposed Improvements and Programs:

1. Encourage continued restoration of the historic structures.
2. Realign and improve the California Coastal Trail to provide improved access and protection of natural and cultural resources. Trail improvements include boardwalks to protect wetlands, and bridges for crossing drainages.
3. Develop cultural interpretive trail focusing on Kashia Pomo culture, and integrate cultural trail with the California Coastal Trail.
4. Update the park General Plan to include the parkland on the east side of Highway 1. Consider additional trails and camping opportunities on the east side of the State Highway. Evaluate the need for additional camping, including group camping facilities and environmental campsites.
5. Acquire additional acreage in the Fort Ross Creek watershed to expand recreational opportunities and support resource protection.
6. Construct restrooms and improve parking areas at Fort Ross Terrace, Windermere Point, and Kolmer Gulch.

(E-15) Fort Ross State Historic Park Unit – Windermere Point

(2001 County LCP reference: #26, page 78)

The site is a former lumber mill. It is used for vehicular access, parking, and pedestrian access to the coastline. It is physically degraded and in need of restoration, but provides for a significant amount of recreational use.

Owner/Manager: State

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: II

Existing Improvements: Informal day use parking

Proposed Improvements and Programs:

1. Develop parking and restroom facilities to serve both Windermere Point and Kolmer Gulch.

2. Develop the California Coastal Trail to connect Kolmer Gulch and Windermere Point

(E-16) Fort Ross State Historic Park Unit – Kolmer Gulch

(2001 County LCP reference: #27, page 78)

The beach at Kolmer Gulch is relatively large, sandy, attractive, and popular. Access to the beach is from informal trails leading from turnouts on State Highway 1.

Owner/Manager: State

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: I

Existing Improvements: None

Proposed Improvements and Programs:

1. Develop parking and restroom facilities to serve both Windermere Point and Kolmer Gulch.
2. Develop a trail connecting Kolmer Gulch with Windermere Point to the north and the bluff tops to the south.

(E-17) Fort Ross State Historic Park Unit – Call Ranch

(2001 County LCP reference: #28, page 78)

The Call Ranch stretches from Fort Ross north almost to Kolmer Gulch and was acquired as an expansion of Fort Ross State Historic Park. The coastline is rocky and has a small beach area at low tide; and there is vertical access down a steep path at Sandy Cove.

Owner/Manager: State

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: Historical structures, interpretive exhibits, trails

Proposed Improvements and Programs:

1. Develop an accessible trail from the Call House to the Fort Ross Visitor Center
2. Improve existing trail access to North Cove and extend trail east to the Call House

(E-18) Fort Ross State Historic Park Unit – Reef Campground

(2001 County LCP reference: #29, page 79)

A road to the northern boundary and a parking area provide access to the cove to the south, the cove to the north, and a bluff trail to the beach at Fort Ross State Historic Park. The middle bluff road and parking area lead to two steep shoreline trails.

Owner/Manager: State

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 21 campsites, restrooms, day use parking

Proposed Improvements and Programs:

1. Extend the California Coastal Trail to the south to connect with the Fort Ross Terrace parking area.

(E-19) Fort Ross State Historic Park Unit – South Reef

(2001 County LCP reference: #30, page 79)

This coastal access trail provides access to the Fort Ross Reef area and is popular with abalone divers and fishermen.

Owner/Manager: State Parks

Existing Status: Acquired

Acquisition Priority: None

Development Priority: II

Existing Improvements: Informal access trails, day use parking

Proposed Improvements and Programs:

1. Improve and expand existing parking area.
2. Develop Coastal Trail Trailhead signing at the parking area.
3. Develop bridge crossing to extend Coastal Trail to the south. Improve existing beach access trail to the south of unnamed drainage.

(E-20) Fort Ross State Historic Park Unit – Cardiacs Trail

(2001 County LCP reference: #31, page 79)

This access point is the most southerly access point at Fort Ross State Historic Park. A steep trail leads to a long narrow beach at the mouth of Timber Gulch.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: 0.3-mile trail, day use parking

Proposed Improvements and Programs:

1. Improve vehicular access to the trailhead.
2. Provide trail connections to the north.

THE HIGH CLIFFS/MUNIZ/JENNER SUBAREA 6
(FIGURE C-PA-1F)

(F-1) California Coastal Trail: Fort Ross State Historic Park to Bridgehaven

(2001 County LCP reference: page 100 & #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

This section of the Sonoma County coastline is extremely rugged and steep, making it a challenge for locating a trail. The California Coastal Trail is unidentified and undeveloped in this area, although informal trails connect short sections north and south of Russian Gulch. Long sandy and rocky beaches become exposed at low tides, but these areas can be dangerous.

The Coastal Trail route through the High Cliffs/Muniz/Jenner SubArea connects Fort Ross State Historic Park, Vista Trail, Russian Gulch, Jenner Headlands Preserve, Russian River Bridge, and Bridgehaven. The route should either directly connect with Jenner or have a connector trail.

Owner/Manager: Private / State Parks

Existing Status: Partially Acquired

Acquisition Priority: I

Development Priority: I

Existing Improvements: Existing trails and parking areas may be incorporated into alignment

Proposed Improvements and Programs:

1. Study off-road trail alignments between Fort Ross State Historic Park and Bridgehaven and select the most appropriate route or routes for the California Coastal Trail. The study will be based on the Coastal Commission's Guidelines for Siting the California Coastal Trail. The feasibility study should include a water taxi between Jenner River Access and Goat Rock River Access.
2. Modify the Russian River Bridge south of Jenner to provide safe pedestrian access for the Coastal Trail including a barrier or other separation between trail users and motorized vehicle traffic.
3. If needed, work with Caltrans and willing land owners to acquire land or easements for a safe off-road trail alignment. The California Coastal Trail should be separate from roads with motorized traffic.
4. Construct the trail in phases as funding becomes available.

(F-2) Sonoma Coast State Park Unit

(2001 County LCP reference: page 106)

The Sonoma Coast State Park spans almost the entire coastline through this subarea and contains numerous coastal access points, trails, and other facilities. Hiking, ocean and freshwater fishing, sea kayaking, seal and whale watching, tidepooling, surfing, and scuba diving are popular activities.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: See specific access points

Development Priority: See specific access points

Existing Improvements: Russian Gulch - day use beach access, restroom, and 30 parking spaces; Goat Rock - day use beach and river access, 2 restrooms, picnic sites, and 230 parking spaces (Blind Beach – 20, Arched View – 32; Goat Rock North – 68, Goat Rock South – 110); Campground – 12 campsites, river access, restroom, and 20 parking spaces; and State Highway 1 - numerous roadside turnouts

Proposed Improvements and Programs:

1. Continue deferred maintenance, rehabilitations, and upgrades as opportunities allow.
2. See recommendations for specific access points.

(F-3) Sonoma Coast State Park – Vista Trail

(2001 County LCP reference: #32, page 79)

The Vista Trail was acquired and developed by the State Parks as an accessible scenic interpretive facility. It is the northernmost developed part of the Sonoma Coast State Park. The view extends from Jenner to Point Reyes and captures most of the southern Sonoma Coast.

Owner/Manager:	State
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	None
Existing Improvements:	1-mile paved loop accessible trail, picnic tables, restroom, and 15 day use parking spaces

Proposed Improvements and Programs:

1. Include the Vista Trail in the alignment of the California Coastal Trail if determined feasible.

(F-4) Russian Gulch – Northern Access Trail

(2001 County LCP reference: #33, page 80)

An informal trail leads from Russian Gulch over the hill to the cove to the north. At low tides it is possible to connect with Fort Ross State Historical Park, but the beach route can be dangerous. A gap in State ownership on the western side of State Highway 1 remains between the southern edge of Fort Ross State Historical Park and the northern edge of Sonoma Coast State Park.

Owner/Manager:	State Parks
Existing Status:	Acquired, Undeveloped
Acquisition Priority:	I
Development Priority:	I
Existing Improvements:	Informal trails

Proposed Improvements and Programs:

1. Acquire remainder of the trail corridor to connect Russian Gulch and Vista Trail with Fort Ross State Historic Park. Study trail alignment alternatives for a safe, continuous trail as the California Coastal Trail. Evaluate both west and east sides of Highway 1.
2. Realign the existing informal trails to reduce erosion, protect resources, and provide safer and increased public access.

(F-5) Sonoma Coast State Park – Russian Gulch

(2001 County LCP reference: #34, page 80)

Russian Gulch has a large, accessible, attractive, and heavily used beach.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	III
Existing Improvements:	Picnic tables, restrooms, 60 day use parking spaces

Proposed Improvements and Programs:

1. Include Russian Gulch in the alignment of the California Coastal Trail if determined feasible.
2. Improve the parking area and restrooms.
3. Develop a trail connecting Russian Gulch with the Jenner Headlands Preserve.

(F-6) Sonoma Coast State Park – North Jenner Beach

(2001 County LCP reference: #35, page 80 and #35-36, page 105)

Several turn-outs along State Highway 1 provide access to an informal trail network. The trails lead to the top of the bluff and in some cases the shoreline. There are excellent vistas to the mouth of the Russian River and north.

Owner/Manager:	State Parks
Existing Status:	Acquired, Undeveloped
Acquisition Priority:	II
Development Priority:	II
Existing Improvements:	Informal trails and about 29 parking spaces in six turnouts on State Highway 1

Proposed Improvements and Programs:

1. Construct restrooms and one parking area between Jenner and Russian Gulch. Evaluate all locations, including east of State Highway 1 not on State property.
2. Prevent vehicle access to the bluffs while providing safe turnout parking to the north and south of Manni Gulch. Evaluate and implement appropriate trail connections between North Jenner Beach and the proposed parking lot on Jenner Headlands Preserve (see F-7 below).
3. Construct a trail that includes safe shoreline access to the double cove from the parking area to No Dog Beach.

(F-7) Jenner Headlands Preserve

(2001 County LCP reference: parking lot only: #36, page 80)

The headlands above the town of Jenner include coastal bluffs and Jenner Gulch, a stream with steelhead trout that is the sole domestic water source for the town. The Sonoma Land Trust acquired 5,630 acres of the Jenner Headlands in 2009 using funding from both private and public sources and has since transferred the property to The Wildlands Conservancy, a non-profit organization that acquires and operates a network of preserves that provide public education and public access. The acquisition grants require that public access be provided on some portions of the property.

The Wildlands Conservancy and their partners are working on an Integrated Resource Management Plan that includes public access. The access element will propose short and long-term public access improvements and programs for facilities. Proposed facilities include two parking lots totaling 30 spaces with two ADA parking spaces and two spaces for school buses. The parking lot will include bioswales and other storm water features and two restrooms. The parking lot and up to 12 miles of ranch roads used as trails are expected to open in summer 2018.

Owner/Manager:	The Wildlands Conservancy (Private)
Existing Status:	Acquired, Partially Developed
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	34 parking spaces, restroom, 12 miles of trail

Proposed Improvements and Programs:

1. Provide maximum public access that is compatible with the preserve's conservation goals. Study public access and recreation facilities including multiple use trails,

overnight facilities including camping and backpacking, and environmental education facilities.

2. Locate the California Coastal Trail on the western portion of the property with coastal views to connect Russian Gulch with the Jenner area.
3. Implement the permitted access plan for a trailhead, trail, restroom, and associated amenities at Manni Gulch on Highway 1.
4. Provide maximum public access to the Preserve at a variety of access points in order to maximize connections and to disperse use. Study trail connections between Sonoma Coast State Park, State Highway 1, Jenner, and areas to the east. Pursue if compatible with conservation goals.
5. Encourage expansion of the Preserve to the north, east, and south to provide greater resource protection and recreation opportunities.
6. Encourage the retention of agriculture for ecological health and reducing fire danger. Manage the forest to promote maximum ecological, old growth forest characteristics, and reduce fire danger. A Non-Industrial Timber Harvest Plan may be required.

(F-8) River's End

(2001 County LCP reference: page 101)

River's End is a small private restaurant and resort facility located on the north side of the mouth of the Russian River in Jenner. Day use of the beach is possible. Cabins, a restaurant, and bar are also located on the property.

Owner/Manager: Private

Existing Status: Existing, May Be Prescriptive

Acquisition Priority: III

Development Priority: III

Existing Improvements: Trail to beach

Proposed Improvements and Programs:

1. Continue day use access to the beach.

(F-9) Russian River Water Trail

(2001 County LCP reference page 100)

The Russian River Water Trail is a water-based route for non-motorized recreational boating that are anchored by land based launch sites, camping, and picnicking facilities.

Water trails provide educational and scenic experiences and are designed to accommodate boaters of all ages and abilities. With an integrated system of facilities, 'trail' guides and access site informational signage, good water trail programs encourage minimum-impact use and emphasize stewardship of the aquatic ecosystems, and historical features.

Owner/Manager: State, County/To Be Determined

Existing Status: Existing, Partially Developed

Acquisition Priority: I

Development Priority: I

Existing Improvements: Various

Proposed Improvements and Programs:

1. Study the Russian River Water Trail to identify an integrated system of facilities and programs to promote increased safe and responsible public access to the Russian River.
2. See specific river access facility proposed improvements in this plan.

(F-10) Jenner River Access

(2001 County LCP reference: #36, pages 80 & 105)

Located at the mouth of the Russian River, this facility includes a popular small boat launch ramp and a small visitor center. The building was damaged by floods and was closed in the mid-1990s, but is now open to the public on a seasonal basis and is being renovated.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: Visitor center building, restroom, boat ramp, and 8 day use parking spaces

Proposed Improvements and Programs:

1. Provide structural improvements to the visitor center, including raising the building above flood levels.
2. Continue to partner with the Sonoma County Water Agency in management of the Russian River estuary.

3. Continue to operate the boat ramp, restroom, and visitor center as a coastal public information center.
4. Provide deferred maintenance to ensure viability of the visitor center.
5. Study the feasibility of acquiring adjacent properties to provide additional parking spaces for the visitor center and river access.

(F-11) South Jenner Vista Points

(2001 County LCP reference: #37, page 80)

Several turnouts are located within the right-of-way along State Highway 1 between Jenner and the Russian River Highway 1 Bridge that provide visual access to the Russian River, Penny Island, and Jenner Pond. Jenner Pond is a freshwater wetland located near the intersection of State Highway 116 and State Highway 1. The Sonoma Land Trust identified the pond as a "Tier Two Opportunity" in its May 2002 *Russian River/North Coast Parcel Analysis*.

Owner/Manager: Caltrans, Private/Undetermined

Existing Status: Partially Dedicated, Undeveloped

Acquisition Priority: III

Development Priority: III

Existing Improvements: Informal turnouts

Proposed Improvements and Programs:

1. Designate a minimum of two turnouts as highway vista points, one for northbound traffic and one for southbound traffic. Provide directional road signs to notify the public about the vista points. Develop interpretive signs. Expand existing turnouts as necessary to provide safe access.
2. Encourage conservation agencies to acquire fee title or a conservation easement protecting Jenner Pond.

(F-12) Russian River Access from Highway 1 Bridge to Sawmill Gulch

(2001 County LCP reference: #38, page 80)

Several turnouts along State Highway 116 provide parking for informal trails across public and private property to the Russian River. The most desirable destination is the cove at the mouth of Sawmill Gulch, but no developed parking is available. State Parks owns an undeveloped ten-acre riverside parcel provides access to the River. Additional access points would offer canoers and kayakers access to the lower five miles of the

river. The Sonoma Land Trust identifies this area as a "Tier Two Opportunity" in its May 2002 *Russian River/North Coast Parcel Analysis*.

Owner/Manager: State – Caltrans, Private

Existing Status: Existing, Proposed, May Be Prescriptive, Undeveloped

Acquisition Priority: III

Development Priority: III

Existing Improvements: Informal trails

Proposed Improvements and Programs:

1. Continue all existing informal access.
2. Pursue acquisition of easements or fee title for river access between Jenner and Duncans Mills. Assess the need for related facilities at the time of dedication.
3. Develop a trail and parking area for the property owned by State Parks.
4. Duncans Mills SubArea 7 (Figure C-PA-1g)

(G-1) Russian River Water Trail

(2001 County LCP reference: page 100)

The Russian River Water Trail is a water-based route for non-motorized recreational boating that is anchored by land based launch sites, camping, and picnicking facilities. Water trails provide educational and scenic experiences and are designed to accommodate boaters of all ages and abilities. With an integrated system of facilities, access site informational signage, good water trail programs encourage minimum-impact use and emphasize stewardship of the aquatic ecosystems, and historical features.

Owner/Manager: Various

Existing Status: Partially dedicated and developed

Acquisition Priority: II

Development Priority: II

Existing Improvements: See individual proposed improvements

Proposed Improvements and Programs:

1. Study the Russian River Water Trail to identify an integrated system of facilities and programs to promote increased safe and responsible public access to the Russian River.
2. See specific river access facility proposed improvements in this plan.

(G-2) Riccioli Ranch

(2001 County LCP reference: #39, page 81)

A long, wide beach borders the Riccioli Ranch property on the Russian River but public access is not available.

Owner/Manager: Private

Existing Status: Proposed

Acquisition Priority: II

Development Priority: II

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Pursue acquisition of fee title or easement for public access with willing landowner. Manage agriculture and public access to ensure mutual compatibility. Assess the need for related facilities at the time of dedication.

(G-3) Duncans Mills Campground

(2001 County LCP reference: #40, page 81; page 102; #62-63, page 107)

Duncans Mills Campground is a resort on the north bank of the Russian River, with a sandy beach and dense riparian vegetation open to camp club members and the public on occasion. Fishing, boating, hiking, picnicking, and horseback riding (including rentals), are common activities. Access to the Russian River was allowed for a small day use fee, but is now available only for private use by camp club members.

Owner/Manager: Private

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: 125 campsites, restrooms with showers, recreational vehicle sanitation facilities, boat launch, playground, basketball, volleyball, recreation center

Proposed Improvements and Programs:

1. Pursue acquisition of a public access easement or fee title if there is a willing seller.
2. Require dedication of a public access easement or other type of public access as a condition of approval for expanding the campground.

(G-4) Casini Family Ranch Campground

(2001 County LCP reference: #41, page 107)

Access to the Russian River is allowed for a small day use fee when the campground is not full.

Owner/Manager:	Private
Existing Status:	Existing, Proposed
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	225 campsites, restrooms, cabins, recreational vehicle waste disposal facilities, boat launch, playground, recreation center, sports fields

Proposed Improvements and Programs:

1. Continue public day use, including day use parking.
2. If the property owner discontinues public access, pursue acquisition of a public access easement.
3. Require as a condition of approval for expansion of the campground that a portion be available for day use.
4. Encourage development of additional campsites and camper services. Any development plans should include prohibiting camping between the river and the riparian vegetation on the beach.

(G-5) Steelhead Boulevard River Access

(2001 County LCP reference: None)

Steelhead Boulevard right-of-way extends to the Russian River's mean high water in at least one location.

Owner/Manager:	County – Public Works/Undetermined
Existing Status:	Proposed
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	Informal trail

Proposed Improvements and Programs:

1. Determine extent of public lands. Develop access on public right-of-way. Pursue acquisition of additional property from willing sellers if needed to support access.

(G-6) Rancho del Paradiso Subdivision/Freezeout Road River Access

(2001 County LCP reference: #42, page 82)

A beach is located adjacent to the Rancho del Paradiso Subdivision along the Russian River and connects to Freezeout Road via several roads, trails, and rights of way. Some of these routes have never been cleared, and others have been closed by physical barriers and overgrown vegetation. The Sonoma Land Trust and the County own several parcels and rights-of-way in the subdivision that may be able to provide public access from Freezeout Road.

Owner/Manager:	Private
Existing Status:	Proposed, May Be Prescriptive
Acquisition Priority:	III
Development Priority:	III
Existing Improvements:	Unknown

Proposed Improvements and Programs:

1. Study the feasibility of providing maximum public access to the river using the existing County rights of way and Sonoma Land Trust parcels. Assess the need for support facilities, including parking management.
2. Clear Beach Drive and open it to pedestrian access. Consider constructing a parking area for eight cars within the 70-foot roadway.

(G-7) Sonoma Coast State Park – Willow Creek – Freezeout Access

Located to the southwest of Duncans Mills, the Freezeout Access trailhead provides access to the eastern area of the Willow Creek Area of Sonoma Coast State Park. Access is currently limited to permit holders and their guests.

Owner/Manager:	State Parks
Existing Status:	Existing
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	Freezeout Creek watershed - about 8.8 miles of multi-use trails; Freezeout Access trailhead – 20 undeveloped day use parking spaces and equestrian trailer access.

Proposed Improvements and Programs:

1. Improve the trailhead facility and access road to reduce erosion and provide parking definition.
2. Include the Freezeout Creek watershed in the Willow Creek roads and trails plan as recommended under (H-9) Sonoma Coast State Park - Willow Creek Area.
3. Include Freezeout Creek area in the watershed and stream restoration projects as recommended under (H-9) Sonoma Coast State Park - Willow Creek Area.

(G-8) Duncans Mills River Access

(2001 County LCP reference: None)

Moscow Road crosses the Russian River adjacent to Duncans Mills, but no public access is currently available.

Owner/Manager: Unknown

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the feasibility of providing maximum public access at or near the Moscow Road Bridge at Duncans Mills within the existing public right-of-way. If feasible, develop appropriate public access.

(G-9) Monte Rio – Willow Creek Trail

(2001 County LCP reference: page 99; 2010 Bikeways Plan Project #209)

The Monte Rio - Willow Creek Trail is a proposed Class I Bikeway to provide access between Monte Rio, the Russian River, and the Coast. This facility may pass through the Duncans Mills SubArea. County Parks and partners have received state funding and local funding to complete a feasibility study of a Class 1 Bikeway from Forestville to Highway 1 which includes this section in the Coastal Zone.

Owner/Manager: To Be Determined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the trail to identify the best alignment. Address flooding issues through trail alignment, design, and management.
2. Acquire property for the trail from willing sellers if needed.
3. Construct the trail.

PACIFIC VIEW/WILLOW CREEK SUBAREA 8
(FIGURE C-PA-1H)

(H-1) Russian River Water Trail

(2001 County LCP reference: page 100)

The Russian River Water Trail is a water-based route for non-motorized recreational boating that are anchored by land based launch sites, camping, and picnicking facilities. Water trails provide educational and scenic experiences and are designed to accommodate boaters of all ages and abilities. With an integrated system of facilities, 'trail' guides and access site informational signage, good water trail programs encourage minimum-impact use and emphasize stewardship of the aquatic ecosystems, and historical features.

Owner/Manager: State, County/To Be Determined

Existing Status: Existing, Partially Developed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Various

Proposed Improvements and Programs:

1. Study the Russian River Water Trail to identify an integrated system of facilities and programs to promote increased safe and responsible public access to the Russian River.
2. See specific river access facility proposed improvements in this plan until a Russian River Water Trail Plan has been completed.

(H-2) Sonoma Coast State Park Unit

(2001 County LCP reference: page 106)

The Pacific View Area consists primarily of coastal terrace lands west of State Highway 1. There are 10 day use access points providing trail access to the beach. The Kortum Trail provides lateral trail access along the coastal terrace.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: II

Existing Improvements: Day use parking lots, roadside turnouts, restrooms, and beach access trails; Wrights Beach Campground – 23 campsites, restroom, and day use beach access

Proposed Improvements and Programs:

1. Implement projects identified in the Sonoma Coast State Park General Plan, including development of a reliable water source for public facilities at Wrights Beach.

(H-3) Sonoma Coast State Park – Penny Island

(2001 County LCP reference: page 105)

Penny Island is accessible only by water craft. The island contains remnants of dairy ranch buildings and is popular with day use explorers.

Owner/Manager: State Parks

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: I

Existing Improvements: Historic structures

Proposed Improvements and Programs:

1. Designate Penny Island and the marsh at Goat Rock as a State Reserve or State Natural Reserve.
2. Stabilize and preserve the existing milking barn and install interpretive signing.

(H-4) Sonoma Coast State Park – Russian River Access

(2001 County LCP reference: #43, page 82)

The beach at the mouth of the Russian River is accessible from the Goat Rock parking area at Sonoma Coast State Park.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 68 day use parking spaces

Proposed Improvements and Programs: None

(H-5) Sonoma Coast State Park – Goat Rock Ocean Access

(2001 County LCP reference: #46, page 82)

Four coastal access trails are available from Goat Rock Road within the Goat Rock Beach Unit.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 4 trails, restrooms, 110 parking spaces

Proposed Improvements and Programs: None

(H-6) Sonoma Coast State Park – Blind Beach

(2001 County LCP reference: #46, page 82)

A steep trail provides access to the ocean within the Goat Rock Beach Unit. The parking area is also the northern trailhead for the Kortum Trail.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.25-mile trail, restrooms, 20 day use parking spaces

Proposed Improvements and Programs: None

(H-7) California Coastal Trail: Bridgehaven to Carmet

(2001 County LCP reference: #47, page 83; page 100; #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The California Coastal Trail is partially developed through this subarea and includes the spectacular Kortum Trail from Blind Beach parking area to Wright's Beach. Recent upgrades to the Kortum Trail include boardwalks, bridges, gravel and asphalt surfacing to provide an accessible trail and to avoid damage to wetlands and coastal prairie. A new trailhead for the Kortum Trail was constructed at Wright's Beach.

Owner/Manager: State Parks

Existing Status: Partially Acquired, Partially Developed

Acquisition Priority: I

Development Priority: I

Existing Improvements: Kortum Trail, 3.8-mile trail, including 0.5 mile paved accessible trail, parking areas

Proposed Improvements and Programs:

1. Modify the Russian River Bridge south of Jenner to provide safe pedestrian access for the Coastal Trail including a barrier or other separation between trail users and motorized vehicle traffic.
2. Study potential safe, off-road alignments for the Coastal Trail between Bridgehaven and the Kortum Trail including routes to the east and west of State Highway 1. If needed, acquire easements from willing sellers. Construct the trail.
3. Designate a portion of the Kortum Trail as the California Coastal Trail. Designate a route through the campground, across Wright's Beach, and up the Duncan's Landing Access Trail as the California Coastal Trail.
4. Study potential safe, off-road alignments for the Coastal Trail between Duncan's Landing and Carmet including routes to the east and west of State Highway 1. If needed, acquire easements or fee title from willing sellers and collaborate with Caltrans Highway 1 Gleason Beach realignment project. Develop the trail.

(H-8) Bridgehaven Trailer Park – Boat Launch

(2001 County LCP reference: #44, page 82)

Fee boat launching was available at the trailer park but is now available only to occupants. For additional information and recommendations, see Visitor Serving and Commercial Facilities section.

Owner/Manager: Private

Existing Status: Proposed, May Be Prescriptive

Acquisition Priority: III

Development Priority: III

Existing Improvements: Boat launch

Proposed Improvements and Programs:

1. Construct a new public access to the river beneath the bridge on Caltrans right-of-way if feasible.
2. Pursue acquisition of an access easement to the river. Assess the need for related facilities at the time of dedication.

(H-9) Sonoma Coast State Park – Willow Creek Area

(2001 County LCP reference: page 106)

The inland Willow Creek Area consists of the lower and a majority of the upper watershed of Willow Creek and portions of the watershed of Freezeout Creek. The total area is about 4800 acres. Only the lower area of these watersheds support developed facilities. Access to the area is provided in four locations - upper and lower Willow Creek Road, Freezeout Creek Access, and Coleman Valley Road Access.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	Pomo Campground - 22 walk-in campsites; Willow Creek Environmental Campground – 12 campsites with river access; trailhead – 30 parking spaces and pit toilets; primitive roads serving as trail access; Willow Creek watershed – about 14 miles of trail; and administrative facility for maintenance

Proposed Improvements and Programs:

1. Restore and expand the Willow Creek ranch buildings as a hostel, administrative facility, and/or environmental education facility. Development should reflect the historic character of the existing structures.
2. Continue negotiations with the owner of the property in the eastern portion of the Willow Creek watershed to acquire fee title and/or conservation easements for improved access and recreation opportunities.
3. Develop a roads and trail plan for Willow Creek to identify trailhead access points, and provide a recreational trails network linking Willow Creek to lands east, west, and south. Based on an approved roads and trails plan, identify and construct trail improvement projects.
4. Conduct watershed and stream restoration projects that include realigning, renovating, or removing problematic roads or other facilities identified as a significant source of sediment.

(H-10) Willow Creek Road Russian River Access

(2001 County LCP reference: none)

Access to the Russian River is available from an informal launch site on the side of Willow Creek Road, near the borrow pit, approximately ¼ mile before the Willow Creek Environmental Campground access trail.

Owner/Manager: County Public Works/State Parks

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: I

Existing Improvements: Informal boat launch, roadside parking

Proposed Improvements and Programs:

1. Provide improved parking, signage, and boat launching at this location.

(H-11) Willow Creek Environmental Campground - Russian River Access

(2001 County LCP reference: #45, page 82)

Access to the Russian River is available from an access road that leads from Willow Creek Road to the walkway in the Willow Creek Environmental Campground.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: II

Existing Improvements: Hike or paddle-in environmental campground – 20 campsites with river access, 20 day use and overnight parking spaces

Proposed Improvements and Programs:

1. Explore the feasibility of additional environmental campsites in the meadow.

(H-12) Monte Rio – Willow Creek Trail

(2010 Bikeways Plan Project #209)

The Monte Rio - Willow Creek Trail is a proposed Class I Bikeway to provide access between Monte Rio, the Russian River, and the Coast. County Parks and partners have

received state funding and local funding to complete a feasibility study of a Class 1 Bikeway from Forestville to Highway 1 which includes this section in the Coastal Zone.

Owner/Manager: To Be Determined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the trail to identify the best alignment. Address flooding issues through trail alignment, design, and management.
2. Acquire property for the trail from willing sellers if needed.
3. Construct the trail.

(H-13) Sonoma Coast State Park – Dr. Joseph Memorial Trail

(2001 County LCP reference: none)

The Dr. Joseph Memorial Trail, also known as the Pomo Canyon Trail, connects the Pomo Campground to the Shell Beach parking area on State Highway 1. An additional 1.25-mile loop trail has been developed on the Red Hill property to the south.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: I

Existing Improvements: 3.5-mile trail

Proposed Improvements and Programs:

1. Provide trail connections between the Dr. Joseph Memorial Trail and Red Hill Trail to Wright Hill Ranch Preserve.

(H-14) Wright Hill Ranch Preserve

This 1,235-acre property was acquired from the Poff Family by the Sonoma County Agricultural Preservation & Open Space District in 2005 to provide resource protection and compatible recreation. It is bordered by Sonoma Coast State Park to the north and west. In 2017 the District adopted the Wright Hill Ranch Preserve Management Plan –

Natural and Cultural Resources, which guides management decisions. The Management Plan does not include public access use or development.

Owner/Manager: County Agricultural Preservation & Open Space District

Existing Status: Acquired, Undeveloped

Acquisition Priority: None

Development Priority: I

Existing Improvements: Ranch roads, historic structures

Proposed Improvements and Programs:

1. Transfer the property to County Parks or State Parks to complete a management plan inclusive of public access in order to expand recreational opportunities, integrate public access with natural resource management goals, and provide for natural and historic interpretation.
2. Consider retaining agriculture for grassland management objectives.
3. Evaluate preservation and public access options for the historic cabin complex.
4. Reuse existing roads and/or construct trails within the property and to connect the property with Red Hill, Wrights Beach area, and other areas if feasible.

(H-15) Sonoma Coast State Park – Shell Beach

(2001 County LCP reference: #48, page 83)

Shell Beach provides safe access to the shore. The Kortum Trail connects Shell Beach to the Blind Beach trailhead on the north and to the Wright's Beach area on the south. The parking area also serves as the trailhead for the Dr. Joseph Memorial Trail that connects to the Pomo Campground in Willow Creek.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 7 miles of trail, restrooms, 40 vehicle parking spaces

Proposed Improvements and Programs:

1. Continue improvements on the connecting trails to protect wetlands, reduce erosion, and protect other sensitive areas.

(H-16) Sonoma Coast State Park – Furlong Gulch

(2001 County LCP reference: #49, page 83)

This property was proposed for subdivision in the late 1970s, but was acquired by the State Parks and added to the State Park. A paved road, Grille Way, was developed prior to the acquisition and now provides access to the Kortum Trail at the northern and southern ends of the site.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: day use parking

Proposed Improvements and Programs:

1. Construct restrooms.

(H-17) Sonoma Coast State Park – Carlevaro Way

(2001 County LCP reference: None)

This property was proposed for subdivision in the late 1970s, but was acquired by the State Department of Parks and Recreation and added to the State Park. A paved road, Carlevaro Way, was developed prior to the acquisition and now provides access to the Kortum Trail at the northern and southern ends of the site.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Day use parking

Proposed Improvements and Programs: None

(H-18) Sonoma Coast State Park – Wright's Beach

(2001 County LCP reference: #50, pages 83-84)

Wright's Beach contains the only public campground on the coast between the Russian River and the Bodega Dunes and as such is a major use area. An accessible trail with

parking has been developed adjacent to Wright's Beach on the southern end of the Kortum Trail.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: I

Existing Improvements: Trail, restroom, day use parking

Proposed Improvements and Programs:

1. Designate a route for the California Coastal Trail through Wright's Beach Campground to connect the Kortum Trail with the beach. Separate pedestrians from motorized vehicles to the extent feasible. Provide signage.

(H-19) Sonoma Coast State Park – Duncan's Landing

(2001 County LCP reference: #51, page 84)

Duncan's Landing is a peninsula with a loop road that provides views to Death Rock, and to the north and south. A trail provides access to Wright's Beach to the north.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Trail, restroom, 45 day use parking spaces

Proposed Improvements and Programs: None

(H-20) Sonoma Coast State Park – Duncan's Cove

(2001 County LCP reference: #52, page 84)

Duncan's Cove is on the south side of Duncan's Landing. There are two trails to the cove, the primary trail begins at the Duncan's Cove parking lot and the secondary trail begins at the Duncan's Landing parking lot.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 2 trails, 25 day use parking spaces

Proposed Improvements and Programs: None

(H-21) Sonoma Coast State Park – Rock Point

(2001 County LCP reference: page 161)

This blufftop parking area adjacent to State Highway 1 has two turnouts that provide visual access to the shoreline.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Picnic table, 15 day use parking spaces

Proposed Improvements and Programs: None

(H-22) Sonoma Coast State Park – Gleason Beach Vista

(2001 County LCP reference: #53, page 84)

This bluff top vista provides visual access to the shoreline and parking.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 10 day use parking spaces

Proposed Improvements and Programs:

1. Maintain access and parking at the Gleason Beach vista point. Provide for no net loss of existing facilities during the realignment of State Highway 1 through this area.

(H-23) Sonoma Coast State Park – Scotty's Creek – Gleason Beach Access

(2001 County LCP reference: #54, page 84)

This access point to Gleason Beach is where the sandy beach reaches State Highway 1 at Scotty's Creek. Caltrans is pursuing relocating Highway 1 due to bluff failure. An agreement between Caltrans, Coastal Commission, and the County is being negotiated.

Owner/Manager: State, Private

Existing Status: Acquired, Developed

Acquisition Priority: I

Development Priority: I

Existing Improvements: Informal roadside parking for 20 vehicles

Proposed Improvements and Programs:

1. Require Caltrans to provide: access to Gleason Beach, off-road continuous Coastal Trail access to the north and south of the project limits, parking, and sufficient provisions for future modifications that may be needed due to sea level rise and additional bluff retreat.
2. Provide universal access to the beach to the degree feasible.
3. Evaluate additional potential adjacent acquisitions to either mitigate the impacts of the highway relocation or to enhance the public access at Scotty Creek Gleason Beach Access. Acquisitions could support additional parking, a restroom, vistas, removal of debris and other benefits.

(H-24) Sonoma Coast State Park – Scotty's Creek Vista Point

This is an existing bluff-top turnout between Scotty's Creek and Calle de Sol subdivision that provides visual access north to Scotty's Creek and Gleason Beach and south towards North Portuguese Beach.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: I

Development Priority: I

Existing Improvements: 8 day use parking spaces

Proposed Improvements and Programs:

1. Install signage identifying the boundary between the existing State Park lands and the adjacent residence.

2. Evaluate acquisition opportunities to expand or enhance public access at the Gleason Beach area and to restore the bluff to its natural condition.

(H-25) Sonoma Coast State Park – North Portuguese Beach

(2001 County LCP reference: #55, page 85)

This access point consists of two coastal access trails and parking areas.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Two trails, 12 day use parking spaces in two areas

Proposed Improvements and Programs: None

(H-26) Sonoma Coast State Park – Portuguese Beach

(2001 County LCP reference: #55, page 85)

This is a major access point to a large sandy beach.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Trail, 68 day use parking spaces

Proposed Improvements and Programs: None

BODEGA BAY SUBAREA 9 (FIGURES C-PA-1I AND C-PA-1J)

(I-1) Sonoma Coast State Park Unit

(2001 County LCP reference: page 106)

The Sonoma Coast State Park spans most of the coastline of this SubArea, including Bodega Dunes Campground and day use areas and Bodega Head. Additional recreation facilities provided by the County include Doran Park and Spud Point Marina.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	II
Development Priority:	I
Existing Improvements:	98 campsites; about 9 miles of trail, including an all access loop trail around Bodega Head; coastal access; 40 day use parking spaces; restrooms

Proposed Improvements and Programs:

1. Encourage development of a multi-agency visitor center in the vicinity of Salmon Creek, Bodega Bay, or the Bodega Dunes Campground.
2. Encourage development of a nature trail west of State Highway 1 at the Salmon Creek Marsh.
3. Develop the California Coastal Trail from Keefe Avenue to Bay Flat Road.
4. Encourage partnerships with the U.C. Davis Bodega Bay Marine Lab and local conservation organizations in the restoration and management of natural dunes systems.
5. Develop concession agreements for the operation of equestrian trail rides.
6. Develop a planning and feasibility analysis for acquisition needs and route planning for completion of missing segments of the California Coastal Trail.

(I-2) California Coastal Trail – Carmet to Salmon Creek

(2001 County LCP reference: page 100 & #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The California Coastal Trail is unidentified from Carmet to Marshall Gulch, with steep cliffs preventing continuous access, and residential development complicating bluff access. From Marshall Gulch, the Coastal Trail route heads east of State Highway 1 onto the Carrington Ranch Preserve, currently owned by the Sonoma County Agricultural

Preservation & Open Space District. The proposed Coastal Trail crosses Salmon Creek at the highway bridge.

Owner/Manager: State, To Be Determined

Existing Status: Partially Acquired, Undeveloped

Acquisition Priority: I

Development Priority: I

Existing Improvements: None

Proposed Improvements and Programs:

1. Study the feasibility of connecting Carmet with Marshall Gulch. Routes west and east of Highway 1 should be evaluated. Acquire property from willing sellers if needed.
2. Develop the Coastal Trail from Marshall Gulch to the Salmon Creek State Highway 1 bridge as illustrated in the Carrington Ranch Immediate Public Use Facilities Plan completed by State Parks or successor plan.
3. Develop a trail separated from motorized vehicles across the Salmon Creek State Highway 1 Bridge.

(I-3) Sonoma Coast State Park – Schoolhouse Beach

(2001 County LCP reference: # 56, page 85 and #11, page 161)

This is a major access point to a large sandy beach towards the north end of Carmet.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Trail, 79 day use parking spaces

Proposed Improvements and Programs: None

(I-4) Sonoma Coast State Park – North and South Carmet Beach

(2001 County LCP reference: #10, page 160)

This access point consists of one large parking turnout that serves two trails to two sandy beaches at the south end of Carmet.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 2 trails, 57 day use parking spaces

Proposed Improvements and Programs: None

(I-5) Sonoma Coast State Park – Marshall Gulch

(2001 County LCP reference: #9, page 160)

This access point consists of a short trail to a beach.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Trail, 8 day use parking spaces

Proposed Improvements and Programs: None

(I-6) Carrington Ranch

(2001 County LCP reference: None)

The Carrington Ranch was acquired by the Sonoma County Agricultural Preservation and Open Space District for transfer to State Parks as an addition to Sonoma Coast State Park. The 330-acre property contains a historic ranch house and out buildings and is located entirely east of Highway 1. Coleman Valley Road bisects the property and provides access to the north and south. State Parks incorporated the Carrington Ranch into the Sonoma Coast State Park General Plan and subsequently prepared a focused plan to provide public use and guidance for stabilization of historic structures. However, State Parks is unable to accept the property, and County Parks will accept the property and will update and implement the Carrington Ranch Immediate Public Use Plan.

Owner/Manager: County Open Space District/County Parks

Existing Status: Acquired and Unimproved

Acquisition Priority: None

Development Priority: I

Existing Improvements: Historic Building, informal parking areas

Proposed Improvements and Programs:

1. Update and implement the Carrington Property Immediate Public Use Plan, including stabilizing historic structures, two parking areas with a total of 30 spaces, access improvements, restrooms, 3 miles of trail, picnic sites, and caretaker residence improvements.
2. Develop the California Coastal Trail from Marshall Gulch to Salmon Creek Bridge, as generally illustrated in the Carrington Ranch Immediate Public Use Plan.
3. Develop trail connections to properties to the east via trail easements and as conservation easements permit.
4. Complete and implement a Master Plan when resources allow.

(I-7) Sonoma Coast State Park – Arched Rock Vista

(2001 County LCP reference: #56, page 85)

This turnout on State Highway 1 immediately to the north of Coleman Valley Road provides spectacular views of Arched Rock and other sea stacks. There is currently no access to Arched Rock Beach from the Arched Rock Vista parking area.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Trail, 34 day use parking spaces

Proposed Improvements and Programs: None

(I-8) Sonoma Coast State Park – Coleman Beach

(2001 County LCP reference: #56, page 85)

This turnout on Highway 1 immediately south of Coleman Valley Road provides spectacular views of Arched Rock and other sea stacks. The access to Coleman Beach washed out preventing access from the parking area.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: II

Existing Improvements: Trail, 26 day use parking spaces

Proposed Improvements and Programs:

1. Restore access to Coleman Beach if determined to be feasible.

(I-9) Sonoma Coast State Park – Miwok Beach

(2001 County LCP reference: #56, page 85)

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Trail, 5 day use parking spaces
Proposed Improvements and Programs: None

(I-10) Sonoma Coast State Park – No-Name Beach

(2001 County LCP reference: #56, page 85)

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Trail, day use parking
Proposed Improvements and Programs: None

(I-11) Sonoma Coast State Park – Rabbit Ears Beach

(2001 County LCP reference: #56, page 85)

Two sea stacks appear as rabbit ears when viewed from this parking area.

Owner/Manager: State Parks
Existing Status: Acquired, Developed
Acquisition Priority: None
Development Priority: None
Existing Improvements: Trail, 5 day use parking spaces
Proposed Improvements and Programs: None

(I-12) Sonoma Coast State Park – North Salmon Creek Beach

(2001 County LCP reference: #56, page 85)

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: Trail, 40 day use parking spaces

Proposed Improvements and Programs: None

(I-13) Sonoma Coast State Park – Bodega Bay to Sebastopol Trail

(2003 Draft County ORP: Trail AA)

This proposed trail begins at Bodega Bay by Salmon Creek and ends at the West County Trail, north of Sebastopol. The trail connects Bodega Bay, Salmon Creek Beach, Carrington Ranch and other trail easements and the West County Trail north of Sebastopol. The existing West County Trail continues south into Sebastopol. The western portion of this proposed trail is in the Coastal Zone.

Owner/Manager: State, County, Private/ Undetermined

Existing Status: Partially Acquired and undeveloped

Acquisition Priority: II

Development Priority: III

Existing Improvements: None

Proposed Improvements and Programs:

1. Study the feasibility of trail alignments between existing trail easements, and public road right of way, and Sebastopol.
2. If feasible, develop offer-to-dedicate trail easements after public parking at Carrington Ranch has been established.

(I-14) Salmon Creek Trail

(2003 Draft County ORP: Trail BG)

This proposed trail begins at the Pacific Ocean and ends at Occidental. The portion of the alignment in the Coastal Zone is unidentified. The portion of the Salmon Creek Trail from Bodega to Occidental is proposed as a Class I Bikeway, Project 207 in the Sonoma County Bikeways Plan.

Owner/Manager: To Be Determined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: Unknown

Proposed Improvements and Programs:

1. Study the feasibility to identify the most appropriate alignment. If needed, acquire easements or fee title from willing sellers. Develop trail.

(I-15) California Coastal Trail: Salmon Creek to Bodega Harbor Subdivision

(2001 County LCP reference: page 100 & #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The California Coastal Trail is a braided trail through this area and consists of two routes serving two purposes. The coastal route follows the western side of the Bodega peninsula and along Doran Beach. This route provides a coastal experience through State and County parkland to pedestrians, equestrians, and partially to bicyclists. The inland route generally parallels State Highway 1 along boardwalks, Class I Bikeways, and multiple use trails. This route connects the community and provides an important transportation corridor. The inland route the Class I segments of the Bodega Bay Pedestrian & Bicycle Trail. From Salmon Creek, the western route includes South Salmon Creek Beach, Bodega Dunes Trail (Lower/Upper?), Bodega Marine Life Refuge, Bodega Head Loop Trail and Doran Beach.

Owner/Manager: Various, State Parks, State – Caltrans, County, Private

Existing Status: Partially Acquired, Partially Developed

Acquisition Priority: See Table C-PA-1 below

Development Priority: See Table C-PA-1 below

Existing Improvements: None

Proposed Improvements and Programs:

1. Modify the Salmon Creek Bridge to provide safe pedestrian access including a barrier or other separation between trail users and motorized vehicle traffic on the eastern side to connect with the Coastal Trail on the Carrington Ranch addition to the State Park. Cross Highway 1 to the south of Salmon Creek and connect with the Bodega Bay Pedestrian & Bicycle Trail.

2. The following Class I Bikeway segments in the Bodega Bay Pedestrian & Bicycle Trail Study are designated as the California Coastal Trail: 1B, 1C, 2B, 3A, 3B-2, 3D-1, 3D-2, 5B, 6B, 6C, I, and J. Acquire and develop the designated California Coastal Trail segments of the Bodega Bay Pedestrian & Bicycle Trail Plan according to the priorities identified in the Bikeways Plan.
3. Designate the existing Lower Dunes Trail, the Overlook Trail, and the Bodega Head Trail as the California Coastal Trail.
4. Develop a trail from the Bodega Head Loop Trail to Campbell Cove to separate hikers from motorized traffic.
5. Study the feasibility of providing a water taxi from Campbell Cove to Doran Regional Park and pursue if feasible to connect the Class I Bikeway on Doran (section I and J).
6. Install the California Coastal Trail signage along all designated sections.

Table C-PA-1: Segments of the Bodega Bay Bicycle & Pedestrian Trail Plan Which Are Part of the California Coastal Trail

North to South	Sonoma Co. Bikeways Plan Project #	Bodega Bay Pedestrian & Bicycle Trail Plan Segment	Acquisition Priority	Development Priority	Notes
1	None	None	I	I	Salmon Creek Bridge Pedestrian Upgrade
2	None	None	I	I	Inland Route East of Highway 1, crosses Highway to join 1B
3	197f	1B, 1C, 2B	I	I	Inland Route. 1B and 1C are Existing.
4	197e	3A, 3B-2	I	I	Inland Route. Only the portion north of Porto Bodega SFC of 3A is designated California Coastal Trail
5	197g	3D-1, 3D-2	I	I	Inland Route
6	197c	5B, 6B	I	I	Inland Route
7	197c	6C	Existing	Existing	Inland Route
8	197a	I, J	None	II	Coastal Route

(I-16) Sonoma Coast State Park – South Salmon Creek Beach

(2001 County LCP reference: #57, page 85)

South Salmon Creek is one of the most important and heavily used beach access points on the Sonoma County Coast. Existing parking for 20 cars is inadequate, and roadside parking is incompatible with residential uses. Heavy use of the area has damaged and destabilized the dunes such that the parking area has periodically been covered by drifting sand. State Parks has undertaken a dune stabilization and revegetation project in selected areas, for which temporary closure of the parking area was necessary. Closure of the parking area may be necessary in the future for revegetation and dune stabilization.

The South Salmon Creek parking lot is usually inadequate on weekends, and overflow parking ends up on Bean Avenue, the road that provides access to the parking lot; and on private roads in the Salmon Creek Subdivision. Access along these narrow roads is very constrained.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: II

Existing Improvements: 40 day use parking spaces

Proposed Improvements and Programs:

1. Continue revegetation and dune stabilization.
2. Parking improvements for South Salmon Creek Beach identified by State Parks include: 1) expanding the South Salmon Creek parking lot; 2) constructing new parking lots further south along State Highway 1 and developing an alternative access to those lots; 3) moving the State Parks headquarters and using that area for parking and beach access; and 4) providing signs at both the Bean Avenue entrance to the South Salmon Creek parking lot and at the entrance to the Dunes Campground directing vehicles to an existing parking lot at the Dunes kiosk for overflow parking.

(I-17) Sonoma Coast State Park – Bodega Dunes Campground

(2001 County LCP reference: #58, page 85)

Direct access to the beach is available from several areas of the Bodega Dunes Campground.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 98 campsites, restrooms, showers, RV dump station

Proposed Improvements and Programs:

1. Acquire the five parcels near the Roppolo Well to protect the dunes from development.
2. Consider providing a hostel or other alternative overnight facilities to serve the South Coast.

(I-18) Bodega Coastal Prairie Trail Property

(2001 County LCP reference: None)

This 34-acre property hosts the multi-purpose community center building, the Nicholas Green Bell Tower, and trails. Community groups lease the community center building for various activities, and the parking area is used for a farmer's market. The first of several phases of the Community Center has been developed.

Owner/Manager: County

Existing Status: Acquired and Partially Developed

Acquisition Priority: None

Development Priority: II

Existing Improvements: Community center, memorial sculpture, 0.5-mile trail, day use parking

Proposed Improvements and Programs:

1. Extend the Coastal Prairie Trail, a segment of the Bodega Bay Pedestrian & Bike Trail and the California Coastal Trail, to Bayflat Road.
2. Study the feasibility of using the area with the building and access road for expanded recreational and/or educational purposes. Address Caltrans' egress safety concerns and pursue them if feasible.
3. Consider additional trail connections across the property and interpretive features.

(I-19) Bodega Marine Reserve and Laboratory

(2001 County LCP reference: #59, page 85)

The 362-acre Bodega Marine Reserve and Laboratory are owned by the University of California Davis and has limited public access. The Overlook Trail is a public pedestrian trail that traverses the Reserve and provides views of Horseshoe Cove. The trail connects with the Osprey Trail in the southern portion of the South Salmon Creek Beach and Bodega Dunes area. Although the remainder of the Reserve is closed to the public due to ongoing research, the University provides facility tours on a weekly basis and for special events.

Owner/Manager: State – University of California at Davis

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.8-mile trail

Proposed Improvements and Programs: None

(I-20) Sonoma Coast State Park – Bodega Head

(2001 County LCP reference: #60, page 86)

Bodega Head is a heavily used area for hiking, sunset viewing, photography, fishing, and other ocean-based activities. The Overlook Trail extends from this site across the dunes to the Bodega Dunes Campground.

Owner/Manager: State Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: 2.1 miles of trail, restrooms, day use parking areas

Proposed Improvements and Programs:

1. Limit recreational development to passive day use activities to minimize conflicts with the Bodega Marine Reserve. Limit development to improving existing parking areas, restrooms, trails, and picnic facilities.
2. Develop an off-road trail from the existing Overlook Trail to Campbell Cove to provide a safe connection for the California Coastal Trail.

(I-21) Sonoma Coast State Park – Campbell Cove

(2001 County LCP reference: None)

Campbell Cove is on the north side of Bodega Head at the entrance to Bodega Harbor and is popular with fishermen, sightseers, bird watchers, and other visitors. Campbell Cove was the site of "The Hole in the Head" where Pacific Gas and Electric Company started to excavate for a nuclear power plant in the 1950s.

Owner/Manager:	State Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	III
Existing Improvements:	Interpretive signage, trail/boardwalk, picnic tables, day use parking

Proposed Improvements and Programs:

1. Connect Campbell Cove and Bodega Head by an off-road trail.
2. Enhance the site's accessibility, visitor amenities, interpretative signage, and resource protection.

(I-22) Westside Regional Park

(2001 County LCP reference: #61, page 86)

Located on the west side of Bodega Harbor, Westside Regional Park provides camping and harbor access. In 2006 Regional Parks completed the connection of the restrooms to public sewer. In 2016 Regional Parks completed the renovation and expansion of the boat launching facilities, including 3 lane launch, docks, ADA kayak launch, fish cleaning station, and accessibility upgrades.

Owner/Manager:	County Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	II
Existing Improvements:	47 campsites, day use picnic area, fish cleaning station, boat rinsing station, RV dump station, 76 boat trailer spaces, and 31 day use parking spaces

Proposed Improvements and Programs:

1. Renovate the campground to improved experience, functionality, sustainability, and aesthetics.
2. Connect the park's boat washing facility and fish cleaning station to either a holding tank or public sewer.
3. Construct a trail separated from the road from Westside Regional Park south to West Side Trail at Sonoma Coast State Park to connect the campground to the greater trail system.

(I-23) Spud Point Marina

(2001 County LCP reference: pages 117-123 and #5 & #7, page 123)

Spud Point Marina was developed by the County in 1986 to accommodate commercial and recreational fishermen. A pier allows public access to view the bay as well as access to the harbor. Slips can accommodate boats up to 148 feet in length. The decline of the fishing industry and other factors has impacted the financial stability of the facility.

Owner/Manager:	County Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	Marina, 244 slips with electrical service, fuel dock, laundry facilities, waste pump-out station, restrooms, showers, fishing pier, parking area

Proposed Improvements and Programs:

1. Complete disabled access improvements to the berths and gangways.
2. Develop a master plan for the Marina and immediate environment to maximize public use for commercial and recreational fishing and boating related activities and provides for stable finances.

(I-24) Mason's Marina

(2001 County LCP reference: None)

Mason's Marina is owned by the County and was leased to a private marina operator since the 1960s. The lease expired in 2012, and the County resumed management. The marina needs extensive repairs to the docks, buildings, restrooms, wharfs/ piers and other facilities. Recently completed reports inventory the necessary repairs and the shift

from a commercial focus to a mixed use focus of commercial, recreational, and educational uses.

Owner/Manager: County

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: I

Existing Improvements: Marina, 120 slips, electrical service, fuel dock, restrooms, showers, dry storage, parking area

Proposed Improvements and Programs:

1. Complete disabled access improvements to the berths and gangways.
2. Complete a feasibility study for the Marina and immediate environment to study the potential to support appropriate commercial, educational, and recreational fishing and boating related activities. If feasible, obtain funding and implement the plan.

(I-25) Bodega Bay Sport Fishing Center

(2001 County LCP reference: none)

The County enters into a license agreement with sport fishing boat operators to allow them use the Bodega Bay Sport Fishing Center for party boats for fishing, whale watching, pelagic bird watching, and sightseeing.

Owner/Manager: County General Services/ County Parks

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: I

Existing Improvements: Dock, berths, parking area

Proposed Improvements and Programs:

1. Complete disabled access renovations of the Parking, gangway consistent with the County wide ADA Transition plan.
2. Maintain the breakwater, pontoons, and gangways.
3. Consider paving parking lot to delineate spaces for safety and to accommodate use levels.
4. Consider moving the Sport Fishing Center activities to Mason's Marina to improve the amenities, accessibility, and consolidate the management of the County's marinas. Evaluate coastal dependent reuse options for the tidelands lease area now occupied for the Sport Fishing Center.

(I-26) Taylor Tract Trail

(2010 Bikeways Plan & Bodega Bay Pedestrian & Bicycle Trail: south portion of Trail 3A & 3B-1)

This Class I Bikeway follows the one-way portion of Bay Flat Road and provides an important connection between the businesses on State Highway 1 with the residences, businesses, Porto Bodega Sport Fishing Center, and the California Coastal Trail. This route begins at the intersection of Bay Flat Road and East Shore Road and continues to Taylor Street. This is the southern half of segment 3A and all of 3B-1 in the Bodega Bay Pedestrian & Bicycle Trail Plan or Projects 197E in the Bikeways Plan.

In 1984 a landslide removed Bay Flat Road's western travel lane and the remaining lane was designated as a one-way road. This proposed Class I Bikeway is contingent upon repairing and stabilizing the slope and may require retaining walls and other measures.

Owner/Manager: County

Existing Status: Proposed

Acquisition Priority: I

Development Priority: I

Existing Improvements: None

Proposed Improvements and Programs:

1. Acquire easements if needed.
2. Construct Class I trail including retaining walls, safety barriers, switchbacks, and other measures necessary to provide safe access.

(I-27) Central Bodega Bay Commercial Access

(2001 County LCP reference: #62, page 86)

Existing commercial uses such as The Tides, Lucas Wharf, and Diekmann's Store provide physical and visual access to the harbor. The Coastal Conservancy purchased other parcels in the town to prohibit development, and these parcels also provide visual access. The proposed Bodega Bay Pedestrian & Bicycle Trail alignment is proposed through along the Central Bodega Bay Commercial area. Additional access opportunities may be possible.

Owner/Manager: Coastal Conservancy, Private, Various/Private

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: III

Existing Improvements: Boardwalks, parking areas

Proposed Improvements and Programs:

1. Require that permits for expansion of existing uses, changing existing uses, establishment of new uses, and renewal of tideland leases with the County include a condition of approval for providing public access to Bodega Harbor, including the Proposed Improvements and Programs of the Bodega Bay Pedestrian & Bicycle Trails Plan.

(I-28) Bodega Harbor Yacht Club

(2001 County LCP reference: #63, page 86 and #9, page 123)

The Bodega Harbor Homeowners' Association leases the Yacht Club property from the County. The permit to operate should include provisions for public access to the parking area and pier. The Yacht Club is considered one of the best wind-sailing launch sites for Bodega Harbor, however closed gates and private signage prevents public access to Bodega Harbor at this county facility.

Owner/Manager: County – General Services/ Private

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: II

Existing Improvements: Boat launch, day use parking area

Proposed Improvements and Programs:

1. The County should work with the tenants to improve public access to the parking area and pier. Install signage notifying the public of access to Bodega Harbor.

(I-29) Birdwalk Coastal Access Trail

(2001 County LCP reference: #64, page 86)

The property previously known as the Old Airport Site has been used as a disposal site for dredge spoils. The Birdwalk Coastal Access Trail was constructed on the reclaimed perimeter berm of the disposal site, on the eastern side of Bodega Harbor. The site is still available for dredge spoil disposal and a 2003 Army Corps of Engineer Study identified the capacity of approximately 100,000 cubic yards.

In 2008 Regional Parks constructed a section of the California Coastal Trail from Birdwalk Coastal Access to Doran Regional Park over Cheney Gulch. The Bodega Bay

Bicycle & Pedestrian Plan identified continuing the Coastal Trail from the levee to Smith Brothers Road and beyond (Project #197c, 6B).

Owner/Manager:	County Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	I
Existing Improvements:	1.2-mile trail, picnic tables, restroom, 10 day use parking spaces

Proposed Improvements and Programs:

1. Reclaim and revegetate the site when the disposal of dredge spoils is complete.
2. Construct a Class I Bikeway from the north property boundary of the Birdwalk Coastal Access property to the existing levee trail on the levee, approximately 0.3 miles.

(I-30) Doran Beach Regional Park

(2001 County LCP reference: #66, page 69; #65, page 86; page 93; page 100; page 103; #54-55, page 107)

Doran County Park provides public access to Doran Beach, Doran Pond, Bodega Harbor, and Bodega Bay. Boat launching, clamming, crabbing, fishing, diving, picnicking, nature observation, bird watching, and surfing are all popular activities at this heavily used park. The Bodega Bay Bicycle & Pedestrian Plan identified a Class I Bikeway along the length of the park (Project #197a, Sections I, J).

Owner/Manager:	County Parks
Existing Status:	Acquired, Developed
Acquisition Priority:	None
Development Priority:	II
Existing Improvements:	323 day use parking spaces, 138 camp sites, 1 group camp sites, 3 restrooms with showers, 4 restrooms without showers, boat launch with dock, fish cleaning station, RV dump station, boardwalk, monuments, other amenities.

Proposed Improvements and Programs:

1. Develop a restroom by the Gull and Shell Camp areas.
2. Develop an accessible ramp to the beach at the Jetty Day Use Area.

3. Complete boat launch improvements which include a new floating dock, accessibility upgrades, and armoring.
4. Study replacing pit toilets with new restrooms to improve water quality and accessibility.
5. Expand boardwalk, interpretive displays, and native dune grass restoration.
6. Study expanded day use parking.
7. Construct a Class I Bikeway along the length of the park.
8. Complete accessibility upgrades consistent with the County Transition Plan.
9. Develop a small visitor center to better provide visitor information and services.

(I-31) Links at Bodega Harbour Golf Course

(2001 County LCP reference: page 108)

Designed by Robert Trent Jones Jr., the Links at Bodega Harbour Golf Course is an 18-hole golf course with clubhouse and other facilities available to owners of property in the Bodega Harbour Subdivision. The back nine greens were opened in 1978, and the front nine greens were added in 1987. Renovations to the golf course were completed in 2008, in which over 96 bunkers were re-constructed and bentgrass was installed on all 18 greens. In 2012 the pro shop was moved outside the clubhouse to the opposite end of the parking lot.

Owner/Manager:	Private
Existing Status:	Developed
Acquisition Priority:	None
Development Priority:	III
Existing Improvements:	18-hole golf course, clubhouse, pro shop, golf warm-up facility, swimming pool, tennis courts, 89 parking spaces

Proposed Improvements and Programs:

1. Expand and upgrade the clubhouse and parking.
2. Construct a building for parking golf carts.

(I-32) California Coastal Trail: Bodega Harbor Subdivision to Marin County

(2001 County LCP reference: page 100 and #56-58, page 107; 2020 County General Plan; SB 908; AB 1396)

The California Coastal Trail is a braided trail through this area and consists of two primary routes. The coastal and inland routes of the California Coastal Trail from Bodega Harbor to Marin County are intertwined with both the Bodega Bay and Valley Ford SubAreas.

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 Trail, and Short Tail Gulch Trail.

The inland route generally follows Highway 1 and Valley Ford Estero Road from the entrance of the Bodega Harbor subdivision to the Marin County line. Highway 1 is very steep through this area.

Owner/Manager:	Various, State Parks, State – Caltrans, County, Private
Existing Status:	Partially Acquired, Partially Developed
Acquisition Priority:	I
Development Priority:	I
Existing Improvements:	See individual access points

Proposed Improvements and Programs:

1. Study the long-term inland route alignment to provide a multi-use trail connecting Bodega Harbor with Marin County.
2. Designate the Highway 1 right-of-way as an alternative trail route until a continuous alignment consistent with Coastal Commission siting goals can be identified. Work with Caltrans to improve pedestrian and bicycle access.
3. Work with Marin County and other partners to connect the coastal route in Marin County.
4. Provide improved signage to existing Pinnacle Gulch and Short Trail Gulch Trails.

(I-33) Pinnacle Gulch Trail

(2001 County LCP reference: #66, page 86)

Dedicating and developing a coastal access trail along Pinnacle Gulch was required as a condition of approval of the Bodega Harbor Subdivision. The narrow access easement has experienced numerous landslides.

Owner/Manager: County Parks (Easement)

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: None

Existing Improvements: 0.5-mile trail, restrooms, 18 day use parking spaces

Proposed Improvements and Programs:

1. Maintain the trail and improve eroded sections.
2. If erosion persists, study options of relocating easements to more stable land.

(I-34) Short-Tail Gulch Trail

(2001 County LCP reference: #67, page 87)

An Offer of Dedication of a coastal access trail at the southern end of Bodega Harbor along Short-Tail Gulch was required as a condition of approval for the Bodega Harbour Subdivision. The trail was developed from Oyster Catcher Road to the beach, which is less than a mile north of the mouth of the Estero Americano. Parking is available approximately ½ mile away at Pinnacle Gulch and on the public streets. Six parking spaces were included approximately 150 feet from the trailhead, in the public road right of way at Oyster Catcher Road to serve the trail, but signs for these spaces have not been erected. It is possible to walk along the beach from the Estero Americano to Doran Beach at low tide.

Owner/Manager: County Parks (Easement)

Existing Status: Acquired, Developed

Acquisition Priority: None

Development Priority: I

Existing Improvements: 0.5-mile trail

Proposed Improvements and Programs:

1. Provide improved directional signage indicating public access trail and public parking locations from Highway 1 to Short Tail Gulch trailhead.

VALLEY FORD SUBAREA 10 (FIGURE C-PA-1K)

(J-1) California Coastal Trail: Bodega Harbor Subdivision to Marin County

(2001 County LCP reference: page 100 & #56-58, page 107; 2020 County General Plan; SB 908; AB 1396

The California Coastal Trail is a braided trail through this area and consists of two primary routes. The coastal and inland routes of the California Coastal Trail from Bodega Harbor to Marin County are intertwined with both the Bodega Bay and Valley Ford SubAreas.

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 Trail, and Short Tail Gulch Trail. The 2016 acquisition of the Estero Ranch by The Wildlands Conservancy may support additional Coastal Trail routes. The inland route generally follows Highway 1 and Valley Ford Estero Road from the entrance of the Bodega Harbor subdivision to the Marin County line. Highway 1 is very steep through this area and bicyclists have trouble negotiating the severe grades.

Owner/Manager: Various, State Parks, State – Caltrans, County, Private

Existing Status: Partially Acquired, Partially Developed

Acquisition Priority: I

Development Priority: I

Existing Improvements: See individual access points

Proposed Improvements and Programs:

1. Study the long-term inland route alignment to provide a multi-use trail connecting Bodega Harbor with Marin County.
2. Designate the Highway 1 right-of-way as an alternative trail route until a continuous alignment consistent with Coastal Commission siting goals can be identified. Work with Caltrans to improve pedestrian and bicycle access.
3. Work with Marin County and other partners to connect the Coastal Trail in Marin County.
4. Provide improved signage to Pinnacle Gulch and Short Trail Gulch Trails.

(J-2) Estero Americano Preserve

(2001 County LCP reference: #68, page 88)

The Sonoma Land Trust owns a 127 acre preserve off Estero Lane that provides limited guided hikes and limited guided canoe/kayak access to the Estero Americano. Access is only through infrequent scheduled guided outings available to the public. The preserve hosts a variety of research projects on water, wildlife, and coastal grassland management. School groups occasionally visit the Preserve to learn about the unique and fragile ecosystem of the Estero Americano.

The Sonoma Land Trust identified additional property in the lower half of the Estero as a "Secondary Conservation Target" for protecting the watershed, biotic resources, and visual access to the ocean in its November 1999 *Sonoma County Coastal Parcel Study*.

Owner/Manager: Sonoma Land Trust (Private)

Existing Status: Acquired, Partially Developed

Acquisition Priority: III

Development Priority: III

Existing Improvements: 20 informal parking spaces

Proposed Improvements and Programs:

1. Encourage additional low-impact support facilities to enhance nature education and interpretation.
2. Pursue acquisition of additional conservation and/or access easements to the Estero Americano from willing sellers.
3. Maintain agriculture and related infrastructure on the preserve to maximize grassland health and address fuel load management.

(J-3) Estero Americano Water Trail

(2001 County LCP reference: page 119)

The Estero Americano is a navigable waterway for at least six miles and as such, the areas below mean high tide are legally available to the public. The waterway has become popular with paddlers, including bird watchers and hunters because of the exceptional scenic and wildlife attributes. There is no developed access facility, and currently there is no identified agency that manages public access at the Estero. As recreational use levels have risen, adjacent private property owners have reported concerns with trespassing. About 3 miles of the western portion of the Estero is also part of the National Marine Sanctuary.

Owner/Manager: Waters of the US, Waters of the State/To Be Determined

Existing Status: Proposed

Acquisition Priority: III

Development Priority: III

Existing Improvements: None

Proposed Improvements and Programs:

1. Create a maximum public access plan that manages the existing right to access the navigable waterway and protects the Estero and private property. The plan should protect the sensitive natural resources from overuse and prevent visitor impacts to private property and agricultural operations.

(J-4) Estero Americano Valley Ford Access

(2001 County LCP reference: #68, page 87)

A gravel road leads from Marsh Road off Valley Ford Estero Road to an unimproved parking area and a bulkhead for paddle craft access to the Estero Americano in Marin County. This is the only publicly accessible launch point to the Estero Americano.

In 2009 local property owners attempted to prevent an annual paddle craft race on the Estero Americano to protest impacts to their property from this historical use pattern. Complaints include litter, human waste, impacts to agriculture, and trespassing.

Owner/Manager: Private

Existing Status: Existing, Likely Prescriptive Access

Acquisition Priority: I

Development Priority: II

Proposed Improvements and Programs:

1. Retain the existing Marin County public access point by encouraging Marin County Parks & Open Space District to acquire fee title or record the easement and improve the access. Prescriptive rights may exist.
2. An agency responsible for public access should acquire and develop a similar access point in Sonoma County.
3. Encourage the installation of restrooms at one location between the existing launch point and the mouth of the Estero Americano.

(J-5) Estero Trail

(2001 County LCP reference: none)

The Sonoma County Agricultural Preservation & Open Space District acquired a conservation easement and trail easement over the Bordessa Ranch. The ranch remains privately owned. The State Coastal Conservancy required a trail access plan be developed as part of the acquisition.

Owner/Manager: Private/ County

Existing Status: Proposed

Acquisition Priority: Acquired (easement)

Development Priority: II

Proposed Improvements and Programs:

1. Complete the trail plan, including locating trails and parking areas consistent with the recorded easements.
2. Implement the plan in phases to allow adaptive management techniques to be fine-tuned to prevent impacts to grazing and natural resources.

(J-6) Estero Ranch

(2001 County LCP reference: none)

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, and included public funding and the requirement for public access. A management plan under development will balance appropriate public access to the bluff, estuary, and coast with ecological protection.

Owner/Manager: The Wildlands Conservancy (Private)

Existing Status: Acquired, Partially Developed

Acquisition Priority: None

Development Priority: I

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.

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PUBLIC REVIEW DRAFT

Sonoma County
Local Coastal Plan

APPENDIX C: RIGHT TO FARM ORDINANCE
September 2019

Local Coastal Program
Permit Sonoma

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX C: RIGHT TO FARM ORDINANCE

(ORDINANCE NO. 5203)

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SONOMA, STATE OF CALIFORNIA, ADDING SECTIONS 7-11.75, 25-12.75, 26-88-170, AND 26C-451.5 TO THE SONOMA COUNTY CODE, AND REPEALING AND RE-ENACTING ARTICLE II OF CHAPTER 30 OF THE SONOMA COUNTY CODE, THE SONOMA COUNTY RIGHT TO FARM ORDINANCE

The Board of Supervisors of the County of Sonoma, State of California, ordains as follows:

SECTION I. Section 7-11.75 of the Sonoma County Code is added to read:

Sec. 7-11.75. Compliance with right to farm ordinance.

Any building or structure subject to the provisions of this chapter shall comply with the right to farm ordinance set forth in Chapter 30 of this code.

SECTION II. Section 25-12.75 is added to the Sonoma County Code to read:

Sec. 25-12.75. Compliance with right to farm ordinance.

Any subdivision subject to the provisions of this chapter shall comply with the right to farm ordinance set forth in Chapter 30 of this code.

SECTION III. Section 26-88-170 is added to the Sonoma County Code to read:

Sec. 26-88-170. Compliance with right to farm ordinance.

Any use subject to the provisions of this chapter shall comply with the right to farm ordinance set forth in Chapter 30 of this code.

SECTION IV. Section 26C-451.5 is added to the Sonoma County Code to read:

Sec. 26C-451.5. Compliance with right to farm ordinance.

Any use subject to the provisions of this chapter shall comply with the right to farm ordinance set forth in Chapter 30 of this code.

SECTION V. Article II of Chapter 30 of the Sonoma County Code is repealed and re-enacted to read:

Article II. Right to Farm.

Sec. 30-20. Short Title.

This article shall be known and may be cited as the Sonoma County Right to Farm Ordinance or the Right to Farm Ordinance.

Sec. 30-21. Findings.

(a) It is the declared policy of this county to conserve, protect, enhance, and encourage agricultural operations on agricultural land within the unincorporated area of the county. Further, it is the intent of this county to provide its residents proper notification of the county's recognition and support, through this article, of the right to farm.

(b) Where non-agricultural land uses, particularly residential and commercial development, extend onto agricultural land or exist side by side, agricultural operations are frequently the subject of nuisance complaints. As a result, some agricultural operations are forced to cease or curtail their operations and many others are discouraged from making investments in improvements to their operations, all to the detriment of adjacent agricultural uses and the economic viability of the county's agricultural industry as a whole. It is the purpose and intent of this article to reduce the loss to the county of its agricultural resources by limiting the circumstances under which properly conducted agricultural operations on agricultural land may be considered a nuisance.

(c) It is the further purpose and intent of this article to promote a good-neighbor policy by requiring notification of owners, purchasers, residents, and users of property adjacent to or near agricultural operations on agricultural land of the inherent potential problems associated with being located near such operations, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil amendments, seeds, and pesticides. It is intended that, through mandatory disclosures, owners, purchasers, residents, and users will better understand the impact of living or working near agricultural operations and be prepared to accept attendant conditions from properly conducted agricultural operations as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector.

(d) It is the further purpose and intent of this article to carry out and advance the goals, objectives, policies, and implementation programs of the agricultural resources element of the general plan.

Sec. 30-22. Relationship to other laws.

This article is not intended to, and shall not be construed or given effect in a manner that modifies or abridges federal law or regulation, or state law as set out in the Civil Code, Health and Safety Code, Fish and Game Code, Food and Agricultural Code, Division 7 of the Water Code, or any other applicable provision of state law relative to nuisances; instead, this article is only to be utilized in the interpretation and enforcement of provisions of this code and county regulations. Further, this article is not intended to, and shall not be construed or given effect in a manner that limits or restricts the county's authority to review and approve or disapprove proposals for agricultural operations on agricultural land in accordance with other provisions of this code or other laws.

Sec. 30-23. Schedule of fees and charges.

The board of supervisors may from time to time establish a schedule of fees and charges following the procedures required by law to recover the reasonable cost of providing services, issuing permits, recording documents, and enforcing regulations pursuant to this article.

Sec. 30-24. Definitions.

Unless the provision or context otherwise requires, the definitions contained in this section shall govern the construction of this article. The definition of a word or phrase applies to any of that word's or phrase's variants.

"Adjacent to agricultural land" means within 300 feet of agricultural land.

"Agricultural land" means all that real property within the unincorporated area of the county designated as land intensive agriculture, land extensive agriculture, or diverse agriculture by the general plan and zoning ordinance.

"Agricultural operation" means and includes, but shall not be limited to, 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.

"Development approval" means all of the following:

(a) Any discretionary approval granted pursuant to Chapter 25, 26, or 26C of this code to allow residential or commercial development of land, including, without limitation, any approval of a zone change, tentative map, lot line adjustment, use permit, or design review.

(b) Any building permit issued pursuant to Chapter 7 of this code to allow construction of a new single-family dwelling, enlargement of an existing single-family dwelling by six hundred forty (640) square feet or more of floor area, or installation of a manufactured home.

"Director of permit and resource management" means the director of permit and resource management of the county or his or her authorized representative.

"General plan" means the Sonoma County General Plan.

"Properly conducted agricultural operation" means an agricultural operation that is in conformance with existing laws and regulations and proper and accepted customs and standards.

"Treasurer/tax collector" means the treasurer/tax collector of the county or his or her authorized representative.

"Zoning ordinance" means the Sonoma County Zoning Ordinance set forth in Chapter 26 of this code or the Sonoma County Coastal Zoning Ordinance set forth in Chapter 26C of this code, as appropriate.

Sec. 30-25. Nuisance - agricultural operation.

No agricultural operation conducted or maintained on agricultural land in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations in the county, shall be or become a nuisance for purposes of this code or county regulations if it was not a nuisance when it began, provided that such operation complies with the requirements of all applicable federal, state, and county statutes, ordinances, rules, regulations, approvals, and permits. The provisions of this section shall not apply where a nuisance results from the negligent or improper management or operation of an agricultural operation.

Sec. 30-26. Disclosure of article to current owners.

The treasurer/tax collector shall cause the following notice to be mailed to all owners of real property within the county with the annual tax bill:

The County of Sonoma permits the operation of properly conducted agricultural operations on agricultural land within the unincorporated area of Sonoma County, and has declared it County policy in the Sonoma County Right to Farm Ordinance (Sonoma County Code, Chapter 30, Article II) to conserve, protect, enhance, and encourage such operations. Residents or users of property located near an agricultural operation on agricultural land may at times be subject to inconvenience or discomfort arising from that operation, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil amendments, seeds, and

pesticides. One or more of these inconveniences or discomforts may occur as result of any properly conducted agricultural operation on agricultural land. The County of Sonoma has determined in the Sonoma County Right to Farm Ordinance that inconvenience or discomfort arising from a properly conducted agricultural operation on agricultural land will not be considered a nuisance for purposes of the Sonoma County Code or County regulations, and that residents or users of nearby property should be prepared to accept such inconvenience or discomfort as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector. For more information about the Sonoma County Right to Farm Ordinance, please contact the Sonoma County Agricultural Commissioner's office at 2604 Ventura Avenue, Santa Rosa, CA 95403.

Sec. 30-27. Disclosure of article in development approvals.

Where a development approval is sought on or adjacent to agricultural land, the property owner, as part of the application for the development approval, shall execute a declaration acknowledging the right to farm. The director of permit and resource management shall cause the declaration to be recorded in the office of the county recorder upon granting of the development approval, unless a declaration acknowledging the right to farm has already been recorded for the property pursuant to this section, in which case the declaration need not be recorded. The declaration shall be in substantially the following form:

DECLARATION ACKNOWLEDGING RIGHT TO FARM

> The undersigned do hereby certify to be the owner(s) of certain real property located in Sonoma County, California, and more particularly described in Exhibit "A," attached hereto and incorporated herein by this reference ("the subject property").
>
> The undersigned do hereby acknowledge that the subject property is located on or adjacent to agricultural land, as defined in the Sonoma County Right to Farm Ordinance (Sonoma County Code, Chapter 30, Article II). The undersigned do hereby further acknowledge that the County of Sonoma permits the operation of properly conducted agricultural operations on agricultural land within the unincorporated area of Sonoma County, and has declared it County policy in the Sonoma County Right to Farm Ordinance to conserve, protect, enhance, and encourage such operations. The undersigned do hereby further acknowledge that if the subject property is located near an agricultural operation on agricultural land, residents or users of the subject property may at times be subject to inconvenience or discomfort arising from that operation, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil

amendments, seeds, and pesticides. The undersigned do hereby further acknowledge that one or more of these inconveniences or discomforts may occur as a result of any properly conducted agricultural operation on agricultural land. The undersigned do hereby further acknowledge that the County of Sonoma has determined in the Sonoma County Right to Farm Ordinance that inconvenience or discomfort arising from a properly conducted agricultural operation on agricultural land will not be considered a nuisance for purposes of the Sonoma County Code or County regulations, and that residents or users of nearby property should be prepared to accept such inconvenience or discomfort as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector.

This Declaration shall run with the subject property in perpetuity and shall be binding upon the undersigned and the undersigned's heirs, personal representatives, lessees, executors, successors, and assigns. This Declaration and the acknowledgments contained herein shall be disclosed to prospective transferees of any interest in the subject property, including, without limitation, a leasehold interest, prior to any such transfer.

IN WITNESS WHEREOF, the undersigned has/have executed this Declaration this _____ day of _____, 19__.

DECLARANT(S)

Dated: _____

Dated: _____

NOTE: ACKNOWLEDGMENTS MUST BE ATTACHED FOR ALL SIGNATORIES.

Sec. 30-28. Disclosure of article to buyers of real property.

(a) Where a transfer of real property by sale, exchange, installment land sale contract, lease with an option to purchase, any other option to purchase, ground lease coupled with improvements, or residential stock cooperative improved with one to four dwelling units is proposed for any real property within the unincorporated area of the county, the transferor shall disclose this article and the nature of its provisions to the prospective transferee in one of the following ways:

(1) Deliver a general disclosures and disclaimers advisory to the prospective transferee pursuant to local real estate practice that includes a statement disclosing this article and the nature of its provisions. The statement shall be in substantially the following form:

The County of Sonoma permits the operation of properly conducted agricultural operations on agricultural land within the unincorporated area of Sonoma County, and has declared it County policy in the Sonoma County Right to Farm Ordinance (Sonoma County Code, Chapter 30, Article II) to conserve, protect, enhance, and encourage such operations. If the property you are purchasing is located near an agricultural operation on agricultural land, residents or users of the property may at times be subject to inconvenience or discomfort arising from that operation, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil amendments, seeds, and pesticides. One or more of these inconveniences or discomforts may occur as a result of any properly conducted agricultural operation on agricultural land. The County of Sonoma has determined in the Sonoma County Right to Farm Ordinance that inconvenience or discomfort arising from a properly conducted agricultural operation on agricultural land will not be considered a nuisance for purposes of the Sonoma County Code or County regulations, and that residents or users of nearby property should be prepared to accept such inconvenience or discomfort as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector. For more information about the Sonoma County Right to Farm Ordinance, please contact the Sonoma County Agricultural Commissioner's office at 2604 Ventura Avenue, Santa Rosa, CA 95403.

(2) Deliver a disclosure statement to the prospective transferee pursuant to Article 1.5 (commencing with Section 1102) of Chapter 2 of Title 4 of Part 4 of Division 2 of the Civil Code disclosing this article and the nature of its provisions. The disclosure statement shall be in substantially the following form:

LOCAL OPTION

REAL ESTATE TRANSFER DISCLOSURE STATEMENT

THIS DISCLOSURE STATEMENT CONCERNS THE REAL PROPERTY SITUATED IN THE UNINCORPORATED AREA OF THE COUNTY OF SONOMA, STATE OF CALIFORNIA, DESCRIBED AS (*Address and Assessor's Parcel Number(s)*). THIS STATEMENT IS A DISCLOSURE OF THE CONDITION OF THE ABOVE DESCRIBED PROPERTY IN COMPLIANCE WITH SECTION 30-28 OF THE SONOMA COUNTY CODE AS OF (*date*). IT IS NOT A WARRANTY OF ANY KIND BY THE SELLER(S) OR ANY AGENT(S) REPRESENTING ANY PRINCIPAL(S) IN THIS TRANSACTION, AND IS NOT A SUBSTITUTE FOR ANY INSPECTIONS OR WARRANTIES THE PRINCIPAL(S) MAY WISH TO OBTAIN.

SELLERS INFORMATION

The Seller discloses the following information with the knowledge that even though this is not a warranty, prospective Buyers may rely on this information in deciding whether and on what terms to purchase the subject property. Seller hereby authorizes any agent(s) representing any principal(s) in this transaction to provide a copy of this statement to any person or entity in connection with any actual or anticipated sale of the property.

THE FOLLOWING ARE REPRESENTATIONS MADE BY THE SELLER(S) AS REQUIRED BY THE COUNTY OF SONOMA, AND ARE NOT THE REPRESENTATIONS OF THE AGENT(S), IF ANY. THIS INFORMATION IS A DISCLOSURE AND IS NOT INTENDED TO BE PART OF ANY CONTRACT BETWEEN THE BUYER AND SELLER.

The County of Sonoma permits the operation of properly conducted agricultural operations on agricultural land within the unincorporated area of Sonoma County, and has declared it County policy in the Sonoma County Right to Farm Ordinance (Sonoma County Code, Chapter 30, Article II) to conserve, protect, enhance, and encourage such operations. If the property you are purchasing is located near an agricultural operation on agricultural land, residents or users of the property may at times be subject to inconvenience or discomfort arising from that operation, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil amendments, seeds, and pesticides. One or more of these inconveniences or discomforts may occur as a result of any properly conducted agricultural operation on agricultural land. The County of Sonoma has determined in the Sonoma County Right to Farm Ordinance that inconvenience or discomfort arising from a properly conducted agricultural operation on agricultural land will not be considered a nuisance for purposes of the Sonoma County Code or County regulations, and that residents or users of nearby property should be prepared to accept such inconvenience or discomfort as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector. For more information about the Sonoma County Right to Farm Ordinance, please contact the Sonoma County Agricultural Commissioner's office at 2604 Ventura Avenue, Santa Rosa, CA 95403.

Seller certifies that the information herein is true and correct to the best of the Seller's knowledge as of the date signed by the Seller.

Seller _____ Date _____

Seller _____ Date _____

BUYER(S) AND SELLER(S) MAY WISH TO OBTAIN PROFESSIONAL ADVICE AND/OR INSPECTIONS OF THE PROPERTY AND TO PROVIDE FOR APPROPRIATE PROVISIONS IN A CONTRACT BETWEEN BUYER(S) AND SELLER(S) WITH RESPECT TO ANY ADVICE/INSPECTIONS/DEFECTS.

I/WE ACKNOWLEDGE RECEIPT OF A COPY OF THIS STATEMENT.

Seller _____ Date _____

Seller _____ Date _____

Buyer _____ Date _____

Buyer _____ Date _____

Agent (Broker Representing Seller) _____ By _____ Date _____
(Associate Licensee or Broker-Signature)

Agent (Broker Obtaining the Offer) _____ By _____ Date _____
(Associate Licensee or Broker-Signature)

A REAL ESTATE BROKER IS QUALIFIED TO ADVISE ON REAL ESTATE. IF YOU DESIRE LEGAL ADVICE, CONSULT YOUR ATTORNEY.

(b) If a prospective transferee refuses to sign the general disclosures and disclaimers advisory or disclosure statement required by subsection (a), the transferor may comply with the requirements of this section by delivering the advisory or statement to the prospective transferee as provided in subsection (a) and affixing and signing the following declaration to the advisory or statement:

"I, __(*name*)__, have delivered a copy of the foregoing (*general disclosures and disclaimers advisory/disclosure statement*) as required by Section 30-28 of the Sonoma County Code to (*transferee's name*),who has refused to sign.

I declare the foregoing to be true.

Date: _____ Signature: _____ Print Name: _____

Sec. 30-29. Noncompliance with article.

Noncompliance with any provision of this article shall not affect title to real property, nor prevent the recording of any document.

SECTION VI. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional and invalid, such decision shall not affect the validity of the remaining portion of this ordinance. The Board of Supervisors hereby declares that it would have passed this ordinance and every section, subsection, sentence, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared unconstitutional or invalid.

SECTION VII. This ordinance shall be and the same is hereby declared to be in full force and effect from and after thirty (30) days after the date of its passage and shall be published once before the expiration of fifteen (15) days after said passage, with the names of the Supervisors voting for or against the same, in *The Press Democrat*, a newspaper of general circulation published in the County of Sonoma, State of California.

In regular session of the Board of Supervisors of the County of Sonoma, passed and adopted this day of , 2012, on regular roll call of the members of said Board by the following vote:

SUPERVISORS:

Brown	Rabbitt	Carrillo	McGuire	Zane

AYES	NOES	ABSENT	ABSTAIN

WHEREUPON, the Chair declared the above and foregoing ordinance duly adopted and

SO ORDERED.

Chair, Board of Supervisors

County of Sonoma

ATTEST:

Veronica A, Ferguson, Clerk of the Board of Supervisors

PUBLIC REVIEW DRAFT

Sonoma County
Local Coastal Plan

APPENDIX D: SCENIC RESOURCES
September 2019

Local Coastal Program
Permit Sonoma

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX D: SCENIC RESOURCES

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APPENDIX D: SCENIC RESOURCES

1. SCENIC VIEW EASEMENTS

(Adopted by Board of Supervisors' Resolution #71611, April 20, 1982)

As a part of the legislative solution to the question of development of The Sea Ranch, the Coastal Act has been amended by the addition of Subsection 30610.6 (d) which instructs the executive director to "specifically identify the areas along State Highway One for which scenic view easements...will be required." Subsection 30610.6 (c) states that these easements are to be established for the purpose of allowing for the removal of trees in order to restore and preserve scenic views from the highway.

Using the Commission's current Overall Conditions and Findings for The Sea Ranch, plus the Sonoma County LCP, as starting points, the staff has identified those areas for which easements will be required. Below is a list of such areas as well as a recommendation for tree removal at each site. These recommendations are designed to be both an aid in directing the eventual removal of the trees as well as a means of ensuring that drainage areas within each easement will not be subject to increased erosion due to tree removal.

Easements and Tree Removal Guidelines

Unit 15

Easement – All the common area in this unit shall be subject to a scenic view easement.

Tree Removal Guideline – South of the Yardarm Drive entrance all trees within 50 feet of the entrance shall be removed, as shall all trees along the southernmost 200 feet of Yardarm Drive. Trees should be removed to open coastal views throughout the easement north of the entrance. (See Map A)

Unit 11

Easement – The easement shall be a 20-foot wide strip running the length of the area tentatively identified as Unit 11, adjacent to Highway One frontage. (See Map B)

Tree Removal Guideline – Trees should be thinned and removed where necessary to open coastal view.

Unit 1

Easement – The easement shall encompass all of the common area behind the Moonraker Recreation Area and Block 5. (See Map C)

Tree Removal Guideline – To open a downcoast view to Black Point trees behind the Moonraker Recreation Center shall be trimmed and thinned, gradually giving way to the creation of a clearing behind Captain's Close.

Moonraker Road

Easement – An easement shall extend 200' seaward along the first 400' of Highway One frontage, south of Moonraker Road. (See Map C)

Tree Removal Guideline – Trees in this area shall be removed.

Unit 7

Easement – Starting at the northern hedgerow, the easement extends across the common area between Highway One and the rear of Block 2 and the lot reserved for a recreation area. (See Map D)

Tree Removal Guideline – Remove only those Bishop Pines in the area behind Lots 4-9. Leave all the trees in the vicinity of Annapolis Road.

Unit 18

Easement 1 **–** The easement begins at the southernmost hedgerow and proceeds southward across the common area between Highway One, Mariners Drive and Lot 102. It then continues along the highway frontage, maintaining the width established between the southeastern corner of Lot 102 and the highway until it terminates at the boundary of this unit and Unit 17. (See Map E)

Tree Removal Guideline – All the young Bishop Pines along the fence shall be removed.

Easement 2 – The easement includes all the common area south of Whitesurf Road, between Lots 38-42 and Highway One. (See Map E)

Tree Removal Guideline – Remove most of the trees in this area.

Sea Ranch Stables

Easement – In the portion of the stables area north of the hedgerow (above Unit 21, Lots 130-140), an easement shall extend southward 200' from the northeast leg of the boundary with Unit 21. In addition, a 20' wide easement, adjacent to Highway One frontage, shall extend south to the hedgerow. (See Map F)

Tree Removal Guideline – Trees along the boundary with Unit 21 shall be topped and trimmed to maintain the northern view across the unit. Trees in the strip along the highway shall be removed where necessary to restore lateral coastal views.

Unit 21

Easement 1 – Includes all common land south of the northern hedgerow to Breaker Reach, bordered by Hedgegate Road on the west. (See Map F)

Tree removal Guideline – Remove all the trees in this area to restore the best downcoast view in The Sea Ranch.

Easement 2 – The easement extends from the Breaker Reach entrance to the Vantage Road entrance. This easement is bordered on the west by Greenvale Close and the lots fronting on that street, down to Lot 8. The easement ends at a straight line between the northwest corner of Lot 8 and the southwest corner of Lot 31. (See Map F)

Tree Removal Guideline – Widen the view down Breaker Reach by cutting the Bishop Pines just south of the entrance. Top and thin trees between Lots 31-34 and 7-8 to maintain a clear downcoast view over this area. It is noted, however, that extensive cutting in this area is not recommended because of the drainage course at this site. Trees behind Lots 4-6 should be thinned. The trees from behind Lot 3 to the Vantage Road entrance should be removed.

Easement 3 – This easement starts at the Vantage Road entrance and extends southward, between Sentinel Close and Highway One, to the boundary between this unit and The Sea Ranch Stables. (See Map f)

Tree Removal Guideline – The young pines in this area should be removed, but the wind stunted redwoods and brush in the southern drainage area should remain to prevent increased erosion.

Easement 4 – The easement begins at the northern hedgerow and extends northward behind Lots 42, 43, and 44, and terminates at the end of this unit. (See Map G)

Tree Removal Guideline – Removal all the young pines along the fence.

Unit 24

Easement – To widen the view down Whalebone Road an easement shall be established to include all the common area south of Whalebone, between Highway One and the rear of Lots 158 and 159. (Note: Pursuant to Coastal Act Subsection 30610.6 (c)(2) this area is also the site of a six vehicle parking area. This scenic easement is intended to cover that portion of the designated area that is not used for parking.) (See Map G)

Tree Removal Guideline – Removal all the trees in this area.

Unit 28

Easement 1 – An easement shall be established to include all common area south of the northern hedgerow to Leeward Spur, between Highway One and Leeward Road. (See Map H)

Tree Removal Guideline – Thin and remove trees in the easement area to restore a view across the entire unit. No trees should be removed between Lots 6 and 7 to avoid exacerbating erosion in the small drainage area.

Easement 2 **–** This easement extends across all the common area bordered by Leeward Spur, Leeward Road and the southern hedgerow. (See Map H)

Tree Removal Guideline – Thin trees to restore view of the coast.

2. SCENIC VIEW GUIDELINES

Development

Screening with Topography and Vegetation. New structures shall be sited and designed to take maximum advantage of existing topography and vegetation in order to substantially screen them from view from public roads and use areas.

Ocean and Coastline View Preservation. New structures shall be sited and designed to preserve existing views of the ocean and coastline from public roads and use areas.

Open Areas on Ridgeline and Hilltops. Development of highly visible open areas on ridgelines and hilltops shall be avoided.

Silhouette Projections. New structures shall not be located on ridgelines or hilltops or so that they project above the silhouette of the ridgeline or hilltop against the sky as viewed from public roads and use areas.

Cuts and Fills. Visible cuts and fills on ridgelines and hilltops shall be minimized.

Structure Cluster. To the extent feasible, structures shall be clustered on each parcel within existing built areas and near existing natural features such as tree groupings.

Driveways and Access Roads. Driveways and access roads shall be substantially screened from views from public roads and use areas where practical.

Tree and Vegetation Removal. Removal of trees and other mature vegetation shall be minimized. Removal of specimen trees, tree groupings, and tree Windbreaks shall be avoided. Where removal of trees is a necessary result of a proposed project, the trees shall be replaced at a greater than 1:1 ratio at another location on the site or at an off-site location approved by Permit Sonoma.

Existing Vegetation and Topography. After new structures have been constructed, existing vegetation or topography shall not be altered or removed if it would expose the new structures to view from public roads and use areas.

Landscaping. Where existing topography and vegetation would not screen structures from view from public roads and use areas, landscaping consisting of native vegetation in natural groupings that fit with the character of the area shall be installed in order to substantially screen structures from view. Screening with native, fire-retardant plants may be required.

Building Material. Structures shall be designed to use building materials and color schemes that blend with the natural landscape and vegetation.

Satellite Dishes. Satellite dishes requiring a building permit shall be sited such that they are not visible in views from public roads and use areas.

Minimize Visual Impacts. If compliance with these standards would make a parcel unbuildable, structures shall be sited and designed so that minimum visual impacts would result.

3. VIEW PROTECTION GUIDELINES

View Protection

Development within Scenic Landscape Units, Major Views, and views from Vista Points shall be required to meet the following criteria in addition to all other applicable design guidelines in order to be consistent with **Policy C-OSRC-1f**. In the case of conflict, the most restrictive design standards shall apply:

Structure Site. New structures shall be sited and designed to take maximum advantage of existing topography and vegetation in order to substantially screen them from view from public roads and use areas.

Ocean and Coastline Views. New structures shall be sited and designed to preserve existing views of the ocean and coastline from public roads and use areas.

Development in High Visible Areas. Development of highly visible open areas on ridgelines and hilltops shall be avoided.

Ridgelines and Hilltops. New structures shall not be located on ridgelines or hilltops or so that they project above the silhouette of the ridgeline or hilltop against the sky as viewed from public roads and use areas.

Cuts and Fills. Visible cuts and fills on ridgelines and hilltops shall be minimized.

Cluster Structures. To the extent feasible, structures shall be clustered on each parcel within existing built areas and near existing natural features such as tree groupings.

Driveways and Access Roads. Driveways and access roads shall be substantially screened from views from public roads and use areas where practical.

Tree and Vegetation Removal. Removal of trees and other mature vegetation shall be minimized. Removal of specimen trees, tree groupings, and tree Windbreaks shall be avoided. Where removal of trees is a necessary result of a proposed project, the trees shall be replaced at a greater than 1:1 ratio at another location on the site or at an off-site location approved by Permit Sonoma.

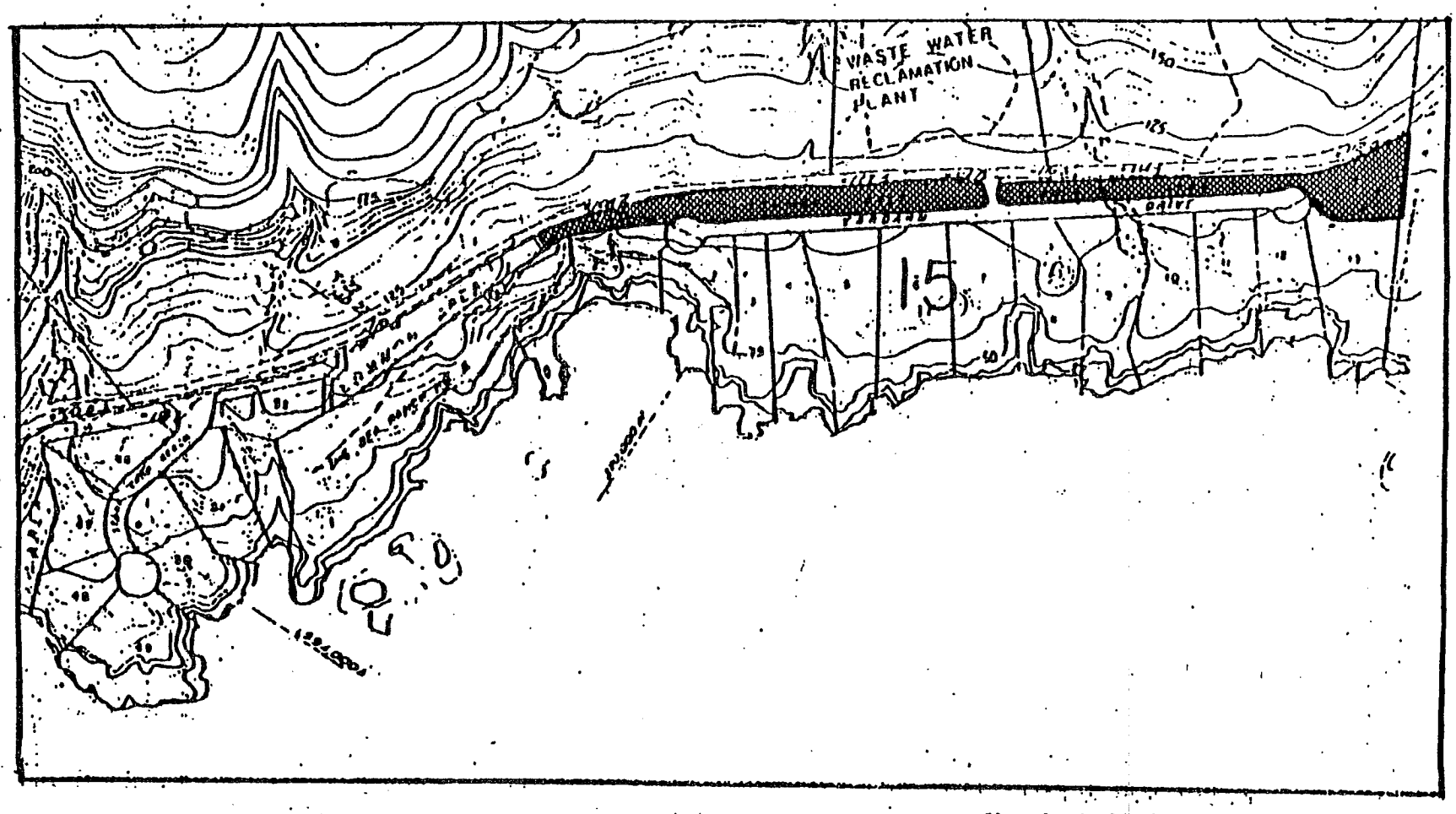
Existing Vegetation and Topography. After new structures have been constructed, existing vegetation or topography shall not be altered or removed if it would expose the new structures to view from public roads and use areas.

Structure Screening. Where existing topography and vegetation would not screen structures from view from public roads and use areas, landscaping consisting of native vegetation in natural groupings that fit with the character of the area shall be installed in order to substantially screen structures from view. Screening with native, fire-retardant plants may be required.

Building Materials and Colors. Structures shall be designed to use building materials and color schemes that blend with the natural landscape and vegetation.

Satellite Dishes. Satellite dishes requiring a building permit shall be sited such that they are not visible in views from public roads and use areas.

Minimize Visual Impacts. If compliance with these standards would make a parcel unbuildable, structures shall be sited where minimum visual impacts would result. **(GP2020 / Existing LCP Revised)**

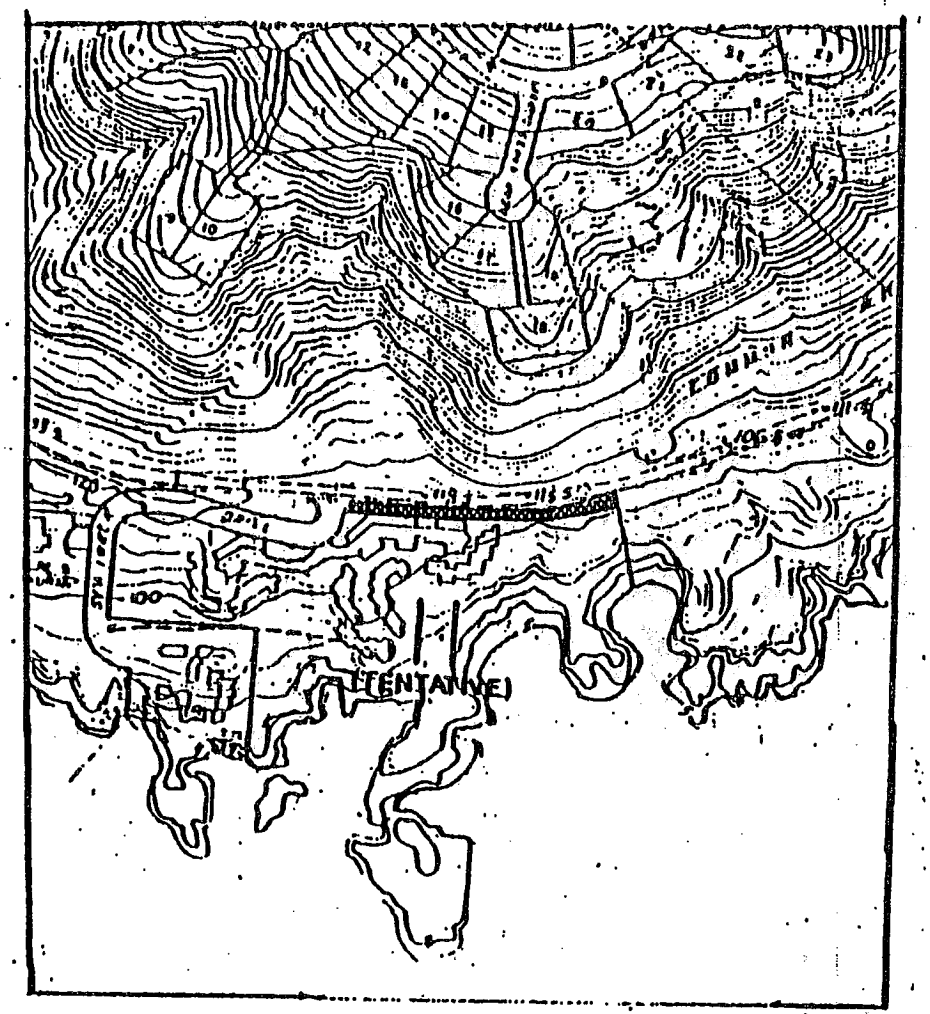


Map A, Unit 15

Designated Easement Area

Scale 1" = 400'

Portion of the Sea Ranch Composite Map
Prepared by Brelje and Race
August 1970 Revised August 1972

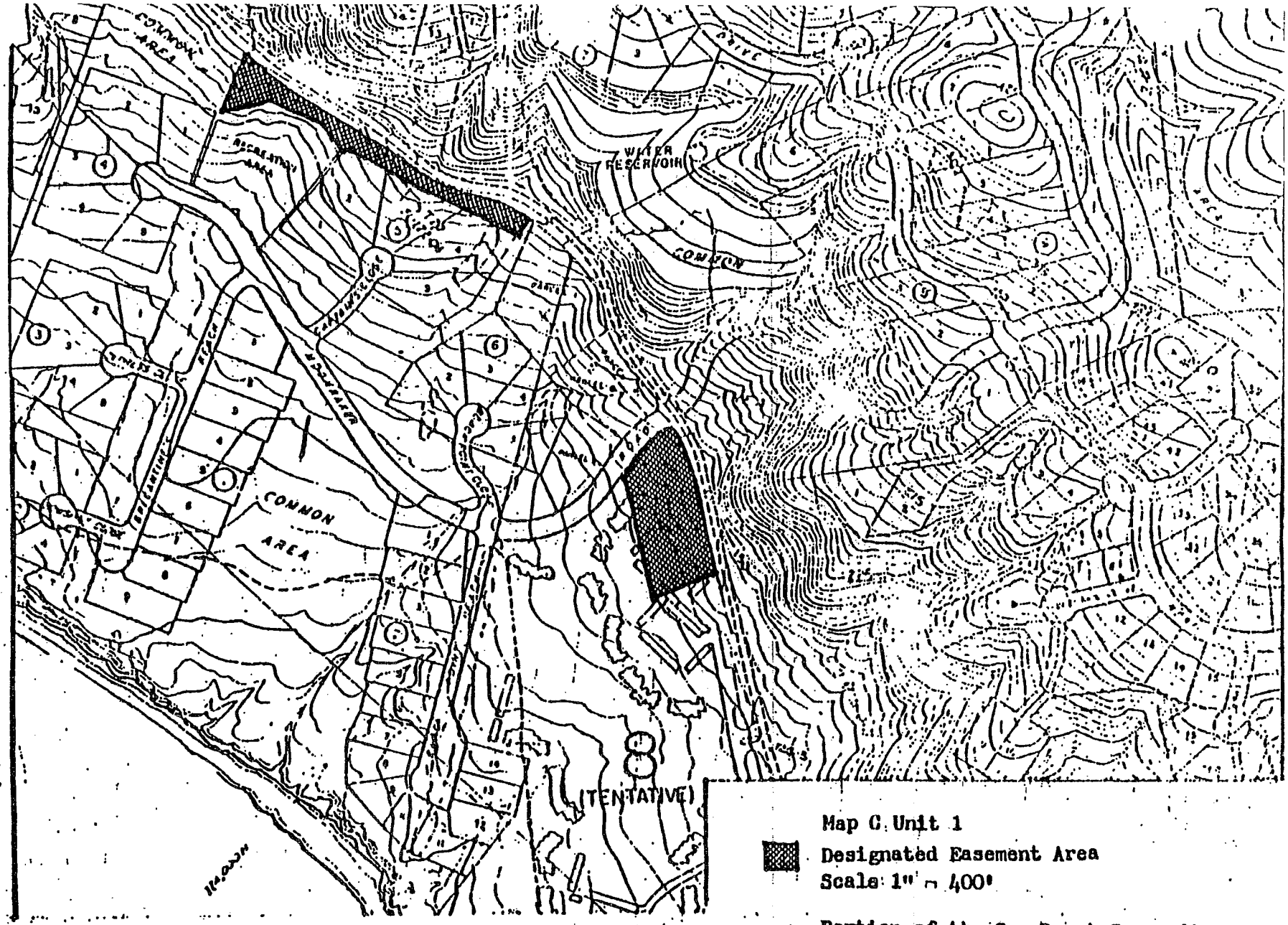


Map B Unit 11

Designated Easement Area

Scale 1" = 400'

Portion of the Sea Ranch Composite Map
Prepared by Brelje and Race
August 1970 Revised August 1972

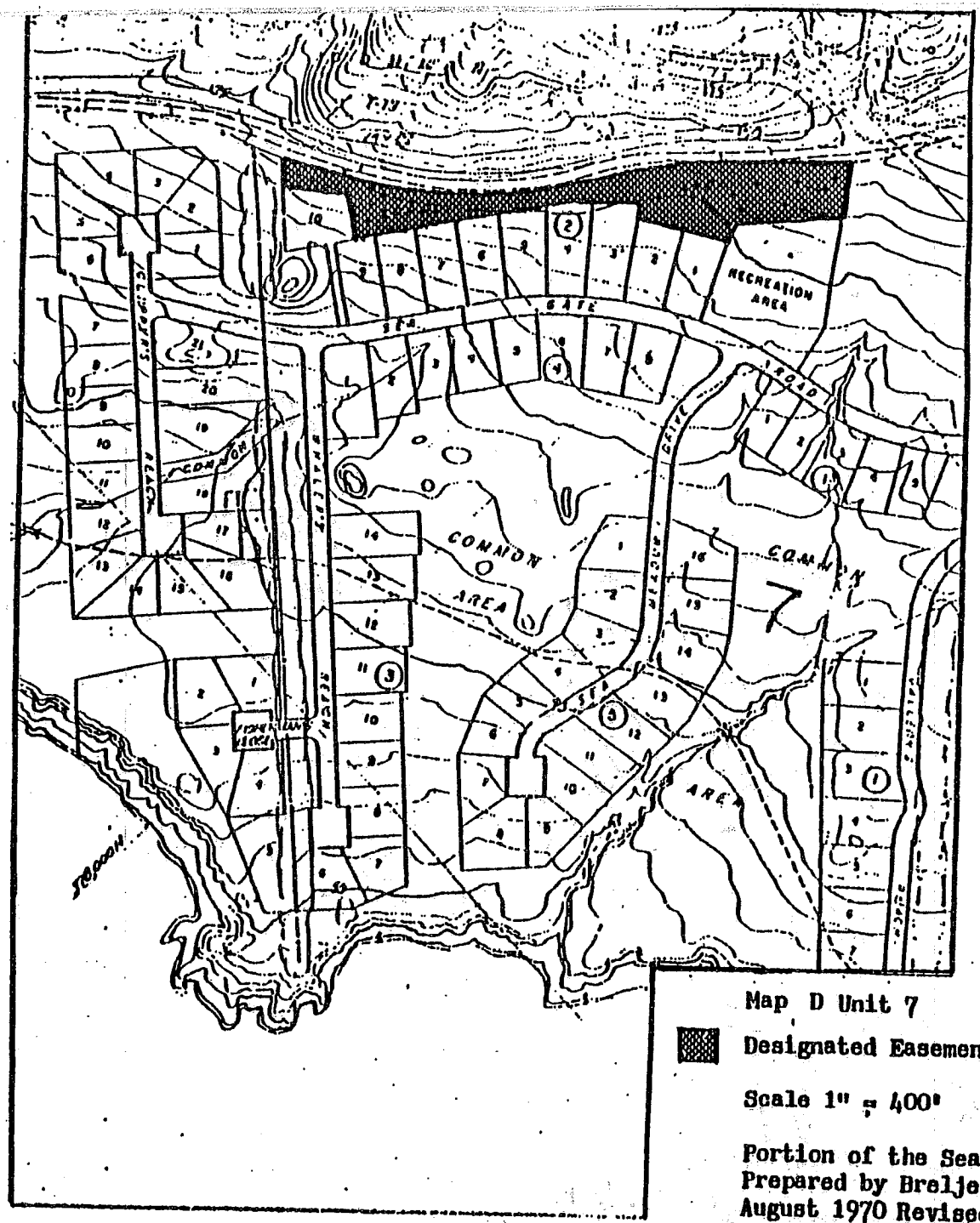


Map C. Unit 1

Designated Easement Area

Scale: 1" = 400'

Portion of the Sea Ranch Composite Map
Prepared by Brelje and Race
August 1970 Revised August 1972

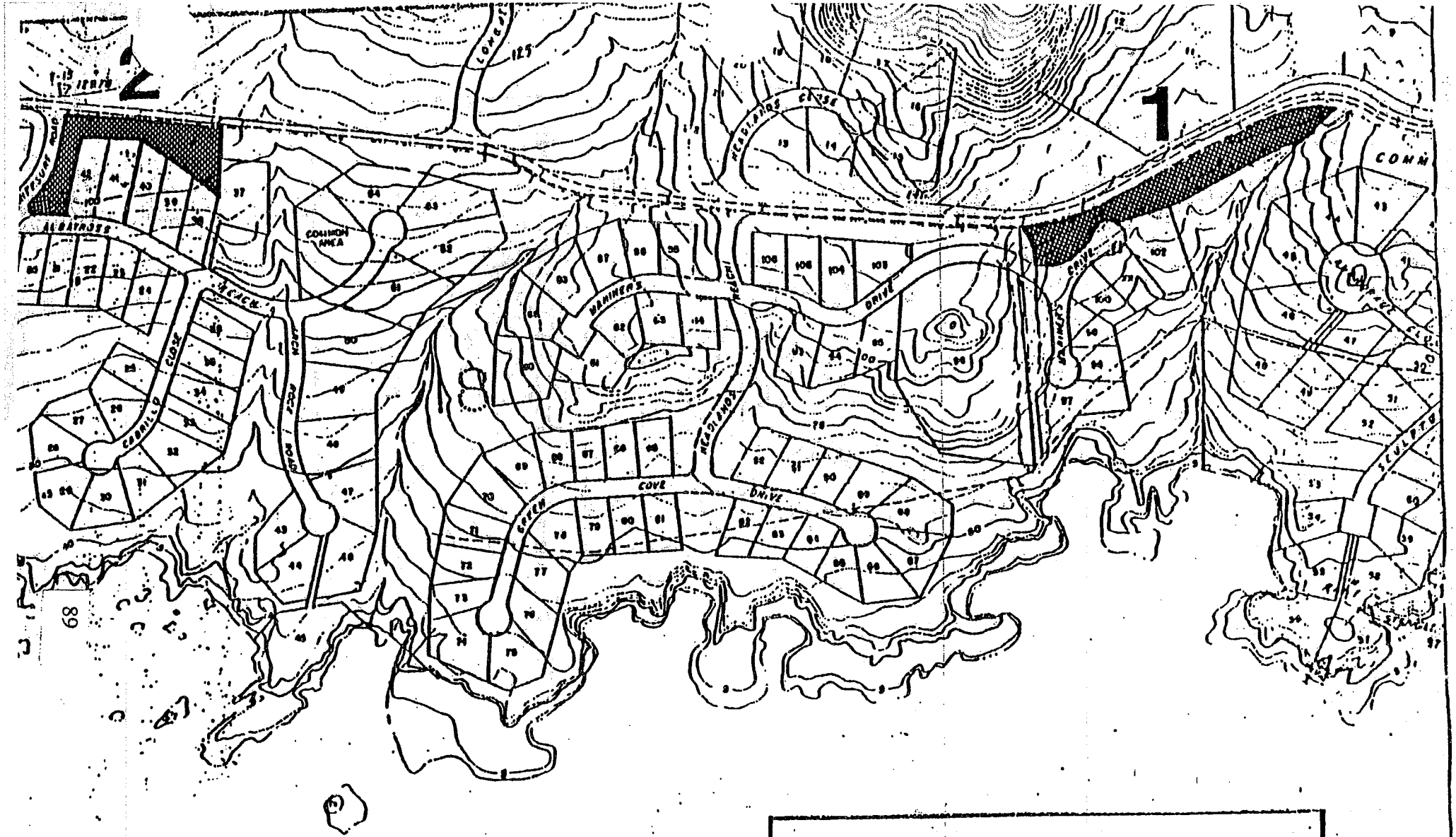


Map D Unit 7

Designated Easement Area

Scale 1" = 400'

Portion of the Sea Ranch Composite Map
Prepared by Brelje and Race
August 1970 Revised August 1972

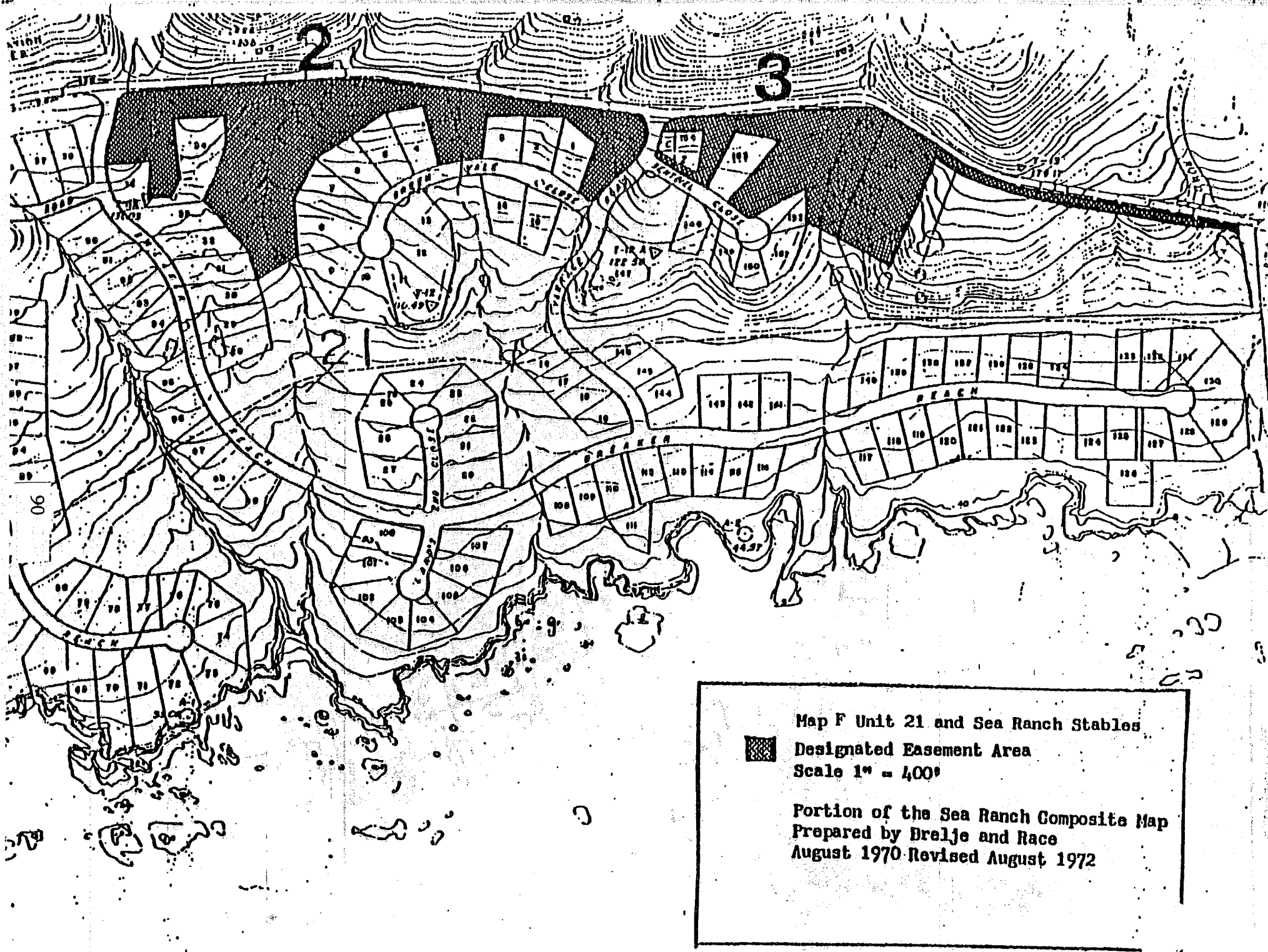


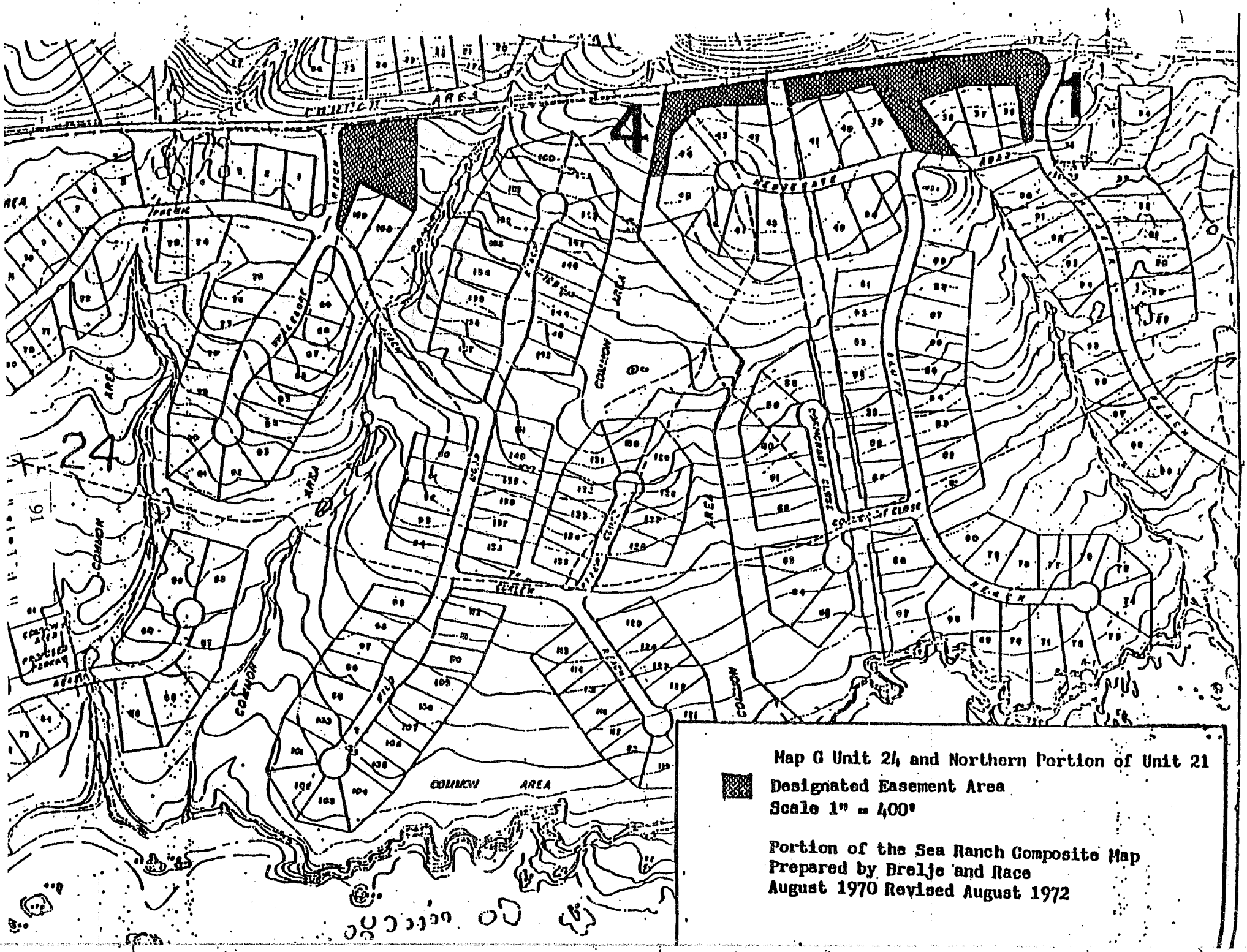
Map E Unit 18

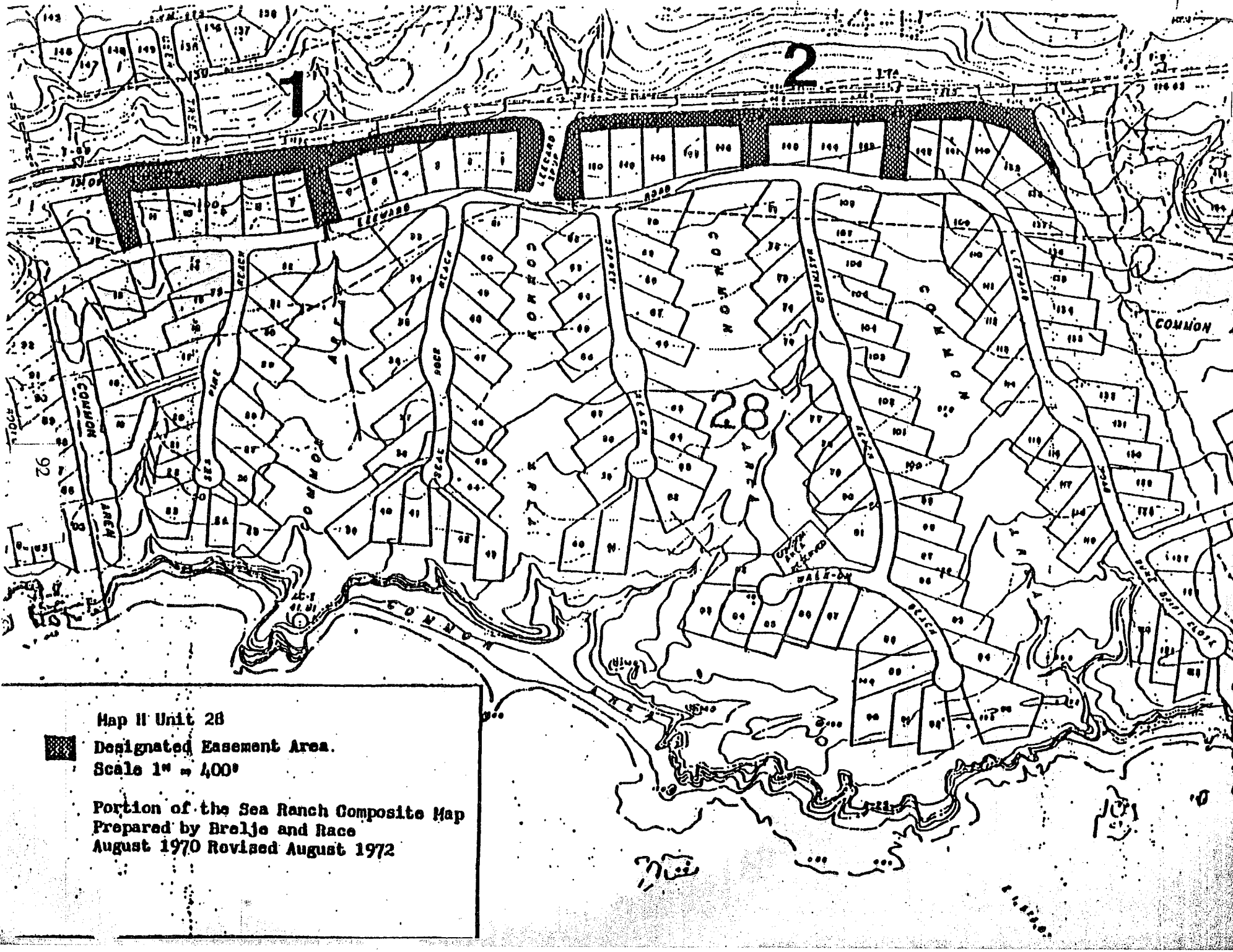
Designated Easement Area

Scale 1" = 400'

Portion of the Sea Ranch Composite Map
Prepared by Brelje and Race
August 1970 Revised August 1972


2
3
21
BEACH
BEACH
BEACH
BEACH
BEACH
Map F Unit 21 and Sea Ranch Stables
Designated Easement Area
Scale 1" = 400'
Portion of the Sea Ranch Composite Map
Prepared by Drelje and Race
August 1970 Revised August 1972


24
4
1
COMMON AREA
PACIFIC
BEACH
HEAVEREAGE
ROAD
CONCHERT CLOSE
CLIFF
COMMON AREA
Map G Unit 24 and Northern Portion of Unit 21
Designated Easement Area
Scale 1" = 400'
Portion of the Sea Ranch Composite Map
Prepared by Brelje and Race
August 1970 Revised August 1972



Map II Unit 28

Designated Easement Area.

Scale 1" = 400'

Portion of the Sea Ranch Composite Map
Prepared by Brelje and Race
August 1970 Revised August 1972

PUBLIC REVIEW DRAFT

Sonoma County
Local Coastal Plan

APPENDIX E: NATURAL RESOURCES
September 2019

Local Coastal Program
Permit Sonoma

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX E: NATURAL RESOURCES

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APPENDIX E: NATURAL RESOURCES

1. RESTORATION AND MONITORING REQUIREMENTS

Restoration and Monitoring

A Restoration and Monitoring Plan shall be required for any project involving habitat mitigation or restoration consistent with **Policy C-OSRC-5a(7)**. The Restoration and Monitoring Plan shall consist of a stand-alone document that specifies performance standards, success criteria, adaptive management, and monitoring requirements as described below. Permit Sonoma County staff may request additional information to address site-specific conditions.

Restoration and Monitoring Plan. A Restoration and Monitoring Plan shall:

(a) Be a stand-alone document that describes actual methods and practices to be employed, including performance/success criteria and adaptive management and monitoring requirements;

(b) Provide complete information, avoiding generalizations and oversimplification of data and references;

(c) Be able to be implemented by a technical specialist who has not been involved in the project;

(d) Be written in such a way that an educated layman could understand and evaluate the plan;

Key Components. A Restoration and Monitoring Plan shall include, but not be limited to, the following key components:

(a) A clear statement of the goals of the restoration for all habitat types;

(b) Characterization of the desired habitat, including at least one actual sampled site, <u>that</u> can act as both a model (with clear rationale and criteria for comparison with the project site) for the restoration and as a reference site for developing success criteria;

(c) Details about the sampling protocol used for the reference site and those methods that will be applied to the restoration site, along with a report and discussion of the data collected from the reference site;

(d) A clear rationale for selecting the proposed restoration site, including specific characteristics that make it a strong candidate for a successful restoration project;

(e) A detailed qualitative and quantitative description of the chosen restoration site prior to restoration, including existing biological resources and their conditions;

(f) Specific performance criteria and the rationale for their selection, procedures for determining performance success, a formal sampling design including analytical methods, and a reporting schedule (interim and final);

(g) Requirements for designation of a qualified restoration biologist as the Restoration Manager who will be personally responsible for all phases of the restoration;

(h) Prohibition on assignment of different phases of the restoration to different contractors without onsite supervision by the Restoration Manager;

(i) A detailed Grading Plan if the topography must be altered, including fill amounts and locations, and the locations of fill removal and disposal;

(j) A specific Erosion Control Plan if soil or other substrate will be significantly disturbed during the course of the restoration;

(k) A Weed Eradication Plan. The Plan should be designed to eradicate existing weeds and to control future invasion by exotic species, to be approved by and carried out or supervised by a restoration biologist;

(l) A Planting Plan that specifies a detailed plant palette based on the natural habitat type and reference site(s) that is the model for the restoration, using local native and non-invasive stock, and requiring that if plants, cuttings, or seed are obtained from a nursery, the nursery must certify that they are of local origin and are not cultivars. The Planting Plan shall provide specifications for preparation of nursery stock and include technical details of planting methods (e.g., spacing, mycorrhizal inoculation, etc.);

(m) An Irrigation Plan that describes the method and timing of watering, conserves water, and ensures removal of watering infrastructure by the end of the monitoring period. Where feasible, planting and seeding should be timed to take advantage of naturally-favorable conditions (e.g., prior to the onset of winter rains) to help reduce reliance on irrigation for establishment;

(n) An Interim Monitoring Plan that includes maintenance and remediation activities, interim performance goals, assessment methods, and schedule. The Interim Monitoring Plan should serve as an adaptive management plan, guiding modifications to the restoration project based upon observed and measured performance, to maximize the success of the effort;

(o) A Final Monitoring Plan to determine whether the restoration has been successful that specifies: the basis for selection of the performance criteria, types of performance criteria, procedure for judging success, formal sampling design, sample size, approval of a final report, and provision for possible further action.

2. BIOLOGICAL RESOURCE ASSESSMENT REQUIREMENTS

Biological Resources

A biological resource assessment shall be required for any project which could impact biological resources consistent with **Policy C-OSRC-5b(3)**. The biological resource assessment shall be performed by a qualified biologist and shall meet criteria described below. Permit Sonoma staff may require additional information to address site-specific conditions.

Permit Sonoma County staff may request additional information to address site-specific conditions.

Site Description. A description of the regional setting and physical characteristics of the site, including, topography (e.g. slope orientation, etc.), soil types, habitat and/or wildlife migration corridors, and microclimate.

Photographic Documentation. Photographic documentation of the existing condition of the proposed development site.

Sensitive Habitats. A list of sensitive habitats and species that could occur on the site, which can be generated from the California Natural Diversity Database, California Native Plant Society, and other reliable source(s).

Site Specific Assessment. A site-specific assessment, based upon the list of sensitive habitats and species with potential to occur on the site and at least one field visit for all parcels that are part of the proposed development. The assessment shall include a discussion of any species observations during the field visit, and whether other species are likely to be present during other times of the year, based upon habitat analysis and professional opinion. Constraints on the accuracy of the assessment (e.g., wrong season, time-of-day) should be explicitly discussed.

Trees for Sensitive Species. Identification of trees suitable for nesting or roosting or significant foraging habitat, and any evidence of sensitive bird species and raptor use.

Wetlands. Identification, assessment, and mapping of potential wetland areas in accordance with **Appendix E**, Section 4.

Field Visit. Details of the field visit, including date, time, weather, temperature, and methods employed. The field visit shall be completed in spring, unless a different

and/or additional time of year is recommended by the Sonoma County staff biologist based on the likelihood of finding particular sensitive habitats or species.

Habitat and Plant Community Types. Identification of and delineation within polygons all the habitat/plant community types (at the alliance level based on the classification methodology used in the *Manual of California Vegetation* (Sawyer et al. 2009 or subsequent editions) present on the property and generally indicate the locations of the plant communities on adjacent properties. The location of observed sensitive plant or animal species should also be shown on the map.

ESHA. Identification and delineation of the limits of potential ESHA on and immediately adjacent to the project site, based upon **Policies C-OSRC-5b(2)** through **C-OSRC-5b(5)**.

Pre and Post Project Conditions. A comparison of pre-project and post-project conditions, including identification of potential project impacts on ESHA and other biotic resources both on and off the project site, and a discussion of the duration, extent, and severity of the project's effects on the condition of the resource within its natural range locally. **(New)**

3. CRITERIA FOR ESTABLISHING BUFFER AREAS

A buffer area provides essential open space between the development and the environmentally sensitive habitat area. The existence of this open space ensures that the type and scale of development proposed will not significantly degrade the habitat area (as required by CA Coastal Act Section 30240). Therefore, development allowed in a buffer area is limited to access paths, fences necessary to protect the habitat area, and similar uses which have either beneficial effects or at least no significant adverse effects on the environmentally sensitive habitat area. A buffer area is not itself a part of the environmentally sensitive habitat area, but a "buffer" or "screen" that protects the habitat area from adverse environmental impacts caused by the development.

A buffer area should be established for each development adjacent to environmentally sensitive habitat areas based on the standards enumerated below. The width of a buffer area will vary depending upon the analysis. The buffer area should be a minimum of 100 feet for small projects on existing lots (such as one single family home or one commercial office building) unless the applicant can demonstrate that 100 feet is unnecessary to protect the resources of the habitat area. If the project involves substantial improvements or increased human impacts, such as a subdivision, a much wider buffer area should be required. For this reason, the guideline does not recommend a uniform width. The appropriate width will vary with the analysis based upon the standards. For a wetland, the buffer area should be measured from the landward edge of the wetland (Appendix D). For a stream or river, the buffer area should be measured landward from the landward edge of riparian vegetation or from the top edge of the bank (e.g., in channelized streams). Maps and supplemental information may be required to determine these boundaries. Standards for determining the appropriate width of the buffer area as follows:

1. Biological significance of adjacent lands. Lands adjacent to a wetland, stream, or riparian habitat area vary in the degree to which they are functionally related to these habitat areas. That is, functional relationships may exist if species associated with such areas spend a significant portion of their life cycle on adjacent lands. The degree of significance would depend upon the habitat requirements of the species in the habitat area (e.g., nesting, feeding, breeding or resting). This determination requires the expertise of an ecologist, wildlife biologist, ornithologist, or botanist who is familiar with the particular type of habitat involved. W here a significant functional relationship exists, the land supporting this relationship should also be considered to be part of the environmentally sensitive habitat area, and the buffer area should be measured from the edge of these lands and be sufficiently wide to protect these functional relationships. Where no significant functional relationships exist, the buffer should be extended

from the edge of the wetland, stream or riparian habitat (for example) which is adjacent to the proposed development (as opposed to the adjacent area which is significantly related ecologically).

2. Sensitivity of species to disturbance. The width of the buffer area should be based, in part, on the distance necessary to ensure that the most sensitive species of plants and animals will not be disturbed significantly by the permitted development. Such a determination should be based on the following:

    a. Nesting, feeding, breeding, resting or other habitat requirements of both resident and migratory fish and wildlife species.

    b. An assessment of the short-term and long-term adaptability of various species to human disturbance.

3. Susceptibility of parcel to erosion. The width of the buffer area should be based, in part, on an assessment of the slope, soils, impervious surface coverage, runoff characteristics, and vegetative cover of the parcel and to what degree the development will change the potential for erosion. A sufficient buffer to allow for the interception of any additional material eroded as a result of the proposed development should be provided.

4. Use of natural topographic features to located development. Hills and bluffs adjacent to environmentally sensitive habitat areas should be used, where feasible, to buffer habitat areas. Where otherwise permitted, development should be located on the sides of hills away from environmentally sensitive habitat areas. Similarly, bluff faces should not be developed, but should be included in the buffer area.

5. Use of existing cultural features to locate buffer zones. Cultural features, (e.g., roads and dikes) should be used, where feasible, to buffer habitat areas. Where feasible, development should be located on the side of roads, dikes, irrigation canals, flood control channels, etc., away from the environmentally sensitive habitat area.

6. Lot configuration and location of existing development. W here an existing subdivision or other development is largely built out and the buildings are a uniform distance from a habitat area, at least that same distance will be required as a buffer area for any new development permitted. However, if that distance is less than 100 feet, additional mitigation measures (e.g., planting of native vegetation which grows locally) should be provided to ensure additional protection. Where development is proposed in an area which is largely undeveloped, the widest and most protective buffer area feasible should be required.

7. Type and scale of development proposed. The type and scale of the proposed development will, to a large degree, determine the size of the buffer area necessary to protect the environmentally sensitive habitat area. For example, due

to domestic pets, human use and vandalism, residential developments may not be as compatible as light industrial developments adjacent to wetlands, and may therefore require wider buffer areas. However, such evaluations should be made on a case-by-case basis depending upon the resources involved, and the type and density of development on adjacent lands.

4. TECHNICAL CRITERIA FOR IDENTIFYING AND MAPPING WETLANDS AND OTHER WET ENVIRONMENTALLY SENSITIVE HABITAT AREAS

The purpose of this discussion is to provide guidance in the practical application of the definition of "wetland" contained in the California Coastal Act. The Coastal Act definition of "wetland" is set forth in Section 30121 of the Act which states:

Sec. 30121 "Wetland means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

This is the definition upon which the California Coastal Commission relies to identify "wetlands". The definition refers to lands "...which may be periodically or permanently covered with shallow water..." However, due to highly variable environmental conditions along the length of the California Coast, wetlands may include a variety of different types of habitat areas. For this reason, some wetlands may not be readily identifiable by simple means. In such cases, the Commission will also rely on the presence of hydrophytes and/or the presence of hydric soils. The rationale for this in general is that wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. For this reason, the single features that most wetlands share is soil or substrata that is at least periodically saturated with or covered by water, and this is the feature used to describe wetlands in the Coastal Act. The water creates severe physiological problems for all plants and animals except those that are adapted for life in water or in saturated soil, and therefore only plants adapted to these wet conditions (hydrophytes) could thrive in these wet (hydric) soils. Thus, the presence or absence of hydrophytes and hydric soils make excellent physical parameters upon which to judge the existence of wetland habitat areas for the purposes of the Coastal Act, but they are not the sole criteria. In some cases, proper identification of wetlands will require the skills of a qualified professional.

The United States Fish and Wildlife Service has officially adopted a wetland classification system[1] which defines and classifies wetland habitats in these terms. Contained in the classification system are specific biological criteria for identifying wetlands and establishing their upland limits. Since the wetland definition used in the classification

[1] "Classification of Wetlands and Deep-Water Habitats of the United States." By Lewis M. Cowardin, et al, United States Department of the interior, Fish and Wildlife Service, December 1979.

system is based upon a feature identical to that contained in the Coastal Act definitions, i.e., soil or substrata that is at least periodically saturated or covered by water, the Commission will use the classification system as a guide in wetland identification. Applying the same set of biological criteria consistently should help avoid confusion and assure certainty in the regulatory process. This appendix discusses the adaption of this classification system to the Coastal Act definition of "wetland" and other terms used in the Act, and will form the basis of the Commission's review of proposals to dike, fill or dredge wetlands, estuaries or other wet habitat areas.

4.1 U.S. Fish and Wildlife Classification System: Upland, Wetland/Deep-water Habitat Distinction

The United States Fish and Wildlife Service classification is hierarchical, progressing from systems and subsystems, at the most general levels, to classes, subclasses, and dominance types. The term "system" refers here to a complex of wetland and deep-water habitats that share the influence of one or more dominant hydrologic, geomorphic, chemical, or biological factors.

The Service provides general definitions of wetland and deep-water habitat and designates the boundary between wetland and deep-water habitat and the upland limit of a wetland. The following are the Services' definitions of wetland and deep-water habitats:

A. Wetlands

"Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrata is predominantly undrained hydric soil; and (3) the substrata is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

Wetlands as defined here include lands that are identified under other categories in some land use classifications. For example, wetlands and farm lands are not necessarily exclusive. Many areas that we define as wetlands are farmed during dry periods, but if they are not tilled or planted to crops, a practice that destroys the natural vegetation, they will support hydrophytes.[2]

[2] For the purpose of identifying wetlands using the technical criteria contained in this guideline, one limited exception will be made. That is, drainage ditches as defined herein will not be considered wetlands under the Coastal Act. A drainage ditch shall be defined as a narrow (usually less than 5-feet wide), manmade, non-tidal ditch excavated from dry land.

Drained hydric soils that are now incapable of supporting hydrophytes because of a change in water regime are not considered wetlands by our definition. These drained hydric soils furnish a valuable record of historic wetlands, as well as an indication of areas that may be suitable for restoration.

The upland limit or wetland is designated as (1) the boundary between land with predominantly hydrophytic cover; (2) the boundary between soil that is predominantly hydric and soil that is predominantly non-hydric; or (3) in the case of wetlands without vegetation or soil, the boundary between land that is flooded or saturated at some time each year and land that is not. Wetlands should be identified and mapped only after a site survey by a qualified botanist, ecologist, or a soil scientist (See section III. 3. or the guideline for a list of required information).[3]

B. Deep water Habitats

"Deep water habitats are permanently flooded lands lying below the Deep water boundary of wetlands. Deep water habitats include environments where surface water is permanent and often deep, so that water, rather than air, is the principal medium within which the dominant organisms live, whether or not they are attached to the substrata. As in wetlands, the dominant plants are hydrophytes; however, the substrata are considered non-soil because the water is too deep to support emergent vegetation (U.S. Conservation Service, Soil Survey Staff, 1975).

"The boundary between wetland and deep-water habitat in the Marine and Estuarine Systems (i.e., areas subject to tidal influence) coincides with the elevation of the extreme low-water of spring tide (ELIS); permanently flooded areas are considered deep-water habitats in these systems. The boundary between wetland and deep-water habitat in the Riverine, Lacustrine and Palustrine System lies at a depth of 2 meters (6.6 ft.) below low water; however, if emergents, shrubs or trees grow beyond this depth at any time, their deep-water edge is the boundary."

4.2 Wetland/Estuary/Open Coastal Water Distinction

For the purposes of mapping "wetlands" under the Coastal Act's definition of wetlands, and of mapping the other wet environmentally sensitive habitat areas referred to in the Act, including "estuaries", "streams", "riparian habitats", "lakes", and "open coastal water", certain adaptations of this classification system will be made. The following is a discussion of these adaptations.

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[3] Further details regarding the standards and criteria for mapping wetlands using the Service's classification system may be found in the following, "Mapping Conventions of the National Wetland Inventory", (undated), published by the U.S.F.W.S. The document may be obtained from the U.S.F.W.S., Regional Coordinator, Region 1, Portland, Oregon.

"Wetland as defined in Section 30121 of the Coastal Act, refers to land covered by "shallow water", and the examples given in this section include fresh, salt and brackish water marshes, mudflats and fens. A distinction between "wetland" and the other habitat areas in the Act, for example, "estuary", must be made because the Coastal Act's policies apply differently to these areas, and because the Coastal Act does not define some of these terms (such as "estuary"). A reasonable distinction can be made between "wetland" and "estuary" on the basis of an interpretation of the phrase "shallow water". Using the Service's classification system, "shallow water" would be water that is above the boundary of deep-water habitat, which would be the line of extreme low-water of spring tide[4] for areas subject to tidal influence and 2 meters for non-tidal areas. Therefore, wetland begins at extreme low-water of spring tide and "estuary" or "open coastal water" is anything deeper. The Coastal Act definition of "wetlands" would include the wetland areas of Estuaries, Palustrine, and Lacustrine ecological systems defined by the Fish and Wildlife classification system.

For the purposes of the Coastal Act, an "estuary" is a coastal wayer body usually semi-enclosed by land, but which has open, partially obstructed, or intermittent exchange with the open ocean and in which ocean water is at least occasionally diluted by fresh water runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation.

"Open coastal water" or "coastal water" as used in the Coastal Act refers to the open ocean overlying the continental shelf and its associated coastline with extensive wave action. Salinities exceed 30 parts per thousand with little or no dilution except opposite mouths of estuaries.

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[4] While the Service's classification system uses "extreme low-water of spring tide" as the datum to distinguish between "shallow-water" and "deep-water habitat", such datum is not readily available for the California coast. Therefore, the lowest historic tide recorded on the nearest available tidal bench mark established by the U.S. National Ocean Survey should be used as the datum.

Data for such bench marks are published separately for each station in loose-leaf form by the National Ocean Survey, Tideland Water Levels, Datum and Information Branch, (C23), Riverdale, MD 20840. These compilations include the description of all bench marks at each tide station (for ready identification on the ground), and their elevations above the basic hydrographic or chart datum for the area, which is mean lower low-water on the Pacific coast. The date and length of the tidal series on which the bench mark elevations are based are also given.

4.3 Wetland/Riparian Area Distinction

For the purpose of interpreting Coastal Act policies, another important distinction is between "wetland" and "riparian habitat". While the Service's classification system includes riparian areas as a kind of wetland, the intent of the Coastal Act was to distinguish these two areas. "Riparian habitat" in the Coastal Act refers to riparian vegetation and the animal species that require or utilize these plants. The geographic extent of a riparian habitat would be the extent of the riparian vegetation. As used in the Coastal Act, "riparian habitat" would include the "wetland" areas associated with Palustrine ecological systems as defined by the Fish and Wildlife Service classification system.

Unfortunately, a complete and universally acceptable definition of riparian vegetation has not yet been developed, so determining the geographic extent of such vegetation is rather difficult. The special case of determining consistent boundaries of riparian vegetation along watercourses throughout California is particularly difficult. In Southern California, these boundaries are usually obvious; the riparian vegetation grows immediately adjacent to watercourses and only extends a short distance away from the watercourse. In Northern California, however, the boundaries are much less distinct; vegetation that occurs alongside a stream may also be found on hillsides and far away from a watercourse.

For the purposes of this guideline, riparian vegetation is defined as that association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other freshwater bodies. Riparian plant species and wetland plant species either require or tolerate a higher level of soil moisture than dryer upland vegetation, and are therefore considered hydrophytic. However, riparian vegetation may be distinguished from wetland vegetation by the different kinds of plant species. At the end of this appendix, lists are provided of some wetland hydrophytes and riparian hydrophytes. These lists are partial, but give a general indication of the representative plant species in these habitat areas and should be sufficient to generally distinguish between the two types of plant communities.

The upland limit of a riparian habitat, as with the upland limit of vegetated wetlands, is determined by the extent of vegetative cover. The upland limit of riparian habitat is where riparian hydrophytes are no longer predominant.

As with wetland, riparian habitats should be identified and mapped only after a site survey by a qualified botanist, freshwater ecologist, or soil scientist.[5] (See pp. 6-9 of the guideline for a list of information which may be required of the applicant.)

4.4 Vernal Pools

Senate Bill No. 1699 (Wilson) was approved by the Governor on September 13, 1980 and the Bill added Section 30607.5 to the Public Resources Code to read:

> **30607.5:** Within the City of San Diego, the commission shall not impose or adopt any requirements in conflict with the provisions of the plan for the protection of vernal pools approved and adopted by the City of San Diego on June 17, 1980, following consultation with state and federal agencies, and approved and adopted by the United States Fish and Wildlife Service.

The Commission shall adhere to Section 30607.5 of the Public Resources Code in all permit and planning matters involving vernal pools within the City of San Diego.

All vernal pools located within the City of San Diego in the coastal zone are depicted on a map attached as Exhibit 1 to a letter from Commission staff to Mr. James Gleason, City of San Diego (4/29/30). While "vernal pool" is a poorly defined regional term, all information available to the Commission suggests that all vernal pools are distinct from vernal ponds and vernal lakes, which exist in other parts of the coastal zone (e.g., Oso Flaco Lakes in San Luis Obispo County). The Commission generally considers these habitat areas to be wetlands for the purposes of the Coastal Act, and therefore all applicable sections of the Coastal Act will be applied to these areas.

4.5 Representative Plant Species in Wetlands and Riparian Habitat Areas

This is a list of "representative" species that can be expected to be found in the various habitat areas indicated. Not all of them will be found in all areas of the State, and there are numerous others that could be included. However, this test should suffice to generally distinguish between these types of plant communities.

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[5] Identification of riparian habitat areas in Northern California presents peculiar difficulties. While Southern California riparian vegetation generally occurs in a narrow band along streams and rivers, along the major rivers in Northern California it may be found in broad floodplains, abandoned river channels and the bottoms adjacent to the channels. In forested areas, the overstory of riparian vegetation may remain similar to the adjacent forest but the understory may contain a variety of plant species adapted to moist or wet substrates. For example, a salmonberry, bayberry, willow, twinberry, and lady fern, may all be more common in the understory of riparian habitat areas than in other types of forest habitats.

A. Salt Marsh

Pickleweed (Salicornia virginica)
Glasswort (S. subterminales)
Saltgrass (Distichlis spicata)
Cordgrass (Spartina foliosa)
Jaumea (Jaumea carnosa)
Saltwort (Batis maritima)
Alkali heath (Frankenia grandifolia)
Salt cedar (Monanthocalce littoralis)
Arrow grass (Triziocnin maritimum)
Sea-bliza (Suaeda californica var pubescens)
Marsh rosemary (Limonium californicum var mexicanum)
Gum plant (Grindelia stricta)
Salt Marsh fleabane (Plucnea purpurescens)

B. Freshwater Marsh

Cattails (Typha spp.)
Bulrushes (Scirpus spp.)
Sedges (Carex spp.)
Rushes (Juncus spp.)
Spikerush (Heleochais palustris)
Pondweeds (Potamogeton spp.)
Smartweeds (Polygonum spp.)
Water Lilies (Nupnar spp.)
Buttercup (Ranunculus aquatilis)
Water-cress (Nasturium officinale)
Bur-reed (Sparganium eurycarpum)
Water parsley (Venanthe sarmentosa)
Naiads (Na)

C. Brackish Marsh

Alkali bulrush (Scirpus robustus)
Rush (Juncus balnicus)
Brass buttons (Cotula coronopifolia)
Fat-hen (Atriplex patula var hastata)
Olney's bulrush (Scirpus olneyi)
Common tula (Scirpus acutus)
Common reed (Phragmites communis)

D. Riparian

Willows (Salix spp.)
Cottonwoods (Populus spp.)
Red alder (Alnus rubra)

Box alder (Acer negundo)
Sycamore (Platanus racemosa)
Blackberry (Rubus vitifolia)
So. Black W alnut (Juglans californica) (So. Calif.)
California Bay (Umbelularia californicum) (So. Calif.)
Bracken fern (Pteris aquilinum) (Cen. Calif.)
Current (Ribes spp.)
Twinberry (Lonicera involucrata) (No. Calif.)
Lady fern (Athyrium filix-femina)
Salmonberry (No. Calif.)
Bayberry (No. Calif.)

E. Vernal Pools

Downingia (Downingia sp.)
Meadow-foxtail (Alopecurus howellii)
Hair Grass (Deschampsia danthonioides)
Quilwort (Isoetes sp.)
Meadow-foam (Limnanthes sp.)
Pogogyne (Pogogyne sp.)
Flowering Quilwort (Lilaea scilloides)
Cryptantha (Cryptantha sp.)
Loosestrife (Lythrum hyssopifolium)
Skunkweed (Navarretia sp.)
Burton-celery (Eryngium sp.)
Crouse-grass (Orcuttia sp.)
Water-starwort (Callitriche sp.)
Waterwort (Elatine sp.)
Woolly-heads (Psilocarpus sp.)
Brodiaea (Brodiaea sp.)
Tilaea (Crassula aquatica)

5. HABITAT PROTECTION GUIDELINES

5.1 Streamside Conservation Area or Riparian Corridor

Allowable uses and development within any streamside conservation area or Riparian Corridor shall be limited to uses and methods described below consistent with **Policy C-OSRC-5c(2)**.

Timber Harvest. Timber harvest operations conducted in accordance with an approved timber harvest plan.

Vegetation Removal. Vegetation removal, including as part of an integrated pest management program administered by the Sonoma County Agricultural Commissioner, necessary for continued viability of the riparian habitat.

Streamside Maintenance and Restoration. Streamside maintenance and restoration necessary for continued viability of the riparian habitat.

Fire Fuel Management. Fire fuel management where vegetation removal is limited to the minimum required for fire safety.

Habitat Alteration. Filling, grading, or dredging necessary for continued viability of the riparian habitat.

Public Recreation Facilities. Parks, public access, trails, bikeways, and other public recreational facilities dependent on the riparian resources where it can be shown there would be no long-term impacts on the viability of the riparian habitat from construction, maintenance, and public use of the facilities.

Stream and River Alteration. Limited alterations of rivers and streams, as provided in **Policy C-OSRC-5c(8)**.

Agricultural Activities. The following agricultural activities, provided that they are conducted and maintained in compliance with agricultural best management practices developed or referenced by the Agricultural Commissioner, or defined in a farm or ranch water quality plan acceptable to the Agricultural Commissioner. The Agricultural Commissioner shall determine the applicable agricultural best management practices and shall enforce the provisions of this subsection.

(a) Grazing and similar agricultural activities not involving structures or agricultural cultivation, except as defined by (9) below, and conducted in accordance with water quality protection guidelines of the Sonoma County Agricultural

Commissioner, Resource Conservation Districts, or Regional Water Quality Control Boards.

(b) Agricultural cultivation and related planting, seeding, fertilizing, weeding, irrigation, and harvesting, not including application of pesticides and herbicides, located less than 100 feet from the edge of the riparian canopy.

Development. Grading, road crossings, and utility line crossings only under one or both of the following conditions:

(a) It can be clearly demonstrated to Permit Sonoma Planning staff through having substantial functions or values as riparian habitat; and the proposed development would not have a significant, adverse impact on the functions and values of adjacent riparian habitat.

(b) A conservation plan is approved by County Permit Sonoma Planning staff that provides for the appropriate protection of biotic resources, water quality, flood management, bank stability, groundwater recharge, and other functions of riparian habitat.

Until the County adopts mitigation standards and procedures for specific land uses and riparian functions, prior to approval of the conservation plan, the Permit Sonoma staff shall consult with the California Department of Fish and Wildlife, appropriate Resource Conservation District, Sonoma County Agricultural Commissioner, and other pertinent resource agencies regarding adequacy of the conservation plan.

5.2 Diking, Filling, Draining, and Dredging of Coastal Waters, Wetlands, and Estuaries

Diking, filling, draining, and dredging of coastal waters, wetlands, and estuaries shall be permitted only in accordance with other applicable provisions of this Local Coastal Program, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to uses and methods described below consistent with **Policies C-OSRC-5d(5) and C-OSRC-5e(4)**.

(a) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(b) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(c) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings

for public recreational piers that provide public access and recreational opportunities.

(d) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(e) Mineral extraction, including sand for restoring beaches, except in ESHA.

(f) Maintenance, restoration, and enhancement of wetland function.

(g) Nature study, aquaculture, or similar resource dependent activities.

Allowable diking, filling, draining, and dredging activities shall meet the following conditions:

(a) Located outside of wildlife breeding habitat;

(b) Limited to the smallest area feasible;

(c) Utilize measures to protect water quality and remove them as soon as possible after they have served their purpose;

(d) Result in no net loss in area and value of wetlands.

5.3 Mitigations Criteria

Where wetlands fill or development impacts are permitted in conformity with the Coastal Act and any applicable Local Coastal Plan policies, require mitigation measures to compensate for the temporal and functional loss of affected wetlands and associated habitat and shall be limited to uses and methods described below consistent with **Policy C-OSRC-5d(8)**.

Net Loss in Wetlands. No net losses shall occur in wetland acreage, functions, or values. This includes both direct impacts on wetlands and essential buffers, and consideration of potential indirect effects of development due to changes in available surface water and nonpoint source water quality degradation. Detailed review of the adequacy of a proposed mitigation plan shall be performed as part of any environmental and permit review of the proposed development project to allow for a thorough evaluation of the anticipated loss, as well as the replacement acreage, functions, and values.

Restoration in Wetlands. Restoration of degraded wetlands is generally preferred to creation of new replacement wetlands, due to the greater likelihood of success in terms of ecological function.

Mitigation Implementation. Mitigation shall be implemented prior to and/or concurrently with the project activity causing the potential adverse impact to minimize any short-term loss and modification to wetlands.

Wetland Buffer. An area of adjacent upland habitat shall be protected to provide an adequate buffer for wetland functions and values. Development shall be set back the minimum distance required under **Policy C-OSRC-5e(4)** to create this buffer.

Mitigation Sites. Mitigation sites shall be permanently protected and managed for open space and wildlife habitat purposes.

Mitigation Projects. Mitigation projects must to the extent feasible minimize the need for ongoing maintenance and operational manipulation (e.g., dredging, artificial water-level controls, etc.) to ensure long-term success. Self-sustaining projects with minimal maintenance requirements constitute the primary objective and are encouraged.

Adverse Impacts on Wetlands. All plans to minimize or mitigate adverse impacts to wetland habitats shall include provisions to monitor the success of the restoration project for at least 5 years. The measures taken to avoid adverse impacts may be modified, but not weakened, if the original plans prove unsuccessful. Performance bonds or other evidence of financial responsibility shall be required for all mitigation plans involving habitat creation or enhancement, including the cost of monitoring for at least five years post-completion, or as long as necessary to ensure success criteria are achieved.

Restored Wetland Target. Mitigation shall be commensurate with adverse impacts of the wetland alteration and consist of providing similar values and greater wetland acreage than those of the wetland area adversely affected. All restored or created wetlands shall have the same or increased habitat values as the wetland proposed to be impacted.

Such mitigation measures may not be required for temporary or short-term fill or diking; provided that a bond or other evidence of financial responsibility is provided to assure that restoration will be accomplished in the shortest period of time, not to exceed 12 months.

6. ADMINISTRATIVE WAIVER OF WETLAND (100 FOOT SETBACKS) REQUIREMENTS IN THE LOCAL COASTAL PLAN IN "RURAL COMMUNITIES" AND "URBAN SERVICE AREAS" ONLY, WHERE ROADS, TOPOGRAPHY, OTHER DEVELOPMENT EXISTS BETWEEN PROPERTY DEVELOPMENT AREA AND WETLAND

In enforcing the 100 foot setbacks from wetlands and 300-foot environmental requirement near wetlands in urban areas, the Director of the Permit and Resource Management Department may, through aerial photos, topographical maps, or other means make a determination, subject to review and approval by the Executive Director of the Coastal Commission, that development will not affect the riparian area or wetland because:

a. Other developed lots or roads exist between the proposed development and the wetland. This standard shall be used cautiously - at the outer edge of the 300-foot limit. If there is any reasonable doubt the proposal would affect the wetlands or riparian area, an environment assessment shall be undertaken and include appropriate mitigation measures.

b. Topography is such that it is highly unlikely that development could affect the wetland.

The policies shall not be waived outside designated "rural community" and "urban service areas" on the Coastal Plan Land Use Map.

7. REVISION OF MAPPED ENVIRONMENTALLY SENSITIVE HABITAT AREAS

If there is no obvious mapping error which can be determined from review of aerial photos, the burden of proof is on the applicant to redefine the boundaries of a mapped environmentally sensitive habitat area.

To define wetlands, the applicant shall use the California Coastal Commission Criteria for identifying and mapping wetlands and other wet environmentally sensitive habitat areas. (See Appendix E, Section 4) The California Coastal Act defines wetlands as "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

Riparian areas refer only to riparian vegetation. The geographical extent of a riparian habitat would be where riparian vegetation comprises at least 50% of the ground (shade) cover. Other habitats may be defined from Coastal Plan definitions.

Small drainage ways, usually less than five feet wide, with no evidence of riparian vegetation, are not to be considered riparian corridors. Unless there is a pooled or marshy area, they are probably also not wetlands as defined by the guidelines.

Where, during the course of review of a project, Coastal staff discovers an unmapped environmentally sensitive habitat area, staff shall utilize Coastal Plan habitat definitions and coastal Commission guidelines (for wet environmentally sensitive habitat areas), to define such area. Applicable Coastal Program restrictions would then apply.

Official changes in Open Space Maps may occur when Local Coastal Plan amendments are considered.

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PUBLIC REVIEW DRAFT

Sonoma County
Local Coastal Plan

APPENDIX F: SHORELINE PROTECTION STRUCTURES GUIDELINES
September 2019

Local Coastal Program
Permit Sonoma

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX F: SHORELINE PROTECTION STRUCTURE GUIDELINES

The construction, reconstruction, expansion, alteration, and/or replacement of a shoreline protective device, including seawalls, revetments, breakwaters, groins, bluff retention devices, deep piers/caissons and other shoreline protection structures for coastal erosion control and hazards protection shall be allowed only if all of the following criteria of the California Coastal Commission and County of Sonoma are met:

(1) The structure would serve or protect only an existing (i.e., in existence prior to the Coastal Act on January 1, 1977) principally permitted use, public road, or public beach.

(2) The siting and design of the proposed structure takes into account projected future changes in sea level based on the most up-to-date science and agency guidance.

(3) The design of the proposed structure would not significantly alter the natural landform on which it is placed, and would not impact local sand supply.

(4) The proposed structure would not have any of the following environmental effects:

   a. Impede lateral beach access.

   b. Reduce public access to the coastal environment.

   c. Significant impacts on cultural and paleontological resources.

   d. Significant impacts on wetlands, marine habitats and other significant resources or habitat areas.

   e. Adversely affect adjacent or other sections of the shoreline.

   f. Create a hazard in the area in which it is built.

(5) A certified engineering geologist report is prepared which:

   a. Demonstrates that the primary structure is in imminent risk from coastal erosion.

   b. Contains at a minimum an alternatives analysis which includes the alternatives of: 1) no action; 2) relocating or demolishing the primary structure subject to the hazards; 3) removal of the portion of the development that is subject to the hazard; or 4) other non-structural alternatives such as sand replenishment or managed retreat; and concludes that a non-structural alternative is not feasible and that the device is the least environmentally damaging feasible alternative.

c. Provides evidence that the proposed protection structure is designed and can be constructed and maintained to withstand the specific range of coastal conditions which can be expected to occur, including sea level rise.

d. Includes measures which ensure that the protection structure can and will be maintained through its design life.

(6) A deed restriction or other legally binding document is recorded on the property which requires the following:

a. Owner is to be responsible, including financially, for monitoring and maintaining the shoreline protection structure.

b. Owner is to be responsible, including financially, for removing the shoreline protection structure if it fails or has an adverse effect on other properties which cannot be mitigated; the use it protects is abandoned; or the County, State Lands Commission, or Coastal Commission determines the structure should be removed.

(7) The owner posts a cash bond with the County in an amount equal to the total cost plus inflation of removing the shoreline protection structure to guarantee that the money is available for that purpose.

(8) The shoreline protective device shall be regularly monitored by an engineer or engineering geologist familiar and experienced with coastal structures and processes. Monitoring reports to the County and the Coastal Commission shall be required every five years from the date of coastal permit issuance until the coastal permit expiration, which shall evaluate whether or not the shoreline protective device is still required to protect the existing structure it was designed to protect.

(9) Shoreline protective devices shall be required to mitigate impacts to shoreline sand supply, public access and recreation, and any other relevant coastal resource impacts in 20-year increments, starting with the building permit completion certification date. Permittees shall apply for a coastal permit amendment prior to expiration of each 20-year mitigation period, proposing mitigation for coastal resource impacts associated with retention of the shoreline protective device beyond the preceding 20-year mitigation period, and such application shall include consideration of alternative feasible mitigation measures in which the permittee can modify the shoreline protective device to lessen its impacts on coastal resources.

PUBLIC REVIEW DRAFT

Sonoma County
Local Coastal Plan

APPENDIX G:
BODEGA BAY FOCUSED VULNERABILITY ASSESSMENT AND ADAPTATION STRATEGIES
September 2019

Local Coastal Program
Permit Sonoma

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

County of Sonoma

Bodega Bay Focused Sea Level Rise Vulnerability Assessment and Adaptation Strategies

April 30, 2017

Funded by:
California Ocean Protection Council

Prepared by:
Sonoma County Permit and Resource Management Department
Lisa Posternak, Planner III

Sea Level Rise Adaptation Planning Grant (CO300500)

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Executive Summary

This Sonoma County Coast Focused Vulnerability Assessment has been prepared under the County's California Ocean Protection Council Sea Level Rise Adaptation Planning Grant. It focuses on Bodega Bay, the coastal community most at risk from the impacts of sea level rise based on the results of the Sonoma County Coast *General Vulnerability Assessment*.

This Vulnerability Assessment: (1) identifies the coastal areas and assets in Bodega Bay exposed to sea level rise and storm events; (2) analyzes the location and extent of assets projected to be inundated by sea level rise and flooded by storm events; (3) assesses the impacts of inundation and flooding; and (4) identifies potential adaptation measures to minimize the risks and impacts of inundation and flooding.

Sea levels are expected to rise over 6 feet by the end of this century. The sea level rise and storm scenarios used in the analysis are based on: (1) the range of sea level rise projections for California adopted by the National Research Council in 2012; and (2) the Our Coast Our Future website and tool that uses the U.S. Geological Survey's Digital Elevation Model and Coastal Storm Modeling System. The model incorporates several factors that can be analyzed individually and collectively under various scenarios, including: sea level rise, tides, storm surge, El Niño effects, wave set up, and wave run up. Sonoma County selected five sea level rise and storm scenarios that cover a full range of impact to affected coastal communities by the end of the century.

The northern section of Bodega Bay is referred to as the Bodega Harbor Area. It contains all of the marinas, the only rural residential development, and the largest area of urban residential development in the Bodega Bay study area. By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 59% to 99% of marinas; 28% to 76% of County roads; 53% of a coastal wetland, and less than 1% to 14% of residential areas.

The eastern section of Bodega Bay is referred to as the Highway 1 Area. It contains all of the commercial development and the only public utility (Bodega Bay PUD Wastewater Treatment Plant) in the Bodega Bay study area. By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 9% to 70% of commercial areas, 51% of the Bodega Harbour Yacht Club, 13% to 22% of residential areas, and 2% of a public access and recreation area (Dredge Spoil Disposal Ponds Site).

The southern section of Bodega Bay is referred to as the County Regional Parks Area. It contains the only County parks (Westside and Doran Beach Regional Parks) and institutional development (U.C. Davis Bodega Marine Laboratory) in the Bodega Bay study area. By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 20% to 73% of coastal wetlands, almost 100% of Westside Regional Park and 36% of Doran Beach Regional Park, 26% to 39% of County roads, 23% of the Links at Bodega Harbor Golf Course, and less than 1% of the U.C. Davis Bodega Marine Laboratory.

1. Introduction

Sea Level Rise Adaptation Planning Grant

The June 2016, *General Sea Level Rise Vulnerability Assessment for the Sonoma County Coast* prepared by staff evaluated coastal areas, communities, land uses, development, public infrastructure, and habitats most vulnerable to sea level rise impacts. This General Vulnerability Assessment also identified Bodega Bay and Jenner as the communities most at risk from the impacts of sea level rise. Permit Sonoma chose Bodega Bay as the first community for a Focused Vulnerability Assessment. This Focused Vulnerability Assessment for Bodega Bay is based on the process outlined in the California Coastal Commission's Sea Level Rise Policy Guidance, and incorporates the results of the *Focused Vulnerability Assessment: Sonoma County* (July 29, 2016) by the Center for Ocean Solutions (COS). **Figure 1** shows the Bodega Bay Study Area.

Local Coastal Plan Update

The California Coastal Commission recently adopted policy guidance on assessing and addressing sea level rise risks in local communities. While only advisory, the guidance includes steps for analyzing sea level rise in Local Coastal Plans, including choosing a range of sea level rise projections, identifying potential impacts, and assessing risks coastal habitats and development. With this analysis, the guidance provides example adaptation measures and Local Coastal Plan policy options to use when drafting updated or new Local Coastal Plan policies for certification with the Coastal Commission. The guidance further provides steps to implementing the policy in an updated Local Coastal Plan, monitoring, and amending the Local Coastal Plan as scientific and engineering fields advance our knowledge of adapting to sea level rise. The Local Coastal Plan regulates lands in the Coastal Zone as defined under California Law.

In the last few years, Sonoma County has focused on climate change and sea level rise. The County is updating its Local Coastal Plan for several reasons, one of which is to reflect the potential impacts of sea level rise and storm events on its coastal residents, infrastructure, and natural resources and to develop appropriate policies and actions to avoid and minimize those impacts. This Focused Vulnerability Assessment informs the Sonoma County Local Coastal Plan Update, and is part of an ongoing scientific, engineering, and public process to understand and prepare for the impacts of sea level rise.

This Focused Vulnerability Assessment tracks the Coastal Commission's Guidance, is consistent with planning standards used in hazards mitigation planning, and will be used to inform policies in the Local Coastal Plan Update. The Assessment is advisory and not regulatory.

Climate Change and Sea Level Rise

Climate change is affecting natural and built systems around the world, including the California coast. In the past century, average global temperature has increased about 1.4°F, and average global sea level has increased 7 to 8 inches. Sea level at the San Francisco tide gauge has risen 8 inches over the past century, and the National Research Council (NRC) projects that by 2100, sea level in California south of Cape Mendocino may rise 66 inches. Recent research shows that

in the worst case scenario, sea-level could rise 70 inches by 2100. The two major causes of global sea level rise are thermal expansion of warming oceans and the melting of land-based glaciers and polar ice caps. While Sonoma County's ocean coast regularly experiences erosion, flooding, and significant storm events, sea level rise would exacerbate these natural processes, and lead to significant social, environmental, and economic impacts. The third National Climate Assessment cites strong evidence showing that the cost of doing nothing exceeds the costs associated with adapting to sea level rise by 4 to 10 times. Therefore, it is critically important that Sonoma County plan and prepare to adapt to sea level rise to ensure public resources and coastal communities are resilient for present and future generations.

The Sonoma County coastline encompasses two characteristically distinct coasts (1) north of the Russian River is a rocky coast with tall bluffs punctuated with small coves; and (2) south of its mouth the coastline if comprised of low-lying grassland, sandy dunes, and pocket beaches. Exposure to coastal erosion and inundation caused by sea level rise and storm events differs significantly along the Sonoma County coastline, with distinct breaks north and south of the mouth of the Russian River. North of Jenner, the high rocky cliffs shelter much of the coastline, and extend into a rocky continental shelf dominated by kelp beds to the border with Mendocino County. The coastline south of Jenner includes the Russian River Estuary and sediment deposition influences hydrology and fisheries through inland Sonoma County. Moving south of Jenner the open coast and low lying beaches allow for greater coastal exposure; and habitats include beaches, high and low dunes, and wetlands extending south along the coast around Bodega Head and to the border with Marin County. These habitats provide some buffering of the coastline from the effects of erosion and inundation. The inland extent of Bodega Harbor is open to wave erosion due to the shallow waters and small amount of fetch. (Center for Ocean Solutions 2016a & b).

The high dunes at Doran Beach along the southern extent of Bodega Bay protect the inner harbor from northwest swells and the impacts of waves. This protection has allowed for the formation of diverse and complex inner harbor tidal mudflat, eelgrass beds, and salt marsh habitats. These habitats host a diversity of species including endangered salmonids, shorebirds, and occasionally seals, which feed on shellfish and invertebrates and seek refuge in the inner harbor. These inner harbor habitats also buffer the effects of shoreline erosion, sedimentation, and inundation during storm events by absorbing excess sediment and the nutrients necessary for production of eelgrass, shellfish, and invertebrates. (Center for Ocean Solutions 2016a & b).

2. Methods

This Focused Vulnerability Assessment process is guided by the California Coastal Commission's August 2015 *Sea Level Rise Policy Guidance*, similar to the California Emergency Management Agency's July 2012 *Climate Adaptation Planning Guide*, used by Marin County in its *Draft Marin Coast Sea Level Rise Vulnerability Assessment*. The Focused Vulnerability Assessment provides background and analysis for individuals, communities, Sonoma County, and local and state agencies to use in planning for and adapting to sea level rise.

This Focused Vulnerability Assessment does not address erosion. In addition, it does not address property under the jurisdiction of the state or federal government, including the Sonoma Coast State Park and Beach and U.S. Coast Guard Station.

In order to organize the analysis of Bodega Bay for this Assessment, we sectioned the community into three Areas: the Bodega Harbor Area to the north, Highway 1 Area to the east, and County Regional Parks Area to the south **(Figure 2)**.

Modeling

Table 1 shows the range of sea level rise projections for the San Francisco, California region adopted by the National Research Council (NRC) in 2012. The NRC projections are the basis for the projections used in this Focused Vulnerability Assessment. Given the uncertainty in the magnitude and timing of future sea level rise, Sonoma County (and Marin County) used a scenario-based approach to assess a range of potential sea level rise impacts. Assessing a range of scenarios provides a framework for analyzing the vulnerability of Sonoma County's assets to sea level rise and storm events. The five scenarios selected for this Vulnerability Assessment are derived from the U.S. Geological Survey's (USGS) Coastal Storm Modeling System (CoSMoS; Storm Model).

Table 1. Sea Level Rise Projections for San Francisco, CA Region

Year	Projected Rise in Sea Level
2030	0.13 – 0.98 feet (4 – 30 cm)
2050	0.39 – 2 feet (12 – 61 cm)
2100	1.38 – 5.48 feet (42 – 167 cm)

Source: National Research Council (2012)

Sea level rise projections used in this analysis are from the Our Coast Our Future (OCOF) website and tool. OCOF was developed through a partnership of several notable institutions and agencies and represents the best available sea level rise and coastal storm science for the Bay Area Region and other parts of coastal California. OCOF uses the USGS Digital Elevation Model (DEM; Elevation Model) constructed for the region with 2-meter horizontal grid resolution and the Storm Model to produce a combination of 40 different sea level rise and storm scenarios. These scenarios include sea level rise, tides, storm surge, El Niño effects, wave set up, and wave run up. High quality elevation data incorporated into the Elevation Model delineates the current mean higher high water (MHHW) tidal elevation plus sea level rise heights and provides the option to add storm scenarios. Because the Elevation Model uses the highest tide measured, properties exposed to MHHW could be dry at lower tides. It is important to note that this tool only accounts for ocean levels and does not incorporate impacts from creek flooding or changes in the coastline (geomorphology) as erosion continues.

Sonoma County selected the sea level rise and storm scenarios in **Table 2** based on the National Research Council sea level rise projections in **Table 1** and the geographic extent and variety of storm severity. When combined, these scenarios cover a full range of impact to affected coastal communities by the end of this century. Scenarios 2-5 are the same scenarios Marin County used in its *Marin Coast Sea Level Rise Vulnerability Assessment*. Scenario 1 represents existing conditions. Scenario 2 represents near-term, and corresponds to the 2030 National Research Council projected range in sea level rise. Scenario 3 is considered medium-term and is within the 2050 National Research Council sea level rise range. Scenarios 4 and 5 represent the long-term. Scenario 4 corresponds to the 2100 National Research Council sea level rise range. Scenario 5 represents sea level rise by 2100 based on additional research theorizing the worst case scenario for sea level rise summarized by the California Ocean Protection Council Science Advisory Team Working Group in *Rising Seas in California – An Update on Sea Level Rise Science* (Griggs et. al. 2017).

The Scenarios include storm events because they have the potential to cause catastrophic damage and hazardous coastal conditions that could increase in geographic extent as sea-levels rise. The storm frequencies presented in **Table 2** are the annual, 20-year, and 100-year storms. An annual storm has a high likelihood of happening in most years; a 20-year storm has a five percent chance of happening annually; and a 100-year storm has a one percent chance of happening in any given year.

Future storm conditions depend on the complicated interaction between the Earth's atmosphere and ocean systems, which the Storm Model attempts to simulate. Replicating storm scenarios

within the model is also difficult due to altered wave conditions varying between different storm events. Lower lying portions of Bodega Bay may experience more inundation during a five or 10-year storm event due to increased water levels, wave heights, storm surges, and altered patterns of erosion and accretion of the ocean floor. For example, the Storm Model has higher wave heights offshore than the 20-year storm; however the waves approach the coast from a more northerly direction.

Table 2. Sea Level Rise and Storm Scenarios Used in Focused Vulnerability Assessment

Scenario	**Projected Sea Level Rise**		**Storm Event**
	feet	**cm**	
1 - 2016	0	0	annual
2 - 2030	0.83	25	20-year
3 - 2050	1.67	50	20-year
4 – 2100 Best Case	3.33	100	100-year
5 – 2100 Worst Case	6.56	200	100-year

Assessment

An asset's vulnerability depends on its exposure, sensitivity, and its capacity to adapt to sea level rise and storm events. This Focused Vulnerability Assessment analyzes almost 40 exposed Residential, Commercial, Marine Industrial, Public Utility, Public Infrastructure, Public Access & Recreation, Private Recreation, and Wetland assets. We identified the assets that could be vulnerable to sea level rise and storm events by developing a "Sonoma County Sea Level Rise Viewer" based on the National Oceanic and Atmospheric Administration (NOAA) *Sea Level Rise and Coastal Flooding Impacts Viewer.* Geographic data layers for parcels, building footprints, land use, public & protected lands, trails, infrastructure, schools, riparian corridors, wetlands, and marine habitats were added.

To assess the potential flooding or inundation of an asset other than roads and the California Coastal Trail (Coastal Trail), a GIS shapefile was created and then entered into the Storm Model on the OCOF site to produce an "OCOF Sea Level Rise and Scenario Report". The OCOF Report includes area and elevation information and two tables: "Projected Percent Area Flooded for the Selected Area" and "Projected Average Flood Depth for the Selected Area." Based on that information, a Table was prepared showing projections for inundation (sea level rise alone) and flood (sea level rise plus storm event) as percent of the selected area.

Permit Sonoma staff assessed the potential temporary flooding or permanent inundation of County Roads or the Coastal Trail (linear assets), by measuring the total length of the road or trail on the Sonoma County Sea Level Rise Viewer. Then using the OCOF site to measure the projected temporary flooding or permanent inundation of the road or trail, staff then went back to the Sonoma County Coast Sea Level Rise Viewer to approximate and measure the extent of the flood or inundation impacts. Staff added the lengths of sections of affected road or trail together to obtain the total length of affected road or trail. Staff used the total affected length divided by the entire road length or trail to obtain the percent of road or trail inundated or flooded. Using the process above, Staff formulated the potential temporary flooding or permanent inundation of linear assets for all Sea Level Rise and Storm Scenarios in **Table 2**.

Coastal Wetland Categories

Data on the location and size of coastal wetlands is from the San Francisco Estuary Institute and Aquatic Science Center, part of the California Aquatic Resource Inventory (CARI; Inventory). The Inventory is a compilation of wetlands, streams, and riparian areas in California. This statewide dataset pulls together many sources of wetland data. In the case of Sonoma County, the National Wetlands Inventory, originally from the U.S. Fish and Wildlife Service, is the source of the wetland data. The National Wetlands Inventory was last updated in 2010 and was acquired by the San Francisco Estuary Institute in 2011. **Table 3** identifies the California Aquatic Resource Inventory wetland classifications comprising the Coastal Freshwater Marsh, Coastal Brackish Marsh, and Bodega Harbor Tidal Mudflat wetland categories.

Coastal Brackish Marsh

Table 3. California Aquatic Resource Inventory Classifications Comprising Wetland Categories

Coastal Freshwater Marsh
Freshwater Emergent Wetland - Depressional Seasonal Natural Emergent Freshwater Emergent Wetland - Depressional Seasonal Natural Emergent Freshwater Emergent Wetland - Depressional Seasonal Unnatural Emergent Freshwater Forested/Shrub Wetland - Depressional Seasonal Natural Shrub-Scrub Freshwater Forested/Shrub Wetland - Depressional Seasonal Natural Shrub-Scrub Freshwater Forested/Shrub Wetland - Depressional Seasonal Unnatural Shrub-Scrub
Coastal Brackish Marsh
Estuarine and Marine Wetland - Estuarine Saline Natural Intertidal Emergent Estuarine and Marine Wetland - Estuarine Saline Natural Intertidal Emergent
Bodega Harbor Tidal Mudflat
Estuarine and Marine Wetland - Estuarine Saline Unnatural Intertidal Non-Vegetated Estuarine and Marine Wetland - Estuarine Saline Unnatural Intertidal Vegetated

3. Bodega Bay Community Profile

Bodega Bay is a small rural community and harbor located approximately 40 miles northwest of San Francisco and 20 miles west of Santa Rosa in Sonoma County, California. The Bodega Bay Census Designated Place (CDP) has a total area of 12.5 square miles, of which 8.3 square miles of it is land and 4.2 square miles of it is water. The population of Bodega Bay was 1,411 in 2014 and 1,077 in 2010. Residential density is concentrated along Bay Flat Road and Westshore Road and near Highway 1.

Bodega Bay is a marine habitat used for navigation, recreation, and commercial and sport fishing. It is about 5 miles across and straddles the boundary between Sonoma County to the north and Marin County to the south, connecting to the mouth of Tomales Bay in Marin County. Bodega Head protects the Bay on its north end from the Pacific Ocean. Bodega Head shelters the harbor and separates it from the main bay by a jetty. The village of Bodega Bay sits on the east side of the harbor. North of the village lies a long coastal exposure of alternating rock outcrops and the sandy beaches of Sonoma Coast State Park. On the coast immediately north of Bodega Head is the University of California's Bodega Bay Marine Laboratory.

All coastal drainages between Salmon Creek and Point Reyes flow into Bodega Bay, creating a complex of fresh and brackish water marshes, tidal mudflats and coastal wetlands. Two main freshwater inputs are Johnson Gulch to the north and Cheney Gulch towards the east. The Bodega Harbor estuary empties southerly into Bodega Bay. The Estero Americano and Estero de San Antonio empty into Bodega Bay along its eastern side and Tomales Bay flows northerly into Bodega Bay. The Tomales Bay Peninsula lies across from Bodega Head, and together they create a neck for the outflow and allow Bodega Bay to function as a marine estuary (2014 Pacific Coast Joint Venture Strategic Plan). **Figures 3 and 4** show the coastal wetlands in the Bodega Bay study area.

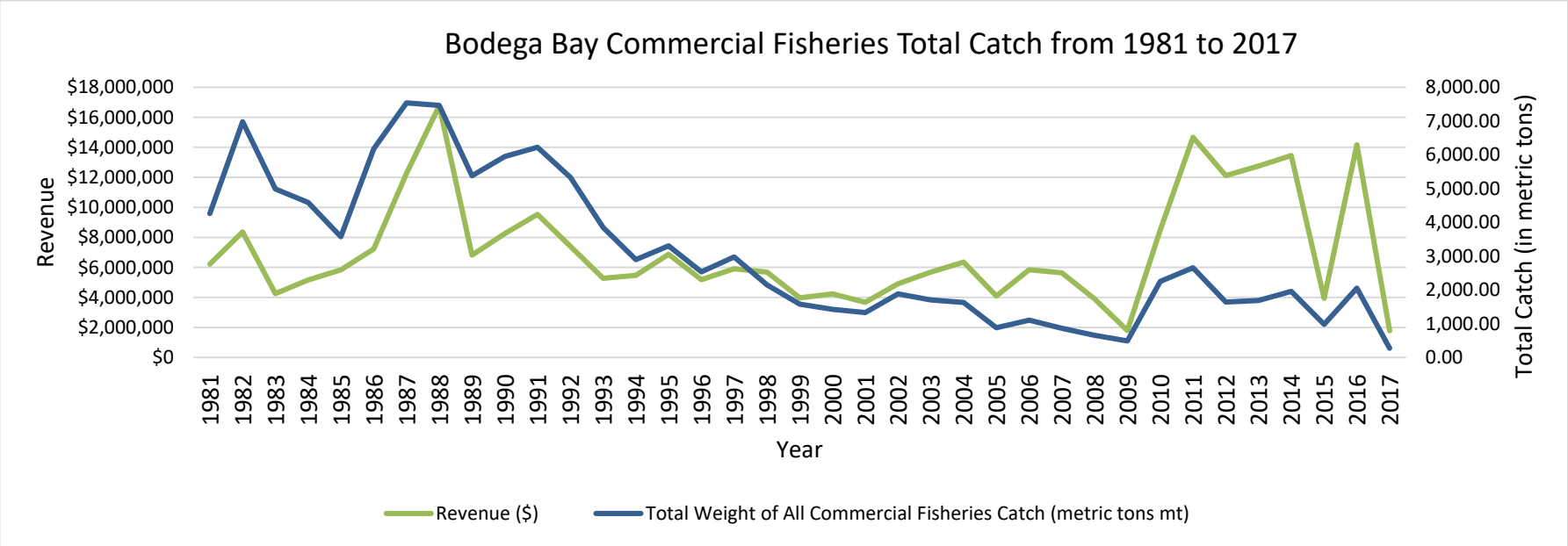
Commercial fishing remains a major component of Bodega Bay's economy. As of 2007, there was one commercial fish processing plant to which 317 commercially registered vessels delivered fish. **Figure 5** depicts the total catch in Bodega Bay commercial fisheries from 1981 to 2017. The sharp decline in 2015 is due to state officials closing the Dungeness crab fishery due to a harmful algal bloom. **Table 4** shows the 2016 total catch by west coast fishery and revenue in Bodega Bay commercial fisheries.

Table 4. 2016 Total Catch (Metric Tons) and Revenue in Bodega Bay Commercial Fisheries

West Coast Fishery	Total Catch (metric tons)	Revenue
Coastal Pelagic	0	$0
Crab	1,816.5	$1,047,625
Groundfish	89	$639,074
Highly Migratory Species	0	$0
Rockfish	3.4	$13,759
Salmon	48.9	$836,848

Source: Pacific Fisheries Information Network (2017)

Figure 5. Bodega Bay Commercial Fisheries: Total Catch (Metric Tons) 1981 to 2017



Marinas in Bodega Bay include the private Porto Bodega Marina & RV Park; and Mason's Marina, Spud Point Marina, and Bodega Bay Sport Fishing Center managed by Sonoma County Regional Parks. At Spud Point Marina, 80 percent of the berths are allocated to commercial fishing. Sonoma County Regional Parks also provides public boat launches at Doran Beach and Westside Regional Parks.

Commercial fishing remains a major component of Bodega Bay's economy. Expanding recreational opportunities to State and County parks in the region has increased exponentially in recent years, substantially increasing tourism to Bodega Bay. Sonoma Coast State Park encompasses 10,272 acres immediately west and north of the bay. Sonoma County Regional Parks manages Doran Beach Regional Park at the south end of the harbor and Westside Regional Park on the west side of the harbor.

About 20 businesses in Bodega Bay offer overnight accommodations including inns, hotels, bed and breakfasts, and an RV park. Four campgrounds provide low cost visitor-serving accommodations. California State Parks manages the Dunes and Wrights Beach Campgrounds in Sonoma Coast State Park, and Sonoma County Regional Parks manages the campgrounds at Doran Beach and Westside Regional Parks. **Figures 6-7** show the locations of the California Coastal Trail and County Regional Parks trails in the Bodega Bay study area.

Annual festivals demonstrate the economic and cultural significance of fishing to the Bodega Bay community: the Fisherman's Festival and Blessing of the Fleet for the approaching salmon season in April and The Seafood, Art, Music, and Wine Festival in August.

Spud Point Marina

4. Flooding and Sea Level Rise Inundation: Impacts at Bodega Bay

Bodega Harbor Area

The Bodega Harbor Area is the North Bay, encompassing the area from Spud Point Marina to the north end of the bay, and to the Bodega Bay Sports Fishing Center on the east. Bodega Harbor Area contains all of the Marine Industrial uses (marinas), the only Rural Residential development, and the largest area of Urban Residential development in Bodega Bay. Additional Bodega Harbor Area assets include Wetlands, County Roads, and County Trails. **Figure 8a** shows the location of and number assigned to each asset.

Assets in the Bodega Harbor Area vulnerable to sea level rise and storm events include Westshore, Eastshore, and Bay Flat Roads; public and private marinas; residential development; and coastal freshwater marsh and tidal mudflat. Sea level rise will impact these valuable assets leading to potential impacts on access; land use; habitats, including critical habitat; recreation and tourism; and commercial fishing. The floating docks at some of the marinas are resilient to rising tides; however, the residential development and the low-cost visitor-serving facilities at marinas are not as adaptable. Some residential buildings may not have direct impacts from sea level rise due to their elevation, but could become isolated and cut-off from all services due to compromised access and damaged utilities.

Bodega Harbor Area

Sea level rise will increase the salinity in freshwater sources, such as Johnson Gulch and Cheney Gulch, the two main sources freshwater to the harbor. The U.S. Fish and Wildlife Service have designated the coastal brackish water marsh at Johnson Gulch along Eastshore Road (FWMARSH-1 on **Figure 8a**) as a tidewater goby (*Eucyclogobius newberryi*) recovery sub-unit. Johnson Gulch marsh supports special status aquatic and terrestrial species. Bodega Harbor also provides rearing habitat for listed salmonids. The flow of freshwater from Johnson and Cheney Gulches into Bodega Harbor has created brackish tidal mudflats at their convergence. As sea level rise results in higher tides, the brackish mixing of these two systems will occur further upstream, which would impact the type and diversity of plant and animal species in the gulches, potentially jeopardizing critical habitat for listed species.

The sections below provide information on the percentage area of each asset that would be inundated or flooded as a result of sea level rise and storm events and potential impacts.

Coastal Wetlands

The Bodega Harbor Area contains two types of coastal wetlands exposed to sea level rise and storm events: (1) Coastal Freshwater Marsh and (2) Bodega Harbor Tidal Mudflat.

Coastal Freshwater Marsh

Coastal Freshwater Marsh occurs in two locations: 1) the boat storage area at the eastern end of Porto Bodega Marina & RV Park to the east toward State Highway 1 (FWMARSH-1 on **Figure 8a**); and 2) north and west of Westshore Road near where it becomes Bay Flat Road (Rail Ponds; FWMARSH-2). The Rail Ponds have some characteristics of coastal brackish marsh. The Rail Ponds area was originally a coastal marsh connected to Bodega Harbor. Development of Westshore Road in 1963 separated the Rail Ponds from the bay shoreline. The Rail Ponds are labeled coastal freshwater marsh but are tidally influenced by an existing connection to Bodega Harbor. They receive freshwater from groundwater inputs and saltwater through culverts carrying the tidal flow under Westshore Road from Bodega Harbor (California Coastal Commission 2012). Vegetation in the Rail Ponds includes coastal brackish marsh plant species - salt grass (*Distichlis spicata*), franconia (*Frankenia salina*), pickleweed (S*alicornia sp.*), and cordgrass (*Spartina foliosa*).

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Coastal Freshwater Marsh. **Table 5** shows the projected percent of marsh area permanently inundated by sea level rise and with storm event flooding. **Figure 8b** illustrates the projected permanent inundation, and **Figure 8c** illustrates the projected permanent inundation with storm event flooding of Coastal Freshwater Marsh under Scenario 5 (2100 Sea Level Rise Worst Case).

FWMARSH-1 is not projected to be at risk of permanent inundation from sea level rise by 2100. However, in 2100 the marsh would experience periodic flooding during storm events at less than 1% of the marsh under the best case scenario and 3% under the worst case scenario.

FWMARSH-2 is projected to be at risk of inundation from sea level rise by 2100. In 2030 the marsh would not be permanently inundated by sea level rise and 17% of the marsh would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 37% of the marsh would be permanently inundated and 53% would be subject to periodic flooding during storm events. In 2100 under the worst case scenario, 53% of the marsh would be permanently inundated and subject to periodic flooding.

Coastal habitats are likely to differ in their vulnerability and response to climate related stressors depending on coastal exposure and local conditions. For example, as sea level rises, coastal deltas and mudflats are likely to be lost to open water. Wetlands and coastal dunes exposed to coastal hazards can migrate upslope given a path free of barriers from coastal development or shoreline hardening. The California Department of Fish and Wildlife has identified wetlands as a sensitive natural community that is vulnerable to further degradation from sea level rise inundation, flooding, and development.

Table 5. Bodega Harbor Area: Coastal Freshwater Marsh – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*FWMARSH-1* *9.95 acres*		*FWMARSH-2* *1.97 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----	----	----
2 - 2030	0.83	25	20-year	----	----	----	17%
3 - 2050	1.67	50	20-year	----	----	----	39%
4 – 2100 Best Case	3.33	100	100-year	----	< 1%	37%	53%
5 – 2100 Worst Case	6.56	200	100-year	----	3%	53%	53%

Bodega Harbor contains about 107 acres of Coastal Freshwater Marsh and 70 acres of Coastal Brackish Marsh. There are three major ways by which sea level rise can disrupt a marsh: inundation, erosion, and saltwater intrusion. The natural impact of a rising sea is to cause marsh systems to migrate upward and inland. Sea level rise increases the frequency and/or duration of tidal flooding throughout a marsh. If no inorganic sediment or peat is added to the marsh, the seaward portions become flooded so much that marsh grass drowns and marsh soil erodes; portions of the high marsh become low marsh; and upland areas immediately above the former spring tide level are temporarily flooded at spring tide, becoming high marsh. If nearby rivers or floods supply additional sediment, sea level rise slows the rate at which the marsh advances seaward.

Wetlands can grow upward fast enough to keep pace with the slow rise in sea level that most areas have experienced in the recent past. Thus, areas that might have been covered with two or three meters of water (or more) have wetlands instead. If sea level rise accelerates only slightly, marshes that are advancing today may have sufficient sediment to keep pace with sea level. But if sea level rise accelerates more rapidly, the sea will be rising much more rapidly than the demonstrated ability of wetlands to grow upward in most areas, and the increase in wetland acreage of the last few thousand years will be negated. If adjacent upland areas are developed, all the wetlands could be lost.

The net change in total marsh acreage depends on the slopes of the marsh and upland areas. If the land has a constant slope throughout the marsh and upland, then the area lost to marsh drowning will be equal to the area gained by the landward encroachment of spring high tides. In most areas, however, the slope above the marsh is steeper than the marsh, so a rise in sea level causes a net loss of marsh acreage.

The U.S. Fish and Wildlife Service has designated the coastal freshwater marsh at Johnson Gulch along Eastshore Road (FWMARSH-1 on **Figure 3**) as a tidewater goby (*Eucyclogobius newberryi*) recovery sub-unit. This marsh supports special status aquatic and terrestrial species. The ability of this freshwater marsh to migrate inland is limited because the marsh is already narrow and backed by residential development. However, under the near-term and medium-term sea level rise scenarios, this marsh habitat would buffer the effects of sea level rise for the residential development by absorbing the rising water and sediment.

Bodega Harbor Tidal Mudflat

Bodega Harbor Tidal Mudflat occurs in two locations: (1) west of Porto Bodega Marina & RV Park (1.70 acres; TIDFLT-1 on **Figure 8a**) and (2) east of the Porto Bodega Marina & RV Park and south of the Bodega Bay Sport Fishing Center (5.12 acres; TIDFLT-2).

Potential Flooding and Inundation Impacts

Data on projected inundation and flooding of Bodega Harbor Tidal Mudflat is not available.

Bodega Harbor contains about 480 acres of Tidal Mudflat that support about 130 acres of Eelgrass Bed. Bodega Harbor Tidal Mudflat links marine, freshwater, and terrestrial habitats; as well as provides economic and recreational benefits to the community. Tidal mudflats form unique habitats and maintain valuable ecosystems, buffering eelgrass beds from excess sedimentation, providing habitat for wildlife, and protecting terrestrial infrastructure from inundation (Thorne 2015). Bodega Harbor tidal waters ebb and flow over the central harbor mudflats depositing suspended sediments and organic matter from local plant production. This ecosystem is particularly unique in that the tidal velocity profile of Bodega Harbor show that water within the channel moves uniformly from top to bottom at fairly rapid flow rates, indicating a large throughput through the system and that the harbor flushes itself, contaminants, and sediments out daily (Rasmussen 2004).

Climate change effects such as sea level rise are altering this habitat, and coastal models are available to extrapolate potential effects until more site specific research is conducted. Tidal mudflat survival depends on the balance between the forces that lead to their creation (mineral and organic sediment accumulation) and the forces that lead to their deterioration (sea level rise, subsidence, and wave erosion). Sea level rise impacts to mudflats over the short and mid-term are controlled by the rate of vertical development (when accumulation exceeds deterioration) compared to relative sea level rise (the combination of the change in sea level and the change in land level; Cahoon 2010).

USGS models predict that over long-term sea level rise, mudflat deterioration will overpower accumulation, vertical development will lag behind sea level rise, permanent inundation will result in below optimum growth range for eelgrass, and tidal mudflat will convert to intertidal mudflat or subtidal open water (Cahoon 2010).

The flow of freshwater from Johnson Gulch into Bodega Harbor has created brackish tidal mudflat at their convergence. As sea level rise results in higher tides, the brackish mixing of these two systems will occur further upstream, which would impact the type and diversity of plant and animal species in the gulches, potentially jeopardizing important habitat for endangered species.

Public Access & Recreation – Trails

The Bodega Harbor Area contains a portion of one segment of the California Coastal Trail (Coastal Trail) exposed to sea level rise and storm events: an Existing Coastal Trail segment along the east side of Bodega Bay (0.54 miles, 2,849 feet). **Figure 6** shows the locations of Coastal Trail segments in the Bodega Bay Study Area.

Potential Inundation and Flood Impacts

Sea level rise and storm events may result in inundation and would result in flooding of the Coastal Trail segment. **Figure 8b** illustrates the projected permanent inundation, and **Figure 8c** illustrates the projected permanent inundation with storm event flooding of the Coastal Trail segment under Scenario 5 (2100 Sea Level Rise Worst Case).

Temporary flooding of an Existing Coastal Trail segment would result in trail damage and disrepair and require temporary closure or routing to an alternative trail segment during trail repair or re-construction. Permanent inundation of an Existing Coastal Trail segment would require relocation of the segment. The level of difficulty in relocating a Coastal Trail segment would depend on the sources of funding and the specific terms of easements with private property owners.

Marine Industrial

Bodega Harbor is the hub of commercial and sport fishing in Sonoma County, and is a popular destination during crab and salmon seasons. The marinas in the Bodega Harbor Area exposed to sea level rise and storm events include Porto Bodega Marina & RV Park (MI-1 on **Figure 8a**), Bodega Bay Sport Fishing Center (MI-2); Mason's Marina (MI-3E: east side of Westshore Road, MI-3BW: west side of Westshore Road); and Spud Point Marina (MI-4).

Porto Bodega Marina & RV Park (MI-1). The Porto Bodega Marina & RV Park is a privately owned resort off Bay Flat Road consisting of 75 open boat slips, guest docks, 58 RV sites, 2 vacation rentals, boat trailer parking, club house, and laundry.

Bodega Bay Sport Fishing Center (MI-2). The Bodega Bay Sport Fishing Center is a County-owned and operated facility east of the Porto Bodega Marina & RV Park. The County has a license agreement with sport fishing boat operators to allow them to use the Bodega Bay Sport Fishing Center License for party boats for fishing, whale watching, pelagic bird watching, and sightseeing. The facility includes a dock, boat launch, bait and tackle shop, and parking.

Mason's Marina (MI-3E & MI-3W). Mason's Marina is a County-owned and operated marina off Westshore Road that serves commercial fishing boats as well as recreational vessels including sailboats and motor launches. A small paved parking area and dock are used for fish-buying (MI-3E). The area on the west side of Westshore Road is used for storing crab pots (MI-3W).

Spud Point Marina (MI-4). Spud Point Marina is a County-owned and operated marina off Westshore Road that serves users of overnight and monthly berths and yacht club cruisers. It

consists of stable docks, fuel dock, guest dock and overnight berths, fishing and observation piers, tenant and public restrooms, laundry, dry dock storage, and parking.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Marine Industrial assets. The marina assets analyzed comprise landside facilities only and do not include the piers or docks. **Table 6** shows the projected percent area of the marinas permanently inundated by sea level rise and with storm event flooding. **Figure 8b** illustrates the projected permanent inundation, and **Figure 8c** illustrates the projected permanent inundation with storm event flooding of the marinas under Scenario 5 (2100 Sea Level Rise Worst Case).

All of the marinas are projected to be at risk of inundation from sea level rise by 2100. Porto Bodega Marina & RV Park and Mason's Marina would be more at risk than the other marinas.

Porto Bodega Marina & RV Park. In 2030 3% of the marina would be permanently inundated by sea level rise and less than 1% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 55% of the marina would be permanently inundated and 86% would be subject to periodic flooding during storm events. Under the worst case scenario, 65% of the marina would be permanently inundated and 95% would be subject to periodic flooding.

Bodega Bay Sport Fishing Center. In 2030 the marina would not be permanently inundated by sea level rise and less than 1% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, less than 1% of the marina would be permanently inundated and 18% would be subject to periodic flooding during storm events. Under the worst case scenario, 59% of the marina would be permanently inundated and 84% would be subject to periodic flooding.

Mason's Marina (East). In 2030 less than 1% of the marina would be permanently inundated by sea level rise and 44% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 91% of the marina would be permanently inundated and 99% would be subject to periodic flooding during storm events. Under the worst case scenario, 99% of the marina would be permanently inundated and subject to periodic flooding.

Mason's Marina (West). In 2030 the marina would not be permanently inundated by sea level rise and less than 1% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 50% of the marina would be permanently inundated and 86% would be subject to periodic flooding during storm events. Under the worst case scenario, 69% of the marina would be permanently inundated and 95% would be subject to periodic flooding.

Spud Point Marina. In 2030 the marina would not be permanently inundated by sea level rise and 2% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 8% of the marina would be permanently inundated and 45% would be subject to periodic flooding during storm events. Under the worst case scenario, 63% of the marina would be permanently inundated and 81% would be subject to periodic flooding.

Table 6. Bodega Harbor Area: Marine Industrial Assets – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	Porto Bodega Marina & RV Park *MI-1* *10.34 acres*		Bodega Bay Sport Fishing Center *MI-2* *1.54 acres*		Mason's Marina *MI-3E* *1.51 acres*		Mason's Marina *MI-3W* *3.45 acres*		*Spud Point Marina* *MI-4* *3.32 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	< 1%	----	----	----	----	6%	----	----	----	----
2 - 2030	0.83	25	20-year	3%	< 1%	----	< 1%	< 1%	44%	----	< 1%	----	2%
3 - 2050	1.67	50	20-year	7%	50%	< 1%	< 1%	< 1%	94%	----	50%	----	9%
4 – 2100 Best Case	3.33	100	100-year	55%	86%	< 1%	18%	91%	99%	50%	86%	8%	45%
5 – 2100 Worst Case	6.56	200	100-year	65%	95%	59%	84%	99%	99%	69%	95%	63%	81%

Permanent inundation of all or a portion of marinas would result in the loss of marine industrial land area to bay waters.

Porto Bodega Marina & RV Park

Temporary flooding and permanent inundation from sea level rise would damage and impair land-based facilities at marinas, potentially rendering them inoperable, including: the clubhouse, laundry, and boat trailer parking at Porto Bodega Marina & RV Park; bait and tackle shop, boat launch, and parking at the Bodega Bay Sport Fishing Center; crab pot storage and parking area at Mason's Marina; and restrooms, laundry, dry dock storage, and parking area at Spud Point Marina. Storm flooding, sea level rise, daily tidal flooding, and erosion would damage and impair docks. Temporary flooding and permanent inundation would impede or prevent access to and from the marinas.

Permanent inundation of the land-based portion of the marinas would result in loss of marine industrial area land.

Permanent inundation of Porto Bodega Marina & RV Park would result in loss of some or all of the RV sites, which would result in the temporary or permanent relocation of residents and loss of affordable housing.

Impacts on land-based facilities, docks, and public access at the marinas and the loss of marine industrial land would decrease sport fishing and other recreational opportunities at Bodega Bay, which would decrease tourism to Bodega Bay and result in the loss of tourist revenue.

Impacts on land-based facilities, docks, and public access at Mason's Marina and Spud Point Marina and the loss of marine industrial area land would decrease commercial fishing opportunities at Bodega Bay, which would reduce the viability of Bodega Bay's commercial fishing industry.

County Roads

The Bodega Harbor Area includes three County Roads exposed to sea level rise and storm events – Eastshore Road, Bay Flat Road, and Westshore Road. **Figure 8a** shows the location of these roads.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Eastshore Road, Bay Flat Road, and Westshore Road. **Table 7** shows the projected percent of road alignment permanently inundated by sea level rise and with storm event flooding. **Figure 8b** illustrates the projected permanent inundation, and **Figure 8c** illustrates the projected permanent inundation with storm event flooding of the roads under Scenario 5 (2100 Sea Level Rise Worst Case).

Table 7. Bodega Harbor Area: County Roads – Inundation and Flood Projections (Percent Alignment)

Scenario	**Projected Sea Level Rise**		**Storm Event**	*Eastshore Road* *2,791.5 feet* *(0.53 mi)*		*Bay Flat Road* *8,435.1 feet* *(1.60 mi)*		*Westshore Road* *4,896.2 feet* *(0.93 mi)*	
	feet	**cm**		**Inundated by Sea Level**	**Plus Storm Event Flood**	**Inundated by Sea Level**	**Plus Storm Event Flood**	**Inundated by Sea Level**	**Plus Storm Event Flood**
1 - 2016	0	0	annual	----	----	----	----	----	3%
2 - 2030	0.83	25	20-year	----	11%	----	2%	< 1%	16%
3 - 2050	1.67	50	20-year	< 1%	32%	----	16%	< 1%	48%
4 – 2100 Best Case	3.33	100	100-year	33%	37%	16%	26%	52%	78%
5 – 2100 Worst Case	6.56	200	100-year	35%	39%	28%	44%	76%	82%

These County Roads are projected to be at risk of inundation from sea level rise between 2050 and 2100. Westshore Road is the more at risk than the other County Roads.

Eastshore Road. In 2030 the road would not be permanently inundated by sea level rise and 11% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 33% of the road would be permanently inundated and 37% would be subject to periodic flooding during storm events. Under the worst case scenario, 35% of the road would be permanently inundated and 39% would be subject to periodic flooding during storm events.

Bay Flat Road. In 2030 the road would not be permanently inundated by sea level rise and 2% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 16% of the road would be permanently inundated and 26% would be subject to periodic flooding during storm events. Under the worst case scenario, 28% of the road would be permanently inundated and 44% would be subject to periodic flooding.

Westshore Road. In 2030 less than 1% of the road would be permanently inundated by sea level rise and 16% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 52% of the road would be permanently inundated and 78% would be

subject to periodic flooding during storm events. Under the worst case scenario, 76% of the road would be permanently inundated and 82% would be subject to periodic flooding.

Temporary flooding of County Roads would cause road closures during a flood event and result in road damage and accelerated deterioration. Recurring damage and deterioration from flooding could result in road failure or capacity restrictions. Road closures would temporarily restrict access to and from homes, businesses, or park and recreation areas. Residents may not be able to evacuate in emergencies, and emergency vehicles may not be able to reach locations in time, or at all. As road access becomes increasingly limited, so will the carrying capacity for visitors that contribute greatly to the regional economy.

Permanent inundation of County Roads would render road segments impassable, resulting in permanent road closures. As for many of these roads alternative routes are not available, access would be limited or non-existing to and from homes, businesses, or park and recreation areas. Homes and businesses would not be able to perform their primary function and become isolated and cut-off from all services. In the Bodega Harbor Area, permanent inundation of Eastshore, Bay Flat, and Westshore Roads would eliminate access to and from rural and urban residential areas and marinas.

Residential

The Bodega Harbor Area contains three urban residential areas and one rural residential area exposed to sea level rise and storm events. The urban residential areas are north of Porto Bodega Marina & RV Park (UR-1 on **Figure 8a**), northwest of Mason's Marina (UR-2), and west of Spud Point Marina (UR-3). The rural residential area (RR-1) is northeast of UR-2. **Table 8** shows the number of developed and vacant lots and number of dwelling units which comprise these residential areas.

Table 8. Bodega Harbor Area: Residential Assets – Lots and Dwelling Units

Asset	Lots	Vacant Lots	Dwelling Units
RR-1	9	2	7
UR-1	6	1	5
UR-2	60	14	46
UR-3	25	5	20

UR-2 and RR-1

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of these residential areas. **Table 9** shows the projected percent area permanently inundated by sea level rise and with storm event flooding. **Figure 8b** illustrates the projected permanent inundation, and **Figure 8c** illustrates the projected permanent inundation with storm event flooding of the areas under Scenario 5 (2100 Sea Level Rise Worst Case).

All of the residential areas are projected to be at risk of inundation from sea level rise by 2100. RR-1 and UR-2 would be more at risk than the other residential areas.

RR-1. In 2030 the residential area would not be permanently inundated by sea level rise and 3% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 7% of the area would be permanently inundated and 14% would be subject to periodic flooding during storm events. Under the worst case scenario, 14% of the area would be permanently inundated and 23% would be subject to periodic flooding.

UR-1. In 2030 the residential area would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. In 2100 under the best case scenario, the area would not be permanently inundated and less than 1% would be subject to periodic flooding during storm events. Under the worst case scenario, less than 1% of the area would be permanently inundated and 6% would be subject to periodic flooding.

UR-2. In 2030 the residential area would not be permanently inundated by sea level rise and 9% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 10% of the area would be permanently inundated and 13% would be subject to

periodic flooding during storm events. Under the worst case scenario, 10% of the area would be permanently inundated and 19% would be subject to periodic flooding.

UR-3. In 2030 the residential area would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. In 2100 under the best case scenario, the area would not be permanently inundated and 2% would be subject to periodic flooding during storm events. Under the worst case scenario, less than 1% of the area would be permanently inundated and 4% would be subject to periodic flooding.

Permanent inundation of all or a portion of residential properties would result in the loss of residential land area to bay waters.

RR-1. Permanent inundation from sea level rise would affect four properties, resulting in: (1) loss of property frontage, hence the size of the useable area; (2) loss of access to and from residences at Bay Flat Road and Westshore Road (see discussion of impacts on County Roads above), potentially isolating and cutting-off residences from essential services; and (3) the bay being closer to properties and residences, decreasing the buffer between them, which could result in inundation of one residence.

UR-1. Permanent inundation from sea level rise would affect all six properties, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to properties and residences, decreasing the buffer between them, which could result in inundation of six residences.

UR-2. Permanent inundation from sea level rise would affect mainly the area between Westshore Road and Bay Flat Road where several vacant or unbuildable properties are located. Permanent inundation would result in: (1) loss of property frontage, hence the size of the useable area; (2) loss of access to residences from Westshore Road and Bay Flat Road, including the entrance to the residential development at Whaleship Road (see the discussion of impacts on County Roads above); and (3) the bay being closer to properties and residences, decreasing the buffer between them, which could result in inundation of four residences.

UR-3. Permanent inundation from sea level rise would affect two properties, resulting in: (1) loss of access to and from the properties at the intersection of Westshore Road and Bay Flat Road; and (2) the bay being closer to the properties and residences, decreasing the buffer between them, which could result in inundation of two residences.

Table 9. Bodega Harbor Area: Residential Assets – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*RR-1* *6.30 acres*		*UR-1* *1.09 acres*		*UR-2* *12.80 acres*		*UR-3* *5.35 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----		----	----	----	----	----	----
2 - 2030	0.83	25	20-year	----	3%	----	----	----	9%	----	----
3 - 2050	1.67	50	20-year	----	8%	----	----	----	10%	----	----
4 – 2100 Best Case	3.33	100	100-year	7%	14%	----	< 1%	10%	13%	----	2%
5 – 2100 Worst Case	6.56	200	100-year	14%	23%	< 1%	6%	10%	19%	< 1%	4%

Bodega Harbor Area - Summary

Potential Impacts

Table 10 summarizes the projected percent of Bodega Harbor Area assets permanently inundated by sea level rise in 2100 under the best and worst case scenarios.

By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 59% to 99% of marinas; 28% to 76% of County Roads; 53% of a coastal wetland, and less than 1% to 14% of residential areas.

Table 10. Bodega Harbor Area: Summary of Projected Percent Area of Assets Permanently Inundated by Sea Level Rise by 2100

Asset	Best Case Scenario	Worst Case Scenario
Coastal Wetlands		
FWMARSH-1	----	----
FWMARSH-2	37%	53%
TIDFLT-1	N/A	N/A
TIDFLT-2	N/A	N/A
Public Access and Recreation		
California Coastal Trail	N/A	N/A
Marine Industrial		
Porto Bodega Marina & RV Park	55%	65%
Mason's Marina (East)	91%	99%
Mason's Marina (West)	50%	69%
Bodega Bay Sport Fishing Center	<1%	59%
Spud Point Marina	8%	63%
County Roads		
Westshore Road	52%	76%
Eastshore Road	33%	35%
Bay Flat Road	16%	28%
Residential		

Asset	Best Case Scenario	Worst Case Scenario
RR-1	7%	14%
UR-1	----	<1%
UR-2	10%	10%
UR-3	----	<1%

Potential Adaptation Strategies

Possible adaptation strategies for the Bodega Harbor Area are retreat and protect. The retreat strategy includes avoiding new development, redeveloping vulnerable infrastructure, and removing damaged infrastructure in hazard areas. Protecting vulnerable road infrastructure in 2030 to 2050 is anticipated until a long-term adaptation strategy has been determined. Section 5 contains a full suite of adaptation strategies for Bodega Bay informed by public outreach.

Bodega Harbor Area adaptation priorities include: (1) avoid new development within mapped hazard areas; (2) consider protection measures for shoreline roads in the short-term, and determine the feasibility of relocating shoreline roads and increasing culvert and roadside ditch capacity in the long-term; and (3) consider developing an abatement program to remove abandoned boats and docks that may degrade harbor water quality.

Highway 1 Area

The Bodega Bay Highway 1 Area is the east bay, encompassing the area from south of the Bodega Bay Sports Fishing Center to the western edge of the Bodega Harbour Subdivision and Golf Course. The Highway 1 Area contains all of the Commercial assets and the only public utility (Bodega Bay Wastewater Treatment Plant) in Bodega Bay; and a smaller area of Urban Residential development compared to the Bodega Harbor Area. Additional Highway 1 Area assets include Wetlands and County Trails. **Figure 9a** shows the location of and number assigned to each asset.

Assets in the Highway 1 Area vulnerable to sea level rise and storm events include Highway 1, residential and commercial buildings on the harbor side of Highway 1; yacht club; wastewater treatment plant; County Regional Parks trails and California Coastal Trail; and coastal freshwater marsh, coastal brackish marsh, and tidal mudflat.

Sea level rise will impact these valuable assets leading to potential impacts on access, land use, recreation and tourism, and habitats. Buildings on the harbor side of Highway 1 are more vulnerable to storm damage and sea level rise than are those on the upland side of Highway 1. Some houses on the harbor side have been elevated on wooden pilings which require maintenance. Boat docks and aquatic infrastructure at the yacht club and other harbor properties are supported by pressure treated wooden piles driven into harbor mud that are not adaptable to changing tidal heights. Residential or commercial buildings that may not be affected by sea level rise due to their elevation could become isolated and cut-off from all services due to compromised access and damaged utilities.

Cheney Gulch is a short drainage that drops steeply from coastal scrub to riparian ravines and freshwater marsh habitat. It supports special status aquatic and terrestrial species such as the California Freshwater Shrimp (*Syncaris pacifica*) and California Red-legged frog (*Rana draytonii*).

The sections below provide information on the percentage area of each asset that would be flooded or inundated as a result of sea level rise and storm events and potential impacts.

Coastal Wetlands

The Highway 1 Area contains two types of coastal wetlands: (1) Coastal Freshwater Marsh and (2) Bodega Harbor Tidal Mudflat.

Coastal Freshwater Marsh

Coastal Freshwater Marsh occurs in three locations: (1) on the north side of State Highway 1 opposite COM-2 at 935 State Highway 1 (FWMARSH-1 on **Figure 9a**; 0.80 acres); (2) on both sides of State Highway 1 in the area of Doran Park Road (FWMARSH-2, 8.58 acres); and (3) on the north side of Highway 1 opposite the Dredge Spoil Disposal Ponds site along Cheney Gulch (FWMARSH-3, 4.72 acres).

Potential Inundation and Flood Impacts

According to the analysis based on the Our Coast Our Future (OCOF) website tool and model, these Coastal Freshwater Marsh areas are not at risk of inundation from sea level rise or flooding from storm events by 2100 under the best and worst case scenarios. However, the model is limited in that it does incorporate tidal flow through culverts. In the case of FWMARSH-3 along Cheney Gulch, there is tidal flow through the culvert under the Highway 1 bridge that affects this marsh, and the Cheney Gulch drainage system extends out to the bay between the Dredge Spoil Disposal Ponds Site and the Bodega Bay PUD Wastewater Treatment Plant. Up to 2050, the coastal freshwater marsh along Cheney Gulch would buffer the effects of sea level rise for the surrounding land uses by absorbing the rising water and sediment. However, sea level rise inundation would have an adverse impact on the non-saline tolerant plant and animal species which occur in or use the marsh. The potential for inland migration of this marsh would be limited because the dredge spoil ponds site, wastewater treatment plant, and residential development confine the drainage.

Public Access & Recreation – Trails and Areas

Trails

The Highway 1 Area contains two County Regional Parks Trails exposed to sea level rise and storm events: (1) Birdwalk Loop Trail (0.6 miles, 3,168 feet) and (2) Cheney Creek Trail (0.5 miles, 2,640 feet). The Area also contains portions of two segments of the California Coastal Trail (Coastal Trail): (1) an Existing Coastal Trail segment at the Dredge Spoil Disposal Ponds Site (0.53 miles, 2,804 feet) and (2) a Proposed Coastal Trail segment along the east side of Bodega Bay (1.1 miles, 5,880 feet). Coastal Trail segments. **Figures 6 and 7** show the locations of Coastal Trail segments and County Regional Parks Trails in the Bodega Bay Study Area.

Potential Inundation and Flood Impacts

Sea level rise and storm events may result in inundation and would result in flooding of the County Regional Parks Trails and Coastal Trail segments. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding in the area of the trails under Scenario 5 (2100 Sea Level Rise Worst Case).

Temporary flooding of a County Regional Parks Trail or Existing Coastal Trail segment would result in trail damage and disrepair and require temporary closure or routing to an alternative trail section during trail repair or re-construction. Permanent inundation of a County Regional Parks Trail or Existing Coastal Trail segment would require relocation of the trail section. The level of difficulty in relocating a County Regional Parks Trail or Existing Coastal Trail segment would depend on the sources of funding and the specific terms of easements with private property owners.

Areas

The Highway 1 Area contains an area consisting of two dredge spoil disposal ponds and a County Regional Parks Trail (Birdwalk Loop Trail). The Dredge Spoil Disposal Ponds Site (PUBACC-1 on **Figure 9a**) is owned and operated by Sonoma County Regional Parks and used by the public for recreation.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of the Dredge Spoil Disposal Ponds Site. **Table 11** shows the projected percent area permanently inundated by sea level rise and with storm event flooding. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding of the Dredge Spoil Disposal Ponds Site under Scenario 5 (2100 Sea Level Rise Worst Case).

The Dredge Spoil Disposal Ponds Site is projected to be at risk of permanent inundation from sea level rise by 2100. In 2030 less than 1% of the site would be permanently inundated by sea level rise and 2% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 2% of the area would be permanently inundated and 3% would be subject to periodic flooding during storm events. Under the worst case scenario, 2% of the area would be permanently inundated and 5% would be subject to periodic flooding.

Birdwalk Loop Trail

Table 11. Highway 1 Area: Dredge Spoil Disposal Ponds Site – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*Dredge Spoil Disposal Ponds Site PUBACC-1 23.91 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	<1%	<1%
2 - 2030	0.83	25	20-year	<1%	2%
3 - 2050	1.67	50	20-year	<1%	2%
4 – 2100 Best Case	3.33	100	100-year	2%	3%
5 – 2100 Worst Case	6.56	200	100-year	2%	5%

Public Utility

The Highway 1 Area includes the only Public Utility in Bodega Bay – the Bodega Bay PUD Wastewater Treatment Plant (UTIL-1 on **Figure 9a**).

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in flooding of the Bodega Bay PUD Wastewater Treatment Plant. **Table 12** shows the projected percent area permanently inundated by sea level rise and with storm event flooding. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding of the public utility site under Scenario 5 (2100 Sea Level Rise Worst Case).

The Bodega Bay PUD Wastewater Treatment Plant is not projected to be at risk of permanent inundation from sea level rise by 2100. However, the utility site would experience periodic flooding during storm events at 40% of the site under the 2100 worst case scenario. Flooding would occur at the southern boundary of the utility property, not at the structures or systems. Periodic flooding during storm events could result in temporary disruption of plant operations.

Bodega Bay PUD Wastewater Treatment Plant

Table 12. Highway 1 Area: Bodega Bay PUD Wastewater Treatment Plant – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*Bodega Bay PUD Wastewater Treatment Plant UTIL-1 4.08 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----
2 - 2030	0.83	25	20-year	----	----
3 - 2050	1.67	50	20-year	----	----
4 – 2100 Best Case	3.33	100	100-year	----	----
5 – 2100 Worst Case	6.56	200	100-year	----	40%

Commercial

The Highway 1 Area includes five commercial areas along the east side of Bodega Bay, four of which are exposed to sea level rise and storm events: the area currently occupied by Diekmann's Bay Store (COM-1 on **Figure 9a**); the area currently occupied by Harbor View Gifts (COM-2); the area currently occupied by Patrick's of Bodega Bay, Gourmet Au Bay, and Tides Wharf Restaurant (COM-3); and the area currently occupied by Fisheterian Fish Market and Lucas Wharf Restaurant & Bar (COM-4). COM-5 is the area currently occupied by Bodega Bay & Beyond, Sonoma Coast Living Real Estate, Coffee Cove, Bodega Bay Escapes, Jessica Brianne Carpenter Photos, and Bodega Coast Inn & Suites.

Potential Inundation and Flooding

Sea level rise and storm events would result in inundation and flooding of these commercial areas. **Table 13** shows the projected percent area permanently inundated by sea level rise and with storm event flooding. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding of the areas under Scenario 5 (2100 Sea Level Rise Worst Case).

All of these commercial areas except COM-5 are projected to be at risk of inundation from sea level rise by 2100. COM-2 and COM-3 would be more at risk than the other commercial areas.

COM-1. In 2030 5% of the area would be permanently inundated by sea level rise and 9% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 10% of the area would be permanently inundated and 14% would be subject to periodic flooding during storm events. Under the worst case scenario, 9% of the area would be permanently inundated and 19% would be subject to periodic flooding.

Lucas Wharf Restaurant & Bar

COM-2. In 2030 the area would not be permanently inundated by sea level rise and 11% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 12% of the area would be permanently inundated and 66% would be subject to periodic flooding during storm events. Under the worst case scenario, 70% of the area would be permanently inundated and 91% would be subject to periodic flooding.

COM-3. In 2030 2% of the area would be permanently inundated by sea level rise and 9% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 10% of the area would be permanently inundated and 14% would be subject to periodic flooding during storm events. Under the worst case scenario, 69% of the area would be permanently inundated and 84% would be subject to periodic flooding.

COM-4. In 2030 5% of the area would be permanently inundated by sea level rise and 16% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 18% of the area would be permanently inundated and 27% would be subject to periodic flooding during storm events. Under the worst case scenario, 34% of the area would be permanently inundated and 56% would be subject to periodic flooding.

Diekmann's Bay Store

Permanent inundation of all or a portion of commercial properties would result in the loss of commercial land area to bay waters.

COM-1 and COM-4. Permanent inundation from sea level rise would result in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the commercial building and parking area, decreasing the buffer between them, which could result in inundation of the building and parking area.

COM-2 and COM-3. Permanent inundation from sea level rise would result in: (1) partial loss of access to the commercial building and parking area; (2) loss of property frontage, hence the size of the useable area; and (3) the bay being closer to the commercial building and parking area, decreasing the buffer between them., which could result in inundation of the building and parking area.

Table 13. Highway 1 Area: Commercial Assets – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*COM-1* *0.50 acres*		*COM-2* *0.19 acres*		*COM-3* *3.56 acres*		*COM-4* *1.21 acres*		*COM-5* *5.43 acres*	
	feet	**cm**		**Inundated by Sea Level**	**Plus Storm Event Flood**	**Inundated by Sea Level**	**Plus Storm Event Flood**	**Inundated by Sea Level**	**Plus Storm Event Flood**	**Inundated by Sea Level**	**Plus Storm Event Flood**	**Inundated by Sea Level**	**Plus Storm Event Flood**
1 - 2016	0	0	annual	2%	< 1%*	----	----	< 1%	3%	2%	5%	----	----
2 - 2030	0.83	25	20-year	5%	9%	----	11%	2%	9%	5%	16%	----	----
3 - 2050	1.67	50	20-year	7%	10%	5%	42%	5%	12%	10%	19%	----	----
4 – 2100 Best Case	3.33	100	100-year	10%	14%	39%	73%	12%	66%	18%	27%	----	----
5 – 2100 Worst Case	6.56	200	100-year	9%**	19%	70%	91%	69%	84%	34%	56%	----	----

* Unknown why a decrease in % area affected with a storm event

** Decrease in permanent inundation under an increase in sea level rise is likely due to a small circulation change that occurs as a result of the higher sea-level and its interaction with flood water (Maya Hayden, Point Blue Conservation Science, personal communication, 201

Private Recreation

Owned and operated by the Bodega Harbour HOA, the Bodega Harbour Yacht Club is the only Private Recreation asset in the Highway 1 Area (PRIV-1 on **Figure 9a**). Situated on the bay off Smith Brothers Road, the Bodega Harbour Yacht Club is a two-story hall with kitchen available for rent.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of the Bodega Harbour Yacht Club. **Table 14** shows the projected percent area of the property permanently inundated by sea level rise and with storm event flooding. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding of the Bodega Harbour Yacht Club property under Scenario 5 (2100 Sea Level Rise Worst Case).

The Bodega Harbour Yacht Club is projected to be at risk of permanent inundation from sea level rise by 2100. In 2030 8% of the site would be permanently inundated by sea level rise and 34% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 13% of the site would be permanently inundated and 49% would be subject to periodic flooding during storm events. Under the worst case scenario, 48% of the site would be permanently inundated and 60% would be subject to periodic flooding.

Bodega Harbour Yacht Club

While inundation and flooding would not prevent access to the Bodega Harbour Yacht Club property at the entrance off Smith Brothers Road, it would impact building ingress (and egress) and most if not all of the parking lot. Impacts on access to the Bodega Harbour Yacht Club would decrease private recreational opportunities and the number of private facilities available for social gatherings in Bodega Bay, and would decrease revenue for the Bodega Harbour Homeowners' Association.

Table 14. Highway 1 Area: Bodega Harbour Yacht Club– Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*Bodega Harbour Yacht Club PRIV-1* *0.48 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	4%	< 1%
2 - 2030	0.83	25	20-year	8%	34%
3 - 2050	1.67	50	20-year	13%	49%
4 – 2100 Best Case	3.33	100	100-year	48%	60%
5 – 2100 Worst Case	6.56	200	100-year	51%	73%

Residential

The Highway 1 Area contains two urban residential and three resources and rural development areas along the east side of Bodega Bay exposed to sea level rise and storm events (UR-1 to UR-2 and RRD-1 to RRD-3 on **Figure 9a**). **Table 15** shows the number of developed and vacant lots and number of dwelling units which comprise these residential areas.

Table 15. Highway 1 Area: Residential Assets – Lots and Dwelling Units

Asset	Lots	Vacant Lots	Dwelling Units
UR-1	3	0	3
UR-2	13	2	12
RRD-1	2	1	1
RRD-2	2	0	3
RRD-3	1	0	1

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of these residential areas. **Table 16** shows the projected percent area permanently inundated by sea level rise and with storm event flooding. **Figure 9b** illustrates the projected permanent inundation, and **Figure 9c** illustrates the projected permanent inundation with storm event flooding of the areas under Scenario 5 (2100 Sea Level Rise Worst Case).

All of these residential areas are projected to be at risk of inundation from sea level rise by 2100.

UR-1. In 2030 less than 1% of the area would be permanently inundated by sea level rise and subject to periodic flooding during storm events. In 2100 under the best case scenario, 28% of the area would be permanently inundated and 31% would be subject to periodic flooding during storm events. Under the worst case scenario, 17% of the area would be permanently inundated and 42% would be subject to periodic flooding.

UR-2. In 2030 5% of the area would be permanently inundated by sea level rise and 9% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 11% of the area would be permanently inundated and 15% would be subject to periodic flooding during storm events. Under the worst case scenario, 13% of the area would be permanently inundated and 21% would be subject to periodic flooding.

RRD-1. In 2030 4% of the area would be permanently inundated by sea level rise and 10% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 13% of the area would be permanently inundated and 17% would be subject to periodic flooding during storm events. Under the worst case scenario, 19% of the area would be permanently inundated and 32% would be subject to periodic flooding.

UR-2

RRD-2. In 2030 7% of the area would be permanently inundated by sea level rise and 11% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 14% of the area would be permanently inundated and 20% would be subject to periodic flooding during storm events. Under the worst case scenario, 22% of the area would be permanently inundated and 30% would be subject to periodic flooding.

RRD-3. In 2030 the area would not be permanently inundated by sea level rise and 12% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 14% of the area would be permanently inundated and 16% would be subject to periodic flooding during storm events. Under the worst case scenario, 17% of the area would be permanently inundated and 24% would be subject to periodic flooding.

Permanent inundation of all or a portion of these residential properties would result in the loss of residential land area to bay waters.

UR-1. Permanent inundation from sea level rise would affect one property, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the property and residence, decreasing the buffer between them, which could result in inundation of the residence.

UR-2. Permanent inundation from sea level rise would affect six developed properties, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the properties and residences, decreasing the buffer between them, which could result in inundation of six residences. Permanent inundation of the two vacant properties would result in loss of property frontage, hence the size of the useable area.

RRD-1. Permanent inundation from sea level rise would affect two properties, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the residences, which could result in inundation of one residence.

RRD-2. Permanent inundation from sea level rise would affect two properties, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the two duplexes, which could result in inundation of the duplexes.

RRD-3. Permanent inundation from sea level rise would affect one property, resulting in: (1) loss of property frontage, hence the size of the useable area; and (2) the bay being closer to the residence, which could result in inundation of the residence.

Table 16. Highway 1 Area: Residential Assets – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*UR-1* *0.46 acres*		*UR-2* *1.47 acres*		*RRD-1* *0.5 acres*		*RRD-2* *0.10 acres*		*RRD-3* *0.07 acres*	
	feet	**cm**		**Inundated by Sea Level**	**Plus Storm Event Flood**	**Inundated by Sea Level**	**Plus Storm Event Flood**	**Inundated by Sea Level**	**Plus Storm Event Flood**	**Inundated by Sea Level**	**Plus Storm Event Flood**	**Inundated by Sea Level**	**Plus Storm Event Flood**
1 - 2016	0	0	annual	----	----	2%	2%	< 1%	3%	4%	3%	----	----
2 - 2030	0.83	25	20-year	< 1%	< 1%	5%	9%	4%	10%	7%	11%	----	12%
3 - 2050	1.67	50	20-year	< 1%	28%	7%	11%	6%	13%	8%	14%	6%	14%
4 – 2100 Best Case	3.33	100	100-year	28%	31%	11%	15%	13%	17%	14%	20%	14%	16%
5 – 2100 Worst Case	6.56	200	100-year	17%*	42%	13%	21%	19%	32%	22%	30%	17%	24%

* Decrease in permanent inundation under an increase in sea level rise is likely due to a small circulation change that occurs as a result of the higher sea-level and its interaction with flood water (Maya Hayden, Point Blue Conservation Science, personal communication, 2017)

Summary – Highway 1 Area

Potential Impacts

Table 17 summarizes the projected percent of Highway 1 Area assets permanently inundated by sea level rise in 2100 under the best and worst case scenarios.

By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 9% to 70% of commercial areas, 51% of the Bodega Harbour Yacht Club, 13% to 22% of residential areas, and 2% of a public access and recreation area (Dredge Spoil Disposal Ponds Site).

Table 17. Highway 1 Area: Summary of Projected Percent Area of Assets Permanently Inundated by Sea Level Rise by 2100

Asset	Best Case Scenario	Worst Case Scenario
Coastal Wetlands		
FWMARSH-1	----	----
FWMARSH-2	----	----
FWMARSH-3	----	----
Public Access and Recreation		
Dredge Spoil Disposal Ponds Site	2%	2%
County Regional Parks Trails	N/A	N/A
California Coastal Trail	N/A	N/A
Public Utility		
Bodega Bay PUD Wastewater Treatment Plant	----	----
Commercial		
COM-1	10%	9%
COM-2	39%	70%
COM-3	12%	69%
COM-4	18%	34%
Private Recreation		
Bodega Harbour Yacht Club	48%	51%

Asset	Best Case Scenario	Worst Case Scenario
Residential		
UR-1	28%	17%
UR-2	11%	13%
RRD-1	13%	19%
RRD-2	14%	22%
RRD-3	14%	17%

Potential Adaptation Strategies

Possible adaptation strategies for the Highway 1 Area are accommodate and retreat. Accommodate strategies employ methods that modify existing development to decrease hazard risks and increase resiliency. Because most of the residential and commercial structures have been built on piling, maintenance of these pilings will be necessary as wave and tidal scours undermine footings over time. Some buildings may need to be incrementally relocated and in-water structures removed. Relocation of the wastewater treatment plant would have to comply with Coastal Act policy (Section 30231) to minimize adverse effects of wastewater discharges and entrainment.

Highway 1 Area adaptation priorities include: (1) potentially accommodate sea level rise through redevelopment and maintenance strategies, (2) protect or increase adaptive capacity of shoreline roads and trail access, and (3) consider relocating the wastewater treatment plant.

County Regional Parks Area

The County Regional Parks Area is the west and south bay, encompassing the area from Westside Regional Park south to the tip of Sonoma Coast State Park, east across Bodega Harbor, across Doran Beach Regional Park, to where it meets the Highway 1 Area at the western edge of the Bodega Harbour Subdivision and Golf Course. The County Regional Parks Area includes all of the Institutional and most of the Public Access & Recreation (County Regional Parks) assets in Bodega Bay. Additional County Regional Parks Area assets include Private Recreation, Trails, and Coastal Wetlands. **Figure 10a** shows the location of and number assigned to each asset.

The assets most vulnerable to sea level rise and storm events in the County Regional Parks Area are Westshore Road, Westside Regional Park, and Doran Beach Regional Park.

Westshore Road is a critical north-south access route that originates in the north harbor and terminates at the Bodega Head trailhead. Sea level rise inundation would substantially affect access to and along Westshore Road. West Bodega Harbor residents and U.C. Davis Bodega Marine Laboratory personnel depend on Westshore Road for access to homes and research facilities/employment. County residents and tourists depend on Westshore Road for access to Westside Regional Park. Potential adaptation measures include relocation of the road alignment or elevating the road.

Westside and Doran Beach Regional Parks combined provide recreational and commercial boat launches, campsites, day use areas, picnic areas, and parking. Sea level rise inundation would affect almost the entire Westside Regional Park and almost 40 percent of Doran Beach Regional Park. Parkland and facilities would be lost or damaged, substantially reducing the available recreational opportunities and the Bodega Bay tourism economy.

Doran Beach

Bodega Harbor's inlet is a 100-foot wide channel protected by two rubble mounded jetties built by the U.S. Army Corps of Engineers in 1943. The north jetty is 1,130 feet long, and the south jetty is 1,650 feet long. The north jetty is perpendicular to Doran Beach on the bay side. It may disrupt shoreline currents by reflecting wave energy back towards the beach, exacerbating sand loss between the north jetty and the beach. Sea level rise will increase the frequency of waves overtopping the jetties, which can erode and weaken the structures.

Doran Beach is a two-mile long dune spit that separates Bodega Harbor from Bodega Bay. Its high sand dunes protect the inner harbor by absorbing wave energy. Normally dunes migrate inland on uninhabited shoreline. However, water surrounds Doran Beach on both sides,

increasing erosion potential and reducing the habitat's resiliency to exposure. Sea level rise increases wave height and volume, which would accelerate erosion of these protective dunes.

The sections below provide information on the percentage area of each asset that would be inundated or flooded as a result of sea level rise and storm events and potential impacts.

Coastal Wetlands

The County Regional Parks Area contains three types of coastal wetlands exposed to sea level rise and storm events: (1) Coastal Freshwater Marsh, Coastal Brackish Marsh, and (3) Bodega Harbor Tidal Mudflat.

Coastal Freshwater Marsh

Coastal Freshwater Marsh occurs in three locations: (1) west of Westside Regional Park (FWMARSH-1 on **Figure 10a**); (2) south of Westside Regional Park, west of Westshore Road (FWMARSH-2); and (3) south of FWMARSH-2 (FWMARSH-3).

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Coastal Freshwater Marsh. **Table 18** shows the projected percent of marsh area permanently inundated by sea level rise and with storm event flooding. **Figure 10b** illustrates the projected permanent inundation, and **Figure 10c** illustrates the projected permanent inundation with storm event flooding of Coastal Freshwater Marsh under Scenario 5 (2100 Sea Level Rise Worst Case).

FWMARSH-1 and FWMARSH-2 are projected to be at risk of permanent inundation from sea level rise by 2100.

FWMARSH-1. In 2030 the marsh would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. In 2100 under the best case scenario, less than 1% of the marsh would be permanently inundated and 3% would be subject to periodic flooding during storm events. Under the worst case scenario, 35% of the marsh would be permanently inundated and 76% would be subject to periodic flooding.

FWMARSH-2. In 2030 and in 2100 under the best case scenario, the marsh would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. Under the worst case scenario, 20% of the marsh would be permanently inundated and 37% would be subject to periodic flooding.

Table 18. County Regional Parks Area: Coastal Freshwater Marsh – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*FWMARSH-1* *42.26 acres*		*FWMARSH-2* *8.74 acres*		*FWMARSH-3* *1.1 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----	----	----	----	----
2 - 2030	0.83	25	20-year	----	----	----	----	----	----
3 - 2050	1.67	50	20-year	----	<1%	----	----	----	----
4 – 2100 Best Case	3.33	100	100-year	<1%	3%	----	----	----	----
5 – 2100 Worst Case	6.56	200	100-year	35%	76%	20%	37%	----	----

Coastal Brackish Marsh

Coastal Brackish Marsh occurs in both the Highway 1 and County Regional Parks Areas, but mainly in the County Regional Parks Area, at the following location: north and south of the Dredge Spoil Disposal Ponds Site and south of the Bodega Bay PUD Wastewater Treatment Plant; west of the Bodega Harbour Subdivision and within and west of the Links at Bodega Harbour Golf Course; and along the northern boundary of Doran Beach Regional Park (BRMARSH-1 on **Figure 10a**).

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Coastal Brackish Marsh. **Table 19** shows the projected percent of marsh area permanently inundated by sea level rise and with storm event flooding. **Figure 10b** illustrates the projected permanent inundation, and **Figure 10c** illustrates the projected permanent inundation with storm event flooding of Coastal Brackish Marsh under Scenario 5 (2100 Sea Level Rise Worst Case).

BRMARSH-1 is currently at risk of permanent inundation from sea level rise. In 2030 32% of the marsh would be permanently inundated by sea level rise and 70% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, less than 72% of the marsh would be permanently inundated and 74% would be subject to periodic flooding during storm events. Under the worst case scenario, 73% of the marsh would be permanently inundated and 78% would be subject to periodic flooding.

See Coastal Freshwater Marsh – Inundation and Flood Impacts under the Bodega Harbor Area.

Table 19. County Regional Parks Area: Coastal Brackish Marsh – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*BRMARSH-1* *69.56 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	21%	32%
2 - 2030	0.83	25	20-year	32%	70%
3 - 2050	1.67	50	20-year	61%	71%
4 – 2100 Best Case	3.33	100	100-year	72%	74%
5 – 2100 Worst Case	6.56	200	100-year	73%	78%

Bodega Harbor Tidal Mudflat

Bodega Harbor Tidal Mudflat occurs in both the Highway 1 and County Regional Parks Areas, but mainly in the County Regional Parks Area in four locations: (1) along the west side of Bodega Bay, west of the main bay channel, from Westside Regional Park south to the first turnout off Westshore north of the access to Bodega Head (134.48 acres; TIDFLT-1 on **Figure 10a**); (2) east of the main bay channel, along and north of Doran Beach Regional Park, and west of the Dredge Spoil Disposal Ponds Site and COM-5 (278.70 acres; TIDFLT-2); (3) east of the Bodega Head turnout and parking area along Campbell Cove State Beach (5.57 acres; TIDFLAT-3); and (4) west of the Links at Bodega Harbour Golf Course north of Doran Beach Road (6.42 acres; TIDFLAT-4).

Potential Inundation and Flood Impacts

Data on projected permanent inundation and storm event flooding of Bodega Harbor Tidal Mudflat is not available.

See Bodega Harbor Tidal Mudflat - Potential Inundation and Flood Impacts under the Bodega Harbor Area.

Public Access & Recreation – Parks and Trails

County Regional Parks

The County Regional Parks Area contains the only Sonoma County Regional Parks in Bodega Bay – Westside Regional Park (PUBACC-1 on **Figure 10a**) and Doran Beach Regional Park (PUBACC-2).

Westside Regional Park. Westside Regional Park features campsites and boat launch facilities. Amenities include 47 RV and tent campsites, 76 boat trailer and 31 day use parking spaces, three boat and kayak launch lanes, docks and gangway, fish-cleaning and boat rinsing stations, day use picnic area, and RV dump station.

Doran Beach Regional Park. Doran Beach Regional Park has a wide, 2-mile stretch of beach on Bodega Bay and is ideal for walking, picnicking, playing in the sand, flying kites, surfing, and bird-watching. Over 120 tent and RV campsites are available. A boat launch provides access to Bodega Harbor for sport fishing, kayaking, stand-up paddling, and kite surfing. A jetty at the harbor mouth is a popular spot for rock fishing and exploring sea life.

Doran Beach Regional Park

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Westside Regional Park and Doran Beach Regional Park. The Regional Parks assets analyzed comprise landside facilities only and do not include piers or docks. **Table 20** shows the projected percent area of the Regional Parks permanently inundated by sea level rise and with storm event flooding. **Figure 10c** illustrates the projected permanent inundation, and **Figure 10b** illustrates the

projected permanent inundation with storm event flooding of the Regional Parks under Scenario 5 (2100 Sea Level Rise Worst Case).

Westside Regional Park is projected to be more at risk than Doran Regional Park of permanent inundation from sea level rise by 2100.

Westside Regional Park. In 2030 the park would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. In 2100 under the best case scenario, less than 1% of the park would be permanently inundated and 83% would be subject to periodic flooding during storm events. Under the worst case scenario, 98% of the park would be permanently inundated and 100% would be subject to periodic flooding. Permanent inundation would affect almost the entire park, resulting in the loss of recreational land area and many Bodega Bay recreational amenities, including RV and tent campsites and parking. The loss of these recreational amenities would result in a decrease in tourism to Bodega Bay and the loss of tourist revenue.

Doran Beach Regional Park. In 2030 7% of the area would be permanently inundated by sea level rise and 17% would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 19% of the area would be permanently inundated and 35% would be subject to periodic flooding during storm events. Under the worst case scenario, 36% of the area would be permanently inundated and 75% would be subject to periodic flooding. Permanent inundation of the park would result in loss of the following recreational amenities: (1) entire Doran Beach, (2) Jetty Day Use Area, (3) Miwok Tent Campground, and (4) Boat Launch & Parking.

Doran Beach Regional Park – Jetty Campground

Westside Regional Park

Table 20. County Regional Parks Area: Regional Parks – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*Westside Regional Park (PUBBACC-1)* *12.54 acres*		*Doran Beach Regional Park (PUBACC-2)* *102.51 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----	< 1%	8%
2 - 2030	0.83	25	20-year	----	----	7%	17%
3 - 2050	1.67	50	20-year	----	2%	12%	20%
4 – 2100 Best Case	3.33	100	100-year	< 1%	83%	19%	35%
5 – 2100 Worst Case	6.56	200	100-year	98%	100%	36%	75%

Permanent inundation would also affect a portion of, or bring sea level closer to, the following facilities, decreasing their buffer from sea level rise: (1) Jetty Campground; (2) Cove, Gull, and Shell Campgrounds; (3) Cypress Day Use Area; and (4) day use parking areas. It would also render eastern and western segments of Doran Beach Road permanently impassible. The above impacts of temporary flooding and permanent inundation could result in temporary or permanent closure of Doran Beach Regional Park. Temporary or permanent closure of the park would result in loss of a significant recreational opportunity in Bodega Bay, and a decrease in tourism and loss of tourist revenue.

Trails

The County Regional Parks Area includes sections of four segments of the California Coastal Trail: (1) an Existing Coastal Trail segment at the Cheney Creek Trail (0.2 miles, 1,261 feet), (2) an Existing Coastal Trail along Doran Beach Regional Park Beach (1.8 miles, 9,504 feet), (3) an Existing Coastal Trail segment on the coast south of Doran Beach Regional Park Beach (0.8 miles, 4,475 feet), and (4) a Future Coastal Trail segment from Doran Beach Regional Park to Sonoma Coast State Beach (1.1 miles, 5,987 feet). **Figure 6** shows the locations of Coastal Trail segments.

Potential Inundation and Flood Impacts

Sea level rise and storm events may result in inundation and would result in flooding of the County Coastal Trail segments. **Figure 10b** illustrates the projected permanent inundation, and **Figure 10c** illustrates the projected permanent inundation with storm event flooding in the area of the trails under Scenario 5 (2100 Sea Level Rise Worst Case).

Periodic flooding during storm events of an Existing Coastal Trail segment would result in trail damage and disrepair and require temporary closure or routing to an alternative trail section during trail repair or re-construction. Permanent inundation of an Existing Coastal Trail segment would require relocation of the trail section. The level of difficulty in relocating an Existing Coastal Trail segment would depend on the sources of funding and the specific terms of easements with private property owners.

County Roads

The County Regional Parks Area includes two County Roads exposed to sea level rise and storm events – Doran Beach Road and Westshore Road.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of Doran Beach and Westshore Roads. **Table 21** shows the projected percent of road alignment permanently inundated by sea level rise and with storm event flooding. **Figure 10a** illustrates the projected permanent inundation, and **Figure 10b** illustrates the projected permanent inundation with storm event flooding of the roads under Scenario 5 (2100 Sea Level Rise Worst Case).

Westshore Road is projected to be more at risk than Doran Beach Road of permanent inundation from sea level rise by 2100.

Doran Beach Road. In 2030 the road would not be permanently inundated by sea level rise and 10% of the road would be subject to periodic flooding during storm events. In 2100 under the best case scenario, 12% of the road would be permanently inundated and 25% would be subject to periodic flooding during storm events. Under the worst case scenario, 26% of the road would be permanently inundated and 68% would be subject to periodic flooding.

Westshore Road. In 2030 the road would not be permanently inundated by sea level rise or subject to periodic flooding during storm events. In 2100 under the best case scenario, 3% of the road would be permanently inundated and 18% would be subject to periodic flooding

during storm events. Under the worst case scenario, 39% of the road would be permanently inundated and 90% would be subject to periodic flooding.

Table 21. County Regional Parks Area: County Roads – Inundation and Flood Projections (Percent of Alignment)

Scenario	Projected Sea Level Rise		Storm Event	*Doran Beach Road* *9,503.2 feet* *(1.80 miles)*		*Westshore Road* *9,025.9 feet* *(1.71 miles)*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood	Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----	----	----
2 - 2030	0.83	25	20-year	----	10%	----	----
3 - 2050	1.67	50	20-year	7%	12%	----	5%
4 – 2100 Best Case	3.33	100	100-year	12%	25%	3%	18%
5 – 2100 Worst Case	6.56	200	100-year	26%	68%	39%	90%

See Potential Inundation and Flood Impacts under County Roads in the Bodega Harbor Area. In the County Regional Parks Area, permanent inundation of Westshore Road would affect access to and from Westside Regional Park and the U.C. Davis Marine Laboratory. Permanent inundation of Doran Beach Road would affect access to and from Doran Beach Regional Park.

Westshore Road

Institutional

The County Regional Parks Area includes the only Institutional asset in Bodega Bay – the U.C. Davis Bodega Marine Laboratory (INST-1 on **Figure 10a**). For nearly 50 years, the Bodega Marine Laboratory has provided hands-on training to students who have become leaders in the fields of marine science and policy. Faculty and researchers address a diverse array of basic and applied research problems. An Organized Research Unit of U.C. Davis, the Bodega Marine Laboratory is a specialized facility equipped with a meteorological and oceanographic observation network and long-term data set, Cadet Hand Library, teaching classrooms, wet labs, seawater system, greenhouses, dive training facility, facility-wide animal care and support, Bodega Marine Reserve, housing and conference facilities, and vessel fleet.

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in negligible inundation and flooding of the U.C. Davis Bodega Marine Laboratory property. **Table 22** shows the projected percent area of the property permanently inundated by sea level rise and with storm event flooding. **Figure 10b** illustrates the projected permanent inundation, and **Figure 10c** illustrates the projected permanent inundation with storm event flooding of the Marine Laboratory property under Scenario 5 (2100 Sea Level Rise Worst Case).

Table 22. County Regional Parks Area: U.C. Davis Marine Laboratory Property – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*INST-1* *274.69 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	< 1%	< 1%
2 - 2030	0.83	25	20-year	< 1%	< 1%
3 - 2050	1.67	50	20-year	< 1%	< 1%
4 – 2100 Best Case	3.33	100	100-year	< 1%	< 1%
5 – 2100 Worst Case	6.56	200	100-year	< 1%	2%

In 2030 and 2100 under the best case scenario, less than 1% of the property would be permanently inundated by sea level rise and subject to periodic flooding during storm events. Under the worst case scenario, less than 1% of the property would be permanently inundated and 2% would be subject to periodic flooding. Under the 2100 worst case scenario, flooding would prevent access to the property entrance off Westshore Road and to Westshore Road itself. While inundation would not prevent access to the property right at the entrance, it would

prevent access to Westshore Road, essentially preventing access to the property. If there is no access to the property, it may become necessary to close the facility. Closure of the U.C. Davis Marine Laboratory would result in the loss of a major marine science and policy training and research facility in California.

Private Recreation

The Links at Bodega Harbour Golf Course is the only Private Recreation asset in the County Regional Parks Area. This analysis addresses only the grounds of the Golf Course exposed to sea level rise and storm events (PRIV-1 on **Figure 10a**).

Potential Inundation and Flood Impacts

Sea level rise and storm events would result in inundation and flooding of the affected grounds of the Links at Bodega Harbour Golf Course. **Table 23** shows the projected percent area of the affected grounds permanently inundated by sea level rise and with storm event flooding. **Figure 10b** illustrates the projected permanent inundation, and **Figure 10c** illustrates the projected permanent inundation with storm event flooding of the affected grounds under Scenario 5 (2100 Sea Level Rise Worst Case).

In 2030 the grounds would not be permanently inundated by sea level rise, and 6% of the grounds would be subject to periodic flooding during storm events. In 2100 under the best case scenario 9% of the grounds would be permanently inundated and 21% would be subject to periodic flooding during storm events. Under the worst case scenario, 23% of the grounds would be permanently inundated and 40% would be subject to periodic flooding.

Links at Bodega Harbour Golf Course

Table 23. County Regional Parks Area: Links at Bodega Harbour Golf Course (affected grounds) – Inundation and Flood Projections (Percent Area)

Scenario	Projected Sea Level Rise		Storm Event	*PRIV-1* *19.07 acres*	
	feet	cm		Inundated by Sea Level	Plus Storm Event Flood
1 - 2016	0	0	annual	----	----
2 - 2030	0.83	25	20-year	----	6%
3 - 2050	1.67	50	20-year	----	15%
4 – 2100 Best Case	3.33	100	100-year	9%	21%
5 – 2100 Worst Case	6.56	200	100-year	23%	40%

Permanent inundation and periodic flooding would affect the grounds of three of 18 holes at the Links at Bodega Harbour Golf Course - those located south of Heron Drive and southwest of the Bodega Harbour Clubhouse. Periodic flooding could result in damage and disrepair to the grounds of three holes, which may result in temporary closure of the grounds while they are being repaired or reconstructed. Permanent inundation of the grounds of two holes could result in temporary closure of the grounds while they are being relocated and constructed, or in their permanent closure. Temporary or permanent closure of the grounds for up to three holes at the golf course could decrease tourist attraction to the golf course, hence could decrease revenue for the Bodega Harbour Homeowners' Association.

Summary – County Regional Parks Area

Potential Impacts

Table 24 summarizes the projected percent of County Regional Parks Area assets permanently inundated by sea level rise in 2100 under the best and worst case scenarios.

By 2100 under the worst case scenario, permanent inundation from sea level rise would affect 20% to 73% of coastal wetlands, almost 100% of Westside Regional Park and 36% of Doran Beach Regional Park, 26% to 39% of County Roads, 23% of the Links at Bodega Harbour Golf Course, and less than 1% of the U.C. Davis Bodega Marine Laboratory.

Table 24. Highway 1 Area: Summary of Projected Percent Area of Assets Permanently Inundated by Sea Level Rise by 2100

Asset	Best Case Scenario	Worst Case Scenario
Coastal Wetlands		
FWMARSH -1	<1%	35%
FWMARSH -2	----	20%
FWMARSH -3	----	----
BRMARSH-1	72%	73%
TIDFLT-1	N/A	N/A
TIDFLT-2	N/A	N/A
TIDFLT-3	N/A	N/A
TIDFLT-4	N/A	N/A
Public Access and Recreation		
Westside Regional Park	<1%	98%
Doran Beach Regional Park	19%	36%
California Coastal Trail	N/A	N/A
County Roads		
Doran Beach Road	12%	26%
Westshore Road	3%	39%
Institutional		

Asset	Best Case Scenario	Worst Case Scenario
U.C. Davis Bodega Marine Laboratory	<1%	<1%
Private Recreation		
Links at Bodega Harbour Golf Course	9%	23%

Potential Adaptation Strategies

Possible adaptation strategies for the County Regional Parks Area are accommodate and retreat. Accommodate strategies employ methods that modify existing development to decrease hazard risks and increase resiliency of the development. Sonoma County Regional Parks may consider moving the campgrounds and parking areas upland to a higher elevation. Potential adaptation strategies for Westshore Road are addressed under the Bodega Harbor Area.

County Regional Parks Area adaptation priorities include: (1) potentially accommodate sea level rise through redevelopment, (2) relocate facilities out of hazard areas, and (3) protect beaches through a sand enrichment program.

5. Adaptation Strategies

Introduction

As described in this Focused Vulnerability Assessment, Bodega Bay faces a number of threats from a rising sea and bay. Sea level rise exacerbates existing climate-related hazards such as an increased number of flooding incidents, increased ocean acidification, or bluff erosion and failure. The previous sections of this assessment identify the assets and resources of Bodega Bay vulnerable to sea level rise and coastal storms; and in this section the County considers potential adaptation strategies to prepare for future changes in coastal hazards. Vulnerable assets and resources identified include development and infrastructure; public access and recreational opportunities; beaches, wetlands, and other environmentally sensitive habitat areas; scenic and visual resources; agricultural resources; and water quality.

As the County prepares for these changes, we must evaluate the feasibility of adaptation strategies necessary to protect public safety, health, and quality of life. Such strategies are still developing and evolving, so the County will have to evaluate whether the cost, legal, or permitting constraints for these strategies are manageable. The strategies we present below are not panaceas to protect, accommodate, or retreat the Sonoma County assets impacted by sea level rise. Rather, these strategies are meant to continue our discussion with the community about the suite of possibilities and constraints to consider for climate adaptation starting from the sea level rise adaptation workshop we held in November.

Legal Context for Sea Level Rise Adaptation

The California Coastal Act, the public trust doctrine, California Environmental Quality Act (CEQA), Coastal Zone Management Act, Clean Water Act, Porter Cologne Act, River and Harbors Act, constitutional protections for property, and other laws provide the context for evaluation of appropriate adaptation measures for Bodega Bay. Section 30235 of the Coastal Act states:

> *Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply…*

Section 30253(b) requires new development to avoid risk and prohibits new development from in any way requiring the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The Coastal Commission guidance suggests rezoning hazard areas as open space; and anticipating that sea level rise will impact new development, assuring that critical infrastructure will be safe from inundation.

Some of the adaptation strategies may involve the adoption of Local Coastal Plan policies and programs, changes to zoning and building codes, or permit conditions that focus on avoidance and minimization of risks and protection of coastal resources. Other adaptation strategies could build adaptive capacity into projects themselves, thus addressing future changes in hazard risks while ensuring long-term resource protection.

General Adaptation Categories

Adaptation strategies for vulnerable resources or assets fall into three broad categories: protect, accommodate, and retreat. These strategies are reciprocal, and one strategy does not preclude using another later in time. For purposes of implementing the Coastal Act, no single category or specific strategy should be considered the "best" option (California Coastal Commission 2015). Sea Level Rise planning for Bodega Bay includes strategies from multiple adaption categories, and may be modified over time as science and engineering evolve. Some adaptation strategies may have legal or procedural constraints. For example, in order to construct and maintain coastal armoring, the County would need to work closely with various regional, state, and federal permitting agencies to meet design standards, both for the structures themselves and the adjacent shoreline environment. Adaptive responses will also need to be consistent with the Coastal Act, California Environmental Quality Act, and outside agency permit conditions.

The following paragraphs describe each adaptation strategy and potential areas for implementation in the Bodega Bay community.

Strategies to Protect Assets

Protection strategies generally employ some sort of engineered structure or other measure to defend development or other resources from sea level rise while allowing the resource or asset to remain in its current location. There are two main types of protection strategies: hard and soft defensive measures or armoring. Hard armoring refers to engineered structures such as seawalls, revetments, and bulkheads that defend against coastal hazards such as wave impacts, erosion, and flooding. Armoring is a common response to coastal hazards, but it can result in serious negative impacts to coastal resources, particularly as sea level rises (California Coastal Commission 2015). Soft armoring refers to the use of natural or green infrastructure like beaches, dune systems, wetlands, and other natural systems to buffer coastal areas.

Hard armoring is common along the harbor in Bodega Bay - large rock boulders protect Westshore Road substructure and pavement from tidal erosion and storm surges. The Bodega Harbor Jetty is a rubble mound jetty seawall and another example of a hard protection strategy. Hard structures have an ecological cost since they form barriers that impede the ability of natural beaches and habitats to migrate inland over time. If they are unable to move inland, public recreational beaches, wetlands, and other habitats will be lost as sea level continues to rise. Passive erosion is the narrowing of beaches because the back of the beach on an eroding shoreline is fixed in place (Flick et al. 2012). In Bodega Bay, this occurs on the harbor side of Doran Beach where the back of the beach is lined with large rock boulders. Other detrimental impacts of hard armoring may include negative visual impacts or interference with other ecosystem services (California Coastal Commission 2015).

Soft armor buffering strategies like using wetlands, beach nourishment, dune management or the construction of living shorelines capitalize on the natural ability of these systems to protect coastlines. At the same time, these strategies provide benefits such as habitat enhancement, recreational areas, more pleasing views, and the continuation or enhancement of ecosystem services. The engineering of green infrastructure is a somewhat newer concept, and because of this the effectiveness of some of these strategy types is not well known or tested. In cases where soft armor strategies might not be completely effective or preferred, a hybrid approach

using both hard and soft armoring could be considered. A potential adaptation strategy for Doran Beach would be beach nourishment.

Although the Coastal Act provides for potential protection strategies for existing development, it requires adaptive capacity in new development to prevent altering a natural shoreline (California Coastal Commission 2015). The Coastal Commission recommends prioritizing "hard" or "soft" protection options that enhance and maximize coastal resources and access. Innovative nature-based approaches such as living shoreline techniques or managed/planned retreat should be considered in Sonoma County.

Strategies to Accommodate Sea Level Rise

Accommodation strategies employ methods that design or modify developments to decrease hazard risks and thus increase the resiliency of developments to the impacts of sea level rise. Accommodation strategies include actions such as elevating structures, retrofits and/or the use of materials meant to increase the strength of development, building structures that can easily be moved and relocated, or using extra setbacks. Sonoma County Regional Parks' Doran Beach and Westside Regional Parks boat launches use floating docks that will fall and rise with the tides and rising harbor water levels.

On a community scale, accommodation strategies could include zoning ordinances for redevelopment actions that will help support the resiliency of the built environment. For example, the County could create a combining district for vulnerable areas that would setback development from bluffs or beaches. Strategies to accommodate sea level rise seek to prevent exposure by clustering development in less vulnerable areas.

As with protection strategies, some accommodation strategies could result in negative impacts to coastal resources. For example, redevelopment such as elevating structures may block coastal views and degrade community character and beach ambience. Pile-supported structures could erode into a form of shoreline protection that interferes with coastal processes, blocks beach and trail access, and deters from the scenic character of the bay. Pile-supported structures that occur on the southside of Highway 1 will accommodate sea level rise, but may require reinforcing due to scour.

Strategies to Retreat from Sea Level Rise

Retreat strategies are those that relocate or remove existing development out of hazard areas and limit the construction of new development within vulnerable areas. These strategies include providing land use designations and zoning to encourage building in more resilient areas, or gradually removing and relocating existing development. Acquisition and buyout programs, transfer of development credits programs, and removal of structures (i.e., after reasonable amortization periods) are examples of strategies designed to encourage managed retreat.

Potential Adaption Strategies for Bodega Bay

In this section, the County cautiously applied the general adaptation categories defined above to vulnerable assets to help increase resilience to sea level rise. These potential strategies may change over time as science and engineering evolve. The County will refine these potential adaptation strategies during the development of Local Coastal Plan programs and policies for

the diverse geography and conditions of the Sonoma Coast. For this focused vulnerability assessment, the adaptation strategies focus on Bodega Bay.

Sonoma County hosted a Sea Level Rise Adaptation Planning Workshop for the community of Bodega Bay on November 29, 2016 at the U. C. Davis Bodega Bay Marine Laboratory. The County provided members of the community with a presentation of the three broad categories of strategies for adaptation, along with examples of how and where different adaptation strategies might be used. County staff requested that the community consider implementation locations for adaptation measures by marking aerial photomaps of Bodega Bay. The County incorporated these suggestions into the adaptation strategies discussion for each Bodega Bay area below.

Bodega Harbor Area

Assets vulnerable to sea level rise and storms in the Bodega Harbor Area include: Westshore, Eastshore, and Bay Flat Roads; public and private marinas; residential development; and coastal habitats. Anticipated impacts include road substructure and pavement degradation, ditches clogged with excess sediment, and the possibility of saltwater contaminating private wells and coastal freshwater habitats.

Possible adaptation strategies for Bodega Harbor fall into the categories of retreat and protect. The retreat strategy includes avoiding new development, redeveloping vulnerable infrastructure, and removing damaged infrastructure in hazard areas. Protecting vulnerable road infrastructure in the near to mid-term is anticipated until a long-term relocation strategy has been determined. The measures below combine suggestions from the community and guidance from the Coastal Commission.

Land Use Adaptation Strategies

Bodega Harbor Area Priorities: Avoid new development within mapped hazard areas, protect or relocate shoreline roads and access, remove boats and infrastructure that may damage or degrade harbor water quality, and increase culvert and roadside ditch capacity.

Retreat:

- **Consider avoiding new development in hazardous areas:** avoid construction of new development in zones or overlay areas identified or designated as hazardous due to potential flooding and inundation.

- **Determine the feasibility of a "Transfer of Development Credit" program (TDC):** Restrict development in one area ("sending area") and allow for the transfer of development credits to another area more appropriate for intensive use ("receiving area"). Local Coastal Plans can establish policies to implement a TDC program to restrict development in areas vulnerable to sea level rise and allow for transfer of development credits to parcels with less vulnerability to hazards. A TDC program can encourage the relocation of development away from at-risk locations, and may be used in combination with a buy-out program.

- **Consider options for future removal when planning and designing new development:** Design options should not place an undue burden on future property owners or coastal resources. For new development in high hazard areas or resource-constrained areas, ensure that foundation designs or other aspects of the development will not preclude future incremental relocation or managed retreat. Certain foundation and building elements such as deep perimeter foundations may be difficult to remove in the future, thus alternative design options should be considered.

- **Consider developing a plan to remove or relocate structures that become threatened:** This measure would require authorization through a Coastal Development Permit for removal or relocation of new development vulnerable to wave action, erosion, or other hazards should it become threatened in the future.

- **Consider developing a plan to remove or relocate existing structures that become threatened:** This measure would require authorization through a Coastal Development Permit for removal or relocation of redevelopment subject to wave action, erosion, or other hazards should it become threatened in the future.

- **Consider developing a boat abatement program:** Sea level rise and coastal storms may result in the sinking, breaking apart, or washing ashore of boats abandoned in Bodega Harbor. This program would prevent abandoned, unregistered boats moored at Sonoma County Regional Parks and marinas from contaminating the harbor or damaging other infrastructure; and would include evaluating and enforcing anchorage rules.

- **Plan and design transportation systems to accommodate anticipated sea level rise impacts:** Ensure that transportation networks are designed to function even if the highest projected sea level rise occurs. Efforts to realign, retrofit, and/or protect infrastructure should be coordinated with Caltrans, local public works/transportation agencies, and coastal planning efforts. Individual transportation projects would be implemented through Coastal Development Permits.

- **Consider retrofitting existing transportation infrastructure as necessary:** In instances where relocation of existing transportation infrastructure is not an option, repair the damage and/or retrofit the existing structures to better withstand sea level rise impacts. For example, use stronger materials, elevate bridges or sections of roadway, and build larger or additional drainage systems to address flooding concerns.

- **Attempt to build redundancy into the transportation system:** Provide alternate routes, as possible, to allow for access to and along the coast for instances in which sections of roadways may become temporarily impassible as a result of coastal hazards. Ensure that alternate route information is provided to residents and visitors to coastal areas.

Protect:

- **Evaluate locations for hard protection use only if allowable and if no feasible less damaging alternative exists:** "Hard" coastal protection is a broad term for most engineered features such as seawalls, revetments, cave fills, and bulkheads that block the landward retreat of the shoreline. In some cases, caissons and pilings may also be

considered hard shoreline protective devices. Due to adverse effects on shoreline sand supply and beach area available for public use, such protective devices should be avoided where feasible. Under current law, shoreline protection for existing structures in danger from erosion may be allowed if coastal resource impacts are avoided or minimized and mitigated.

- **Potentially survey and determine feasibility of retaining existing shoreline protection:** Westshore Road, Highway 1, and Bayflat Road run along developed shoreline with no or limited alternate routes. The structural integrity of existing armoring along these roads should be determined, and potential long-term strategies for road resiliency to sea level rise should be considered.

- **Consider increasing capacity of stormwater infrastructure:** Actions to reduce impacts from higher water levels could include widening drainage ditches, improving carrying and storage capacity of tidally-influenced streams, installing larger pipes and culverts, adding pumps, converting culverts to bridges, creating retention and detention basins, and developing contingency plans for extreme storm events. Encouraging and supporting these types of efforts upstream may also be important.

Highway 1 Area

The assets vulnerable to sea level rise and storms in the Highway 1 Area include Highway 1, residential and commercial buildings on the harbor side of Highway 1, yacht club, wastewater treatment plant, Regional Parks and California Coastal Trails access, and environmentally sensitive habitat areas. Soldier pile walls and hard armoring reinforce the low-lying areas of Highway 1. Residential and commercial buildings on the harbor side of Highway 1 are more vulnerable to storm surges, kind tide inundation, and sea level rise. Some of the buildings have been elevated on wooden pilings, which require maintenance.

The adaptation strategies to consider for these assets are based on accommodate and retreat. Accommodate strategies employ methods that modify existing developments to decrease hazard risks and increase resiliency of the development. Because most of the residential and commercial structures have been built on pilings already, maintenance of these pilings will be necessary as wave and tidal scours undermine footings over time. Some buildings may need to be incrementally relocated and in-water structures removed. Relocation of the wastewater treatment plant would be required to follow Coastal Act policy (Section 30231) to minimize the adverse effects of wastewater discharges and entrainment.

Land Use Adaptation Strategies

Highway 1 Area Priorities: Potentially accommodate sea level rise through redevelopment and maintenance strategies, protect or increase adaptive capacity of shoreline roads and trail access, determine wastewater treatment plant resiliency.

Accommodate:

- **Consider revising setbacks for new development:** Ensure structures (especially wells and septic systems) are set back far enough inland from the beach or bluff edge such that they will not be endangered by erosion (including sea level rise induced

erosion) over the life of the structure, without the use of a shoreline protective device. When used to address future risk, setbacks are normally defined by a measurable distance from an identifiable location such as a bluff edge, line of vegetation, dune crest, or roadway.

- **Examine non-conforming structure policies and definitions:** Consider developing policies and regulations to define development in the area between the sea and the first coastal roadway or other known hazard zones as non-conforming, in order to avoid perpetuating development that may become at risk.

- **Consider policies for the gradual phase out of uses in hazardous areas subject to future sea level rise:** Over time, sea level rise is going to create hazardous or harmful conditions that will make some uses unworkable. In some cases it will be difficult or not feasible to mitigate impacts of sea level rise. In these cases, the County will consider policies to phase out existing uses in high hazard or emerging nuisance areas over time. Consider the adoption of policies, including phase out times, for amortization of the uses. Until an amortization schedule is adopted, existing uses that become non-conforming will be allowed to remain for their economic life, but would not be allowed to be rebuilt.

- **Scrutinize redevelopment or upgrades to existing structures in at risk locations:** Use redevelopment policies or regulations to limit expansions, additions, or substantial renovations of existing structures in danger from erosion. Require removal of non-conforming portions of the existing structure, when possible, when a remodel or renovation is proposed.

- **Evaluate redevelopment of existing structures and encourage use of current standards.** Use Local Coastal Plans and CDPs to require that renovations meeting the threshold for redevelopment not be approved unless the entire structure meets the standards for new development, including but not limited to a waiver of right to protection. Specify that if any existing non-conforming elements are permitted to remain, those non-conforming elements are not subject to rights to protection pursuant to Coastal Act Section 30235. Consider limiting cumulative improvement or additions to existing structures:

- **Consider retrofitting existing transportation infrastructure as necessary:** In instances where relocation is not an option, repair damage and/or retrofit existing structures to better withstand sea level rise impacts. For example, use stronger materials, elevate bridges or sections of roadways, and build larger or additional drainage systems to address flooding concerns.

- **Consider developing ecological buffer zones and/or increase the size of buffers:** Buffer zones are intended to protect sensitive habitats from the adverse impacts of development and human disturbance. An important aspect of buffers is that they are distinct ecologically from the habitat they are designed to protect. Local Coastal Plans can establish requirements for ecological buffers and provide guidance on how to establish or adjust these buffers to accommodate sea level rise. Coastal Permits should require buffers to be designed, where applicable, to provide "habitat migration corridors" that allow sensitive habitats and species to migrate inland or upland as sea level rises.

- **Carefully consider siting and design of wastewater disposal systems to avoid risks from sea level rise:** Wastewater treatment and disposal systems are particularly challenging in that they are often located in areas that will be impacted by sea level rise. Damage to these facilities could result in impacts to water quality or other coastal resources. New facilities should not be sited in hazardous areas. Existing facilities already located within hazardous areas should be modified to withstand worst-case scenario sea level rise impacts.

- **Encourage siting and design wastewater disposal systems to avoid risks from sea level rise:** Wastewater treatment and disposal systems are particularly challenging in that they are often located in areas that will be impacted by sea level rise. Ensure that these systems are not adversely affected by the impacts of sea level rise over the full life of the structure and ensure that damage to these facilities would not result in impacts to water quality or other coastal resources. Avoid locating new facilities in hazardous areas if possible. If complete avoidance is not possible, minimize elements of the system that are in hazardous areas (for example, locate the main facility on higher ground and only place pump stations in potentially hazardous areas), and design any facilities in hazardous areas to withstand worst-case scenario sea level rise impacts.

- **Evaluate water quality risks from wastewater treatment plants, septic systems, and ocean outfalls:** Consider conducting a feasibility study of wastewater treatment plant operations, berm stability, and emergency operations. Consider establishing a program to retrofit, decommission, relocate, or eliminate ocean outfalls and other wastewater infrastructure deemed at risk. Alternatives include modifications to outfall lines, the use of green infrastructure, and redesign of waste and stormwater systems.

- **Identify research and monitoring needs to more precisely understand local issues:** Research programs may be established to analyze the particular local challenges related to water quality and supply as a result of sea level rise. Opportunities for innovative solutions to these challenges should be identified.

Retreat:

- **Consider avoiding the expansion or perpetuation of existing structures in at-risk locations:** On an eroding shoreline, the seaward portions of an existing structure may become threatened as the setback or buffer zone between the structure and the mean high tide line or bluff edge is reduced due to erosion of the beach or bluff. When the seaward portion of the structure no longer meets the standards or setback that would be required for new development, it becomes a "non-conforming" structure for purposes of redevelopment policies and regulations. The following should be considered, as consistent with the Coastal Act, FEMA policies, and other relevant standards, to address existing non-conforming development to avoid the need for shoreline or bluff protective devices and associated impacts to coastal resources.

- **Consider retrofitting or relocating vertical accessways:** Consider options to retrofit existing accessways to reduce impacts from sea level rise. Such retrofits could include using different materials that can better withstand impacts, or re-orienting the

layout or other features of accessways to lessen damage and other impacts. Also begin to plan for and identify triggers and options for relocating accessways over time as conditions change.

- **Evaluate the potential of retrofitting or relocating sections of the Coastal Trail:** Use boardwalks, bridges, and/or other design features to ensure continuity of the California Coastal Trail (Coastal Trail) in sections that are vulnerable to sea level rise hazards. Some sections may need to be relocated over time. A Local Coastal Plan could identify vulnerable sections of the Coastal Trail and establish a phased approach to relocate sections of the trail in such a way that is consistent with provisions of the Coastal Act and ensures that the Coastal Trail remains within sight, sound, or smell of the sea.

- **Determine the feasibility of establishing conservation easements or other development restrictions to protect habitat:** Establish a formalized program to identify, acquire, and manage areas appropriate for some form of conservation protection. Easements or other strategies may be used to limit or restrict development on portions of a lot parcel that are most vulnerable to sea level rise impacts. The program might develop standard agreements to be used for easements and identify the entities that could hold the easements. A conservation easement program could be established on a community wide basis through a Local Coastal Plan and implemented on a parcel by parcel basis through individual Coastal Permits.

- **Encourage open space protection as a component of new development located adjacent to coastal habitats:** The Local Coastal Plan can require permit conditions for new development in certain areas that buffers around natural resource areas be protected through a conservation easement, deed restrictions, or other comparable mechanism.

- **Identify opportunities for Regional Sediment Management:** Sediment supplies will be important for the long-term sustainability of many beaches and wetland areas. Strategies to maintain or restore natural sediment supplies and to coordinate sediment removal efforts with opportunities for reuse can provide multiple benefits to coastal ecosystems. See Strategy A.19c above for more detail on RSM programs.

County Regional Parks Area

The assets most vulnerable to sea level rise and storms are Westshore Road, Doran Beach, and Westside Regional Parks, and the inlet to Bodega Harbor. Sea level rise inundation would affect access to and along Westshore Road. Permanent sea level rise inundation would affect almost all of Westside Regional Park facilities including parking and campgrounds by 2100. Doran Beach Regional Park will have permanent inundation of up to 35 percent of the beach and campground by 2100.

The adaptation strategies to consider for these assets are accommodate and retreat. Accommodate strategies employ methods that modify existing developments to decrease hazard risks and increase resiliency of the development. Sonoma County Regional Parks may consider moving the campgrounds and parking areas higher upland. Potential adaptation strategies for Westshore Road have been discussed in the Bodega Harbor Area section.

Land Use Adaptation Strategies

County Regional Parks Area Priorities: Potentially accommodate sea level rise through redevelopment, relocate facilities out of hazard areas, and protect beaches through a sand enrichment program.

Accommodate:

- **Consider long-term hazards in site design for access sites and facilities to minimize impacts:** May include policies that encourage public access sites, segments of the CCT, and recreation and visitor-serving facilities to be sited and designed to avoid impacts from sea level rise, while maximizing public access and recreation opportunities. Examples of siting and design standards for development can be found in section A. Where facilities can be safely sited for the near term but future impacts are likely, require an adaptive management plan detailing steps for maintenance, retrofitting, and/or relocation.

- **Consider protecting existing Parks and Open Space adjacent to the coast:** Plan for future coastal recreational space and parkland by protecting open space adjacent to coastal habitats so that beaches and other habitats can migrate or so that there is open space available as parkland or other areas are lost.

- **Support research on impacts to recreation and public access:** Changes in sea level will affect wave conditions and sediment transport, but additional research is needed to understand how these changes will affect specific conditions for surfing and other recreation activities. While such research programs may be outside the scope of individual local jurisdictions, statements of support for the local issues that need to be addressed can help guide research agendas at the regional state or federal level. Or, such needs can serve to guide grant applications to undertake the needed projects within a jurisdiction. To the extent possible, add policies to promote research on sea level rise impacts to recreational activities like surfing or other coastal recreational uses in the Local Coastal Plan jurisdiction.

Retreat:

- **Consider the feasibility of retrofit or relocate recreation and visitor-serving facilities:** Consider options to retrofit existing recreation and visitor-serving facilities to better accommodate sea level rise impacts. Such retrofits could include use of different building materials and/or relocating facilities.

Protect:

- **Consider incorporating sea level rise into a comprehensive beach management strategy:** Potentially develop a new comprehensive beach management strategy to address loss of beach areas, including loss of lateral access, or changes in beach management due to sea level rise. Establish a program to minimize loss of beach area through, as may be appropriate, a beach nourishment program; restoring sand and sediment supply to the littoral cell; removal, adjustments, or maintenance to shoreline

protection structures; use of man-made structures such as terminal groins or artificial reefs to retain sediment; or other actions.

- **Determine the feasibility of establishing a beach nourishment program and protocols:** The County may need to develop new policies to address the need for beach nourishment with sea level rise. Policies within a Local Coastal Plan may identify locations where nourishment may be appropriate or ecologically feasible. Beach nourishment programs should also consider how nourishment options may need to change over time as sea level rises.

- **Determine the feasibility of establishing management actions to maintain and restore dunes and natural dune processes.** Dunes provide buffers against erosion and flooding by trapping windblown sand, storing excess beach sand, and protecting inland areas, and they provide habitat. Doran Beach is a sand spit with dune habitat that provides wind protection to the inner Harbor, and is a sensitive ecosystem. The County would have to determine the ecological feasibility of this adaptation strategy. This is likely most effective for areas with some existing dune habitat and where there is sufficient space to expand a foredune beach for sand exchange between the more active (beach) and stable (dune) parts of the ecosystem. This strategy requires incremental amounts of sand due to increased erosion from sea level rise.

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7. Glossary

Land Use Categories

Marine Industrial (MI). Land designated for or occupied by marine industrial development. The MI land use category encompasses land to accommodate a variety of commercial, light to medium industrial, and service uses which support the commercial fishing and other coastal dependent industries which depend on the marine environment and resources.

Rural Residential (RR). Land designated for very low density residential development (1 to 20 acres per dwelling unit) which has few if any public services but which has access to county maintained roads.

Urban Residential (UR). Land planned for public services for low and medium density residential development (1 to 6 dwelling units per acre) to accommodate a variety of housing and tenure types.

Resources and Rural Development (RRD). Land designated for very low density residential development and to protect lands needed for use and production of natural resources (e.g., water, timber, geothermal steam, or aggregate production); protect water resources and biotic habitats; and protect from intensive development lands constrained by geologic, flood, or fire hazards or other constraints.

Inundation and Flooding

Permanent Inundation. Permanently covered by water from sea level rise.

Temporary Flooding. Temporarily covered by flood water from storm events.

California Coastal Trail

Existing Coastal Trail. The trail has been constructed.

Proposed Coastal Trail. The approximate location of the trail alignment has been identified as described in the Public Access Plan of the Local Coastal Plan Update.

Future Coastal Trail. The trail alignment between two end points is unknown. In some cases, where the alignment has not been identified, the beginning and end points of the trail are shown and the future alignment is illustrated along State Highway 1.

Coastal Wetlands

Section 30122 of the 1976 California Coastal Act defines wetlands as lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

PUBLIC REVIEW DRAFT

Sonoma County
Local Coastal Plan

APPENDIX H: 2010 SONOMA BICYCLE AND PEDESTRIAN PLAN – COASTAL ZONE PROJECTS
September 2019

Local Coastal Program
Permit Sonoma

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

LIST OF PROJECTS – COASTAL ZONE

Route Segments	Project Area	Supervisorial District	Project Number	Bikeway	Begin Point	End Point	Miles	Cost / Mile	Cost Estimate	Notes	Priority
Bean Ave. – Ocean View Ave.	Coast	5	128	Class III	Ocean View Ave.	Sonoma Coast State Beach	0.23	$5,000	$1,000	Signs and striping only. Bodega Bay Trail segment B.	MEDIUM
Bodega Ave.	Coast	5	131	Class III	State Hwy. 1	Windy Lane	0.23	$5,000	$1,000	Signs and striping only. Bodega Bay Trail segment 3C-1	MEDIUM
Bodega Bay Trail	Coast	5	197E	Class I	Eastshore Rd.	Taylor St.	0.2	$7,605,000	$1,521,000	Cost estimate from Bodega Bay Trails Plan feasibility study. Bodega Bay Trail segments 3A, and 3B-1.	HIGH
Bodega Bay Trail	Coast	5	197B	Class I	Harbor View Dr.	State Hwy. 1	0.65	$400,000	$259,000	Switch-back section recommended by the Harbor View feasibility study. Bodega Bay Trail segment 3C-2	HIGH
Bodega Bay Trail	Coast	5	197F	Class I	Keefe Ave.	Bay Flat Rd.	1.43	$400,000	$572,000	Bodega Bay Trail segments 1B, 1C, and 2B	HIGH
Bodega Bay Trail	Coast	5	197G	Class I	Bay Flat Rd.	Smith Bros. Rd.	0.92	$2,228,000	$2,050,000	Cost estimate from Bodega Bay Trails Plan feasibility study. Bodega Bay Trail segments 3D-1 and 3D-2.	HIGH
Bodega Bay Trail	Coast	5	197C	Class I	Lucas Warf/ Smith Bros. Rd.	Doran Beach Rd.	0.66	$400,000	$266,000	Bodega Bay Trail segments 5B, 6B, and 6C.	HIGH
Bodega Bay Trail	Coast	5	197A	Class I	State Hwy. 1	Jetty Campground	1.78	$400,000	$713,000	Bodega Bay Trail segments I and J	MEDIUM
Coleman Valley Rd.	Coast	5	122	Class III	State Hwy. 1	Bohemian Hwy.	9.54	$5,000	$48,000	Signs and striping only.	MEDIUM
Fort Ross Rd.	Coast	5	123	Class III	State Hwy. 1	Cazadero Hwy.	10.59	$5,000	$53,000	Signs and striping only.	LOW
Gualala River Bridge Trail	Coast	4	204	Class I	Mendo. Co. Line	Mendo. Co. Line	0.3	$400,000	$119,000	Provides connection to Mendocino County via Class I across the Highway 1 Gualala River Bridge.	HIGH
Harbor View Dr.	Coast	5	134	Class III	Bodega Ave.	State Hwy. 1	0.25	$5,000	$1,000	Signs and striping only. Bodega Bay Trail segment 3C-2	MEDIUM
Keefe Ave.	Coast	5	130	Class III	Bodega Bay Trail (1B)	Ocean View Ave.	0.12	$5,000	$1,000	Signs and striping only. Bodega Bay Trail segment C. Connects Hwy 1 with segment 1B Class I.	MEDIUM
Kruse Ranch Rd.	Coast	5	126	Class III	Seaview Rd.	State Hwy. 1	3.65	$5,000	$18,000	Signs and striping only.	LOW
Meyers Grade Rd.	Coast	5	124	Class III	State Hwy. 1	Fort Ross Rd.	4.92	$5,000	$25,000	Signs and striping only.	LOW
Ocean View Ave.	Coast	5	129	Class III	Keefe Ave.	State Hwy. 1	0.12	$ N/A	$1,000	Connects segments B and C of the Bodega Bay Trail with Hwy 1.	MEDIUM
Smith Brothers Rd.	Coast	5	135	Class III	State Hwy. 1	State Hwy. 1	0.3	$5,000	$2,000	Signs and striping only. Bodega Bay Trail segment 5B.	MEDIUM
State Hwy. 1	Coast	5	4E	Class II	Slaughter House Rd.	Doran Beach Rd.	7.23	$25,000	$181,000	Adequate right-of-way for Class II. Signs, striping, brush removal, and minor improvements.	HIGH
State Hwy. 1	Coast	5	4F	Class II, Shoulders	Valley Ford Rd.	Slaughter House Rd.	1.49	$750,000	$1,119,000	Roadway must be widened and additional right-of-way acquired.	HIGH
State Hwy. 1	Coast	5	4D	Class II, Shoulders	Doran Beach Rd.	State Hwy. 116	11.04	$750,000	$8,278,000	Roadway must be widened and additional right-of-way acquired.	HIGH
State Hwy. 1	Coast	5	4G	Class II	Marin Co. Line	Valley Ford Rd.	1.52	$25,000	$38,000	Adequate right-of-way for Class II. Signs, striping, brush removal, and minor improvements.	MEDIUM
State Hwy. 1	Coast	5	4C	Class II, Shoulders, Class III	State Hwy. 116	Meyer's Grade Rd.	6.05	$390,000	$2,360,000	Class II in climbing lanes, Class III in descending lanes. Roadway must be widened and additional right-of-way acquired.	MEDIUM
State Hwy. 1	Coast	5	4A	Class II, Shoulders, Class III	Kruse Ranch Rd.	Gualala River Bridge	15.47	$390,000	$6,034,000	Class II in climbing lanes, Class III in descending lanes. Roadway must be widened and additional right-of-way acquired.	MEDIUM
State Hwy. 1	Coast	5	4B	Class III	Meyer's Grade Rd.	Kruse Ranch Rd.	16.12	$5,000	$81,000	Signs and striping only.	MEDIUM
Taylor St.	Coast	5	132	Class III	State Hwy. 1	Bodega Ave.	0.04	$ N/A	$1,000	Signs and striping only. Bodega Bay Trail segment 3C-1.	MEDIUM
Windy Lane	Coast	5	133	Class III	State Hwy. 1	Bodega Ave.	0.06	$ N/A	$1,000	Signs and striping only. Bodega Bay Trail segment 3C-1.	MEDIUM

PUBLIC REVIEW DRAFT

Sonoma County
Local Coastal Plan

APPENDIX I: CATEGORICAL EXCLUSIONS
September 2019

Local Coastal Program
Permit Sonoma

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX I: CATEGORICAL EXCLUSIONS

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APPENDIX I: CATEGORICAL EXCLUSIONS

1. CATEGORICAL EXCLUSION CONDITIONS FOR UNITS 1, 2, AND 3 IN BODEGA HARBOUR

Note: The following lots in Unit 2 are not exempt from Coastal Permits because of visual concerns:

APNs 100-320-006-008, 014-016, 048-053, 062-066
100-330-033-036

Of these lots, APNs 100-320-051, 053, 066 are subject to Condition 3.

Units 1, 2 and 3 of Bodega Harbour depicted on Exclusion Map B-1 are exempt (except for the lots specified above) from Coastal Permits under certain conditions. All conditions must be met or a Coastal Permit will be required. The Permit and Resource Management Department shall not sign off on any building permit unless evidence is provided that the conditions have been met.

CONDITION 1: (Units 1 and 2 only) All residences must be no higher than 16 feet from the high point of the roof (chimney flues excluded) to the highest point of natural grade under the house.

CONDITION 2: (Unit 3 only) No structure shall be more than one story or 16 feet in height, except that up to 20% of the total roof area may be 20 feet in height if at least an equal amount of the total roof area is a corresponding distance below the 16 foot maximum height. Height is measured as the vertical distance from the highest and lowest points of natural grade beneath the enclosed portion of the structure.

CONDITION 3: Because subdivision geologic studies have indicated that certain lots require an additional soils engineering study to ensure proper construction, the following lots in Units 1, 2, and 3 must meet the following specific requirements:

1. Building layout and foundation plans shall be reviewed by an engineering geologist.

2. The engineering geologist may require inspection of foundation excavations prior to pouring concrete if slopes are more than 20%.

Units 1 and 2

APNs 100-255-003, 004, 009, 010
100-261-005-007

100-271-004, 005
100-281-008-010
100-282-004-08, 018, 019
100-291-002-005, 017, 019-021
100-340-073, 074, 075, 078

Unit 3

APNs 100-380-031, 032
100-400-049
100-420-025, 037
100-440-008
100-450-002

CONDITION 4: The following lots in Unit 3 must meet the following additional soils/geologic requirements:

Unit 3

APNs 100-380-030, 033-036
100-400-013, 016, 017
100-410-038, 039, 040, 062
100-420-073
100-450-001

1. A surface/subsurface foundation investigation by an engineering geologist is required based on the proposed building location prior to foundation design.

2. Building layout and foundation plans must be reviewed by a registered engineering geologist.

3. The engineering geologist is likely to require inspection of foundation excavations while excavating equipment is on the site and before forms and steel are place.

CONDITION 5: The following lots require an archaeological field study and implementation of reasonable mitigation measures when recommended by the study:

APNs 100-261-020
100-380-054
100-420-720

CONDITION 6: The following lots lie within 300 feet of a designated freshwater marsh. To mitigate possible impacts on the marsh, the following measures shall be employed:

APNs 100-281-007-010
100-292-004-010

1. Any grading, cut or fill shall occur between May 15 and September with immediate reseeding of any disturbed areas. This requirement may be waived if an erosion control plan is submitted.

2. Finished cut slopes shall be 3:1 or flatter.

3. Use of pole, caissons and grade beam, or similar construction is strongly encouraged to minimize grading on these lots.

4. Retaining devices such as railroad ties shall be used downslope from all structures, with thick plantings of native grasses on the downstream side of the ties.

CONDITION 7: All development shall comply with the Bodega Harbour Design Regulations and homeowners' CC&Rs. Evidence of Final Design Review approval (Design Review letter) must be presented to the Sonoma County Permit and Resource Management Department. On any lot with a slope greater than 5%, the Design Review letter shall indicate appropriate measures for erosion control of storm runoff which have been included in the project design.

No final planning approval sign-off shall occur until the planner sees the Final Design Review approval letter and the Bodega Harbour checklist.

2. CATEGORICAL EXCLUSION FOR TAYLOR TRACT AND FIRST ADDITION, BODEGA BAY

One single-family dwelling for each existing vacant parcel is categorically excluded from a Coastal Permit in the area west of Highway 1 in the Taylor Tract and the First Addition if it meets all of the following conditions. If it does not meet all of the following conditions, a Coastal Permit is required.

1. The exclusion shall apply only to those parcels depicted on Exclusion Map B-2.
2. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by structure to ensure community compatibility.
3. Dwelling units shall be subject to Design Review and conform to Bodega Bay "Core Area" Coastal Plan Design Guidelines.
4. The following lots are subject to the requirements of the Alquist-Priolo Special Studies Zone (engineered foundations) enforced by the Sonoma County Permit and Resource Management Department.

   APNs 100-080-011, 017, 019, 022-027, 031, 055, 057, 058, 064, 065
   100-092-001-009
   100-093-002-006, 008, 010, 011, 015-023
   100-094-001, 004-007
   100-095-001-007
   100-096-014-019, 033, 034

5. The following lots lie within 300 feet of a designated freshwater marsh. A grading, erosion, and sediment control plan prepared by a civil engineer is required to mitigate possible impacts on the marsh.

   AP# 100-080-045, 046, 054, 055
   100-090-025, 030, 031

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2.1 Categorical Exclusion Conditions Attachment "B-2" For Villa Marina, Bodega Bay

One single-family dwelling for each existing vacant parcel in the Villa Marina Subdivision is categorically excluded from Coastal Permits if it meets to following conditions. If it does not meet any of the conditions, a Coastal Permit is required.

1. The exclusion shall apply only to those parcels depicted as excludable parcels on Exclusion Map B-2.

2. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by structure.

3. All dwellings are subject to design review and shall conform to Coastal Zone design guidelines.

4. The following parcels are subject to requirements of the Alquist-Priolo Special Studies Zone (engineered foundations) enforced by the County Permit and Resource Management Department:

   AP# 100-070-012-017
   100-070-026-028

5. The following parcels require an engineering geologist review and approve grading, site preparation, drainage, and foundation plans to determine there will be no significant impacts:

   AP# 100-070-012-017
   100-070-026-028

6. The following parcels require an archaeological study, and implementation of reasonable mitigation measures when recommended by the study:

   AP# 100-070-012, 026, 028

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2.2 Categorical Exclusion Conditions Attachment "B-2" for W Haleship Area, Bodega Bay

One single family dwelling for each existing vacant parcel in the Whaleship Road area is categorically excluded from Coastal Permits if it meets the following conditions. If it does not meet any of the conditions, a Coastal Permit is required.

1. The exclusion shall apply only to those parcels depicted as excludable parcels on Exclusion Map B-2. Remaining parcels are not excluded because they are within 100 feet of a designated marsh, contain marshes or ponds, potential public trust land, or are steep and present significant design issues.

2. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by structure.

3. All dwellings are subject to design review and shall conform to Coastal Zone Design guidelines.

4. The following parcels are subject to requirements of the Alquist-Priolo Special Studies Zone (engineered foundations) enforced by the County Permit and Resource Management Department:

   AP# 100-051-013-017

5. The following parcels require that an engineering geologist review and approve all grading, site preparation, drainage, and foundation plans to determine there will be no significant impacts:

   AP# 100-051-013-017

The engineering geologist report shall contain, at a minimum, the information specified in the Coastal Commission Statewide Interpretive Guidelines concerning Geologic Stability of Blufftop Development.

3. CALIFORNIA COASTAL COMMISSION CATEGORICAL EXCLUSION ORDER E-81-5, ADOPTED IN 1981, SONOMA COUNTY

The Commission by a two-thirds vote of its appointed members hereby adopts an order, pursuant to Public Resources Code Section 30010(e) and 30610.5(b), categorically excluding from the permit requirements of the California Coastal Act of 1976 the categories of development within the specifically defined geographic areas described below:

I. BACKGROUND

Section 30610 of the California Coastal Act allows the State Commission to adopt a Categorical Exclusion for a specific type of development within a defined geographic area.

Section 30610(e) states that no Coastal Development Permit shall be required for the following types of development and in the following areas:

> "Any category of development, or any category of development within a specifically defined geographic area, that the Commission, after public hearing, and by two-thirds vote of its appointed members, has described or identified and with respect to which the Commission has found that there is no potential for any significant adverse effect, either individually or cumulatively, on coastal resources or on public access to, or along, the coast and, where such exclusion precedes certification of the applicable local coastal program, that such exclusion will not impair the ability of local government to prepare a local coastal program."

Public Resources Code Section 30610.5(b) additionally requires that the following findings and provisions must be made:

Section 30610.5(b) states in part:

> "Every exclusion granted...shall be subject to terms and conditions to assure that no significant change in density, height, or nature of uses will occur without further proceedings under this division and an order granting an exclusion under Subdivision (e) of Section 30610...may be revoked at any time by the Commission if the conditions of the exclusion are violated."

The County of Sonoma seeks the exclusion by the California Coastal Commission of categories of development in the geographic areas designated in Exhibit 1 from Coastal Development Permit requirements. The categorical exclusion may be authorized pursuant to Public Resources Code Section 30610(e) and 30610.5(b). The geographic area is the entire coastal zone of the County of Sonoma. Within this area, the County

proposes that the following activities within the specific areas shall not require a Coastal Development Permit.

II. CATEGORIES OF DEVELOPMENT, GEOGRAPHIC AREAS, AND CONDITIONS

A. Category of Development

Single-family residences on existing parcels in Units I and II of the Bodega Harbour Subdivision.

Geographic Areas of Exclusion

Existing lots in Units l and II of Bodega Harbour Subdivision except APNs 100-032-006, 008, 014-016, 048-053, 062-066, and 100-033-033-036, as shown on the attached Exclusion Map B-1.

Conditions

1. All residences must be no higher than 16 feet from the highest point of natural grade under the house to the high point of the roof (chimney flues excluded).

2. Because subdivision geologic studies have indicated that certain lots require additional soils engineering study to ensure proper construction, the following lots must meet specified requirements.

   APNs 100-255-003, 004, 009, 010
   100-261-005-007
   100-271-004, 005
   100-281-008-010
   100-282-004-008, 018, 019
   100-291-002-005, 017-021
   100-034-073-075, 078

Requirements

   a. The building layout and foundation plans shall be reviewed by an engineering geologist.

   b. The engineering geologist may require inspection of foundation excavations prior to pouring concrete if slopes are more than 20 percent.

3. The following lot requires an archaeological field investigation, and implementation of reasonable mitigation measures when recommended by the study: APN 100-261- 020.

4. The following lots lie within 300 feet of a designated freshwater marsh: APNs 100-281-007-010; 100-029-004-010.

To mitigate possible impacts on the marsh, the following measures shall be employed:

a. Any grading, cut or fill shall occur between May 15 and September 15 with immediate reseeding of any disturbed areas. This requirement may be waived if an erosion control plan is submitted.

b. Finished cut slopes shall be 3:1 or flatter.

c. Use of pole, caissons and grade beam, or similar construction is strongly encouraged to minimize grading on these lots.

d. Retaining devices such as railroad ties shall be utilized downslope from all structures with thick plantings of native grasses on the downstream side of the ties.

5. All development shall comply with Bodega Harbour Design Regulations and homeowners" CC&Rs. Evidence of final Design Review approval (letter) must be presented to the Permit and Resource Management Department. On any lot with a slope greater than 5 percent, the Design Review letter shall indicate appropriate measures for erosion control of stormwater runoff which have been included in the project design.

B. Category of Development

Single-family residences on existing parcels in the Taylor Tract and First Addition, Bodega Bay.

Geographic Area of Exclusion

Existing parcels in the Taylor Tract and First Addition, as shown on the attached Exclusion Map B-2.

Conditions

1. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by the structure.

2. Dwelling units shall be subject to Design Review and must conform to Bodega Bay "Core Area" Coastal Plan Design Guidelines.

3. The following lots are subject to the requirement of engineered foundations for development within the Alquist-Priolo Special Studies Zone, as enforced by the Sonoma County Permit and Resource Management Department:

   APNs 100-098-011-017, 019, 022-027, 031-055, 057, 058, 064, 065
   100-092-001-009
   100-093-002-006, 008, 010, 011, 015-023
   100-094-001, 004-007

100-095-001-007
100-096-014-019, 033, 034

4. The following lots lie within 300 feet of a designated freshwater marsh:

   APNs 100-051-013-017

   A grading, erosion, and sediment control plan prepared by a civil engineer is required to mitigate possible impacts on the marsh.

C. Category of Development

Single-family residences on existing parcels in the Whaleship Area, Bodega Bay.

Geographic Area of Exclusion

Existing parcels in the Whaleship Area as shown on Exclusion Map B-2.

Conditions

1. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by the structure.

2. All dwellings are subject to design review by the Sonoma County Permit and Resource Management Department and shall conform to Coastal Zone Design Guidelines.

3. The following parcels are subject to requirements of the Alquist-Priolo Special Studies Zone (engineered foundations) enforced by the Sonoma County Permit and Resource Management Department:

   APNs 100-051-013-017

4. The following parcels require that an engineering geologist review and approve all siting of structures, grading, site preparation, drainage, and foundation plans to determine where will be no unmitigable hazards to life or property:

   APNs 100-051-013-017

   The engineering geologist report shall contain, at a minimum, the information specified in the Coastal Commission Statewide Interpretive Guidelines concerning Geologic Stability of Blufftop Development (5-77).

D. Category of Development

Single-family residences on existing parcels in the Villa Marina Subdivision, Bodega Bay.

Geographic Area of Exclusion

Existing parcels in the Villa Marina Subdivision as shown on Exclusion Map B-2.

Conditions

1. Height shall not exceed 16 feet from the average level of the highest and lowest point of that portion of the lot covered by the structure.

2. All dwellings are subject to design review by the Sonoma County Permit and Resource Management Department and shall conform to Coastal Zone Design Guidelines.

3. The following parcels are subject to requirements of the Alquist-Priolo Special Studies Zone, including engineered foundations, as enforced by the Sonoma County Permit and Resource Management Department:

   APNs 100-007-012-017
   100-001-020-028

4. The following parcels require that an engineering geologist review and approve the siting of structures and all grading, site preparation, drainage, and foundation plans; and to determine there will be no unmitigable hazards to life and property:

   APNs 100-007-012-017
   100-007-026-028

5. The following parcels require an archaeological study and the implementation of reasonable mitigation measures when recommended by the study:

   APNs 100-007-012,026,013

E. Category of Development

The pruning, trimming or removal of non-commercial trees that are part of a vegetation management program administered by the California Department of Parks and Recreation to provide for:

a. tree hazard control

b. arboriculture

c. exotic (non-native) tree removal as part of a program to restore an area to its native vegetation

d. fire prevention or control

e. insect or disease control

f. fuel break or fuel reduction

g. scenic vista clearing

h. soil erosion control

i. ecological management

Geographic Area of Exclusion

All California State Park, reserves, and recreation areas within the exclusion areas mapped on Exhibit 1.

Conditions

A report of the activity shall be submitted to the Director of the Permit and Resource Management Department at least 10 days prior to that activity. Emergency fire control measures and the removal of trees which pose an imminent threat to public safety, such that the vegetation removal is exempted from the Department of Parks and recreation Operations Manual approval procedures, are exempt from the condition of this exclusion requiring a report and review by the Director of the Permit and Resource Management Department.

The proposed activity is excludable under this order only if the Director of the Permit and Resource Management Department reviews the proposed activity and certifies, prior to the commencement of any activity, that the tree trimming, pruning, and removal will protect the resource values of the following:

1. Any tree or trees that are landmark trees or that are of special cultural or coastal community significance.

2. Any tree or trees that are visually significant and/or important scenic resource.

3. Any tree or trees that provide shade or act as a buffer against visual or noise intrusion in areas used by the public for recreational purposes or access to or along the coast.

4. Any tree or trees which are an integral part of an environmentally sensitive habitat area.

5. Any tree or trees that are native California species.

6. Any tree or trees that are of educational or scientific value because of their location, species, size, habitat value or other natural features.

7. Any tree or trees that are important in the control of erosion, in the provision of windbreaks or other climate control, in the provision of protection to surrounding vegetation, in the provision of soil stabilization, or in the maintenance of flood control protection.

8. Any tree which is rare or endangered or provides habitat for rare or endangered species as listed in the following sources:

    a. Volume 60, Code of Federal Regulations, Part 23 (Based upon Convention on International Trade in Endangered Species of Wild Fauna and Flora).

    b. Volume 60, Code of Federal Regulations, Part 17 (Based upon Endangered Species Act of 1973).

    c. Title 14, California Administrative Code, Section 670.2 (Plants of California Declared to be Endangered or Rare).

    d. California Native Plant Society Special Bulletin No.1, lnventory of Rare and Endangered Vascular Plants of California (The latest edition published shall be used).

    The rare or endangered species lists referred to above are continually updated. The developer shall consult the most currently published versions of these lists.

F. Category of Development

The raising, grazing, maintaining, and breeding of horses, cattle, sheep, goats, and similar livestock, except for the construction of feedpens, milking sheds, feedsheds, barns, or similar structures within areas designated as Sanctuary-Preservation, Conservation, or Potentially Sensitive (hereinafter referred to collectively as "Sensitive Areas") on the adopted Open Space Map.

Geographic Area of Exclusion

Parcels of land in the Sonoma County Coastal Zone which are zoned Resources and Rural Development, Land Intensive Agriculture, Land Extensive Agriculture or Diverse Agriculture and designated as excluded areas by the map attached as Exhibit 1.

Conditions

This exclusion shall apply only to parcels five acres or larger.

G. Category of Development

The outdoor growing and harvesting of shrubs, plants, flowers, vines, fruits, vegetables, hay, grain, and similar food and fiber crops, including packing and polishing of unprocessed agricultural yield.

Within any Sensitive Areas designated on the adopted Open Space Map, this exclusion does not include the operation or maintenance of any power driven machinery, nor the erection of any structures for growing, harvesting, packing or polishing unprocessed agricultural yield.

Geographic Area of Exclusion

Parcels of land in the Sonoma County Coastal Zone which are zoned Resource and Rural Development, Land Intensive Agriculture, Land Extensive Agriculture, Diverse Agriculture, Agriculture and Residential, or Rural Residential and designated as excluded areas by the map attached as Exhibit 1.

H. Category of Development

The raising, feeding, maintaining, and breeding of poultry, fowl, rabbits, furbearing and similar animals for use of the persons residing on the property.

Geographic Area of Exclusion

Parcels of Land in the Sonoma County Coastal Zone which are zoned Resources and Rural Development, Land lntensive Agriculture, Land Extensive Agriculture, Diverse Agriculture, and Timber Production and designated as excluded areas by the map attached as Exhibit 1.

Conditions

Such use must be incidental and appurtenant to a single-family dwelling.

I. Category of Development

Reforestation and restoration of timber and agricultural areas incidental to the growing and harvesting of timber and agricultural products. Exempted developments include the planting of trees, hydromulching, removal of temporary culverts, removal of slash, restoration of the natural contours of dirt roads, contour plowing and other restoration of land which has been subject to harvesting of timber or other agricultural products to a habitat value which existed prior to human activity. The exclusion does not include structural development or grading which would otherwise require a coastal permit under the Site Development and Erosion Control Standards of this chapter. Structural development is defined as the placement, erection, or construction of any structure. Structure includes, but is not limited to, any building, road, pipe, conduit, or aqueduct.

Geographical Area of Exclusion

Parcels of land in the Sonoma County Coastal Zone which are zoned Resources and Rural Development, Timber Production, Land Intensive Agriculture, Land Extensive Agriculture, or Diverse Agriculture and designated as excluded areas by the map attached as Exhibit 1, except for areas which are identified as Sensitive Areas on the Adopted Open Space Map.

Conditions

These activities must be carried out in a manner that protects riparian, and other sensitive habitat areas and deals adequately with water quality concerns. Site

Development and Erosion Control Standards of this chapter shall govern developments under this category, where applicable. These developments must be carried out in accordance with the Environmental Resource Management Recommendations listed in Chapter III of the Local Coastal Plan, the North Coast Water Quality Control Basin Plan and the Department of Fish and Game regulations.

J. Category of Developments

Maintenance and protection of wildlife preserves, including the stocking of fish, the planting of feed grains, the posting of signs and the erection and maintenance of barriers to predators.

Geographic Area of Exclusion

Parcels of Land in the Sonoma County Coastal Zone zoned Resource and Rural Development, Timber Production, Land Intensive Agriculture, Land Extensive Agriculture, or Diverse Agriculture and designated as excluded areas by the map attached as Exhibit 1.

Conditions

Operation of any wildlife and fishing preserve and refuge must be approved by the Department of Fish and Game and must be carried out in accordance with the Environmental Resource Management Recommendations listed in Chapter III of the Local Coastal plan.

K. Category of Development

The construction, improvement or expansion of accessory structures or uses appurtenant and incidental to agricultural and timber operations such as sheds, barns, and corrals.

Geographic Area of Exclusion

Land in the Sonoma County Coastal Zone which is zoned Land Intensive Agriculture, Land Extensive Agriculture, Diverse Agriculture, Timber Production, Resources and Rural Development, or Resources and Rural Development/Agricultural Preserve subject to and designated as excluded by the map attached as Exhibit 1.

Conditions

Development is exempt under this category only if all of the following conditions are met:

1. Development is located east of Highway One and not within view of any designated scenic road;

2. It is not located within any Sensitive Area or hazardous areas so designated in the County's adopted Open Space Map;
3. It does not affect sensitive areas in a manner contrary to the Environmental Resource Management Recommendation listed in Chapter III of the Local Coastal Plan;
4. It does not involve a designated historic site or area;
5. It meets County erosion control, grading and zoning requirements.

L. Category of Development

Geotechnical studies not requiring a grading permit. In addition, grading or fill as follows:

1. An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. This shall not exempt any fill made with the material from such excavation nor exempt any excavation having an unsupported height greater than 5 feet after the completion of such structure.
2. Cemetery graves.
3. Refuse disposal sites controlled by other regulations.
4. Excavations for wells or tunnels or utilities.
5. Exploratory excavations under the direction of soil engineers or engineering geologists.
6. An excavation which (a) is less than 2 feet in depth, (b) which does not create a cut slope greater than 5 feet in height and steeper than one and one-half horizontal to one vertical.
7. A fill less than 1 foot in depth and placed on natural terrain with a slope flatter than five horizontal to one vertical, or les s than 3 feet in depth, not intended to support structures, which does not exceed 50 cubic yards on any one lot and does not obstruct a drainage course.

Geographic Area of Exclusion

Land in the Coastal Zone of Sonoma County designated as excludable areas by the map attached as Exhibit 1, not within any sensitive or hazardous areas as designated by the County's adopted Open Space Map, nor affecting any sensitive area in a manner contrary to the Environmental Resource Management Recommendations.

Conditions

This exclusion shall not apply to grading or fill on land with slopes over 30% nor where the Soils Conservation Service of the U.S. Department of Agriculture has identified the soils as moderately to severely erodible.

M. Category of Development

Controlled burns regulated by the Department of Forestry and the Air Pollution Control District.

Geographic Area Exclusion

Land in the Sonoma County Coastal Zone mapped on the attached Exhibit 1 as excluded areas.

Conditions

All required permits must be obtained from the Department of Forestry and the Air Pollution Control District.

N. Category of Development

A single residential dwelling on a vacant, legal lot or improvements to an existing residential dwelling or accessory structures or uses incidental and appurtenant to a single-family dwelling provided it does not affect scenic views or sensitive coastal resources.

Geographic Area of Exclusion

Parcels of land in the Sonoma County Coastal Zone designated as excludable on the map attached as Exhibit 1 east of Highway One (except for parcels within the Timber Cove subdivision); not within view of any designated scenic road).

O. Category of Development

One single family dwelling for each existing vacant parcel in Unit Ill of Bodega Harbour Subdivision.

Geographic Area of Exclusion

Vacant single family residential lots in Unit Ill of Bodega Harbour Subdivision as shown on Exhibit B-2.

Conditions

1. No structure shall be more than one story or 16 feet in height, except that up to 20 percent of the total roof area may be 20 feet in height if a corresponding distance is below the 16 foot maximum height. Height is measured as the vertical distance from the median elevation of the highest

and lowest points of natural grade beneath the enclosed portion of the structure to the high point of the roof.

2. Because subdivision geologic studies have indicated that certain lots require additional soils engineering study to insure proper construction, the following lots must meet specified requirements.

   APN 100-038-003, 032
   100-040-049
   100-042-025,037
   100-044-008
   100-045-002

   a. Building layout and foundation plans shall be reviewed by an engineering geologist.

   b. The engineering geologist m ay require inspection of foundation excavations prior to pouring concrete if slopes are more than 20 percent.

3. The following lots in Unit III must meet additional soils/geologic requirements:

   APN 100-038-030, 033-036
   100-040-013, 016, 017
   100-041-038, 039, 040, 062
   100-042-073
   100-045-001

   a. A surface/subsurface foundation investigation by an engineering geologist is required based on the proposed building location prior to foundation design.

   b. Building layout and foundation plans must be reviewed by a registered engineering geologist.

   c. The engineering geologist is likely to require inspection of foundation excavations while excavating equipment is on the site and before forms and steel are in place.

4. The following lots require an archaeological field investigation, and implementation of reasonable mitigation measures when recommended by the study:

   APN 100-380-054
   100-420-072

6. All development shall comply with Bodega Harbour Design regulations and homeowner's CC&Rs.

Evidence of final Design Review approval (letter) must be presented to the Permit and Resource Management Department. On any lot with a slope greater than 5 percent, the Design Review letter shall indicate appropriate measures for erosion control of storm runoff which have been included in the project design.

P. Category of Development

Day care facilities for six or fewer children conducted in existing residence.

Geographic Area of Exclusion

Land in the Sonoma County Coastal Zone excluded under Exhibit 1.

Q. Category of Development

Home occupation carried out in an existing residence. This exclusion shall apply only to any activity which is carried on in a residence and which results in a product or service not used in its entirety by the family group, and which meets all of the following criteria:

1. The use is clearly incidental and secondary to the use of the dwelling for dwelling purposes;
2. The use is conducted entirely within a dwelling and is carried on by the inhabitants thereof; this does not include attached or detached garages or other accessory buildings;
3. The use does not appreciably change the character of the dwelling or adversely affect the uses permitted in a residential district. No home occupation shall be permitted which creates objectionable noise, dust, smoke, odor, or other nuisance;
4. The use shall not cause more than eight (8) customers or clients to come to the dwelling unit for service or products during any one (1) day;
5. The use shall not create substantial additional traffic or require additional parking;
6. No persons are employed other than those necessary for domestic purposes;
7. The use does not occupy more than one-quarter (1/4) of the total floor space of the dwelling;
8. The entrance to the space devoted to a home occupation shall be from within the building. No internal or external alterations or construction features are permitted;

9. Signing shall be limited to one (1) attached, non-illuminated, two (2) square foot sign;

10. No commercial vehicle shall be garaged, except that a single one ton or smaller truck may be ungaraged so long as signs on the truck are limited in size to normal logos found on business vehicles.

Geographic Area of Exclusion

Parcels within the Coastal Zone of Sonoma County shown as excluded on the map attached as Exhibit 1.

Conditions

Each person proposing to conduct a home occupation shall submit a letter to the Director of the Permit and Resource Management Department fully disclosing the nature and extent of the proposed occupation. The Director of the Permit and Resource Management Department may require the person proposing to conduct the home occupation to obtain written consent of owners of neighboring properties, or to obtain a use permit in cases where the proposed home occupation be incompatible with the particular neighborhood.

R. Category of Development

Signs subject to design review and conforming to Coastal Zone Design Guidelines.

Geographic Area of Exclusion

Land in the Sonoma County Coastal Zone designated as excluded in Exhibit 1.

S. Category of Development

Fences appurtenant to single-family residential, agricultural or animal husbandry use.

Geographic Area of Exclusion

Land in the Sonoma County Coastal Zone shown as excluded by Exhibit 1.

Conditions

No fence which might obstruct public accessways or public views to the ocean is exempted under this order.

No fence shall be allowed to obstruct any path, trail, or road over which there is evidence of use by the public.

If the construction of a fence is nonetheless necessary, and there is evidence of public use, then the developer shall preserve the accessway by erecting a stile, installing a gate, or by other appropriate physical means.

Exhibit 1

"Exhibit 1", as used in this document, refers to the adopted map of exclusion areas which was prepared by the staff of the Coastal Commission and incorporated herein by this reference. The map is on file with both the County and the Commission. This map shows areas excluded from this request for categorical exclusion under Section 30610.5(b) of the Coastal Act, namely: "Tide and submerged lands, beaches, and lots immediately adjacent to the inland extent of any beach, or of the mean high tide line of the sea where there is no beach, and all lands and waters subject to the public trust," where land is in the jurisdiction of the State Coastal Commission.

III. FINDINGS

Provisions for Categorical Exclusions Public Resources Code Section 30610(e) states that no coastal development permit shall be required for…

Any category of development, or any category of development with in a specifically defined geographic area, that the Commission, after public hearing and by two-thirds vote of its appointed members, has described or identified and with respect to which the Commission has found that there is no potential for any significant adverse effect, either individually or cumulatively, on coastal resources or on public access to, or along, the coast, and where such exclusion precedes certification of the applicable local coastal program, that such exclusion will not impair the ability of local government to prepare a local coastal program.

Public Resources Code Section 30610(b) additionally requires that the following findings and provisions must be made.

30610.5 (b) (in part)

Every exclusion granted shall be subject to terms and conditions to assure that no significant change in density, height or nature of uses will occur without further proceedings under this division and an order granting an exclusion under Subdivision (d) of Section 30610..."may be revoked at any time by the Commission if the conditions of the exclusion are violated."

The findings below support the conclusions that the exclusion has no potential for significant adverse effect, either individually, or cumulatively, on coastal resources or on public access to or along the coast and that such exclusion will not result in a significant change in density, height or nature of uses.

1. Single-Family Homes (Categories A, B, C, D, N, O,)

The exclusion covers single-family homes in specific parts of Bodega Bay including the Bodega Harbour Subdivision, and in the coastal zone generally where homes would not be visible from Highway One and would meet certain other conditions.

a. Visual and Scenic Resources. The Coastal Act requires the protection of scenic and visual quality of coastal areas and the protection of views to and along the ocean and scenic coastal areas (Sec. 30251).

   Furthermore, the Act provides for the protection of scenic communities which are popular visitor destination points (Sec. 30253(5)).

   The Sonoma County Coastal zone is a highly scenic area where construction of houses and other structures may affect public views. Communities on the Sonoma Coast such as Bodega Bay area popular visitor destination points where protection of community character is an important Coastal Act goal.

   In the Bodega Bay area, the exclusion protects public views and visual resources through limiting the height of houses to be built and requiring design review. (For houses in Bodega Harbour Subdivision, design review would be accomplished by the Homeowner's Association under the existing recorded restrictions of the subdivision. (For houses elsewhere in Bodega Bay, design review would be accomplished by the Sonoma County Permit and Resource Management Department under Coastal Plan design guidelines approved as part of the Coastal Plan.

   Outside of Bodega Bay, the exclusion would protect coastal visual resources by not applying to homes within view of any designated scenic road (including Highway One). For areas not with in view of scenic roads, homes are excluded without a height limit or other design restrictions because the construction of a house in such locations would not have a potential for adverse impacts on coastal visual resources.

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   As proposed and conditioned, the exclusion of single-family dwellings will not have an adverse impact either individually or cumulatively, on coastal visual resources.

b. Geologic Hazards. Section 30253 of the Coastal Act provides that new development shall minimize risks to life and property in areas of high geologic hazard and shall assure stability and structural integrity. The San Andreas fault zone passes near the community of Bodega Bay, and much of the proposed excluded area lies within the Alquist-Priolo Special Geologic Studies Zone. In order to meet the requirements of Section 30253 of the Coastal Act, the exclusion provides for engineered foundations and other engineering work in areas of Bodega Harbour Subdivision and elsewhere in Bodega Bay

where lots have the potential for instability. In addition, foundations for houses within the Alquist-Priolo Geologic Studies Zone must be designed by a registered civil engineer or engineering geologist. As proposed and conditioned, the exclusion will minimize risk s to life and property in areas of geologic instability, in accordance with Section 30253.

c. Adequacy of Services. Section 30250 (a) provides that new development shall be located within or near existing developed areas where services are available to accommodate it. In Bodega Bay, houses constructed under this exclusion will be served by community sewage disposal system at Bodega Bay serves approximately 420 houses. The number of potential additional connections in the community is approximately 700 lots, including a small number of lots not covered under this exclusion. The total of existing and potential development is approximately 1120 homes, which is significantly less than the sewage disposal system's capacity of approximately 1775 residential units.

   The Coastal Plan states that existing water sources available to the Bodega Bay Public Utilities District may not be adequate to support full build-out of the community. The Plan states that the Public Utilities District is exploring additional supplies. Until additional supplies are available, the Coastal Plan calls for limiting development to existing lots (Phase 1 Land Use Plan) and relating new development to water capacities. If adequate water is not available for all lots, the Plan states than an allocation system should be developed and that additional water supplies should be pursued.

   The construction of new homes in Bodega Bay has proceeded at a relatively slow pace in relation to the number of vacant lots remaining in the community. This moderate rate of growth ensures that development of new homes under this exclusion will not outrun the ability of the Public Utilities District to develop new water sources and to provide service to all existing lots.

   Outside Bodega Bay, the exclusion covers single-family homes on legal lots which meet enumerated County standards including sewage disposal and water supply standards. (The subdivision at Timber Cove which is identified by the Coastal Plan to have particular water supply problems is specifically not covered by the Exclusion). In other areas where the County Environmental Health Department's requirements for water supply cannot be met including communities such as Jenner which are identified by the Coastal Plan as having inadequate water for additional development, the Exclusion would not apply.

   As proposed and conditioned, the Exclusion ensures that all development will be served by adequate sewage disposal and water supply systems, consistent with Section 30250(a) of the Coastal Act. The Exclusion has no potential for

significant adverse effect, either individually or cumulatively, on the ability of public services to support new development.

d. Public Access/Traffic. Section 30210 of the Coastal Act provides that maximum access and recreational opportunities shall be provided for all the people, consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse. The exclusion of certain single-family homes, as proposed, will not significantly affect public access to or along the coast, for the following reasons. The first row of parcels adjacent to the sea is not covered by the exclusion. Furthermore, most parcels in Bodega Bay which are excluded are located inland of the first public road paralleling the sea. In other areas, the Coastal Plan Access Plan provides for the acquisition and/or development of additional accessways, beyond the extensive system of State and County parks which now exist on the Sonoma coast. Development of homes on existing lots covered by this Exclusion does not have the potential for impairing public access to the coast.

   The Coastal Plan states that traffic congestion along Highway One is a problem, particularly on peak summer weekends. The Plan recommends certain highway and parking improvements that would help to improve traffic flow. The Plan also recommends the construction of a future Highway One bypass around the community of Bodega Bay, where the most significant traffic congestion occurs. The Plan provides that development should be limited to the Phase 1 land use plan (development on existing lots) until such time as a Highway One bypass is provided (and additional water is available). At that time, the Phase 2 land use plan (expanded development) would be implemented.

   Throughout the coastal zone, the Plan generally provides for continued residential development on existing legally subdivided lots if water, septic system and other applicable regulations can be met. The pace of residential development on the Sonoma Coast has been modest. Continued moderate growth can be accommodated by existing road systems with the improvements recommended by the Coastal Plan. Major road improvements (Highway One bypass) would be required in Bodega Bay before additional areas could be opened to residential development. As proposed and conditioned, the Exclusion has no potential for any significant adverse effect, either individually or cumulatively, on public access to or along the coast.

2. Trimming or Removal of Trees on State Parks Land (Category E)

   Section 30240 of the Coastal Act provides that environmentally sensitive habitat areas shall be protected against any significant disruption of habit values. Commission studies have indicated that trees provide and protect wildlife habitat and enhance the biological productivity of coastal areas. Thus, trees are an

important element in environmentally sensitive habitat areas. The Commission finds that all trees which are in areas designated by the Coastal Plan to be environmentally sensitive habitat areas or riparian areas shall not be covered by this Exclusion. As conditioned, the Exclusion requires that the Sonoma County Director of the Permit and Resource Management Department review any proposed tree trimming or cutting and certify that the proposed activity will protect environmentally sensitive habitat areas.

Section 30251 of the Coastal Act provides for the protection of the scenic and visual qualities of coastal areas.

Section 30253(5) provides for the protection of special communities which are popular visitor-destination points. The natural forest of the Sonoma Coast and the planted hedgerows and windbreaks of the Sonoma Coast are important elements in the scenic and visual quality of the area. Certain old or large stands of trees serve as community landmarks and bear particular importance in establishing community character. The Commission finds that the Exclusion shall not apply to the removal or trimming of trees which have special scenic or cultural significance. The Director of the Permit and Resource Management Department is required to certify that any proposed activity under this Exclusion shall protect landmark trees or trees of special scenic or cultural significance.

Section 30243 of the Coastal Act provides that the long-term productivity of soils shall be protected. Trees provide a natural means of controlling soil erosion by acting as windbreaks and soil stabilizers. The Exclusion provides that the Director of the Permit and Resource Management Department must certify that any proposed activity protects trees which are important in the control of erosion and in the provision of windbreaks. The Commission finds that, as conditioned, this Exclusion will assure the long-term productivity of soils and will not contribute to soil erosion.

As proposed and conditioned, the exclusion of tree-trimming and tree-cutting has no potential for any significant adverse effect, either individually or cumulatively, on coastal soil resources.

3. Raising of Cattle, Sheep, and Other Livestock (Category F).

   The Coastal Plan encourages agriculture, including grazing and dairy uses, in the coastal zone. Extensive areas of the coastal zone are zoned for agriculture under the County's Implementation Program. This Exclusion covers the raising of livestock and the construction of feedpens and other structures incidental to the raising of livestock.

   Section 30240 of the Coastal Act provides for the protection of environmentally sensitive habitat areas. As conditioned, the Exclusion does not apply to construction of feedpens, or other structures incidental to livestock raising within

Sensitive Areas as mapped on the County's Open Space Map. As conditioned, the Exclusion will have no potential or any significant adverse impact, either individually or cumulatively, on environmentally sensitive habitat areas.

4. Planting and Harvesting of Crops (Category G).

   The Coastal Plan and Implementation Program designate large areas of the coastal zone for agricultural use.

   Much of the Sonoma County coastal zone is suited for grazing rather than cultivation of crops, but where crops are appropriate, the Exclusion covers the growing and harvesting of food and fiber crops. As condition, the Exclusion does not apply to use of mechanized farm equipment or placement of structures within Sensitive Areas as mapped on the County's Open Space Map. Thus, the Exclusion protects Environmentally Sensitive Habitat areas, consistent with Section 30240 of the Coastal Act.

5. Raising of Poultry, Rabbits, and Similar Animals (Category H).

   The Exclusion covers the raising of small animals for the use of persons residing on the property. As conditioned, the Exclusion applies only to parcels with a single-family dwelling. The Exclusion is limited to the keeping of animals incidental to residential use, and it therefore presents no potential for any significant adverse effects on coastal resources.

6. Reforestation and Restoration of Timber and Agricultural Lands (Category I).

   Activities covered by this category of the Exclusion Order are those which restore areas which have been subject to harvesting of timber or other agricultural products. Excluded activities include removal of slash, planting of trees, restoration of natural land contours, and similar activities. The conditions of the Exclusion require that such activities take place in accord with the Environmental Resource Management Recommendations of the Coastal Plan and other applicable County standards. The Environmental Resource Management Recommendations strictly define what activities can take place in riparian areas and other environmentally sensitive habitat areas. The excluded activities will act to improve and restore the habitat values of harvested areas. As conditioned, the Exclusion has no potential for significant adverse effects on coastal resources.

7. Maintenance of Wildlife Preserves (Category J).

   This category of the Exclusion Order covers those activities which are carried on by the California Department of Fish and Game in wildlife preserves in order to maintain habitat values for fish and wildlife. As conditioned, the activities under the Exclusion, must be carried out in accord with the Environmental Resource Management Recommendations of the Coastal Plan which, provide for the

protection of environmentally sensitive habitat area, consistent with Section 30240 of the Coastal Act.

8. Construction of Agricultural Accessory Structure (Category K).

   This category of the Exclusion Order covers the construction of barns, sheds, corrals, and other structures incidental to agricultural and timber operations. The conditions provide that developments are excluded only if they are located out of view of Highway One or other designated scenic roads, outside Sensitive or Hazardous Areas designated on the County's Open Space Map, and outside designated historic sites or areas, and If they meet certain other conditions. The conditions provide that excluded development will not have adverse effects on coastal visual resources, environmentally sensitive habitat areas, or historic resources, consistent with Coastal Act Sections 30251, 30240, and 30253(5).

9. Grading and Geotechnical Studies (Category L).

   Section 30231 of the Coastal Act provides that "The biological productivity and the quality of Coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms...shall be maintained, and where feasible, restored through, among other means, controlling runoff,...and preventing substantial interference with surface water flow. Section 30253 of the Coastal Act states that "New development shall... neither create nor contribute significantly to erosion, geologic instability, or destruction of the site and surrounding areas.

   The grading and fill exempted by this order is either limited in size, or undertaken, as part of a permitted use.

   The direction of soil engineers or engineering geologists is a prerequisite of exploratory excavations permitted under subsection 1.

   Only excavations limited to less than 2 (two) feet deep, or which do not create a cut slope greater than 5 (five) feet high and steeper than 1 ½ (one and one-half) horizontal to 1 (one) vertical are specified in subsection 6.

   Only fill which is less than 50 (fifty) cubic yards on any one lot and does not construct a drainage course, and is less than 1 (one) foot deep, and placed on natural terrain with a slope flatter than 5 (five) horizontal to 1 (one) vertical, or less than 3 (three) feet deep, and not intended to support structures is allowed under subsection 7.

   The wetlands, streams, estuaries, coastal waters and lakes protected under Section 30231 are either subject to the public trust or mapped as "Sensitive Areas". This exclusion does not authorize grading or fill in these areas without a coastal permit. The chances of runoff into these areas are minimized because the order does not exempt grading on slopes over 30%.

The order does not authorize grading of fill in any "hazardous area", as designated on the County's Open Space Map, nor on any land where the Soil Conservation Service has identified the soils as moderately to severely erodible. Only cut or fill consistent with the geologic safety policies of Section 30253 is excluded by this order.

10. Controlled Burns (Category M).

    Section 30253 of the Coastal Act states that new development shall be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.

    Section 30414 of the Coastal Act acknowledges that the State Air Resources Board and local air pollution control districts are the principal public agencies responsible for the establishment of air quality and air pollution control programs.

    Section 30243 of the Coastal Act states that the long-term productivity of soils and timberlands shall be protected.

    This order exempts controlled burns of timber. In some cases, the elimination of brush and timber is necessary to promote the rejuvenation of forests or to enhance habitat values. Such burns are exempted only if they are regulated by two other environmental regulatory agencies. The Coastal Act expressly recognizes the jurisdiction of the Air Pollution Control District to monitor burns. Given the effect of controlled burns and the supervision of such burns by responsible public agencies, the exclusion is consistent with the policies of the Coastal Act.

11. Day Care Facilities (Category P).

    State law requires the regulatory agency to allow the operation of day care facilities for six or fewer children in existing residences.

12. Home Occupations Within Existing Structures (Category Q).

    Only home occupations which meet specific criteria are exempted. Those criteria ensure that the use does not alter the residential character of the neighborhood, and that it has no impacts upon traffic, noise, or other factors affecting coastal resources or the quality of the environment.

13. Signs (Category R).

    The Exclusion covers only signs which conform to Coastal Plan design guidelines. Furthermore, excluded signs are subject to county design review conducted by the County Permit and Resource Management Department. Application of the design guidelines and design review procedures to individual signs will ensure

that coastal visual resources are preserved, consistent with Section 30251 of the Coastal Act.

14. Fences Category (S).

    Fences are excluded from permit requirements because they are an accessory structure to primary uses allowed in the certified Local Coastal Plan. Conditions of the order ensure that the fence(s) will have no impact on visual resources nor have the potential for interfering with public access.

15. The Commission certified that the Categories of development excluded under this order are allowed by right in Sonoma County, have specific development standards under the certified Local Coastal Program, and are handled ministerially by Sonoma County.

16. Consistency With Coastal Act Section 30610.

    As demonstrated in the findings above, the proposed exclusion is consistent with the requirements of Coastal Act Section 30610(e) and 30610.5(b).

17. California Environmental Quality Act (CEQA)

    For the same reasons that this exclusion will have no potential for any significant effect either individually or cumulatively on coastal resources, this exclusion will have no significant effect on the environment for purposes of the California Environmental Quality Act of 1970. (See attached Negative Declaration).

IV. CONDITIONS

1. Maps showing excluded areas with:

    a. the appropriate approved zone district,

    b. areas of actual or potential public trust,

    c. boundaries of parcels landward of the first public road paralleling the sea, and

    d. the sensitive and/or hazardous areas depicted on the County's adopted Open Space Map.

    shall be submitted for Commission Executive Director review and concurrence before the County may implement the Exclusion.

2. The County of Sonoma shall maintain a record of any other permits which may be required for categorically excluded development which shall be made available to the Commission or any interested person upon request, pursuant to Section 30154 of the Commission Local Coastal Program Regulations.

3. The County of Sonoma shall, at an appropriate stage in the local approval process for the following development subject to this Exclusion, distribute to the applicant for such local approval an instruction sheet and form provided by the Executive Director of the Commission. After obtaining final local governmental approval but prior to commencing construction under this exclusion, such applicant shall send the completed form containing a brief description of the excluded development to the Commission:

   In Units I and II of Bodega Harbour Subdivision:

   APN 100-281-007-010
   100-029-004-010

   In Taylor Tract of the First Addition to the Taylor Tract:

   APN 100-008-045, 046, 054, 055
   100-009-025, 030, 031

   The County of Sonoma shall notify the Coastal Commission in writing within 5 working days of its determinations that the above categories of exempted development are properly exempt from coastal permit requirements. This notice is required because the development sites are within 100 feet of a freshwater marsh.

4. Where development under this exclusion is conditioned upon conformity with the Environmental Resource Management Recommendations set out in Chapter III of the Sonoma County Coastal Plan, those "recommendations" shall be implemented as mandatory requirements.

5. Local Government Compliance with Exclusion Order:

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   The order granting a categorical exclusion for these categories of development in the Central Coast Region, pursuant to Public Resources Section 30610, shall not become effective until the Executive Director of the State Coastal Commission has determined in writing that the local government has taken the necessary action to carry out the exclusion order pursuant to Section 13244 of the Coastal Commission regulations.

6. This exclusion shall apply to the permit requirements of the Coastal Act of 1976, pursuant to Public Resources Code Section 30610(a) and 30610.5(b), and shall not be construed to exempt any person from the permit requirements of any other federal, state or local government agency.

7. Development under this exclusion shall conform with the County of Sonoma zoning ordinances in effect on the date this exclusion is adopted by the Commission or to the terms and conditions of this exclusion where such terms and conditions specify more restrictive development criteria.

8. Any amendment to the certified Local Coastal Program which affects the land areas to which this exclusion applies shall require the approval of the California Coastal Commission pursuant to Commission Regulations and the Coastal Act of 1976 (Public Resources Code Section 30514).

9. Any development not falling within this exclusion remains subject to the regular permit requirements of the Coastal Act of 1976.

V. RESCISSION AND REVOCATION

Pursuant to Title 14 of the California Administrative Code Section 13243(e), The Commission hereby declares that the order granting this exclusion may be rescinded at any time, in whole or in part, if the Commission finds by a majority vote of its appointed membership after public hearing that the terms and conditions of the exclusion order no longer support the findings specified in Public Resources Code Section 30610(e). Further, the Commission declares that this may be revoked at any time that the terms and conditions of the order are violated.

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PUBLIC REVIEW DRAFT

Sonoma County
Local Coastal Plan

APPENDIX J: HISTORIC RESOURCES INVENTORY
September 2019

Local Coastal Program
Permit Sonoma

2550 Ventura Avenue
Santa Rosa, CA 95403

Adopted by Resolution No. 19-XXXX
of the Sonoma County Board of Supervisors
September XX, 2019

APPENDIX J: HISTORIC RESOURCES INVENTORY

Feature	Location	Ownership	Description
Sea Ranch North			
Del Mar	West of Highway 1 in The Sea Ranch at Del Mar Landing	Private	This gable roof board and batten cottage is one of the few remaining buildings that was the town of Del Mar, a lumber town. The roof has a rarely found shingle pattern in that shingles are very long. Adjacent are barns and evidence of a lumber mill and moorings.
Sea Ranch South			
Sea Ranch stable and barn	West of Highway 1 in The Sea Ranch	Private	The Sea Ranch stable barn has a wide gable roof and is topped with two large ventilators. The sides are vertical boards and the south gable end, which appears to have been replaced, is horizontal siding. Estimated construction date: 1905.
Sea Ranch barn and cottage	West of highway 1 at Black Point near The Sea Ranch Lodge	Private	The house and barn are deteriorating but are an important part of The Sea Ranch landscape. The house has vertical board and batten siding and long wood shingles on the roof and centered porch. The large barn has the same exposed shingle roof over the entire structure. The siding is vertical redwood. Estimated construction date: 1890.
Condominium I	End of Sea Walk Drive, The Sea Ranch	Private	Condominium I includes ten units designed by Moore, Lyndon, Turnbull and Whitaker in Sea Ranch Modern, forerunner of this style of architecture in the United States. Construction date: 1965.
Espherick Cluster House	Black Point Reach, The Sea Ranch	Private	One of the Espherick cluster houses, first detached residential units at Sea Ranch. Hedge Row housing related to cypress windbreak, Construction date: 1965.
Stewarts Point / Horseshoe Cove			
Stewarts Point Post Office	Highway 1 and Skaggs Springs Road, Stewarts Point	Private	The Post Office building and cluster of houses appear to be built at various times and date from 1890 to 1920, but are similar with gable roofs, are small and painted white.
Stewarts Point Store	Highway 1 and Skaggs Springs Road, Stewarts Point	Private	The general merchandise store is a two story Greek Revival building painted blue with white trim and horizontal shiplap siding. The gable roof has a broken pediment. There are six symmetrically placed windows at the front and rear. Construction date: 1868.
Stewarts Point Hotel and Barns	Highway 1 and Skaggs Springs Road, Stewarts Point	Private	This group of buildings appears to range in date from 1870 to 1900. The hotel has two buildings, the one to the west appearing older because of the wider shiplap siding. The salt box barn to the south is an excellent example, with long shingles on the gable roof and vertical unpainted siding. These and various barns and outbuildings, along with the adjacent store building and one-room school, demonstrate every facet of rural Greek Revival architecture and are the first example of a small rural complex in Sonoma County.

Feature	Location	Ownership	Description
Stewarts Point / Horseshoe Cove (cont.)			
Stewarts Point School	West of Highway 1, south of Stewarts Point	Private	The Stewarts Point School is an excellent example of the one-room Greek Revival schoolhouses that dotted Sonoma County before the turn of the century. The main gable roof and the two side gablets have broken pediments, and a cupola with flagpole sits on the eave toward the front of the building. Estimated construction date: 1860.
Richardson House	29601 Highway 1	Private	This vernacular residence shows distinctive styles of the late nineteenth and early twentieth century. The wide, steep-pitched gable roof covers a square bay on the second floor and tall, narrow windows below. Various wings have been added. A small gable roof barn sitting in the rocks overlooking the ocean exemplifies the small sheep feeder barns in the region. Estimated construction date: 1900.
Kruse Barn and House	Highway 1 at Cannon Gulch	Public	The Kruse Ranch barn is a very large gable roof wood structure with vertical wood siding. A large portion of the roof collapsed in the last year. Across the road are two gable roof cottages. Estimated construction date: 1880.
Salt Point			
Plantation	34285 Kruse Ranch Road	Private	Plantation is a small town of gable roof structures built around San Andreas Fault sag ponds. The existing residence is a gable roof structure. Estimated construction date: 1870
Sawmill Teepee	31090 Seaview Road	Private	The sawmill teepee, remnant of a lumber mill, is believed to be the only remaining on in the Sonoma Coastal Zone.
Timber Cove / Fort Ross			
Stillwater Cove Ranch	22555 Coast Highway 1	Private	The house is a simple colonial style structure with gable roof and roof dormers. There are two stone buildings on the property and stone pillars at the entrance. The complex has been used as a boys' school but is currently operated as a guest ranch.
Fort Ross School	Stillwater Cove Regional Park, Highway 1	Public	The one-room school has recently been restored after being moved to its present site. The schoolhouse, constructed around 1885 at Fort Ross, is Greek Revival with simple, clean lines and precise detailing. It has horizontal lap siding and the distinguishing bell tower of a school. The Fort Ross School is Sonoma County Landmark No. 27.
Ocean Cove	23125 Coast Highway 1	Private	There are four structures on this site: A grocery store, barn and two houses. The store and the two houses are sided with long shingles. Estimated construction date: 1900.
Town of Fort Ross	20700 Coast Highway 1	Private	The town of Fort Ross has three gable roof houses with natural wood, horizontal siding. There is a large water tank between the houses and the cove. Estimated construction date: 1920.

Feature	Location	Ownership	Description
Timber Cove / Fort Ross (cont.)			
Plummer Graveyard	Highway 1 near Timber Cove	Private	Gravestones are located within a wood picket fenced area. Fence posts feature decorative top pieces. Also on the site are remnants of a log building. Estimated establishment date: 1860.
Residence	21085 Coast Highway 1	Private	Greek Revival house with horizontal siding and attached shed. The house has tall, narrow windows. Estimated construction date: 1890
Bufano Statue at Timber Cove Inn	Coast Highway 1, Timber Cove	Private	Large statue of a human figure with a hand affixed to the head, symbol of peace. made of mosaic by Italian sculptor Benny Bufano in 1960.
Sea View Ranch	27780 Sea View Road	Private	This gable roof barn has lean-to extensions on both sides. The walls are vertical unpainted redwood. Estimated construction date: 1900.
Eckert Ranch	18001 Coast Highway 1	Private	The ranch contains several red board and batten sheep barns with gable roofs along Highway 1. Estimated construction date: 1900.
Fort Ross Call Ranch	19005 Coast Highway 1	Public	The Call Ranch Home is a gable roof cottage with the oldest continuing weather station on the West Coast, starting in 1874. The ranch is part of the Fort Ross Historic Park.
Fort Ross Chapel	Highway 1, Fort Ross	Public	The chapel is one of the many fine structures presently in the compound of Fort Ross Park, with a domical roof and vertical siding. Originally built in 1825, it was rebuilt many times.
High Cliffs / Jenner			
Four Clapboard Houses	9081, 9089, 9095, 9101 Balboa Ave., Jenner	Private	These four gable cottages were built in 1904-05 and were homes to lumber mill workers for the Jenner lumber mill which operated from 1904 to 1914. The cottages, originally identical, have been altered over time.
Mill Cottage	9500 Balboa Ave	Private	Mill Cottage built in 1904 or 1905
Bungalow Residence	9440 Balboa Ave.	Private	Stepped into the hillside of a crag overlooking Jenner, this bungalow is two stories with a raised foundation and a hop and gable roof. A second story veranda with a solid balustrade wraps around three sides of the house. Estimated construction date:; 1904-05.
Double bunkhouse	9498 Pomo Ave.	Private	This residence once served as a double bunkhouse for lumber mill workers.
Bungalow Residence	10609 Highway 1 Jennfer	Private	One story, gabled bungalow, with distinctive craftsman detailing in the stickwork trim of the gables, site on a raised foundation and has a porch extension facing the Russian River. Estimated construction date: 1910.
Bungalow Residence	9509 Pomo Ave. Jenner	Private	One story shingled bungalow with a gable roof and exterior brick chimney reflecting a craftsman influence. An enclosed porch extends across the gable end. The residence is situated on the side of Castle Crag overlooking Jenner. Construction date: 1904-05

Feature	Location	Ownership	Description
High Cliffs / Jenner (cont.)			
Board and Batten Structure	Willig Drive and Riverside Drive, Jenner	Private	Two and a half story gabled frame building with board and batten siding stepped into the hillside.
Cottages	Willig Drive and El Camino, Jenner	Private	A row of derelict cottages are partially concealed by trees behind Murphy's Restaurant at the intersection of Willig Avenue and Highway 1.
Jenner School	Willig Drive, Jenner	Private	A gable roof, one story schoolhouse stepped into the hillside, the Jenner Schook has the shingle siding typical of the bungalow era. The gable façade facing Willig Avenue has shiplap siding. Construction date: 1904.
Mill Hospital	10483 Willig Drive	Private	This residence once served as the lumber mill hospital and was built 1904-05.
Mill House Bungalow	Willig Drive, Jenner	Private	Hip roof bungalow on raised foundation, two and a half stories, with shiplap siding, brick chimney, and a second story veranda. Construction date 1904-05.
Three mill cottages	10467, 10469, and 10471 Willig Drive, Jenner	Private	These three mill cottages have a prominent location at the intersection of Highway 1 and Willig Drive and were located across Willig from the lumber mill. They have been altered over the years. Construction date: 1904-05.
Duncans Mills			
Sheep Ranch	26600 Highway 116	Private	A cluster of sheep ranch building which includes two gable roof barns, one with vertical siding and another particularly find barn with board and batten siding, a gabled L-shape farmhouse and several frame outbuildings. Estimated construction date: 1880.
Greek Revival Residence	Duncans Mills	Private	The one and a half story residence sits on a hillside overlooking Duncans Mills. It has a gable roof and sits on a raised foundation. The shed roof porch supported by four square posts has a fine turned balustrade. Estimated construction date: 1878
Hip Roof Cottage	Duncans Mills	Private	A one story cottage with a hip roof and shiplap siding, it has a shed roof porch, supported by square posts extending the length of the front of the building. The cottage is adjacent to an avenue distinguished by large cypress and eucalyptus trees. Construction date: 1880
Dentist office	Main Street, Duncans Mills	Private	A one story gable roof cottage with a front porch which extends the length of the front of the building and is supported by four wood posts. The cottage was removed from its original location near the Russian River in the area called Pig Allen after the 1906 earthquake. Estimated construction date: 1880.
The Jeweler	Main Street, Duncans Mills	Private	A one and a half story gable roof building with an Italianate false front, the building is unusual in that the false front is attached to the non gable side. The elaborate cornice has a paneled frieze, pierced and scrolled brackets and dentils. Estimated construction date: 1877.

Feature	Location	Ownership	Description
Duncans Mills (cont.)			
DeCarly General Story	B Street, Duncans Mills	Private	Two commercial false fronts are joined by a third smaller building to form a continuous commercial streetscape that is virtually unaltered. The frame buildings have gable roofs, shiplap siding, and stepped false fronts. A 1920's gas pump is located in front. Estimated construction date: 1888.
Country Store	Main Street, Duncans Mills	Private	A one-and-a-half story frame building with shiplap siding, a gable roof, and a false front attached to the gable end, the building occupies the corner of Main and B Streets. Attached to the rear of the building is a two-story gable roof building which appears to have served as a barn or stable on the first floor with quarters on the second floor. The two buildings form an L shape. Estimated construction date: 1880.
Duncans Mills School	Near B St., Duncans Mills	Private	The schoolhouse is a one-story rectangular frame building with a gable roof and an open, square bell tower above the entrance in the gable end. Siding is channel rustic. The schoolhouse is in an open field near the original road, now closed, that once swept around the outer perimeter of Duncans Mills. Estimated construction date: 1885.
Duncans Mills Depot	Highway 116, Duncans Mills	Private	The depot is a recently restored frame building with a central core and open waiting platform area sheltered under a hip roof. The open waiting area roof overhang is supported by square posts. Stick style influence is evident. Date constructed: 1910.
The Slaughterhouse	Duncans Mills Campground	Private	A rectangular frame building, one story in height, with a metal gable roof. Vertical board siding is of single-wall construction. In the gable end is a door of vertical boards and the legend "The Slaughterhouse, Vic Pedroia, Prop.".
Moscow Mill Pond	22855 Moscow Road	Private	A 19th century mill pond believed to be one of the earliest in Sonoma County.
Moscow Barn Casini Ranch	22855 Moscow Road	Private	A two-story gabled barn with gabled dormers and shiplap siding. There have been considerable alterations with the addition of windows, verandas, and interior remodeling. Estimated construction date: 1890.
Willow Creek State Beach			
Greek Revival Farmhouse	Willow Creek Road	Public	This farm cluster includes a Greek Revival farmhouse, gabled barn and several outbuildings. The farmhouse is two stories. The central doorway has a transom; the pedimented frame porch appears added. Estimated construction date: 1900.
Farmhouse Barns	Willow Creek Road	Public	This farm cluster includes a one-story farmhouse, two barns, and frame outbuildings. The farmhouse carries craftsman stick details and is in an L-shape form with a gabled roof and narrow, horizontal siding. Estimated construction date: 1910.

Feature	Location	Ownership	Description
Willow Creek State Beach (cont.)			
Farmhouse	Willow Creek Road	Private	This farmhouse and cluster of ranch buildings are located in a small valley at the edge of the redwoods. The farmhouse is two stories on a raised foundation with a hip and gabled roof and shiplap siding. A partially-enclosed porch wraps around two sides. Estimated construction date: 1890.
Bridgehaven Resort	Highway 1 and Russian River	Private	The resort includes a cluster of three gable roof cottages and a garage. The cottages are one-story with exposed rafters, narrow horizontal siding, interior brick chimneys and sash windows. The two-story gable roof garage is stepped into the hillside. Estimated construction date: 1925.
Sheep Ranch	9275 Highway 1 South of Jenner	Public	A gabled one-story cottage with channel rustic and vertical siding is the ranch house for this sheep ranch which has adjacent gabled frame barns with vertical wood siding. Estimated construction date: 1910.
Ranch	Highway 1, Ocean View	Private	A ranch cluster with a two-story, gabled structure with a saltbox form and a one-story gabled shed. Estimated construction date: 1910.
Water Tower	Cliff Avenue, Ocean View	Private	A water tower raised to an unusual height, has a wood tank on a frame tower.
Duncans Point Duncans Landing	Highway 1	Public	Landscape feature and site of early lumbering, shipping operations
Mann Ranch	Highway 1 and Scotty Creek	Private	This scenic farm complex includes what may have been the oldest frame building in Sonoma County.
Bodega Bay			
Greek Revival Residence	McChristian Avenue, Salmon Creek	Private	A two-story Greek Revival clapboard residence with an interior brick chimney at the gable end. The front entrance is in the non-gable facade facing the original roadway. Extensive greenhouse additions have been made as well as a one-story gabled addition with shiplap siding. The house sits on a knoll and is shielded by a cypress grove. Estimated construction date: 1860.
Carrington Ranch	Coleman Valley Road and Highway 1	Private	High on a knoll surrounded by a cypress windbreak is this two-story Greek Revival clapboard residence. The main non-gable facade faces the ocean. A two-story water tower with a hip roof, a large gable roof frame barn, and outbuildings are adjacent to the house. Estimated construction date: 1860.
Queen Anne	Bay Flat road, Bodega Bay	Private	A Queen Anne corner tower with a tent roof transforms this hip roof bungalow into a more formal residence, unique in Bodega Bay. One story with shiplap siding, the house rests on a raised foundation typical of seaside residences.

Feature	Location	Ownership	Description
Bodega Bay (cont.)			
"Marin"	Bay Flat Road and Whaleship Road	Public	A derelict 1920's California river boat, the "Marin" is beached just off Bay Flat Road. The boat carried a two-story superstructure with a pilot house and had a shallow draft.
Bodega Bay Union Church	Bay View Road, Bodega Bay	Private	Craftsman church similar in size and scale to craftsman bungalow cottages in Bodega Bay. The gabled roof has exposed rafters and gable trim. Wood siding is narrow and horizontal. A gabled portico and gabled wing extend from one side. In front is a square bell tower. Estimated construction date: 1910.
Craftsman Bungalow	Bodega Avenue and Kent Avenue	Private	A one-story craftsman bungalow with the characteristic gently pitched double gables exposed rafters and purlins, and a large gable sheltering a front porch. Estimated construction date: 1915.
Ghislini House	1215 Highway 1, Bodega Bay	Private	Stepped into the steep hillside beneath Highway 1 is this one-story hip-roof bungalow surrounded by cypress trees overlooking the bay. A gabled wing projecting toward the water is flanked by side and front porches and an enclosed sun porch beneath a shed roof. Construction date: 1917.
Medley Shop Antiques	Highway 1 and Windy Lane	Private	An excellent example of a craftsman bungalow, two stories, stepped into the hillside. It carries a low-pitched gable roof with exposed rafters, a strong central front gable with split columns and detailed craftsman windows. Estimated construction date: 1915.
Woodhaven	Highway 1 and Windy Lane	Private	Woodhaven, the seaside residence of the Wood family, a prominent Sonoma County family, is one-and-a-half stories with a gabled roof and projecting gable dormer. Balconies extend to each side of the dormer. The house sits on a raised foundation on a knoll overlooking the harbor and is surrounded by a picket fence. Estimated construction date: 1910.
Queen Anne Bungalow	Highway 1, Bodega Bay	Private	A hip roof bungalow with a projecting gable reflecting the Queen Anne style, this one-story house extends over the water on pylons. A distinguishing feature is the two-story water tower with a hip roof on the hillside above the house. Estimated construction date: 1910.
Meredith's Fish Company	Highway 1, Bodega Bay	Private	Functional gable roof industrial frame building on a wharf extending into Bodega Bay, central to the commercial fisheries district. Varying roof levels and siding indicate a number of add-on stages. Estimate construction date: 1920
Gas Station	Highway 1, Bodega Bay	Private	In the style of a hip roof bungalow, common to seaside communities of the 1920's, this one-story building, once serving as a gas station, has a low-pitched hip roof with exposed rafters extending over a drive-through area. Estimated construction date: 1920.

Feature	Location	Ownership	Description
Bodega Bay (cont.)			
Greek Revival Residence	Highway 1 and Bay Hill Road	Private	A one-and-a-half story Greek Revival house with its non-gable main facade to the highway. The gable roof has a boxed cornice and plain frieze. A shed roof porch extends the length of the front of the building supported by plain square posts. Siding is clapboard. Estimated construction date: 1875.
Farm	19000 Highway 1	Private	A farm cluster with a one-and-a-half story, gable roof farmhouse, a gabled frame barn and several frame outbuildings. The house has clapboard gables and vertical frame siding on the non-gable main facade, with a partially enclosed porch. Estimated construction date: 1875.
Valley Ford			
Greek Revival Farm	18300 Highway 1	Private	A cluster of 19th century farm buildings including a Greek Revival farmhouse, a small gabled vertical frame barn and a grove of eucalyptus trees. The farmhouse has a T-shape with a two-story gable wing facing the road. Estimated construction date: 1875.
Greek Revival Farm	1600 Valley Ford Freestone Road	Private	Greek Revival farm with a residence, barn, outbuildings, and wood bridge over creek.
Dinucci's Italian Dinners	Valley Ford Road, Valley Ford	Private	A two-and-a-half story square building with a hip roof and gables displaying the decorative shingles characteristic of the Queen Anne style. The first floor has been enlarged with the enclosure of a porch. Estimated construction date: 1905.
Bungalow Dairy	Valley Ford Estero Road	Private	A one-and-a-half story bungalow with a hip roof and shed dormers which is the farmhouse for a dairy ranch. The frame house has a front porch extending the length of the house supported by turned columns. Clustered near the bungalow are three gable roof barns, several outbuildings, and a round tower. Estimated construction date: 1910.
Valley Ford Market	14400 Highway 1, Valley Ford	Private	A one-story rectangular brick building with a stucco surface and a flat roof, the market had a curvilinear false front added about 1930. The painted mural on the false front commemorates the Running Fence. Estimated construction date: 1895.
Fire Department Tank and Frame Garage	14445 Highway 1, Valley Ford	Public	Behind a gable roof metal building housing the present volunteer fire department equipment stands a water tank. The tank, an exposed wood cask, sits on a raised frame platform. A fire siren rises above. To one side is a shed-roof building with two bays and siding of vertical board.
Frame False front	14390 Highway 1, Valley Ford	Private	Adjacent to the west side of Valley Ford Market is a one-story gable roof false front building with channel rustic siding. Characteristic of the earliest false front frame buildings, it is one-room wide with a central door in the false front. Estimated construction date: 1880.

Feature	Location	Ownership	Description
Valley Ford (cont.)			
Bank of America	14435 Highway 1, Valley Ford	Private	A one-story masonry building with neo-classical influence, the Dairyman's Bank suffered damage in the 1906 earthquake and has been subsequently remodeled. In front of the brick facade is a stepped parapet concealing a flat roof. A sign carried the legend, "1893 - the Dairyman's Bank - 1914". Estimated construction date: 1893.
Sandy's	14415 Highway 1, Valley Ford	Private	A two-story gable roof building with its non-gable facade to the road, the hotel has a channel rustic siding and a porch extending the length of the front. Six posts support the low hip roof of the porch which has a raised foundation. Estimated construction date: 1870.
Hip Roof Bungalow	14405 Highway 1, Valley Ford	Private	A one-story residence on a raised foundation with a hip roof and channel rustic siding. The front porch is sheltered under the main hip roof. Porch posts are square with sawn and pierced brackets. Estimated construction date: 1900.
Greek Revival Residence	14380 Highway 1, Valley Ford	Private	Facing the Valley Ford Road is this one-and-a-half story gable roof residence with its gable end to the road. To the rear are several additions. Estimated construction date: 1875.
Italianate Residence	14395 Highway 1, Valley Ford	Private	An Italianate influence is seen in the windows and door of the one-and-a-half story gable roof cottage with channel rustic siding. A porch partially extends across the front. It is supported by distinctive turned columns with intricate brackets, bracket extensions, and decorative button detailing on the columns and column bases. Estimated construction date: 1875.
Shingle Bungalow	14350 Highway 1, Valley Ford	Private	A one-and-a-half story shingled bungalow with a hip roof dormer, the residence sits on a raised foundation which is sheathed with narrow horizontal siding. To the rear is a shingled water tower with a hip roof finial and a large frame gable roof barn. Estimated construction date: 1910.
Greek Revival Cottage	14220 Highway 1, Valley Ford	Private	A one-and-a-half story Greek Revival cottage which reflects several distinctive architectural influences of the mid-19th century, including board and batten siding and a hip roof porch. Estimated construction date: 1870.
Greek Revival Cottage	14210 Highway 1	Private	This one-and-a-half story residence has channel rustic siding and quoins at the corners. A carved and sawn sunburst panel marks the gable end. A gable roof portico over the front entrance is supported by square posts. Estimated construction date: 1880.
Eucalyptus Windbreak	Valley Ford, Petaluma Road	Public	Eucalyptus windbreak along the road. Estimated planting date: 1900.

Feature	Location	Ownership	Description
Valley Ford (cont.)			
Soil Conservation Service Building	School Street, Valley Ford	Public	A one-and-a-half story building, with Spanish Colonial Revival influence, with a raised foundation, the former school was built into a hillside. The hip roof has a central gable over the main entrance with its round-arched entryway. Siding is stucco with a concrete and stucco staircase. Estimated construction date: 1920.
Hip Roof Queen Anne Cottage	14460 School Street, Valley Ford	Public	A one-story cottage with a steep hip roof, a Queen Anne influence is visible in the pedimented gable with its decorative shingles. Siding is channel rustic. Estimated construction date: 1900.
Bridge	Middle Road near Valley Ford	Public	A timber and iron bridge over the Estero Americano marking the boundary between Sonoma County and Marin County.
Christo's Running Fence	Main Street, Valley Ford	Private	Pole No. 7-33 is a 21-foot steel pole with small portions of steel cable and guy wires used in the construction of the Christo Running Fence in September, 1976. On opposite sides of the pole are two steel monuments displaying two bronze plaques. This site is Sonoma County Historic Landmark No. 24.