



Appendices

- A Location of Required EIR Content
- B Soil Definitions and Characteristics
- C Environmental Regulations, Permit Requirements, and Environmental Checklist
- D Archaeological and Historical Sites within Sonoma Coast State Beach
- E Sonoma Coast State Beach Survey Summary
- F Notice of Preparation and Public Comments
- G Willow Creek Access Site Evaluation
- H Acronyms
- I Glossary of Terms

Appendix A

Location of Required EIR Content

Location of EIR Required Content

This plan is prepared in accordance with CEQA Guidelines (Title 14, California Code of Regulations), article 9. Contents of Environmental Impact Report (EIR) §15120(c) states that draft EIRs shall contain the information required by sections 15122 through 15131. The following table shows where the required items are found in this General Plan/EIR.

CEQA Guidelines Content	Location in General Plan/EIR
Section 15122. Table of Contents or Index	Beginning of this document/Table of Contents
Section 15123. Summary	Sec. 4.2 Summary
Section 15124. Project Description	Ch. 3 The Plan (description) Sec. 4.3 Project Description (summarized) Ch. 1 Introduction (information about general plan purpose and process)
Section 15125. Environmental Setting	Ch. 2 Existing Conditions Sec. 4.4 Environmental Setting
Section 15126. Consideration and Discussion of Environmental Impacts	Ch. 4 Environmental Analysis
(a) (and Section 15126.2) Significant Environmental Effects of the Proposed Project	Sec. 4.6 Significant Environmental Effects and Mitigation
(b) Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented	Sec. 4.7.1 Unavoidable Significant Environmental Effects
(c) Significant Irreversible Environmental Changes Which Would be Involved in the Proposed Project Should it be Implemented	Sec. 4.7.2 Unavoidable Significant Environmental Effects
(d) Growth-Inducing Impact of the Proposed Project	Sec. 4.7.3 Growth-Inducing Impacts
(e) (and Section 15126.4) The Mitigation Measures Proposed to Minimize the Significant Effects	Ch. 3 The Plan, Sec. 3.2 Goals and Guidelines (intended to minimize adverse environmental effects) Sec. 4.6 Significant Environmental Effects and Mitigation
(f) Alternatives to the Proposed Project	Sec. 4.8.1 Alternatives to the Proposed Action
Section 15127. Limitations on Discussion of Environmental Impact	Sec. 4.7.2 Significant Irreversible Environmental Effects
Section 15128. Effects Not Found to be Significant	Sec 4.5 Environmental Effects Eliminated from Further Analysis
Section 15129. Organizations and Persons Consulted	Sec. 5.2 References
Section 15130. Discussion of Cumulative Impacts	Sec. 4.7.4 Cumulative Impacts
Section 15131. Economic and Social Effects (optional topic)	Ch. 3 The Plan Throughout the document under discussions of recreation and visitor experience

Appendix B

Soil Definitions and Characteristics

Soil Descriptions and Characteristics

Soil Descriptions

- **Alluvial land, sandy**

Alluvial land, sandy (AdA) consists of sandy and gravelly deposits along streams. Stratification is variable, and recent overwashes tend to change the texture of the surface layer from time to time. Streambank cutting and erosion have occurred in some locations. This land type is used for limited grazing and wildlife habitat. Capability unit VIIw-4.

- **Atwell clay loam, 30 to 50 percent slopes**

This steep soil is on uplands. It is commonly in swales and draws on wooded hillsides. Included in mapping are areas of Hugo very gravelly loam and Hely silt loam. Small areas of soils having slopes less than 30 percent are also included. Permeability of the subsoil is very slow, and runoff is rapid. The hazard of erosion is high and slips are common. Fertility is moderate. The available water capacity is 9 to 11 inches. This soils is used for woodland and for recreation. Capability unit VIe-3; woodland group 8.

- **Baywood loamy sand, 2 to 9 percent slopes**

This soil is on coastal benches. Most of the slopes are long and smooth. In most places the range in slope is from 2 to 5 percent. The texture ranges from sand to loamy sand. Included in mapping are small areas of Sheridan coarse sandy loam and Rohnerville loam. Also included are small localized areas of rock outcrops. Permeability is rapid. Runoff is very slow to slow, and the hazard of soil blowing is moderate. Fertility is low. The available water capacity is 4 to 5 inches. This soil is used mainly for pasture. Capability unit IIIe-4.

- **Casabonne-Wohly-Holohan**

The Casabonne series consists of deep, well drained soils formed in material weathered from sandstone or shale. Casabonne soils are on hills and mountains with slopes ranging from 9 to 75%. The Wohly series consists of moderately deep, well drained soils that formed in material weathered from sandstone. Wohly soils are on hills and mountains. Slopes range from 9 to 75%. The Holohan series consists of very deep, well drained soils formed in material weathered from sandstone. Holohan soils are on hills and mountains and have slopes of 9 to 75%.

- **Coastal beaches**

Coastal beaches is a miscellaneous land type which consists of narrow, sandy beaches that are covered or nearly covered during high tide and exposed during low tide. They occur where the rocky and sandy areas of the Pacific Ocean meet the Sonoma County

coast. Parts of the coast consist of narrow beaches backed by bluffs that are 10 to 250 feet high. In some areas the bluffs rise abruptly from the sea. The beaches have no agricultural value but are used for recreation such as camping, picnicking, surf fishing, and clam and abalone hunting. Capability unit VIIIw-4.

- **Dune land**

Dune land consists of loose, shifting sand. It is in many areas scattered along the coast. The largest area is on the coastal side of the north end of Bodega Head extending toward the mouth of Salmon Creek. Much dune grass has been planted in an effort to control mass movement of the sand. Ocean winds have shifted the dunes. This shift has threatened agricultural land and possible homesites. Dune land is used mainly for recreational purposes. Capability unit VIIIe-4.

- **Hugo very gravelly loam, 50 to 75 percent slopes**

This very steep soil is in mountainous uplands. Soil depth to weathered rock ranges from 30 to 60 inches. Included in mapping are small areas of Atwell clay loam, Josephine loam, Laughlin loam, and Maymen gravelly sandy loam. Also included are areas with up to 5 percent rock outcrops on the surface. Permeability is moderate in the subsoil of this Hugo soil. Runoff is very rapid, and the hazard of erosion is very high. Fertility is moderate. The available water capacity is 4 to 8 inches. This soil is used mainly for producing timber. Some areas that have been logged are used for grazing. Capability unit VIIe-4; woodland group 6.

- **Hugo very gravelly loam, 30 to 50 percent slopes**

This soil is similar to Hugo very gravelly loam, 50 to 75 percent slopes, but it is not so steep. The gravel content varies from 25 to 45 percent by volume. Included in mapping areas are small areas of Josephine loam, Laughlin loam, and Maymen gravelly sandy loam. Runoff is rapid, and the hazard of erosion is high. The available water capacity is 4 to 8 inches. This soil is used mainly for timber. Capability unit VIe-4; woodland group 2.

- **Hugo-Atwell complex, 30 to 50 percent slopes**

This complex is in the northern and western areas of the county on sandstone and shale of the Franciscan formation. It is also between Camp Meeker and north to the Russian River, where there is a large proportion of metamorphosed sandstone and shale. The Hugo soils make up about 70 percent of the complex; Atwell soils, about 20 percent; Melbourne soils, about 5 percent; and Josephine soils, the remaining 5 percent. Stoniness ranges from 15 to 30 percent. The Hugo soils have predominantly concave slopes while the Atwell soils have convex slopes and occur near water courses. Occasional landslips are common on Atwell soils. The quality of timber is lower on Atwell soils than on Hugo soils. The Hugo soil has a profile similar to the Hugo very gravelly

loam, 50 to 75 percent slopes. Soil depth is 30 to 50 inches. Runoff is rapid, and the hazard of erosion is high. The available water capacity is 4 to 7.5 inches. The Atwell soil has a profile similar to Atwell clay loam, 30 to 50 percent slopes. Soil depth is 30 to 50 inches. Surface runoff is rapid, and the hazard of erosion is high. This soil is used mainly for timber. Capability unit Vle-4; Hugo, woodland group 2; Atwell, woodland group 8.

- **Josephine loam, 9 to 30 percent slopes**

This soil ranges in depth from 36 to 60 inches, although much of the acreage is 45 inches deep or more. Content of stone and gravel ranges from none to 20 percent, by volume. Included in mapping are small areas of Hugo very gravelly loam, Laughlin loam, and Mendocino sandy clay loam. Runoff is medium to rapid, and the hazard of erosion is moderate to high. The available water capacity is 6 to 10 inches. The main use of this soil is for timber. Attempts at growing orchards and vineyards have been generally unsuccessful. Capability unit IVe-1; woodland group 1.

- **Kinman loam, 30 to 50 percent slopes**

This steep soil is on uplands. Most of the slopes are long and smooth. In most places, slopes range from 30 to 40 percent. Depth to rock varies from 30 to 55 inches. Some of the steeper slopes have old slip areas that are nearly stabilized. Included in mapping are small areas of Kneeland loam, Laughlin loam, Rohnerville loam, and Yorkville clay loam. Also included are scattered areas of large rock outcrops sometimes called "sea stacks." Permeability is slow in the subsoil of this Kinman soil. Runoff is rapid, and the hazard of erosion is high. Fertility is moderate. The available water capacity is 4.5 to 8 inches. This soil is used mainly for grazing by sheep and cattle. Capability unit Vle-3; range site 6.

- **Kinman loam, 15 to 30 percent slopes**

This soil is similar to Kinman loam, 30 to 50 percent slopes, but the depth to bedrock is deeper. The surface layer and subsoil combined are about 40 to more than 60 inches thick. Included in mapping are small areas of Kneeland loam, Laughlin loam, and Yorkville clay loam. Also included are scattered areas of a dark-gray clay generally near the areas of the Yorkville series. Occasionally, there are outcrops of hard sandstone. Runoff is medium to rapid, and the hazard of erosion is moderate to high. The available water capacity is about 6 to 10 inches. The soil is used mainly for sheep pasture and for range. Capability unit Vle-3; range site 2.

- **Kinman-Kneeland loams, 30 to 50 percent slopes**

This complex is above the coastal terraces between Bodega Bay and the vicinity of Jenner. Kinman loam makes up about 60 percent of the complex, and Kneeland loam about 40 percent. Included with these soils are areas of soils that have slopes of less than 30 percent or greater than 50 percent. The lesser slopes usually occur on broad

ridgetops. Rock outcrops cover less than 2 percent of the surface. Seepage is common on the lower toeslopes of the Kinman soils. Depth to sandstone and shale in Kinman loam is 30 to 45 inches. Runoff is rapid, and the hazard of erosion is high. The available water capacity is 4.5 to 7.5 inches. Kneeland loam has a profile similar to that of Kneeland loam, 5 to 9 percent slopes. Depth to sandstone is 25 to 40 inches. Runoff is rapid, and the hazard of erosion is high. The available water capacity is 4 to 7 inches. These soils are used for range and pasture. Capability unit Vle-3; Kinman, range site 6; Kneeland, range site 12.

- **Kneeland loam, 5 to 9 percent slopes**

This is gently sloping to moderately sloping soil is on upland ocean terraces. Included in mapping are scattered areas of sandstone outcrops and small areas of Kinman loam and Steinbeck loam. Permeability is moderate in the subsoil of this Kneeland soil. Runoff is slow, and the hazard of erosion is slight. Fertility is moderately low, and the available water capacity is 4 to 8 inches. The effective rooting depth is 25 to 45 inches. This soil is used mainly for range and pasture. Capability unit IIIe-1; range site 12.

- **Kneeland loam, 30 to 50 percent slopes**

This soil is similar to the Kneeland loam, 5 to 9 percent slopes. It generally is about 25 inches deep, but at times it is 40 inches deep. Included in mapping are small areas of Kinman loam, Los Osos clay loam, and Steinbeck loam. Runoff is rapid, and the hazard of erosion is high. This soil is used mainly for range, for sheep grazing. Capability unit Vle-1; range site 12.

- **Kneeland rocky complex, 30 to 75 percent slopes**

Rock outcrops or “sea stacks,” scattered throughout the fields, occupy about 15 to 20 percent of the surface area of this complex. Sea stacks are remnant, weather-resistant, fine-grained sandstone that rise above the surface. The remaining 80 to 85 percent of these areas consists of Kneeland loam. Occasionally there are stone in the subsoil. Runoff is very rapid, and the hazard of erosion is very high. Kneeland soils seldom exceed a depth of 24 inches, but in places they are as deep as 40 inches. Included in mapping are small areas of Kinman loam, Los Osos clay loam, and Steinbeck loam. This complex is used mainly for grazing. Capability unit VIIe-1; range site 12.

- **Laughlin loam 50 to 75 percent slopes**

This soil is on very steep mountainous terrain of the Coast Range. Depth to sandstone or shale is between 20 and 30 inches. Included in mapping are small areas of Hugo very gravelly loam, Maymen gravelly sandy loam, Suther loam, and Yorkville clay loam. Also included are areas with a pale brown loam surface layer. Permeability is moderate in the subsoil of this Laughlin soil. Runoff is very rapid, and the hazard of erosion is very high.

Fertility is moderately low. The available water capacity is about 3 to 4.5 inches. This soil is used mainly for range. Capability unit VIIe-8; range site 8.

- **Laughlin loam, 30 to 50 percent slopes**

This soil is similar to Laughlin loam, 50 to 75 percent slopes. Included in mapping are small areas of Hugo very gravelly loam, Maymen gravelly sandy loam, and Suther loam. Runoff is rapid, and the hazard of erosion is high. This soil is used mainly for range. Capability unit VIe-8; range site 4.

- **Maymen gravelly sandy loam, 30 to 50 percent slopes**

This steep soil is on mountainous uplands. The profile contains approximately 10 to 25 percent gravel, by volume, throughout. Depth to sandstone varies from 10 to 20 inches. Included in mapping are small areas of Henneke gravelly loam, Hugo very gravelly loam, Huse stony clay loam, and Los Gatos gravelly loam. Also included are some areas where slope is 75 percent, some eroded areas, and areas that have as much as 10 percent rock outcrop. Permeability is moderate in the subsoil of this Maymen soil. Runoff is rapid, and the hazard of erosion is high. Fertility is very low. The available water capacity is 1 to 2 inches. This soil is used mainly for watershed, for wildlife browse and cover, and for limited range. Capability unit VIIe-8; range site 10.

- **Ornbaun-Zeni-Yellowhound**

The Ornbaun series consists of deep, well drained soils formed in material weathered from sandstone and mudstone. Ornbaun soils are on hills and mountains and have slopes of 9 to 75%. The Zeni series consists of moderately deep, well drained soils formed in material weathered from sandstone or mudstone. Zeni soils are on hills and mountains. Slopes range from 9 to 75%. The Yellowhound series consists of deep, well drained soils formed in material weathered from sandstone or conglomerate. Yellowhound soils are on hills and mountains and have slopes of 9 to 99%.

- **Quinliven-Ferncreek-Dystropepts**

The Quinliven series consists of very deep, moderately well drained soils formed in marine sediments. Quinliven soils are on marine terraces and have slopes of 2 to 50%. The Ferncreek series consists of very deep, somewhat poorly drained soils formed in marine sediments. The Ferncreek soils are on marine terraces and have slopes of 2 to 30%. The Dystropepts series consists of soils on side slopes of marine terraces. Native vegetation is mainly brush, grass, and/or Grand fir, Douglas fir, and Redwood. Permeability and available water capacity are extremely variable in Dystropepts.

- **Riverwash**

Riverwash consists of very recent depositions of gravel, sand, and silt alluvium along major stream and their tributaries. Gravel bars make up the majority of these areas.

During floods, alluvial areas are subject to repeated deposition, erosion, and shifting of transported material. Layering and gullying of soil and gravel brought from upstream areas has resulted. Riverwash provides gravel for commercial production, construction, and road fill. Capability unit VIIIw-4.

- **Rock land**

Rock land consists of stony steep slopes and ridges that generally are in rough mountainous areas where there is little soil material. Small shrubs or an occasional stunted tree growing between lichen-covered rocks are the only vegetation. This land type is used mainly for watershed. Capability unit VIIIs-8.

- **Rohnerville loam, 0 to 9 percent slopes**

This soil is along the coastal terraces from Gualala to Bodega Bay. Generally, it is nearly level, but where this soil is on a rise abutting the steep uplands adjacent to the terrace, it is gently sloping. Included in mapping are small areas of Baywood sandy loam, Kinman loam, Kneeland loam, and Noyo coarse sandy loam. Permeability is moderately slow in this Rohnerville soil. Runoff is slow to medium, and the hazard of erosion is slight to moderate. Fertility is moderate. The available water capacity is 4.5 to 8 inches. The soil is used mainly for sheep pasture and range. Capability unit IIIe-1; range site 1.

- **Rohnerville loam, 9 to 15 percent slopes**

This soil is similar to Rohnerville loam, 0 to 9 percent slopes, but it is generally 30 to 40 inches deep to the substratum. In most areas this soil has slopes of 9 to 12 percent. Included in mapping are small areas of Kinman loam, Kneeland loam, and Noyo coarse sandy loam. Runoff is medium, and the hazard of erosion is moderate. The available water capacity is 4.5 to 7 inches. This soil is used mainly for pasture for sheep and a few dairy cattle. Capability unit IVe-1; range site 1.

- **Sheridan coarse sandy loam, 2 to 30 percent slopes**

This gently sloping to moderately steep soil is on uplands. Most of the slopes are long and range from 7 to 15 percent. Bedrock is at a depth of 36 to 60 inches. Included in mapping are small areas of Baywood loamy sand and Dune land. Also included are areas that are 20 to 36 inches deep to the parent material. Permeability is moderately rapid in this Sheridan soil. Runoff is slow to rapid, and the hazard of erosion is slight to high. Fertility is moderate. The available water capacity is 3.5 to 7 inches. This soil is on Bodega Head and the coast where there is an ideal view of the ocean. It is used mainly for recreation. Capability unit VIe-4.

- **Sobrante loam, 30 to 50 percent slopes**

This steep soil is on uplands. Depth to weathered greenstone ranges from 20 to 40 inches. Gravel content of shattered rock fragments varies from none to about 10 percent,

by volume, because of irregular weathering of the parent bedrock. Included in mapping are small areas of Boomer loam, Goulding cobbly clay loam, Laughlin loam, and Suther loam. Although rock outcrops are characteristically associated with the landscape, they occupy less than 3 percent of the surface. Permeability is moderate in this Sobrante soil. Runoff is rapid, and the hazard of erosion is high. Fertility is moderate. The available water capacity is 3.5 to 8 inches. The soil is used mainly for range. Capability unit VIe-1; range site 4.

- **Sobrante loam, 50 to 75 percent slopes**

This soil is similar to Sobrante loam, 30 to 50 percent slopes, but it is steeper. Soil depth ranges from 20 to 30 inches. Included in mapping are small areas of Boomer loam, Goulding cobbly clay loam, and Laughlin loam. Some areas are eroded, exposing the reddish-brown subsoil. Runoff is very rapid, and the hazard of erosion is very high. The available water capacity is 3.5 to 6 inches. This soil is mainly used for range. Capability unit VIIe-1; range site 8.

- **Terrace Escarpments**

Terrace escarpments consist of long, narrow, rocky areas that rise abruptly from the mean tide line to the coastal plain terraces or plateaus. This land type consists of steep faces that separate the terraces from the lower lying land. The faces are composed of soft coastal sandstone, hard shale, or hard, weather-resistant, fine-grained sandstone. Vegetation is sparse and is made up of dwarfed shrubs, a few patches of grass, lichens, and moss. In seepage areas water grasses, a few cypress and oaks, and various weathered conifers also grow. Areas of Terrace escarpments are used mainly for watershed and as wildlife habitat. Capability unit VIIIs-8.

- **Tidal Marsh**

Tidal marsh consists of nearly level marsh lands that are under water or extremely wet throughout the year. This miscellaneous land type occurs adjacent to San Pablo Bay and on narrow drainage-ways that empty into the Pacific Ocean. Except for small included areas that support limited grazing, tidal marsh has no farming value. It is used mainly for recreation and as wildlife habitat. Capability unit VIIIw-2.

- **Yolo loam, overwash, 0 to 5 percent slopes**

This soil is similar to Yolo loam, 0 to 2 percent slopes, but because of its location where inundation and overflow are minor hazards, this soil stays wet for longer periods of time. Included in mapping are small areas of Cortina very gravelly loam, Pleasanton loam, and Zamora silty clay loam. Runoff is slow to medium, and the hazard of erosion is slight to moderate. This soil is used mainly for orchards, vineyards, row crops, and pastures. Capability unit IIw-2.

- **Yolo sandy loam, overwash, 0 to 5 percent slopes**

This soil differs from Yolo loam, 0 to 2 percent slopes, in that its surface layer is sandy loam. This Yolo loam is subject to flooding and consequent deposition because of its topographic position along rivers and creeks. Included in mapping are small areas of Cortina very gravelly sandy loam, Pleasanton loam, and Zamora silty clay loam. Runoff is slow to medium, and the hazard of erosion is slight to moderate. The available water capacity is 8 to 10 inches. This soil is used mainly for orchards and vineyards. Some areas are used for pasture. Capability unit Ilw-2.

- **Yorkville clay loam, 5 to 30 percent slopes**

This moderately steep soil is on uplands. Generally, slopes range from 15 to 30 percent, and they are long and smooth. The subsoil may contain slickensides and variable amounts of rock fragments. Soil depth to rock ranges from 24 to 60 inches within short distances. Rock replaces the clay parent material. Included in mapping are small areas of Hugo loam, Josephine loam, Laughlin loam, and Suther loam. Permeability is very slow in the subsoil of this Yorkville soil. Runoff is medium to rapid, and the hazard of erosion is moderate to high. Fertility is moderately high. The available water capacity is 4 to 6 inches. This soil is subject to landslips and is used mainly for range. Capability unit Vle-3; range site 2.

- **Yorkville clay loam, 30 to 50 percent slopes**

This soil is steeper than Yorkville clay loam, 5 to 30 percent slopes. Depth to bedrock ranges from 24 to 60 inches, but generally it occurs between 36 to 50 inches. Landslips and gullies are present. Included in mapping are small areas of Josephine loam, Laughlin loam, and Suther loam. Runoff is rapid, and the hazard of erosion is high. This soil is used mainly for range. Other areas are used for wildlife cover and for watershed. Capability unit Vle-3; range site 6.

References

Natural Resources Conservation Service. 1972. *Soil Survey of Sonoma County, CA*. U.S. Department of Agriculture.

Summary of Soil Characteristics				
Soil Type	Permeability	Runoff	Erosion Hazard	Water Capacity (water-holding capacity)
Alluvial Land, Sandy	--	--	--	--
Atwell Clay Loam, 30-50 Percent Slopes	Slow	Rapid	High	9 to 11 inches
Baywood Loamy Sand, 2 to 9 Percent Slopes	Rapid	Slow	Moderate	4 to 5 inches
Coastal Beaches	--	--	--	--
Dune Land	--	--	--	--
Hugo Very Gravelly Loam, 30 to 50 Percent Slopes		Rapid	High	4 to 8 inches
Hugo Very Gravelly Loam, 50 to 75 Percent Slopes	Moderate	Very Rapid	Very High	4 to 8 inches
Hugo-Atwell Complex, 30 to 50 Percent Slopes	--	Rapid	High	4 to 7.5 inches
Josephine Loam, 9 to 30 Percent Slopes	--	Medium to Rapid	Moderate to High	6 to 10 inches
Kinman Loam, 15 to 30 Percent Slopes	--	Medium to Rapid	Moderate to High	6 to 10 inches
Kinman Loam, 30 to 50 Percent Slopes	--	Rapid	High	4.5 to 8 inches
Kinman-Kneeland Loams, 30 to 50 Percent Slopes	--	Rapid	High	4.5 to 7.5 inches
Kneeland Loam, 30 to 50 Percent Slopes.	--	Rapid	High	--
Kneeland Loam, 5 to 9 Percent Slopes.	Moderate	Slow	Slight	4 to 8 inches
Kneeland Rocky Complex, 30 to 75 Percent Slopes	--	Very Rapid	Very High	--
Laughlin Loam, 30 to 50 Percent Slope	--	Rapid	High	--
Laughlin Loam, 50 to 75 Percent Slope	Moderate	Very Rapid	Very High	3 to 4.5 inches

Summary of Soil Characteristics				
Soil Type	Permeability	Runoff	Erosion Hazard	Water Capacity (water-holding capacity)
Maymen Gravelly Sandy Loam, 30 to 50 Percent Slopes	Moderate	Rapid	High	1 to 2 inches
Riverwash	--	--	--	--
Rock Land	--	--	--	--
Rohnerville Loam, 0 to 9 Percent Slopes	Moderately Slow	Slow to Medium	Slight to Moderate	4.5 to 8 inches
Rohnerville Loam, 9 to 15 Percent Slopes	--	Medium	Moderate	4.5 to 7 inches
Sheridan Coarse Sandy Loam, 2 to 30 Percent Slope	Moderately Rapid	Slow to Rapid	Slight to High	3.5 to 7 inches
Sobrante Loam, 30 to 50 Percent Slope	Moderate	Rapid	High	3.5 to 8 inches
Sobrante Loam, 50 to 75 Percent Slope	--	Rapid	Very High	3.5 to 6 inches
Terrace Escarpments	--	--	--	--
Tidal Marshes	--	--	--	--
Water	--	--	--	--
Yolo Loam, Overwash, 0 to 5 Percent Slopes	--	Slow to Medium	Slight to Moderate	--
Yolo Sandy Loam, Overwash, 0 to 5 Percent Slopes	--	Slow to Medium	Slight to Moderate	8 to 10 inches
Yorkville Clay Loam, 30 to 50 Percent Slopes	--	Rapid	High	--
Yorkville Clay Loam, 5 to 30 Percent Slopes	Very Slow	Medium to Rapid	Moderate to High	4 to 6 inches

Appendix C

Environmental Regulations, Permit Requirements,
and Environmental Checklist

Environmental Regulations and Permit Requirements

Many biological resources in California are protected by Federal and State laws and regulations. During the project planning and pre-implementation process, surveys and other assessments may be needed to determine site sensitivities and compliance measures to minimize environmental impacts or effects on protected resources. Key environmental regulatory requirements and permits applicable to implementation of the General Plan are discussed below.

FEDERAL REGULATIONS

ENDANGERED SPECIES ACT

Pursuant to the federal Endangered Species Act (ESA), the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) have authority over projects that may result in take of a federally listed species. Under the ESA, the definition of “take” is to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS has also interpreted the definition of “harm” to include significant habitat modification that could result in take. If a project has a reasonable likelihood that it would result in take of a federally listed species, either one of two take approvals is required: an incidental take permit, under Section 10(a) of the ESA (if no other federal action is involved), or a federal interagency consultation and Biological Opinion under Section 7 of the ESA (if another federal approval is needed).

The recreation facilities improvements and recreation activities discussed in this report have the potential to affect federally listed threatened or endangered, and candidate or proposed species.

MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act (MBTA), first enacted in 1918, implements a series of treaties that provide international migratory bird protection, and authorize the Secretary of the Interior to regulate the taking of migratory birds. The MBTA states it shall be unlawful, except as permitted by regulations, “to pursue, take, or kill...any migratory bird, or any part, nest or egg of any such bird, included in the terms of conventions” with certain other countries (16 U.S. Code [USC] 703). The current list of species protected by the MBTA contains several hundred species and essentially includes all native birds. Section 3513 of the California Fish and Game Code provides for adoption of the MBTA’s provisions. Although neither the MBTA nor this state code offers statutory or regulatory mechanisms for obtaining an incidental take permit for the loss of nongame migratory birds, a Section 10(a) permit issued under the ESA may constitute a special purpose permit for the take of a listed species that is also covered by the MBTA. Sometimes California Department of Fish and Game (CDFG) and USFWS seek measures that demonstrate avoidance of loss of MBTA-covered species. USFWS and CDFG have discretion whether or not to pursue an MBTA action, if some migratory birds would be

lost, but have decided not to pursue action when agencies demonstrate that all reasonable loss avoidance measures have been incorporated into a project.

MARINE MAMMAL PROTECTION ACT

All marine mammals are protected under the Marine Mammal Protection Act of 1972 (MMPA). The MMPA established a moratorium, with certain exceptions, on the taking of marine mammals in U.S. waters and by U.S. citizens on the high seas, and on the importing of marine mammals and marine mammal products into the United States. Under the MMPA, the Secretary of Commerce is responsible for the conservation and management of pinnipeds (other than walruses) and cetaceans. The Secretary of the Interior is responsible for walruses, sea and marine otters, polar bears, manatees and dugongs. The Secretary of Commerce delegated MMPA authority to NMFS.

The term “take” is statutorily defined to mean “to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal.” All activities that have the potential to disturb a marine mammal in the wild by causing disruption of behavioral patterns are prohibited under this act. Under the 1994 amendments, the Congress statutorily defined and divided the term “harassment” into two levels. Harassment is defined as any act of pursuit, torment, or annoyance which:

- ▶ Level A) has the potential to injure a marine mammal or marine mammal stock in the wild; or
- ▶ Level B) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption or behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.

Certain provisions apply to allow take of marine mammals for scientific research, enhancement, and public display purposes, including educational and commercial photography purposes. The MMPA also allows the take of marine mammals incidental to commercial fishing operations, under a regime that includes preparation of stock assessments for all marine mammal stocks in waters under U.S. jurisdiction, development and implementation of take reduction plans for stocks that may be reduced or are being maintained below their optimum sustainable population levels due to interactions with commercial fisheries, and studies of pinniped-fishery interactions.

SECTION 404 OF THE CLEAN WATER ACT

Section 404 of the Clean Water Act (CWA) establishes a requirement to obtain a permit from USACE prior to initiating any activity that involves any discharge of dredged or fill material into “waters of the United States,” including wetlands. Waters of the United States include navigable waters of the United States, interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Wetlands are defined as those areas that

are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Jurisdictional wetlands must meet three wetland delineation criteria: hydrophytic vegetation, hydric soil types, and wetland hydrology. Many surface waters and wetlands in California meet the criteria for waters of the United States, including intermittent streams and seasonal lakes and wetlands.

Pursuant to Section 404 of the CWA, the U.S. Army Corps of Engineers (USACE) regulates and issues permits for activities that involve the discharge of dredged or fill materials into waters of the United States. In addition, under Section 10 of the Rivers and Harbors Act, USACE issues permits for structures and/or work in or affecting navigable waters of the United States. Fills of less than ½ acre of non-tidal waters of the United States for residential, commercial, or institutional development projects can generally be authorized under the USACE's nationwide permit (NWP) program, provided the project satisfies the terms and conditions of the particular NWP. Fills that do not qualify for a NWP require a Letter of Permission or an individual permit.

STATE

CALIFORNIA ENDANGERED SPECIES ACT

Pursuant to the California Endangered Species Act (CESA) and Section 2081 of the Fish and Game Code, an incidental take permit from the California Department of Fish and Game (CDFG) is required for projects that could result in the take of a state-listed Threatened or Endangered species. Under CESA, "take" is defined as an activity that would directly or indirectly kill an individual of a species, but the definition does not include "harm" or "harass," as the federal act does. As a result, the threshold for a take under the CESA is higher than that under the ESA.

SECTION 401 OF THE CLEAN WATER ACT (CWA)

Section 401(a)(1) of the Clean Water Act (CWA) specifies that any applicant for a Federal license or permit to conduct any activity, including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters, shall provide the federal licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of the Clean Water Act. Succinctly, this means that in California, the Regional Board must certify that the project will comply with water quality standards (defined below). In some instances, the need for certification may be waived if the action is shown to have minimal water quality effects.

SECTION 3503.5 OF THE CALIFORNIA FISH AND GAME CODE - PROTECTION OF RAPTORS

Section 3503.5 of the Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Violations include destruction of active raptor nests as a result of tree removal and disturbance to nesting pairs by nearby human activity that causes nest abandonment and reproductive failure.

SECTION 1602 OF THE CALIFORNIA FISH AND GAME CODE – STREAMBED ALTERATION AGREEMENT

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream or lake in California that supports wildlife resources and/or riparian vegetation are subject to regulation by CDFG, pursuant to §1600 through §1603 of the California Fish and Game Code. Under §1601 for public projects and §1603 for projects proposed by nonpublic entities, it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake designated by CDFG, or use any material from the streambeds, without first notifying CDFG of such activity. Authorization from CDFG would be in the form of a Streambed Alteration Agreement.

CALIFORNIA COASTAL ACT

The California Coastal Act (CCA) (California Public Resources Code §30000 et seq.) was enacted in 1976 to provide long-term resource protection and public access of California's coastline. Article 4 of the CCA requires the maintenance, enhancement, and restoration, if feasible, of marine resources for long-term commercial, recreational, scientific, and educational purposes. Specifically, it affords special protection for species of biological significance. It also requires maintenance of water quality and biological productivity within the coastal zone in order to maintain optimum populations of marine organisms and to protect human health.

The CCA is implemented locally through local coastal plans. Within the Sonoma Coast SB, the Department is responsible for complying with the Sonoma County Local Coastal Plan (LCP). The Sonoma County LCP contains 80 management recommendations that apply to each of the environmental resources in the coastal zone (e.g., dunes and coastal strands, wetlands, tideflats, anadromous fish streams, marine mammal haul-out grounds).

ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION		
1. Project Title:	Sonoma Coast State Beach General Plan	
2. Lead Agency Name and Address:	California Department of Parks and Recreation Northern Service Center One Capitol Mall, Suite 500 Sacramento, CA 95814	
3. Contact Person and Phone Number:	Wayne Woodroof General Plan Unit Manager 916.445.8850	
4. Project Location:	Sonoma County	
5. Project Sponsor's Name and Address:	Same as Lead Agency	
6. General Plan Designation:	Open Space	
7. Zoning:	Open Space	
8. Description of Project:	<p>Sonoma Coast State Beach (Park) is located along Highway 1 in Sonoma County and extends for approximately 19 miles from Bodega Head in the South to the Vista Trail 4 miles north of Jenner. The Park is characterized by costal terraces, sandy beaches, sandy dunes, rocky headlands and sweeping ocean vistas. The Willow Creek unit is located at the confluence of Willow Creek and the Russian River and contains extensive stands of willow riparian scrub, wetlands and grasslands. The upper slopes of the Willow Creek Watershed are heavily wooded. The park possesses substantial recreational resources and opportunities ranging from hiking and horse trails, to offshore fishing, beachcombing, picnicking, tidepooling whale watching, wildlife viewing, and rockclimbing.</p> <p>DPR's General Plan Unit, in conjunction with its Russian River District office, is in the process of developing a General Plan for Sonoma Coast State Beach in accordance with Public Resources Code §5002.2 referencing General Plan guidelines and §21000 et seq. concerning the California Environmental Quality Act (CEQA). The purpose of the General Plan is to guide future development activities and management objectives at the Park. Preparation of the General Plan is in its early stages, so ultimate land use and resources management provisions have not yet been determined. DPR is currently in the process of evaluating existing resources and management opportunities and constraints at the Park that will aid in the development of the General Plan. Public outreach and involvement will be a substantial component of the development of the General Plan.</p>	
9. Surrounding Land Uses and Setting:	Pacific Ocean, small coastal communities, private ranch and timber lands, Russian River	
10. Other public agencies whose approval is required:	None	
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:		
<p>The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.</p>		
<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture Resources	<input type="checkbox"/> Air Quality
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Geology / Soils
<input type="checkbox"/> Hazards & Hazardous Materials	<input type="checkbox"/> Hydrology / Water Quality	<input type="checkbox"/> Land Use / Planning
<input type="checkbox"/> Mineral Resources	<input type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing
<input type="checkbox"/> Public Services	<input checked="" type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation / Traffic
<input type="checkbox"/> Utilities / Service Systems	<input type="checkbox"/> Mandatory Findings of Significance	

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

I find that although the proposed project **COULD** have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** or its functional equivalent is required.

I find that the proposed project **MAY** have a “potentially significant impact” or “potentially significant unless mitigated impact” on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards and b) have been avoided or mitigated pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
II. AGRICULTURAL RESOURCES				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (The Farmland Mapping and Monitoring Program in the California Resources Agency, Department of Conservation, maintains detailed maps of these and other categories of farmland.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
III. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IV. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
V. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VI. GEOLOGY AND SOILS — Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Div. of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
VII. HAZARDS and HAZARDOUS MATERIALS — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES	Potential y Significan t Impact	Less Than Significant With Mitigation Incorporated	Less Than Significan t Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
VIII. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirement?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ENVIRONMENTAL ISSUES	Potential y Significan t Impact	Less Than Significant With Mitigation Incorporated	Less Than Significan t Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IX. LAND USE AND PLANNING — Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
X. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XI. NOISE — Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XII. POPULATION AND HOUSING — Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
XV. TRANSPORTATION/TRAFFIC — Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVI. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ENVIRONMENTAL ISSUES	Potential y Significan t Impact	Less Than Significant With Mitigation Incorporated	Less Than Significan t Impact	No Impact
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Authority: Public Resources Code Sections 21083 and 21087. Reference: Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 31083.3, 21093, 21094, 21151; <i>Sundstrom v. County of Mendocino</i>, 202 Cal. Approximately. 3d 296 (1988); <i>Leonoff v. Monterey Board of Supervisors</i>, 222 Cal. Approximately. 3d 1337 (1990).</p>				

Appendix D

Archaeological and Historical Sites within Sonoma Coast State Beach

Archaeological and Historical Sites within the State Beach					
Site No.	Date Recorded	Site Type	Tested	Comments	Quadrangle
CA-Son-173	1949, 1988	shell midden	—	erosion along drainage	Duncans Mills
CA-Son-284	1956, 1967, 1988	shell scatter	—	—	Bodega Head
CA-Son-285	1949, 1967, 1988	shell scatter	—	grading	Bodega Head
CA-Son-287	—	—	—	—	Bodega Head
CA-Son-288	—	—	—	—	Bodega Head
CA-Son-292	1949, 1962, 1988	shell midden	y	erosion, ethnographic village of <i>tiwut'huya</i>	Bodega Head
CA-Son-293	1949, 1962, 1988	shell	y	destroyed	Bodega Head
CA-Son-294	1949, 1988	historic-era	y	destroyed	Bodega Head
CA-Son-295	1949, 1988	historic-era		not relocated	Bodega Head
CA-Son-296	—	—	—	—	Bodega Head
CA-Son-297	1948, 1949, 1988	occupation		construction, ethnographic village of <i>oyemu'ku</i>	Bodega Head
CA-Son-298	—	—	—	—	Bodega Head
CA-Son-299	1948, 1950, 1951, 1988	shell scatter	—	pot hunting, construction, almost destroyed, ethnographic village of <i>Kili</i>	Bodega Head
CA-Son-300	—	—	—	—	Bodega Head
CA-Son-302	—	—	—	—	Bodega Head
CA-Son-303	—	—	—	—	Bodega Head
CA-Son-304	—	—	—	—	Bodega Head
CA-Son-305	—	—	—	—	Bodega Head
CA-Son-306	—	—	—	—	Bodega Head
CA-Son-307	—	—	—	—	Bodega Head

Archaeological and Historical Sites within the State Beach					
Site No.	Date Recorded	Site Type	Tested	Comments	Quadrangle
CA-Son-308	—	—	—	—	Bodega Head
CA-Son-309	—	—	—	—	Bodega Head
CA-Son-310	—	—	—	—	Bodega Head
CA-Son-311	—	—	—	—	Bodega Head
CA-Son-312	—	—	—	—	Bodega Head
CA-Son-313	—	—	—	—	Bodega Head
CA-Son-314	—	—	—	—	Bodega Head
CA-Son-315	1949, 1988	shell scatter	—	erosion, grading	Bodega Head
CA-Son-316	1949, 1967, 1988	shell scatter	—	not relocated	Bodega Head
CA-Son-317	—	—	—	—	Bodega Head
CA-Son-318	—	—	—	—	Bodega Head
CA-Son-319	1948, 1949, 1951, 1988	shell midden, lithics	—	pot hunting, erosion, road	Bodega Head
CA-Son-320	1948, 1950, 1988	shell midden	—	road, erosion, ethnographic village of <i>lakkenhu'ye</i>	Bodega Head
CA-Son-321	—	—	—	ethnographic village of <i>tokau</i>	Bodega Head
CA-Son-322	—	—	—	—	Bodega Head
CA-Son-323	1949, 1988	—	—	not relocated	Bodega Head
CA-Son-324	1949, 1962, 1988	shell	y	destroyed	Bodega Head
CA-Son-325H	1949, 1988	historic-era foundation, debris	—	structures gone	Bodega Head
CA-Son-326	—	—	—	—	Bodega Head

Archaeological and Historical Sites within the State Beach					
Site No.	Date Recorded	Site Type	Tested	Comments	Quadrangle
CA-Son-327	—	—	—	—	Bodega Head
CA-Son-328	—	—	—	—	Bodega Head
CA-Son-329	1949, 1956, 1988	—	—	not relocated	Bodega Head
CA-Son-330	—	—	—	—	Bodega Head
CA-Son-331	1949, 1988	—	—	not relocated	Bodega Head
CA-Son-332	1949, 1956, 1967, 1988	shell, fcr	—	erosion	Bodega Head
CA-Son-333	1949, 1988	—	—	not relocated	Bodega Head
CA-Son-334	1949, 1956, 1988	occupation	—	ethnographic village of <i>pulya-lakum</i>	Bodega Head
CA-Son-335	1948, 1949, 1988	shell midden, fcr	—	erosion, construction	Bodega Head
CA-Son-336	1949, 1988	shell midden	—	not relocated - destroyed?	Bodega Head
CA-Son-337	1949, 1988	shell scatter	—	destroyed by erosion	Bodega Head
CA-Son-338	—	—	—	—	Bodega Head
CA-Son-339	1949, 1988	shell midden	—	destroyed	Bodega Head
CA-Son-340	1949, 1988	shell scatter	—	destroyed by parking lot	Bodega Head
CA-Son-341	—	—	—	ethnographic village of <i>japa'mu</i>	Bodega Head
CA-Son-342	1949, 1988	shell midden	—	road cut, erosion	Duncans Mills
CA-Son-343	—	—	—	ethnographic village of <i>napagipu'lak</i>	
CA-Son-348H	1949, 1956, 1967, 1986, 1988	rock shelter, habitation	y	erosion, pot hunting, ethnographic village of <i>Kab'mali lippula'mma</i> , on NRHP	Duncans Mills
CA-Son-349	1949	shell concentration	—	erosion, road cut	Duncans Mills

Archaeological and Historical Sites within the State Beach					
Site No.	Date Recorded	Site Type	Tested	Comments	Quadrangle
CA-Son-350	1949, 1967, 1986, 1988	habitation, shell midden	—	erosion, road cut	Duncans Mills
CA-Son-351H	1949	historic-era	—	not relocated	
CA-Son-352	1949, 1967, 1986, 1988	shell midden	—	extreme erosion	Duncans Mills
CA-Son-353	1949, 1967, 1988	shell midden, fcr, lithics	—	eroding, trail cut	Duncans Mills
CA-Son-354	1949, 1967, 1988	shell scatter	—	eroding	Duncans Mills
CA-Son-355	1967, 1988	shell midden	—	road cut	Duncans Mills
CA-Son-356	1949, 1988	shell mound	—	eroding, ethnographic village of <i>ku'tk</i>	Duncans Mills
CA-Son-365H	1950, 1986, 1988	shell midden, historic	—	road cut	Duncans Mills
CA-Son-366	1950, 1988	shell midden	—	not relocated	Duncans Mills
CA-Son-453	1965, 1988	shell midden	—	eroding	Duncans Mills
CA-Son-520	1967, 1988	shell midden	—	—	Duncans Mills
CA-Son-1305	1980, 1988	shell scatter, lithics, fcr	—	jeep trail, parking lot	Bodega Head
CA-Son-1346	1981, 1988	shell midden	—	burned houses, road cut	Duncans Mills
CA-Son-1512H	1985	logging camp, lithic scatter	—	—	Duncans Mills
CA-Son-1513	1985, 1986	lithic scatter	—	road cut	Duncans Mills
CA-Son-1514	1985	petroglyph	—	inside corral	Duncans Mills
CA-Son-1515H	1985	1896 schoolhouse debris	—	Ocean District School	Duncans Mills

Archaeological and Historical Sites within the State Beach					
Site No.	Date Recorded	Site Type	Tested	Comments	Quadrangle
CA-Son-1566	1986, 1988	shell midden, lithics, fcr	—	pot hunting, trail	Duncans Mills
CA-Son-1708H	1988	wood breakwater	—	—	Arched Rock
CA-Son-1709H	1988	pit	—	—	Duncans Mills
CA-Son-1710	1988	shell scatter	—	—	Duncans Mills
CA-Son-1712	1988	lithic scatter, midden	—	—	Duncans Mills
CA-Son-1713	1988	lithic/shell scatter	—	—	Duncans Mills
CA-Son-1714	1988	shell midden	—	grazing	Duncans Mills
CA-Son-1715	1988	shell midden	—	grazing	Duncans Mills
CA-Son-1716	1988	lithic scatter	—	—	Duncans Mills
CA-Son-1717	1988	lithic scatter	—	grazing	Duncans Mills
CA-Son-1718	1988	shell scatter, lithics	—	large animal burrows	Duncans Mills
CA-Son-1719	1988	lithic scatter	—	erosion	Duncans Mills
CA-Son-1720	1988	lithic scatter	—	parking area may have destroyed part of site	Duncans Mills
CA-Son-1721	1988	shell scatter	—	trail through site	Duncans Mills
CA-Son-1727	1988	shell midden	—	ethnographic village of <i>a'ca'tcattiu tala Lu'pu</i>	Duncans Mills
CA-Son-1728	1988	shell midden	—	destroyed by construction, erosion	Duncans Mills
CA-Son-1729	1988	shell concentration	—	site may be covered by colluvium	Duncans Mills
CA-Son-1730	1988	shell scatter	—	partially graded	Duncans Mills
CA-Son-1731	1988	shell concentration	—	—	Duncans Mills

Archaeological and Historical Sites within the State Beach					
Site No.	Date Recorded	Site Type	Tested	Comments	Quadrangle
CA-Son-1732	1988	shell scatter	—	erosion, recent trash deposit	Bodega Head
CA-Son-1733	1988	shell and lithic scatter	—	—	Bodega Head
CA-Son-1734	1988	shell concentration	—	—	Bodega Head
CA-Son-1735	1988	shell scatter	—	—	Bodega Head
CA-Son-1736	1988	shell scatter	—	—	Bodega Head
CA-Son-1737H	1988	Wright Ranch	—	—	Duncans Mills
CA-Son-1874H	1990	Collapsed historic residence and prehistoric midden	—	Sites are adjacent rather than superimposed	Duncans Mills
CA-Son-1875	1990	Lithic scatter	—	—	Duncans Mills
CA-Son-2125H	1993	Carlton's Hotel	—	Foundation footing and historic debris scatter; heavily looted	Duncans Mills
P-49-3046	1995	Sparse lithic scatter	—	—	Duncans Mills
n/a	1998	Wright Ranch	—	existing ranch complex	Duncans Mills
n/a	1980	Willow Creek Ranch	—	existing ranch complex	Duncans Mills
n/a	1980	Carrington Ranch	—	existing ranch complex, NRHP-eligible rural historic landscape	Duncans Mills
n/a	1994	Baxman/ Knowles Ranch	—	existing ranch complex	Duncans Mills
n/a	—	historic-era	—	farm/ranch complex: Penny Island	Duncans Mills
n/a	1982	historic-era	—	cable ferry tender's house	Duncans Mills

Source: DPR site record forms 2003

Appendix E

Sonoma Coast State Beach Survey Summary

**SONOMA COAST STATE BEACH
SURVEY SUMMARY
APRIL 18, 2003**

Number of responses: 37 (17 electronic, 20 hardcopy)

Zip codes of responders: 93705, 94111, 94117, 94121, 94127, 94534, 94923 (2), 94954, 95402, 95403 (3), 95430 (2), 95441 (4), 95465, 95472 (5), 95492, 95603, 95608, 95616, 95628, 95666, 95673, 95678, 95765

Organization affiliations:

- ▶ Vertex Climbing Center
- ▶ Environmental Devices
- ▶ EDAW
- ▶ Holy Virgin Community of San Francisco, Inc.
- ▶ Sonoma Wings Hang Gliding Club (3)
- ▶ Petaluma firefighter
- ▶ California State Parks Advisory Committee
- ▶ Learning Waters (501c3)
- ▶ Redwood Empire Hang Gliding Association
- ▶ Hood Mountain Adventures/Rim Club
- ▶ Coastwalk (2)
- ▶ Garden Creek Ranch (2)
- ▶ Gateway Christian Life Church
- ▶ Planner for Sonoma County PRMD
- ▶ Retired veterinarian
- ▶ Stewards of Slavianka (2)

Frequency of visits to park: Once to several times a year: 94.2%, Every few years: 2.86%, Never 2.86%.

Distance/time to reach the beach: 120 mi (2), 100 yds, from Santa Rosa area (2), 1 mi, 25 mi, 75 mi, 275 mi, 130–140 mi (2), 1.5–2 hrs (2), 40 mi, 35 mi, 15–20 mi (2), 15 mi or less, 15 mi to Bodega Bay (2), 20 mi, 30–40 min (2), 30 min, 3.5–4 hrs (2), 4 mi, 2–2.5 hrs (2), about 30 mi, less than an hour away.

Activities participated in during visits:

Beachcombing 85.29%

Picnicking 64.71%

Camping 47.06%

Fishing 14.71%

Biking on trails 14.71%

Wildlife viewing 82.35%

Whale watching 61.76%

Other 70.59% [hang gliding (6), hiking/walking on trails/beach (4), rock climbing (2), just relaxing, canoeing on Russian River, riding cruise boat to view sea lions, diving, horseback riding]

OVERALL PARK MANAGEMENT

- ▶ Keep it the same (remote, untouched, natural) (5)
- ▶ Keep beaches clean and foster healthy environment for future generations
- ▶ Maintain/expand access
- ▶ Limit access to beaches
- ▶ Continuity of management philosophy needs to be addressed in GP
- ▶ Take guns away from park rangers. Return them to the status of nature mentors and away from police activities.

PROTECTION OF NATURAL RESOURCES

- ▶ Appreciation/protection of natural resources (4)
- ▶ Value of open space/wilderness (2)
- ▶ Willow Creek should get top priority for preservation of flat-lands (reparation from logging) and headlands of the creek and possible channelizing for recreation of wetlands and rehabilitation of the riparian corridor.
- ▶ Watershed restoration, encourage watershed perspective (2)
- ▶ No seawalls and riprap to protect the highway or other infrastructure from coastal erosion (2)
- ▶ How to accommodate increased public usage and protect resources at the same time
- ▶ Address erosion on coastal gullies (2)
- ▶ Value of tidepools (2)
- ▶ **Wildlife**
 - Abundance of wildlife as a value (6)
 - Preserve native wildlife (3) (increased seal protection)
 - Sustainable fishing practices (no drag nets)
 - Prosecute those who injure/kill birds and mammals.
- ▶ **Plants**
 - Control non-native invasive plants (3)
 - Discontinue all spraying of herbicides

▶ **Water Quality**

- Ensure that sewer and septic systems do not enter waterways
- Need to address water quality in Russian River
- No outfall of wastewater into ocean (5)

▶ **Scenic and Aesthetic Values**

- Keep pristine untouched beauty/remoteness (5)
- Appreciation of cleanliness (6)
- Hide auto glitter
- Appreciation of clean air (3)
- Concern for trash in general or on beaches (8)
- Concern for noise, appreciation of serenity/quiet (5) (designate quiet areas)
- Appreciation of the lack of commercialism (3)
- Appreciation of scenery/view/natural beauty (18)
- Appreciation of climate (3)
- Dislike of wind and fog
- Less development (e.g., along Russian River, marina, ocean) (3)
- Too many tourists/crowding (2)
- Fewer unsightly parking lots along bluffs (4)
- Need more enforcement of trash/noise rules

COMMUNITY INVOLVEMENT

- ▶ No park fees (2)
- ▶ Appreciation of friendly people (park hosts, rangers, etc.) (4)
- ▶ More clean-up days at the coast
- ▶ Need better public awareness
- ▶ I am concerned that consolidation of the park headquarters with other parks will lead to park supervision being located out of the area and not familiar with local issues and problems.
- ▶ Control inappropriate behavior of children
- ▶ Encourage children/families to experience and respect nature (2)
- ▶ Clubs, such as Sonoma Wings that use certain areas like Goat Rock could adopt an area of coastline that they would help keep clean.
- ▶ Dislike of changing personnel in ranger/administrative hierarchy; can have negative impact on public e.g., Ron Hanshew as superintendent created friction with public and users
- ▶ More public appreciation events, rituals, festivals, which emphasize human life in harmony & respect for the physical forces of land & water, as well as for all the inhabitants.

PROTECTION OF CULTURAL RESOURCES

- ▶ Historical structures/resources protection (2)
- ▶ Preservation of all archaeological sites (including potential arch. sites)

RECREATION USES

- ▶ Value of hiking/walking (2)
- ▶ Fire as a recreation use
- ▶ Surfing
- ▶ **Camping**
 - Discontinue reservations through contractors with poor services. State Parks should administer this program and could do so easily and more economically via automatic telephone reservation system.
 - Need a pricing system for camping that allows a higher rate for weekend use and a lower rate for weekdays
- ▶ Excellent conditions for hang gliding (3)
- ▶ Value of Fort Ross State Park area and Russian River mouth area
- ▶ Appreciation of free access (4)
- ▶ Abundance of landmarks
- ▶ Address highway danger for bicycle riders
- ▶ Value of rock-climbing (e.g., Sunset Boulders) (2)
- ▶ More flying (launch and land) sites available for local hang gliders/paragliders close to beach (e.g., Salmon Creek, Wright's Beach, Fort Ross) (5)
- ▶ Value of beach access/parking close to beach (10)
- ▶ Spiritual value (2)
- ▶ **Vehicular Use**
 - Limit size of RVs @ Wright's Beach and at bodega dunes, assign RVs to smaller loop
 - Dislike of RVs
 - When checking in, make use of CB radio/cell phone to confirm site selected with entrance station personnel. This would negate the need to pull RVs around camp and thus reduce noise and pollution cause by additional driving.
- ▶ **Use/Overuse** (2)
 - Concern for overuse
 - Protection from excessive human use
 - Concern for impacts from increasing visitors

INTERPRETATION AND EDUCATION

- ▶ Education/information about how people need to behave around wildlife and noise level awareness

- ▶ Ongoing education about coastal safety practices with regards to sleeper waves and particular locations that are prone to drownings.
- ▶ Need more interpretive signage and trail markers (2)
- ▶ As a non-profit dedicated to environmental education, I would like to be considered for using acquired properties for educational programs, i.e., the Coleman Ranch property.
- ▶ Create a signed trail system protecting bluffs.
- ▶ Education about native species, engendering respect & protection for all

FACILITIES

- ▶ Improve and expand recreation facilities
- ▶ Need more trash cans/waste disposal areas for visitors (4)
- ▶ Need recycling receptacles to encourage more recycling (2)
- ▶ Need hot water for restrooms and showers
- ▶ Too many visitors for the existing facilities (e.g., viewing points, campgrounds) (2)
- ▶ Good facilities
- ▶ Need hostels (2)
- ▶ Need a dump station at Wright's Beach
- ▶ Need more restrooms (e.g., at Kortum Trail, by rocks) (4)
- ▶ Restrooms are always tidy
- ▶ Discontinue shooting range in Willow Creek (esp. lead) (2)
- ▶ More acquisitions (3) e.g., Scotty Creek Beach, Willow Creek, Red Hill
- ▶ **Campsites**
 - Less campgrounds
 - More campgrounds (e.g., group camp at Pomo Canyon, east side of Hwy 1, group camp south of Shell Beach) (8)
 - need more campsites with beach access, year round camps (2)
 - smaller campgrounds
 - More non-RV campsites
 - Not enough spaces to accommodate trailers, 5th wheels, and RVs
 - Lack of enforcement of generator use rules
 - More asphalt/concrete in campsites
 - Need shower facilities (e.g., Wright's Beach campground) (2)
 - Need water at camp sites
 - Need electricity, sewer, and water hook-ups
 - State parks RV pads need to be leveled in many areas of Dunes state park and Wright's Beach
- ▶ **Parking and Access**
 - Distinguish between pulloffs (no parking) and parking to prevent accidents

- Allow more overnight parking in the day use area and move day use parking to opposite side of day use lot
 - Build tram system for beach access and remove parking lots
 - Need more parking (2)
 - Less parking lots (3)
 - Need handicapped accessible facilities (2)
 - Need more bike/auto turnouts
 - To alleviate parking problems, have a central parking structure that can accommodate several hundred cars and then provide shuttle service in daylight hours with a connection to Sonoma County Transit and Mendocino Transit buses. Over time reduce the number of parking places at the beaches so that folks are encouraged to use the system and reduce vehicle emissions at the beaches
- ▶ **Signage**
 - Need trail signs (e.g., how far to beach from parking, in dunes, etc.) (3)
 - More signs to indicate what is and is not permitted in park
 - Rock climber access trails and signs are needed (2)
 - ▶ **Development and Structures**
 - Protection from development (4)
 - Concern for inappropriate structures
 - Need design control/guidelines on residences
 - Better Visitor Center (would like to help with this)
 - Provide kiosk at “Hole in the Head”

ROADS AND TRAILS

- ▶ Value of hiking on the near-beach trails (2)
- ▶ No bikes on trails
- ▶ Keep people on main trails to avoid disturbance/erosion
- ▶ Maintain roads and trails for access (2)
- ▶ Roads need to be repaired (especially at Wright’s Beach) (2)
- ▶ Poor trails/signage
- ▶ Dislike of trails that don’t connect
- ▶ Great trails
- ▶ Complete/extend the California Coastal Trail (2)
- ▶ Need more trails (at bluff head; for hikers, rock climbers, dog walking at Bodega Dunes) (3)
- ▶ No bikes on hiking trails

OTHER COMMENTS

- ▶ Keep up the great work – we love this beach! (3)
- ▶ I enjoy my time spent at the coast with my family and hope to pass this beautiful place on to many more generations to come. Thank you.
- ▶ We are happy to volunteer to build trails to climbing sites
- ▶ We love Wright’s Beach
- ▶ We look forward to our visits to Bodega Dunes Park
- ▶ I find it disconcerting that under activities you do not list hiking, but you list “biking on trails”. Hiking is very popular on the Kortum Trail, the Pomo Trail, Salmon Creek to Bodega Head and on the Head, as well as on the longer sandy beaches. These trails are not suited for bikes
- ▶ I am very sorry the State Park system is so short of funds for ecosystem enhancement. and short of funds period. (2)
- ▶ I’m currently working on a long-term project celebrating the coastal waters & watersheds of our Pacific Northwest region. I envision this work as vital to public understanding of coastal issues, & invite support to achieve it. Please see my web site: www.sonic.net/~sandoak. Thank you.
- ▶ Please keep the area open to hang gliding. It has one of the smallest impacts of any sport, and the pilots are in close touch with nature. (2)
- ▶ I have enjoyed the area for over 22 years, camping with children and now grandchildren- thank you for having such a wonderful place for us to enjoy.
- ▶ I hope we don’t “love” the coast to death or destruction. No need to advertise it more.
- ▶ Hang gliders have soared at Goat Rock for over 20 years, at Vista Trail for about 10 years (all by permit); very successful program, very low impact, excellent response from public, and we maintain areas we use free from litter. Sonoma Wings manages permits for hang gliding and regulates use by establishing rules for use and overseeing program. We want to continue in this relationship.
- ▶ Sonoma Coast still looks a lot like it did 30 years ago, although the pace of development has seemed to accelerate lately. I value Bodega Bay as a fishing community where there are experiences for rock fishing, surf fishing, and numerous boating opportunities. I want Bodega Bay to smell like a harbor, not Carmel. My family uses the coast on average at least once a month or about 15 times/yr for general airing out and preferred location for celebrations. My grandson is the 7th generation born in California and I hope he will always have free access to California coast. However, I do support fees and use controls when traffic to a particular location begins to overwhelm the natural ecosystem’s ability to heal. Ultimately there should always be opportunities for our young people and senior citizens to enjoy the coast without charge. No one should be denied coast access due to lack of finances as our state tidelands are a public trust that belong to us all. I really miss doing bonfires at the coast.

Appendix F

Notice of Preparation and Public Comments



State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

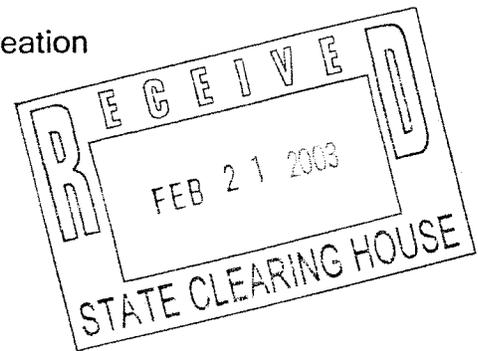
Notice of Preparation

To: State Clearinghouse, Responsible and Trustee Agencies, Interested Individuals

Subject: Notice of Preparation of a programmatic Environmental Impact Report for the Sonoma Coast State Beach General Plan

Lead Agency: California Department of Parks and Recreation
Northern Service Center
One Capitol Mall, Suite 500
Sacramento, CA 95814
Contact: Wayne Woodroof

Consultant: EDAW, Inc.
2022 J Street
Sacramento, CA 95814
Contact: Curtis Alling, Petra Unger



The California Department of Parks and Recreation (DPR), as the Lead Agency, will prepare a programmatic Environmental Impact Report (EIR) for the Sonoma Coast State Beach General Plan. We would like to know the views of interested individuals, organizations and agencies as to the scope and content of the information to be included and analyzed in the EIR. Agencies should comment on the elements of the environmental information that are relevant to their statutory responsibilities in connection with the proposed project.

The project description, location, and potential environmental effects of the proposed project (to the extent known) are included in this Notice of Preparation (NOP).

Due to the time limits mandated by State law, your response should be sent at the earliest possible date, **but not later than 30 days** after issuance of this notice, which establishes the final deadline as **March 24, 2003**.

Please send your written response to Wayne Woodroof, Statewide General Plan Coordinator, California Department of Park and Recreation, at the address shown above. Responses should include the name of a contact person at your agency.

A planning workshop and EIR scoping meeting has been scheduled to give the public an opportunity to comment on the scope, focus, and content of the Sonoma Coast State Beach

General Plan and EIR. The meeting will be held from 6:30 pm to 8:30 pm on March 13, 2003 at the Bodega Bay Marine Lab Facility at 2099 Westside Road, Room in Bodega Bay, CA.

PROJECT TITLE

Sonoma Coast State Beach General Plan

PROJECT LOCATION

Sonoma Coast State Beach extends approximately 19 miles from Bodega Head in the vicinity of Bodega Bay to Vista Trail, located 4 miles north of Jenner on the coast in Sonoma County (Exhibit I).

PROJECT DESCRIPTION

DPR's General Plan Unit, in conjunction with its Russian River District office, is in the process of developing a General Plan for Sonoma Coast State Beach ("Park") in accordance with Public Resources Code §5002.2 referencing General Plan guidelines and §21000 et seq. concerning the California Environmental Quality Act (CEQA). The purpose of the General Plan is to guide future development activities and management objectives at the Park. A carrying capacity analysis will be integrated into the general planning process and EIR to evaluate the level of visitor use in relationship to its potential effects on natural, cultural, aesthetic, and recreational resources, overall visitor experience.

The Sonoma Coast State Beach General Plan study area covers approximately 5,333 acres and consists of a series of beaches separated by rocky bluffs and headlands. Beachcombers, fishermen, sunbathers and picnickers can access the beach from more than a dozen points along coast Highway 1. The Willow Creek Unit contains extensive stands of willow riparian scrub, wetlands, and grassland. The upper slopes of the Willow Creek Watershed are heavily wooded. The park provides various recreational opportunity including hiking, horseback riding, surfing, camping, scenic driving, rock climbing, whale watching, wildlife viewing, picnicking, and beachcombing.

Preparation of the General Plan is in its early stages, so ultimate land use and resource management provisions have not yet been determined. DPR is currently in the process of evaluating existing resources and management opportunities and constraints at the Park that will aid in the development of the General Plan, with plan provisions to minimize any potential environmental impact. Known resources within the Park include:

- Coastal environments (underwater areas, intertidal zones, fragile marine terraces with sandy beaches separated by rocky bluffs, coastal bluff wetlands, coastal prairie, sand dunes);
- Marshlands and native riparian habitat;
- Special-status species (e.g., western snowy plover, Tidestrom's lupine, anadromous fish species);
- Russian River and tributaries including Willow Creek;

- Other drainages in the park including Salmon Creek, Jenner Gulch, Furlong Gulch, Scotty Creek, and Marshall Gulch;
- A significant harbour seal haul out at the mouth of the Russian River;
- Culturally significant areas (e.g., Miwok rock shelter at Duncans Landing, Sunshine Rock, Campbell's Cove, Victorian house and historic dairy at Wright's Ranch);
- New and potential property acquisitions.

Issues that will be considered as part of the General Plan process include, but are not limited to, the following:

- Protection and long-term management of sensitive natural, cultural, and aesthetic resources;
- Potential impact to threatened and endangered species and sensitive natural habitats;
- Invasive species management and restoration of natural ecosystems;
- Compatible and incompatible uses of significant cultural resource areas;
- Preservation and restoration recommendations for sensitive cultural resources;
- Expansion of recreational facilities (i.e. campgrounds and trails);
- Erosion control and slope stability issues;
- Water supply and water quality issues (i.e. mechanical opening of the Russian River and available drinking water supply);
- Increased recreational access, including improved water and undeveloped area access and ADA access to the beach,
- Incorporation of new and planned property acquisitions (Redhill and Willow Creek properties);
- Facilities development and siting to avoid flood events (i.e. relocation of Jenner visitor center);
- Development of interpretive facilities at the park;
- Relocation of maintenance facilities at Salmon Creek and historic Willow Creek Ranchhouse;
- Relocation of shooting range at Willow Creek;
- Potential reclassification of inland units as separate park;
- Increased park staffing to ensure public safety;
- Current and future concessions;
- Carrying capacity of the park.

POSSIBLE ENVIRONMENTAL EFFECTS

Although ultimate land use and resources management provisions of the General Plan have not yet been determined, generally expected types of environmental impacts that could occur as a result of the General Plan can be identified. The General Plan will seek to minimize any potential effects through the plan alternative development process. Based on the known resource characteristics of the Park and generally anticipated Park needs and uses, potential environmental effects that will be addressed in the General Plan and EIR, include:

- Potential conflicts between sensitive biological and cultural resources and facility development;
- Protection and long-term research and management of sensitive natural communities;
- Potential impacts to threatened and endangered species or their habitats;
- Potential impacts to sensitive marine resources, including tidepools and underwater reserve;
- Confirmed presence of sudden oak death syndrome in the park;
- Impacts resulting from increased recreational access, including improved water and undeveloped area access and ADA access to the beach;
- Impacts resulting from construction of additional housing sites for permanent and seasonal staff;
- Erosion control issues;
- Mechanical opening of the mouth of the Russian River;
- Shortage of potable water in the park;
- Percolation and other water quality related problems; and
- Traffic safety for along Highway I.

Because recreational use levels at the Park are not expected to change substantially as a result of the General Plan, no significant transportation improvements and/or impacts are anticipated. If the potential to take threatened and endangered species is identified, the EIR will describe future State and Federal consultation and permit requirements that will be necessary for facility development and the types of typically mitigation expected.

INTENDED USES OF THE EIR

DPR and the Parks and Recreation Commission will use the EIR component of the General Plan to consider the environmental effects, mitigation measures, and alternatives, when reviewing the proposed General Plan for approval. The EIR will serve as the State's CEQA compliance document for adoption of the General Plan. It will also serve as the programmatic environmental document that may be referenced in implementing future actions included in the General Plan. Subsequent project-level activities identified in the General Plan will be examined in light of the program EIR to determine whether and additional environmental document must

be prepared prior to project approval and implementation (State CEQA Guidelines 15168 (c)). Responsible agencies may also use the EIR for subsequent discretionary action as needed.

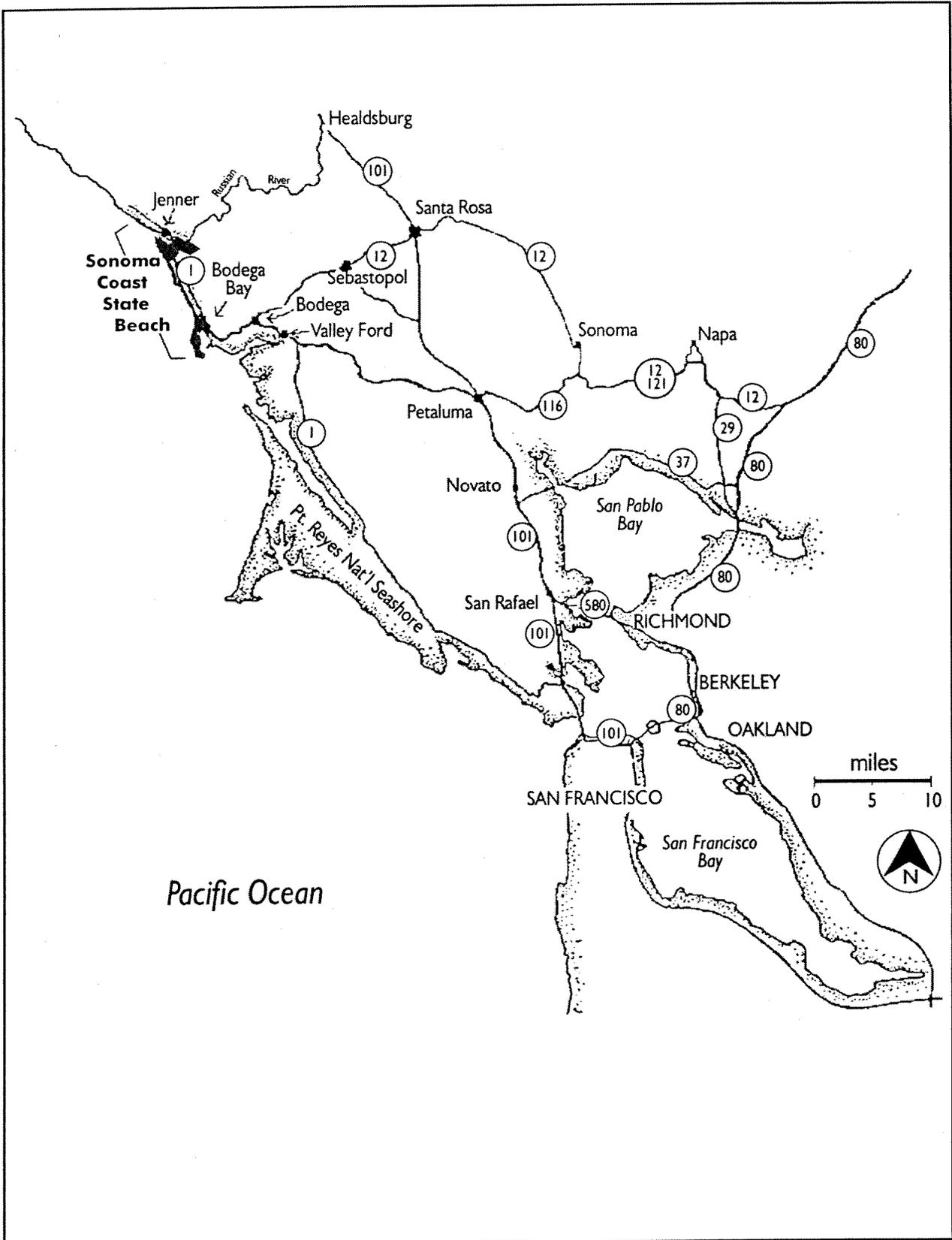
By: Wayne O. Woodroof

Signature: Wayne O. Woodroof

Title: Manager, Statewide General Plan Program

Date: February 21, 2003

Attachment: Exhibit I: Regional Location of Sonoma Coast State Beach



Source: EDAW 2003

Regional Location of Sonoma Coast State Beach

MAR 26 2003



Memorandum

To: Mr. Wayne Woodroof, Manager
California Department of Parks
and Recreation
One Capital Mall, Suite 500
Sacramento, CA 95814
Via fax (916) 445-9100

Date: March 25, 2003

for *Scott Wilson*
From: Robert W. Floerke, Regional Manager
Department of Fish and Game - Central Coast Region, Post Office Box 47, Yountville, California 94599

Subject: Sonoma Coast State Beach General Plan, Notice of Preparation
Sonoma County, SCH 2003022116

Department of Fish and Game (DFG) personnel have reviewed the California Department of Parks and Recreation's (DPR) Notice of Preparation (NOP) for Sonoma Coast State Beach Park (Park) General Plan.

DPR is proposing to prepare a programmatic Environmental Impact Report (EIR) for the Sonoma Coast State Beach General Plan (General Plan). The purpose of the General Plan is to guide future development activities and management objectives at the Park. The EIR will incorporate a carrying capacity analysis integrated into the general planning process to evaluate the level of visitor use in relationship to its potential effect on cultural, recreational, aesthetic, and natural resources.

The NOP states that the General Plan will serve as the programmatic environmental document which may be referenced for implementing future actions included in the General Plan. The NOP states that subsequent project level activities identified in the General Plan would be evaluated in the program EIR to determine whether additional environmental documents will be prepared.

The Park area is located predominately along the immediate coast south of the mouth of the Russian River and extending southward and terminating at the coastal formation referred to as "Bodega Head" occurring just north of the town of Bodega Bay in Sonoma County. The U. C. Davis Bodega Marine Laboratory and its coastal reserve are bordered both on the north and south by the Park. The Park area encompasses about 5,333 acres and

consists of a series of beaches separated by rocky bluffs and headlands where the public can access the beach from more than a dozen points along coast Highway 1.

The NOP further delineates the Park's coastal environments into intertidal zones, marine terraces, sandy beaches, rocky bluffs, bluff wetlands, coastal prairie, marshlands, and sand dunes. A series of oceanic and Russian River tributaries are identified as Willow Creek, Salmon Creek, Jenner Gulch, Furlong Gulch, and Scotty Creek. The NOP acknowledges rare and sensitive plant and animal species in the Park. There is also a significant harbor seal haul-out area at the mouth of the Russian River.

DFG recommends that the Sonoma County Planning Department be made aware of DPR's General Plan and EIR progression. The County is currently addressing sensitive biological resources and riparian habitats through the County's current General Plan 2020 revision process. Due to its proximity, DFG also recommends that DPR continue to keep U. C. Davis Bodega Marine Laboratory aware of the General Plan and EIR process. DFG is aware that the March 13, 2003 public planning workshop was held at the marine laboratory.

The U. S. Fish and Wildlife Service should be notified of DPR's General Plan process. This is in regard to several Federally listed species documented in or near the State Park boundaries. These species include the Federally threatened western snowy plover (*Charadrius alexandrinus nivosus*), the Federally endangered Myrtle's silverspot butterfly (*Speyeria zerene myrtle*), the Federally endangered tidewater goby (*Eucyclogobius newberryi*), and the Federal and State endangered Tidestrom's lupine (*Lupinus tidestromii*). We also recommend that DPR notify the National Marine Fisheries Service because of the Park's crucial vicinity for supporting local rare and sensitive anadromous fish.

The General Plan may present potential conflicts between facility development and sensitive wildlife species and natural communities. We are aware of DPR's brochure, "Natural Resource Management in California State Parks" (2002), which states "the goal of State Parks resource management program is to protect, restore, and maintain the natural resources in the State Park System." Through the California Environmental Quality Act

A range of alternatives should be analyzed to ensure that alternatives to the proposed DPR projects are fully considered and evaluated. A range of alternatives which avoid or otherwise minimize impacts to sensitive resources should be included. Specific alternative locations should be evaluated in areas with lower resource sensitivity where appropriate.

DFG opposes the elimination of watercourses and/or their channelization or conversion to subsurface drains. All wetlands and watercourses, whether intermittent or perennial, should be retained and provided with substantial setbacks which preserve the riparian and aquatic values and maintain their value to on-site and off-site wildlife populations. For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a stream, or use material from a streambed, DFG may require a Streambed Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code. Issuance of an SAA is subject to CEQA and DFG, as a responsible agency under CEQA, will consider the local jurisdiction's (lead agency) CEQA document for the project. The CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance or mitigation, as well as any necessary monitoring and reporting commitments for completion of the SAA.

We appreciate the opportunity to comment on the NOP and look forward to being involved in the General Plan process. If you have comments regarding our memorandum, please contact Mr. Liam Davis, Environmental Scientist, at (707) 944-5529; or Mr. Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

cc: See next page

Mr. Wayne Woodruff

March 25, 2003

cc: Pete Parkinson, Director
County of Sonoma
Permit and Resource Management Department
2550 Ventura Avenue
Santa Rosa, CA 95403

U. S Fish and Wildlife Service
Coast/Bay/Delta Branch
Endangered Species Division
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W-2605
Sacramento, CA 95825-1846

National Marine Fisheries Services
777 Sonoma Avenue
Santa Rosa, CA 95404

Dr. Peter Connors, Reserve Manager
U. C. Davis Bodega Marine Laboratory
2099 Westside Road
Bodega Bay, CA 94923

EDAW, Inc.
2022 J Street
Sacramento, CA 95814

Philip Crimmins, Project Analyst
State Clearinghouse
Post Office Box 3044
Sacramento, CA 95812-3044



SONOMA COUNTY
AGRICULTURAL
PRESERVATION
& OPEN SPACE
D I S T R I C T

747 Mendocino Avenue
Suite 100
Santa Rosa, CA
95401-4850
(707) 565-7360
Fax: (707) 565-7359

March 18, 2003

Mr. Wayne Woodroof
California Department of Parks and Recreation
Northern Service Center
One Capitol Mall, Suite 500
Sacramento, CA 95814

Dear Mr. Woodroof:

Thank you for providing the opportunity to comment on the scope of issues to be covered in the Sonoma Coast State Beach General Plan Environmental Impact Report.

Sonoma County's Agricultural Preservation and Open Space District has partnered with the California's State Department of Parks and Recreation on several conservation projects. The District's primary role has been acquisition of important lands, securing trail offers, and organizing stewardship activities in conjunction with its non-profit partner LandPaths.

In the context of the Sonoma Coast General Plan, District staff would like to bring to your attention ongoing negotiations on properties which would be offered for addition to the existing park unit. District staff has been in close communication with State Parks staff and makes every effort to provide regular updates on the progress of negotiations.

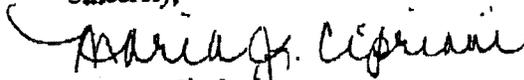
District staff is currently in active negotiations on the following properties in this area. A regional map has been enclosed for your reference.

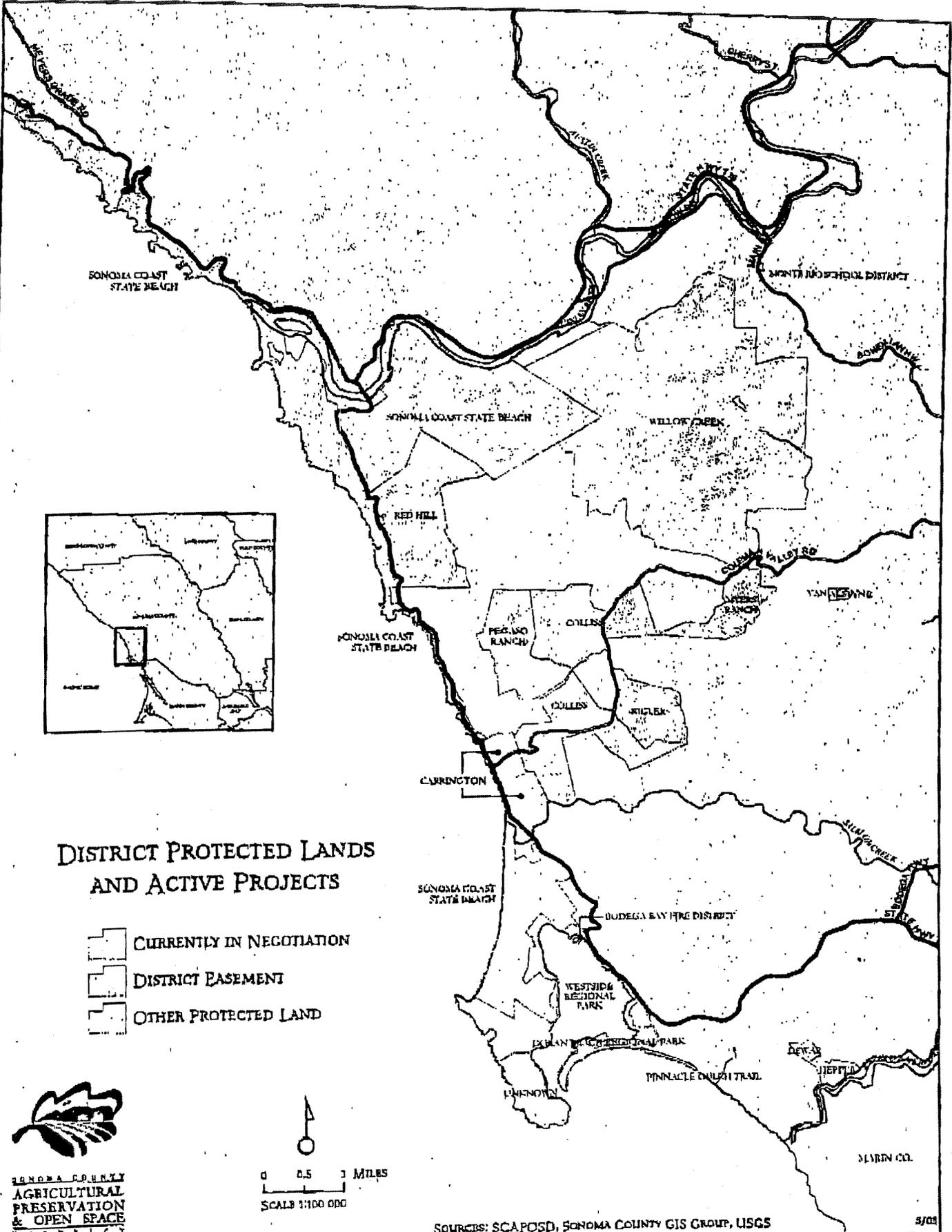
- 1) Carrington— 332 acres. This project is under contract for fee purchase for public outdoor recreation and is expected to close by June 30, 2003.
- 2) Willow Creek— 3300 acres. This project is in negotiations.
- 3) Pegaso Ranch— 600 acres. This is a new project and the conservation project structure is in process.

Also shown on the enclosed map are lands for which the District has acquired either a fee or easement interest.

Please do not hesitate to contact me should you have any questions regarding the information I have provided herein.

Sincerely,


Maria J. Cipriani
Assistant General Manager



SONOMA COAST STATE BEACH

SONOMA COAST STATE BEACH

RED HILL

SONOMA COAST STATE BEACH

CARRINGTON

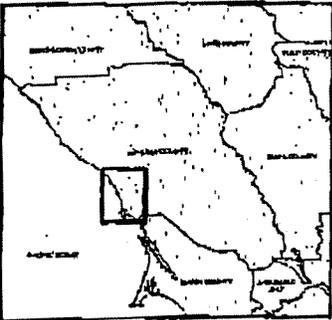
SONOMA COAST STATE BEACH

WESTSIDE REGIONAL PARK

PLANETREE REGIONAL PARK

PINNACLE DUNES TRAIL

SARIN CO.



SONOMA COUNTY
AGRICULTURAL
PRESERVATION
& OPEN SPACE
DISTRICT

SOURCES: SCAPOSD, SONOMA COUNTY GIS GROUP, USGS

3/03

DEPARTMENT OF TRANSPORTATION

P. O. BOX 23660
OAKLAND, CA 94623-0660
(510) 286-4444
(510) 286-4454 TDD



*Flex your power!
Be energy efficient!*

March 24, 2003

SON-1-20.1
SON001221
SCH 2003022116

Mr. Wayne Woodroof
California Department of Parks and Recreation
Northern Service Center
One Capitol Mall, Suite 500
Sacramento, CA 95814

Dear Mr. Woodroof:

Sonoma Coast State Beach General Plan – Notice of Preparation (NOP)

Thank you for including the California Department of Transportation in the environmental review process for the general plan (proposed project). We have reviewed the NOP and have the following comments to offer:

Our primary concern with the proposed project is the potentially significant impact it may have to traffic conditions on State Route 1 (SR 1) and State Route 116 (SR 116). In order to adequately assess the proposed project's impact on these highways we recommend a traffic impact analysis be prepared, which should include, but not be limited to the following information:

1. Information on the proposed project's traffic impacts in terms of trip generation, distribution, and assignment. The assumptions and methodologies used in compiling this information should be addressed.
2. Current Average Daily Traffic (ADT) and AM and PM peak hour volumes on all significantly affected streets, highway segments and intersections.
3. Schematic illustration of the traffic conditions for: 1) existing, 2) existing plus project, and 3) cumulative for the intersections in the project area.
4. Calculation of cumulative traffic volumes should consider all traffic-generating developments, both existing and future, that would affect state highway facilities.

5. Mitigation measures should consider highway and non-highway improvements and services. Special attention should be given to the development of alternate solutions to circulation problems that do not rely on increased highway construction.
6. All mitigation measures proposed should be fully discussed, including financing, scheduling, implementation responsibilities, and lead agency monitoring.

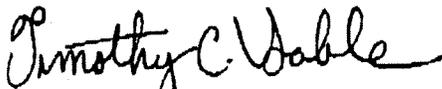
We recommend utilizing Caltrans' "Guide for the Preparation of Traffic Impact Studies" which can be accessed from the following webpage:
<http://www.dot.ca.gov/hq/traffops/devlopserv/operationalsystems/reports/tisguide.pdf>

We look forward to reviewing the Draft Environmental Impact Report for this project. We do expect to receive a copy from the State Clearinghouse, but in order to expedite our review you may send a copy in advance to:

Maija Cottle
Office of Transit and Community Planning
Department of Transportation, District 4
P.O. Box 23660
Oakland, CA 94623-0660

Should you require further information or have any questions regarding this letter, please call Maija Cottle of my staff at (510) 286-5737.

Sincerely,


TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Philip Crimmins (State Clearinghouse)



United States Department of the Interior

NATIONAL PARK SERVICE
Point Reyes National Seashore
Point Reyes Station, California 94956

IN REPLY REFER TO
L76

March 24, 2003

Wayne Woodroof
Statewide General Plan Coordinator
California Department of Park and Recreation
Northern Service Center
One Capitol Mall, Suite 500
Sacramento, CA 95814

Dear Mr. Woodroof:

Thank you for the opportunity to contribute to the scope and content to be analyzed in the Environmental Impact Report for the Sonoma Coast State Beach General Plan. The area is rich with a variety of habitats created in the interface between ocean and land and the challenges in creating a management plan are equally diverse.

As stated in the Notice of Preparation, many special status species occur in the study area. The coastal ecosystems have the potential to provide habitat for federally endangered species such as Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*), as well as Tidestrom's lupine (*Lupinus tidestromii*). Dillon Beach is potential breeding habitat for the federally threatened Western snowy plover (*Charadrius alexandrinus nivosus*) and could serve as local alternate habitat to birds that breed on Point Reyes beaches.

I encourage you to also consider what could be one of the newest Northern elephant seal (*Mirounga angustirostris*) breeding colonies at Jenner Beach. We have received reports of elephant seals using the beach during the breeding and molting seasons and from our experience you may expect a steady increase of seals each year.

We have developed adaptive management strategies for each of the species discussed above and will look forward to working with you to preserve and protect these species and habitats for future generations. Please contact Dawn Adams, Inventory and Monitoring Coordinator, at 415-464-5202 or Dawn_Adams@nps.gov for further information or clarification.

Sincerely,

Don L. Neubacher
Superintendent

Appendix G

Willow Creek Access Site Evaluation



EDAW INC

240 EAST MOUNTAIN AVE

FORT COLLINS COLORADO

80524

TEL 970 484 6073

FAX 970 484 8518

www.edaw.com

TO Project Team
FROM Kelley Savage, Phil Hendricks, Jr.
DATE June 9, 2006
CC File
SUBJECT Willow Creek Access Site Evaluation

Potential access points into the Willow Creek property were reviewed in the field on May 10, 2006. Potential sites were evaluated using several criteria for their ability to provide appropriate access. The locations of the sites are illustrated in Map 1.0.

The attached Table 1.0 includes a summary of the evaluations, with the evaluation being “+” positive, “0” neutral, or “-” negative. These assessments are not intended to be a recommendation against or for a specific site, only create the ability to evaluate the sites within the context of the General Plan Update and future Trails Plan. The assessment is intended to be a cursory review only. Table 2.0, includes previous preliminary assessments provided by DPR for reference.

Photos of each site are included in Exhibits 1.0 – 3.0, and are intended to illustrate the overall size, location and character of each site.

Based on field observations, Figures 1.0 – 9.0* illustrate the potential configuration of the developed access points. These illustrations are conceptual in nature and are only based on field observations and measurements. Numbers of parking spaces are estimated and are intended to provide order-of-magnitude quantities. Accurate on-site information regarding drainage, slopes, vegetation, cultural surveys, road and traffic studies will determine exact configurations of each site. No detailed base mapping was available or utilized for this evaluation study. Type and size of access facilities are to be determined by visitor and operational needs and with detailed mapping and site specific resource information that is available.

General Comments and Discussion

- Establish setback distances from use areas to sensitive habitat and resources such as Willow Creek.
- Implement Best Management Practices for stormwater management at all developed sites to minimize erosion impacts to resources.
- Establish policies for use of each site, time of day, locked gates, maintenance procedures, maximum capacities, etc.
- Determine approximate maximum/average size of truck/horse trailer combinations using the Willow Creek area, to assist in development of standard facility sizes.
- Sites that will provide access to accessible trails or facilities should meet current accessibility standards. Consider review of draft Recommendations for Accessibility Guidelines: Outdoor Developed Areas developed by the U.S. Architectural and Transportation Barriers Compliance Board.

* To avoid confusion by the reader, conceptual illustrations (Figures 1.0-9.0) were not included in the General Plan (Appendix G)

- Consider utilizing existing mature vegetation or strategically planting vegetation during construction of the sites to minimize visual impacts to Park visitors and surrounding uses.
- Recommend Cultural studies to determine any potential project impacts.

Lower Willow Creek Road

Site A

General Description

- South side of the Willow Creek Road.
- Willow Creek and significant riparian vegetation adjacent to the southern edge of the site.
- Site slopes toward the Creek at approximately 2-5% grade.
- Open area approximately 500' x 300' from roadway to Creek at its maximum width. Open area has been significantly disturbed by erosion and flood flows originating on the roadway at the eastern edge of the site.

Potential Use

- This site is well suited for a larger, primary access. Equestrian trailer parking could be accommodated in this area, as well as additional vehicle parking. Site is geographically centrally located.
- Other day use, such as picnicking could also be accommodated at this site.
- Potential exists for trail connections into the park from this area through the conservation easement.

Considerations

- Willow Creek Road would serve as the trail for access into upper reaches of the park. Users will have to pass on-foot through the private ranch site on the road, creating potential conflicts. A trail connecting this site past the ranch would help alleviate potential conflicts.
- Development setbacks from the riparian area may be needed to protect the Creek corridor.
- Upstream drainage improvements would be necessary to maintain any facilities on this site without continued significant erosion.
- Use of Best Management Practices (BMP's) for stormwater run-off would be recommended at this site to maintain water quality within the Creek.
- Views into the site from other areas of the Park are minimal.

Lower Willow Creek Road

Site B

General Description

- South side of the Willow Creek Road.
- Site is surrounded by riparian vegetation on three sides.
- Site slopes toward the Creek at approximately 2-5% grade.
- Open area approximately 100' x 200' from roadway to riparian vegetation. Open area has been significantly disturbed by erosion and flood flows originating on the roadway at the eastern edge of the site.

Potential Use

- This site is well suited for a larger, primary access. Equestrian trailer parking could be accommodated in this area, as well as additional vehicle parking. Site is geographically centrally located.
- Other day use, such as picnicking could also be accommodated at this site.
- An adjacent bench on the north side of the road is somewhat elevated and may provide a good opportunity for a picnic site with views of the Willow Creek Valley.

- This site is slightly farther from potential trail connections through the conservation easement, causing users to utilize the road for a longer distance.

Considerations

- Grade drops several feet from the road onto the site, and the roadway also curves sharply in this area. An access road would need to be graded in to allow good visibility.
- Willow Creek Road would serve as the trail for access into upper reaches of the park. Users will have to pass on-foot through the private ranch site on the road, creating potential conflicts. A trail connecting this site past the ranch would help alleviate potential conflicts.
- Development setbacks from the riparian area may be needed to protect the Creek corridor.
- If large amounts of parking or separation of users is desired, equestrian parking could be provided at Site A and vehicle only parking at Site B.
- Views into the site are possible from the ridge to the west.

Lower Willow Creek Road

Site C

General Description

- North side of the Willow Creek Road.
- Open area approximately 75' x 200'.
- Site is within the forest canopy and has mature trees surrounding the open area.
- Site slopes toward the road at approximately 2-5% grade.

Potential Use

- This is the smallest of the Lower Willow Creek sites and is well suited for a smaller, secondary access. Equestrian trailer parking could not be accommodated in this area, due to the small size of the open area and lack of turn-around space.
- A small picnic site could also be accommodated at this location.
- The site is much further into the Park than sites A or B, allowing quicker access into the upper reaches of Willow Creek.

Considerations

- Site C could be used for vehicle only parking, with a small amount of equestrian parking occurring at Site D.
- Hazard trees may be a problem at this site.
- This site potentially contains Spotted Owl habitat. Surveying may be needed prior to any improvements.

Lower Willow Creek Road

Site D

General Description

- North side of the Willow Creek Road.
- Open area approximately 150' x 200'.
- Site is within the forest canopy (redwood) and has mature trees surrounding the open area.
- Site slopes toward the road at approximately 2-5% grade.

Potential Use

- This site is slightly larger than Site C, and may allow some equestrian use. The turn-around area should accommodate smaller truck-trailer combinations as well as a small number of vehicle sites as a secondary access.
- Approximately 6-8 vehicles will fit into this site.

- A small picnic site could also be accommodated at this location.
- The site is much further into the Park than sites A or B, allowing quicker access into the upper reaches of Willow Creek.

Considerations

- Site C could be used for vehicle only parking, with a small amount of equestrian parking occurring at Site D.
- Hazard trees may be a problem at this site.
- An old logging road begins at this site, heading north up a drainage. This may provide a logical location for a future trail into the park.
- This site potentially contains Spotted Owl habitat. Surveying may be needed prior to any improvements.
- Seasonally wet site, may be subject to drainage problems

Upper Willow Creek Road

Site A

General Description

- South side of the Willow Creek Road.
- Located on ridge top at the termination of the road.
- Site slopes at approximately 4-6% grade.
- Open areas approximately 300' x 150' within gently sloping ridge-top, steeper slopes occur at outlying edges.

Potential Use

- This site will accommodate a larger, primary access, but safe entry and exit from the County Road and neighborhood concerns may relegate the site to secondary status. Equestrian trailer parking could be accommodated in this area, as well as additional vehicle parking.
- Other day use, such as picnicking could also be accommodated at this site.
- The site would provide convenient access into the upper portions of the planned trail system.

Considerations

- Due to the large, open nature of this site, it is highly visible from the access road while entering and potentially visible by surrounding residences and other locations in the park. At least one residence is clearly visible from the site.
- The access road into the site is very long for the potentially small number of users it will serve. This road will need maintenance and improvements.
- Accesses on the upper paved reaches of the County Road are problematic. The road is not wide enough for two vehicles to pass safely, especially if trailer use will be accommodated at this site. Tight radius turns and adjacent vegetation also make the access difficult. Encouraging more use in this area may result in traffic issues.
- Geologic instability occurs in the form of hillside creep. Geology and engineering studies required.
- A traffic study may be warranted to determine comprehensive impacts and potential solutions to the above traffic concerns.

Upper Willow Creek Road

Site B

General Description

- South side of the Willow Creek Road.
- Located several hundred yards uphill on the access road from Site A.
- Site slopes at approximately 4-6% grade.
- Open area approximately 200' x 150' at the toe of road side slope.

Potential Use

- This site will accommodate a larger, primary access, but safe entry and exit from the County Road and neighborhood concerns may relegate the site to secondary status. Equestrian trailer parking could be accommodated in this area, as well as additional vehicle parking.
- Other day use, such as picnicking could also be accommodated at this site.
- The site would provide convenient access into the upper portions of the planned trail system.

Considerations

- This site has better potential to be screened from view than Site A. Existing mature evergreens and large shrubs at the perimeter of the site significantly lessen the views into the site from the access road, and potentially from within the Park and neighboring residences. Visual studies would need to be completed to determine the exact visual impacts.
- The access road into the site is very long for the potentially small number of users it will serve. This road will need maintenance and improvements.
- A curved, sloped access off the main road will be necessary to make up grade down into the site.
- Accesses on the upper paved reaches of the County Road are problematic. The road is not wide enough for two vehicles to pass safely, especially if trailer use will be accommodated at this site. Tight radius turns and adjacent vegetation also make the access difficult. Encouraging more use in this area may result in traffic issues.
- Geologic instability occurs in the form of hillside creep. Geology and engineering studies required.
- A traffic study may be warranted to determine comprehensive impacts and potential solutions to the above traffic concerns.
- General site area supports visual evidence of geologic instabilities.

Upper Willow Creek Road

Site C

General Description

- South side of the Willow Creek Road.
- Located several hundred yards uphill on the access road from Site B and downhill from the washed out road section.
- Site slopes at approximately 4-6% grade.
- Open area approximately 200' x 150' at the toe of road side slope.

Potential Use

- This site will accommodate a larger, primary access, but safe entry and exit from the County Road and neighborhood concerns may relegate the site to secondary status. Equestrian trailer parking could be accommodated in this area, as well as additional vehicle parking.
- Other day use, such as picnicking could also be accommodated at this site.
- The site would provide convenient access into the upper portions of the planned trail system.

Considerations

- This site has better potential to be screened from view than Site A. Existing mature evergreens and large shrubs at the perimeter of the site significantly lessen the views into the site from the access road, and potentially from within the Park and neighboring residences. Visual studies would need to be completed to determine the exact visual impacts.

- The access road into the site is very long for the potentially small number of users it will serve. This road will need maintenance and improvements.
- A curved, sloped access off the main road will be necessary to make up grade down into the site.
- Accesses on the upper paved reaches of the County Road are problematic. The road is not wide enough for two vehicles to pass safely, especially if trailer use will be accommodated at this site. Tight radius turns and adjacent vegetation also make the access difficult. Encouraging more use in this area may result in traffic issues.
- Geologic instability occurs in the form of hillside creep. Geology and engineering studies required.
- A traffic study may be warranted to determine comprehensive impacts and potential solutions to the above traffic concerns.
- General site area supports visual evidence of geologic instabilities.

Coleman Valley Road

General Description

- North side of Coleman Valley Road in the southeast portion of the site.
- Open area approximately 60' x 150'.
- Site is within the forest canopy and has mature trees surrounding the open area.
- Road gradients are approximately 2-5% grade, general slope characteristics of the area are in the above 10% category.
- Located on existing road alignment and access on Coleman Valley Road.

Potential Use

- The remote location of this site makes it well suited as a secondary access.
- The site will accommodate approximately 6 vehicles.
- The site has several options for providing small picnic areas.
- A trail connecting the access point to a viewpoint overlook is easily possible along the existing road alignment. With a few modifications, the trail could be made to meet accessibility requirements.

Considerations

- Road access point is along a hill and curve, making visibility in and out of the access difficult. Roadway signage may be necessary to mitigate potential traffic conflicts. Visibility of cars leaving the trailhead is most problematic to the south, where Coleman Valley Road slopes steeply downhill.
- The access road has a fairly steep grade into the site. Selective clearing and some grading may help increase visibility onto the roadway when exiting the site.
- Although the site arrangement is well-suited to an interpretive featured trail and overlook which could be used by school groups, bus turning distances within the parking area are minimal. Backing-up/3-point turn will most likely be required.
- If encouraging more users at the overlook site, controls such as fencing and signage may be useful in minimizing resource damage.
- If large groups will potentially use the site, a developed gathering site should be developed. This could occur near the parking/access area and could provide picnic and seating areas.
- Hazard trees may be a problem at this site.
- Area would require some grading and earth moving to accommodate reasonable parking and maneuvering space for 6 to 8 vehicle capacity.

Freezeout Creek

General Description

- North side of Freezeout Flat Road in the northwest portion of the site.
- Open area approximately 150' x 400'.
- Site is located adjacent to an open meadow, at the base of a hillside to the south.
- Sight lines into and out of the site are good.
- Site slopes at approximately 2-5% grade.
- An existing trail, with gate and signage begins at the east end of the access site and continues up Freezeout Creek.
- Views into the site from other areas in the Park are minimal.

Potential Use

- This site is already used as a trailhead for approximately 5-6 equestrian/trailer spaces.
- This site's close proximity to Duncan's Mills makes it an ideal candidate as a primary trailhead including an equestrian access for the Willow Creek parcel.
- The site is large enough to provide turn-around space for truck-trailer combinations, vehicle parking and day use areas.
- The addition of equestrian amenities such as manure collection, hitching posts and corrals may be possible at this site.

Considerations

- The Freezeout Flat road coming into the site is a long, narrow, one-way which may present difficulties for passing vehicles, especially those with trailers. Adding pull-outs at several points along the roadway may help alleviate this problem.
- The site is adjacent to the meadow used for civil war reenactments. The existing parking area is currently used during these events, creating a potential impact/conflict with Park users.
- Drainage adjacent to the road will need to be addressed and may require the installation of culverts or other conveyances.
- There are private property inholdings that use this access.

SONOMA STATE BEACH										EDAW
WILLOW CREEK ACCESS EVALUATION										
Table 1.0										June 9, 2006
EVALUATION CRITERIA	Lower Willow Creek Site A	Lower Willow Creek Site B	Lower Willow Creek Site C	Lower Willow Creek Site D	Upper Willow Creek Site A	Upper Willow Creek Site B	Upper Willow Creek Site C	Coleman Valley Road	Freezeout Flat	NOTES
GENERAL										
Elevation										
Vegetation Type	meadow/ disturbed	meadow	disturbed	disturbed	meadow	meadow	meadow	disturbed	existing parking site	All sites are located in existing disturbed (gravel) areas or open meadows/grasslands
Site Size	300' x 400' 120,000 SF	200' x 200' 40,000 SF	75' x 150' 15,000 SF	150' x 200' 30,000 SF	150' x 300' 45,000 SF	150' x 200' 30,000 SF	150' x 200' 30,000 SF	60' x 150' 9,000 SF	150' x 400' 60,000 SF	Site size is approximate, based on field observations for area potentially suitable for development.
APPROACH TO ENTRANCE										
Approach road width	+	+	+	+	-	-	-	o	-	Approach roadway width accomodates two way traffic. + = easily accomodated o = passing difficult - = passing not possible at some locations
Existing Intersection	-	-	+	+	+	-	-	+	+	Existing intersection available for use. + = existing intersection available - = no existing intersection available
Location Suitability	o	o	+	+	+	o	o	-	+	Existing intersection location. + = location highly suitable o = no intersections exist. modifications needed to define intersection locations - = existing intersection needs further analysis`
Approach Grades	+	o	+	+	-	o	o	o	+	Approach to entry on roadway. + = 0 to 4% Slope o = 4 to 8% Slope - = greater than 8% slope
Approach Visibility/Sight Lines	+	o	+	+	+	o	o	o	+	Approach to entry on roadway + = good visibilty into and out of entry o = minor modifications needed for good visibility - = major modifications needed for good visibility
ENTRANCE										
Entry Gradient	+	o	+	+	o	-	o	-	+	Slope of entry at roadway. + = 0 to 4% Slope o = 4 to 8% Slope - = greater than 8% slope
Entry width	+	+	+	+	+	+	+	o	+	Ease to accommodate two-way traffic - 22' min width. + = easily accomodated o = minor modifications needed - = major modifications needed
Drainage Improvements	o	o	o	o	+	o	o	o	o	Need for drainage improvements, culverts at entrance + = not needed o = minor improvements needed - = major improvements needed

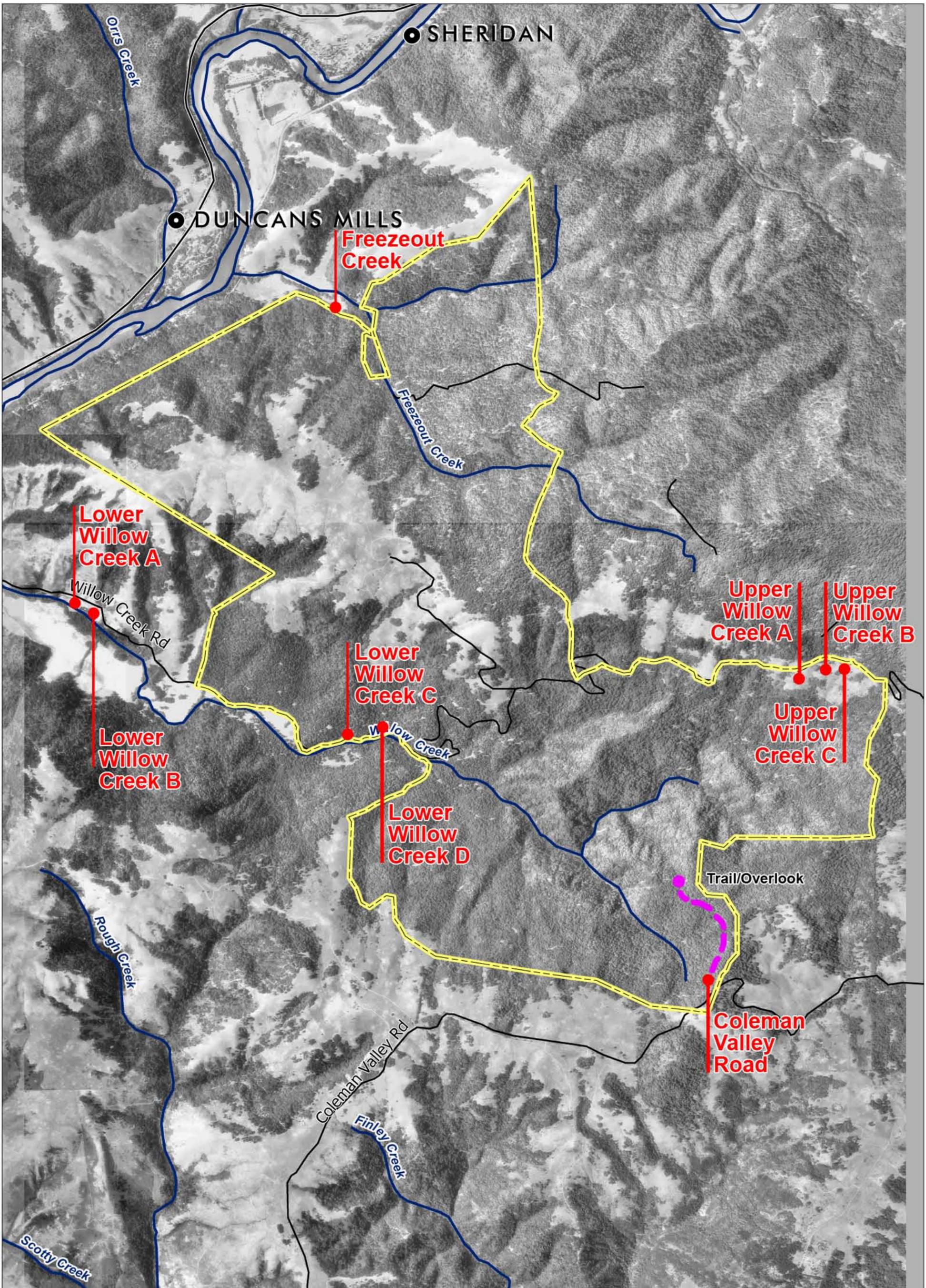
SONOMA STATE BEACH										EDAW
WILLOW CREEK ACCESS EVALUATION										
Table 1.0										June 9, 2006
EVALUATION CRITERIA	Lower Willow Creek Site A	Lower Willow Creek Site B	Lower Willow Creek Site C	Lower Willow Creek Site D	Upper Willow Creek Site A	Upper Willow Creek Site B	Upper Willow Creek Site C	Coleman Valley Road	Freezeout Flat	NOTES
SITE VISUAL QUALITY										More detailed on-site evaluation needed to determine visibility from specific locations within and outside the Park.
View into site from adjacent property	+	+	+	+	-	o	o	+	-	Visual quality impacts from adjacent properties + = minimal visual impacts o = moderate visual impacts - = significant visual impacts
View of site from park property	o	o	+	+	-	o	o	+	+	Visual quality impacts from Park property/use areas. + = minimal visual impacts o = moderate visual impacts - = significant visual impacts
Scenic view from site	o	o	-	-	+	+	+	+	-	Scenic views of Park from site + = high quality scenic views available o = moderate quality scenic views available - = no scenic views available
SITE SUITABILITY										
Existing slope gradient	+	o	+	+	+	o	o	o	+	Slopes suitable for development + = highly suitable o = minor improvements to become suitable - = major improvements to become suitable
On-site drainage	o	+	+	+	+	o	o	+	+	Drainage improvements needed on-site + = minimal improvements, soft swales o = moderate improvements, short culverts, soft swales - = major improvements, long culverts, extensive swales
Off-site drainage impacts	o	o	+	+	o	o	o	o	o	Drainage impacts from site to adjacent areas + = no impacts o = minimal impacts, minor drainage improvements needed - = moderate impacts, moderate drainage improvements needed
Hazard Tree Clearing Required	+	+	-	-	+	o	o	o	+	Hazard tree removal required + = none o = minor removals anticipated - = major removals anticipated
Size	+	+	o	+	+	+	+	-	+	Site sized appropriately to accommodate use + = appropriately size and allows for future growth o = appropriately sized, no future growth possible - = only minor improvements possible - may not meet current needs

SONOMA STATE BEACH										EDAW
WILLOW CREEK ACCESS EVALUATION										
Table 1.0										June 9, 2006
EVALUATION CRITERIA	Lower Willow Creek Site A	Lower Willow Creek Site B	Lower Willow Creek Site C	Lower Willow Creek Site D	Upper Willow Creek Site A	Upper Willow Creek Site B	Upper Willow Creek Site C	Coleman Valley Road	Freezeout Flat	NOTES
SITE RESOURCES										Potential for impacts to site resources. Studies needed to confirm potential impacts. + = no impacts ○ = minor impacts - = major impacts
Wetlands/riparian areas	○	○	○	○	+	+	+	+	+	
Forest areas	+	+	○	○	+	+	+	○	+	
ACCESSIBILITY POTENTIAL										Potential to provide accessible facilities and trails + = easily possible ○ = some modifications to site required - = accessible facilities potentially difficult to fit within site.
Potential for adjacent accessible trails	+	+	-	-	+	○	○	+	-	
Potential for accessible overlook	+	+	-	-	+	+	+	+	-	
TRAIL ACCESS POTENTIAL										Potential to connect directly into proposed trail system - will depend on final outcome of trails plan. + = direct connection possible or already exists ○ = connection via road required - = connection potentially difficult.
Potential for connection to trail system	+	○	+	+	+	○	○	+	+	

SONOMA COAST STATE BEACH GENERAL PLAN
WILLOW CREEK ACCESS POINTS
SITE ANALYSIS

TABLE 2.0

	UPPER WILLOW CREEK ROAD	COLEMAN VALLEY ROAD	FREEZEOUT CREEK	LOWER WILLOW CREEK ROAD
Exterior Connectivity	Good access to county roads outside park boundary. Paved road access to park from Coleman Valley Road near Occidental. 2-way unstriped road favors local residents. Road turns to gravel at boundary. This section of road has instabilities. Current road bed slipout prevents vehicle access.	Direct gated access off of Coleman Valley Road. (paved, striped, 2-lane) at the south boundary.	Access to northeast section of park via 2-lane paved Co. roads. Close access to Highway 116 and Duncan Mills. Gated single lane unpaved road access to currently used parking / staging area.	Area served by Willow Creek Road from Highway 1 at Bridgehaven via paved unstriped road in poor condition. Road subject to flooding. Access point area approximately 3 miles from Highway 1.
Interior Connectivity	Direct access to interior via Willow Creek Road at upper elevations. Provides access throughout the elevation range. WCR prone to seasonal failures. Location serves upper watershed on S.E. Boundary. High potential for interior connection options.	Access connects to interior unpaved road. Gravel road steep, and ends at Seed Orchard Tract. Operational use only. Low connectivity potential due to steep slopes and high elevation of access point.	Interior access provided by Freezeout Creek Road. Moderately steep single lane unpaved road branches to serve Freezeout Creek. Watershed and upper east WC watershed. Good potential for diverse connections / access to interior.	Most centrally located of all considered access points. Highest potential for connection for points in WC watershed. Closest location to other existing park facilities.
Physical Characteristics (constraints & opportunities)	Area is mix of open grasslands and forest. Topography highly variable, moderate to steep, w/ pockets of gentle slopes. Localized areas of instability in open grasslands. Development opportunities limited by topography. Potential exists due to larger site selection area.	Forested area of moderate to mostly steep and complex topography. Immediate area laced with roads giving potential for small staging area close to paved road. Close by scenic overlook has public use and interpretive potential. Opportunities present for limited all access activity.	Park ownership is mostly forested and steep sloped lands. Boundary / ownership configuration, and geography constrains initial access and limits potential for staging areas. Little to no opportunity to expand on existing staging area.	Area characterized by broad valley bottom, grassland meadows, interspersed with riparian areas. Open level to gently sloping lands present greatest opportunity for staging area development.
Natural Resource Sensitivities	Potential Northern Spotted Owl habitat. Surveys will be needed prior to any construction activity. NSO activity to be considered during use and facility planning / design phase.	Northern Spotted Owl habitat. Surveys will be needed prior to any construction activity. NSO activity to be considered during use and facility planning / design phase.	Wetlands present adjacent to access and currently used staging area. Potential for listed species associated with wetlands. Northern Spotted Owl habitat. Surveys will be needed prior to any construction activity. NSO activity to be considered during use and facility planning / design phase.	Potential for wetlands and seasonal flooding. Proximity to creeks and riparian habitats.
Cultural Resource Sensitivities	Unknown at this time	Unknown at this time	Unknown at this time	Unknown at this time
Permitting Issues	CEQA, Coastal Permit for construction / change in use. USFWS consult (NSO) may be necessary.	CEQA, Coastal Permit for construction / change in use. USFWS consult (NSO) may be necessary.	CEQA, potential for USFWS (NSO) and ACE (wetlands) permits. Outside of coastal zone.	CEQA, other permits as necessary based on proposed scope of work. Coastal permit for construction / change in use.
Operational Suitability (convenience & limitations)	Furthest removed from current operations. Area linked via Willow Creek Road from both ends. (top-Occidental, bottom-Higway 1).	Closest access to / from Salmon Creek Ranger Station. Close and good administrative access to this and central interior of park.	Closest to DPR District HDQ, removed from other park operations.	Centrally located and close to other park facilities. Minimal conflicts with adjacent ownership and land uses.
Other	Local residents on Willow Creek Road not in favor of development of public access at this location.	Scatter rural residential property in area. Minimal conflict with adjacent landowners.	Even though area is surrounded by private property, minimal conflict exists. Access shared by private property inholdings and shared access with MRC.	Due to ownership boundaries / patterns, valley bottom access to upstream locations via the valley bottom is restricted to one point on Willow Creek Road. See map.

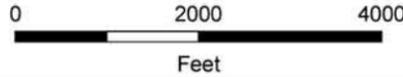


Source: EDAW 2006

Map 1.0



1 inch = 1,000 feet



Jun 9, 2006

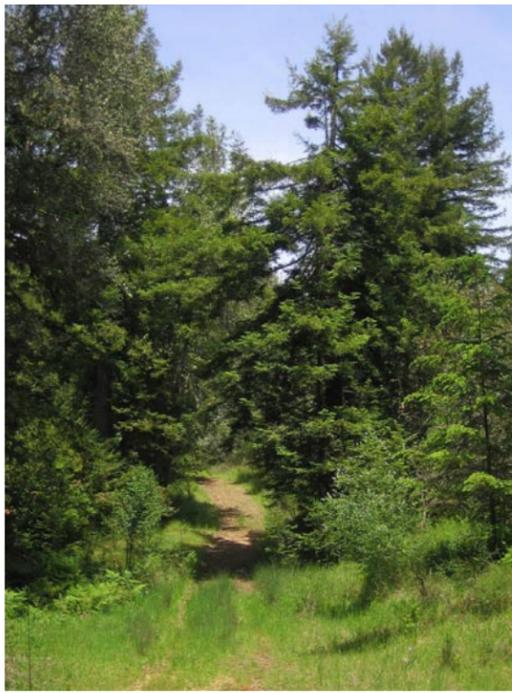
EDAW

Sonoma Coast State Beach

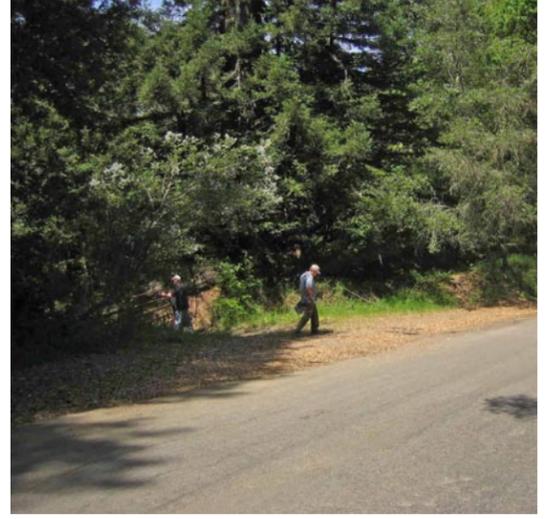
Willow Creek Access Evaluation



Potential access site - looking southwest.



Trail/road leaving access point.



Access point at Coleman Valley Road.



Overlook site looking northwest.



Overlook site looking south.



View from overlook looking northwest.

Coleman Valley Road



Trail leading east out of parking area, kiosk and manure collection bin.



Looking east from the access road - site is on the right.

Freezeout Flat

Sonoma Coast State Beach

Willow Creek Access Evaluation



Site A - looking west - eroded roadway swale on left.



Site A - looking west - eroded roadway swale on left.



Site A - looking west.



Site A - looking northeast - eroded area/soil deposits in center of photo.



Site A - looking southwest at eroded area.

Lower Willow Creek - Site A



Site B - looking south - potential day-use bench on far right.

Lower Willow Creek - Site B



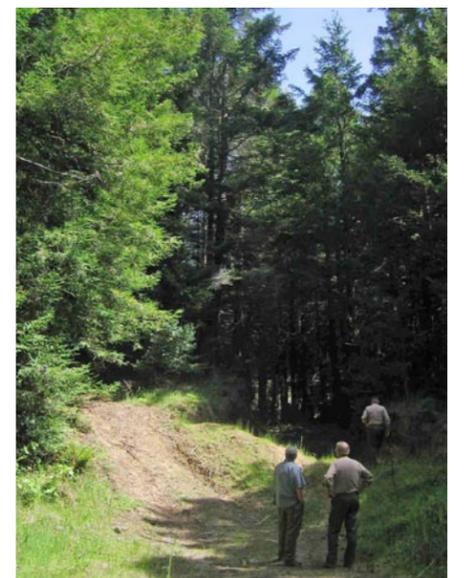
Site C - looking south towards County Road.

Lower Willow Creek - Site C



Site D - looking south towards County Road.

Lower Willow Creek - Site D



Site D - looking northeast towards existing road.

Sonoma Coast State Beach

Willow Creek Access Evaluation

Jun 9, 2006

EDAW

Exhibit 2.0
Site Photos



Narrow entry from residential area.



Access gate at logging road.



Access road below road wash-out.

Upper Willow Creek - Access Road



Site A - Looking southwest toward Site A at center of photo.



Site A - Looking northeast toward access road.

Upper Willow Creek - Site A



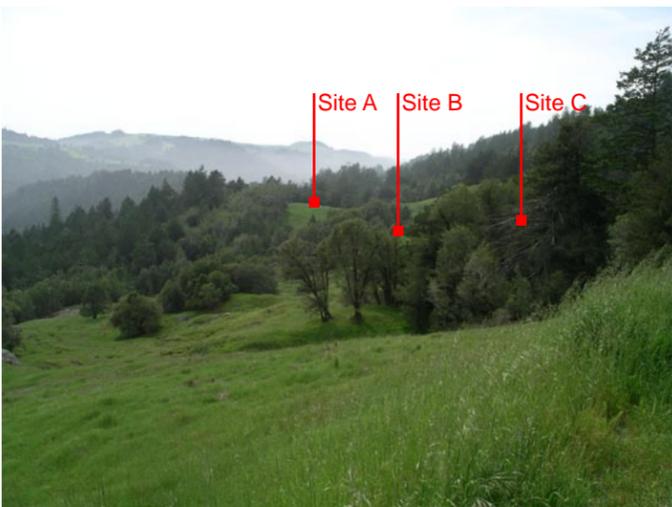
Site B - Looking southwest.

Upper Willow Creek - Site B



Site C - Looking southwest toward Site C from access road at left center of photo.

Upper Willow Creek - Site C



Site A - Looking southwest toward Site A at center of photo.

Upper Willow Creek - All Sites

Sonoma Coast State Beach

Willow Creek Access Evaluation

Appendix H

Acronyms

ACRONYMS

AADT	average annual daily trip
ABAG	Association of Bay Area Governments
ACSC	areas of critical state concern
ADA	Americans with Disabilities Act
ADT	average daily traffic
APCD	Air Pollution Control District
AQMD	Air Quality Management District
ARB	California Air Resource Board
ARMP	Abalone Recovery and Management Plan
BACT	best available control technology
BLM	Bureau of Land Management
BMP	best management practices
C	Celsius
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
CalEPPC	California Exotic Pest Plant Council
Caltrans	California Department of Transportation
CBC	California Building Code
CCA	California Coastal Act
CCNM	California Coastal National Monument
CCC	California Conservation Corps
CCP	Comprehensive Conservation Plan
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection
CDFA	California Department of Food and Agriculture
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act

CFP	California Fully Protected Species as designated by the California Fish and Game Code
CFR	Code of Federal Regulation
cfs	cubic feet per second
CHTF	California Heritage Task Force
CHP	California Highway Patrol
CNDDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
Commission	California Parks and Recreation Commission
CORRP	California Outdoor Recreation Resource Plan
CUP	Conditional Use Permit
CRHR	California Register of Historic Resources
CRMP	Cultural Resource Management Plan
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
dB	decibel
dBA	A-weighted decibel
DEIR	draft environmental impact report
Department	California Department of Parks and Recreation
DFG	State of California, Department of Fish and Game
DOC	Department of Conservation
DOE	Department of Energy (U.S.)
DOF	Department of Finance
DPR	California Department of Parks and Recreation
DWR	State of California, Department of Water Resources
EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
ESU	Evolutionarily Significant Unit

F	Fahrenheit
FCAA	Federal Clean Air Act
FEIR	final environmental impact report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
FIP	Federal Implementation Plan
gal	gallon
GIS	Geographic Information System
GP	general plan
GPS	Global Positioning System
HAP	hazardous air pollutant
HC	hydrocarbons
HCP	Habitat Conservation Plan
ITSWC	InterTribal Sinkyone Wilderness Council
ISO	Insurance Services Offices (Rating)
KRNCA	King Range National Conservation Area
kW	kilowatt
kWh	kilowatt-hour
LAFCO	Local Agency Formation Commission
LCP	Local Coastal Plans
L_{eq}	energy-equivalent noise level
L_{dn}	day-night average noise level
LOS	level of service

M	Richter Scale Magnitude
mgd	million gallons per day
ml	milliliters
mm	millimeter
MMA	Marine Managed Area
Monument	California Coastal Monument
MOU	Memorandum of Understanding
MRZ	Mineral Resource Zone
msl	mean sea level
MW	megawatts
N	nitrogen
NA	not applicable
NAAQS	National Ambient Air Quality Standards
NCIC	North Coast Information Center
NCCP	Natural Communities Conservation Program
NCUAQMD	North Coast Unified Air Quality Management District
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NO _x	nitrogen oxide(s)
NO ₂	nitrogen dioxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
NTHP	National Trust for Historic Preservation
O ₃	ozone
OHP	State of California, Office of Historic Preservation

OHV	off-highway vehicle
PM _{2.5}	fine particulate matter
PM ₁₀	respirable particulate matter
ppb	parts per billion
ppm	parts per million
PRC	Public Resources Code
RMP	Resource Management Plan
ROG	reactive organic gasses
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SB	State Beach
SHPO	State Historic Preservation Officer
SMARA	California Surface Mining and Reclamation Act of 1975
SO ₂	sulfur dioxide
Sonoma Coast SB	Sonoma Coast State Beach
SP	State Parks
SR	State Route
SRA	State Recreation Area
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
THC	total hydro carbons
TMDL	Total Maximum Daily Loads
UC	University of California
UDF	Unit Data File

US101	U.S. Highway 101
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
USDA	U.S. Department of Agriculture
USDI	U.S. Department of the Interior
USDOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
V	volts

Appendix I

Glossary of Terms

GLOSSARY OF TERMS

Active Fault: a fault that has moved recently and which is likely to move again. For planning purposes, an “active fault” is usually defined as one that shows movement within the last 11,000 years and can be expected to move within the next 100 years.

Adaptive Use: use of a historic structure for a purpose other than for which it was originally intended.

Aesthetics: refer to the visual, audible, and other sensory factors within the park setting and its surrounding landscapes that, taken together, establish character or sense of place.

Alluvium: a general term for all detrital deposits resulting from the operations of modern rivers, thus including the sediments laid down in riverbeds, flood plains, lakes, fans at foot of mountain slopes and estuaries.

Ambient Air Quality: the atmospheric concentration (amount in specified volume of air) of a specific compound as actually experienced at a particular geographic location that may be some distance from the source of the relevant pollutant emissions.

Ambient Noise Level: the composite of noise from all sources near and far.

Aquifer: the underground layer of water-bearing rock, sand, or gravel through which water can seep or be held in natural storage. Such water holding rock layers hold sufficient water to be used as a water supply.

Archaeological: pertaining to the material remains of past human life, culture, or activities.

Bedrock: the solid rock underlying unconsolidated surface materials.

Best Available Control Technology (BACT): the most stringent emission limit or control technique that has been achieved in practice that is applicable to a particular emission source.

Best Management Practices (BMP): the most current methods, treatments, or actions in regards to environmental mitigation responses.

Bikeways: bicycle travel way, encompasses bicycle lanes, bicycle paths, and bicycle routes.

Biodiversity: biological diversity in an environment as indicated by numbers of different species of plants and animals, as well as the relative abundance of all the species within a given area.

Buffer: land that protects natural and/or cultural values of a resource or park from adverse effects arising outside the buffer.

California Coastal Commission: established by the 1972 Coastal Act to review and approve projects and actions within a defined zone along the California coastline for compliance with the Coastal Act.

California Coastal National Monument: All unappropriated or unreserved lands and interest in lands owned or controlled by the United States, in the form of islands, rocks, exposed reefs, and pinnacles above mean high tide within 12 miles nautical miles of the shoreline of the State of California. Cooperatively managed with other federal, state, local government, universities, and private interests, the primary purpose of the Monument is to protect important biological and geological values. The islands, rocks, reefs, and pinnacles provide forage and breeding grounds for significant populations of birds and sea mammals.

California Environmental Quality Act (CEQA): a state law (PRC §21000 et al.) requiring state and local agencies to take actions on projects with consideration for environmental protection. If a proposed activity may result in a significant adverse effect on the environment, an EIR must be prepared. General Plans require a “program EIR” and park development projects require a project environmental document.

California State Parks and Recreation Commission: established in 1927 to advise the Director of Parks and Recreation on the recreational needs of the people of California. In 1928 it gathered support for the first state park bond issue. The Commission schedules public hearings to consider classification or reclassification and the approval of State Parks’ general plan (and amendments) for each park unit.

Classification: official designation of units of the State Park System. Classification are established by the State Parks and Recreation Commission at the recommendation of Department staff and are based on the sensitivity and kind of unit’s most important resources and what types of use the unit will receive from the public.

Clean Water Act (CWA): enacted in 1972 to create a basic framework for current programs to control water pollution; provide statutory authority for the National Pollutant Discharge Elimination System (NPDES).

Concession: a contract with persons, corporations, partnerships, or associations for the provision of products, facilities, programs, and management and visitor services that will provide for the enhancement of park visitor use, enjoyment, safety, and convenience. Concession developments, programs, and services must be compatible with a park unit’s classification and general plan provisions.

Conservation Easement: acquisition of rights and interests to a property to protect identified conservation or resource values using a reserved interest deed. Easements may

apply to entire parcels of land or to specific parts of the property. Most are permanent, although term easements pose restrictions for a limited number of years. Land protected by a conservation easement remains on the tax rolls and is privately owned and managed; landowners who donate conservation easements are generally entitled to tax benefits.

Constraints: (1) the state of being restricted or confined within prescribed bounds (2) one that restricts, limits, or regulates; a check.

County Route: a segment of roadway that has been officially designated by the Director of California Department of Transportation as a scenic corridor.

Cultural Heritage Point of Interest: human activity site, interpretive exhibit. Utilizes both preservation and interpretation.

Cultural Landscape: a geographic area (including both the cultural and natural resources) associated with a historic event, activity, or person or exhibiting cultural or aesthetic values. This type is a landscape that evolved through use by people whose activities or occupancy shaped it.

Cultural Preserve: the subclassification protects areas of outstanding historic interest in state parks, including such features as sites, buildings, or zones where significant events in the flow of history in California occurred. They need to be large enough to protect resources from potential damage and to permit effective management and interpretation and must also have complete integrity of the resources; no conflicting improvements, such as roads, are permitted. Natural resources values are secondary to historical values in cultural preserves.

Cultural Resource: a resource that exists because of human activities. Cultural resources can be prehistoric (dating from before European settlement) or historic (post-European contact). Includes archeological or architectural sites, structures, or places; and places of traditional cultural or religious importance to specific groups whether or not represented by physical remains.

Culvert: a drain, ditch, or conduit not incorporated in a closed system that carries drainage water under driveway, roadway, railroad, pedestrian walk or publicway. Culverts are often built to channelize streams and as part of flood control systems.

Cumulative Impact: as defined by the state CEQA Guidelines (§15355) two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts.

Degradation: the reduction of environmental quality in an area through a lessening of diversity, the creation of growth anomalies, or the supplanting of native species by nonnative plant and animal species.

Demographic: having to do with a particular characteristic of a segment of the public at large; may be connected to the group's age, the region where the group resides, a particular recreational interest, economic status, etc.

Ecology: the study of the interrelationship of living things to one another and their environment.

Ecosystem: a community consisting of all biological organisms (plant, animals, insects, etc.) in a given area interacting with the physical environment (soil, water, air) to function together as a unit of nature.

Ecotone: a transition area between two adjacent ecological communities, usually exhibiting competition between organisms common to both; often a rich biological area.

Effect/Impact: an environmental change; as defined by State CEQA Guidelines §15358:
(1) Direct or primary effects are caused by the project and occur at the same time and place
(2) Indirect or secondary effects that are caused by the project and are late in time or farther removed in distance, but still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water quality and other natural systems including ecosystems.

Endangered Species: a species of animal or plant is considered to be endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. The U.S. Fish and Wildlife Service and/or the California Department of Fish and Game make this designation.

Endemic: indigenous to, and restricted to, a particular area.

Environment: as defined in State CEQA Guidelines §15360, "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historical and aesthetic significance."

Environmental Impact Report (EIR): a report required by CEQA that assesses all the environmental characteristics of an area and determines what effects of impacts will result if the area is altered or disturbed by a proposed action. If a proposed activity may result in a significant adverse effect on the environment, an EIR must be prepared. General plans require the preparation of a "program" EIR appropriate to its level of specificity.

Environmentally Sensitive: an area in which plant or animal life or their habitats are either rare or especially valuable because of their role in an ecosystem. Such areas can be easily disturbed or degraded by human activities and developments.

Ethnographic: a multi-format group of materials gathered and organized by an anthropologist, folklorist, or other cultural researcher to document human life and traditions.

Exotic Species: a species occurring in an area outside of its historically known natural range that has been intentionally introduced to or have inadvertently infiltrated into the system. Also known as non-native, ornamental, or introduced species. Exotic animals prey upon native species and compete with them for food and habitat. Exotic plant species can convert native ecosystems into a non-native dominated system that provides little benefit to other species in the ecosystem.

Fauna: animal life, particularly animals that are characteristic of a region, period, or special environment.

Floodplain: a lowland or relatively flat area adjoining inland or coastal waters that is subject to a one or greater chance of flooding in any given year (i.e., 100-year flood).

Floodway: the channel of a natural stream or river and portions of the flood plain adjoining the channel, which are reasonable required to carry and discharge the floodwater or flood flow of any natural stream or river.

Flora: plant or bacterial life, particularly plants and bacteria that are characteristic of a region, period, or special environment.

Forbes: any herbaceous (non-woody) plant having broad leaves, and therefore excluding grasses and grass-like plants.

General Plan (GP): a general plan is a legal planning document that provides guidelines for the development, management, and operation of a unit of the state park system. A general plan evaluates and defines land uses, resource management, facilities, interpretation, concessions, and operations of a park unit as well as addressing environmental impacts in a programmatic manner. A park unit must have an approved general plan prior to implementing any major development project.

Geology: the scientific study of the origin, history, and structure of the earth.

Grade: the degree of rise or descent of a sloping surface.

Habitat: the physical location or type of environment, in which an organism or biological population lives or occurs. It involves an environment of a particular kind, defined by characteristics such as climate, terrain, elevation, soil type, and vegetation. Habitat typically includes shelter and/or sustenance.

Hazardous Material: any substance that, because of its quantity, concentration, physical or chemical characteristics, poses a significant presence or potential hazard to human health and safety or to the environment. Lead-based paint is an example of a hazardous material.

Historic Character: the sum of all visual aspects, features, materials, and species associated with a structure or cultural landscape's history, i.e., the original configuration together with losses and later changes. These qualities are often referred to as character defining.

Historic Faults: (i.e., San Andreas) have shown displacement in historic time and are considered active.

Historical Resource: Resources of architectural, historical, archeological, or cultural significance that retain historic integrity and are historically significant at the local, state or national level under one or more of the following criteria:

- ▶ Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
- ▶ Associated with the lives of persons important to local, California or national history.
- ▶ Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
- ▶ Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Eligible resources include buildings, sites, structures, objects, or historic districts.

Hydrology: pertaining to the study of water on the surface of the land, in the soil and underlying geology, and in the air.

Impervious surface: any material, which reduces or prevents absorption of water into land.

Infrastructure: public services and facilities, such as sewage-disposal systems, water supply systems, other utility systems, road and site access systems.

Initial Study: as defined by State CEQA Guidelines §15365, an analysis of a project's potential environmental effects and their relative significance. An initial study is preliminary to deciding whether to prepare a negative declaration or an EIR.

Interpretation: In this planning document, it refers to a communication process, designed to reveal meanings and relationships of our cultural and natural heritage, through involvement with objects, artifacts, landscapes, sties, and oral histories.

Kilowatt: A measure of the rate of electrical flow equal to one thousand watts.

Kilowatt – Hour: A measure of quantity of electrical consumption equal to the power of one kilowatt acting for one hour.

Landform: Configuration of land surface (topography).

Mean Sea Level: The average altitude of sea surface for all tidal stages.

Mitigation Measure: A measure proposed that would eliminate, avoid, rectify, compensate for, or reduce significant environmental effects (see State CEQA Guidelines §15370).

Morphology: Form and structure of a plant that is typical.

Mycology: The study of fungi.

National Pollutant Discharge Elimination System (NPDES): As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

National Register of Historic Places (NRHP): The official federal list of buildings, structures, objects, sites and districts worthy of historic preservation. The register recognizes resources of local, state, and national significance. The register lists only those properties that have retained enough physical integrity to accurately convey their appearance during their period of significance.

Native species: A plant or animal that is historically indigenous to a specific site area.

Natural Preserve: A subclassification within a unit of the State Park System that requires parks and Recreation Commission approval. Its main purpose is to maintain such features as rare and endangered plants and animals and their supporting ecosystems in perpetuity.

Negative Declaration: When a project is not exempt from CEQA and will not have a significant effect upon the environment a negative declaration must be written (see State CEQA Guidelines §15371).

Office of Historic Preservation (OHP): The governmental agency primarily responsible for the statewide administration of the historic preservation program in California. Its responsibilities include identifying, evaluating, and registering historic properties and ensuring compliance with federal and state regulatory obligations.

Open Space: An area with few or no paved surfaces or buildings, which may be primarily in its natural state or improved for use as a park.

Pre-Quaternary Fault: have no known evidence of movement with in the past 1.6 million years. They are not necessarily inactive, but have less potential to cause earthquakes than Quaternary or Historic faults.

Project: As defined by the State CEQA Guidelines §15378, a project can be one of the following a) activities undertaken by any public agency; b) activities undertaken by a person which are supported in whole or in part through contracts, grants, subsidies, loans or other forms of assistance from one or more public agencies; c) activities involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

Public Resources Code (PRC): In addition to the State Constitution and Statutes, California Law consists of 29 codes covering various subject areas. The PRC addresses natural, cultural, aesthetic, and recreation resources of the State.

Quaternary Faults: have evidence of displacement within the last 1.6 million years. They may still be active and capable of rupture.

Regional Water Quality Control Board (RWQCB): There are nine Regional Water Quality Control Boards. The mission of the RWQCBs is to develop and enforce water quality objectives and implementation plans which will best protect the beneficial uses of the State's waters, recognizing local differences in climate, topography, geology and hydrology.

Riparian: Riparian habitat represents the vegetative and wildlife areas adjacent to perennial and intermittent streams and are delineated by the existence of plant species normally found near fresh water.

Riprap: A loose assemblage of broken rock or concrete often used to prevent erosion.

Runoff: That portion of rainfall or surplus water that does not percolate into the ground and flows overland and is discharged into surface drainages or bodies of water.

Septic System: An on-site sewage treatment system that includes a settling tank through which liquid sewage flows and in which solid sewage settles and is decomposed by bacteria in the absences of oxygen. Septic systems are often used where a municipal sewer system is not available.

Shoulder Season: The months of the year immediately before and after the park's busy recreation season. This term generally refers to April and October, but could also shade into late March and early November, depending upon activities under discussion.

Significant Effect on the Environment: As defined by State CEQA Guidelines §15382, substantial or potentially substantial, adverse change on any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to physical change may be considered in determining whether the physical change is significant.

Siltation: The process of silt deposition. Silt is a loose sedimentary material composed of finely divided particles of soil or rock, often carried in cloudy suspension in water.

Solid Waste: Term used to describe the mixture of items, discarded by agricultural, residential and non-residential activities.

Special-Status Species: Plant or animal species that are typically listed (State and Federal) as endangered, rare and threatened, plus those species considered by the scientific community to be deserving of such listing.

State Historic Preservation Officer (SHPO): The chief administrative officer for the OHP and is also the executive secretary of the State Historic Resources Commission.

Subclassification: A separate classification for a portion or unit of the State Park System. The State Parks and Recreation Commission establish these at the recommendation of Department staff. Cultural preserves, and Wilderness are subclassifications.

Subsidence: The gradual sinking of land as a result of natural or man-made causes.

Threatened Species: An animal or plant species that is considered likely to become endangered throughout a significant portion of its range within the foreseeable future because its prospects for survival and reproduction are in jeopardy from one or more causes. The U.S. Fish and Wildlife Service and/or the California Department of Fish and Game make this designation.

Topography: Graphic representation of the surface features of a place or region on a map, indicating their relative positions and elevations.

Trailhead: The beginning of a trail, usually marked by information signs.

Unit Data File: A unit data file (UDF) is the working file that contains an organized body of information about a specific park unit. It acts as an organized library of both unit data and the status of current issues. This file contains information and maps about a park unit's acquisition, history, natural and cultural resources, demographics, visitor use patterns, recreation experiences, land use, facilities, and key issue papers. The file encompasses much of what is traditionally referred to as the unit's Resource Inventory.

Viewshed: The area that can be seen from a specified location.

Watershed: The total area above a given point on a watercourse that contributes water to the flow of the watercourse; entire region drained by a watercourse.

Wetland: Includes the environment of subtidal, mudflats, tidal salt marsh, periodically inundated or brackish marsh, diked marshland, associated upland, and freshwater marsh.

Wilderness: Within state parks, this is a subclassification requiring approval by the State Parks and Recreation Commission. It provides protection for plants and animals and their supporting ecosystems while also encouraging recreational use. Its provision includes no permanent facilities other than “semi-improved campgrounds” and possible retention of structures existing when the land was designated. No mechanical equipment may be used in a wilderness (including bicycles), and there is a 2,000-foot no-fly zone above.