

**Habitat Conservation Plan for the  
Federally Endangered Morro Shoulderband Snail  
Sweet Springs Nature Preserve, Los Osos, California**

**Prepared by:**

Morro Coast Audubon Society  
PO Box 1507  
Morro Bay, CA 93443  
(805) 772-1991

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## Executive Summary

Morro Coast Audubon Society, as the property owner and applicant, is seeking an incidental take permit (ITP) under Section 10(a)(1)(B) of the Endangered Species Act of 1973, as amended, to cover the incidental take of the Morro shoulderband snail (MSS) (= banded dune snail; *Helminthoglypta walkeriana*) associated with the construction of public access improvements, ongoing maintenance, and use of Sweet Springs Nature Preserve (preserve) located on the north side of Ramona Avenue and west of 4th Street (Assessor Parcel Numbers 074-101-004, 074-229-010, and 074-229-009) in the unincorporated community of Los Osos, San Luis Obispo County, California.

A 15-year permit term is requested to address incidental take of MSS associated with the construction of public access and interpretive improvements, maintenance, and use of the Sweet Springs Nature Preserve, which consists of three parcels totaling approximately 30.25 acres. Project implementation is likely to result in the incidental take of MSS in all life stages.

The MSS is a federally endangered terrestrial invertebrate endemic to the Los Osos and Baywood Park areas of central coastal San Luis Obispo County. While several federally-listed species are known to occur in this area, only the MSS has the potential to be affected by the project. Due to the project's limited and mostly beneficial effects on biological resources, construction of access improvements, maintenance of the preserve, and public use are not anticipated to significantly affect the survival and recovery of MSS population in the wild.

The conservation strategy within this habitat conservation plan is consistent with the recovery criteria for the MSS. Measures to minimize and mitigate take of the species include the following:

- pre-construction surveys to identify individual MSS present;
- capture and moving of MSS out of harm's way to appropriate habitat located on the preserve;
- pre-construction awareness training for all construction personnel;
- construction monitoring;
- creation and installation of informational signs to promote public education of MSS and other sensitive resources; and,
- a portion of Sweet Springs Nature Preserve will be specifically designated to effect recovery task actions for MSS.

The project is also subject to County of San Luis Obispo (County) permit requirements to ensure compliance with the California Environmental Quality Act and California Coastal Act, both of which were conditioned to require that an ITP be secured prior to the issuance of necessary County building permits.

# Section 1. Introduction and Background

## 1.1 Overview and Background

This Habitat Conservation Plan (HCP) has been prepared to address the likely take of Morro shoulderband snail (MSS) (*Helminthoglypta walkeriana*), a federally endangered species, that may result from the management and operations of a coastal access trail and habitat restoration project at the Sweet Springs Nature Preserve (the preserve) in Los Osos, San Luis Obispo County, California. This HCP has been prepared pursuant to the requirements of the Federal Endangered Species Act of 1973, as amended (Act), and is intended to provide the basis for issuance of a Section 10(a)(1)(B) incidental take permit (ITP) to Morro Coast Audubon Society (the applicant or MCAS), to authorize incidental take of the federal endangered MSS that may occur in association with the removal of non-native vegetation, native dune scrub restoration, construction and ongoing uses of a coastal access trail, and routine maintenance of the preserve grounds. The proposed habitat restoration and coastal access trail project may alter essential MSS behaviors such as breeding, feeding, or sheltering.

This HCP provides an assessment of the existing habitat conditions on the preserve relative to MSS and evaluates the effects of the proposed project on this species. The HCP presents an on-site mitigation plan to offset alteration of habitat and direct harm that could result from implementation of the proposed project. This HCP is supported by the Sweet Springs Nature Preserve Morro Shoulderband Snail Recovery Action Plan (RAP) (refer to Appendix A).

### 1.1.1 Sweet Springs Nature Preserve Background

Sweet Springs Nature Preserve consists of three parcels: West Sweet Springs (west preserve), Central Sweet Springs (central preserve), and East Sweet Springs (east preserve). In 1981, MCAS was gifted the west and central preserve areas. By 1988, MCAS finalized the Sweet Springs Marsh Resource Enhancement and Access Management Plan (1988 management plan) and began restoring the native habitats. MCAS acquired the east preserve in 2008. Following the 2008 acquisition, MCAS began updating the 1988 management plan to include the annexed property. The updated management plan will include habitat restoration and coastal access improvements and will identify the need for these activities to be covered under an ITP for MSS.

## 1.2 Permit Holder/Permit Duration

MCAS will be the permittee. The proposed access improvements are anticipated for completion over a 24-month period. However, MCAS will manage the preserve to enhance wildlife values and public access for generations to come. Therefore, the permit is requested to be valid for 15 years, which will cover the access improvement project activities, future maintenance activities, and on-going uses.

## 1.3 Permit Boundary/Covered Lands

Sweet Springs Nature Preserve consists of three parcels, all of which are subject to habitat restoration and public access. Therefore, all three parcels will be included in the ITP. The three parcels are contiguous and are located on the north side of Ramona Avenue, between 4th Street

and Broderson Avenue, at the northwest end of the community of Los Osos, in San Luis Obispo County, California (refer to Figures 1 and 2). The permit boundaries will encompass the parcels (Assessor's Parcel Numbers [APN] 074-101-004, and 074-229-009 and -010) located on the Morro Bay South 7.5-minute U.S. Geological Survey quadrangle, in Township 30 S, Range 10 and 11 E. Development and ongoing maintenance areas are located on APN 074-229-009 and -010, while the mitigation area would be located entirely on APN 074-229-009 (refer to Figure 2).

### **1.3.1 Existing Land Conservation Requirements**

Pursuant to the terms of transfer to MCAS, the properties to be covered under this HCP are to remain in open space and conserved principally for their wildlife habitat value. Sweet Springs "west" and "central" (APNs 074-101-004 and 074-229-010, respectively) were transferred to MCAS from the California Coastal Conservancy in 1992. The grant deed for these properties includes an an easement in perpetuity for purposes of wetlands conservation and enhancement, and the preservation of wildlife habitat and open space on the property subject to several terms and conditions (refer to Appendix B). The grant deed for Sweet Springs "east" (APN 074-229-009) specifies the following:

"The Property shall be held and used for the purposes of acquisition, development, rehabilitation, restoration, and protection of habitat that promotes the recovery of threatened and endangered species, that provides corridors linking separate habitat areas to prevent habitat fragmentation, and protects significant natural landscapes and ecosystems..."

To meet HCP requirements, MCAS will continue to abide by the terms and conditions of the grant deeds and will continue to restore coastal dune scrub habitat for the benefit of MSS and other local native species.

### **1.3.2 Proposed MSS HCP Area**

MCAS has established Recovery Area 1, a 3.5 acre portion of the east preserve, to be managed specifically for the recovery of MSS. MCAS proposes to include a 0.5-acre MSS HCP area in Recovery Area 1 (refer to Figure 2). The HCP area includes non-native grassland and coastal dune scrub habitat. To achieve the MSS habitat preservation and enhancement goals proposed under this HCP, MCAS will continue to restore coastal dune scrub in the 0.5-acre HCP area and manage the restored dune scrub to benefit MSS.

Figure 1. Project Vicinity Map

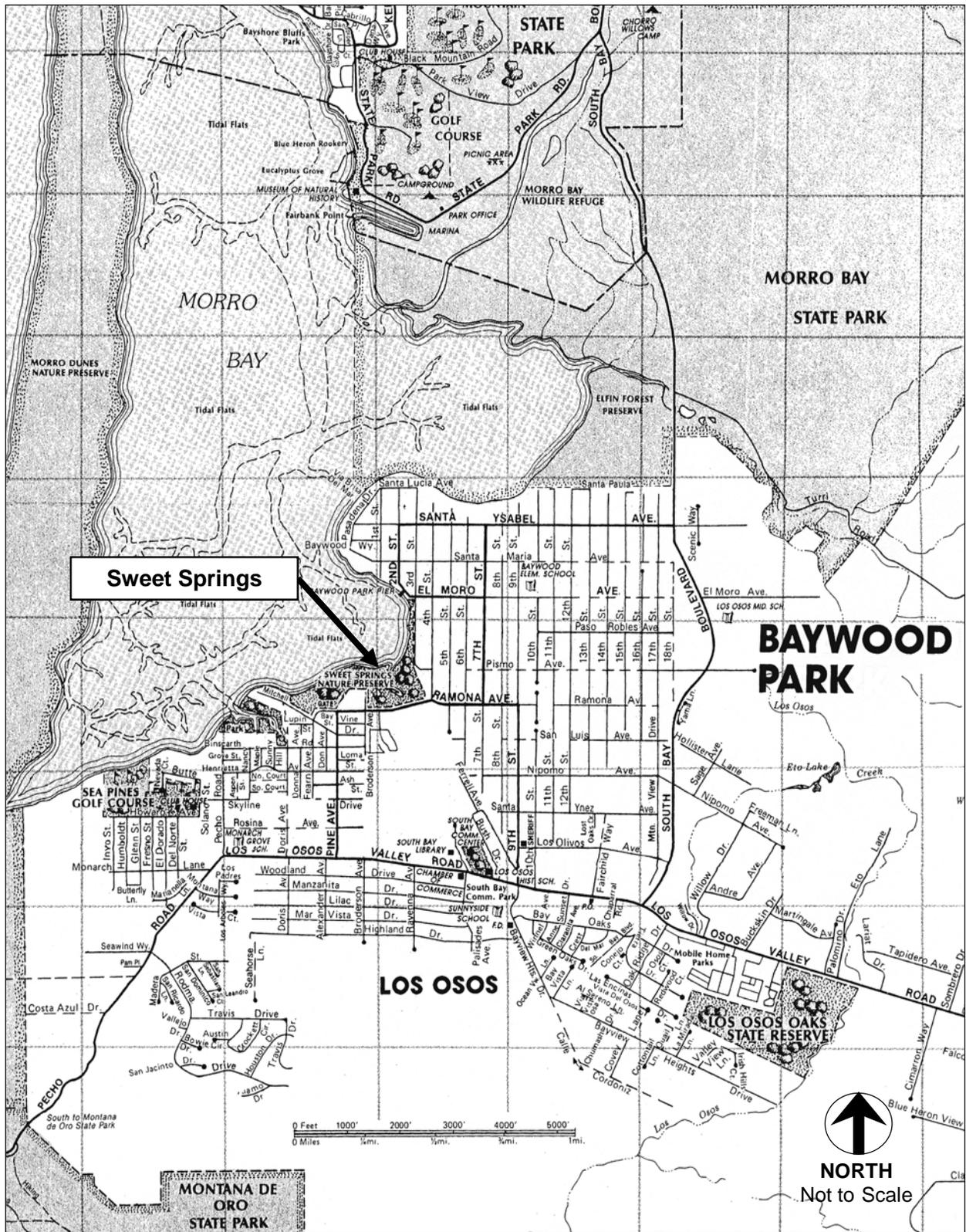


Figure 2. Project Location, Habitat, and Mitigation Area Map



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## **1.4 Species to be Covered by Permit**

The MSS is the only species requested to be covered by the ITP. This species is federally listed as endangered; however, it is not listed or otherwise protected by the State of California.

### **1.4.1 Species Survey Summary**

Protocol level surveys were conducted from December 2008 through February 2009 and confirmed the presence of 44 live MSS on the eastern portion of the preserve. A non protocol survey was conducted in the central portion of the preserve on January 6, 2009, which confirmed the presence of 18 live MSS in the restored maritime chaparral.

Following issuance of a Section 10(a)(1)(A) recovery permit to MCAS and U.S. Fish and Wildlife Service (Service) approval of the Sweet Springs Nature Preserve Recovery Action Plan (RAP), MCAS initiated coastal dune scrub habitat restoration activities on the preserve. During these activities and in accordance to the RAP the MCAS Preserve Manager has observed 78 live MSS in the restoration areas. The combined survey findings indicates that the central and eastern portions of the preserve support a viable population of MSS.

## **1.5 Regulatory Framework**

### **1.5.1 Federal Endangered Species Act**

Section 9 of the Act and Federal regulation pursuant to Section 4(d) prohibit the take of endangered and threatened animal species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species by annoying them to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Pursuant to sections 11(a) and (b) of the Act, any person who knowingly violates Section 9 of the Act or any permit, certificate, or regulation related to Section 9, may be subject to civil penalties of up to \$25,000 for each violation or criminal penalties up to \$50,000 and/or imprisonment of up to 1 year.

Individuals and State and local agencies proposing an action that is likely to result in the take of federally listed animal species are encouraged to apply for an ITP under Section 10(a)(1)(B) of the Act to be in compliance with the law. These permits are issued by the Service and National Oceanic and Atmospheric Administration when take is not the intention of an action but, rather, incidental to otherwise legal activities. An application for an ITP must be accompanied by a conservation plan which is typically an HCP.

Section 7(a)(2) of the Act requires federal agencies to ensure that their actions, including issuing permits, do not jeopardize the continued existence of listed species or destroy or adversely modify listed species' critical habitat. "Jeopardize the continued existence of..."

pursuant to 50 Code of Federal Regulations (CFR) 402.2, means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species. Issuance of an ITP under Section 10(a)(1)(B) of the Act by the Service is a federal action subject to Section 7 of the Act. As a federal agency issuing a discretionary permit, the Service is required to conduct an internal consultation to address these requirements.

### **1.5.2 Section 10(a)(1)(B) Incidental Take Process**

The process for obtaining an ITP has three primary phases: (1) development of the HCP; (2) processing of the permit; and (3) post-issuance compliance. During development of the HCP, the project applicant(s) prepares a plan that integrates the proposed project or activity with protection of listed species. Every HCP submitted in support of an ITP application must include the following information: (1) those impacts likely to result from the proposed taking of the species for which permit coverage is requested; (2) measures that will be implemented to monitor, minimize, and mitigate impacts; funding that will be made available to undertake such measures; and procedures to deal with unforeseen circumstances; (3) alternatives to the proposed action that would not result in take; and (4) any additional measures the Service may require as necessary or appropriate for purposes of the plan.

During the post-issuance phase, the permittee (and any other responsible entity) implements the HCP, and the Service monitors the permittee's compliance as well as the long-term progress and success of the HCP. The public is notified of permit issuance by means of the Federal Register. The HCP development phase concludes and the permit processing phase begins when a complete application package is submitted to the appropriate permit-issuing office. A complete application package typically consists of: 1) the HCP document, 2) an Implementing Agreement (IA) if applicable, 3) a permit application, and 4) a \$100 fee. The Service must also publish a Notice of Availability in the Federal Register to inform the public that they have received an application for an ITP and provide an opportunity for public review and comment. The Service also prepares an internal Section 7 Biological Opinion and a Findings document that evaluates the ITP application in the context of permit issuance criteria described below. Depending on the project scope, National Environmental Policy Act (NEPA) compliance can consist of an Environmental Action Statement, Environmental Assessment, or Environmental Impact Statement. An IA is sometimes needed HCPs that are not processed as a low-effect HCP. An ITP is granted upon a determination by the Service that all requirements for permit issuance have been met. Statutory criteria for issuance of the permit specify that: (1) the taking will be incidental; (2) the impacts of incidental take will be minimized and mitigated to the maximum extent practicable; (3) the taking will not appreciably reduce the likelihood of survival and recovery of the species in the wild; (4) the applicant(s) will provide additional measures that the Service requires as being necessary or appropriate; and (5) the Service has received assurances, as may be required, that the HCP will be implemented.

During the post-issuance phase, the permittee (or any other responsible entity) is responsible for implementing the HCP and compliance with the terms and conditions of the ITP. The Service monitors compliance with the HCP as well as its long-term progress and success.

### **1.5.3 National Environmental Policy Act**

The purpose of NEPA is two-fold: to ensure that federal agencies examine environmental impacts of their actions (in this case deciding whether to issue an ITP) and to utilize public participation. NEPA serves as an analytical tool on direct, indirect, and cumulative impacts of the proposed project alternatives to help the Service decide whether to issue an ITP (or Section 10(a)(1)(B) permit). Compliance with NEPA is required as part of the ITP issuance.

### **1.5.4 National Historic Preservation Act (NHPA)**

All federal agencies are required to examine the cultural impacts of actions they undertake or fund. This may require consultation with the State Historic Preservation Office and appropriate American Indian tribes. As part of the ITP application process, a Request for Cultural Resources Compliance form is submitted to the Service. To ensure compliance with NHPA, the applicant may be required to contract for cultural resource surveys and possibly to develop and implement mitigation.

### **1.5.5 California Environmental Quality Act**

The California Environmental Quality Act (CEQA) is a statute that is considered to be analogous to NEPA as it also requires the completion of an environmental review for projects that may impact environmental resources. It requires lead public agencies to review the environmental impacts of proposed projects, prepare and review environmental impact reports or negative declarations and to consider feasible alternatives and mitigation measures that would substantially reduce significant adverse environmental effects. It applies to a broad range of environmental resources including state and federally listed wildlife and plant species, as well as other species and natural plant communities that are considered to be locally sensitive.

The County of San Luis Obispo (County) is the lead agency responsible for conducting CEQA review and ensuring compliance for projects in the unincorporated community of Los Osos. As such, the County will evaluate the MCAS's application and ensure compliance with CEQA. Impacts to MSS represent one issue evaluated in a CEQA review; however, as with NEPA, the potential for impacts to other environmental resources is also reviewed as part of the CEQA compliance process.

### **1.5.6 California Coastal Act**

A California voter initiative, Proposition 20 (i.e., the Coastal Zone Conservation Act), passed in 1972, creating the California Coastal Commission (Commission). It was later made permanent through the passage of the California Coastal Act of 1976 (Coastal Act). The Commission is a state environmental agency charged with ensuring that all development within California's coastal zone (CZ) is consistent with the provisions of the Coastal Act. Commission jurisdiction within the CZ is broad and applies to both private and public entities and addresses almost all types of development activities inclusive of division of land, changes in the intensity of use of state waters, and of public access to the waters. The regulatory role of the Commission is facilitated through their review of development projects and the issuance of Coastal Development Permits (CDP) that typically include conditions of approval that, if met, will bring the development into compliance with the Coastal Act. In circumstances where a Local Coastal Program (LCP) has been prepared by a local agency and certified by the Commission, it is, in effect, the environmental review. In such cases, the issuance of a CDP is the responsibility of the

local agency. The Commission retains ultimate oversight and responsibility for compliance through an appeal process. The CZ encompasses waters 3 miles seaward from the coastline and generally extends inland 1,000 yards from the mean high tide line except in developed urban areas where the boundary is often less than 1,000 yards. In significant estuarine habitat and recreational areas the CZ extends inland to the first major ridge line, or 5 miles from the mean high tide line. By virtue of its proximity to the Morro Bay Estuary, the entire community of Los Osos, including the preserve, lies within the CZ. One of the primary provisions of the Coastal Act is to preserve, protect, and enhance environmentally sensitive habitat areas (ESHA). Section 30107.5 of the Coastal Act defines an ESHA as "Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

Since the proposed project is located in the CZ, implementation of the project requires a CDP to satisfy provisions of the Coastal Act. The proposed project falls within the County's Estero Planning Area, and must remain in compliance with the policies of the County's Coastal Zone Land Use Ordinance and LCP. The applicant has consulted with the County Department of Planning and Building regarding the proposed project (No. DRC2011-00013). On June 4, 2013, the County Board of Supervisors approved the applicant's Minor Use Permit/CDP and accompanying CEQA document.

## Section 2. Project Description / Activities Covered by Permit

### 2.1 Project Description

As the owner and manager of Sweet Springs Nature Preserve, MCAS wishes to implement the following: provide public access to east Sweet Springs, maintain and/or replace improvements throughout the entire preserve, and restore native vegetation throughout the preserve under the auspices of any required regulatory authorization. Therefore, the project description has been separated into the East Sweet Springs improvements and remaining activities throughout the entire 30.25-acre preserve.

#### 2.1.1 East Sweet Springs

The access improvements on East Sweet Springs include an Americans with Disabilities Act (ADA) compliant trail and boardwalk system including interpretive elements that will guide visitors to a viewing platform along the shoreline of the Morro Bay Estuary. The conceptual alignment of the trail system and its associated interpretive elements to be installed as a part of this project are shown in Figure 2. To allow for limited handicapped parking, one handicapped parking spot will be installed at the entrance to the boardwalk, and in the current unimproved pullout area that is located at the corner of 4<sup>th</sup> Street and Ramona Avenue. It is anticipated that the parking space will include an 8 foot wide vehicle space and an 8 feet wide level access aisle. Both the parking space and access would be covered with road base or decomposed granite.

In order to provide improved access for the public and reduce impacts to sensitive resources, the trail system will include a linear main trail constructed of a combination of decomposed granite and elevated wooden or composite boardwalk, which will lead from the preserve entrance to the viewing platform. The main trail will be at least 5 feet wide to provide ADA accessibility. Two spur trails will connect the main trail to the existing Central Sweet Springs Preserve, and one small loop may be installed near the middle of the main trail to provide a resting area. The main trail will originate from the southeast corner of the East Sweet Springs parcel. As recent cultural studies and MSS surveys indicate, there are sensitive resources in the areas close to the shoreline. To protect these resources, the trail will transition to an elevated boardwalk (see description below). All existing informal volunteer trails will be closed and re-vegetated to help protect sensitive areas. Permanent signs directing trail users to stay on the established trail will be installed. If needed, temporary fencing will be installed to discourage visitors from using the decommissioned trails and shortcuts.

With oversight by MSS-knowledgeable construction monitors, trail construction will begin with minor grading/earthwork to level the trail surface and prepare the trail bed. For all new/improved trails, edging will be constructed to formally delineate the trail and contain the fill material used for the trail surface. For the main trail, a geotextile fabric will be installed to line the trail bed. Decomposed granite or an equivalent will be stockpiled at the southeast service entrance. Fill material will be delivered to the trail bed via a pickup truck or bobcat where it will be leveled and compacted. The connector spur will be constructed with the sand found onsite. All trails will be installed on contour so that the

drainage regime is not significantly altered, therefore minimizing runoff, erosion, and sedimentation during and following construction.

The main trail originates from the southeast corner of the East Sweet Springs Preserve parcel. The final section of proposed trail that leads to the shoreline of the Morro Bay Estuary will be a boardwalk to minimize impacts to biological and cultural resources.

Very little grading will be necessary for construction of the elevated boardwalk. Soil disturbance will involve shallow excavation (less than 1 foot), minor leveling, and compaction during the creation of footings for the boardwalk, which will be constructed to "float" on the soil. The boardwalk will be designed and installed to meet ADA specifications and County structural requirements. The boardwalk will be 5 feet (60 inches) wide and the walking surface will vary in height above the ground to compensate for changes in grade. One section will be higher than 30 inches above ground; therefore, a railing will be installed from that point to the overlook.

The boardwalk will end at a viewing platform at a distance of approximately 90 feet south and 6 feet in elevation above the high tide shoreline. The platform will be no larger than 24 x 16 feet to accommodate multiple visitors and groups and will include interpretive panels..

The generous width of the trail and boardwalks will negate the need to construct frequent wide spots in the trail to accommodate passage and resting areas. Resting spots will be constructed every 200 feet in areas of the trail where the slope exceeds 5 percent. Three benches, including at least one that is ADA compliant, will be installed at the trail loop located approximately equidistant between the entrance and the overlook.

Interpretive panels will be installed along the main trail, spur, and boardwalks. The interpretive plan includes a community kiosk at the entrance to the preserve, two grantor/partners signs (one at the entrance to the preserve and one at the southwest pedestrian entrance), three interpretive panels will be located along the length of the main line and one will be mounted at the overlook. Additionally, the trail system will feature eight to 16 plant identification signs. The community kiosk will be a roofed two-sided upright structure with information about the preserve and current updates on the outside panels. The grantor/partners entrance panels will be 36 x 24 inches, installed on upright double pedestals. The interpretive panels will be 24 x 36 inches, mounted on double cantilevered pedestals at a 45 degree angle. The plant identification signs will be 6 x 10 inches, mounted on mini posts at a 45 degree angle. With the exception of the small plant identification signs, all pedestals will be anchored into concrete footings and will require excavation to a depth of 24 inches.

The chain link fence between East and Central Sweet Springs and along Ramona Drive and 4<sup>th</sup> Street will be removed. A post and rail fence, which matches the existing fencing at the preserve, will be installed on the same alignment along Ramona Drive and 4<sup>th</sup> Street. The boundary between the east and central preserves will be left open. The fence will cross through a culturally-significant site and habitat for MSS; therefore, the appropriate monitors will oversee construction. The post and rail fence will include 6-inch-diameter, 5- to 6-foot-tall peeler logs, anchored in cement at a depth of 2 feet, connected by two 3-inch-diameter, 8-foot stringer rails.

A bicycle rack will be installed at the primary entrance. Bicycles will not be allowed on the preserve. Trash receptacles will be available to visitors, which will be stored in a 10 feet

by 10 feet wooden shed installed at the entrance. A free standing kiosk will be located adjacent to the shed. As leashed dogs will be allowed on the preserve, the kiosk will include a “mutt mitt” dispenser.

Ongoing habitat restoration at East Sweet Springs Preserve consists of herbaceous non-native species removal, with a focus on veldt grass (*Ehrharta calycina*) removal. All habitat restoration activities will be conducted in accordance with this HCP and per the RAP. Therefore, non-native species removal will be monitored by a Service-approved MSS monitor permitted to survey for and handle MSS. A combination of manual (hand pulling), and mechanical (weedwhacking and/or mowing) techniques will be used to remove herbaceous non-native plants from the management areas.

Revegetation and stabilization will be achieved through a combination of native seeding and container stock planting. Seeds and cuttings will be collected locally and/or onsite where possible. Seed will be hand broadcast following construction activities and on sensitive areas where soil disturbance is not permissible. One-gallon container stock will be contract-grown locally and installed in areas where soil disturbance is allowed. Shovels will be used to dig the holes and all container stock will be watered. Mulch will be applied around each plant to hold in moisture and discourage the establishment of exotic species. For additional information related to planting procedures, refer to the RAP in Appendix A.

The plant species to be installed in the recovery areas will be chosen from the palette identified in the Service-approved RAP (refer to Appendix A). These species were included if they met all of the following criteria: they have been found at East Sweet Springs Preserve; they can be grown locally or acquired from commercial seed sources; and they have established successfully from seed and/or containers on local restoration sites.

Supplemental irrigation will be required during plant establishment. Irrigation water will be provided by the existing water storage tank at the southeast corner of the parcel. Irrigation will be achieved through the use of a temporary drip system consisting of above ground polyvinyl chloride (PVC) and/or 0.5-inch drip line on battery-operated timers. The systems will be designed for each area when restoration has begun. The irrigation techniques used will be non-erosive.

### **2.1.2 Entire Preserve**

Some of the infrastructure at Central Sweet Springs is over 25 years old and will require major maintenance or replacement within the next several years and on-going maintenance in perpetuity. In addition, vegetation management and habitat improvement activities are necessary to maintain and enhance biological values and the visitor experience as well as to maintain safety. Such activities may include but are not limited to trail raking/maintenance, trash and debris removal, fence repairs, kiosk and interpretive sign repairs, and foot bridge repairs.

Approximately 7 acres of the preserve supports large eucalyptus (*Eucalyptus globulus*) and Monterey cypress (*Cupressus macrocarpa*) trees. The existing and proposed trail meanders through the eucalyptus trees. In order to maintain a safe walking trail, it is necessary to remove certain branches or trees that pose a risk of falling. Tree trimming and removal occurs as necessary and is typically conducted by a certified arborist or the California Conservation Corps.

## 2.2 **Activities Covered by Permit**

The following is a list of the activities to be covered in the HCP:

- Surveys for, capture, and moving of MSS;
- Habitat enhancement activities (e.g., non-native species removal, planting and seeding native plant species, irrigation, etc.) in the HCP area and other portions of the preserve;
- Installation of access improvements (including ADA Parking Space) and other amenities on the east preserve (described in approved CDP No. DRC2011-00013, refer to Appendix E);
- Maintenance, replacement, or enhancement of existing facilities;
- Maintenance and irrigation of restored/enhanced vegetation;
- Trail construction, improvement, and maintenance;
- Tree removal or trimming; and
- Public use limited to foot traffic on the pedestrian pathway. This may include small gatherings (upto 20 people). All patrons are required to stay on the trail system.

The following describes the activities that are to be covered in the HCP.

### 2.2.1 **Surveys, Capture, and Moving of Morro Shouderband Snail**

Prior to any activity that could result in take of MSS including but not limited to trail construction, trail maintenance, facilities repair, tree removal, and habitat restoration activities, a Service-approved monitor will conduct surveys to identify live MSS that may be present. Surveys will likely involve disturbance to vegetation, capture and handling of individual MSS, and moving individual MSSs out of harm's way into existing coastal dune scrub habitat within the preserve or another receptor site approved by the Service, as necessary. If construction activities would occur during the summer months when MSS are aestivating, one thorough pre-construction survey prior to start of construction will be considered sufficient to remove MSS from the impact areas. Work shall commence within 48 hours (in dry weather) of survey completion. If activities that have the potential to affect MSS or their habitat, such as trail installation, weed control, and native plant installation, occur during the rainy season (November to March), surveys will be conducted during the activities to remove any MSS that may be present in the area.

### 2.2.2 **Habitat Enhancement Activities**

The goal of the habitat restoration effort will be to return the recovery areas and the HCP area (refer to Figure 2) to predominately native coastal scrub habitat conditions. Non-native grass species, particularly veldt grass (*Ehrharta calycina*), will be removed by hand or mechanical means, and application of grass-selective herbicides. If herbicides are used, several grow and kill periods may be necessary to eliminate the species. Broadleaf herbicides shall not be used within the recovery areas. Any broadleaf weeds present will be removed by manual techniques such as digging, hoeing, and hand pulling, to reduce

potential for impacts to volunteer native species currently becoming established in the area.

Following completion of the veldt grass grow and kill cycles, and removal, the recovery areas will be planted and seeded with native coastal dune scrub species. Planting will use native shrubs grown from seeds or cuttings obtained from within the Los Osos watershed. All seed collection will occur within the Los Osos watershed area. Existing drip irrigation will be used to support native plantings. Once plants are well established (approximately 2 to 3 years), the drip system will be removed.

Maintenance during and after installation of the plantings will be necessary to ensure success of the recovery effort. The maintenance program will ensure that watering installed plant materials, follow-up weed control, debris removal, vandalism repair, and replanting tasks are performed adequately. Maintenance should be conducted until the planted areas demonstrate self-sustaining growth patterns without the need for significant maintenance measures.

### **2.2.3 Irrigation System**

A temporary irrigation system will be installed. The irrigation will consist of the use of drip emitters or direct hand watering to promote the establishment of native seeds and plantings. Although planting and seeding efforts will be timed to take advantage of natural precipitation patterns, use of the irrigation system is expected to be necessary in the first and second seasons following plant installation or if drought conditions persist.

### **2.2.4 Erosion Control and Repair**

Most of the restoration efforts will be conducted in areas with relatively flat terrain underlain by Baywood fine sand that experiences minimal surface runoff. Due to these factors, erosion resulting from the habitat restoration activities is not expected to be a significant issue. However, to ensure that erosion does not become a problem, MCAS will routinely inspect the management areas for erosion and address any problems as they arise. If erosion occurs in a particular area, MCAS will repair the area with industry accepted materials and methods. At a minimum, MCAS will have shovels available at all times to redirect any surface flows that are creating the erosion problem and to replace soil that may have been removed. MSS can be attracted to certain erosion control materials such as straw wattles, silt fence, and sandbags. Therefore, use of these erosion control materials should be avoided if feasible. If these materials must be used, a qualified monitor shall survey the materials for MSS before they are removed. If MSS are found utilizing the erosion control materials, the individuals shall be relocated to suitable habitat on the preserve, prior to removing the erosion control devices.

If a particular restoration activity results in the loss of vegetative cover in an area, immediately following completion of the activity, MCAS will apply native seed and jute netting in the disturbed area. The jute netting will protect the ground surface from rain drop impact and provide a protective cover for the native seed.

### **2.2.5 Installation of Access Improvements**

Most of the construction work will be done using hand tools. Minor grading will be conducted with shovels, McLeods, and rakes. Edging will be placed to formally delineate the trail and contain the fill material used for the trail surface. Geotextile fabric will be installed to line the trail bed of the main line. Decomposed granite or an equivalent will be

stockpiled at the southeast service entrance and delivered to the trail bed via a pickup truck or bobcat where it will be leveled and compacted. The connector spur will be constructed by hand using native soil on-site. The boardwalk sections of trail and viewing platform will be constructed by personnel using hand tools in order to minimize impacts to biological and cultural resources. The handicapped parking spot will be installed with small equipment and covered with roadbase or decomposed granite.

### **2.2.6 Maintenance, Replacement or Enhancement of Facilities**

Maintenance and replacement activities will be on-going and will most likely include trail maintenance, fence repairs, sign repairs, trash removal, irrigation repairs, and bench repairs. Trail maintenance will focus on keeping the trails clear of debris and repairing erosion as necessary. The sections of trail located under eucalyptus will be raked as necessary to remove duff and branches. When necessary, volunteers and/or MCAS staff will use, shovels, rakes, eucalyptus branches and occasionally lumber to repair trail surfaces and borders. Fence repairs will include replacing decaying peeler logs or rails as necessary. Due to ultraviolet (UV) damage, vandalism, and moisture, the interpretive signs on the preserve will be replaced as necessary. Sign replacement may include removing and replacement of the signs pictures or replacement of the kiosk structures. Trash removal is ongoing at the preserve and is typically confined to the preserve entrance areas. Above ground temporary irrigation will be used in the active recovery areas to reduce the need for soil disturbance while making repairs. Coyote and other wildlife often chew holes in the irrigation line to access the water. Sections of damaged irrigation will be replaced, as needed, using hand tools. Benches will be repaired with new lumber using hand tools as necessary.

### **2.2.7 Maintenance of Vegetation**

Vegetation maintenance will be conducted regularly and may include minor vegetation removal, non-native species removal, and tree trimming. The above mentioned facilities maintenance activities may include minor vegetation removal or trimming. In addition, the restoration areas will be weeded and maintained by the permittee for the duration of the permit period, and, if necessary, the permit will be extended to allow additional maintenance to be conducted. Maintenance is expected to consist primarily of weed removal efforts, the need for which should decrease over time as native species increase in dominance and weed seed stocks are depleted. Tree trimming will be conducted to keep trails safe.

### **2.2.8 Public use**

MCAS seeks to provide a natural place for the public to enjoy. Public will use the preserve for trail walking, bird watching, small events, and other activities. Under current MCAS policy, small events are limited to 20 people. Recently allowed events have included educational walks that are instructor or docent lead, weddings, and religious ceremonies. Events that include more than 20 people and up to 50 people are required to stay on the existing outlook and dirt trails located on the west and central preserve areas. Public trail use is confined to the trail system. The trail system will include signs stating "no off trail use allowed" and a four-foot tall rail will be installed on certain parts of the trail at east preserve to deter off-trail use.

## Section 3. Environmental Setting / Covered Species

### 3.1 Environmental Setting

The preserve supports maritime chaparral, non-native perennial grassland, coastal dune scrub, mixed eucalyptus woodland, and a variety of wetland habitats. The maritime chaparral and coastal dune scrub provide valuable native habitat for MSS. The species also does utilize the non-native perennial grasslands on the preserve; however, use of this habitat is likely due to necessity rather than preference. The eucalyptus woodlands and various wetland habitats on the preserve do not provide suitable MSS habitat.

Central maritime chaparral is a shrub-dominated community commonly found on sandy soils in coastal environments. The southwestern corner of the central preserve supports a stand of intact maritime chaparral and chaparral restored by MCAS. The intact maritime chaparral is characterized by 70-90 percent cover by coastal buckwheat (*Eriogonum parvifolium*), Morro manzanita (*Arctostaphylos morroensis*), silver dune lupine (*Lupinus chamissonis*), black sage (*Salvia mellifera*), coyote brush (*Baccharis pilularis* ssp. *consanguinea*), and mock heather (*Ericameria ericoides*). This chaparral transitions to disturbed chaparral at the edge of the eucalyptus woodland. The presence of maritime chaparral species is reduced and shaded by eucalyptus and Monterey cypress trees. The shade and litter from these trees has limited the growth of chaparral species resulting in an understory of sparse herbaceous weeds. The presence of maritime chaparral associates indicates that this area likely supported maritime chaparral in the past. Habitat restoration efforts will aim to expand maritime chaparral into this area as part of increasing native MSS habitat on the preserve.

Non-native perennial grassland is found in disturbed areas throughout coastal central California. Grass species in this community are usually tussock forming and often include either perennial veldt grass or fountain grass (*Pennisetum setaceum*). The east preserve supports non-native perennial grassland dominated by veldt grass. Veldt grass is widespread in the Los Osos area where it quickly invades disturbed sites and alters the native shrublands. When a shrubland is invaded by veldt grass, the resulting community is characteristic of non-native grassland that supports only remnant native shrubs.

The non-native perennial grassland on the east preserve have been mowed for generations, resulting in sparse to thick coverage of veldt grass with remnant patches of coastal dune scrub species and woody debris piles. Due to past disturbances and resulting veldt grass invasion, the coastal dune scrub is patchy and too discontinuous to be considered an intact community. Coastal dune scrub species in the area include coyote brush, mock heather, black sage, silver dune lupine, and California croton (*Croton californicus*). Coastal dune scrub provides the best habitat for MSS; therefore, restoration efforts in this area will focus on expanding the coastal dune scrub. Since 2011, MCAS has been restoring some of the non-native perennial grassland areas to coastal dune scrub.

Eucalyptus woodlands occur throughout coastal California and are dominated by various eucalyptus species. The eucalyptus woodlands on the preserve are dominated by blue gum eucalyptus but also include occurrences of planted Monterey cypress and the occasional coast live oak (*Quercus agrifolia*). These woodlands occur in both wet and dry areas on the preserve.

Woodlands located within the dry areas are almost completely covered with a thick layer of litter that has greatly limited the growth of understory vegetation. Some wetland species have successfully survived under the woodlands within the wet areas. Due to the presence of a thick eucalyptus duff layer and lack of significant vegetation in the dry portions of the eucalyptus woodland, these areas do not provide suitable MSS habitat. Additionally, the presence of wetland soils in the wet portions of the eucalyptus woodlands renders these areas unsuitable for MSS.

A large portion of the preserve consists of various wetland habitats including open water ponds, coastal salt marsh, freshwater marsh, mudflats, and thickets of California blackberry (*Rubus ursinus*) and willow (*Salix* spp.). These areas support a diverse assemblage of wetland species that provide dense vegetative cover; however, are not considered to be suitable habitat for MSS.

Habitats on the preserve support the following special-status species: MSS, California sea-blite (*Suaeda californica*; federally listed), Blochman's leafy daisy (*Erigeron blochmaniae*), sand almond (*Prunus fasciculata* var. *punctata*), Leopold's rush (*Juncus acutus* ssp. *leopoldii*), saltmarsh bird's beak (*Chloropyron maritimum* ssp. *maritimum*; federally listed), marsh sandwort (*Arenaria paludicola* [self sustaining planted population; federally listed]), Morro manzanita (federally listed), and suffrutescent wallflower (*Erysimum insulare* ssp. *suffrutescens*). Blochman's leafy daisy, sand almond, and suffrutescent wallflower are associates of MSS habitats; therefore, these species presence in the covered lands was considered when identifying the recovery areas proposed in this HCP.

### **3.1.1 Climate**

In the plan area, the summer temperature range is from 50 degrees Fahrenheit (°F) to 70°F, and average is 58°F. The winter temperature range is from 52°F to 55°F, and average is 53°F. Annual precipitation is approximately 17 inches per year. All precipitation falls as rain. The rainy season is from October to March, with the majority of the rainfall occurring between January and March.

### **3.1.2 Topography/Geology**

Elevation at the preserve ranges from approximately sea level to 40 feet. The preserve slopes slightly to the northwest. Soils are mapped as approximately 25 percent Baywood fine sand, 2 to 9 percent slopes, 15 percent Baywood fine sand 9 to 15 percent slopes, and 60 percent Aquolls, saline (mainly the coastal salt marsh areas of the preserve).

### **3.1.3 Hydrology/Streams, Rivers, Drainages**

The plan area is within the Los Osos Creek watershed. Two drainages are present at the preserve. The first is located near the northern boundary of the east preserve; the second is located on the central preserve. Both drainages support emergent freshwater vegetation. The drainage on the central preserve includes open water habitat. The entire preserve lies along the south edge of Morro Bay. Therefore, portions of the preserve lie within a flood zone.

### **3.1.4 Existing Land Use**

East Sweet Springs Preserve is zoned Residential Suburban and Open Space, while the remainder of the preserve does not have a County land use category designation. Permit authority was reserved by the Commission when the County's LCP was certified by the Commission in 1988. Existing land use consists of a privately-owned nature preserve.

Currently, only the central portion of the preserve is open to the public. There are no plans to open the western portion to the public.

## **3.2 Morro Shoulderband Snail**

### **3.2.1 Status, Distribution, and Trends**

The MSS is a native gastropod endemic to the Los Osos, Baywood Park, and southern Morro Bay region of coastal central San Luis Obispo County, California. The MSS was federally listed as endangered on December 15, 1994 (Service 1994), and a recovery plan for the species and four plants from western San Luis Obispo County was completed in September 1998 (Service 1998). A 5-year status review for the MSS was completed in 2006 (Service 2006).

On February 7, 2001, the Service designated 2,566 acres of critical habitat for MSS. The acreage occurs in three distinct units, each unit representing a core population of MSS and considered essential for maintenance of the species' geographic distribution and genetic variability. The primary constituent elements of critical habitat for the MSS are those physical and biological features essential to the conservation of the species and include the following: sand or sandy soils needed for reproduction, a slope not greater than 10% to facilitate movement of individuals, and the presence of native coastal dune scrub vegetation.

The MSS is restricted to areas of sandy soils in the town of Los Osos and near Morro Bay in San Luis Obispo County. In 1985, Roth found that the geographic limits of this species generally coincided with the limits of stabilized, vegetated, dune habitats located east, southeast, and south of Morro Bay. The current known range is slightly expanded and covers approximately 7,700 acres, extending from Morro Strand State Beach in northern Morro Bay southward to Montaña de Oro State Park and inland to at least Los Osos Creek in eastern Los Osos (Service 2006). Since its listing, more surveys have been conducted, and information on the distribution and abundance of this species is increasing. However, the increase in number of known populations may be attributed to the increase in surveys. These data are not sufficient to determine a population trend. MSS populations may be increasing, or are at least stable and or increasing and not decreasing (Service 2006).

At the time of listing, identified threats included habitat loss or degradation, competition from non-native snail species, off-highway vehicle activity, and use of pesticides. The threats identified in the listing rule have diminished; however, loss and degradation of habitat continues to constitute a threat to the species. Dehydration is a major threat to all terrestrial mollusks and, therefore, a major threat to the MSS is exposure that results from partial or complete removal of protective, sheltering vegetation. As with other species of Helminthoglypta, MSS are likely subject to predation by small mammals and snakes (Service 1998). MSS may suffer physiological stress or even death if their epiphragm (a seal of dried mucus in the aperture of the shell) is broken or they are exposed to otherwise desiccating conditions during aestivation. However, recent evidence indicates that individuals can survive being relocated while in aestivation, provided they are relocated to areas with substantial shelter (SWCA 2014).

### **3.2.2 Habitat Characteristics/Use**

In its native habitat on Baywood fine sandy soils, the MSS is typically found in the accumulated leaf litter and the undersides of lower branches of shrub species of coastal

dune scrub. Common plant species with which MSS have been associated include mock heather (*Ericameria ericoides*), seaside golden yarrow (*Eriophyllum staechadifolium*), deerweed, dune lupine, and dune almond (*Prunus fasciculata* var. *punctata*). Typically, shrubs that support MSS exhibit dense, low growth with ample contact with the ground. MSS are also commonly found in non-native iceplant species and the non-native perennial veldt grass. Recent survey data indicates that MSS are opportunistic and will utilize almost anything that provides structure and protection. Surveys have found MSS associated with old tires, wood and brush piles, deadwood, trash and debris, building foundations, fence boards, and other protected areas, sometimes with little or no coastal scrub habitat present nearby (SWCA 2014).

Active MSS are typically observed when increased moisture availability facilitates their ability to find food, disperse, and mate. In the dry season, MSS, like other terrestrial snail species, aestivate in accumulated litter, and attached to the branches of shrubs and other structural materials as described above. As with other snails in the genus *Helminthoglypta*, this species aestivates by producing an epiphragm to reduce water loss during the dry season.

### **3.2.3 Critical Habitat for Morro Shoulderband Snail**

On February 7, 2010, the Service designated 2,566 acres of critical habitat for MSS. Each of the three units represents a core population of MSS and is considered to be essential for maintenance of the species' geographic distribution and genetic variability. The primary constituent elements of critical habitat for the MSS are considered to be those physical and biological features essential to the conservation of the species and include the following: sand or sandy soils needed for reproduction, a slope not greater than 10% to facilitate movement of individuals, and the presence of native coastal dune scrub vegetation.

The proposed project is not located within critical habitat for the MSS and, as such, critical habitat will not be addressed further in this document.

### **3.2.4 Occurrence within the Project Area**

Five protocol surveys were conducted on the east portion of the preserve in 2008 and 2009 (refer to Appendix D). In addition, non-protocol surveys are regularly conducted during habitat restoration activities on the east and the central portions of the preserve. The past surveys have identified approximately 140 live MSS and numerous empty shells on various portions of the preserve. Most of the identified occurrences were concentrated in and directly adjacent to remnant coastal dune scrub and woody debris piles located at the northern and southern ends of the east preserve. Only six live individuals were observed in grassland areas removed from the coastal scrub or woody debris. Two of these six were located in escaped ornamental ground cover at the base of the chain link fence adjacent to Ramona Avenue.

Surveys conducted in support of ongoing habitat restoration activities have identified MSS utilizing maritime chaparral, veldt grass, woody debris, wood chips, and other debris for shelter on the preserve.

### **3.3 *Federally-Listed Plant Species***

Morro manzanita may not have occurred on the preserve prior to the 1980s, when MCAS began native plant restoration activities on the property. Several Morro manzanita shrubs were planted on the central portion north of Ramona Avenue and east of Broderson Avenue. These shrubs are not located near any existing trails or facilities. In addition, none of the proposed improvements would be located near the shrubs. The proposed covered activities would have no effect on the Morro manzanita shrubs.

A population of marsh sandwort was introduced in 2003 to the freshwater marsh immediately east of the pond on the central portion of the preserve. This population has thrived, and now occupies several square meters. None of the proposed activities would occur in the freshwater marsh; therefore, the proposed covered activities would have no effect on the marsh sandwort plants on the preserve.

Anticipated trail development and preserve maintenance activities are not expected to affect the introduced Morro manzanita or marsh sandwort. However, these rare plant species are promoted on the preserve. Therefore, MCAS's management actions will continue to conserve the species on the preserve.

## Section 4. Potential Biological Impacts/ Take Assessment

### 4.1 *Direct and Indirect Impacts*

This section analyzes direct and indirect effects of the proposed coastal access trail, habitat restoration activities, and preserve maintenance on the MSS. Direct impacts may occur during vegetation removal and grading in the trail alignment, habitat restoration activities, trail maintenance, and fence installation and repairs. Indirect impacts are expected to occur on and directly adjacent to trails during trail maintenance and unauthorized off trail pedestrian use within the HCP Area.

Implementation of the proposed restoration activities has the potential to cause short-term negative impacts to MSS and MSS habitats in the preserve. Potential impacts include injury or mortality from crushing individual MSS or improper relocation of MSS during survey and weed eradication efforts, loss of shelter after removal of exotic vegetation, and potential contact with herbicides.

Direct impacts of covered activities will include:

- Permanent loss of 6,500 square feet (0.15 acre) of non-native perennial grassland habitat areas containing MSS.
- Take in the form of capture of MSS that are found in the impact areas during capture and relocation of individuals out of harm's way.
- Take in the form of injury or mortality to those MSS in the disturbance areas that may be overlooked during the pre-disturbance capture and relocation efforts.

Indirect impacts of the project may include:

- On occasion MSS may be trampled, collected, or exposed by authorized trail use and unauthorized off-trail pedestrian traffic.
- A temporary loss of non-native MSS shelter habitat may occur during those times when non-native vegetation has been removed from an area and the planted native vegetation has yet to develop suitable shelter habitat.

The proposed project aims to restore native MSS habitat at the preserve. This goal coupled with the proposed minimization and mitigation measures will result in a project that will have a net long-term benefit for the covered species.

Successful project implementation and management of the preserve is expected to contribute to the recovery of MSS and benefit existing populations of common and special-status plant species within the preserve. These benefits will result from habitat enhancement, removal of exotic species, pedestrian access restrictions to reduce erosion and allow regeneration of native vegetation, and revegetation with native coastal dune scrub plant species. The efforts will reduce the spread of non-native plant species and begin a significant trend towards fewer non-native

species, decreased erosion, and improved native habitat quality. Implementation of the project will greatly enhance habitat values in the preserve, and will provide for the long-term persistence of those habitats.

## **4.2 Anticipated Take of Morro Shoulderband Snail**

Take of MSS anticipated to result from the covered activities identified in Section 2.2 is considered to be insignificant in terms of the species' survival and recovery. The actual number of animals subject to incidental take in the form of injury or mortality is expected to be very low. Incidental take of MSS would largely be in the form of harassment and would occur when individuals identified as part of monitoring are captured and moved out of harm's way. The MSS habitat in the preserve includes a mix of non-native habitat, coastal dune scrub, and maritime chaparral. The trail improvement locations are focused in degraded areas with little current value to MSS. As part of the project, all MSS habitat areas not permanently lost would be restored and enhanced to increase their value and function for MSS use. The project site is not located in critical habitat for MSS. For these reasons, the level of take of the MSS that would result from implementation of the coastal access trail and habitat restoration project is considered to be negligible and will be offset by the conservation strategy, which focuses on native habitat enhancement and restoration. Once completed, the proposed habitat restoration activities are expected to result in a net benefit to MSS.

## **4.3 Impacts to Critical Habitat**

The preserve is not located within critical habitat designated for the MSS on February 7, 2001 (Service 2001). For this reason, project implementation will not result in modification or destruction of critical habitat.

## **4.4 Cumulative Impacts**

In contrast with the analysis of cumulative impacts under section 7, section 10(a)(1)(B) of the Act and supporting conservation plans analyze cumulative impacts as incremental effects of the action on the environment when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. The geographic area for analysis should be defined by the manifestation of direct or indirect impacts as a result of covered activities. Cumulative impacts under section 10 of the Act can result from individually minor but collectively significant actions taking place over a period of time.

Lands surrounding the preserve currently contain residential housing, undeveloped land, and the Morro Bay Estuary. Many of these uses predate the listing date of MSS. Historically, these developments likely removed and caused the fragmentation of habitat for MSS, and also likely resulted in direct mortality of MSS.

The net effect of this project will be that MSS habitat on the preserve will be restored and protected in perpetuity for the benefit of MSS. Restoration of dune scrub habitat on the preserve will enhance habitat for MSS in the area by increasing the abundance of native MSS habitat in this portion of Los Osos.

Because of the restoration and preservation of habitat on the preserve, the cumulative impacts of this project on the persistence of MSS and suitable native habitat are expected to be beneficial.

#### **4.5 *Anticipated Effects of the Taking***

Since the project includes a preserve-wide plan to enhance MSS habitat, the effect of any taking of MSS resulting from project implementation is expected to be negligible. The overall effect of the proposed project will be an increase in the quality and quantity of native habitat for MSS. The enhanced MSS habitat would be protected from development in perpetuity, and would ultimately improve habitat connectivity between existing patches of MSS habitat on the preserve. The proposed restoration portion of the proposed project would restore, preserve, maintain habitat opportunities for MSS on the preserve.

Neither the mortality of MSS potentially occupying the areas proposed to be disturbed, nor the permanent removal of non-native grassland habitat, are anticipated to affect the persistence of the population of MSS in the central Los Osos region or recovery of the species.

## Section 5. Conservation Program / Measures to Minimize and Mitigate Take

### 5.1 Biological Goals and Objectives

Section 10(a)(2)(A) of the Act requires that an HCP specify the measures that the permittee will take to minimize and mitigate, to the maximum extent practicable, the impacts of the taking of any federally listed animal species as a result of activities addressed by the plan.

As part of the “Five Point” Policy adopted by the Service in 2000, HCPs must establish biological goals and objectives (65 *Federal Register* 35242, June 1, 2000). The purpose of the biological goals is to ensure that the operating conservation program in the HCP is consistent with the conservation and recovery goals established for the species. The goals are also intended to provide to the applicant an understanding of why these actions are necessary. These goals are developed based upon the species’ biology, threats to the species, the potential effects of the Covered Activities, and the scope of the HCP.

The biological goals and objectives of this HCP are as follows:

Goal 1: To minimize take of MSS during preserve improvements and maintenance.

*Objective 1.1:* Survey for, capture, and move MSS from impact areas by performing surveys prior to and, if necessary, during any activities that may result in take of MSS. Since the HCP Recovery Area may not be fully restored and capable of sheltering MSS for several years, captured individuals may be moved to established native MSS habitat on the east or central preserve.

Goal 2: To mitigate for unavoidable take, MCAS will restore, preserve, and maintain native coastal dune scrub habitat for MSS within the on-site HCP mitigation area and throughout the appropriate portions of the preserve.

*Objective 2.1:* Restore native dune scrub habitat throughout the preserve, as described in the Service-approved Recovery Action Plan, including the 0.5-acre HCP mitigation area. Habitat restoration will be accomplished via removal of exotic species, including veldt grass and select eucalyptus trees, and planting and seeding of native plants.

*Objective 2.2:* Maintain the HCP mitigation area and other habitat areas through regular non-native plant species removal efforts.

### 5.2 Avoidance, Minimization, and Mitigation Measures

As part of an application for an ITP, HCPs must contain measures to “minimize and mitigate” the effects of take that is being requested in the permit. An HCP’s mitigation program should be based

on sound biological rationale. The mitigation program should be practicable and commensurate with the effects of the taking. The Service encourages applicants to develop minimization and mitigation measures that will contribute to the recovery of the covered species.

In accordance with these guidelines and the requirements of the Endangered Species Act, the Conservation Program of this HCP is intended to achieve its biological goals and objectives and to ensure that the effects of the Covered Activities on the MSS are minimized and mitigated to the maximum extent practicable, and contribute to the recovery of the species (refer to Table 2).

## **5.2.1 Measures to Avoid Impacts**

### **5.2.1.1 Design of Impact Areas**

The proposed trail development and on-going uses have been designed to avoid impacts to native MSS habitat. All proposed trail improvements would be located within disturbed areas, would maintain habitat connectivity, and avoid habitat fragmentation to the greatest extent feasible. In addition, installation of the trail and pathway will concentrate foot traffic in designated areas thus reducing the potential for trampling MSS habitat in other parts of the preserve.

### **5.2.1.2 Protective Delineation**

Before any grading or materials delivery occurs, MSS will be removed from the designated work areas and the the work areas will be flagged to establish the limits of construction activities. This flagging will consist of wood lath and brightly colored flags set at least 3 feet outside the HCP restoration area boundary line. This setback will eliminate the potential for soil or material stockpiles to slump or fall into the restoration area.

During or immediately following construction, permanent fencing will be installed along the preserve boundary at Ramona and Broderson avenues. This fence will be constructed from wood, and will provide a clear boundary barrier between the preserve and the surrounding urban areas. Although permanent fencing will not be installed to separate the trails from the HCP area, the trails have been designed to focus foot disturbance away from habitat areas. As stated above, temporary fencing will be installed to exclude pedestrian traffic into habitat areas, if human egress into the areas becomes a problem.

### **5.2.1.3 Sediment and Erosion Control**

All sediment and erosion control measures established for the project shall direct stormwater flows away from the HCP mitigation area and the existing restoration areas.

## **5.2.2 Measures to Minimize Impacts**

### **5.2.2.1 Surveys for, Capture, and Moving of Morro Shoulderband Snails**

To reduce the potential for take of MSS in the form of injury or direct mortality, a Service-approved monitor will survey the work areas (and any other areas where take may occur) for MSS that may be present. Any identified individuals, in all life stages, will be captured and moved out of harm's way. All efforts will be made to locate and move live snails. All living snails that are identified will be captured and moved to suitable areas within the preserve. The size, age-class, location of capture, and release site location will be recorded for each individual MSS moved from the affected work area. Empty shells will be noted on a map, counted, and classified by size and age. These shells will be left in place. The monitor will document those activities associated with all surveys and prepare report(s) for submittal to the Service in accordance with the reporting section to follow.

Surveys will be conducted within 48 hours prior to commencement of initial ground disturbance activities, including vegetation removal, materials staging, grading, etc. If pre-construction surveys occur during the summer months (April through October), when MSS are aestivating, one intensive survey conducted by at least two permitted monitors immediately prior to construction should be sufficient to remove the MSS from the development areas. The survey process will involve moving and searching under all vegetation, and anthropogenic artifacts present (e.g., woodpiles, tires, debris), and will result in destruction or uprooting of vegetation. If pre-construction surveys occur during the rainy season (November through March) multiple surveys prior to initial disturbance may be needed to identify all MSS present in the work area.

The intent of the pre-construction survey(s) is to capture and remove all MSS observed during an intensive search of the work area. However, previous experience has shown that due to the small size and cryptic nature of the species, some individuals can be missed during even the most thorough effort, and may then become visible during ground disturbance. To address this possibility, a permitted monitor will also be present during all grading and grubbing activities to capture and move any additional MSS discovered.

If major construction activities that have the potential to affect MSS or their habitat, such as grading or cement pouring, occur during the rainy season, daily surveys will be conducted at the beginning of each work day to check for and remove any MSS that may have entered the construction area.

#### **5.2.2.2 Contractor and Employee Training/Education**

A Service-approved monitor with demonstrable knowledge and experience with MSS and its habitat will conduct pre-construction environmental awareness training sessions for all construction and volunteer personnel. The sessions are intended to inform construction crews, field supervisors, and volunteers about the status and presence of the species, grading and construction-activity restrictions, and those minimization measures specified in the HCP.

### **5.2.3 Measures to Mitigate Unavoidable Impacts**

MCAS proposes to establish a 0.5-acre HCP Mitigation Area within Recovery Action Plan Area 1 to mitigate unavoidable impacts to MSS (refer to Figure 2). The proposed mitigation area is gently sloping, dominated by veldt grass, and contains scattered native plants, some of which have been planted during on-going habitat restoration efforts. The 0.5-acre HCP Mitigation Area is based on the anticipated square feet of disturbance that may result from the various physical improvements (kiosk, paths, boardwalk, etc. – 6,500 square feet), plus an additional amount to account for the other covered activities identified in Section 2.2. An area of disturbance for the activities other than the physical improvements is difficult to estimate, but is assumed to be less than half of the area of physical improvements. A multiplier of two was chosen to mitigate the impacts of all activities because the project's overall impact is minimal and additional areas of the preserve will be restored to coastal dune scrub (apart from requirements of this HCP). The mitigation area of 0.5 acre was determined by multiplying 6,500 square feet times the factor of two (13,000 square feet or 0.3 acre), then adding an additional 0.2 acre for the impacts which are more difficult to quantify.

The 0.5-acre mitigation area will be within the area identified as Recovery Area 1 in the RAP (refer to Figure 2). The reasons for choosing a portion of Recovery Area 1 and not its entirety are: 1) 1 acre of Recovery Area 1 is already committed to mitigation for an off-

site project; and 2) MCAS wishes not to limit opportunities for obtaining grant funding for restoration by restricting more area than necessary.

#### **5.2.3.1 Coastal Dune Scrub Habitat Restoration**

MCAS will restore coastal dune scrub habitat in the HCP Mitigation Area and the recovery areas to provide native habitat conditions for MSS. Habitat restoration will be accomplished via the removal of non-native plants, planting and seeding with native species, and regular maintenance. The goal of the habitat restoration effort will be to return the appropriate areas to predominately native coastal scrub habitat conditions. Non-native grass species, particularly veldt grass, will be removed by hand or application of grass-selective herbicides.

Removal of non-native non-native plant species is crucial to success of the restoration effort. Non-native, non-native plant species must be removed from or substantially reduced in an area prior to planting native plants or sowing native seed. Manual removal is the preferred method for removal within the preserve; however, use of herbicides is proposed to control species that are difficult to eliminate by manual techniques. Herbicide use may be necessary to adequately control English ivy (*Hedera helix*) and veldt grass. Herbicide applications in the preserve will follow Service Programmatic Biological Opinion requirements as included in the Service-approved RAP. Extreme care shall be taken during herbicide application(s) to avoid damage to native plants, MSS, and other wildlife.

The removal methods presented below have been designed to match specific target plants, while minimizing damage to adjacent native plants and wildlife. Removal methods for the primary target species are listed below. Other weedy species encountered should be removed by hand as they are encountered during weed removal activities.

All habitat restoration activities will be conducted pursuant the the Service-approved RAP (refer to Appendix A). The RAP provides detailed procedures for implementing habitat restoration on the preserve. Please refer to the RAP for detailed discussions of how MSS habitat in the HCP mitigation area will be restored.

**Table 1. Summary of Minimization and Mitigation Measures and Corresponding Biological Goals and Objectives**

Covered Activity	Form of Take	Expected Take or Impact	Avoidance, Minimization, & Mitigation Measures	Biological Goals and Objectives Met
MSS surveys, capture, and moving	Harassment, injury, or mortality of MSS	All suitable habitat in the development and restoration areas would be surveyed for MSS. Identified MSS would be captured and moved to suitable habitat within the preserve. It is anticipated that capturing and relocating MSS would be the most common form of take experienced with the project.	MSS surveys, capture, and moving of individuals will be performed by a Service-approved monitor holding a section 10(a)(1)(A) permit for MSS.	Minimize take of MSS in the form of injury or mortality within the affected area.
Vegetation removal and grading	Harassment, injury, or mortality of MSS	Expected to be very few; only individuals that were not identified and moved out of harm's way during pre-construction surveys.	MSS surveys, relocation, contractor and worker education, and monitoring conducted by Service-approved monitor. Protective fencing installation.	Minimize unavoidable take of MSS within the affected areas.
Facilities maintenance	Harassment, injury, or mortality of MSS that may move into maintenance areas	Expected to be few; only individuals found during daily pre-construction surveys.	MSS surveys and relocation, contractor and volunteer worker education, and monitoring.	Minimize take of MSS in the form of injury or mortality within the affected area.
Habitat restoration and maintenance activities	Harassment, injury, or mortality of MSS	Expected to be minor, occurring primarily during initial exotic species removal and planting efforts. Expected to decrease as native species cover increases.	Habitat restoration activities will be performed by the permittee, and as described in the MSS RAP.	Restore, preserve, and maintain native coastal dune scrub habitat for MSS in the conservation area.



## **5.3 Monitoring**

Monitoring tracks compliance with the terms and conditions of the HCP, IA (if needed), and permit. There are three types of monitoring: (1) compliance monitoring to track the permit holder's compliance with the requirements specified in the HCP and permit; (2) effects monitoring to track the impacts of the covered activities on the covered species; and (3) effectiveness monitoring to track the progress of the conservation strategy in meeting the HCP's biological goals and objectives (includes species surveys, reproductive success, etc.). Monitoring provides information for making adaptive management decisions.

Any potential habitat degradation or other threats to MSS will be identified during construction compliance and effects monitoring by the approved monitor, and during effectiveness monitoring conducted by the permittee during the permit period. Suitable measures to remediate identified habitat degradation or potential threats will be implemented with concurrence from the Service.

### **5.3.1 Compliance Monitoring**

Upon issuance of the permit, a Service-approved monitor will conduct compliance monitoring during construction of the project and habitat restoration activities. This monitor will ensure that the required minimization measures, such as protective fencing and environmental training, are implemented. Results of the compliance monitoring will be reported in the first annual report for the project.

### **5.3.2 Effects Monitoring**

To quantify the amount of incidental take resulting from project implementation, the Service-approved monitor will document the number and age class of individual MSS that were captured and moved, as well as the number of MSS injured or killed during implementation of the minimization measures or any aspect of project implementation. This information will be included in each annual report for the project.

### **5.3.3 Effectiveness Monitoring**

The recovery areas and the HCP Mitigation Area will undergo on-going monitoring in perpetuity. Monitoring activities will be documented and the resulting reports will be submitted to the Service annually for 14 years or while restoration activities are being performed following the 12-month construction period. The annual monitoring will be conducted by the permittee, and will focus on measuring cover of non-native plants and ensuring that the management areas are meeting the performance standards outlined in this HCP and the attached RAP. During the monitoring period, the HCP mitigation area will be visually inspected for disturbance that could negatively affect MSS.

## **5.4 Performance and Success Criteria**

The overall goal of this HCP is to restore and preserve high quality, occupied habitat for MSS within the HCP Mitigation Area. Performance criteria for each objective stated in Section 5.1 are as follows:

*Objective 1.1: Remove MSS from the 6,500-square-foot development area by performing surveys prior to and, if necessary, during construction, and moving all identified MSS (in all life stages) to suitable habitat within the recovery area.*

Performance Criteria

- A qualified monitor holding a valid Section 10(a)(1)(A) permit for MSS will conduct all surveys for, capture of, and moving of MSS. Upon completion of all necessary surveys, this monitor will submit a report to the Service detailing survey methods, number, age class, and location of MSS found; number of MSS moved; location of capture and relocation areas; and any mortality of MSS.

*Objective 2.1: Restore native coastal dune scrub habitat on the 0.5-acre HCP Recovery Area through removal of exotic species, particularly veldt grass, and planting and seeding of native plants.*

Performance Criteria

- Cover of non-native weed plants within the 0.5-acre HCP Recovery Area will continually decline.
- Cover of coastal dune scrub species shall show a notable increase on an annual basis.

*Objective 2.2: Maintain the habitat value of the HCP Recovery Area in perpetuity through regular weed control efforts as required by the Service under this HCP.*

Performance criteria:

- The project success criteria will be based on the continual decrease in non-native species cover and gradual increase in native species cover. Annual monitoring will be conducted to quantify success of the restoration efforts. The success of the restoration activities will be assessed by comparing baseline data with future annual survey results. The goal is to gradually increase MSS habitat by reducing non-native species cover and improving native habitat quality within the preserve. MCAS will implement an annual monitoring program to ensure that their efforts are working toward achieving the project goal.
- Project success will be based on the relative cover of non-native (not just non-native) species in the restoration areas. The success criterion for percent cover of non-native species will be based on the existing conditions (baseline) of the restoration areas prior to planting and weeding efforts. Immediately prior to preparing a site for restoration, MCAS (or a representative) will measure the percent cover of non-native species in the area. The observed percent cover of exotic species will be used as the baseline for the following year. In each subsequent year, the restoration specialist will collect percent cover data utilizing the same method chosen for the baseline data collection. MCAS will compare the new data with the prior year's data to determine if the annual goal was achieved. The annual goal for the project is a 5% reduction in exotic species each year for up to 9 years. MCAS will choose the monitoring method to be used; this HCP recommends utilizing the Step Point method or Line Intercept method.

## **5.5 Adaptive Management Strategy**

For some HCPs, the adaptive management strategy will be an integral part of an operating conservation program that addresses the uncertainty in the conservation of a species covered by an HCP. Adaptive management should identify and address the uncertainty, incorporating a range of previously agreed-upon alternatives for addressing those uncertainties, integrating a monitoring program that detects the necessary information, and incorporating a feedback loop that links implementation and monitoring to a decision-making process that results in appropriate changes in management. Adaptive management should help the permittee achieve the biological goals and objectives of the HCP.

Adaptive management will be used if success criteria prove insufficient to achieve the biological goals or objectives set forth in this HCP or if success criteria require more than is necessary to achieve the biological goals and/or objectives. Success criteria may be modified to more quickly and more efficiently achieve biological goals, and may include changes in restoration techniques, access controls, and non-native species eradication techniques that have been used successfully at other similar sites in the vicinity of the preserve. The permittee shall determine specific applications of these techniques in coordination with the Service and shall modify them as approved by the Service based on monitoring data.

## **5.6 Reporting**

Project implementation and annual monitoring reports will be submitted to the Service during the 15-year ITP permit term.

Project update reports will be submitted via e-mail to the Service by the approved MCAS monitor quarterly during the construction phase. These reports will include:

1. Reason for monitoring visit.
2. Summary of project activities accomplished since the previous visit.
3. Summary of current and upcoming project activities.
4. Discussion of any issues or problems noted, and the steps taken to address the issue.
5. Recommendations, and a tentative schedule for the next visit.

In addition, MCAS will submit annual monitoring reports each year of the 15-year permit term. Annual Reports to the Service will include:

1. Brief summary or list of project activities accomplished during the reporting year (e.g., development / construction activities, restoration efforts, and other covered activities).
2. Project impacts (e.g., acres graded, number of buildings constructed, etc.).
3. Description of any take of covered species that occurred (includes cause of take, form of take, take amount, location of take and time of day, and deposition of dead or injured individuals).
4. Brief description of conservation strategy implemented.
5. Monitoring results (compliance, effects, and effectiveness monitoring) and survey information (if applicable).

6. Description of any circumstances that made adaptive management necessary, how changes were implemented, and a brief summary of the actions taken.
7. Description of any changed or unforeseen circumstances that occurred and how they were dealt with.
8. Funding expenditures, balance, and accrual.
9. Description of any minor or major amendments.

## Section 6. Plan Implementation

### 6.1 *Changed Circumstances*

#### 6.1.1 Summary of Circumstances

Section 10 regulations (69 *Federal Register* 71723, December 10, 2004 as codified in 50 CFR Sections 17.22(b)(2) and 17.32(b)(2)) require that an HCP specify the procedures to be used for dealing with changed and unforeseen circumstances that may arise during the implementation of the HCP. In addition, the HCP No Surprises Rule (50 CFR 17.22 (b)(5) and 17.32 (b)(5)) describes the obligations of the permittee and the Service. The purpose of the No Surprises Rule is to provide assurance to the non-federal landowners participating in habitat conservation planning under the Act that no additional land restrictions or financial compensation will be required for species adequately covered by a properly implemented HCP, in light of unforeseen circumstances, without the consent of the permittee.

Changed circumstances are defined in 50 CFR 17.3 as changes in circumstances affecting a species or geographic area covered by an HCP that can reasonably be anticipated by plan developers and the Service and for which contingency plans can be prepared (e.g., the new listing of species, a fire, or other natural catastrophic event in areas prone to such events). If additional conservation and mitigation measures are deemed necessary to respond to changed circumstances and these additional measures were already provided for in the plan's operating conservation program (e.g., the conservation management activities or mitigation measures expressly agreed to in the HCP or IA), then the permittee will implement those measures as specified in the plan. However, if additional conservation management and mitigation measures are deemed necessary to respond to changed circumstances and such measures were not provided for in the plan's operating conservation program, the Service will not require these additional measures absent the consent of the permittee, provided that the HCP is being "properly implemented" (properly implemented means the commitments and the provisions of the HCP and the IA have been or are fully implemented).

#### 6.1.2 Newly Listed Species

If a new species that is not covered by the HCP but that may be affected by activities covered by the HCP is listed under the Act during the term of the Section 10(a)(1)(B) permit (ITP), the ITP will be reevaluated by the Service. Covered activities may be modified, as necessary, to ensure the activities covered under the HCP are not likely to result in the take of the newly listed species or adverse modification of critical habitat designated for that species. The applicant shall implement the modifications to the HCP covered activities identified by the Service as necessary to avoid the likelihood of jeopardy to or take of the newly listed species or adverse modification of newly designated critical habitat. The applicant shall continue to implement such modifications until such time as the permittee has applied for and the Service has approved an amendment to the ITP, in accordance with applicable statutory and regulatory requirements, to cover the newly listed species or until the Service notifies the applicant in writing that the covered activities are not likely to result in take of the species or adverse modification of newly designated critical habitat.

### **6.1.3 Newly Discovered Previously Listed Species**

In the event that one or more other already listed species is discovered at the preserve during the term of the permit, the permittees will cease project activities that are likely to result in take and work with the Service to develop a permit amendment to address said species. Since the preserve has been heavily studied and the occurrences of rare species are largely known, it is unlikely that any other listed species will be discovered there.

### **6.1.4 Wildfires**

Wildfires are common occurrences in central California, and are part of the natural ecology of native scrub habitats. Wildfires within the permit boundaries would be expected to remove vegetation necessary to the life cycle of MSS as well as to directly injure or kill individual MSS. Scrub habitat is adapted to this type of disturbance, and early successional plants quickly grow in burned areas. Burns can also open habitat for non-native, non-native weedy species, which can invade and overtake the burned area. If a wildfire occurs in the project area during the course of the permit, the permittee will contact the Service to determine appropriate measures, which may include revegetation efforts to reestablish native vegetative cover if such a procedure is deemed beneficial.

### **6.1.5 Prolonged Drought**

The proposed mitigation and recovery efforts include planting and encouraging native coastal dune scrub plant species on appropriate parts of the preserve. Although, these species are adapted to dry conditions, newly planted individuals and naturally occurring seedlings must have sufficient moisture to become established. Like most of California, the Central Coast has been experiencing a drought for the last three years. If the drought continues, MCAS will not be able to rely on natural precipitation to establish plantings/seedlings on the preserve. MCAS is currently prepared for this scenario. A 2,500 gallon water tank and a pump system have been installed at the eastern preserve, where the bulk of the restoration activities are to occur. The water tank can (and sometimes is) be filled with a hired water truck. Above ground irrigation lines are connected to the tank and are capable of supplying irrigation water to plantings, when necessary.

## **6.2 Unforeseen Circumstances**

Unforeseen circumstances are defined in 50 CFR 17.3 as changes in circumstances that affect a species or geographic area covered by the HCP that could not reasonably be anticipated by plan developers and the Service at the time of the HCP's negotiation and development and that result in a substantial and adverse change in status of the covered species. The purpose of the No Surprises Rule is to provide assurances to non-federal landowners participating in habitat conservation planning under the Act that no additional land restrictions or financial compensation will be required for species adequately covered by a properly implemented HCP, in light of unforeseen circumstances, without the consent of the permittee.

In case of an unforeseen event, the permittee shall immediately notify the Service staff that have functioned as the principal contacts for the proposed action. In determining whether such an event constitutes an unforeseen circumstance, the Service shall consider, but not be limited to, the following factors: size of the current range of the affected species; percentage of range adversely affected by the HCP; percentage of range conserved by the HCP; ecological significance of that portion of the range affected by the HCP; level of knowledge about the affected species and the degree of specificity of the species' conservation program under the HCP; and whether failure to

adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of the affected species in the wild.

If the Service determines that additional conservation and mitigation measures are necessary to respond to the unforeseen circumstances where the HCP is being properly implemented, the additional measures required of the permittee must be as close as possible to the terms of the original HCP and must be limited to modifications within any conserved habitat area or to adjustments within lands or waters that are already set-aside in the HCP's operating conservation program. Additional conservation and mitigation measures shall involve the commitment of additional land or financial compensation or restrictions on the use of land or other natural resources otherwise available for development or use under original terms of the HCP only with the consent of the permittee.

## **6.3 Amendments**

### **6.3.1 Minor Amendments**

Minor amendments are changes that do not affect the scope of the HCP's impact analysis and conservation strategy, change amount of take, add new species, or change significantly the boundaries of the HCP. Examples of minor amendments include correction of spelling errors or minor corrections in boundary descriptions. The minor amendment process is accomplished through an exchange of letters between the permittee and the appropriate Service Field Office.

### **6.3.2 Major Amendments**

Major amendments to the HCP and permit are changes that do affect the scope of the HCP and conservation strategy, increase the amount of take, add new species, and change significantly the boundaries of the HCP. Major amendments often require amendments to the Service's decision documents, including the NEPA document, the biological opinion, and findings and recommendations document. Major amendments will often require additional public review and comment.

### **6.3.3 Suspension/Revocation**

The Service may suspend or revoke their respective permits if the permittee fails to implement the HCP in accordance with the terms and conditions of the permits or if suspension or revocation is otherwise required by law. Suspension or revocation of the Section 10(a)(1)(B) permit, in whole or in part, by the Service shall be in accordance with 50 CFR 13.27-29, 17.32 (b)(8).

### **6.3.4 Permit Renewal**

Permit renewal may be necessary if all facets of the project are not completed within the designated time, including construction activities and restoration efforts.

At least 30 days prior to ITP expiration, the ITP may be renewed without the issuance of a new permit, provided that the permit is renewable, and that biological circumstances and other pertinent factors affecting covered species are not significantly different than those described in the original HCP. To renew the permit, the applicant shall submit to the Service, in writing:

- a request to renew the permit, including reference to the original permit number;

- certification that all statements and information provided in the original HCP and permit application, together with any approved HCP amendments, are still true and correct, and inclusion of a list of changes;
- a description of any take that has occurred under the existing permit; and,
- a description of any portions of the project still to be completed, if applicable, or what activities under the original permit the renewal is intended to cover.

If the Service concurs with the information provided in the request, it shall renew the permit consistent with permit renewal procedures required by federal regulation (50 CFR 13.22). If the permittee files a renewal request and the request is on file with the issuing Service office at least 30 days prior to the permits expiration, the permit shall remain valid while the renewal is being processed, provided the existing permit is renewable. However, the permittee may not take listed species beyond the quantity authorized by the original permit. If the permittee fails to file a renewal request within 30 days prior to permit expiration, the permit shall become invalid upon expiration. The permittee must have complied with all annual reporting requirements to qualify for a permit renewal.

### **6.3.5 Permit Transfer**

The ITP would need to be transferred if property covered under this HCP is sold or transferred, or if the permittee is not able to oversee the completion of the requirements of the ITP.

In the event of a sale or transfer of ownership of the property during the life of the permit, the following will be submitted to the Service by the new owner(s): a new permit application, permit fee, and written documentation providing assurances pursuant to 50 CFR 13.25 (b)(2) that the new owner will provide sufficient funding for the HCP and will implement the relevant terms and conditions of the permit, including any outstanding minimization and mitigation. The new owner(s) will commit to all requirements regarding the take authorization and mitigation obligations of this HCP unless otherwise specified in writing and agreed to in advance by the Service.

## Section 7. Funding

### 7.1 Costs of HCP Implementation

The costs of HCP implementation presented below have been estimated based on previous experience in MSS survey, relocation, and habitat restoration efforts in the Los Osos area. Table 2 provides estimated costs for all aspects of the conservation strategy and monitoring and reporting effort, based on use of an approved monitor to perform preconstruction survey and construction monitoring tasks. Recovery area restoration and maintenance, and annual monitoring and reporting, will be performed by the permittee. An amount to cover any unforeseen circumstances is also included in the estimate to ensure that any such instances will be addressed.

**Table 2. Estimated Funding Costs (for a 15-year Permit)**

<b>Item/Activity (Implemented by)</b>	<b>Unit Cost</b>	<b>One-Time Cost</b>	<b>Re-occurrence</b>	<b>Total</b>
<b>Protective Fencing (Permittee)</b>				
Temporary fencing materials/installation/maintenance	\$100	\$500	n/a	\$500
Permanent Fencing	\$15/linear foot	\$31,125		
<i>Subtotal</i>				<b>\$31,625</b>
<b>MSS Surveys, Construction and Restoration Monitoring (24 months) (Approved monitor – permittee)</b>				
Pre-construction survey of development area (includes capture and moving of MSS and a brief report)	\$1,200	\$1,200	n/a	\$1,200
Worker Awareness Training	\$100		up to 4 events	\$400
Additional survey(s) during grubbing/grading activities (includes capture and moving of MSS and a brief report)	\$300	n/a	Twice annually	\$9,000
Construction monitoring and reporting as needed during 24-month construction period	\$1000	n/a	up to 6 visits and reports	\$8,000
Restoration monitoring and assistance with seed collection, planting, and general implementation	\$8,000/year		up to 14 years	\$70,000
<i>Subtotal</i>				<b>\$88,600</b>
<b>Mitigation Area Maintenance (10 years) (Permittee)</b>				
Materials costs (e.g., herbicide, container plants, irrigation supplies)	\$10,000	\$10,000		\$10,000

**Table 2. Estimated Funding Costs (for a 15-year Permit)**

<b>Item/Activity (<i>Implemented by</i>)</b>	<b>Unit Cost</b>	<b>One-Time Cost</b>	<b>Re-occurrence</b>	<b>Total</b>
<i>Subtotal</i>				<b>\$10,000</b>
<b>Annual Monitoring and Reporting (<i>Permittee</i>)</b>				
Annual Monitoring and Reporting (Years 1-14)	500	n/a	up to 14 years	\$7,000
Final Report	800	800	n/a	\$800
<i>Subtotal</i>				<b>\$7,800</b>
<b>Changed Circumstances (<i>Permittee</i>)</b>				
Contingency for Remedial Actions	\$1,000		n/a	\$1,000
<i>Subtotal</i>				<b>\$1,000</b>
<b>TOTAL COST</b>				<b>\$139,025</b>

## 7.2 Funding Source(s)

MCAS, as the permittee, will be responsible for the full cost of implementing the minimization and mitigation measures as described in Section 7.1, Table 2, as well as those changed circumstances described in Section 6.2 above. The permittee understands that failure to provide adequate funding and consequent failure to implement the terms of this HCP and the ITP in full could result in temporary permit suspension or permit revocation. MCAS has been successful for the past 30 years in raising monies from a combination of grants and donations from members and the local community to fund on-going maintenance at Central Sweet Springs. Grant sources have included the State Coastal Conservancy, Chevron, and the Morro Bay National Estuary Program, among others. MCAS has also already raised a substantial amount of the monies required; as of April 30, 2015, over \$87,000 has been set aside for East Sweet Springs. MCAS is confident, based past performance it can raise the additional monies required in a timely manner.

## Section 8. Alternatives

### 8.1 Summary

Section 10(a)(2)(A)(iii) of the Endangered Species Act of 1973, as amended, (and 50 CFR 17.22(b)(1)(iii) and 17.32(b)(1)(iii)) requires that alternatives to the taking of species be considered and reasons why such alternatives are not implemented be discussed. Three alternatives to the proposed project were considered. These alternatives are the No Action Alternative, Alternate Design Alternative, and Proposed Action. A discussion of each alternative is provided below.

### 8.2 No Action Alternative

The No Action Alternative means that an HCP would not be prepared and no ITP would be issued. Trail and overlook construction, installation of fencing, and habitat restoration would not occur. MSS and its habitat within the project area would not be impacted by construction activities. Unauthorized neighborhood uses of the parcels (dog walking, children playing, etc.) that could cause take of federally listed species would continue. The permittee would not be able to open this portion of Sweet Springs Nature Preserve to the public due to inadequate access. Failure to open the preserve would contravene the terms of the agreement by which MCAS was deeded the property. Repossession of the property by the California Coastal Conservancy could interrupt stewardship of the parcel, and habitat degradation would be expected to result.

Under this alternative, 3.5 acres of coastal dune scrub habitat would not be restored and conserved in perpetuity for MSS. The sale of the property for purposes other than the current and proposed uses is not feasible. Because of these considerations, and because this HCP results in a net benefit for the covered species, the No Action Alternative has been rejected.

### 8.3 Alternative 2 – Alternate Design

Alternative 2 is similar to the proposed action, except that it eliminates approximately 450 linear feet of trail and includes a slightly smaller lookout. Under Alternative 2 access to the main trail from the existing trail on the central preserve would be reduced to just one connecting trail. The proposed action has two connector trails that start at the central preserve. In addition, the trail design for Alternative 2 would remove the small loop that is proposed near the middle of the main trail. Under Alternative 2 the small loop would be replaced by widening the path in that location to approximately 8 feet, which would accommodate a bench. The lookout in Alternative 2 would be reduced from 24 × 16 feet to approximately 18 × 12 feet. The location of the lookout would not change. The designs in Alternative 2 would provide less public benefit than Alternative 1, provide fewer opportunities for interpretive signs, and be less efficient at directing human traffic away from existing MSS habitat.

### 8.4 Alternative 3 – Proposed Action

Under the Proposed Action alternative, the project would be constructed as discussed in the project description. The proposed trail would focus foot traffic on the east preserve to a new designated foot path, thus reducing trampling of MSS habitat that currently results from foot traffic

on undesignated trails. The stipulations of the deed would be met, allowing MCAS to continue habitat restoration activities on the east preserve. The combined public access and habitat restoration project would continue, thus providing a mechanism to improve MSS habitat on the preserve.

This HCP establishes procedures to minimize take associated with project implementation, and compensates for unavoidable take by committing to restore 0.5 acre on the permanently protected Sweet Springs Nature Preserve, which will protect habitat occupied by MSS in perpetuity.

In addition, the HCP provides for the removal of non-native non-native species, and establishing native coastal dune scrub habitat through planting and seeding in the recovery areas, thus creating new native habitat for MSS on the preserve. Implementation of this HCP will offset the adverse effects to MSS caused by the project, and will benefit MSS in the long term because of the connectivity it establishes between adjacent habitat areas, and the long-term conservation it provides. For these reasons and because this proposed alternative best meets the goals of the applicant, this is the preferred alternative.

## Section 9. References

- SWCA Environmental Consultants. 2009. *Morro Shoulderband Snail Habitat Assessment Report Sweet Springs Nature Preserve*. Prepared for Morro Coast Audubon Society. March 24, 2009.
- SWCA Environmental Consultants. 2009. *Morro Shoulderband Snail Protocol Survey Report for the East Sweet Springs Nature Preserve Habitat Restoration and Public Access Project*. Prepared for Morro Coast Audubon Society. March 21, 2009.
- SWCA Environmental Consultants. 2011. *Morro Shoulderband Snail Recovery Action Plan for the Sweet Springs Nature Preserve*. Prepared for Morro Coast Audubon Society. June 28, 2011.
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Appendix A: **Morro Shoulderband Snail  
Recovery Action Plan (2011)**



**Morro Shoulderband Snail  
Recovery Action Plan for the  
Sweet Springs Nature Preserve,  
Los Osos, San Luis Obispo County,  
California**

Prepared for:

**Morro Coast Audubon Society**

Prepared by:

**SWCA Environmental Consultants**

June 2011



**MORRO SHOULDERBAND SNAIL  
RECOVERY ACTION PLAN  
FOR THE  
SWEET SPRINGS NATURE PRESERVE**

Prepared for:

**Morro Coast Audubon Society**  
P.O. Box 1507  
Morro Bay, CA 93443  
Contact: Holly Sletteland

Prepared by:

**SWCA Environmental Consultants**  
1422 Monterey Street, Suite C200  
San Luis Obispo, CA 93401  
Contact: Travis Belt

June 28, 2011

SWCA Project Number: 15646.01



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APPENDIX B: Plant Species Recommended for Reintroduction

# 1. INTRODUCTION

The Morro Coast Audubon Society (Audubon) proposes to restore disturbed and degraded areas of native habitat within the Sweet Springs Nature Preserve (Preserve). This Recovery Action Plan (Plan) will be used as a tool to guide the removal of non-native invasive plant species within the Preserve and restore disturbed areas to natural conditions. Successful implementation of the Plan will improve habitat quantity and quality for the federally endangered Morro shoulderband snail (*Helminthoglypta walkeriana*) (MSS), and will enhance existing populations of common and special-status plant species within the Preserve. The Plan is not intended to mitigate impacts to the Preserve resulting from previous or future trail improvements; rather the intent of the Plan is to improve habitat quality throughout the Preserve. Implementation of this Plan would be conducted under the *Intra-Service Programmatic Biological Opinion on Issuance of Recovery Permits for Control and Removal of Invasive Non-native Plants in the Vicinity of Los Osos, San Luis Obispo, County, California (1-8-03-FW-33R)* (1997) (PBO). Preparation of this Plan was coordinated with the U.S. Fish and Wildlife Service (USFWS) to ensure that all restoration activities comply with the Federal Endangered Species Act.

## 1.1 PROJECT SUMMARY

### 1.1.1 Site Location and Description

The Preserve consists of three parcels – West Sweet Springs (west preserve), Central Sweet Springs (central preserve), and East Sweet Springs (east preserve). The three parcels are directly adjacent to each other and are located on the northern side of Ramona Avenue, between 4th Street and Broderson Avenue at the northwest end of the community of Los Osos, in San Luis Obispo County, California (refer to Figure 1). In 1981, Audubon was gifted the west and central preserve areas; the east preserve was acquired in 2008.

The parcels have been managed for various land uses since the early 1900's. Past land uses have included a eucalyptus and Monterey cypress plantation, private residence, waterfowl hunting area, and several proposed developments. The varied history of the parcels is made evident by the fragmented nature of the habitat communities currently existing on the Preserve. The Preserve in its entirety supports maritime chaparral, remnant coastal dune scrub, eucalyptus and Monterey cypress woodlands, non-native perennial grassland, and wetland communities. Detailed discussions of these communities are provided below in the prioritized site descriptions.

### 1.1.2 Project Components

The Plan is intended to provide the necessary baseline information, training requirements, and implementation methods necessary for exotic species removal and native vegetation rehabilitation within the Preserve. The Plan addresses ongoing problems of invasive species incursion and human disturbance in an ecologically sound manner that protects and preserves the habitats and resources of the Preserve, including special-status plant and animal species and cultural resources. Implementation of the Plan is expected to provide significant benefits for the MSS through habitat enhancement resulting from removal of invasive species and revegetation with native coastal dune scrub plant and maritime chaparral species. The Plan includes the following components:

- Baseline information and analysis;
- Detailed maps of the prioritized action areas;
- A work plan and sequence of events, including work activities, monitoring, and training;
- Invasive species removal strategies;
- Soil erosion control and repair efforts;

- Seed collection, native plant propagation, and planting methodologies;
- Maintenance and monitoring schedules and success criteria; and,
- MSS Avoidance measures including sensitive species training guidelines for contractors and volunteers.

## 1.2 STUDY METHODS

Numerous studies have been conducted on the Preserve since 1988; the findings of these studies and the existing conditions on the Preserve provided the basis for this Plan. In 1988, Audubon finalized the *Sweet Springs Marsh Resource Enhancement and Access Management Plan* (1988 Management Plan), which outlined the goals and objectives for enhancing the habitat and providing public access on the west and central preserves. Following the acquisition of the east preserve, Audubon began updating the 1988 Management Plan to include the annexed property. In support of the Management Plan update, Audubon retained SWCA Environmental Consultants (SWCA) to develop a Biological Constraints Analysis for the east preserve. The constraints analysis identified MSS as a key issue to be considered in the updated management plan.

In light of the issues identified in the constraints analysis, Audubon retained SWCA to conduct protocol MSS surveys on the east preserve, prepare an MSS Habitat Assessment on the east and central preserve, and train Audubon staff on the survey and handling techniques for MSS. Audubon and SWCA utilized USFWS protocol survey methods (USFWS 1997) to conduct the MSS studies. SWCA biologists utilized aerial photographs and Trimble® GeoXT Global Positioning System (GPS) equipment to map the habitat types and vegetative features. Use of this technology provided accurate locations and area calculations for mapped habitat types, special-status resources, and suitable restoration areas.

Mapped features were categorized by type, acreage, and sensitivity to document baseline conditions, and were analyzed for use in planning an effective restoration strategy for the Preserve. Baseline conditions data were used to prepare a Habitat and Recovery Area Map (refer to Figure 2) and establish restoration goals and success criteria for the recovery effort.

In addition to the biological resources studies, Audubon retained Bertrando and Bertrando Research Associates to inventory the cultural resources existing on the east preserve. To avoid impacts to identified cultural resources, the results of the cultural studies were considered in developing the Plan implementation methods.

## 2. EXISTING CONDITIONS AND PROPOSED RECOVERY AREAS

### 2.1 EXISTING CONDITIONS

The Preserve (east, central, and west) supports maritime chaparral, non-native perennial grassland, remnant coastal dune scrub, mixed eucalyptus woodland, and a variety of wetland habitats. The maritime chaparral and remnant coastal dune scrub provide valuable native habitat for MSS. MSS does utilize the non-native perennial grasslands on the Preserve; however, use of this habitat is likely due to necessity rather than preference. The eucalyptus woodlands and various wetland habitats on the Preserve do not provide suitable MSS habitat.

Central maritime chaparral is a shrub dominated community that is commonly found on sandy soils in coastal environments. The southwestern corner of the central preserve supports a stand of maritime chaparral that Audubon has restored. This area contains occurrences of intact maritime chaparral and disturbed maritime chaparral. The intact maritime chaparral is characterized by 70 to 90 percent

vegetative cover by chaparral species including coastal buckwheat (*Eriogonum parvifolium*), Morro manzanita (*Arctostaphylos morroensis*), dune lupine (*Lupinus chamissonis*), black sage (*Salvia mellifera*), coyote brush (*Baccharis pilularis*), and mock heather (*Ericameria ericoides*). The intact chaparral transitions to disturbed chaparral at the edge of the eucalyptus woodland. This area contains sporadic occurrences of maritime chaparral species but is shaded by planted Eucalyptus (*Eucalyptus globulus*) and Monterey cypress (*Cupressus macrocarpa*) trees. The shade and litter from the trees has limited the growth of chaparral species resulting in the ground layer being dominated by herbaceous weeds. The presence of maritime chaparral associates indicates that this area likely supported maritime chaparral in the past. Habitat restoration efforts will aim to expand maritime chaparral into this area and increase native MSS habitat on the Preserve.

Non-native perennial grassland is found in disturbed areas throughout central California. Grass species in this community are usually tussock forming and often include either veldt grass (*Ehrharta calycina*) or fountain grass (*Pennisetum setaceum*). The east preserve supports non-native perennial grassland that is dominated by veldt grass. Veldt grass is widespread in the Los Osos area where it quickly invades disturbed sites and alters the native shrublands. When a shrubland is invaded by veldt grass, the resulting community is characteristic of non-native grassland that supports remnant native shrubs.

The non-native perennial grasslands on the east preserve have been mowed for generations, resulting in sparse to thick coverage of veldt grass with remnant patches of coastal dune scrub species and woody debris piles. Due to past disturbances and resulting veldt grass invasion, the coastal dune scrub is patchy and too discontinuous to be considered an intact community. Coastal dune scrub species in the area include coyote brush, mock heather, black sage, dune lupine, and California croton (*Croton californicus*). Coastal dune scrub provides the best habitat for MSS; therefore, restoration efforts in this area will focus on expanding the coastal dune scrub.

Eucalyptus woodlands occur throughout coastal California and are dominated by various eucalyptus species. The eucalyptus woodlands on the Preserve are dominated by *Eucalyptus globulus* but also include occurrences of planted Monterey cypress and the occasional coast live oak (*Quercus agrifolia*). These woodlands occur in wet and dry areas on the Preserve. Woodlands located within the dry areas are almost completely covered with a thick layer of litter that has greatly limited the growth of under story vegetation. Some wetland species have successfully survived under the woodlands within the wet areas. Due to the presence of a thick eucalyptus duff layer and lack of significant vegetation in the dry portions of the eucalyptus woodland, these areas do not provide suitable MSS habitat. Additionally, the presence of wetland soils in the wet portions of the eucalyptus woodlands renders these areas unsuitable for MSS.

A large portion of the Preserve consists of various wetland habitats including open water ponds, coastal salt marsh, freshwater marsh, mudflats, and thickets of California blackberry (*Rubus ursinus*) and willow (*Salix* spp.). These areas support a diverse assemblage of wetland species that provide dense vegetative cover. These wetland areas are not considered to be suitable habitat for MSS.

The existing habitats in the Preserve support the following special-status species: MSS, California sea-blite (*Suaeda californica*), Blochman's leafy daisy (*Erigeron blochmaniae*), sand almond (*prunus fasciculata* var. *punctata*), Leopold's rush (*Juncus acutus* ssp. *leopoldii*), saltmarsh bird's beak (*Cordylanthus maritimus* ssp. *maritimus*), marsh sandwort (*Arenaria paludicola* [planted population]), Morro manzanita, and suffrutescent wallflower (*Erysimum insulare* ssp. *suffrutescens*). The presence of these species and the sensitive habitats provided the basis for identifying the recovery areas proposed in this Plan.

Figure 1. Project Location Map

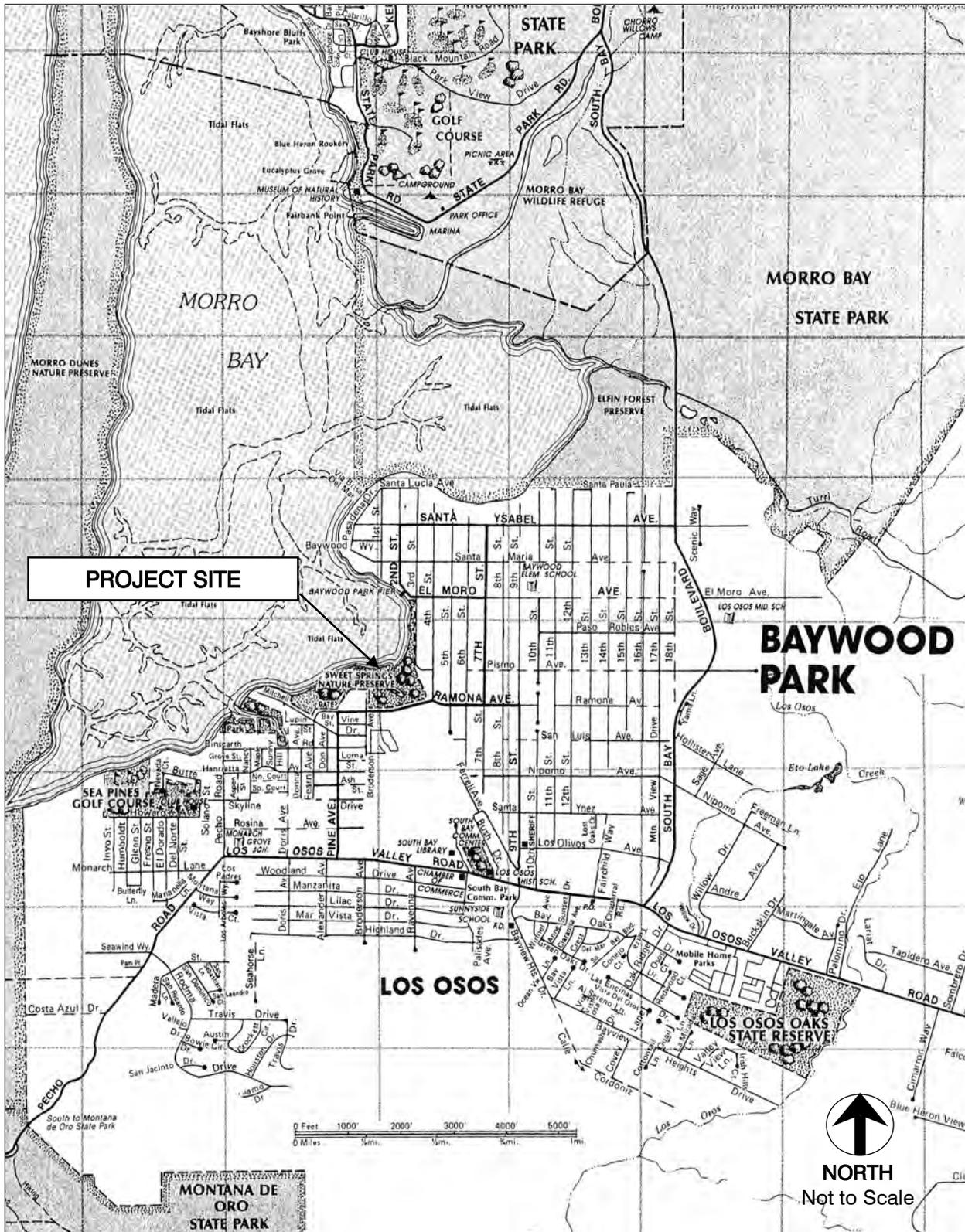
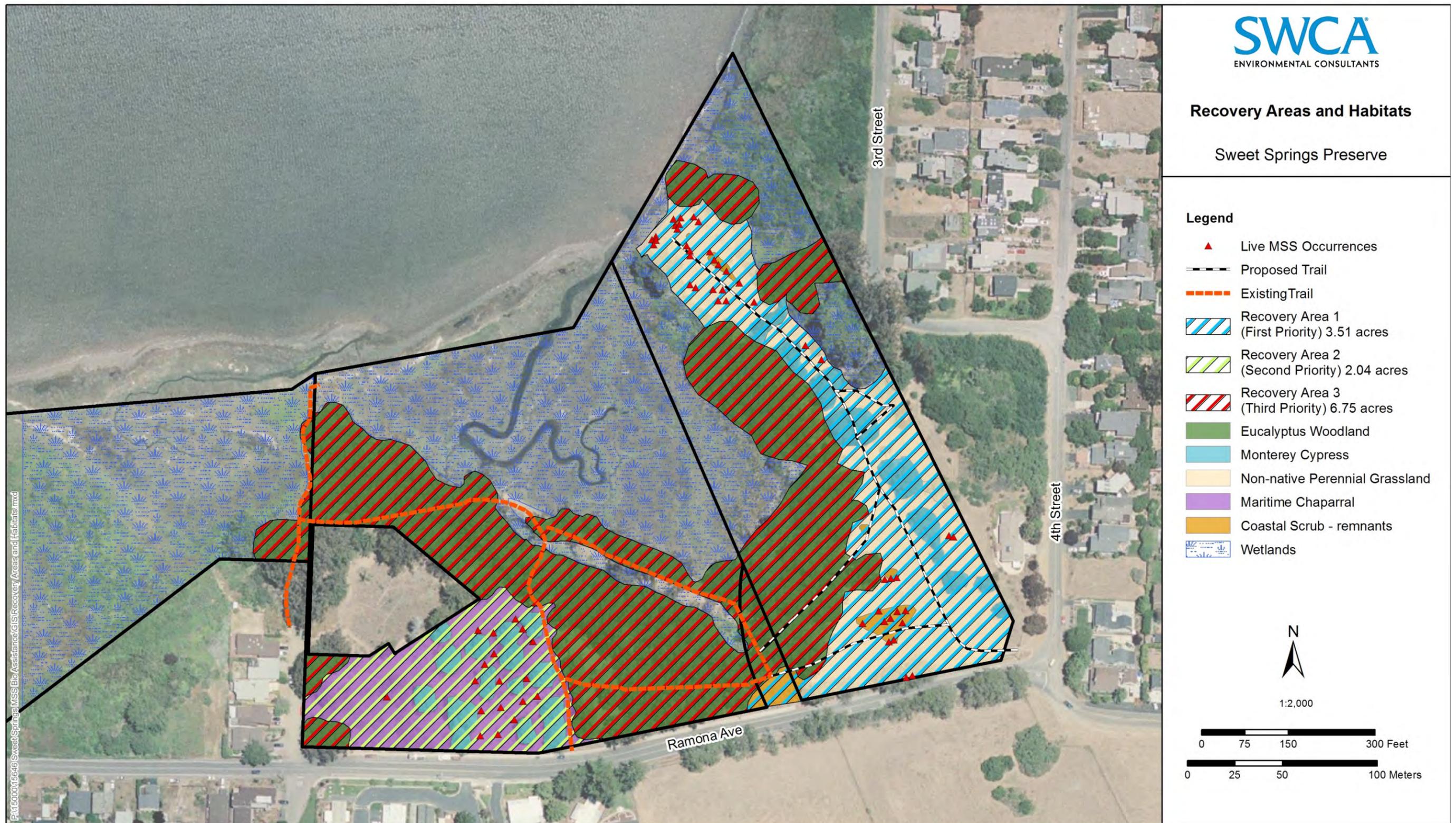


Figure 2. Habitat and Recovery Area Map



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## 2.2 PROPOSED RECOVERY AREAS

Three proposed recovery areas have been identified based on the habitat type in each area (refer to Figure 2). Each recovery area has been assigned a level of priority based on the habitat suitability for MSS and the observed concentrations of MSS occurrences in the recovery areas. Since the wetlands do not provide suitable MSS habitat, they have not been included in the recovery areas. The description of each recovery area is provided below.

### 2.2.1 Recovery Area 1 (First Priority)

Recovery Area 1 consists of 3.51 acres that are mostly located on the east preserve with a small area located on the central preserve. The topography of the east preserve gently slopes northwest towards the Morro Bay Estuary at elevations between 0 and 20 feet. The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) mapped Baywood fine sand and saline aquolls within the property.

Recovery Area 1 is dominated by veldt grass; however, remnant patches of coastal dune scrub, planted Monterey cypress trees, and piles of woody debris are scattered throughout the grassland. Remnant coastal scrub species present include mock heather, bush lupine, Blochman's leafy daisy, and coyote brush. Several locally rare plant species including Blochman's leafy daisy and sand almond are present in the non-native grasslands. MSS are often found aestivating under sand almond. The non-native grassland intergrades with field sedge (*Carex praegracilis*) and salt grass (*Distichlis spicata*) at the transition to wetland habitats.

Recovery Area 1 contains several sensitive cultural resource areas. Restoration activities conducted in Recovery Area 1 will be conducted in such a manner that reduces the impacts to the cultural resources (refer to Section 3.2).

### 2.2.2 Recovery Area 2 (Second Priority)

Recovery Area 2 consists of 2.04 acres located on the central preserve that supports intact maritime chaparral. The area is flat and exposed. The NRCS mapped Baywood fine sand in Recovery Area 2. Audubon's past restoration activities have helped to establish a healthy maritime chaparral community in Recovery Area 2 that supports California buckwheat, Morro manzanita, dune lupine, black sage, coyote brush, and mock heather.

### 2.2.3 Recovery Area 3 (Third Priority)

Recovery Area 3 includes 6.75 acres that span the central and the east preserves, with a small area existing in the west preserve. Recovery Area 3 includes dense eucalyptus woodland that is well established within and directly adjacent to the wetland areas. The thick eucalyptus duff has limited the under story growth; however, persistent species such as field sedge, juncus (*Juncus* spp.), California blackberry, poison oak (*Toxicodendron diversilobum*), and three-square (*Schoenoplectus americanus*) exist in the under story. Volunteer Monterey cypress saplings are interspersed within the eucalyptus woodland.

### 3. IMPLEMENTATION

As proposed, the Plan is a multi-year process consisting of three phases focused on the identified priority areas. Phased implementation of the Plan will be dependent on available funds and volunteer work. All restoration activities will be conducted pursuant to the USFWS PBO. Implementation of this Recovery Action Plan will require periodic coordination with the USFWS to ensure that the project meets the requirements of the PBO and Audubon's current MSS recovery permit TE-213314-0. At a minimum, periodic coordination with USFWS will include submittal of annual reports to USFWS (refer to Section 3.3.3) and the appropriate reporting to satisfy the requirements of the recovery permit. The following list summarizes the phased implementation of the recovery effort.

- Phase I will focus on controlling non-native, invasive species within the identified first priority site. Initial seed collection and plant propagation of native dune scrub species should be conducted during Phase I.
  - Establishment of an access trail on the east preserve will be conducted as part of Phase 1 (refer to Figure 2 and Section 3.1.3).
- Phase II will consist of seeding and planting efforts in suitable first priority areas that are clear of invasive species, and continuing seed collection and plant propagation of native species.
  - Phases I and II will be repeated for second and third priority areas as timing and budget allows.
- Phase III will consist of ongoing maintenance activities that will start after the first plantings have been installed.

#### 3.1 PHASE I

##### 3.1.1 Invasive Species Removal

Removal of non-native invasive plant species is crucial to success of the Plan. Non-native, invasive plant species must be removed from or substantially reduced in an area prior to planting native plants or sowing native seed. Manual removal is the preferred method for removal within the Preserve; however, use of herbicides is proposed to control species that are difficult to eliminate by manual techniques. Herbicide use may be necessary to adequately control English ivy (*Hedera helix*) and veldt grass. Herbicide applications in the Preserve will follow USFWS PBO requirements (refer to Section 4.1.2 and Appendix A). Extreme care shall be taken during herbicide application to avoid damage to native plants and wildlife within the Preserve, and warning signs will be posted along trails leading to treatment areas during application.

The removal methods presented below have been designed to match specific target plants, while minimizing damage to adjacent native plants and wildlife. Removal methods for the primary target species are listed below. Other weedy species encountered should be removed by hand as they are encountered during weed removal activities.

##### Veldt Grass

Veldt grass occurrences within or adjacent to native plants should be removed by manual methods to minimize potential impacts to native plants and MSS that may be among the veldt grass. If manual methods are not feasible without causing damage to adjacent special-status species, veldt grass seed heads will be cut off before they mature. Seed head removal should be performed several times throughout the growing season to be successful.

All pulled or cut veldt grass with seed heads should be removed from the site or composted in controlled compost piles. Composting weedy debris has been successful at other nearby restoration sites including the Elfin Forest. The compost piles should be located in areas not suitable for MSS such as beneath the eucalyptus trees. All compost piles should be covered with tarps to accelerate decomposition and prevent seed drift. The compost piles should be monitored and turned regularly during the growing season to eliminate seed sprouts.

Large areas of veldt grass with few native plants present (Recovery Area 1) should be sprayed with a grass specific herbicide, such as Fusilade (Fluazifop-p), after completion of MSS surveys and relocation of any individuals found. The herbicide applications will be implemented by an individual in possession of a Qualified Applicators License and with experience managing invasive species. Although the Qualified Applicator will determine the appropriate timing for the herbicide applications, it is expected that multiple applications per year will be necessary to affectively reduce the invasive grass populations. Annual application rates will not exceed limits required by law.

Areas where veldt grass has been removed should be seeded and planted with vigorous perennial species that can compete with any re-occurrence of veldt grass. Species to be planted or seeded include silver lupine, deerweed, coastal buckwheat, Blochman's groundsel (*Senecio blochmaniae*), and mock heather. Invasive species control may use other non-selective herbicides such as glyphosate (Rodeo®) to control broadleaf species, if necessary. Use of herbicides other those specified above would be inconsistent with the requirements of the PBO and, therefore, is not permitted.

#### **Narrow-leaf Iceplant (*Conicosia pugioniformis*) and Iceplant (*Carpobrotus spp.*)**

Narrow-leaf iceplant and iceplant occurrences throughout the Preserve should be removed by hand after completion of MSS surveys and relocation of any individuals found. In larger areas containing a dense cover of iceplant, one or two applications of glyphosate may be necessary prior to removing the plant material. All plant material should be removed from the site. Frequent follow-up visits to remove seedlings are necessary for full control of these species.

#### **English-ivy (*Hedera helix*)**

English ivy is present in the eucalyptus woodlands and wetland transitional areas where shade is present for part of the day. Manual removal of this species is difficult because stolons and underground parts fragment easily, remaining stem fragments sprout rapidly, and infestations usually occupy large areas. Control of this species will require manual removal of runners attached to native plants, and spot spraying of remaining foliage on or close to the ground, after completion of MSS surveys and relocation of any individuals found. All herbicide applications will be conducted per PBO requirements and should be conducted in the late spring when the species is at the apex of its growing season. Frequent follow-up visits to remove new sprouts are necessary for full control of this species.

#### **Blue Gum Eucalyptus (*Eucalyptus globulus*)**

Eucalyptus is present in and adjacent to the wetland areas located on the central and eastern preserves. Removal of this species is considered a third priority task; however, Audubon does plan on combating the species as time and budgets allow. The understory in the eucalyptus woodlands is typically unsuitable for MSS; however, MSS may occur in fringe areas that could be trampled while accessing the eucalyptus. Prior to accessing the eucalyptus to be removed, Audubon staff would conduct surveys for MSS and relocate any individuals observed. Eucalyptus removal on the Preserve would be conducted by the California Conservation Corps (CCC). The CCC uses chain saws, trucks, and chippers when removing eucalyptus trees. Immediately after felling a eucalyptus tree (within two to three minutes), a Qualified Applicator would apply a 50 percent solution of glyphosate to the exposed cambium of the stump. The glyphosate application is necessary to inhibit stump sprouting.

### 3.1.2 Seed Collection/Plant Propagation

#### Guidelines for Collecting Cuttings and Seed from Native Species

A qualified professional will collect seed and cuttings from native plants located within the Preserve. Priority will be given to collecting seed from native plants that will provide habitat for MSS, restrict access to pedestrians (e.g., buckbrush, gooseberry, or blackberry), and that have good potential for growth in areas disturbed by invasive species removal. To enhance genetic diversity, seeds and cuttings will be gathered from numerous individual plants and areas throughout the Preserve. No more than 10 percent of seed or vegetative cover will be collected from an individual plant during seed or cutting collection.

Seed collection of native plants will be performed by a qualified professional, with the assistance of volunteers where possible. Seed and cuttings will be collected for the purpose of seed casting and propagating container plants. Collection of seed will generally occur from mid-spring through early fall of each year that planting is to occur. Cuttings will be collected during appropriate time periods for each species (generally spring and summer months).

The amount of seed and cuttings to be collected and used for seed casting and plant propagation will be dependent on the size and density of existing plants, and preferred species of each recovery site. Appendix B provides a list of species that are recommended for reintroduction into the Preserve. Following collection, all native plant seed will be cleaned and stored, and prepared as necessary for direct seeding or growing container plants.

#### Guidelines for Plant Propagation

Seed and cuttings of suitable species shall be propagated under the direct supervision of a qualified professional in appropriate green house conditions. Propagated specimens should be moved outside to “harden off” for approximately 10 weeks prior to planting. The timing of propagation efforts should vary depending on the species being propagated. However, the propagation schedule should aim to have plants ready for installation in the fall or winter to take advantage of natural precipitation and favorable conditions for root growth. Seed and cuttings of shrub and forb species will be propagated in 2.25-inch to 4-inch pots, using a peat-vermiculite potting mix or similar substrate. If fertilizer is used, it should be a slow-release type that will not inhibit seed germination. Coast live oak plantings will be installed in select areas of the Preserve. Oak plantings will be limited to the property borders and existing woodlands to facilitate screening the area. Since oaks do not provide good MSS habitat, oaks will not be planted among the restored coast dune scrub areas. Oak plantings may utilize seedlings grown in tree band pots or acorns planted directly in the restoration areas. If acorns are planted directly in the restoration area, the following guidelines will be utilized:

- Acorns will be collected in the fall from coast live oak trees found on the Preserve or other Audubon lands with similar soils and habitats.
- Acorns will be collected from the tree rather than the ground.
- The collected acorns will be immediately processed for stratification. Processing will include cleaning, removing the caps, and checking for viability. To check for viability, the acorns should be dropped into a bucket of water – acorns that float are probably damaged; acorns that sink are likely viable.
- The processed acorns will be cold stratified for approximately three months or until the acorns begins to sprout. Cold stratification includes placing wet acorns in a sealed container and placing the container in a refrigerator. The refrigerator should be kept between 35 and 41 degrees

Fahrenheit (°F). This process requires checking the acorns periodically to ensure they remain moist and to determine if they have germinated.

- The acorns should be sown immediately following first signs of germination

The germinated acorns should be planted in tree tubes and surrounded by mulch. Germinated acorns will be placed in the planting hole with the tree tube and 3 inches of mulch will be applied around the planting. The mulch should cover an approximately 3-foot diameter plot. .

### **3.1.3 Access Trail Installation**

In order to situate and then restore Recovery Area 1, Audubon will establish an access trail on the parcel. The trail is necessary for Audubon restoration staff to access the restoration areas and to minimize the potential for Preserve visitors to trample the restoration areas. During Phase 1 of the project, Audubon would likely retain the CCC to build the trail. Audubon anticipates the trail to consist of a mix of decomposed granite and raised boardwalk. The CCC would utilize basic hand tools for building the trail such as McClouds, shovels, rakes, and tamping bars. Prior to installation of the access trail, Audubon staff would survey for MSS and relocate any individuals identified.

Audubon currently maintains a trail system in the central preserve; the new access trail would be an extension of the existing trail (refer to Figure 2). Upon completion of the appropriate environmental review process, Audubon may improve the access trail for use by the general public. At that time, Audubon would place interpretive signs that discuss MSS, MSS habitat, and other sensitive resources situated along the trail. The trail and interpretive signs would provide an opportunity educate the public about MSS and other sensitive natural resources.

## **3.2 PHASE II**

### **3.2.1 Planting Procedures**

The purpose of this Plan is to create and enhance MSS habitat values on the Preserve by promoting self sustaining MSS habitats. Revegetation will be accomplished through a combination of seed casting and planting propagated plants within recovery sites, after Phase I exotic species removal is completed. Although both cuttings and seed can be used as part of this program, an emphasis will be placed on propagating plants from seed to provide for more productive and competitive root systems for each plant.

The proposed recovery areas are located adjacent to the existing Preserve trail system and are subject to off-trail uses by the public. In order to reduce the potential for off-trail uses and trampling of the restoration areas, Audubon will erect protective fencing and informational “Keep Out” signs around active restoration areas. At a minimum, the portion of each restoration area located closest to existing access (e.g., boardwalk, sand trails) should be fenced off until native vegetation is well established. Temporary fencing should consist of “t-posts” with connecting barbless wire and/or green plastic construction netting. In those areas that have a high potential for ongoing pedestrian use and disturbance even following establishment of mature vegetation, installation of permanent fencing (e.g., split rail fence) and signage will be considered.

### **Cultural Resources Considerations**

Recovery Area 1 contains sensitive cultural resources that need to be considered during the implementation of this Plan. Since the location of these resources is confidential information, they are omitted from Figure 2. Audubon staff is aware of the locations of these resources and will ensure that the following considerations are implemented while restoring the vegetation in their vicinity.

- Restoration activities in the vicinity of the cultural resource areas will focus on exotic species removal efforts. Exotic species removal efforts in the cultural resource areas should emphasize herbicide applications to avoid soil disturbances associated with pulling exotic species.
- To avoid disturbances to the soils associated with planting container stock, native vegetation enhancement in the cultural areas will largely rely on broadcast seeding.
- If planting container stock in the cultural resources areas is determined to be necessary, Audubon shall limit the size of container stock to 4 inches in these areas.

### **3.2.2 Planting of Propagated Species**

A restoration specialist team or other qualified professional will supervise installation of the propagated plants listed in Appendix B. Although the list of plants presented in Appendix B includes coastal dune scrub and maritime chaparral species, Audubon will emphasize the use of species that MSS typically utilize. Such species will include mock heather, sand almond, dune lupine, and California sage. The propagated plants should be planted in early winter (December and January) following the first heavy rains. Planting during the summer months of June through August should be avoided, as feasible.

The propagated plants should be planted in holes that are twice as wide and deep as the container. The holes should then be backfilled with stockpiled excavated soils, with the organic layer replaced at the surface. A layer of weed-free wood chips will be placed around each plant to conserve soil moisture and inhibit weed growth. Propagated plants should be planted an average of 2 to 5 feet apart within each restoration site, to emulate natural growth patterns. The distance between plantings will allow room for native volunteers to establish through natural recruitment. Following planting, each restoration area should be carefully raked to prepare for seed casting.

### **3.2.3 Seed Casting**

Direct seed casting should occur in the fall/winter (November, December, and January) and after soil disturbances from invasive species removal and planting efforts occurs. Following planting of container plants, the collected seed mix should be cast over each recovery site and lightly raked into the soil. Seeding rates will be dependent on the species used and the amount of seed available.

## **3.3 PHASE III**

### **3.3.1 Maintenance and Monitoring Requirements**

Maintenance during and after installation of the plantings will be necessary to ensure success of the recovery effort. The maintenance program will ensure that watering installed plant materials, follow-up weed control, debris removal, vandalism repair, and replanting tasks are performed adequately. Maintenance should be conducted until the planted areas demonstrate self-sustaining growth patterns without the need for significant maintenance measures.

### **Irrigation System**

To facilitate a successful habitat restoration effort, a temporary irrigation system would be installed. The irrigation system would utilize drip emitters or direct hand watering (no overhead spray applications) to promote the establishment of native seeds and transplants. Although planting and seeding efforts will be timed to take advantage of natural precipitation patterns, use of the irrigation system is expected to be necessary in the first and second seasons following plant installation. A detailed irrigation plan will be developed as part of the application for a Minor Use Permit (MUP) which will be subject to environmental review under the California Environmental Quality Act (CEQA).

### **Erosion Control and Repair**

Most of the restoration efforts will be conducted in areas with relatively flat terrain underlain by Baywood fine sand, with minimal surface runoff. Due to these factors, erosion resulting from the habitat restoration activities is not expected to be a significant issue. However, to ensure that erosion does not become a problem, Audubon will routinely inspect the site for erosion and address any problems as they arise. If erosion occurs in a particular area, Audubon will repair the site with industry accepted materials and methods. At a minimum, Audubon will have shovels available at all times to redirect any surface flows that are creating the erosion problem and to replace soil that may have been removed. MSS can be attracted to certain erosion control materials such as straw wattles, silt fence, and sandbags. Therefore, use of these erosion control materials should be avoided if feasible. If these materials must be used, a qualified biologist shall survey the materials for MSS before they are removed from the site. If MSS are found utilizing the erosion control materials, the individuals shall be relocated to suitable habitat on the Preserve, prior to removing the erosion control devices.

If a particular restoration activity results in the loss of vegetative cover in an area, immediately following completion of the activity, Audubon will apply native seed and a thin layer of mulch over the disturbed area. The thin layer of mulch will protect the ground surface from rain drop impact and provide a protective cover for the native seed.

### **3.3.2 Monitoring and Success Criteria**

The project success criteria will be based on the continual decrease in non-native species cover and gradual increase in native species cover. Annual monitoring will be conducted to quantify success of the restoration efforts. The success of the Plan will be assessed by comparing baseline data with future annual survey results. The goal is to gradually increase MSS habitat by reducing non-native species cover and improving native habitat quality within the Preserve. Audubon will implement an annual monitoring program to ensure that their efforts are working toward achieving the project goal.

Project success will be based on the relative cover of non-native (not just invasive) species in the restoration areas. The success criterion for percent cover of exotic/invasive species will be based on the existing conditions (baseline) of the restoration areas prior to planting and weeding efforts. Immediately prior to preparing a site for restoration, Audubon (or a representative) will measure the percent cover of exotic/invasive species in the area. The observed percent cover of exotic species will be used as the baseline for the following year. In each subsequent year, the restoration specialist will collect percent cover data utilizing the same method chosen for the baseline data collection. Audubon will compare the new data with the prior year's data to determine if the annual goal was achieved. The annual goal for the project is a five percent reduction in exotic species each year for up to five years. Audubon will choose the monitoring method to be used; this Plan recommends utilizing the Step Point method or Line Intercept method.

### **3.3.3 Reporting**

In order to track the progress of the recovery effort, Audubon will prepare annual reports for inclusion in the project file. The reports will include discussions of the past year's restoration efforts, herbicide uses, numbers of MSS observed, documented take of MSS, photos of the restoration areas, and results of the annual monitoring data. If known, the annual reports should also provide a brief discussion on future restoration efforts or significant changes to the long-term management of the Preserve. The brief reports will remain on-file at the Audubon office and will be available for review by interested parties.

### 3.4 IMPLEMENTATION TIMEFRAME

The timeframe for implementation will depend on USFWS review of the proposed recovery plan and associated permit amendments. Restoration work will start as soon as possible once USFWS has reviewed this Plan. All work will be performed under the reviewed Plan, in accordance with the PBO, and the Terms and Conditions of Audubon’s recovery permit. Table 1 outlines an approximate time frame for implementation of the proposed project phases.

**Table 1. Approximate Timeframe for Implementation**

<b>Task</b>	<b>Proposed Timeframe</b>
<i>Sensitive species training (prior to initiating exotics removal and seed/cutting collection)</i>	
Phase I exotic species removal	Winter through Spring
Cutting collection and begin propagation	Summer through Fall
Seed collection, treatment, and begin propagation	Spring through Fall
Phase II site preparation for planting	Summer/Fall
Container planting	Early Winter
Seed casting (both during and after planting)	Early Winter
Begin Phase III monitoring/maintenance	Early Winter

## 4. IMPACT ASSESSMENT

The following section identifies potential impacts to MSS and other special-status species that may occur during habitat restoration activities and provides required avoidance and minimization measures to reduce the impacts. Many of the minimization and avoidance measures must be conducted by a qualified MSS biologist. For the purpose of this Plan, the term “qualified MSS biologist” refers to any individual in possession of a valid 10(a)(1)(A) Recovery Permit that specifically includes habitat enhancement as a permitted activity.

### 4.1.1 Potential Impacts to Special-status Species

Implementation of the proposed restoration activities has the potential to cause short-term negative impacts to the federally protected MSS, MSS habitats, and special-status plant species within the Preserve. Potential impacts include injury or mortality from crushing individual MSS or improper relocation of MSS during survey and weed eradication efforts, loss of shelter sites after removal of exotic vegetation, and potential contact with herbicides. Special-status plant species including Morro manzanita and Blochman’s leafy daisy could be damaged or killed by aggressive manual weed removal and herbicide drift during exotic species control efforts.

### 4.1.2 Proposed MSS Minimization Measures

To minimize disturbance of MSS individuals, suitable habitat for MSS, and special-status plant species during implementation of the Plan, all minimization and protective measures contained in the PBO and the recovery permit will be implemented prior to and during restoration efforts. The PBO includes MSS minimization measures that must be implemented during all restoration activities occurring in MSS

habitat on the Preserve. The following list summarize the minimization measures; however, they are not intended to replace or alter the measures provide in the PBO.

### **MSS Minimization Measures**

1. All work should be performed during dry conditions. If precipitation is predicted within 24 hours of the work day, work should be postponed and rescheduled for a dry period.
2. To avoid inadvertent trampling of MSS, all restoration personnel should avoid accessing the non-native woodlands and wetland areas via the non-native grassland and maritime chaparral. Restoration personnel should utilize the existing foot path to access the non-native woodland and wetland areas. If restoration personnel must utilize the non-native grassland or maritime chaparral to access the non-native woodlands or wetlands, the qualified MSS biologist should survey the identified access route for MSS prior to any disturbances. If live MSS are identified within the access route, the individual(s) should be left in place and the access route should be realigned to avoid the individual(s). Once the absence of MSS is confirmed within an access route, the route should be delineated with visible flagging (pin flags or tape). All personnel should limit traffic to the delineated area.
3. All restoration activities conducted in the maritime chaparral, coastal dune scrub, and non-native grassland should be monitored by a qualified biologist in possession of a valid 10(a)(1)(A) permit for MSS.
4. Prior to implementing restoration activities, restoration personnel should attend an environmental awareness training conducted by the qualified MSS biologist prior to start of activities. At a minimum, the training should included a description of the MSS and its habitat, the general provision of the Endangered Species Act of 1973, as amended, the specific measures being implemented to conserve the MSS as they relate to the project, the access routes to the project site, and the project boundaries. Further, the training should include a description of Morro manzanita, its habitat, and the specific measures being implemented to protect the species. Brochures, photographs, books, and briefings may be used in the training session, provided a USFWS-approved biologist is available to answer any questions.
5. Prior to the onset of each day's activities, the USFWS-approved biologist should search for MSS within the treatment areas. Search methods may include, but are not limited to, carefully sifting through accumulated plant litter beneath shrubs, checking the lower branches of shrubs, and turning over rocks and other debris where MSS may shelter. MSS found within access routes and work areas shall be carefully moved outside the work area and released nearby, preferably within 50 feet of original location, and placed under native vegetation after minimal handling time (generally within one minute). Information which includes the date, time of capture, specific location of capture and release, associated vegetation and any other pertinent information should be recorded.
6. Prior to each work event, the USFWS-approved biologist should clearly define and demarcate the work area and acceptable access routes with visible flagging. Access routes should be selected to avoid or minimize adverse effects to individual MSS and Morro Manzanita. The fewest number of access routes should be established to minimize trampling of MSS, Morro manzanita, and other native vegetation.
7. If MSS are encountered during restoration activities, the USFWS-approved biologist should stop the work. The MSS should be relocated to predetermined native habitat areas, preferably within 50 feet of the original location, before work activities may resume.

8. Removal of woody debris and broadcast sprinkler irrigation should not be conducted within areas containing non-native grassland or maritime chaparral.

### **Weed Removal Methods**

1. Removal of or damage to native vegetation during project implementation must be avoided to the maximum extent possible.
2. Prior to starting veldt grass removal, non-target shrubs that provide substantial habitat for MSS should be flagged. When hand removal methods are used, a “safety zone” of 5 feet in diameter shall surround each non-target shrub. Veldt grass should be removed by hand or with hand tools to within 18 inches of the shrub. Veldt grass within 18 inches of the shrub should be pulled by hand only.
3. Extensive monocultures of veldt grass may be mowed to stubble just above ground level, but the 5-foot safety zone should be maintained around non-target plants. Herbicide should be applied when veldt grass reaches a height of 3 inches. Repeated mowing and spraying may be necessary to exhaust the seed bank.
4. When using hand removal methods, pest plants should be disposed of off-site and not be piled or composted on the project site, reducing the possibility of re-sprouting from seeds or root segments and re-colonizing the treatment site.
5. All equipment and clothing should be inspected and cleaned before moving off-site to lessen the probability of spreading pest plants to other areas.
6. Solarization should be used only during the summer months and when soils are thoroughly wet. It should not be used to treat extensive areas of veldt grass, so that changes to soil composition and chemistry are reduced.

### **Herbicide Application Methods**

1. Only two herbicides should be used for weed removal: glyphosate (Roundup Custom® or Rodeo® with the addition of a USFWS-approved low-toxicity surfactant) and fluazifop-p-butyl (Fusillade®). Glyphosate should be used only on extensive veldt grass monocultures. In areas where veldt grass is intergrown with native broadleaf species, Fusillade® should be used because it will leave broadleaf vegetation intact. Glyphosate should not be used in these areas because it will kill both broadleaf and grass species on contact.
2. A 15-foot buffer zone should be established around native shrubs that provide substantial habitat for MSS. No spraying should occur within the buffer zone.
3. Morro manzanita and other rare plant species should be covered with appropriate shielding, such as plastic sheeting, 5-gallon buckets, or 20-gallon plastic tubs (depending on size of plants) to protect them during herbicide applications occurring in their vicinity. Plants should be covered for no more than two hours.
4. A non-toxic dye should be mixed in to the herbicide spray solution of prevent double spraying at the project site and to identify treatments gaps.

5. Herbicide drift to non-target areas should be reduced by using low-drift equipment and careful spot spraying procedures. Herbicides should only be applied during calm weather conditions, with wind blowing less than 5 miles per hour.
  - a. No herbicide spraying should occur within 150 feet of any water bodies to keep herbicide drift from entering water.
  - b. When not in use, herbicides and any other project-related hazardous materials should be stored off-site. On days when herbicides are being applied, such materials should either be in the possession of the registered applicator or in a designated location on an impermeable liner for accidental spill containment. All accidental project-related spills of hazardous materials should be cleaned up immediately.

Herbicide operations must be performed by a registered applicator. The herbicide applicator should carry, at any one time, only the amount of herbicide required for the day's application and use a cloth to wipe up any drips.

#### **4.1.3 Potential Benefits to Special-status Species**

Implementation of the Plan is expected to provide significant benefits for the MSS and existing populations of common and special status plant species within the Preserve. These benefits will result from habitat enhancement resulting from removal of exotic species, pedestrian access restriction to reduce erosion and allow regeneration of native vegetation, and revegetation with native coastal dune scrub plant species. The efforts will reduce the spread of invasive plant species and begin a significant trend towards fewer invasive species, decreased erosion, and improved native habitat quality. Implementation of the Plan will greatly enhance habitat values in the Preserve, and will provide for the long-term persistence of those habitats.

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**APPENDIX A:**  
**Intra-Service Programmatic Biological Opinion on Issuance of Recovery**  
**Permits for Control and Removal of Invasive Non-native Plants in the Vicinity**  
**of Los Osos, San Luis Obispo, County, California**  
**(1-8-03-FW-33R)**





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ventura Fish and Wildlife Office  
2493 Portola Road, Suite B  
Ventura, California 93003

In Reply Refer To: PAS 713.762.966

September 12, 2003

### Memorandum

To: Chief, Endangered Species, Region 1, Portland, Oregon  
/s/: Catrina Martin

From: Deputy Field Supervisor, Ventura Fish and Wildlife Office, Ventura, California

Subject: Intra-Service Programmatic Biological Opinion on Issuance of Recovery Permits for Control and Removal of Invasive Non-native Plants in the Vicinity of Los Osos, San Luis Obispo County, California (1-8-03-FW-33R)

This document transmits our biological opinion on your proposed issuance of a permit, pursuant to section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended (Act), for the removal and control of invasive non-native plants within the habitat of the federally endangered Morro shoulderband snail (*Helminthoglypta walkeriana*) and its critical habitat and the Indian Knob mountainbalm (*Eriodictyon altissimum*), and the threatened Morro manzanita (*Arctostaphylos morroensis*). This consultation document has been prepared pursuant to 50 CFR 402 of our interagency regulations governing section 7(a)(2) of the Act.

This biological opinion was prepared using an invasive species control program proposed for Morro shoulderband snail habitat or areas underlain by Baywood fine sands in the vicinity of Los Osos (Morro Estuary Greenbelt Alliance); discussions with biologists familiar with similar projects and the affected species; and our files. We also conducted site visits of areas where control activities may occur. A complete administrative record of this consultation is on file at our Ventura Fish and Wildlife Office, Ventura, California. For the remainder of this biological opinion, the control and removal of invasive non-native plants or pest plants will be referred to as "weed removal."

This biological opinion will not address the federally endangered Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*) because invasive non-native plant removal and control activities are not expected to occur where this species may be. We believe the only likely place the Morro Bay kangaroo rat may be found is on the Bayview property (formerly known as the Morro Palisades) which is managed by California Department of Fish and Game. In the event that non-native plant removal and control activities are proposed for the Bayview property, trapping for Morro Bay kangaroo rat must take place before any weed removal activities are begun. If the species is found, we will be notified and the 10(a)(1)(A) permit modified. The proposed actions could then ultimately benefit the Morro Bay kangaroo rat by improving the

condition of the habitat upon which it depends.

#### CONSULTATION HISTORY

On July 2, 2003, the Service issued an intra-Service programmatic biological opinion (1-8-03-FW-11) on the issuance of recovery permits for control and removal of invasive plants in the Los Osos area. In that opinion, we described a process whereby each recovery permit would undergo a separate tiered consultation. This approach was taken so that we could track take exempted through issuance of the recovery permits. On July 24, 2003, the Service re-initiated consultation after deciding that a more simplified and time-efficient way to consult on issuance of these recovery permits could be done by anticipating a maximum amount of take that may occur annually and tracking actual take from our review of annual reports provided by permit holders. This biological opinion will describe this approach in more detail in the incidental take statement.

#### BIOLOGICAL OPINION

##### DESCRIPTION OF THE PROPOSED ACTION

The invasion of non-native plants, particularly veldt grass (*Ehrharta calycina*), in the Los Osos area will cause progressive loss of habitat for Morro shoulderband snails, Indian Knob mountainbalm, and Morro manzanita as dune scrub and chaparral are converted to grassland. Although other pest plants are present in Los Osos, it is critical to control veldt grass now because it spreads quickly and inhibits or prevents germination and establishment of native dune scrub and chaparral species (Bossard *et al.* 2000). Control and removal of veldt grass and other pest plants would occur mostly in coastal dune scrub habitat that supports the Morro shoulderband snail, and in maritime chaparral that supports Indian Knob mountainbalm and Morro manzanita. Lands owned by state, federal, and local government, and private lands may be included. Project actions are also expected to benefit other listed and sensitive species that share these habitats, such as the Morro blue butterfly (*Icaricia icarioides morroensis*). Weed removal has been identified as a recovery task in the recovery plan for the Morro shoulderband snail, Indian Knob mountainbalm, and Morro manzanita (Service 1998).

The primary methods for weed removal are: 1) hand and mechanical removal, in which pest plants are pulled by hand or with hand tools, mowing, or solarization (placing black or clear plastic over the soil surface to increase soil temperature and block sunlight), 2) herbicide application, or 3) a combination of these methods. The advantages of hand pulling include its small ecological impact, minimal damage to neighboring plants, and low cost for equipment or supplies (Tu *et al.* 2001). It is the preferred method for removing veldt grass growing directly under sensitive (non-target) native shrubs (The Land Conservancy 2002). However, hand pulling is extremely labor intensive and useful only for relatively small populations.

Mowing can reduce seed production and restrict weed growth, especially if done before pest plants flower and set seed. Extensive monocultures of veldt grass may be effectively controlled

by repeated mowing followed by herbicide application.

Solarization is the technique of placing a cover, usually black or clear plastic, over the soil surface to trap solar radiation and cause an increase in soil temperature that kills plants, seeds, plant pathogens, and insects (Tu et al. 2001). Black plastic also blocks sunlight. Solarization is only effective if done in wet soil and is most effective against weeds that germinate under cool conditions. The higher the soil temperature, the more quickly vegetation is killed.

When providing guidance on the use of herbicides for weed removal projects, we generally recommend Roundup Custom® (or Rodeo®) and Fusilade® (Snyder-Conn, pers. comm. 2002). Roundup® is a broad-spectrum, non-selective, systemic herbicide that will kill both broadleaf and grass species on contact. When tested at normal application rates, the active ingredient glyphosate was slightly toxic to birds, practically non-toxic to fish and slightly toxic to terrestrial invertebrates (Exttoxnet: Glyphosate 2002). Roundup Custom® or Rodeo® are the recommended products because they lack a surfactant in the formulation. Surfactants are sometimes the most generally toxic portion of a pesticide product (Briggs 1992). In light of this, we generally recommend two very low-toxicity surfactants that work well with Roundup Custom® and Rodeo®: Agri-dex, produced by Helena Chemicals, and LI 700, produced by Loveland Industries (Snyder-Conn, pers. comm. 2002).

Fusilade® (fluazifop-p-butyl) is a selective, post-emergence phenoxy herbicide used for control of most annual and perennial grass weeds. It does not affect broadleaf species. It is practically nontoxic to birds, highly to moderately toxic to fish, and slightly toxic to other aquatic species such as invertebrates. It has low persistence in moist soil environments with a reported half-life of less than one week (Exttoxnet: Fluazifop-p-butyl 2002).

The majority of weed removal actions would occur in and around the community of Los Osos on public and private lands, with the permission of landowners. We will work with project coordinators to identify appropriate sites to conduct the proposed actions. Methods proposed for each project site to avoid or reduce adverse effects to Morro shoulderband snails, Indian Knob mountainbalm, and Morro manzanita would be subject to review and approval by us before being implemented. Weed removal may be carried out by staff and members of nonprofit conservation organizations and government agencies, including, but not limited to the California Native Plant Society, Morro Estuary Greenbelt Alliance, National Audubon Society, Small Wilderness Area Preserves, California Conservation Corps, and California Department of Parks and Recreation.

When agencies or groups submit an application for a section 10(a)(1)(A) permit to our Regional Office, the Regional Office will request that we review the application to determine whether it is consistent with the provisions of the programmatic biological opinion. If the application meets the issuance criteria in the programmatic biological opinion, we will provide the Regional Office with a letter that includes permit specifications, additional terms and conditions as needed, and the take limit of Morro shoulderband snails from restoration activities covered under that recovery permit. The Regional Office will issue the recovery permit and require that the permittee notify us at least 30 days before work begins at any specific site so we can track both

the work site locations and the amount of take that is occurring.

*Suitability Criteria*

Actions being considered under this consultation are those that are designed for weed removal that are likely to adversely affect Morro shoulderband snails either by mortality of individuals or through temporary disturbance of critical habitat, or both, but that do not contribute to a decline in Morro shoulderband snails in the affected area. Actions that are likely to adversely affect Indian Knob mountainbalm or Morro manzanita are also included in this consultation. Actions that meet suitability criteria include, but are not limited to mapping pest plant infested areas, removal by hand or mechanical methods, herbicide application, and survey, monitoring, and relocation activities for Morro shoulderband snails.

Projects are likely to meet the suitability criteria if the minimization measures provided below are implemented and the intended purpose of the action is recovery of native habitats and their species. If we determine that the effects are different than we analyzed for any of the listed species, we will notify permittees and amend their permits. Consultation will be reinitiated and amended as necessary.

*Minimization of Adverse Effects*

To the maximum extent practicable, projects authorized under this recovery permit would be designed and implemented to minimize adverse effects to the Morro shoulderband snail, its critical habitat, Indian Knob mountainbalm, and Morro manzanita. To achieve that purpose, the following measures would be taken at a minimum:

**Morro shoulderband snails**

1. Before any weed removal activities begin, a Service-approved biologist will conduct a training session for all project personnel. At a minimum, the training will include a description of the Morro shoulderband snail and its critical habitat, the general provisions of the Endangered Species Act of 1973, as amended, the specific measures being implemented to conserve the Morro shoulderband snail as they relate to the project, the access routes to the project site, and the project boundaries. Further, the training will include a description of Indian Knob mountainbalm and Morro manzanita, their habitats, and the specific measures being implemented to protect these plants. Brochures, photographs, books and briefings may be used in the training session, provided a Service-approved biologist is available to answer any questions.
2. The Service-approved biologist will clearly demarcate the pest plant treatment areas. Access routes will be selected to avoid or minimize adverse effects to individual Morro shoulderband snails, Indian Knob mountainbalm, and Morro manzanita. The fewest number of access routes will be established to minimize trampling of Morro shoulderband snails, Indian Knob mountainbalm, Morro manzanita, and native vegetation.
3. Prior to the onset of each day's activities, the Service-approved biologist will search for

Morro shoulderband snails within the treatment areas. Search methods may include, but are not limited to, carefully sifting through accumulated plant litter beneath shrubs, checking the lower branches of shrubs, and turning over rocks and other debris where Morro shoulderband snail may shelter. Morro shoulderband snails found within access routes and work areas will be carefully moved outside the work area and released nearby, preferably within 50 feet of original locality, and placed under native vegetation after minimal handling time (generally within one minute). Information which includes the date, time of capture, specific location of capture and release, associated vegetation and any other pertinent information will be recorded.

4. If Morro shoulderband snails are encountered during pest plant treatment activities, the Service-approved biologist will stop the work. Morro shoulderband snails will be relocated to predetermined native habitat areas, preferably within 50 feet of original location, before work activities may resume.
5. The Service-approved biologist will be onsite and will monitor the project throughout the entire pest plant removal project to ensure protective measures are implemented.

#### **Hand and mechanical removal methods**

6. Removal of or damage to native vegetation during project implementation will be avoided to the maximum extent possible.
7. Prior to starting veldt grass removal, flagging will be placed adjacent to non-target shrubs that provide substantial habitat for Morro shoulderband snails. When hand removal methods are used, a "safety zone" of 5 feet in diameter will surround each non-target shrub. Veldt grass will be removed by hand or with hand tools to within 18 inches of the shrub. Veldt grass within the 18-inch zone will be pulled by hand only.
8. Extensive monocultures of veldt grass may be mowed to stubble just above ground level, but the 5-foot safety zone as in #2 above will be maintained around non-target plants. Herbicide will be applied when veldt grass reaches a height of 3 inches. Repeated mowing and spraying may be necessary to exhaust the seed bank.
9. When using hand removal methods, pest plants will be disposed of offsite and will not be piled or composted on the project site, reducing the possibility of resprouting from seeds or root segments and recolonizing the treatment site.
10. All equipment and clothing will be inspected and cleaned before moving off-site to lessen the probability of spreading pest plants to other areas or the next project site.
11. Solarization will be used only during the summer months and when soils are thoroughly wet. It will not be used to treat extensive areas of veldt grass, so that changes to soil composition and chemistry are reduced.

**Herbicide application methods**

12. Only two herbicides will be used for weed removal: glyphosate (Roundup Custom® or Rodeo® with the addition of a Service-approved low-toxicity surfactant), and fluazifop-p-butyl (Fusilade®). Glyphosate will be used only on extensive veldt grass monocultures. In areas where veldt grass is intergrown with native broadleaf species, Fusilade® will be used because it will leave broadleaf vegetation intact. Glyphosate will not be used in these areas because it will kill both broadleaf and grass species on contact.
13. A 15-foot buffer zone, where no spraying is done, will be established around native shrubs that provide substantial habitat for Morro shoulderband snails.
14. Indian Knob mountainbalm and Morro manzanita will be covered with appropriate shielding, such as plastic sheeting, 5-gallon buckets, or 20-gallon plastic tubs (depending on size of plants) to protect them during herbicide application in their vicinity. Plants will be covered for no more than 2 hours.
15. A nontoxic dye will be mixed into the herbicide spray solution to prevent double spraying at the project site and to identify treatment gaps.
16. To reduce the likelihood of contaminating shallow groundwater, herbicides will not be applied directly to sand or other permeable soil types.
17. Herbicide drift to non-target areas will be reduced by using low-drift equipment and careful spot spraying procedures. Herbicides will only be applied during calm weather conditions, with wind blowing less than 5 miles per hour.
18. A 150-foot buffer zone, where no spraying is done, will be established around water bodies to keep herbicide drift from entering water.
19. When not in use, herbicides and any other project-related hazardous materials will be stored off-site. On days when herbicides are being applied, such materials will either be in the possession of the registered applicator or in a designated location on an impermeable liner for accidental spill containment. All accidental project-related spills of hazardous materials will be cleaned up immediately.
20. Herbicide operations will be performed by a registered applicator. The herbicide applicator will carry, at any one time, only the amount of herbicide required for the day's application and use a cloth to wipe up any drips.

We must annually evaluate the effects of actions that have occurred under this programmatic consultation to ensure that its continued implementation does not result in long-term adverse effects to the ecosystems upon which the Morro shoulderband snail, Indian Knob mountainbalm, and Morro manzanita depend. This opinion may be modified to address problems with the programmatic process or unforeseen adverse effects on listed species.

## STATUS OF THE SPECIES

### **Morro shoulderband snail**

On December 15, 1994, we listed the Morro shoulderband snail as endangered (50 *Federal Register* 64613). A recovery plan for the Morro shoulderband snail and four plants from western San Luis Obispo County was published in September 1998 (Service 1998).

The Morro shoulderband snail is a member of the land snail family Helminthoglyptidae. The genus *Helminthoglypta*, the shoulderband snails of California, is a complex of many species, each with a relatively small range and therefore relatively vulnerable to extinction (Burke et al. 1999). Although the geographic range of the Morro shoulderband snail is not fully known, we do not expect it to extend much beyond the region it is now known to inhabit. Further studies are underway to better define the range of this species.

Two other species in the genus *Helminthoglypta* inhabit areas adjacent to or overlapping the range of the Morro shoulderband snail. The Surf shoulderband snail (*H. fieldi*) inhabits coastal dune habitats from south of the San Luis Range in San Luis Obispo County to Point Arguello in Santa Barbara County. The Big Sur shoulderband snail (*H. umbilicata*) occurs from Monterey Bay, Monterey County, south to northern Santa Barbara County, and it has been found in the community of Los Osos.

The genus *Helminthoglypta* ranges from northern Baja California to southwestern Oregon, but is largely restricted to California. Species in this genus occupy a range of habitats, ranging from moist areas on the northwest coast to the dry hills in the Mojave Desert. The recovery plan for the Morro shoulderband snail describes its current distribution as “areas south of Morro Bay, west of Los Osos Creek and north of Hazard Canyon” (Service 1998); the species occurs throughout the community of Los Osos (Service 1998). At the time the recovery plan was written, the range of the Morro shoulderband snail was thought to be limited to the vicinity of Morro Bay and to be largely restricted to sandy soils of the coastal dune and coastal sage plant communities of the cities of Morro Bay and Los Osos. However, recent surveys have rediscovered the snail in inland areas, particularly the Chorro Valley and the City of San Luis Obispo (Morro Group, Inc., 2002). At these inland areas, the snail was found under rocks, woody debris, or in decaying vegetation under shrubs in localities with grassy swales, black clay, or serpentine rock outcrops (Tupen, pers. comm. 2002). In 1998, the species was rediscovered by Service staff on a coastal bluff between Morro Bay and Cayucos, where it had not been recorded since 1948.

The Morro shoulderband snail inhabits the accumulated litter and undersides of low shrub branches in coastal dune scrub vegetation, particularly mock heather (*Ericameria ericoides*), seaside golden yarrow (*Eriophyllum staechadifolium*), deerweed (*Lotus scoparius*), and dune almond (*Prunus fasciculata* var. *punctata*). Morro shoulderband snail have been found within introduced iceplant (*Mesembryanthemum* spp. and *Conicosia* spp.) and fig-marigold

(*Carpobrotus edulis*). The species has been found most often in mock heather (Roth 1985; Hill 1974). Morro shoulderband snails seem to prefer shrubs that exhibit dense, low growth with ample contact to the ground. Based on this observation, favorable microclimate for the species may depend on shrubs that provide partial shading and act as windbreaks to moderate temperatures and moisture loss within accumulated plant litter. Recent records from the Chorro Valley and City of San Luis Obispo suggest the Morro shoulderband snail can find adequate shelter and moisture under woody debris and in decaying vegetation under fennel (*Foeniculum vulgare*) and other shrubs.

High moisture availability is necessary for the species to be active, and their feeding is facilitated by dampness. Therefore, surveys should be conducted during the rainy season or during heavy fogs when Morro shoulderband snails are most likely to be active, although Morro shoulderband snails can be found estivating in the accumulated litter under shrubs during the dry season. Morro shoulderband snails estivate by producing an epiphragm (a seal of dried mucus in the aperture of the shell) to reduce water loss during seasonal periods of inactivity (summer and winter). However, searching for Morro shoulderband snails during the dry season is not recommended because moving leaf litter and branches by survey efforts may disturb the temperature and moisture levels needed by the species in estivation sites. It seems that changes in these microhabitat conditions could cause physiological stress or death in estivating Morro shoulderband snails, although no studies have been conducted to determine how Morro shoulderband snails are affected when disturbed during estivation.

Critical habitat for the species was designated on February 7, 2001 (66 *Federal Register* 9233). The final rule describes three units encompassing 1,951 acres in San Luis Obispo County. The primary constituent elements of critical habitat for the Morro shoulderband snail are those physical and biological features that are essential to conservation of the species and may require special management considerations and protections. Critical habitat for the Morro shoulderband snail includes sand or sandy soils needed for reproduction, a land slope not greater than ten percent to facilitate movement of individuals, and the presence of native coastal dune scrub vegetation.

The greatest threat to the Morro shoulderband snail is loss of habitat through partial or complete removal of native vegetation within its geographic range. Habitat loss, fragmentation and degradation can result from urban development and by invasion of non-native plant species, particularly veldt grass. Shrubs and brush are needed for the cooling effect of partial shading and to provide windbreaks that reduce the drying effect of wind at ground level (dehydration is a major threat to terrestrial mollusks). Woody debris also provides shelter for Morro shoulderband snails and may be important in the local food chain as a source of nutrients for fungi and herbaceous plants.

Other threats to the species include direct trampling, soil disturbance and soil compaction caused by horses, people and off-road vehicles. Individual Morro shoulderband snails may be threatened by the application or spilling of chemicals, including pesticides, herbicides, fertilizers, and fire retardants. The structural senescence of dune vegetation may also threaten snail survival; older shrubs that no longer contact the ground may not provide the necessary microhabitat, temperature

and moisture in the accumulated litter. Morro shoulderband snails may be limited by competition with non-native species, such as the brown garden snail (*Helix aspersa*), and predation by sarcophagid fly larvae (Service 1998). Although the Morro shoulderband snail has been found in non-native iceplant, if left unchecked this vegetation can "carpet" native plant communities and exclude native plants, which may render the habitat unsuitable for Morro shoulderband snail.

### **Indian Knob mountainbalm**

Indian Knob mountainbalm is a diffusely branched evergreen shrub of the waterleaf family (Hydrophyllaceae) that reaches a height of 6.6 to 13 feet. The sticky leaves are long and narrow; the lavender flowers are arranged in coiled clusters and produce tiny seeds. As with other fire-adapted chaparral plants, Indian Knob mountainbalm produces new growth primarily from rhizomatous suckers.

Only six stands of Indian Knob mountainbalm are known. Five of six extant stands occur within a few square miles of each other, from the south side of the community of Los Osos to the north end of Montana de Oro State Park. Each of these stands has fewer than 50 plants. A sixth stand is found 15 miles to the southeast on Indian Knob, between San Luis Obispo and Arroyo Grande; with more than 500 plants, it comprises the largest stand (Lynn Dee Oyler, Botanical Consultant, *in litt.* 1991). Estimating population sizes is imprecise because the plant sprouts from the root, making identification of a genetic or physiologic "individual" difficult. Two of the Morro Bay stands are on lands owned and managed by Montana de Oro State Park, and co-occur with Morro manzanita in Hazard Canyon. The remaining stands are on private property. Because rugged terrain in the Irish Hills (between Morro Bay and Indian Knob) has precluded extensive botanical surveying, it is not known whether other stands of Indian Knob mountainbalm occur in this area.

Indian Knob mountainbalm occurs in soils derived from marine sandstones containing tar deposits referred to as "tar sands" and, in the northern part of its range, on Baywood fine sands and weathered ancient dune soils. This species co-occurs with Morro manzanita in several locations in maritime chaparral. Vanderwier (1987) did a detailed study of the chaparral and oak woodland communities at the type locality for Indian Knob mountainbalm. As with other members of this genus, Indian Knob mountainbalm is thought to be adapted to ecologic disturbance, specifically to periodic fire within the chaparral community. Field botanists have noted that most stands of Indian Knob mountainbalm are mature or senescent in age, and that prescribed fire may be needed to revitalize the stands (Bittman 1985).

This perennial shrub is believed to be relatively long-lived; lichens the size of a quarter can be found scattered along its woody stems. Indian Knob mountainbalm flowers in June and July. A variety of nonspecialist potentially pollinating insects have been recorded visiting the flowers of this species. Fruits contain a single ovule and seedset is low in those individuals (ramets) in which it has been recorded. A related species, Lompoc yerba santa, is self-incompatible and

reproductive and genetic studies suggest that small colonies may consist of only a single genotype (clone) (Elam 1997). It is not known if Indian Knob mountainbalm is self-compatible; however, it is possible that some colonies are also composed of a single clone. In addition to sexual reproduction, this species regenerates by root sprouts.

The potential for development is the greatest threat to Indian Knob mountainbalm on private lands. In the early 1990s, a water storage tank was installed within a hundred feet of one occurrence north of Highland Drive on private property. Surface mining of tar sands was proposed several years ago for the Indian Knob area (Vanderwier 1987); however, part of this stand now receives protection through a conservation easement that restricts mining activities.

This species was listed by the State of California Fish and Game Commission as endangered in 1979. The City of San Luis Obispo has purchased a conservation easement that provides protection to a large portion of the known population at Indian Knob. The easement covers almost 1500 acres and restricts mining and development where the known population of the mountainbalm occurs.

### **Morro manzanita**

We listed the Morro manzanita as threatened on December 15, 1994 (*50 Federal Register* 64613). Morro manzanita is a shrub in the heath family (Ericaceae) that reaches a height of 5 to 13 feet and has oblong to ovate grey-green to olive-green leaves. Older individuals of Morro manzanita may have canopies 33 feet in diameter. Its white to pinkish flowers form orange-brown fruits with 8 to 10 stones per fruit (Wells 1993; Tyler and Odion 1996) that are fused but separable.

Morro manzanita is found south of Morro Bay on a soil type referred to as Baywood fine sands, in association with coastal dune scrub, maritime chaparral, and coast live oak woodland communities in sites with no or low to moderate slopes. On steeper slopes, particularly on the north-facing slopes of the Irish Hills, Morro manzanita occurs in almost pure stands. Where Morro manzanita occurs in dense stands, few understory species are present (Tyler and Odion 1996).

The historic distribution of Morro manzanita was estimated to cover between 2,000 and 2,700 acres, based on the distribution of Baywood fine sands in the Los Osos area (McGuire and Morey 1992). The flat areas covered by Baywood fine sands have largely been developed, primarily in the communities of Los Osos, Baywood Park, and Cuesta-by-the-Sea on the south and east sides of Morro Bay. Some development has also occurred on the steeper north-facing slopes of the Irish Hills. The current range of Morro manzanita is approximately 840 to 890 acres (LSA 1992); half of the range consists of small or low-density patches of Morro manzanita plants that remain in and around developed areas of Los Osos and Baywood Park, and half consists of more continuous and more dense (at least 50 percent cover by this species) stands.

Approximately 65 percent of the remaining Morro manzanita habitat is in private ownership; the bulk of this is habitat with high densities of manzanita. Approximately 35 percent of the current distribution of the manzanita is on publicly owned lands, the majority within Montana de Oro State Park. Most of the distribution of Morro manzanita on public lands exists at low densities (McGuire and Morey 1992).

Morro manzanita is a long-lived shrub that flowers in winter, with fruit maturing and seed dispersing in summer and fall. Unlike other species of manzanita, Morro manzanita lacks a woody burl from which it can resprout following a fire (Tyler and Odion 1996). Typically, when obligate-seeding manzanita individuals are consumed by fire, stand regeneration depends on long-lived seeds that remain viable, but dormant, in a soil seedbank. Recent studies found that Morro manzanita seeds were typically abundant under the canopies of adult individuals, but were at much lower densities beyond the canopy. Under canopies seed densities were estimated at 12,000 to 37,000 seeds per square meter, although viability of the seeds was less than five percent. About 80 percent of the seeds were found in the top one inch of the soil samples (Tyler and Odion 1996).

Morro manzanita is expected to be relatively long-lived. Studies of stand age based on trunk ring counts and aerial photos of previous disturbance events, including fire and possibly clearing, indicate that the youngest intact stands in Los Osos are some of those south of Highland Drive, which are about 37 years old. Stands west of Pecho Drive are about 47 years old. The remainder are older than 47 years, with stands in the Elfin Forest estimated to be the oldest (Tyler and Odion 1996).

The germination response of Morro manzanita to fire has not been studied in depth. However, studies of other species suggest that fire intensity and depth of the buried soil seedbank influence the number of seeds that survive the fire and are able to germinate (Tyler and Odion 1996). Some seedling establishment in Morro manzanita has also occurred following mechanical clearing (LSA *in litt.* 1993). While the process of clearing likely scarifies some seed, other factors that may encourage regeneration after a fire, such as heat and leachate from ash, are missing. Aerial photo analysis suggests that mechanical clearing and burning for ordnance removal in the 1950s converted maritime chaparral with manzanita into weedy coastal sage scrub on what is now state park land west of Pecho Road (Tyler and Odion 1996).

Morro manzanita is threatened primarily by historical and continued loss and fragmentation of habitat on private lands and alteration in fire cycles due to increased urbanization. Habitat degradation and alteration from nonnative plant species (e.g., *Carpobrotus* sp.), which are particularly aggressive invaders after a burn or in a canopy opening, also threaten this species.

ENVIRONMENTAL BASELINE

According to the recovery plan for Morro shoulderband snails, Indian Knob mountainbalm, and Morro manzanita, the best areas to focus recovery and management efforts are on conserved lands where the three species overlap in distribution or are contiguous with one another, in

natural habitats that are relatively large and unfragmented by development, and in areas that are in public ownership and are managed for their biological diversity. The majority of pest plant control would take place on these lands, particularly on the Greenbelt parcels that were acquired to conserve native habitats. Coastal dune scrub and maritime chaparral make up substantial portions of these lands, constituting prime habitat that supports Morro shoulderband snail, Indian Knob mountainbalm and Morro manzanita. The constituent elements of critical habitat for Morro shoulderband snails are also present on some of these conserved lands.

We do not know the absolute population size of Morro shoulderband snails in the Los Osos area. However, in an intensive survey effort over one-quarter of an acre on the Broderson property, biologists found a total of 28 live Morro shoulderband snails (Sloan, pers. comm., 2003). Because of the small size and cryptic behavior of the species, it is not possible to locate every individual but a strong survey effort should be able to find 75-80 percent of adult Morro shoulderband snails in healthy coastal sage scrub and up to 90 percent of adult individuals in sparse or senescent habitat areas (Sloan, pers. comm., 2003). Since coastal sage scrub covers approximately 345 acres in the Los Osos vicinity (Crawford, Multari and Clark, 2003), we estimate there could be approximately 100 Morro shoulderband snails per acre or as many as 35,000 for the entire Los Osos area.

Population estimates for Morro manzanita range from 86,000 to 153,000 individuals in the Morro Bay area, primarily in maritime chaparral plant community. Indian Knob mountainbalm individuals number less than 600 and are contained in six known stands from south of Morro Bay to Indian Knob. The majority of individual weed removal projects would occur at different times and locations in the Greenbelt areas and other lands around Los Osos, and would be conducted in coastal dune scrub where veldt grass is the most invasive. We expect the effects to Indian Knob mountainbalm and Morro manzanita would be minimal because these species seldom occur in coastal sage scrub plant communities where veldt grass is the most dense.

#### EFFECTS OF PROPOSED ACTION

Activities covered in this biological opinion are those that would promote recovery of Morro shoulderband snails, Indian Knob mountainbalm, and Morro manzanita by effectively removing and controlling pest plants. Mapping pest plant infested areas, removal by hand or mechanical methods, herbicide application, and Morro shoulderband snail survey, monitoring, and relocation activities would affect Morro shoulderband snails, Indian Knob mountainbalm, and Morro manzanita in several ways. The following discussion summarizes the potential effects from weed removal activities and the effectiveness of the proposed minimization actions to reduce those effects to Morro shoulderband snails, Indian Knob mountainbalm and Morro manzanita.

#### **Morro shoulderband snail**

Morro shoulderband snails may be disturbed, injured or killed during survey activities conducted to determine snail distribution in the project area and when they are relocated prior to and during the proposed actions. Incidental death or injury to Morro shoulderband snails would be reduced

by minimizing the handling time and by ensuring that surveys are conducted only by a biologist we approve who is experienced in handling the species. When Morro shoulderband snails are relocated to the predetermined receiving sites, they would be carefully placed under dense vegetation with accumulated leaf litter that would provide a suitable microclimate. Incidental death or injury may occur if surveyors step on a Morro shoulderband snail. However, surveyors would attempt to avoid stepping on Morro shoulderband snails by surveying slowly while visually inspecting the ground and not stepping on the plant litter underneath shrubs.

Potential effects of hand pulling or mowing weeds may cause damage to or loss of shelter sites which provide cover and appropriate microclimate. Effects would be reduced by limiting the number of access routes into the treatment area so that trampling native vegetation and disturbing accumulated plant litter underneath shrubs is kept to a minimum. Clearly demarcating the treatment area would minimize disturbance to Morro shoulderband snails shelter sites outside of the designated treatment areas. Solarization has the potential to kill or injure Morro shoulderband snails if they are trapped beneath the plastic and subjected to the resultant high temperatures and lack of sunlight. However, surveying and relocating Morro shoulderband snails to the predetermined receiving sites would minimize their exposure to this method.

The potential effects of herbicides on Morro shoulderband snails are not known, although a study on aquatic snails exposed to glyphosate concluded the herbicide caused abnormalities in snail development and reproduction (Tate *et al.* 1998). The effect of the grass-specific herbicide fluazifop-p-butyl on Morro shoulderband snails is also unknown. Routes of herbicide exposure for Morro shoulderband snails would be ingestion and absorption while living in or migrating through a recently treated area. Direct herbicide spray or drift from spray would contaminate soil; the leaves, stems and branches of shrubs; leaves, mold, and fungi in plant litter; and other potential shelter sites for Morro shoulderband snails, including downed wood, rocks, or debris piles. Because glyphosate is known to adversely affect development and reproduction in aquatic snails and because we don't know how fluazifop-p-butyl affects Morro shoulderband snails, we will assume that these herbicides may cause reduced fitness in Morro shoulderband snails. Reduced fitness may be manifested in slow or abnormal development, reduced fecundity, other types of injury or may even lead to death. Surveying and relocating Morro shoulderband snails each day prior to beginning work activities would minimize direct contact with herbicide spray. Clearly demarcating all treatment areas would minimize herbicide spray from contacting Morro shoulderband snails outside of designated work areas. Shielding native plants with plastic sheeting, buckets, or tubs would minimize herbicide contaminating plant litter and soil, and would minimize contact with Morro shoulderband snails that are foraging or moving about.

### **Indian Knob mountainbalm and Morro manzanita**

Potential effects to Indian Knob mountainbalm and Morro manzanita may result from project personnel trampling vegetation and severely disturbing soil and leaf litter by pulling and digging out pest plants. These newly opened areas would be subject to re-invasion by nonnative

vegetation. Re-invasion of pest plants would be reduced by monitoring the treatment sites and repeating the pest plant control efforts until the native vegetation appears to be self-sustaining. Cuttings should also be collected and removed from the project area to prevent re-sprouted root and stem fragments from re-colonizing native habitats with Indian Knob mountainbalm and Morro manzanita.

Manual removal of veldt grass would involve pulling up veldt grass clumps and transporting them off-site. The potential exists that some loss of Indian Knob mountainbalm and Morro manzanita seeds from the soil seed bank will occur, both through burial and perhaps through removal from the site in the soil root wads of veldt grass clumps. To reduce these effects, digging should be limited to that needed to dislodge veldt grass clumps and all excavations would be refilled with soil. The root zone, seedlings and young plants of Indian Knob mountainbalm and Morro manzanita may be damaged, trampled or disturbed by workers during manual weed removal activities. These effects would be minimized by establishing buffer zones around Indian Knob mountainbalm and Morro manzanita shrubs so that seedlings and young plants are discovered and avoided during veldt grass removal. Buffer zones would also minimize potential effects to the root zones of these species

Solarization has the potential to cause significant biological, physical, and chemical changes in soil that can last up to 2 years and deter the growth of native species (Tu *et al.*, 2001). Additionally, solarization leaves an open substrate that can be invaded by native and non-native organisms once the plastic is removed. Long-term effects to Indian Knob mountainbalm and Morro manzanita would be minimized by not using this method to treat extensive weed-infested areas that are adjacent to Indian Knob mountainbalm and Morro manzanita, so that the soil supporting these species is not chemically or physically altered. The method should be used only during the hotter summer months on wet soils to speed up the process of increasing soil temperatures, thus reducing the amount of time the plastic cover is needed.

Indian Knob mountainbalm and Morro manzanita would be killed from direct contact with glyphosate (Roundup®) because it kills broadleaf species on contact. Only Fusilade® should be used in situations where veldt grass is intermingled with Indian Knob mountainbalm and Morro manzanita are because it is a grass specific herbicide and does not affect broadleaf species. The possibility of contact with herbicides would be reduced by the use of low-drift equipment and the addition of a nontoxic dye in the spray solution to show if drift is occurring. Careful spot spraying and establishing a buffer zone around bodies of water would minimize the possibility of herbicide getting into groundwater to be later absorbed by Indian Knob mountainbalm or Morro manzanita. Establishing buffer zones around Indian Knob mountainbalm and Morro manzanita, shielding individuals with plastic sheeting, buckets or tubs, spraying during mild to warm humid weather, and avoiding windy conditions would minimize herbicide contact with the species. Potential effects from weed removal activities on the constituent elements of critical habitat for Morro shoulderband snails would be similar to the effects and minimization actions listed for Indian Knob mountainbalm and Morro manzanita. Vegetation trampling, soil and leaf litter disturbance, and herbicide application would all potentially affect the health of Morro shoulderband snails through habitat degradation, which may decrease the availability of certain

native plants important in snail diet or in habitat requirements such as cover. However, removal of non-native vegetation would help native plants recolonize treatment areas and increase the value of constituent elements in Morro shoulderband snail critical habitat.

### CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. No State actions that would affect the Morro shoulderband snail, Indian Knob mountainbalm, or Morro manzanita on State Park or private lands are known at this time.

### CONCLUSION

The purpose of this consultation is to implement actions that will assist in recovery of Morro shoulderband snails, Indian Knob mountainbalm, and Morro manzanita in Los Osos. The recovery plan for these species clearly states that the control of pest plants would be of benefit to the Morro shoulderband snail, Indian Knob mountainbalm, Morro manzanita, and other native species that depend on coastal dune scrub and maritime chaparral habitats by preventing or at least slowing the spread of non-native species. Additionally, the eventual reestablishment of native vegetation in treatment areas in coastal dune scrub would, in the long-term, benefit these species. We will be issuing 10(a)(1)(A) permits for the recovery of these species. The permits could be issued on any conserved areas in Los Osos, but because of minimization measures in the project description, we expect only small scale effects.

After reviewing the current status of Morro shoulderband snails, Indian Knob mountainbalm, and Morro manzanita, the environmental baseline for the action area, the effects of the proposed weed removal actions, and the cumulative effects, it is our biological opinion that the weed removal program, as proposed, is not likely to jeopardize the continued existence of the Morro shoulderband snail, Indian Knob mountainbalm, and Morro manzanita, and is not likely to destroy or adversely modify designated critical habitat for the Morro shoulderband snail. Critical habitat for this species has been designated at Morro Spit and West Pecho, in South Los Osos and in Northeast Los Osos; however, this action does not affect those areas and no destruction or adverse modification of that critical habitat is anticipated. We believe the effects and minimization actions analyzed above are not likely to jeopardize the continued existence of the Morro shoulderband snail, Indian Knob mountainbalm, and Morro manzanita for the following reasons:

1. The proposed actions would preserve and improve the health of existing native plant populations through removal of aggressive non-native pest plants, thereby improving habitat for these species.
2. Adverse effects of these actions will be temporary. Positive or beneficial effects to plants

and Morro shoulderband snails would be long-term.

3. The projects will not occur over the entire range of the Morro shoulderband snails, and the area that would be affected by these activities constitutes a small portion of the entire Los Osos area.
4. We do not expect any Indian Knob mountainbalm or Morro manzanita to be killed.

#### INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. We further define hard to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as intentional or negligent actions that create the likelihood of injury to listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of an incidental take statement contained in a biological opinion.

To ensure that issuance of recovery permits for restoration activities does not result in excessive mortality of Morro shoulderband snails, no more than 100 individual Morro shoulderband snails may be killed from restoration activities annually.

Section 9 of the Act does not address the incidental take of listed plant species; however, protection of listed plants is provided in that the Act requires a Federal permit for the removal or reduction to possession of endangered or threatened plants from Federal lands. Furthermore, it is unlawful for any person to remove, cut, dig up, or damage or destroy a listed plant species in knowing violation of any law or regulation of any state or in the course of any violation of a state criminal trespass law.

#### REPORTING REQUIREMENTS

We shall ensure the cooperators prepare and submit semi-annual reports to our Ventura Fish and Wildlife Office at the letterhead address. The reports shall summarize all activities conducted pursuant to this biological opinion. The reports shall include, but not be limited to, information

on the following: (a) a description of the activities, methods, and acreage affected; (b) the results of such activities; (c) any instances of any mortality of or injury to Morro shoulderband snails, Indian Knob mountainbalm, and Morro manzanita; (d) pre- and post-treatment photos of project sites; and (e) a summary of activities planned for the next six months. The reports shall also include a discussion of any problems encountered in implementing the terms and conditions; recommendations for modifying the stipulations to enhance the conservation of the Morro shoulderband snail, Indian Knob mountainbalm, and Morro manzanita; and any other pertinent information. These reports will assist the Service in evaluating future measures for the conservation of the Morro shoulderband snail, Indian Knob mountainbalm, and Morro manzanita during similar projects.

#### DISPOSITION OF DEAD OR INJURED MORRO SHOULDERBAND SNAILS

Upon locating a freshly dead Morro shoulderband snail, notification must be made in writing to our Division of Law Enforcement (370 Amapola Ave., Suite 114, Torrance, California 90501, (310) 328-6307) and by telephone and writing to our Ventura Fish and Wildlife Office (2493 Portola Road, Suite B, Ventura, California 93003, (805) 644-1766 and FAX (805) 644-3958) within three working days of its finding. Notification must include the date, time, and location of the carcass; cause of death, if known; and any other pertinent information. Morro shoulderband snails with broken shells should be placed under dense native vegetation to allow regeneration of the broken part of the shell. Care shall be taken in handling freshly dead specimens to preserve biological material in the best possible state for later analysis.

The remains of Morro shoulderband snails shall be deposited with a professionally maintained facility that is widely accessible for scientific study, such as the California Academy of Sciences (Contact: Dave Kavanaugh, Entomology Department, Golden Gate Park, San Francisco, California 94118, (415) 750-7037 and 7239) or the Santa Barbara Museum of Natural History (Contact: Eric Hochberg, Department of Invertebrates, 2559 Puesta del Sol Road, Santa Barbara, California 93105, (805) 682-4711). Arrangements regarding the proper disposition of potential museum specimens shall be made with the receiving institution by the cooperator prior to implementation of any fieldwork. Other arrangements may be made for disposition of specimens with our written concurrence.

#### CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat. We should:

1. Seek funding for acquisition of habitat for the Morro shoulderband snail and other listed species in the Los Osos area.
2. Cooperate with the County of San Luis Obispo, the California Department of Fish and Game, conservation organizations, and Los Osos local land owners to develop

conservation actions to benefit the Morro shoulderband snail and its habitat.

3. Support efforts to raise public awareness of the threat of non-native vegetation to native species and methods to manage this threat. Such efforts may include the production, printing, and distribution of educational materials to local communities.

#### REINITIATION OF CONSULTATION

This concludes formal intra-Service consultation on issuance of section 10(a)(1)(A) permits for the removal and control of non-native plant species that occur in Morro shoulderband snail, Indian Knob mountainbalm, and Morro manzanita habitats. Re-initiation of formal consultation is required if: 1) the amount or extent of incidental take is exceeded; 2) new information reveals effects of the agency action that may adversely affect listed species or critical habitat in a manner or to an extent not considered in this biological opinion; 3) the agency action is subsequently modified in a manner that causes an effect to a listed species or critical habitat that was not considered in this biological opinion; or 4) a new species is listed or critical habitat designated that may be affected by this action (50 CFR 402.16).

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- Tyler, C. and D. Odion. 1996. Ecological studies of Morro manzanita (*Arctostaphylos morroensis*). Report prepared for the California Department of Fish and Game, Endangered Plant Program, Sacramento, California. 39 pp.
- U.S. Fish and Wildlife Service. 1998. Recovery plan for the Morro shoulderband snail and four plants from western San Luis Obispo County, California. U.S. Fish and Wildlife Service, Portland, Oregon. 75 pp.
- Vanderwier, J. 1987. Vegetation of Indian Knob. Master's Thesis, California Polytechnic State University, San Luis Obispo. 122 pp.
- Wells, P. V. 1962. A subarborescent new *Eriodictyon* (Hydrophyllaceae) from San Luis Obispo County, California. *Madroño* 16:184-186. U.S. Fish and Wildlife Service. 1998. Recovery plan for the Morro shoulderband snail and four plants from western San Luis Obispo County, California. U.S. Fish and Wildlife Service, Portland, Oregon. 75 pp.

**APPENDIX B:  
Plant Species Recommended for Reintroduction**



### Plant Species Recommended for Reintroduction at Sweet Springs Nature Preserve

Scientific Name	Common Name	Native	Species Status / Notes
Vascular Plants nomenclature follows "The Jepson Manual" and <a href="http://ucjeps.berkeley.edu/interchange.html">http://ucjeps.berkeley.edu/interchange.html</a>			
<b>Asteraceae</b>		<b>Sunflower family</b>	
<i>Achillea millefolium</i>	yarrow	Yes	
<i>Artemisia californica</i>	California sagebrush	Yes	Good MSS Habitat
<i>Artemisia douglasiana</i>	mugwort	Yes	
<i>Cirsium occidentale var. occidentale</i>	cobwebby thistle	Yes	
<i>Ericameria ericoides</i>	mock heather	Yes	Good MSS Habitat
<i>Erigeron blochmaniae</i>	Blochman's leafy daisy	Yes	List 1B.2
<i>Eriophyllum staechadifolium</i>	seaside golden yarrow	Yes	
<i>Senecio blochmaniae</i>	dune ragwort	Yes	CNPS List 4.2
<b>Brassicaceae</b>		<b>Mustard family</b>	
<i>Erysimum insulare ssp. suffrutescens</i>	suffrutescent wall flower	Yes	CNPS 4.2
<b>Crassulaceae</b>		<b>Stonecrop family</b>	
<i>Dudleya lanceolata</i>	southern California dudleya	Yes	
<b>Cucurbitaceae</b>		<b>Gourd family</b>	
<i>Marah fabaceus var. fabaceus</i>	wild cucumber	Yes	
<b>Ericaceae</b>		<b>Heath family</b>	
<i>Arctostaphylos morroensis</i>	Morro manzanita	Yes	CNPS List 1B.1/FT
<b>Euphorbiaceae</b>		<b>Spurge family</b>	
<i>Croton californicus</i>	croton	Yes	
<b>Fabaceae</b>		<b>Pea family</b>	
<i>Lupinus chamissonis</i>	dune lupine	Yes	Good MSS Habitat
<b>Grossulariaceae</b>		<b>Gooseberry family</b>	
<i>Ribes speciosum</i>	fuschia-flowered gooseberry	Yes	
<b>Lamiaceae</b>		<b>Mint Family</b>	
<i>Salvia mellifera</i>	black sage	Yes	Good MSS Habitat
<b>Papaveraceae</b>		<b>Poppy family</b>	
<i>Eschscholzia californica</i>	California poppy	Yes	
<b>Paeoniaceae</b>		<b>Peony Family</b>	
<i>Peony californica</i>	California peony	Yes	

Scientific Name	Common Name	Native	Species Status / Notes
<b>Polemoniaceae</b>		<b>Phlox family</b>	
<i>Eriastrum densifolium</i>	giant woollystar	Yes	
<b>Polygonaceae</b>		<b>Buckwheat family</b>	
<i>Eriogonum parvifolium</i>	dune buckwheat	Yes	
<b>Rhamnaceae</b>		<b>Buckthorn family</b>	
<i>Ceanothus cuneatus</i> var. <i>fascicularis</i>	sand buckbrush	Yes	CNPS List 4.2
<b>Rosaceae</b>		<b>Rose family</b>	
<i>Adenostoma fasciculatum</i>	chamise	Yes	
<i>Prunus fasciculata</i> var. <i>punctata</i>	sand almond	Yes	CNPS List 4.3
<i>Rosa californica</i>	California wild rose	Yes	
<b>Scrophulariaceae</b>		<b>Figwort family</b>	
<i>Mimulus aurantiacus</i>	sticky monkey flower	Yes	
<b>Solanaceae</b>		<b>Nightshade family</b>	
<i>Solanum xanti</i>	white nightshade	Yes	
<b>ANGIOSPERMS (MONOCOTS)</b>			
<b>Poaceae</b>		<b>Grass family</b>	
<i>Elymus glaucus</i>	blue wild rye	yes	
<i>Nassella pulchra</i>	purple needle-grass	Yes	

Appendix B: **Grant Deed – West and Central  
Sweet Springs**



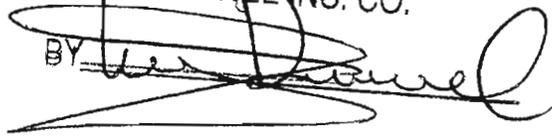
Recording Requested By and  
When Recorded Mail to:

Morro Coast Audubon Society  
P.O. Box 1507  
Morro Bay, CA 93443-1507  
Attn: Jan Surbey, President

CERTIFIED TO BE A TRUE COPY  
OF DOCUMENT RECORDED 7/17/08  
IN BOOK \_\_\_\_\_ SERIES 2008-036439  
OF OFFICIAL RECORDS  
CHICAGO TITLE INS. CO.

MAIL TAX STATEMENTS TO:

(same as above)

BY 

---

Assessor Parcel Number: 074-229-009

THE UNDERSIGNED GRANTOR DECLARES

DOCUMENTARY TRANSFER TAX IS: Tax Paid: Section 11932 R&T Code  
Computed on Full Value of Property

GRANT DEED

For valuable consideration, receipt of which is acknowledged, The Trust for Public Land, a California nonprofit public benefit corporation ("Grantor"), hereby grants to Morro Coast Audubon Society, a California public benefit corporation ("Grantee"), the real property in the unincorporated town of Los Osos, County of San Luis Obispo, State of California, described in Exhibit A attached hereto and made a part hereof (the "Property").

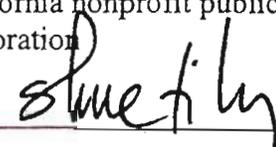
TOGETHER with the tenements, hereditaments, and appurtenances thereunto belonging or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof.

This conveyance is an AS-IS transaction and is also subject to all other matters appearing of record or known to Grantee that can be ascertained by an inspection of said Property and is made without any warranty expressed or implied as to the suitability of said Property for any purpose.

IN WITNESS WHEREOF, Grantor has executed this instrument this 5<sup>th</sup> day of JUNE, 2008.

GRANTOR:

THE TRUST FOR PUBLIC LAND, a  
California nonprofit public benefit  
corporation

By: 

Title: REG. COUNSEL

ACKNOWLEDGMENT

State of California )  
County of San Francisco )

On June 5<sup>th</sup> before me, Eileen V. Meehan,  
Notary Public, personally appeared Tily Shue, who proved to me on the  
basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within  
instrument and acknowledged to me that he/she/they executed the same in his/her/their  
authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or  
the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the  
foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Eileen V. Meehan (Seal)



## LEGAL DESCRIPTION

### EXHIBIT "A"

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA OF THE COUNTY OF SAN LUIS OBISPO, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

That portion of Lot B of a plat of part of Lot 79 of the Rancho Canada de Los Osos, in the County of San Luis Obispo, State of California, according to map subdivided by H. C. Ward in June 1880 and filed for record June 9, 1880 in Book B, Page 72 of Maps, in the Office of the County Recorder of said County, described as follows

Beginning at a stake "S.1" at the line of high water mark of Morro Bay, from which a stake "W.P. No. 1 El Morro" bears South 27° 57' East, 127.38 feet (1.93 chains) distant; thence

1) Along said line of high water mark South 27°20' West 402.60 feet (6.10 chains) to an iron pipe marked "S.4", from which a blue gum 26" in diameter bears North 44° East 38.94 feet (59 links) distant; thence

2) South 24°45' East, 825.48 feet, more or less, to the North line of property conveyed to the County of San Luis Obispo, a political corporation, by Deed dated April 9, 1957 and recorded June 24, 1957, in Book 896, page 504 of Official Records, thence

3) North 76°06' East along the North line of said Deed to County a distance of 351.06 feet; thence

4) North 14°04' East along the North line of said Deed to County a distance of 59.46 feet to the Southwest line of the Town of El Moro as shown on map filed in Book A of Maps, at page 80, thence

5) North 27°57' West along said line of El Moro to Stake "S.1", the point of beginning.

APN: 074-229-009

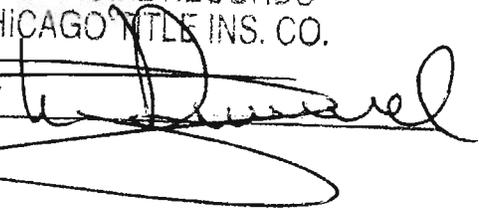
**RECORDING REQUESTED BY:**

Morro Coast Audubon Society  
Post Office Box 1507  
Morro Bay, CA 93443-1507  
Attn: Jan Surbey

**WHEN RECORDED, RETURN TO:**

State of California  
Wildlife Conservation Board  
Attn: Executive Director  
1807 13th Street, Suite 103  
Sacramento, CA 95811-7137

CERTIFIED TO BE A TRUE COPY  
OF DOCUMENT RECORDED 7/17/08  
IN BOOK \_\_\_\_\_ SERIES 2007-036440  
OF OFFICIAL RECORDS  
CHICAGO TITLE INS. CO.

BY 

Project Name: Morro Bay Wildlife Area –  
Sweet Springs Preserve (Donovan)  
County: San Luis Obispo

*Space above line for Recorder's use*

**NOTICE OF UNRECORDED GRANT AGREEMENT  
(WITH COVENANTS AFFECTING REAL PROPERTY)**

This Notice of Unrecorded Grant Agreement ("Notice"), dated as of December 20, 2007, is made by Morro Coast Audubon Society ("Grantee") and recorded concurrently with the Deed described below, to provide notice of an agreement between Grantee and the Wildlife Conservation Board ("Grantor" or "WCB"), a subdivision of the State of California, affecting the real property described below.

1. WCB and Grantee have entered into the California Wildlife Conservation Board Grant Agreement for Acquisition of Fee Interest, Grant Agreement No. WC-7035CK ("Grant" or "Agreement"), pursuant to which WCB grants to Grantee certain funds for Grantee's acquisition of fee title to approximately eight (8) acres of real property located in the County of San Luis Obispo, California (the "Property"), by Grant Deed (the "Deed") from Kathryn C. Donovan, et al. The Property is legally described in **Exhibit A** attached to this Notice and incorporated in it by this reference. Initial-capitalized terms used in this Notice and not otherwise defined shall have the meaning set forth in the Grant.

2. Grantee agrees under the terms of the Grant to execute this Notice to give notice that Grantee received funds under the Agreement to assist Grantee in acquiring the Property and that, in consideration of the Grant Funds, Grantee has agreed to the terms of the Grant. The Grant is incorporated by reference into this Notice.

3. Grantee covenants and agrees in Section 5 of the Agreement as follows:

3.1. The Property shall be held and used only in a manner that is consistent with the Agreement, including the following "Purposes of Grant" set forth in Section 2 of the Agreement:

The Property shall be held and used for the purposes of acquisition, development, rehabilitation, restoration, and protection of habitat that promotes the recovery of threatened and endangered species, that provides corridors linking separate habitat areas to prevent habitat fragmentation, and protects significant natural landscapes and ecosystems such as old growth redwoods and oak woodlands and other significant habitat areas (individually and collectively, the "Purposes of Grant").

3.2. The Property (including any portion of it or any interest in it) shall not be sold, transferred, exchanged or otherwise conveyed without the written approval of WCB or its successor.

3.3. The Property (including any portion of it or any interest in it) may not be used as security for any debt without the written approval of the State of California, acting through WCB or its successor.

3.4. At the request of Grantor, not less than once in any period of three calendar years, Grantee shall allow designated staff of Grantor to access the Property to assess compliance with the terms, covenants and conditions of this Agreement.

4. Pursuant to Section 7 of the Agreement, in the event of a Default under the Agreement, in addition to any and all remedies available at law or in equity, Grantor may seek specific performance of the Grant and may require Grantee to convey a conservation easement over the Property in favor of Grantor (or, at the election of Grantor, another entity or organization authorized by California law to acquire and hold conservation easements and which is willing and financially able to assume all of the obligations and responsibilities of Grantee), and to pay a sum to Grantor which, when combined with the fair market value of the conservation easement, equals the sum granted to Grantee pursuant to the Agreement, together with interest thereon as provided in the Agreement.

5. Pursuant to Section 8 of the Agreement, if Grantee is a nonprofit organization and the existence of Grantee is terminated for any reason, title to all interest in real property acquired with state funds shall immediately vest in the State of California. However, prior to that termination, upon approval of Grantor, another public agency or nonprofit organization may receive title to all or a portion of that interest in real property by recording its acceptance of title in writing. Any deed or other instrument of conveyance whereby real property is being acquired by a nonprofit organization pursuant to this section shall be recorded and shall set forth the executory interest and right of entry on the part of the State of California.

6. Pursuant to Section 9 of the Agreement, the Grant shall remain in full force and effect from and after the close of escrow for the acquisition of the Property.

7. Pursuant to Section 10 of the Agreement, the Grant shall be binding upon Grantee and all designees, successors and assigns of Grantee.

8. Pursuant to Section 11 of the Agreement, if all or any part of the Property is taken by exercise of the power of eminent domain, or acquired by purchase in lieu of condemnation, Grantor and Grantee shall act jointly to recover from the condemning authority the full value of the Property so taken or purchased, and all direct or incidental damages resulting therefrom. Grantor shall be entitled to the share of the Award, which equals the ratio of the Grant Funds provided by Grantor to the purchase price Grantee paid to acquire the Property.

9. This Notice is solely for the purpose of recording and in no way modifies the provisions of the Agreement. Grantee and WCB each has rights, duties and obligations under the Agreement, which are not set forth in this Notice. To the extent the terms of this Notice conflict with the Agreement, the terms of the Agreement shall govern and control.

10. For additional terms and conditions of the Agreement, reference should be made to the California Wildlife Conservation Board Grant Agreement for Acquisition of Fee Interest by and between WCB and Grantee that commenced February 20, 2008, and is on file with the Wildlife Conservation Board, 1807 13th Street, Suite 103, Sacramento, California 95811-7137; mailing address: Wildlife Conservation Board, c/o Department of Fish and Game, P. O. Box 944209, Sacramento, CA 94244-2090.

GRANTEE:

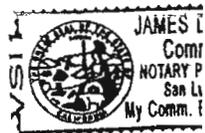
Morro Coast Audubon Society

By: Jan Surbay

Print Name: Jan Surbay

Title: MCIAS President

[Notary Acknowledgment]



## LEGAL DESCRIPTION

### EXHIBIT "A"

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA OF THE COUNTY OF SAN LUIS OBISPO, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

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1) Along said line of high water mark South 27°20' West 402.60 feet (6.10 chains) to an iron pipe marked "S.4", from which a blue gum 26" in diameter bears North 44° East 38.94 feet (59 links) distant; thence

2) South 24°45' East, 825.48 feet, more or less, to the North line of property conveyed to the County of San Luis Obispo, a political corporation, by Deed dated April 9, 1957 and recorded June 24, 1957, in Book 896, page 504 of Official Records, thence

3) North 76°06' East along the North line of said Deed to County a distance of 351.06 feet; thence

4) North 14°04' East along the North line of said Deed to County a distance of 59.46 feet to the Southwest line of the Town of El Moro as shown on map filed in Book A of Maps, at page 80, thence

5) North 27°57' West along said line of El Moro to Stake "S.1", the point of beginning.

APN: 074-229-009

## AGREEMENT OF SALE

This is an Agreement dated February 5, 2008 between THE TRUST FOR PUBLIC LAND, a California nonprofit public benefit corporation, which shall be referred to as "Seller," and MORRO COAST AUDUBON SOCIETY, a California nonprofit public benefit corporation, who shall be referred to as "Buyer."

### RECITALS

A. The addresses and telephone numbers of the parties to this Agreement are as follows. Telephone numbers are included for information only.

#### SELLER:

The Trust for Public Land  
116 New Montgomery, 3rd Floor  
San Francisco, CA 94105  
Attn: Tily Shue, Esq.  
Tel: (415) 495-5660  
FAX: (415) 495-0541

Copies of any notice to Seller should also be sent to:

The Trust for Public Land  
116 New Montgomery, 3rd Floor  
San Francisco, CA 94105  
Attn: Karen Frankei  
Tel: (415) 495-5660  
FAX: (415) 495-0541

#### BUYER:

Morro Coast Audubon Society  
P.O. Box 1507  
Morro Bay, CA 93443-1507  
Attn: Jan Surbey, President  
Tel: (805) 772-1991

Copies of any notice to Buyer should also be sent to:

Morro Coast Audubon Society  
1302 Bayview Heights Dr.  
Los Osos, CA 93402  
Attn: Henry Pontarelli  
Strategic Development Chair  
Tel: (805) 528-4587

B. Seller is the holder of an exclusive option to acquire from the current landowner (the "Current Landowner"), and upon exercise of such option will be the owner of certain real property located in San Luis Obispo County, California, as further described in Exhibit A

attached hereto and incorporated herein by this reference. Said real property, together with any improvements thereon, shall be referred to in this Agreement as "the Property."

C. Upon Seller's taking title to the Property, Buyer wishes to purchase the Property from Seller and Seller wishes to sell the Property to Buyer on the terms and conditions set forth in this Agreement.

THE PARTIES AGREE AS FOLLOWS:

1. **Purchase and Sale.** Seller agrees to sell to Buyer and Buyer agrees to buy from Seller the Property on the terms and conditions set forth herein.

2. **Purchase Terms.**

(a) **Price.** The purchase price for the Property shall be Two Million Dollars (\$2,000,000.00) (the "Purchase Price").

(b) **Method of Payment.** The Purchase Price shall be payable in cash on close of escrow.

3. **Condition of the Property.**

(a) Buyer agrees that Buyer has, or will have by close of escrow, undertaken such of the following due diligence as Buyer deems necessary:

(i) made an independent investigation of the physical condition of the Property including but not limited to the condition of the soil, the presence of hazardous materials or contaminants, other physical characteristics, and compliance with any statutes, ordinances or regulations;

(ii) studied all aspects or circumstances of the Property which Buyer deems material or relevant;

(iii) reviewed all other documents and materials which Buyer deems material or relevant with respect to the transactions contemplated under this Agreement;

(iv) availed themselves of full, complete and satisfactory access to the Property, and all records relating to the same which Buyer has requested and or deemed material or relevant; and

(v) availed themselves of the opportunity to make all inspections and verifications which Buyer deemed necessary for the completion of Buyer's due diligence review for the transactions covered by this Agreement.

(b) Buyer agrees that:

(i) Seller has made no representations or warranties with respect to the Property except as set forth in this Agreement;

(ii) Seller shall not be responsible for any statements, representations or warranties of any kind furnished to Buyer by any real estate broker or any other person, unless the same are specifically set forth in this Agreement; and

(iii) no materials, brochures, or documents delivered by Seller to Buyer or any other Person shall be, or be deemed, a representation, warranty, or agreement of Seller under, or with respect to, this Agreement; and Buyer has, and shall have, the exclusive responsibility for verifying any facts or conditions set forth or described in any such materials, brochures, or documents.

(c) Buyer agrees to accept the Property "as is," in its present condition, subject to all reasonable use, wear and tear, and deterioration of any kind in, of, or to the Property.

4. **Conditions Precedent to Closing** Seller and Buyer's respective obligations to consummate the transaction contemplated herein shall be contingent upon satisfaction of the following:

(a) Seller receives approval of the transaction which is the subject of this Agreement by Seller's Project Review Committee, which approval is subject to said Committee's sole discretion.

(b) Buyer receives approval of its grant applications to the State Coastal Conservancy and the Wildlife Conservation Board (the "Funders") and the subsequent deposit of grant funds into escrow by the Funders on behalf of Buyer in an amount sufficient to cover the Purchase Price.

5. **Escrow**. Upon execution of this Agreement or at any time as may be convenient, the parties shall open an escrow with Chicago Title Company (the "Escrow Holder"), 388 Market Street, Suite 1300, San Francisco, CA 94111, Attn: Terry Duwel, Escrow Officer, telephone (415) 291-5151, Facsimile (415) 399-0040, for the purpose of closing the purchase and sale of the Property. Escrow shall close no later than July 16, 2008.

6. **Title**. Seller shall by grant deed convey to Buyer a fee simple interest free and clear of all monetary liens and encumbrances except: (a) the lien for nondelinquent real property

taxes; (b) exception nos. 1 and 3-7, inclusive, listed in Preliminary Report No. 134-11477, dated as of December 28, 2007, issued by the Escrow Holder; (c) an exception to reflect the recording of the Notice of Unrecorded Grant Agreement (with Covenants Affecting Real Property) required by the Wildlife Conservation Board; (d) an exception to reflect the recording of the Notice of Unrecorded Agreement to Subgrant required by the Wildlife Conservation Board; (e) an exception to reflect the recording of the Notice of Unrecorded Grant Agreement required by the State Coastal Conservancy; (f) the standard printed exceptions on the form of title insurance policy issued pursuant to Section 7 and (g) any other matters approved by Buyer.

7. **Title Insurance.** At Buyer's election, Buyer may obtain a standard owner's policy of title insurance in the full amount of the purchase price, ~~to be paid by Buyer,~~ <sup>800</sup> insuring that title to the Property is vested in Buyer upon close of escrow, subject only to the exceptions noted in Section 5.

8. **Seller's Promise not to Further Encumber.** Seller shall not, without the prior written consent of Buyer, make or allow to be made any leases, contracts, options or agreements whatsoever affecting the Property which would in any manner impede Seller's ability to perform hereunder and deliver title as agreed herein.

9. **Seller's Representations.** Seller makes the following representations:

(a) At the close of escrow, Seller will own (provided that the Current Landowner does not default in the performance of its agreement with Seller) and will have the power to sell, transfer and convey all right, title and interest in and to the Property.

(b) Seller represents and warrants that it is not a "foreign person" as defined in Section 1445 of the Internal Revenue Code. Seller's United States Taxpayer Identification Number is 23-7222333.

10. **Buyer's Representations.** Buyer represents and warrants that it has the power and authority to enter into this Agreement and to consummate the transaction contemplated herein.

11. **Closing Expenses and Fees.** The escrow fee, the premium for Buyer's title insurance policy and the fee for recording the Grant Deed shall all be divided equally between the parties. Any documentary tax or real property transfer tax arising out of the conveyance of the Property shall be paid by Seller.

12. **Notices.** All notices pertaining to this Agreement shall be in writing delivered to the Parties hereto by facsimile transmission, personally by hand, courier service or Express Mail, or by first class mail, postage prepaid, at the addresses set forth in Recital A. All notices shall be deemed given: (a) if sent by mail, when deposited in the mail, first class postage prepaid, addressed to the party to be notified; (b) if delivered by hand, courier service or Express Mail,

when delivered; or (c) if transmitted by facsimile, when transmitted. The Parties may, by notice as provided above, designate a different address to which notice shall be given.

13. **Attorneys' Fees.** If any legal action is brought by either party to enforce any provision of this Agreement, the prevailing party shall be entitled to recover from the other party reasonable attorneys' fees and court costs in such amounts as shall be allowed by the court.

14. **Remedies Upon Default.** In the event Buyer defaults in the performance of any of Buyer's obligations under this Agreement, Seller shall, in addition to any and all other remedies provided in this Agreement or by law or equity have the right of specific performance against Buyer.

15. **No Broker's Commission.** Each party represents to the other that it has not used a real estate broker in connection with this Agreement or the transaction contemplated by this Agreement. If any person asserts a claim for a broker's commission or finder's fee against one of the parties, the party on account of whose actions the claim is asserted will indemnify and hold the other party harmless from and against the claim.

16. **Time of the Essence; Dates.** Time is of the essence of this Agreement. In the event that any date specified in this Agreement falls on Saturday, Sunday or a public holiday, such date shall be deemed to be the succeeding day on which the public agencies and major banks are open for business.

17. **Binding on Successors.** This Agreement shall be binding not only upon the parties but also upon their heirs, personal representatives, assigns, and other successors in interest.

18. **Additional Documents.** Seller and Buyer agree to execute such additional documents, including escrow instructions, as may be reasonable and necessary to carry out the provisions of this Agreement.

19. **Assignment.** Buyer may not assign its interests under this Agreement without the written consent of Seller.

20. **Entire Agreement; Modification; Waiver.** This Agreement constitutes the entire agreement between Buyer and Seller pertaining to the subject matter contained in it and supersedes all prior and contemporaneous agreements, representations, and understandings. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing by all the parties. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision, whether or not similar, nor shall any waiver constitute a continuing waiver. No waiver shall be binding unless executed in writing by the party making the waiver.

21. **Counterparts** This Agreement may be executed in counterparts, each of which shall be deemed an original and which together shall constitute one and the same agreement.

22. **Severability** Each provision of this Agreement is severable from any and all other provisions of this Agreement. Should any provision(s) of this Agreement be for any reason unenforceable, the balance shall nonetheless be of full force and effect.

23. **Governing Law** This Agreement shall be governed by and construed in accordance with the laws of the State of California.

IN WITNESS of the foregoing provisions the parties have signed this Agreement below:

SELLER:

BUYER:

**THE TRUST FOR PUBLIC LAND**, a  
California nonprofit public benefit  
corporation

**MORRO COAST AUDUBON  
SOCIETY**, a California nonprofit public  
benefit corporation

By: Shirley  
Title: Regional Counsel  
Date: February 5, 2008

By: Jan Lurkey  
Title: MCAAS President  
Date: February 6, 2008

RECORDING REQUESTED BY

State Coastal Conservancy  
State of California

APR 20 1992

FRANCIS M. COONEY  
County Clerk-Recorder

TIME 10:45 AM

WHEN RECORDED MAIL TO:

Morro Coast Audubon Society, Inc.  
Post Office Box 160  
Morro Bay, California 93442  
Attention: Ron Ruppert, President

RECORDED	FREE PAC	EXEMPT	OUT OF STATE
		<input checked="" type="checkbox"/>	

APN: 74-101-4 and 74-221-79

Exempt from recording fees  
pursuant to Gov't Code  
Sections 6103 & 2738.3.

GRANT DEED

The undersigned declares that the Documentary Transfer  
Tax payable hereon is \$8.35  
...Computed on full value of property conveyed.  
...Computed on full value less liens and encumbrances  
remaining at time of sale.

Signature: *Francis M. Cooney*

SURVEY MONUMENT FEE \$10.00

THE STATE OF CALIFORNIA, acting by and through its Director of General Services,  
at the request of the STATE COASTAL CONSERVANCY (the "Grantor"),

hereby GRANTS to the MORRO COAST AUDUBON SOCIETY, INC., a California nonprofit  
public benefit corporation, (the "Grantee"), all that certain real property in  
the County of San Luis Obispo, State of California, described in the attached  
EXHIBIT A and incorporated herein by this reference.

RESERVING THEREFROM, an easement in gross and in perpetuity for purposes of  
wetlands conservation and enhancement, and the preservation of wildlife habitat  
and open space on the property herein conveyed (the "Property"), subject to the  
following terms and conditions:

1. No development, as defined in California Public Resources Code Section 30106, attached as EXHIBIT B and incorporated herein by this reference, shall occur or be allowed on the Property except for those uses consistent with, or activities undertaken pursuant to, the Sweet Springs Marsh Resource Enhancement and Access Management Plan (the "Restoration Plan"), as set forth in Contract No. 85-062-81-28-A, dated June 24, 1986, between Grantor, State of California, State Coastal Conservancy and Grantee, Morro Coast Audubon Society. Permissible uses and activities include, but are not limited to, activities undertaken pursuant to the Restoration Plan for the enhancement, maintenance and preservation of wetland resources and wildlife habitat and the provision of public access.
2. This easement shall run with and burden the Property and the obligations, terms, conditions, and restrictions imposed herein shall be deemed to be covenants and restrictions running with the land and shall benefit and bind the Grantor, the Grantee, and their respective successors and assigns, and shall be effective regarding uses of this land from the date of recording of this Grant Deed.
3. In the event any of the provisions of this easement are held to be invalid or become unenforceable for any reason, no other provision shall be thereby affected or impaired.
4. Any act or any conveyance, contract or authorization, whether written or oral, by the Grantee herein, which uses or would cause to be used or would permit use of the Property contrary to the terms of this easement shall be deemed a

Taxes will be mailed as stated on existing tax rolls.

breach hereof. The State of California, acting through the Coastal Conservancy, may bring any action in court necessary to enforce this easement including, but not limited to, injunction to terminate the breaching activity and to force the restoration of all damage done by such activity, or an action to enforce the terms and provisions hereof by specific performance. It is understood and agreed that the Coastal Conservancy may pursue any appropriate legal and equitable remedies. Any forbearance on the part of the Coastal Conservancy to enforce the terms and provisions hereof in the event of a breach shall not be deemed a waiver of the Coastal Conservancy's rights regarding any subsequent breach.

5. In addition, Grantee covenants and agrees to operate and manage the property in accordance with the Restoration Plan and the terms and conditions of this easement. Grantee shall not use the Property as security for any debt incurred by it, and shall not transfer the Property, except with written approval of the Executive Officer of the Coastal Conservancy.

6. If the Grantee violates any provision of Paragraph 5 above, or if the existence of the Grantee is terminated for any reason, then the State of California shall have the right to enter and take title to the Property as set forth in this Paragraph. This right of entry may be exercised at any time upon a finding by the Coastal Conservancy that the Grantee has violated any such provision or, in the event that the existence of the Grantee has terminated, immediately upon dissolution or termination of the Grantee. The Coastal Conservancy may elect to designate another public agency or nonprofit organization to take title to the Property subject to the terms and conditions of this Grant. The exercise of this right of entry by the State or a qualified designee of the Coastal Conservancy shall be evidenced by recording a notice in the Official Records of San Luis Obispo County to that effect.

THIS GRANT IS MADE SUBJECT TO the covenants set forth in the Gift Deed from Morro Palisades Co. to the State of California, dated August 28, 1985, and recorded December 31, 1985, in the Official Records of San Luis Obispo County, Document No. 075694.

The signature of the Grantee's authorized representative below certifies that the interest in the real property conveyed by this deed is hereby accepted by the Grantee.

Dated: Sept. 17, 1990

Ron M. Ruppert  
Ron Ruppert, President  
Morro Coast Audubon Society, Inc.  
Grantee

Dated: NOV 26 1990

DEPARTMENT OF GENERAL SERVICES  
Darrell Haynes  
BY DS DARRELL HAYNES, Chief  
Office of Real Estate and Design  
Services

Approved: Peter Grenell  
Peter Grenell  
Executive Officer  
California State Coastal Conservancy

The above named person Ron M Ruppert appeared before me, a Notary Public, personally known to me.

Kathryn Thorp  
Notary Public



State of California        )  
                                      )   ss.  
County of San Luis Obispo)

CERTIFICATE OF ACKNOWLEDGEMENT

On this 15<sup>th</sup> day of January, 1990, before me, Kathy Thorp, Notary Public, State of California, personally appeared Ron M. Ruppert, personally known to me to be the person who executed this instrument as the Executive Officer of the Morro Coast Audubon Society and acknowledged to me that said agency executed it.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal in the City of San Luis Obispo, County of San Luis Obispo, on the date set forth above in this certificate.



Kathy Thorp  
Notary Public, State of California

EXHIBIT A

Parcel 1

A parcel of land in the County of San Luis Obispo, State of California being described as follows:

Block 36 in the Cuesta By the Sea as recorded in Map Book 3 at Page 48 of Records of San Luis Obispo County, California.

Parcel 2

A parcel of land in a portion of Lot B of the plat of part of the Rancho Canada De Los Osos, in the County of San Luis Obispo, State of California, as shown on map filed in Book B, Page 72 of Maps, in the Office of the County Recorder of said County, described as follows:

Bounded southerly by the northerly line of the land described in the deed to the County of San Luis Obispo, recorded February 9, 1966 in Book 835, Page 179 of Official Records, in the office of the County Recorder of said County; Bounded Easterly by the Westerly line of the land first described in the deed to Charles E. Ferrel and T. P. Bush, recorded February 6, 1912 in Book 92, Page 108 of deeds, in the Office of the County Recorder of said County; Bounded northerly by the line of ordinary high water of Morro Bay; Bounded westerly by the westerly line of Lot 79 of the subdivisions of the Rancho Canada De Los Osos and La Laguna, as shown on map filed in Book A, Page 84 of Maps, in the office of the County Recorder of said County.

reserving therefrom the following parcel of land:

A parcel of land in a portion of a Lot B of the plat of part of the Rancho Canada De Los Osos, in the County of San Luis Obispo, State of California, as shown on map filed in Book B, Page 72 of Maps, in the Office of the County Recorder of said County, described as follows:

Commencing at the intersection of the north right of way line of Ramona Avenue, being 60.00 feet in width, with the east line of Broderson Avenue being 40.00 feet in width; Thence following the said east line of Broderson Avenue; North  $2^{\circ} 04' 27''$  East, 160.23 feet; Thence, leaving said line North  $87^{\circ} 55' 33''$  East, 5.00 feet to the true point of beginning; thence through the following courses: North  $2^{\circ} 04' 27''$  East, 231.62 feet; South  $87^{\circ} 55' 33''$  East, 139.00 feet; South  $50^{\circ} 13' 00''$  East, 193.71 feet; South  $57^{\circ} 20' 00''$  West, 174.00 feet; North  $32^{\circ} 40' 00''$  West, 20.00 feet; South  $57^{\circ} 20' 00''$  West, 40.00 feet; South  $87^{\circ} 55' 33''$  West, 105.28 feet to the true point of beginning.

Also reserving therefrom an easement for street, drainage and utility purposes over the following described parcel of land:

A parcel of land in a portion of Lot B of the plat of part of the Rancho Canada De Los Osos, in the County of San Luis Obispo, State of California, as per map filed in Book B, Page 72 of maps, in the office of the County Recorder of said County, described as follows:

Commencing at the intersection of the north right of way line of Ramona, being 60.00 feet in width, with the east line of Broderson Avenue being 40.00 feet in

width; thence following the said North line of Ramona Avenue South  $88^{\circ} 21' 33''$  East, 90.00 feet to the true point of beginning; thence leaving said line through the following courses: North  $02^{\circ} 04' 27''$  East, 145.68 feet; North  $57^{\circ} 20' 00''$  East, 24.34 feet; South  $32^{\circ} 40' 00''$  East, 20.00 feet; South  $57^{\circ} 20' 00''$  West, 53.87 feet; South  $02^{\circ} 04' 27''$  West, 135.06 feet to a point on north line of said north line of Ramona Avenue; thence following said line North  $88^{\circ} 21' 33''$  West, 20.00 feet to the true point of beginning.

Further reserving therefrom, a scenic view easement over the "Buffer Area" to allow Grantor, its assigns, and successors in interest to enter on said Buffer Area to trim vegetation existing thereon, to the extent necessary to maintain coastal views from Grantor's Retained Parcel. All such trimming shall be performed in compliance with the Coastal Act of 1976 (Public Resources Code Section 30000 et seq.) and other applicable state and local laws and regulations. Trees, shrubs or other plants may be removed with Grantee's express permission in writing. Grantee shall be held harmless by Grantor for all costs, claims, and liability arising out of injuries to persons or property in connection with Grantor's exercise of its rights under this scenic view easement, except to the extent that such injury results from a condition existing in the Buffer Area which was contrary to an express representation in writing to Grantor by Grantee.

Subject to that easement granted to San Luis Obispo County by Deed dated June 11, 1984 from Morro Palisades Co. filed in Book 2667, Page 967 of Official Records in the office of the County Recorder of said County.

EXHIBIT B

Public Resources Code Section 30106

30106. Development

"Development" means, on land, in or under water, the placement or erection of any solid material or structure; discharge, or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal of harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511).

As used in this section "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

## CALIFORNIA STATE COASTAL CONSERVANCY

30 BROADWAY, SUITE 1100  
OAKLAND, CA 94612  
ATSS 561-1015  
TELEPHONE 415/464-1015

Memorandum

Date: March 18, 1991

To: County Recorder's Office  
County of San Luis Obispo

From: Elena M. Eger *E. Eger*  
Staff Counsel, California State Coastal Conservancy

Re: Statement of Property Value for Documentary Transfer Tax  
Purposes

The California State Coastal Conservancy determines that the value for the Sweet Springs property located in Los Osos, San Luis Obispo County, California is approximately \$71,000. See attached memorandum dated March 15, 1991. The value of the conservation easement transferred to the State of California on behalf of the California State Coastal Conservancy is approximately \$63,900. The value of the fee interest transferred from the State of California to the Morro Coast Audubon Society is approximately \$7,100.

Pursuant to the California Revenue and Taxation Code Sections 11901 et seq., (the Documentary Transfer Tax Act), the property interest transferred to the State of California is exempt from any tax imposed under the Documentary Transfer Tax Act. See Cal. Rev. & Tax. Code Section 11922.

Thus, the tax due under the Documentary Transfer Tax Act is based on \$7,100, or the estimated value of the interest transferred to the Morro Coast Audubon Society.

## CALIFORNIA STATE COASTAL CONSERVANCY

330 BROADWAY, SUITE 1100  
OAKLAND, CA 94612  
ATSS 561-1015  
TELEPHONE 415/464-1015

Memorandum

Date: March 15, 1991

To: Elena Eger,  
Staff Counsel

From: Carol Arnold, *Carol Arnold*  
Project Manager

Ellsworth Young,  
Real Estate Manager *Ellsworth Young*

Re: Property Value of Sweet Springs Marsh, Los Osos, San Luis  
Obispo County, California

As requested, the approximate value of the Sweet Springs Marsh property located in San Luis Obispo County is \$71,000. This estimate is based on a value of \$2,000 per acre for the nine acres of wetland and \$5,000 per acre for the sixteen acres of upland.

The value for the conservation easement held by the State of California on the Sweet Springs property is approximately \$63,900 or 90% of the estimated value of \$71,000. This value is based on an examination of the terms and conditions of the easement which restrict the uses and development of the property in perpetuity for the sole purposes of wetland conservation and enhancement, preservation of wildlife habitat and open space.

Appendix C: **Morro Shoulderband Snail Habitat  
Assessment Report (2009)**

March 24, 2009

Mr. Roger Root  
U.S. Fish & Wildlife Service  
2493 Portola Road, Suite B  
Ventura, CA 93003

SUBJECT: *Concurrence Request for Habitat Restoration Activities at Sweet Springs Preserve, Los Osos, California (SWCA # 15165)*

Dear Mr. Root:

The Audubon Society (Audubon) manages the 32 acre Sweet Springs Preserve in Los Osos, California. Audubon's activities include native habitat restoration and maintenance in areas that support maritime chaparral, non-native grassland, Eucalyptus woodland, and wetlands. SWCA has confirmed the presence of Morro shoulderband snail (MSS) within maritime chaparral and non-native grassland. Whereas, we have determined MSS habitat and individual MSS to be absent in eucalyptus woodland and wetlands. Audubon is currently drafting a Recovery Action Plan (RAP) for MSS and wishes to continue restoration activities concurrently with the recovery plan preparation. Audubon will implement MSS avoidance and minimization measures while restoring MSS habitat and will include these measures in the RAP. Audubon's restoration activities include exotic plant species removal (including eucalyptus trees), planting native plant species, and maintaining planted species. These activities are conducted by volunteers that implement standard gardening methods. Eucalyptus removal is conducted by the California Conservation Corps, who utilizes chainsaws, trucks, and chippers to remove the trees. On behalf of Audubon, I am requesting your concurrence that proposed restoration activities coupled with the minimization measures will not have adverse effects on MSS.

Enclosed with this request is an MSS Habitat Assessment that outlines the minimization measures that Audubon agrees to implement to ensure that restoration activities do not adversely affect MSS. The report presents the results of several surveys conducted on the preserve. We hope that this information is sufficient to allow you to make a determination for the site. If you have any questions or comments regarding this request or the attached report, please contact me at (805) 543-7095 extension 108, or at [tbelt@SWCA.com](mailto:tbelt@SWCA.com)

Sincerely,



Travis Belt  
Associate Biologist

**MORRO SHOULDERBAND SNAIL HABITAT ASSESSMENT**  
**Sweet Springs Preserve, Los Osos, California**

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**March 24, 2009**

**INTRODUCTION**

This Morro shoulderband snail (MSS) Habitat Assessment Report has been prepared by Morro Group- a division of SWCA (SWCA) at the request of Holly Sletteland of the Morro Coast Audubon Society (Audubon), and is intended for use by Audubon and the United States Fish and Wildlife Service (USFWS) for planning purposes. The intent of this report is to provide a habitat assessment and a summary of survey activities for the Morro shoulderband snail (*Helminthoglypta walkeriana*), on the Sweet Springs Preserve (preserve), located on Ramona Avenue, in Los Osos, California (refer to Figure 1).

Audubon is currently updating a resource enhancement plan and preparing a MSS Recovery Action Plan at the preserve and wishes to implement MSS habitat restoration activities, while drafting the documents. The objective of this habitat assessment is to provide USFWS with sufficient information to grant Audubon a concurrence authorization to conduct MSS habitat restoration activities on the preserve, while they are preparing a Recovery Action Plan for MSS. The data presented in this report is a summary of several on-site investigations of the preserve by SWCA personnel and information received from regulatory agencies.

***Site History***

Sweet Springs Preserve consists of three parcels; West Sweet Springs (west preserve), Central Sweet Springs (central preserve), and East Sweet Springs (east preserve). The three parcels are directly adjacent to each other and have been managed for various land uses since the early 1900's. Past land uses have included a eucalyptus and Monterey cypress plantation, a private residence, duck hunting area, and several proposed developments. The varied history of the parcels is made evident by the fragmented nature of the habitat communities currently existing on the preserve.

In 1981, Audubon was gifted the west and central preserve areas. By 1988, Audubon finalized the Sweet Springs Marsh Resource Enhancement and Access Management Plan (1988 management plan) and began restoring the native habitats. Audubon acquired the east preserve in 2008. The 2008 acquisition spurred concerns regarding Audubon's management actions and their affects on sensitive resources. Immediately following the 2008 acquisition, Audubon began updating the 1988 management plan to include the annexed property. In support of the management plan update, Audubon retained SWCA to develop a Biological Constraints Analysis for the newly acquired east preserve. The constraints analysis identified MSS as a key issue to be considered in the updated management plan.

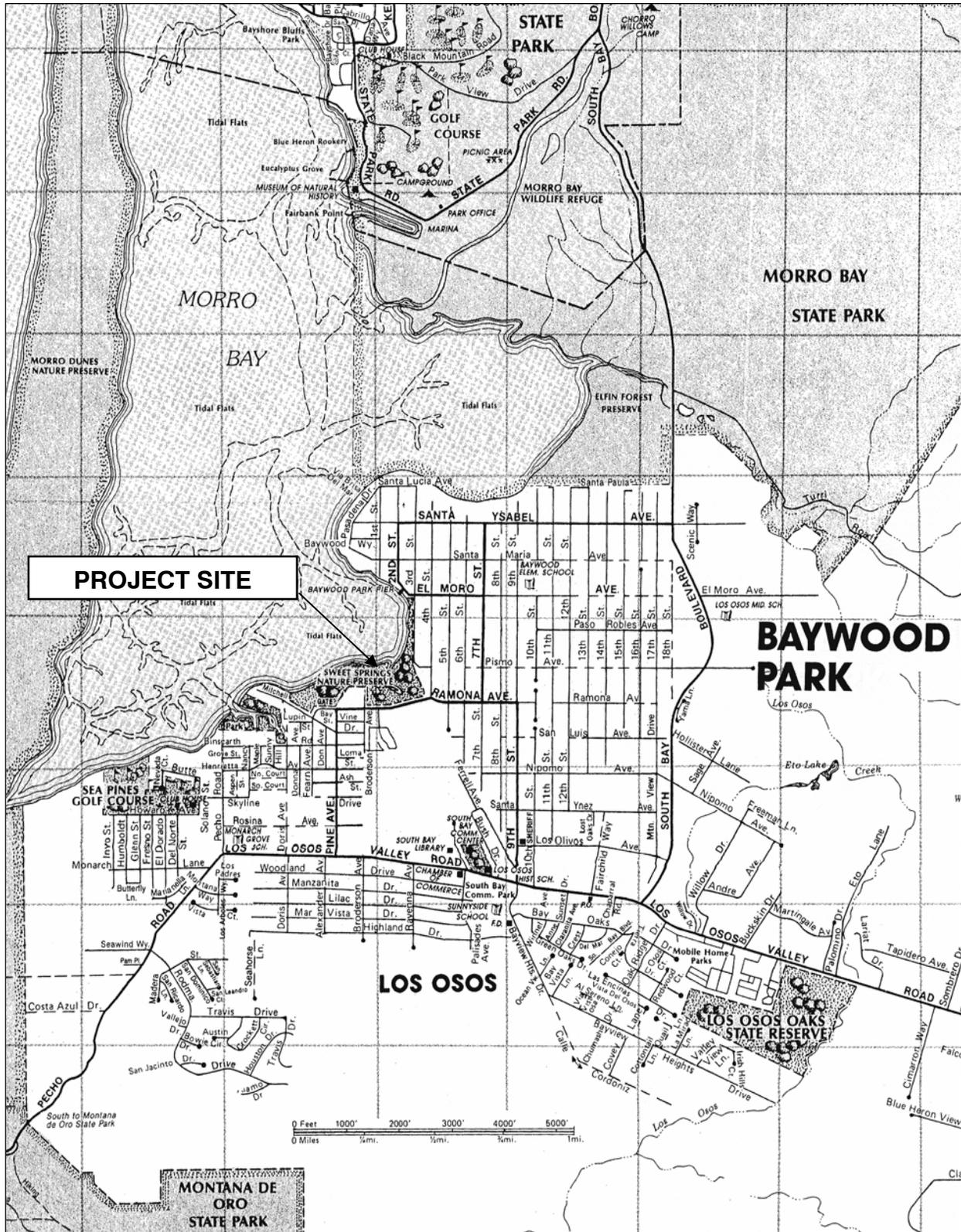
In light of the issues identified through the acquisition and in the constraints analysis, Audubon is currently updating the 1988 management plan, conducting MSS surveys, and drafting a MSS Recovery Action Plan; in hopes of obtaining a MSS Recovery Permit for the preserve.

### ***Proposed Action***

Audubon realizes that updating the 1988 management plan, developing a MSS Recovery Action Plan, and retaining a MSS Recovery Permit is going to take significant time and resources, which will be limited by available funding. Audubon does not want to lose time in completing their stated mission for the preserve, which is to: “*promote the appreciation, conservation, and restoration of ecosystems, focusing on the biological diversity of birds, other wildlife, and their habitats, particularly in San Luis Obispo County, California*”. Audubon wishes to continue conducting habitat restoration activities concurrently with preparing the needed documents; however, needs USFWS authorization to do so.

Audubon has conducted native habitat restoration activities at the west and central preserves since 1988 and is proposing to implement the same activities at the east preserve. Activities associated with habitat restoration include exotic plant species removal (including eucalyptus trees), planting native plant species, and maintaining planted species. With the exception of eucalyptus removal, these activities are conducted by volunteers who utilize hand tools to remove weeds and plant native species. The volunteers use hoses attached to existing underground irrigation lines to water the restoration plantings. These activities do not require the use of any large equipment; however, pursuant to CalFire mandates, Audubon utilizes a mechanical mower to mow grasses within 100 feet of roads and structures. Eucalyptus removal is usually conducted by the California Conservation Corps (the Cs). The Cs use chain saws, trucks, and chippers when removing eucalyptus trees. All restoration activities would be conducted in accordance to the Intra-Service Programmatic Biological Opinion on Issuance of Recovery Permits for Control and Removal of Invasive Non-native Plants in the Vicinity of Los Osos, San Luis Obispo, County, California (PAS 713.762.966).

It should be noted that Audubon’s updated management plan will include improvements on the east preserve such as a pedestrian trail, new fences and a tool shed. This Habitat Assessment and associated request for concurrence does not include or address site improvements that are planned for the preserve. Audubon will address additional site improvements in the preparation of the Draft MSS Recovery Action Plan and in coordination with the USFWS.



  
**NORTH**  
Not to Scale

**Vicinity Map**  
**FIGURE 1**

## **Habitat Assessment Methods and Results**

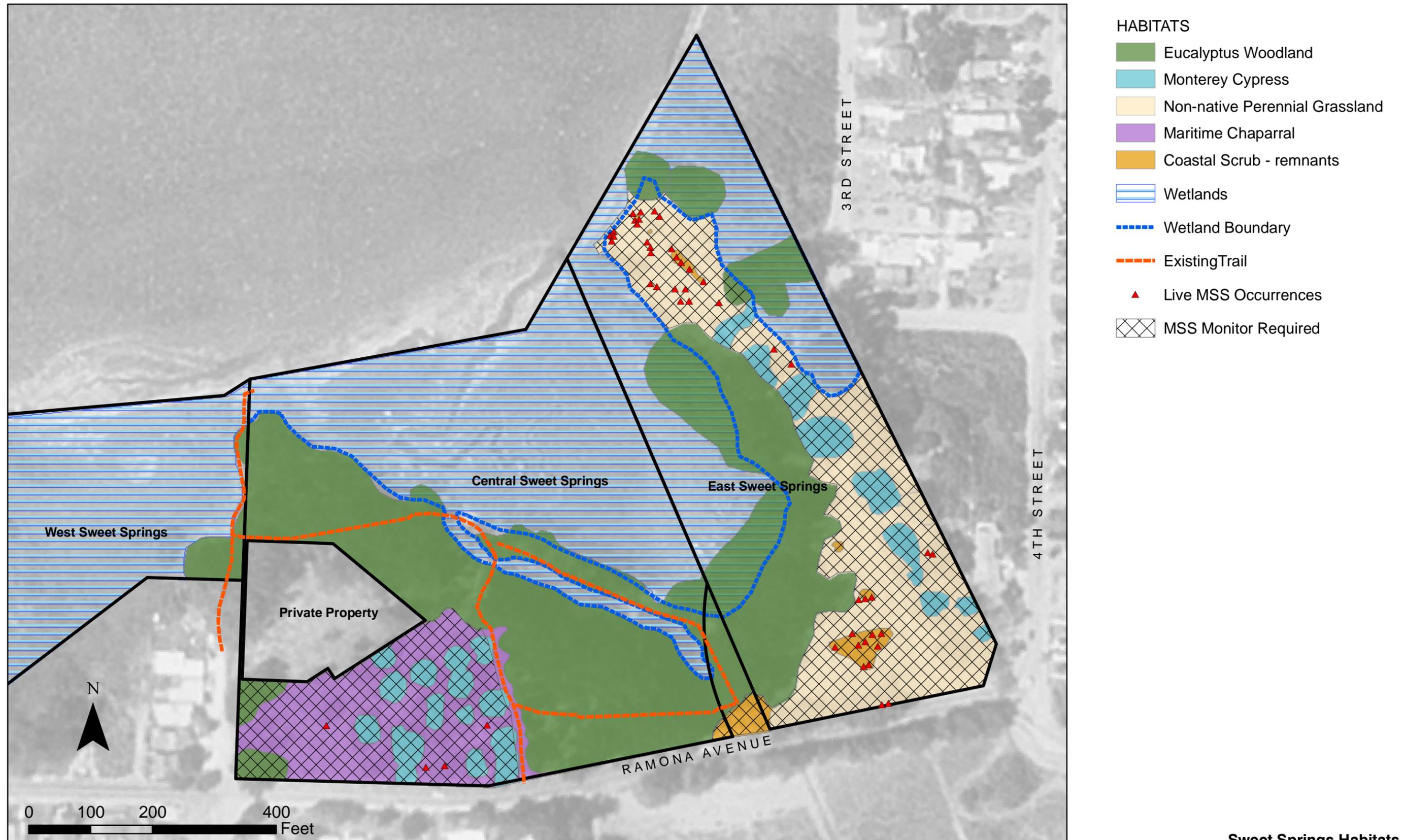
This habitat assessment compiles the results of several MSS and general biological survey efforts conducted by Travis Belt of SWCA at the preserve. Table 1 and Figure 2 provide a summary of Mr. Belt's work conducted on the preserve. Mr. Belt has prepared a Biological Constraints Analysis in Fall 2008, conducted Protocol MSS Surveys in winter 2008/2009, conducted a non-protocol MSS survey on January 6, 2009, and conducted numerous botanical surveys from 2005 through 2009. These activities were conducted on foot and within various portions of the preserve. Mr. Belt thoroughly examined all habitats on the preserve to determine whether live MSS, empty MSS shells, suitable MSS habitat, or other sensitive resources were present on the preserve. Mr. Belt is federally authorized under Permit TE-824123-4 to conduct protocol surveys and habitat assessments for MSS.

**Table 1**  
**Summary of Survey Efforts**

Timing	Survey Effort	Location	Results
December 2008 through February 2009	5 Protocol MSS Surveys	East Preserve	Identified and mapped 44 live MSS occurrences and 33 empty MSS shells.
January 6, 2009	General Biological Survey and Non-protocol MSS Survey	Central Preserve	Identified and mapped vegetative communities and confirmed the presence of live and empty MSS.
September 2, 2008	General Biological Survey	East Preserve	Confirmed presence of MSS, <i>Suaeda Californica</i> , <i>Erigeron blochmaniae</i> , <i>prunus fasciculata</i> var. <i>punctata</i> , and <i>Juncus acutus</i> ssp. <i>leopoldii</i>
Various seasons from 2005 through 2009.	Botanical Surveys (area utilized for botanical reference site)	West and Central Preserve	Confirmed presence of <i>Cordylanthus maritimus</i> ssp. <i>maritimus</i> , <i>Suaeda Californica</i> , <i>Arenaria paludicola</i> , <i>Arctostaphylos morroensis</i> , <i>Erysimum insulare</i> ssp. <i>suffrutescens</i> and <i>Juncus acutus</i> ssp. <i>leopoldii</i>

SWCA personnel have conducted numerous activities related to MSS on the preserve in the last three years. Surveys conducted in support of this habitat assessment include one survey during dry conditions on the central preserve and five protocol surveys on the east preserve. Four live MSS and numerous empty MSS shells (all classes) have been observed within the maritime chaparral on the central preserve. Protocol surveys conducted on the east preserve identified the presence of 44 live MSS and numerous empty shells within the non-native perennial grassland, remnant coastal scrub, and woody debris piles. No live MSS, empty MSS, or MSS fragments were observed within the eucalyptus woodlands or in the wetland areas on the preserve.

In addition to the general biological surveys and MSS surveys, Mr. Belt has conducted numerous botanical surveys on the west and central preserve. These areas support numerous rare plant species (refer to Table 1) and provide valuable opportunities to reference the seasonal flowering status of these species. Some of these species have been planted in the area and others are natural populations.



Sweet Springs Habitats  
FIGURE 2

### **Existing Conditions**

The preserve (east, central, and west) supports maritime chaparral, non-native perennial grassland, mixed eucalyptus woodland, and a variety of wetland habitats (refer to Figure 2 and Photos in Attachment A). The maritime chaparral and non-native perennial grasslands on the preserve provide habitat suitable for MSS (refer to Photos 1 through 4). The eucalyptus woodlands and various wetland habitats on the preserve do not provide suitable MSS habitat (refer to Photos 5 through 8).

Central maritime chaparral is a scrub community that is commonly found on sandy soils and dominated by various *Arctostaphylos* species. The southwestern corner of the central preserve supports a stand of maritime chaparral that Audubon has restored. This area contains occurrences of intact maritime chaparral and disturbed maritime chaparral. The intact maritime chaparral is characterized by 70-90% vegetative cover by chaparral species including California buckwheat (*Eriogonum fasciculatum*), Morro Manzanita (*Arctostaphylos morroensis*), dune lupine (*Lupinus chamissonis*), black sage (*Salvia mellifera*), coyote brush (*Baccharis pilularis*), and mock heather (*Ericameria ericoides*). The intact chaparral transitions to disturbed chaparral at the edge of the Eucalyptus woodland. This area contains sporadic occurrences of chaparral species but is shaded by planted Eucalyptus and Monterey cypress (*Cupressus macrocarpa*) trees. The constant shade and tree litter has limited the growth of chaparral species resulting in dominance by herbaceous weeds.

Non-native perennial grassland is found in disturbed areas throughout central California. Grass species in this community are usually tussock forming and often include either veldt grass (*Ehrharta calycina*) or fountain grass (*Pennisetum setaceum*). The east preserve supports non-native perennial grassland that is dominated by veldt grass. This area contains remnant patches of coastal scrub, planted Monterey cypress, and woody debris piles. Coastal scrub species observed includes coyote brush, mock heather, black sage, dune lupine, and California croton (*Croton californicus*). The non-native perennial grasslands on the east preserve have been mowed for generations, resulting in the sparse to thick coverage of veldt grass and remnant patches of coastal scrub species.

Eucalyptus woodlands occur throughout coastal California and are dominated by various eucalyptus species. The eucalyptus woodlands on the preserve include occurrences of planted Monterey cypress and the occasional coast live oak (*Quercus agrifolia*). These woodlands occur in wet and dry areas on the preserve. Woodlands located within the dry areas are almost completely covered with a thick layer of litter that has greatly limited the growth of under story vegetation. Some wetland species have successfully survived under the woodlands within the wet areas. Due to the presence of a thick Eucalyptus duff layer and lack of significant vegetation in the dry portions of the eucalyptus woodland, these areas do not provide suitable MSS habitat. Additionally, the presence of wetland soils in the wet portions of the Eucalyptus woodlands renders these areas unsuitable for MSS as well.

A large portion of the preserve consist of various wetland habitats including open water ponds, salt marsh, freshwater marsh, mudflats, and blackberry/willow thickets. These areas support a diverse assemblage of wetland species that provide dense vegetative cover. These wetland areas are not suitable for MSS.

## **Regulatory Implications**

The findings as described above are sufficient to establish the presence of live MSS and suitable MSS habitat within the maritime chaparral and non-native perennial grassland on the preserve (refer to Figure 2). However, the eucalyptus woodlands and wetland areas on the preserve do not provide suitable habitat for MSS.

Based on the survey results, restoration activities conducted within the maritime chaparral and non-native perennial grassland could result in take of MSS. Section 3(18) of the Endangered Species Act defines “take” to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Due to the absence of suitable MSS habitat in the eucalyptus woodland and wetlands on the preserve, it is highly unlikely that restoration activities conducted in these areas would impact MSS. Consequently, restoration activities in these areas can proceed without the potential for violations of the Endangered Species Act.

## ***Recommended Minimization Measures***

Based on the findings of the survey efforts, it is evident that MSS are present within the non-native grasslands and maritime chaparral located on the preserve. Restoration activities conducted within the non-native grassland and maritime chaparral have potential to impact MSS. The following minimization measures should be implemented when conducting restoration activities within the non-native grassland and maritime chaparral:

### *MSS Minimization Measures*

1. All work should be performed during dry conditions. If precipitation is predicted within 24 hours of the work day, work should be postponed and rescheduled for a dry period.
2. To avoid inadvertent trampling of MSS, all restoration personnel should avoid accessing the non-native woodlands and wetland areas via the non-native grassland and maritime chaparral. Restoration personnel should utilize the existing foot path to access the non-native woodland and wetland areas. If restoration personnel must utilize the non-native grassland or maritime chaparral to access the non-native woodlands or wetlands, the qualified MSS biologist should survey the identified access route for MSS prior to any disturbances. If live MSS are identified within the access route, the individual(s) should be left in place and the access route should be realigned to avoid the individual(s). Once the absence of MSS is confirmed within an access route, the route should be delineated with visible flagging (pin flags or tape). All personnel should limit traffic to the delineated area.
3. All restoration activities conducted in the maritime chaparral and non-native grasslands should be monitored by a qualified biologist in possession of a valid 10(a)(1)(A) permit for MSS.
4. Prior to implementing restoration activities, restoration personnel should attend an environmental awareness training conducted by the qualified MSS biologist prior to start of activities. At a minimum, the training should include a description of the MSS and

its habitat, the general provision of the Endangered Species Act of 1973, as amended, the specific measures being implemented to conserve the MSS as they relate to the project, the access routes to the project site, and the project boundaries. Further, the training should include a description of Morro manzanita, its habitat, and the specific measures being implemented to protect the species. Brochures, photographs, books and briefings may be used in the training session, provided a USFWS- approved biologist is available to answer any questions.

5. Prior to the onset of each day's activities, the Service- approved biologist should search for MSS within the treatment areas. Search methods may include, but are not limited to, carefully sifting through accumulated plant litter beneath shrubs, checking the lower branches of shrubs, and turning over rocks and other debris where MSS may shelter. MSS found within access routes and work areas shall be carefully moved outside the work area and released nearby, preferably within 50 feet of original locality, and placed under native vegetation after minimal handling time (generally within one minute). Information which includes the date, time of capture, specific location of capture and release, associated vegetation and any other pertinent information should be recorded.
6. Prior to each work event, the USFWS-approved biologist should clearly define and demarcate the work area and acceptable access routes with visible flagging. Access routes should be selected to avoid or minimize adverse effects to individual MSS and Morro Manzanita. The fewest number of access routes should be established to minimize trampling of MSS, Morro manzanita and other native vegetation.
7. If MSS are encountered during restoration activities, the Service-approved biologist should stop the work. The MSS should be relocated to predetermined native habitat areas, preferably within 50 feet of the original location, before work activities may resume.
8. Removal of woody debris and broadcast sprinkler irrigation should not be conducted within areas containing non-native grassland or maritime chaparral.

#### *Weed Removal Methods*

1. Removal of or damage to native vegetation during project implementation must be avoided to the maximum extent possible.
2. Prior to starting veldt grass removal, non-target shrubs that provide substantial habitat for MSS should be flagged. When hand removal methods are used, a "safety zone" of 5 feet in diameter shall surround each non-target shrub. Veldt grass should be removed by hand or with hand tools to within 18 inches of the shrub. Veldt grass within 18 inches of the shrub should be pulled by hand only.
3. Extensive monocultures of veldt grass may be mowed to stubble just above ground level, but the 5 foot safety zone should be maintained around non-target plants. Herbicide

should be applied when veldt grass reaches a height of 3 inches. Repeated mowing and spraying may be necessary to exhaust the seed bank.

4. When using hand removal methods, pest plants should be disposed of off-site and not be piled or composted on the project site, reducing the possibility of resprouting from seeds or root segments and recolonizing the treatment site.
5. All equipment and clothing should be inspected and cleaned before moving off-site to lessen the probability of spreading pest plants to other areas.
6. Solarization should be used only during the summer months and when soils are thoroughly wet. It should not be used to treat extensive areas of veldt grass, so that changes to soil composition and chemistry are reduced.

### *Herbicide Application Methods*

1. Only two herbicides should be used for weed removal: glyphosate (Roundup Custom® or Rodeo® with the addition of a Service-approved low-toxicity surfactant), and fluazifop-p-butyl (Fusillade®). Glyphosate should be used only on extensive veldt grass monocultures. In areas where veldt grass is intergrown with native broadleaf species, Fusillade® should be used because it will leave broadleaf vegetation intact. Glyphosate should not be used in these areas because it will kill both broadleaf and grass species on contact.
2. A 15 foot buffer zone should be established around native shrubs that provide substantial habitat for MSS. No spraying should occur within the buffer zone.
3. Morro manzanita and other rare plant species should be covered with appropriate shielding, such as plastic sheeting, 5-gallon buckets, or 20-gallon plastic tubs (depending on size of plants) to protect them during herbicide applications occurring in their vicinity. Plants should be covered for no more than two hours.
4. A non-toxic dye should be mixed in to the herbicide spray solution of prevent double spraying at the project site and to identify treatments gaps.
5. Herbicide drift to non-target areas should be reduced by using low-drift equipment and careful spot spraying procedures. Herbicides should only be applied during calm weather conditions, with wind blowing less than 5 miles per hour.
  - a. No herbicide spraying should occur within 150-feet of any water bodies to keep herbicide drift from entering water.
  - b. When not in use, herbicides and any other project-related hazardous materials should be stored off-site. On days when herbicides are being applied, such materials should either be in the possession of the registered applicator or in a designated location on an impermeable liner for accidental spill containment. All

accidental project-related spills of hazardous materials should be cleaned up immediately.

- c. Herbicide operations must be performed by a registered applicator. The herbicide applicator should carry, at any one time, only the amount of herbicide required for the day's application and use a cloth to wipe up any drips.

## **Conclusion**

Since 1988, Morro Coast Audubon Society has contributed significant time and resources to the biological restoration, public environmental awareness, and enhancement of recreational opportunities at the preserve. Audubon has successfully restored a large portion of the maritime chaparral at the central preserve and eradicated exotic plant species at the western and central preserve. These successes are a result of diligent and continuous work conducted by Audubon and their volunteers. Their management actions and public outreach programs are beneficial to MSS and other rare plant and wildlife species at the preserve. Delays in the restoration and maintenance activities would be detrimental to the success of the restoration efforts conducted to date.

Restoration activities conducted in suitable MSS habitat on the preserve do have potential to result in take of MSS. Audubon and their volunteers are good stewards of the land and are sensitive to environmental issues. Audubon is devoted to ensuring their activities are beneficial to MSS and other rare species; therefore, have agreed to implement the minimization and avoidance measures discussed above while restoring the MSS habitat at the preserve. The requested concurrence authorization will allow MSS habitat restoration efforts to continue while a formal recovery plan is prepared.

## **APPENDIX A**

- **Photo Documentation**



**Photo 1:**

View looking west over restored maritime chaparral. This community is located at the southwestern corner of the preserve, along Ramona Avenue.

Photo taken January 6, 2009



**Photo 2:**

View looking east over the disturbed maritime chaparral. This area is located adjacent to the Ramona Avenue entrance to the west preserve and is scheduled for restoration activities.

Photo taken January 6, 2009

## PHOTO DOCUMENTATION



**Photo 3:**

View looking northwest over the non-native perennial grassland. This community is located on the east preserve. Audubon proposes to restore native coastal scrub MSS habitat in this area.

Photo taken  
September 2, 2008



**Photo 4:**

View of remnant coastal scrub located within the non-native perennial grassland at the east preserve. Eucalyptuses in the background demarcate the wetland edge and would eventually be removed by restoration activities.

Photo taken  
March 4, 2009

**PHOTO DOCUMENTATION**



**Photo 5:**

Representative view of a transitional zone between wetlands and non-native grassland. These areas have a eucalyptus in the over story and field sedge in the under story and so not provide suitable MSS habitat.

Photo taken September 2, 2008



**Photo 6:**

Representative view of a wetland community located at the east preserve. This area is dominated by blackberries, sedges and other wetland species.

Photo taken September 2, 2008

**PHOTO DOCUMENTATION**



**Photo 7:**

View of the interface between non-native perennial grassland and the Morro Bay water edge. Four MSS were observed in the downed log seen in the right of the picture.

Photo taken September 2, 2008



**Photo 8:**

View of non-native woodlands located at the edge of open water habitat in the central preserve.

Photo taken March 4, 2009

**PHOTO DOCUMENTATION**



Appendix D: **Morro Shoulderband Snail Protocol  
Survey Report (2009)**

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**East Sweet Springs Preserve Habitat Restoration  
and Public Access Project  
Los Osos, California**

**MORRO SHOULDERBAND SNAIL  
PROTOCOL SURVEY REPORT**

**Prepared for:**

Holly Sletteland  
Morro Coast Audubon Society  
PO Box 1507  
Morro Bay, California 93443

**Prepared by:**



**MORRO  
GROUP**

A DIVISION OF SWCA

**March 21, 2009**



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**APPENDIX**

Appendix A Photo-Documentation

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## I. INTRODUCTION

This protocol survey report has been prepared by Morro Group, a Division of SWCA (SWCA) for the Morro Coast Audubon Society (Audubon), and is intended for use by Audubon and the United States Fish and Wildlife Service (USFWS) for permitting and planning purposes. Audubon manages three parcels at Sweet Springs Preserve: West Sweet Springs (west preserve), Central Sweet Springs (central preserve), and East Sweet Springs (east preserve). This report provides protocol-level survey results for the Morro shoulderband snail (*Helminthoglypta walkeriana*), on the east preserve. The east preserve is located at the corner of Ramona Avenue and 4th Street, in Los Osos, California (refer to Figures 1 and 2). The data presented in this report is a compilation of information received from regulatory agencies, literature reviews, and five protocol-level surveys of the east preserve by SWCA biologists

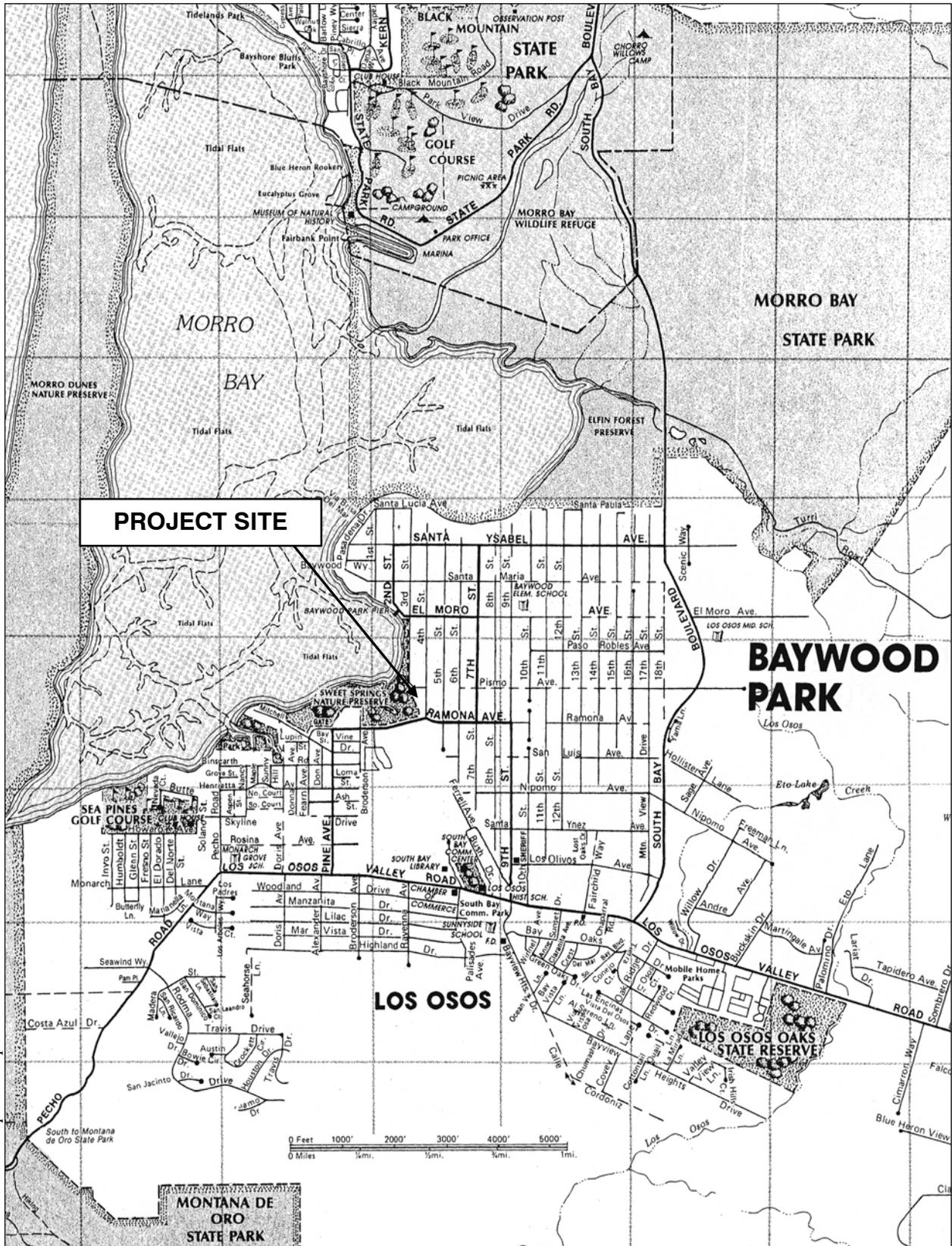
Audubon is proposing to implement several improvements on the east preserve that will enhance the native flora and provide public access to the Morro Bay Estuary. The intent of this report is to document the distribution of Morro shoulderband snail (MSS) on the east preserve. This report should be used by Audubon and the USFWS when preparing a MSS Recovery Action Plan and site plan that minimizes impacts to MSS while enhancing the MSS habitat on the site.

## II. SURVEY METHODS

According to the 2003 USFWS Protocol Survey Guidelines for MSS, five protocol surveys must be performed during rainy or heavy fog conditions to establish the presence/absence of MSS. Per the USFWS requirements, Morro Group conducted five surveys during or immediately following rainfall events (refer to Table 1), between December 16, 2008 and February 17, 2009. All surveys were conducted by SWCA biologist Travis Belt, with assistance from Doug and Holly Sletteiland. Travis Belt is authorized to perform MSS surveys under federal permit PRT-824123-3. The surveyors examined all areas containing suitable MSS habitat on the east preserve; areas not containing suitable habitat (i.e. wetlands) were not surveyed. The surveyors divided the suitable habitat into five survey areas and thoroughly examined one survey area during each survey event. This approach allowed the surveyors to accurately determine the distribution of MSS throughout the survey area.

## III. MORRO SHOULDERBAND SNAIL SPECIES AND HABITAT DESCRIPTION

On December 15, 1994 the USFWS listed MSS as an endangered species, under the Federal Endangered Species Act. MSS are a member of the land snail family Helminthoglyptidae and are found in association with sandy soils of coastal dune and coastal sage scrub communities near Morro Bay. MSS are closely associated with several shrub species including mock heather, seaside golden yarrow, deerweed sand almond, and ice plant. Other plants that commonly occur in areas occupied by this species include black sage, dune buckwheat, California sagebrush, dune lupine, and California croton. Typically, live snails are found in shrubs that exhibit dense, low growth and ample contact with the ground.



Source: Compass Maps

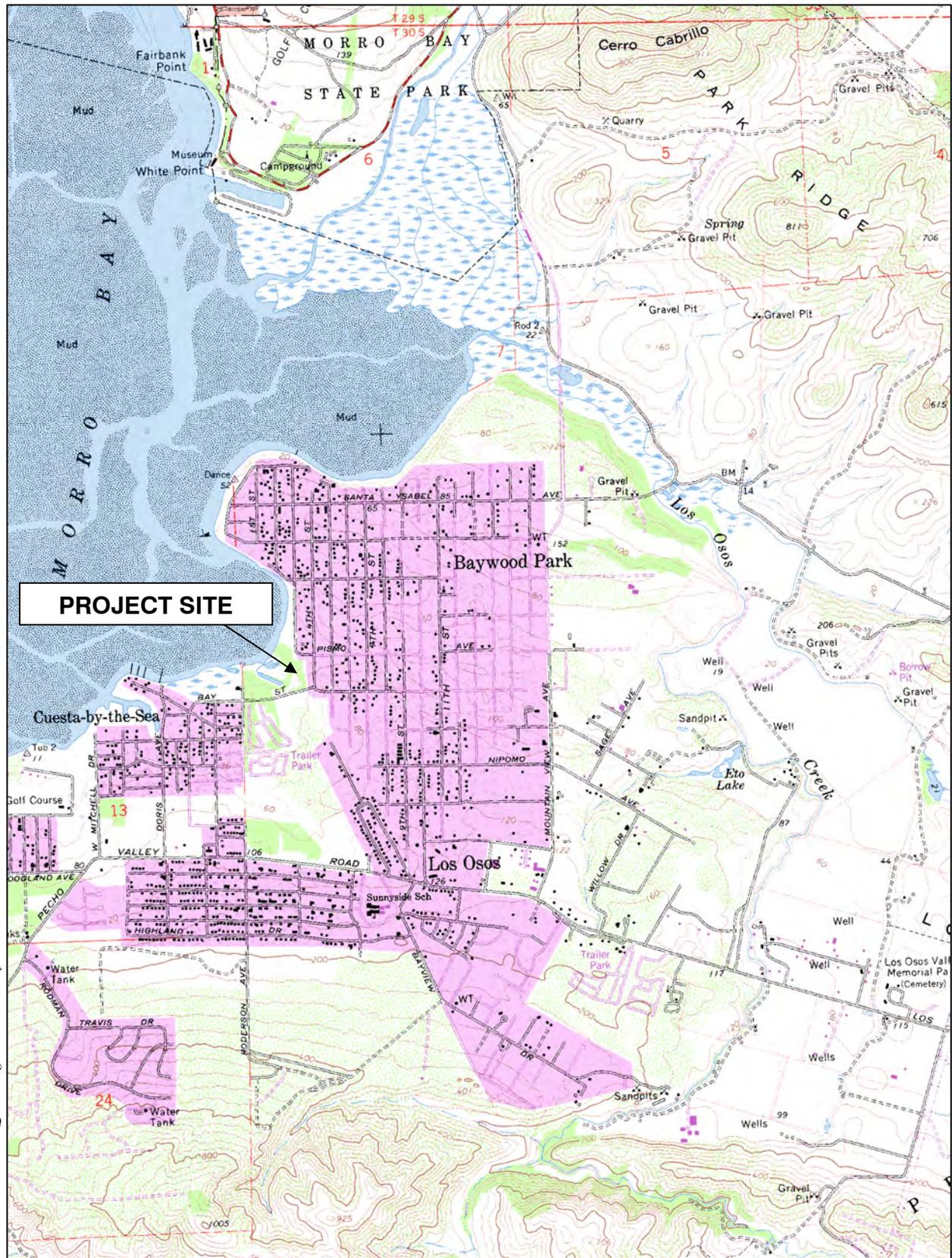


NORTH

Not to Scale

Morro Group - A Division of SWCA

Vicinity Map  
FIGURE 1



Source: USGS 7.5 Quadrangle – Morro Bay South.



**NORTH**  
Not to Scale

**Location Map – USGS Quad  
FIGURE 2**

## **IV. PROPOSED PROJECT**

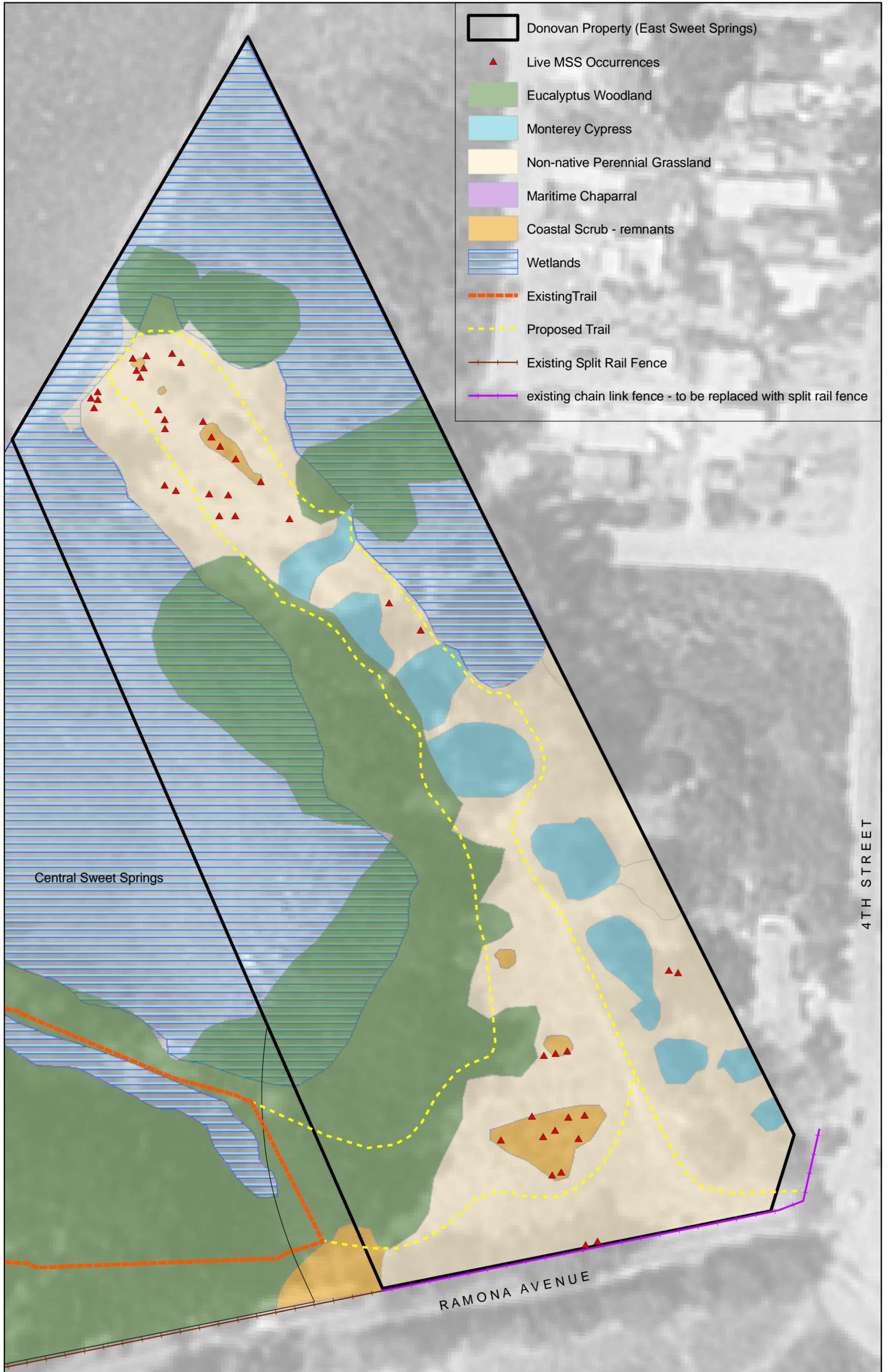
Audubon has managed the west and east preserves since 1988 and recently (2008) annexed the east preserve, which was formally known as the Donovan Property. Audubon is proposing several site improvements that will facilitate public access and provide for vegetation enhancement on the east preserve. Proposed site improvements include installing pedestrian trails, installing interpretive signs, replacing an existing chain-link fence with a wooden rail fence, constructing a tool shed and implementing a long-term habitat restoration plan.

The proposed trail would connect the east preserve to the existing trail at the central and western portions of the preserve. Although the final trail alignment and design have yet to be identified, it is anticipated to connect with the existing trail system near the southwest corner of the east preserve (refer to Figure 3). The anticipated alignment will create a loop centrally located within the east preserve and would travel through the non-native perennial grassland and the eucalyptus woodland. Audubon is currently evaluating various materials for constructing the trail; however, the project budget is limiting their options. At this time, Audubon anticipates utilizing decomposed granite or other all-weather material for the trail surface. If funding becomes available, Audubon would consider developing a raised wood path.

Currently approximately 600 feet of chain link fence is located at the southern boundary of the east preserve. Audubon proposes to remove the chain link fence and replace it with a wooden split rail fence. The proposed wooden rail fence would connect to an existing wooden rail fence located on the central preserve. Interpretive signs would be strategically located along the proposed fence and trail.

Habitat restoration activities would focus on enhancing coastal scrub, maritime chaparral, and wetland communities. Key aspects of the restoration work would include exotic plant species removal (including eucalyptus trees), planting native species, and maintaining planted species. Most weed removal activities would be conducted by volunteers utilizing standard gardening methods and hand tools; however, some herbicide applications would be necessary. Eucalyptus removal would be performed by the California Conservation Corps (the Cs). The Cs would utilize chainsaws, trucks and chippers while removing eucalyptus trees. Herbicide applications would be implemented by Audubon personnel under Operator Identification Number 40-09-4000645 and limited to glyphosate (round up) or fluazifop-p-butyl (Fusilade).

Volunteers would utilize hand tools to install restoration plantings. In order to provide supplemental water to the plantings, Audubon proposes to install PVC irrigation lines that would connect to existing irrigation located on the central preserve. The irrigation lines would be installed approximately six inches below the soil surface and run directly adjacent to the existing sidewalk located on Ramona Drive. Volunteers would connect hoses to the irrigation line to apply water to the plantings.



MSS Habitat and Survey Area Map  
FIGURE 3

Back of Figure 3

## V. EXISTING CONDITIONS

The topography of the east preserve gently slopes northwest towards the Morro Bay Estuary at elevations between zero and twenty feet. The United States Soil Conservation Service mapped Baywood fine sand and saline aquolls within the property. The east preserve supports non-native perennial grassland, remnant coastal scrub, eucalyptus woodland, and wetland habitats (refer to Figure 3).

The non-native grassland is centrally located on the property and is dominated by veldt grass. Remnant patches of coastal scrub, planted Monterey cypress trees, and piles of woody debris are scattered throughout the grassland. Remnant coastal scrub species present include mock heather, bush lupine, Blochman's leafy daisy (*Erigeron blochmaniae*), and coyote brush. Several rare plant species including blochman's leafy daisy and sand almond (*prunus fasciculata* var. *punctata*) are present in the non-native grasslands on the site. The previous owners of the property routinely mowed the grasslands, which has limited the re-establishment of these coastal scrub species. The grassland, remnant coastal scrub species, and woody debris piles provide the only habitat suitable for MSS usage on the east preserve.

The non-native grassland intergrades with field sedge and salt grass at the transition to wetland habitats. The wetland habitats are located at the north, west, and east ends of the property and include riparian vegetation, salt marsh, freshwater marsh, and emergent wetlands. The wetlands are supported by freshwater drainages that skirt the edges of the property and tidal inundation from Morro Bay. These areas are densely vegetated with wetland species including blackberry, willows, cattail, rushes, and various fresh and salt water marsh species. Portions of the wetlands located directly adjacent to the Morro Bay support the federally protected California seablite (*Suaeda californica*) and southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), which is a CNPS list 4 species. The wetland areas do not provide suitable habitat for MSS.

Dense eucalyptus woodland is well established within and directly adjacent to the wetland areas. The thick eucalyptus duff has limited the under story growth; however, persistent wetland species such as field sedge, *Juncus*, and three-square exist in the under story. Volunteer Monterey cypress saplings are interspersed within the eucalyptus woodland. The eucalyptus grove does not provide suitable habitat for MSS.

## VI. RESULTS

Forty-four live MSS and thirty-three empty MSS shells were observed on the east preserve during the five protocol surveys (refer to Table 1). Most of these occurrences were concentrated in and directly adjacent to remnant coastal scrub and woody debris piles located at the northern and southern ends of the property. Only six live individuals were observed in grassland areas removed from the coastal scrub or woody debris. Two of these six were located in escaped ornamental ground cover at the base of the chain link fence adjacent to Ramona Avenue. Approximately thirty-five (live and empty) common brown garden snails (*Helix aspersa*) and nine cellar glass snails (*Oxychilus cellarius*) were observed in the survey area. These individuals were also concentrated in the coastal scrub and woody debris piles.

**TABLE 1**  
**Survey Dates, Time and Findings**

Survey Number	Survey Date and Time	Rainfall Activity	Temperature	Results	Biologist(s)
1	12/16/08 8:00 a.m. to 10:00 a.m.	Scattered showers; 0.16" recorded on survey day. 0.70" recorded 72 hours prior.	60° F	MSS - 9 live; 1“A”, 3”B”, and 2”C” shells. Garden snail – 1 empty	T. Belt H.Sletteland D. Anderson
2	1/23/09 1:00 p.m. to 3:00 p.m.	Scattered showers; 0.47" recorded on survey day. 0.02" recorded 24 hours prior.	60° F	MSS - 5 live; 2”B”, and 5”C” shells. Garden snail - 11 live/empty. Cellar glass - 1 live	T. Belt H.Sletteland D. Anderson
3	2/6/09 9:00 a.m. to 11:00 a.m.	Raining; 0.79" recorded on survey day. 0.70" recorded 24 hours prior.	63° F	MSS - 15 live; 2“A”, 9”B”, and 2 ”C” shells. BSS - 1”B” and 1”C” shell. Garden snail – 13 live/empty.	T. Belt H.Sletteland D. Anderson
4	2/13/09 8:30 a.m. to 10:30 a.m.	Showers; 0.65”; recorded on survey day. 0.12" recorded 48 hours prior.	62° F	MSS - 12 live; 4”C” shells. BSS – 1 live, 3”C” shells Garden snail – 6 live/empty. Cellar glass – 4 live/empty	T. Belt H.Sletteland D. Anderson
5	2/17/09 2:00 p.m. to 4:30 p.m.	Showers; 0.06" recorded on survey day. 1.17" recorded 24 hours prior.	63°F	MSS - 3 live; 2“A”, 1”C” shells. Garden snail – 4 empty. Cellar glass – 4 live	T. Belt H.Sletteland D. Anderson

\*Weather data provided by www.wunderground.com; History for Station KCABAYW02

MSS = Morro shoulderband snail  
BSS = Big Sur shoulderband snail  
Garden snail = *Helix aspersa*  
Cellar glass snail = *Oxychilus cellarius*

In addition to the protocol surveys conducted on the east preserve, SWCA conducted a non-protocol survey on the central preserve on January 6, 2009 (refer to the SWCA, 2009). This survey identified the presence of live and empty MSS within maritime chaparral located adjacent to Ramona Avenue.

**VII. REGULATORY IMPLICATIONS**

Section 3(19) of the Endangered Species Act (ESA) defines “take” to mean “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” As further defined by the USFWS, “harm” includes significant habitat modification or degradation which actually kills or injures wildlife by “significantly impairing essential behavioral patterns, which include, but are not limited to, breeding, feeding, or sheltering.” Therefore, activities such as construction, mowing, brush or debris removal or grading within a property that is known to support MSS has potential to result in “take” of the species, as well as modification and/or degradation to known habitat. Unauthorized “take” is a violation of the

Endangered Species Act and could result in penalties of up to \$100,000 and/or up to one year imprisonment.

## VIII. CONCLUSIONS AND EFFECTS DETERMINATION

The findings as described in Section VI established the presence of forty-four live MSS and areas of suitable MSS habitat on the east preserve. In addition, there are known occurrences of MSS on the adjacent central preserve. Considering the presence of live MSS and suitable MSS habitat, the proposed improvements has potential to result in take of MSS. Fortunately, habitat restoration activities associated with the proposed project would be beneficial to the recovery of MSS, Morro Manzanita (*Arctostaphylos morroensis*), and other rare species on the preserve. Restoration and enhancement of coastal scrub and maritime chaparral communities would expand the available habitat for MSS on the property; potentially facilitating growth of the existing MSS population.

SWCA recommends that Morro Coast Audubon Society coordinate with USFWS to prepare a MSS Recovery Action Plan (RAP). The RAP should be incorporated with the updated Resource Enhancement and Access Management Plan that Audubon is currently preparing. Additionally, the plan should address activities proposed on the entire preserve, not just the east preserve. Audubon should ensure that the RAP is prepared in accordance to the guidelines provided in the Intra-Service Programmatic Biological Opinion on Issuance of Recovery Permits for Control and Removal of Invasive Non-native Plants in the Vicinity of Los Osos, San Luis Obispo, County, California (PAS 713.762.966).

At a minimum, the RAP should include the following elements: 1) Project Summary; 2) Analysis of Baseline Data within the Recovery Area; 3) MSS Recovery Implementation Plan; 4) Impact Assessment; and 5) Proposed Avoidance and Minimization Measures. The project summary should include a site description and location, project components, and a discussion of the study methods. The analysis of baseline data should summarize the results of all studies conducted on the preserve including the Biological Constraints Analysis (SWCA, 2008), Sweet Springs Preserve MSS Habitat Assessment (SWCA, 2009), the Updated Resource Enhancement and Access Management Plan and this MSS Survey Report. Data presented in these documents should be used to establish baseline habitat conditions and designate proposed recovery areas. The implementation plan should provide detailed methods for implementing recovery actions and provide conceptual timing for the actions. In addition, this section should provide measurable success criteria to be used to monitor the actions. Potential impacts to sensitive resources resulting from the implementation plan must be addressed in the impact assessment. Proposed mitigation measures designed to avoid or minimize the identified impacts should be included in the impact assessment. Lastly the RAP should clearly define the potential benefits to resources that would result from RAP implementation.

Upon completion of the Draft MSS Recovery Action Plan, Audubon should coordinate with USFWS to review the draft RAP and address any comments they may have. After addressing USFWS comments, Audubon should submit a Final MSS Recovery Action Plan and an

application to obtain a MSS Recovery Permit issued under section 10(A)(1)(a) of the Endangered Species Act.

## IX. REFERENCES

- California Natural Diversity Data Base. 2009. Data Base Search for the Morro Bay South U.S.G.S 7.5-minute Quadrangle. California Department of Fish and Game. Sacramento, California.
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- Hoover, Robert F. 1970. The Vascular Plants of San Luis Obispo County, California. University of California Press. Berkeley, California.
- Morro Group, a Division of SWCA, Inc. SWCA 2008. Sweet Springs Preserve Donovan Property Annex Biological Screening and Constraints Analysis. Prepared for the Morro Coast Audubon Society
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- Roth. 1985. Status Survey of the Banded Dune Snail, (*Helminthoglypta walkeriana*). Prepared for the U.S. Fish and Wildlife Service. Sacramento, California.
- U.S. Fish and Wildlife Service. 1998. Recovery Plan for the Morro Shoulderband Snail and Four Plants from Western San Luis Obispo County, California. U.S. Fish and Wildlife Service, Portland, Oregon.
- U.S. Fish and Wildlife Service. 2003. Protocol Survey Guidelines for the Morro Shoulderband Snail. U.S. Fish and Wildlife Service, Portland, Oregon.

## **APPENDIX A**

- **Photo Documentation**



**Photo 1:**

View of remnant coastal scrub located near the southern corner of the east preserve. Twelve live MSS were observed in these shrubs.

Photo taken  
March 4, 2009



**Photo 2:**

View of several decomposing tree stumps located near the southeast corner of the east preserve. Two live MSS were observed in these stumps.

Photo taken  
March 19, 2009

**PHOTO DOCUMENTATION**



**Photo 3:**

View of the non-native perennial grassland located under the planted cypress trees. This area is lacking significant coastal scrub. Two live MSS were observed within the grasses in this area.

Photo taken  
March 19, 2009



**Photo 4:**

View of remnant coastal scrub and surrounding grasses located at the northern end of the east preserve. Five live MSS were observed within these shrubs and numerous live MSS were observed in the grasses surrounding the shrubs.

Photo taken  
March 19, 2009

**PHOTO DOCUMENTATION**



**Photo 5:**

View of a decomposing tree trunk located at the northern end of the east preserve. Several MSS were observed in the tree trunk and the surrounding grasses.

Photo taken  
March 19, 2009



**Photo 6:**

View of the interface between non-native perennial grassland and the Morro Bay water edge. Four MSS were observed in the downed log seen in the right of the picture.

Photo taken  
September 2,  
2008

**PHOTO DOCUMENTATION**



**Photo 7:**

Representative view of a transitional zone between wetlands and non-native grassland at the east preserve. These transitional areas were surveyed; however, no evidence of MSS was observed.

Photo taken September 2, 2008



**Photo 8:**

Representative view of a wetland community located at the east preserve. This area is dominated by blackberries, sedges and other wetland species. This wetland habitat was not surveyed.

Photo taken September 2, 2008

**PHOTO DOCUMENTATION**



## Appendix E: **Coastal Development Permit**



SAN LUIS OBISPO COUNTY  
**DEPARTMENT OF PLANNING AND BUILDING**

June 26, 2013

Morro Coast Audubon Society  
P.O. Box 1507  
Morro Bay, CA 93443

**NOTICE OF FINAL COUNTY ACTION**

HEARING DATE: June 4, 2013

SUBJECT: MORRO COAST AUDUBON SOCIETY (MCAS)  
County File No. DRC2011-00013  
Minor Use Permit / Coastal Development Permit

LOCATED WITHIN COASTAL ZONE: YES

The above-referenced application was approved by the Board of Supervisors, based on the approved Findings and Conditions, which are attached for your records. This Notice of Final Action is being mailed to you pursuant to Section 23.02.033(d) of the Land Use Ordinance.

This action is appealable to the California Coastal Commission pursuant to regulations contained in Coastal Act Section 30603 and the County Coastal Zone Land Use Ordinance 23.01.043. These regulations contain specific time limits to appeal, criteria, and procedures that must be followed to appeal this action. The regulations provide the California Coastal Commission ten (10) working days following the expiration of the County appeal period to appeal the decision. This means that no construction permits can be issued until both the County appeal period and the additional Coastal Commission appeal period have expired without an appeal being filed.

Exhaustion of appeals at the county level is required prior to appealing the matter to the California Coastal Commission. This second appeal must be made directly to the California Coastal Commission Office. Contact the Commission's Santa Cruz Office at (831) 427-4863 for further information on their appeal procedures.

If the use authorized by this Permit approval has not been established, or if substantial work on the property towards the establishment of the use is not in progress after a period of twenty-four (24) months from the date of this approval or such other time period as may be designated through conditions of approval of this Permit, this approval shall expire and become void unless an extension of time has been granted pursuant to the provisions of Section 23.02.050 of the Land Use Ordinance.

If the use authorized by this Permit approval, once established, is or has been unused, abandoned, discontinued, or has ceased for a period of six (6) months, or conditions have not been complied with, such Permit approval shall become void.

If you have questions regarding your project, please contact me at (805) 781-5612.

Sincerely,



RAMONA HEDGES  
Custodian of Records

cc: California Coastal Commission,  
725 Front Street, Suite 300, Santa Cruz, California 95060  
Save The Park! 405 Acacia St. Morro Bay, California 93442

---

(Planning Department Use Only – for California Coastal Commission)

Date NOFA copy mailed to Coastal Commission: June 26, 2013

Enclosed:              X   Staff Report(s) dated June 4, 2013  
                           X   Resolution with Findings and Conditions

**IN THE BOARD OF SUPERVISORS**  
COUNTY OF SAN LUIS OBISPO, STATE OF CALIFORNIA

Tuesday, June 4, 2013

**PRESENT:** Supervisors Frank Mecham, Bruce S. Gibson, Adam Hill, Debbie Arnold  
and Chairperson Paul A. Teixeira

**ABSENT:** None

RESOLUTION NO. 2013-135

RESOLUTION AFFIRMING THE DECISION OF THE  
HEARING OFFICER AND CONDITIONALLY APPROVING  
THE APPLICATION OF MORRO COAST AUDUBON SOCIETY  
FOR MINOR USE PERMIT/COASTAL DEVELOPMENT PERMIT  
DRC2011-00013

The following resolution is now offered and read:

WHEREAS, on March 15, 2013, the Zoning Administrator of the County of San Luis Obispo (hereinafter referred to as the "Hearing Officer") duly considered and conditionally approved the application of Morro Coast Audubon Society for Minor Use Permit/Coastal Development Permit DRC2011-00013; and

WHEREAS, Save the Park has appealed the Hearing Officer's decision to the Board of Supervisors of the County of San Luis Obispo (hereinafter referred to as the Board of Supervisors) pursuant to the applicable provisions of Title 23 of the San Luis Obispo County Code; and

Attachment 1

WHEREAS, a public hearing was duly noticed and conducted by the Board of Supervisors on June 4, 2013, and determination and decision was made on June 4, 2013; and

WHEREAS, at said hearing, the Board of Supervisors heard and received all oral and written protests, objections, and evidence, which were made, presented, or filed, and all persons present were given the opportunity to hear and be heard in respect to any matter relating to said appeal; and

WHEREAS, the Board of Supervisors has duly considered the appeal and finds that the appeal should be denied and the decision of the Hearing Officer should be affirmed and that the application should be approved subject to the findings and conditions set forth below.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED by the Board of Supervisors of the County of San Luis Obispo, State of California, as follows:

1. That the recitals set forth hereinabove are true, correct and valid.
2. That the Board of Supervisors makes all of the findings of fact and determinations set forth in revised Exhibit A attached hereto and incorporated by reference herein as though set forth in full.
3. That the Mitigated Negative Declaration prepared for this project is hereby approved as complete and adequate and as having been prepared in accordance with the provisions of the California Environmental Quality Act.
4. That the appeal filed by Save the Park is hereby denied and the decision of the Hearing Officer is affirmed and that the application of Morro Coast Audubon Society for Minor Use Permit/Coastal Development Permit DRC2011-00013 is hereby approved

Attachment 1

subject to the conditions of approval set forth in Exhibit B attached hereto and incorporated by reference herein as though set forth in full.

Upon motion of Supervisor Gibson, seconded by Supervisor Hill, and on the following roll call vote, to wit:

AYES: Supervisors Gibson, Hill, Mecham, Arnold and Chairperson Teixeira

NOES: None

ABSENT: None

ABSTAINING: None

the foregoing resolution is hereby adopted.

Paul A. Teixeira  
Chairperson of the Board of Supervisors

ATTEST:

Julie L. Rodewald  
Clerk of the Board of Supervisors  
By: /s/Sandy Currens  
Deputy Clerk

[SEAL]

APPROVED AS TO FORM AND LEGAL EFFECT:

RITA L. NEAL  
County Counsel



**EXHIBIT A - FINDINGS**

*Environmental Determination*

- A. The Environmental Coordinator, after completion of the initial study, finds that there is no substantial evidence that the project may have a significant effect on the environment, and the preparation of an Environmental Impact Report is not necessary. Therefore, a Negative Declaration (pursuant to Public Resources Code Section 21000 et seq., and CA Code of Regulations Section 15000 et seq.) has been issued on December 27, 2012 for this project. Mitigation measures are proposed to address aesthetics, biological resources, public services/utilities and transportation/circulation and are included as conditions of approval.

Comments were received on the Negative Declaration during the comment period. The comments were responded to in this staff report. The Negative Declaration adequately addresses the project's potential impacts and no changes to the Negative Declaration are necessary in response to the received comments.

*Minor Use Permit*

- B. The proposed project or use is consistent with the San Luis Obispo County General Plan because the use is an allowed use and as conditioned is consistent with all of the General Plan policies.
- C. As conditioned, the proposed project or use satisfies all applicable provisions of Title 23 of the County Code.
- D. The establishment and subsequent operation or conduct of the use will not, because of the circumstances and conditions applied in the particular case, be detrimental to the health, safety or welfare of the general public or persons residing or working in the neighborhood of the use, or be detrimental or injurious to property or improvements in the vicinity of the use because habitat restoration and trail construction does not generate activity that presents a potential threat to the surrounding property and buildings. This project is subject to Ordinance and Building Code requirements designed to address health, safety and welfare concerns.
- E. The proposed project or use will not be inconsistent with the character of the immediate neighborhood or contrary to its orderly development because the project area is designated open space.
- F. The proposed project or use will not generate a volume of traffic beyond the safe capacity of all roads providing access to the project, either existing or to be improved with the project because the project is located on Ramona Ave., a local road constructed to a level able to handle any additional traffic associated with the project.
- G. Morro Coast Audubon Society's restoration activities as defined as hand removal of non-natives and replacement with native plants is not considered a land use and therefore not subject to Section 23.03.042.

## Attachment 1

### *Coastal Access*

- H. The proposed use is in conformity with the public access and recreation policies of Chapter 3 of the California Coastal Act, because the project creates additional access to coastal waters and recreation areas.

### *Sensitive Resource Area*

- I. The development will not create significant adverse effects on the natural features of the site or vicinity that were the basis for the Sensitive Resource Area designation, and will preserve and protect such features through the site design, because the project is primarily habitat conservation.
- J. Natural features and topography have been considered in the design and siting of all proposed physical improvements because trails have been routed to create the least amount of impact on the natural environment.
- K. The proposed clearing of topsoil, trees, is the minimum necessary to achieve safe and convenient access and siting of proposed structures, and will not create significant adverse effects on the identified sensitive resource, because all work will be accompanied by habitat restoration.
- L. The soil and subsoil conditions are suitable for any proposed excavation and site preparation and drainage improvements have been designed to prevent soil erosion, and sedimentation of streams through undue surface runoff.

### *Environmentally Sensitive Habitat Areas*

- M. There will be no significant negative impact on the identified sensitive habitat and the proposed public access improvements will be consistent with the biological continuance of the habitat.
- N. The proposed public access improvements will not significantly disrupt the habitat.

### *Archeological Sensitive Area*

- O. The site design and development incorporate adequate measures to ensure that archeological resources will be acceptably and adequately protected because the project design routes trails and structures away from sensitive areas.
- P. The site design and development cannot be feasibly changed to avoid intrusion into or disturbance of archaeological resources. Construction will use appropriate methods to protect the integrity of the site. Such methods include a monitoring plan for all construction activities

**EXHIBIT B - CONDITIONS OF APPROVAL**

**Approved Development**

1. This approval authorizes implementation of public access improvements at East Sweet Springs and connecting the site (with trails) to the Central Sweet Springs Nature Preserve. The project includes an accessible trail and boardwalk system including interpretive elements guiding visitors to a prominent lookout point along the shoreline of the estuary (as shown on the approved site plan).

**Conditions required to be completed at the time of a Notice to Proceed**

***Site Development***

2. At the time of application for a **Notice to Proceed**, plans submitted shall show all development consistent with the approved site plan and elevations.
3. **At the time of application for a Notice to Proceed**, the applicant shall provide details on any proposed exterior lighting, if applicable. The details shall include the height, location, and intensity of all exterior lighting. All lighting fixtures shall be shielded so that neither the lamp nor the related reflector interior surface is visible from adjacent properties. Light hoods shall be dark colored.

***Fire Safety***

4. **At the time of application a Notice to Proceed**, all plans submitted to the Department of Planning and Building shall meet the fire and life safety requirements of the California Fire Code.

***Drainage & Flood Hazard***

5. The applicant shall submit evidence to the Department of Public Works that all structures comply with County flood hazard construction standards, Sections 23.07.060-066.

**Conditions to be completed prior to issuance of a Notice to Proceed**

***Archaeology***

6. **CR-1:** The Applicant shall submit a monitoring plan, prepared by a County-approved archaeologist, for review and approval by the County Department of Planning and Building. The intent of this Plan is to monitor all earth-disturbing activities in areas identified as potentially sensitive for cultural resources, per the approved monitoring plan. The monitoring plan shall include at a minimum:
  - a. List of personnel involved in the monitoring activities;
  - b. Description of how the monitoring shall occur;
  - c. Description of frequency of monitoring (e.g., full-time, part time, spot checking);
  - d. Description of what resources are expected to be encountered;
  - e. Description of circumstances that would result in the halting of work at the project site (e.g., What is considered "significant" archaeological resources?);
  - f. Description of procedures for halting work on the site and notification procedures; and
  - g. Description of monitoring reporting procedures.

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7. The applicant shall submit an Incidental Take Permit or other approval from the US Fish and Wildlife Service.

**Conditions to be completed during project construction**

*Biological Resources*

8. **BR-1: All ground disturbance activities** will be restricted to the dry season (June 1 through October 31) when Morro shoulderband snails (MSS) are typically inactive and less likely to move into the construction area.
9. **BR-2: Preconstruction surveys** for Morro shoulderband snail shall be conducted **prior to any ground disturbance** in those areas to be affected by grading and other construction-related activities.
10. **BR-3: Prior to site disturbance**, exclusion fencing shall be installed under the direction of a qualified biologist or a US Fish and Wildlife Service authorized Morro shoulderband snail monitor to ensure that areas occupied or potentially occupied by Morro shouldband snail are not impacted. The fence will remain in place throughout the duration of the project.
11. **BR-4:** A qualified biologist or a US Fish and Wildlife Service authorized Morro shoulderband snail monitor shall monitor construction activities to ensure that Morro shoulderband snail have not moved into the construction site during mist conditions such as heavy dew, fog, rain., In the event such conditions occur, the biologist shall conduct another pre-activity survey prior to resumption of work. The service will be contacted immediately if Morro shoulderband snails are located in the construction areas during such surveys. Construction shall not be resumed until all Morro shoulderband snail issues have been resolved.
12. **BR-5: Prior to site disturbance**, an environmental awareness training shall be conducted for all construction workers at the site. The Environmental Awareness training shall be conducted by a qualified biologist or a US Fish and Wildlife Services authorized Morro shoulderband snail monitor.

*Archaeology*

13. **CR-2:** During all ground disturbing activities, the applicant shall retain a qualified archaeologist (approved by the Environmental Coordinator) to monitor all earth disturbing activities, per the approved monitoring plan. If any significant archaeological resources or human remains are found during work shall stop within the immediate vicinity (precise area to be determined by the archaeologist in the field) of the resource until such time as the resource can be evaluated by an archaeologist and any other appropriate individuals. The applicant shall implement the mitigation as required by the environmental coordinator.
14. **CR-4: Prior to ground disturbance activities**, all labor crews shall be trained on the identification of archaeological remains and instructed in the proper steps to take in the

## Attachment 1

event archaeological remains are exposed. The training shall be conducted by a qualified archaeologist.

### **Conditions to be completed prior to establishment of the use**

15. **Prior to establishment of the use**, whichever occurs first, the applicant shall obtain final inspection and approval from CDF of all required fire/life safety measures.
16. **Prior to establishment of the use**, the applicant shall contact the Department of Planning and Building to have the site inspected for compliance with the conditions of this approval.

### ***Archaeology Monitoring – Completion Report***

17. **CR-3: Upon completion of all monitoring/mitigation activities, and prior to establishment of the use**, the consulting archaeologist shall submit a report to the Environmental Coordinator summarizing all monitoring/mitigation activities and confirming that all recommended mitigation measures have been met. If the Phase III program is not complete by the time of final inspection or occupancy will occur, the applicant shall provide to the Environmental Coordinator, proof of obligation to complete the required analysis.

### **On-going conditions of approval (valid for the life of the project)**

18. This land use permit is valid for a period of 24 months from its effective date unless time extensions are granted pursuant to Land Use Ordinance Section 23.02.050 or the land use permit is considered vested. This land use permit is considered to be vested once a construction permit has been issued and substantial site work has been completed. Substantial site work is defined by Land Use Ordinance Section 23.02.042 as site work progressed beyond grading and completion of structural foundations; and construction is occurring above grade.
19. All conditions of this approval shall be strictly adhered to, within the time frames specified, and in an on-going manner for the life of the project. Failure to comply with these conditions of approval may result in an immediate enforcement action by the Department of Planning and Building. If it is determined that violation(s) of these conditions of approval have occurred, or are occurring, this approval may be revoked pursuant to Section 23.10.160 of the Land Use Ordinance.
20. The applicant shall as a condition of approval of this minor use permit/coastal development permit defend, at his sole expense, any action brought against the County of San Luis Obispo, its present or former officers, agents, or employees, by a third party challenging either its decision to approve this minor use permit/coastal development or the manner in which the County is interpreting or enforcing the conditions of this minor use permit/coastal development permit, or any other action by a third party relating to approval or implementation of this minor use permit/coastal development permit. The applicant shall reimburse the County for any court costs and attorney's fees which the County may be required by a court to pay as a result of such action, but such participation shall not relieve the applicant of his obligation under this condition.



**COUNTY OF SAN LUIS OBISPO  
DEPARTMENT OF PLANNING AND BUILDING  
STAFF REPORT**

**Tentative Notice of Action**

*Promoting the wise use of land  
Helping build great communities*

MEETING DATE March 1, 2013	CONTACT/PHONE Kerry Brown, Project Planner (805) 781-5713	APPLICANT Morro Coast Audubon Society	FILE NO. DRC2011-00013
LOCAL EFFECTIVE DATE March 15, 2013			
APPROX FINAL EFFECTIVE April 15, 2013	<a href="mailto:kbrown@co.slo.ca.us">kbrown@co.slo.ca.us</a>		

**SUBJECT**  
Request by Morro Coast Audubon Society (MCAS) to implement public access improvements at East Sweet Springs connecting the site (with trails) to the Central Sweet Springs Nature Preserve. The project includes an accessible trail and boardwalk system including interpretive elements guiding visitors to a prominent lookout point along the shoreline of the estuary. The trail will include one linear main line constructed of a combination of decomposed granite and elevated wooden or composite boardwalk (from the entrance to the bay overlook). Two spur trails leading from the Pond Loop trail to the north and south of the pond on the Central Sweet Springs preserve will connect the main line to the eastern section. One small loop trail will be included near the middle of the main line to provide a resting area. The main line trail will be five feet in width. The project will result in 6,500 square feet of ground disturbance on an 8.3 acres site. The project is located on the north side of Ramona Street between Broderson Avenue and 4th Street, in the community of Los Osos, in the Estero planning area.

- RECOMMENDED ACTION**
1. Adopt the Mitigated Negative Declaration (ED12-039) in accordance with the applicable provisions of the California Environmental Quality Act, Public Resources Code Section 21000 et seq.
  2. Approve Minor Use Permit DRC2011-00013 based on the findings listed in Exhibit A and the conditions listed in Exhibit B.

**ENVIRONMENTAL DETERMINATION**  
The Environmental Coordinator, after completion of the initial study, finds that there is no substantial evidence that the project may have a significant effect on the environment, and the preparation of an Environmental Impact Report is not necessary. Therefore, a Negative Declaration (pursuant to Public Resources Code Section 21000 et seq., and CA Code of Regulations Section 15000 et seq.) has been issued on December 27, 2012 for this project. Mitigation measures are proposed to address aesthetics, biological resources, public services/utilities and transportation/circulation and are included as conditions of approval.

LAND USE CATEGORY Open Space and Residential Single Family	COMBINING DESIGNATION Archaeological Study Area, Coastal Access Area, Flood Hazard, Local Coastal Plan Area, Sensitive Resource Area, Wetlands	ASSESSOR PARCEL NUMBER 074-229-009	SUPERVISOR DISTRICT(S) 2
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**PLANNING AREA STANDARDS:**  
Height Limitations  
Does the project meet applicable Planning Area Standards: Yes - Not applicable

**LAND USE ORDINANCE STANDARDS:**  
Appeals to the Coastal Commission (Coastal Appealable Zone).  
Does the project conform to the Land Use Ordinance Standards: Yes - see discussion

**FINAL ACTION**  
This tentative decision will become the final action on the project, unless the tentative decision is changed as a result of information obtained at the administrative hearing or is appealed to the County Board of Supervisors pursuant Section 23.01.042 of the Coastal Zone Land Use Ordinance; effective on the 10th working day after the receipt of the final action by the California Coastal Commission. The tentative decision will be transferred to the Coastal Commission following the required 14-calendar day local appeal period after the administrative hearing. The applicant is encouraged to call the Central Coast District Office of the Coastal Commission in Santa Cruz at (831) 427-4863 to verify the date of final action. The County will not issue any construction permits prior to the end of the Coastal Commission process.

<b>EXISTING USES:</b> Open space with perimeter fencing	
<b>SURROUNDING LAND USE CATEGORIES AND USES:</b> North: Estero Bay East: Residential Single Family; single family residences South: Residential Multi Family; undeveloped West: Area of deferred certification (Coastal Commission jurisdiction); Morro Coast Audubon Society Sweet Springs Nature Preserve	
<b>OTHER AGENCY / ADVISORY GROUP INVOLVEMENT:</b> The project was referred to: Los Osos Community Advisory Council, Public Works, Los Osos Community Services District, and the California Coastal Commission	
<b>TOPOGRAPHY:</b> Nearly level	<b>VEGETATION:</b> Eucalyptus Woodland, Monterey Cypress, Non-native Perennial Grassland, Maritime Chaparral, Coastal Scrub
<b>PROPOSED SERVICES:</b> Water supply: None Sewage Disposal: Not applicable Fire Protection: Cal Fire	<b>ACCEPTANCE DATE:</b> October 15, 2012

## DISCUSSION

### Background:

Morro Coast Audubon Society owns and manages the Sweet Springs Nature Preserve. Sweet Springs is a 24 acre Nature Preserve which provides public access, educational programs, and a monitoring and management of the flora and fauna at the site. In 2008, Sweet Springs East was purchased by the Trust for Public Land with funding for the acquisition provided by California State Coastal Conservancy, the National Coastal Wetlands Conservation Grant (USFWS), 2004 Section VI Recovery Land Acquisition Grant (USFWS), 2002 Section VI Recovery Land Acquisition Grant (USFWS), and the California Wildlife Conservation board. The Trust for Public Land transferred the property over to the Morro Coast Audubon Society to manage with the Central Sweet Springs Preserve. Deed restrictions were placed on the property, restricting the use of the property to the following uses: plant and wildlife habitat preservation, restoration and management, wildlife-oriented education and research, and public access. Sweet Springs Nature Preserve is now made up of three areas: West Sweet Springs, Central Sweet Springs, and East Sweet Springs. West Sweet Springs is fully protected and public access is discouraged as it is a salt marsh, Central Sweet Springs allows managed public access and habitat preservation, and East Sweet Springs is proposed to allow public access and habitat enhancement and preservation.

Vegetation on the site includes non-native grassland, Eucalyptus woodland, emergent wetland, saltwater marsh, and coast live oak. Two drainages border the property on the east and west. MCAS initially proposed removal of approximately 100 Eucalyptus trees at the site. This portion of the project was removed for further study regarding potential impacts to Monarch butterflies.

### Project Description

Morro Coast Audubon Society (MCAS) is proposing to implement public access improvements at East Sweet Springs and connect the site (with trails) to the Central Sweet Springs Nature Preserve. The project includes an accessible trail and boardwalk system including interpretive elements guiding visitors to a prominent lookout point along the shoreline of the estuary. The

trail will include one linear main line constructed of a combination of decomposed granite and elevated wooden or composite boardwalk (from the entrance to the bay overlook). Two spur trails leading from the Pond Loop trail to the north and south of the pond on the Central Sweet Springs preserve will connect the main line to the eastern section. One small loop trail will be included near the middle of the main line to provide a resting area. The main line trail will be five feet in width. The project also includes a bike rack (bicycles will not be allowed on the preserve), an ADA parking space, a small shed and a 3,000 gallon water tank; all located at the entrance of the preserve.

## **PLANNING AREA STANDARDS:**

### **Bayfront Development**

#### **1. Height**

Proposed structures are limited to a maximum height of 14 feet (within area mapped in Figure 7-41).

*This project complies with this standard; the height of the proposed water tank and shed are approximately 8 feet and 10 feet 6 inches in height respectively.*

## **LAND USE ORDINANCE STANDARDS:**

### **Section 23.01.043c.(1): Appeals to the Coastal Commission (Coastal Appealable Zone)**

The project is appealable to the Coastal Commission because the subject parcels are located between the sea and the first public road paralleling the sea.

### **Section 23.07.060: Flood Hazard Area**

The project site is adjacent to the Morro bay estuary. A portion of the proposed project's trails are located within the Flood Hazard area; however trails are not subject to the flood hazard standards.

### **Section 23.07.104: Archaeologically Sensitive Areas**

The project site is within a mapped Archaeologically Sensitive Area. Before issuance of a land use or construction permit for development within an archaeologically sensitive area, a preliminary site survey shall be required.

*A Phase I (surface) survey was conducted (Bertando and Bertrando, October 2009). Prehistoric cultural material, including marine shell, bone, and fire affected rocks and chipped stone debris were observed over most of the parcel. The proposed public access improvements have the potential to impact cultural resources at the site. Monitoring is required as part of the project to mitigate any impacts to the resource.*

### **Section 23.07.120: Local Coastal Program**

The project site is located within the California Coastal Zone as established by the California Coastal Act of 1976, and is subject to the provisions of the Local Coastal Program.

### **Sections 23.07.160, 172, 176: Sensitive Resource Area and Wetlands**

The project site is largely mapped as a sensitive resource area with wetlands. Design measures have been incorporated into the project to limit the potential impacts on these sensitive areas by:

- Routing trails so that they minimize impacts
- Closing informal trails and re-vegetating them
- Usage of signs to discourage informal trail construction
- Construction of a "floating" boardwalk to minimize soil disturbance.

The proposed overlook and portions of the boardwalk are located within areas designated Wetlands and within the Wetland setback. These uses are allowed; Section 23.07.166bii allows coastal accessways and nature trails within this area and 23.07.172d(1) allows passive recreation and educational uses within the wetland setback.

#### COASTAL PLAN POLICIES:

##### **Shoreline Access**

**Policy 2: New Development.** Maximum public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development.

*The proposed project complies with this policy, as the proposed projects will not interfere with public access to the beach or the ocean. The project will install a viewing platform that overlooks the shoreline and provide shoreline access to the public.*

##### **Recreation and Visitor Serving**

**Policy 1: Recreation Opportunities.** Coastal recreational and visitor-serving facilities, especially lower-cost facilities, shall be protected, encouraged and where feasible provided by both public and private means.

*The proposed project complies with this policy, as the project will increase access to the public for visitor-serving activities. The proposed ADA trail and sign system will enhance the public's ability to traverse the property.*

##### **Environmentally Sensitive Habitats**

**Policy 1: Land Uses Within or Adjacent to Environmentally Sensitive Habitats.** New development within or adjacent to locations of environmentally sensitive habitats (within 100 feet unless sites further removed would significantly disrupt the habitat) shall not significantly disrupt the resource. Within an existing resource, only those uses dependent on such resources shall be allowed within the area.

*This project complies with this policy because it will not disrupt resources on the site through installation or use of access improvements. Impacts associated with the project are minimized.*

**Policy 2: Permit Requirement.** As a condition of permit approval, the applicant is required to demonstrate that there will be no significant impact on sensitive habitats and that proposed development or activities will be consistent with the biological continuance of the habitat. This shall include an evaluation of the site prepared by a qualified professional which provides: a) the maximum feasible mitigation measures (where appropriate), and b) a program for monitoring and evaluating the effectiveness of mitigation measures where appropriate.

*The proposed project complies with this policy, potential impacts due to the proposed project were identified and mitigation measures are incorporated into the project.*

**Policy 8: Principally Permitted Use.** Principally permitted uses in wetlands are as follows: hunting, fishing and wildlife management; education and research projects.

*The proposed project complies with this policy; the project will provide educational opportunities at the site.*

##### **Visual and Scenic Resources**

**Policy 1: Protection of Visual and Scenic Resources.** Unique and attractive features of the landscape, including but not limited to unusual landforms, scenic vistas and sensitive

habitats are to be preserved, protected, and in visually degraded areas restored where feasible.

*The proposed project complies with this policy; deed restrictions ensure that long term protection of this unique and sensitive area.*

### **Archaeology**

**Policy 4:** Preliminary Site Survey for Development within Archaeologically Sensitive Areas.

Development shall require a preliminary site survey by a qualified archaeologist knowledgeable in Chumash culture prior to a determination of the potential environmental impacts of the project.

*The proposed project complies with this policy, as the Morro Coast Audubon Society has conducted numerous archaeological investigations to identify and protect sensitive cultural resources and sites, and has determined that with proper mitigation the project's impacts can be reduced to the greatest extent possible. Rerouting of trails away from archaeological sensitive areas, a data recovery plan, and monitoring of construction have been implemented into project design. In the event that cultural resources are discovered during construction, all construction activities shall halt, as conditioned in Exhibit B.*

**Does the project meet applicable Coastal Plan Policies:** Yes, as conditioned

ENVIRONMENTAL DETERMINATION: A Mitigated Negative Declaration in accordance with the applicable provisions of the California Environmental Quality Act was issued on December 27, 2012 (see attached). Staff received a comment letter from Save the Park. Save the Park is concerned with the adverse impacts associated with the implementation of the Morro Shoulderband snail recovery plan and the need for a comprehensive Management of Plan for the East Sweet Springs. Their letter is attached and specific issues summarized below with staff's comments.

1. Environmental approvals should promote comprehensive, multi-species resource protection. They should also reference the value of the site as an aesthetic resource to the Los Osos community.

*The proposed project is to implement public access improvements. The Initial Study outlines the proposed project impacts and proposes mitigation measures to reduce any impacts. Aesthetic impacts were evaluated in the context of public access improvements.*

2. The Audubon group should be restrained from removal of understory or trees that do not have the maturity and size that would require a use permit. The mitigations should directly state that there may not be removals of vegetation outside of the construction area.

*The scope of the project is to implement public access improvements; understory (non-native) removal and ongoing restoration activities at the site are not subject to County authorization and therefore the County cannot restrain MCAS from these actions. Impacts, including vegetation removal, associated with the proposed access improvements have been evaluated in the Negative Declaration. Impacts associated with actions outside the evaluated project are beyond the scope of the Negative Declaration and the proposed minor use permit.*

3. The Audubon Chapter should be required to prepare an update of the Sweet Springs Management Plan before any additional site development proposals are presented for County approval. The process for the preparation of the updated Management Plan should be open to public review and the County should formally consider and adopt its proposals.

*Save the Park may have issues with management of Sweet Springs; however the preparation of an updated Management Plan is not required or subject to County approval unless specific actions or projects (outlined within the Management Plan) require a Coastal Development Permit.*

Staff received three comment letters from Marie Smith. The first specifically questioned the County's Environmental Determination, that it was not in-depth. Ms. Smith highlighted notes from the County's parcel screen that outlined the need for an Environmental Impact Report for the project.

*The notes were regarding a previous proposal to subdivide the site and staff's preliminary observations that there may be a potential for significant impacts. The current project is to provide public access and related improvements; and the County evaluated this project, and found that the project will not have a significant impact on the environment.*

The second comment letter referenced four subjects and specifically references the Initial Study (prepared for the project). The first subject concerns the Aesthetic section of the Environmental Determination. Ms. Smith believes the Aesthetics section does not adequately address both the existing setting and the proposed project. The kiosks, entrance, interpretive panels, storage shed are not mentioned in this Aesthetic section. Ms. Smith also believes the viewing platform was not accurately described, she prefers 24 X 16, as opposed to 384 square feet. Other observations about the aesthetics of the site are also outlined in the letter.

*The kiosk, entrance, interpretive panels, storage shed are discussed in the project description, in the Aesthetics section, these features are summarized as public access improvements. The shed and small water tank are proposed at the entry of the site screened by trees; the other improvements are minor in nature and will not have a significant impact. The viewing platform is described in terms of total square footage, as is the County Planning Department's standard.*

The second subject of the letter concerns the deer that live at Sweet Springs East. Ms. Smith questions whether U.S. Fish and Wildlife or California Department of Fish and Game (now Wildlife) has been contacted regarding the best way to protect the deer.

*Staff has heard about the deer that live at the site. Deer are not a protected species and are common in many urban areas. U.S. Fish and Wildlife or California Department of Fish and Game (now Wildlife) have not been contacted, as the deer are not listed species.*

The third subject is regarding water. Ms. Smith is concerned about the impacts to the water basin. Ms. Smith states maybe they can use recycled water.

*Water will be delivered to the site. Water usage will be temporary, until newly restored areas are established. Recycled water is currently not available.*

The fourth comment of the letter states the following "Sweet Springs Nature Preserve East is an established eco-system, with many habitats, containing a wide variety of interwoven native & non-native plants. Many organisms are dependent on this area. I am concerned with any clearing before it is analyzed for the consequences of our actions".

*The project has been analyzed, minimal ground disturbance will occur, as a result of the project. The provision of trails can help protect this habitat and sensitive area by concentrating usage on designated trails.*

A third letter from Marie Smith discusses the placement of the kiosk.

*The kiosk is shown on the site plan attached. The kiosk is located at the eastern entrance.*

**COMMUNITY ADVISORY GROUP COMMENTS:**

The Los Osos Community Advisory Council reviewed the proposed project on October 27, 2011. At the time LOCAC reviewed the project Eucalyptus tree removal was included in the project description. MCAS revised their project description and tree removal is no longer part of this permit. LOCAC voted to support the public access improvements and no tree removal.

**STAFF COMMENTS:**

MCAS initially proposed removal of approximately 100 Eucalyptus trees at the site. This portion of the project was removed for further study regarding potential impacts to Monarch butterflies. Staff has received approximately 165 letters and postcards regarding this project. This correspondence mostly addressed the tree removal. The correspondence addressed concerns regarding impacts to birds and Monarch butterflies. Concerns about the aesthetic of the site were also outlined. Approximately 60% of the correspondence was in support of the tree removal. These letters were not included in this staff report, but are available in the file.

**AGENCY REVIEW:**

Public Works – 1. Provide a Loading Zone and ADA parking plan for Public Works Review.  
2. Remove the “No Parking” sign from the plans and contact Ryan Chapman in the Traffic Division (781-1406) to discuss the ordinance requirements and Board of Supervisors Approval required for a “No Parking” sign.  
The applicant has worked with Public Works to address these issues

California Coastal Commission – No response

**LEGAL LOT STATUS:**

The parcel was legally created by a conditional certificate of compliance at a time when that was a legal method of creating lots.

Staff report prepared by Jonathan Hidalgo and Kerry Brown and reviewed by Steve McMasters.

## EXHIBIT A - FINDINGS

### ***Environmental Determination***

- A. The Environmental Coordinator, after completion of the initial study, finds that there is no substantial evidence that the project may have a significant effect on the environment, and the preparation of an Environmental Impact Report is not necessary. Therefore, a Negative Declaration (pursuant to Public Resources Code Section 21000 et seq., and CA Code of Regulations Section 15000 et seq.) has been issued on December 27, 2012 for this project. Mitigation measures are proposed to address aesthetics, biological resources, public services/utilities and transportation/circulation and are included as conditions of approval.

Comments were received on the Negative Declaration during the comment period. The comments were responded to in this staff report. The Negative Declaration adequately addresses the project's potential impacts and no changes to the Negative Declaration are necessary in response to the received comments.

### ***Minor Use Permit***

- B. The proposed project or use is consistent with the San Luis Obispo County General Plan because the use is an allowed use and as conditioned is consistent with all of the General Plan policies.
- C. As conditioned, the proposed project or use satisfies all applicable provisions of Title 23 of the County Code.
- D. The establishment and subsequent operation or conduct of the use will not, because of the circumstances and conditions applied in the particular case, be detrimental to the health, safety or welfare of the general public or persons residing or working in the neighborhood of the use, or be detrimental or injurious to property or improvements in the vicinity of the use because habitat restoration and trail construction does not generate activity that presents a potential threat to the surrounding property and buildings. This project is subject to Ordinance and Building Code requirements designed to address health, safety and welfare concerns.
- E. The proposed project or use will not be inconsistent with the character of the immediate neighborhood or contrary to its orderly development because the project area is designated open space.
- F. The proposed project or use will not generate a volume of traffic beyond the safe capacity of all roads providing access to the project, either existing or to be improved with the project because the project is located on Ramona Ave., a local road constructed to a level able to handle any additional traffic associated with the project

### ***Coastal Access***

- G. The proposed use is in conformity with the public access and recreation policies of Chapter 3 of the California Coastal Act, because the project creates additional access to coastal waters and recreation areas.

***Sensitive Resource Area***

- H. The development will not create significant adverse effects on the natural features of the site or vicinity that were the basis for the Sensitive Resource Area designation, and will preserve and protect such features through the site design, because the project is primarily habitat conservation.
- I. Natural features and topography have been considered in the design and siting of all proposed physical improvements because trails have been routed to create the least amount of impact on the natural environment.
- J. The proposed clearing of topsoil, trees, is the minimum necessary to achieve safe and convenient access and siting of proposed structures, and will not create significant adverse effects on the identified sensitive resource, because all work will be accompanied by habitat restoration.
- K. The soil and subsoil conditions are suitable for any proposed excavation and site preparation and drainage improvements have been designed to prevent soil erosion, and sedimentation of streams through undue surface runoff.

***Archeological Sensitive Area***

- L. The site design and development incorporate adequate measures to ensure that archeological resources will be acceptably and adequately protected because the project design routes trails and structures away from sensitive areas.
- M. The site design and development cannot be feasibly changed to avoid intrusion into or disturbance of archaeological resources. Construction will use appropriate methods to protect the integrity of the site. Such methods include a monitoring plan for all construction activities

## **EXHIBIT B - CONDITIONS OF APPROVAL**

### **Approved Development**

1. This approval authorizes implementation of public access improvements at East Sweet Springs and connecting the site (with trails) to the Central Sweet Springs Nature Preserve. The project includes an accessible trail and boardwalk system including interpretive elements guiding visitors to a prominent lookout point along the shoreline of the estuary (as shown on the approved site plan).

### **Conditions required to be completed at the time of a Notice to Proceed**

#### ***Site Development***

2. At the time of application for a **Notice to Proceed**, plans submitted shall show all development consistent with the approved site plan and elevations.
3. **At the time of application for a Notice to Proceed**, the applicant shall provide details on any proposed exterior lighting, if applicable. The details shall include the height, location, and intensity of all exterior lighting. All lighting fixtures shall be shielded so that neither the lamp nor the related reflector interior surface is visible from adjacent properties. Light hoods shall be dark colored.

#### ***Fire Safety***

4. **At the time of application a Notice to Proceed**, all plans submitted to the Department of Planning and Building shall meet the fire and life safety requirements of the California Fire Code.

#### ***Drainage & Flood Hazard***

5. The applicant shall submit evidence to the Department of Public Works that all structures comply with County flood hazard construction standards, Sections 23.07.060-066.

### **Conditions to be completed prior to issuance of a Notice to Proceed**

#### ***Archaeology***

6. **CR-1:** The Applicant shall submit a monitoring plan, prepared by a County-approved archaeologist, for review and approval by the County Department of Planning and Building. The intent of this Plan is to monitor all earth-disturbing activities in areas identified as potentially sensitive for cultural resources, per the approved monitoring plan. The monitoring plan shall include at a minimum:
  - a. List of personnel involved in the monitoring activities;
  - b. Description of how the monitoring shall occur;
  - c. Description of frequency of monitoring (e.g., full-time, part time, spot checking);
  - d. Description of what resources are expected to be encountered;
  - e. Description of circumstances that would result in the halting of work at the project site (e.g., What is considered "significant" archaeological resources?);
  - f. Description of procedures for halting work on the site and notification procedures; and
  - g. Description of monitoring reporting procedures.

**Conditions to be completed during project construction**

*Biological Resources*

7. **BR-1: All ground disturbance activities** will be restricted to the dry season (June 1 through October 31) when Morro shoulderband snails (MSS) are typically inactive and less likely to move into the construction area.
8. **BR-2: Preconstruction surveys** for Morro shoulderband snail shall be conducted **prior to any ground disturbance** in those areas to be affected by grading and other construction-related activities
9. **BR-3: Prior to site disturbance**, exclusion fencing shall be installed under the direction of a qualified biologist or a US Fish and Wildlife Service authorized Morro shoulderband snail monitor to ensure that areas occupied or potentially occupied by Morro shouldband snail are not impacted. The fence will remain in place throughout the duration of the project
10. **BR-4:** A qualified biologist or a US Fish and Wildlife Service authorized Morro shoulderband snail monitor shall monitor construction activities to ensure that Morro shoulderband snail have not moved into the construction site during mist conditions such as heavy dew, fog, rain., In the event such conditions occur, the biologist shall conduct another pre-activity survey prior to resumption of work. The service will be contacted immediately if Morro shoulderband snails are located in the construction areas during such surveys. Construction shall not be resumed until all Morro shoulderband snail issues have been resolved.
11. **BR-5: Prior to site disturbance**, an environmental awareness training shall be conducted for all construction workers at the site. The Environmental Awareness training shall be conducted by a qualified biologist or a US Fish and Wildlife Services authorized Morro shoulderband snail monitor.

*Archaeology*

12. **CR-2:** During all ground disturbing activities, the applicant shall retain a qualified archaeologist (approved by the Environmental Coordinator) to monitor all earth disturbing activities, per the approved monitoring plan. If any significant archaeological resources or human remains are found during, work shall stop within the immediate vicinity (precise area to be determined by the archaeologist in the field) of the resource until such time as the resource can be evaluated by an archaeologist and any other appropriate individuals. The applicant shall implement the mitigation as required by the environmental coordinator.
13. **CR-4: Prior to ground disturbance activities**, all labor crews shall be trained on the identification of archaeological remains and instructed in the proper steps to take in the event archaeological remains are exposed. The training shall be conducted by a qualified archaeologist.

**Conditions to be completed prior to establishment of the use**

14. **Prior to establishment of the use**, whichever occurs first, the applicant shall obtain final inspection and approval from CDF of all required fire/life safety measures.

15. **Prior to establishment of the use**, the applicant shall contact the Department of Planning and Building to have the site inspected for compliance with the conditions of this approval.

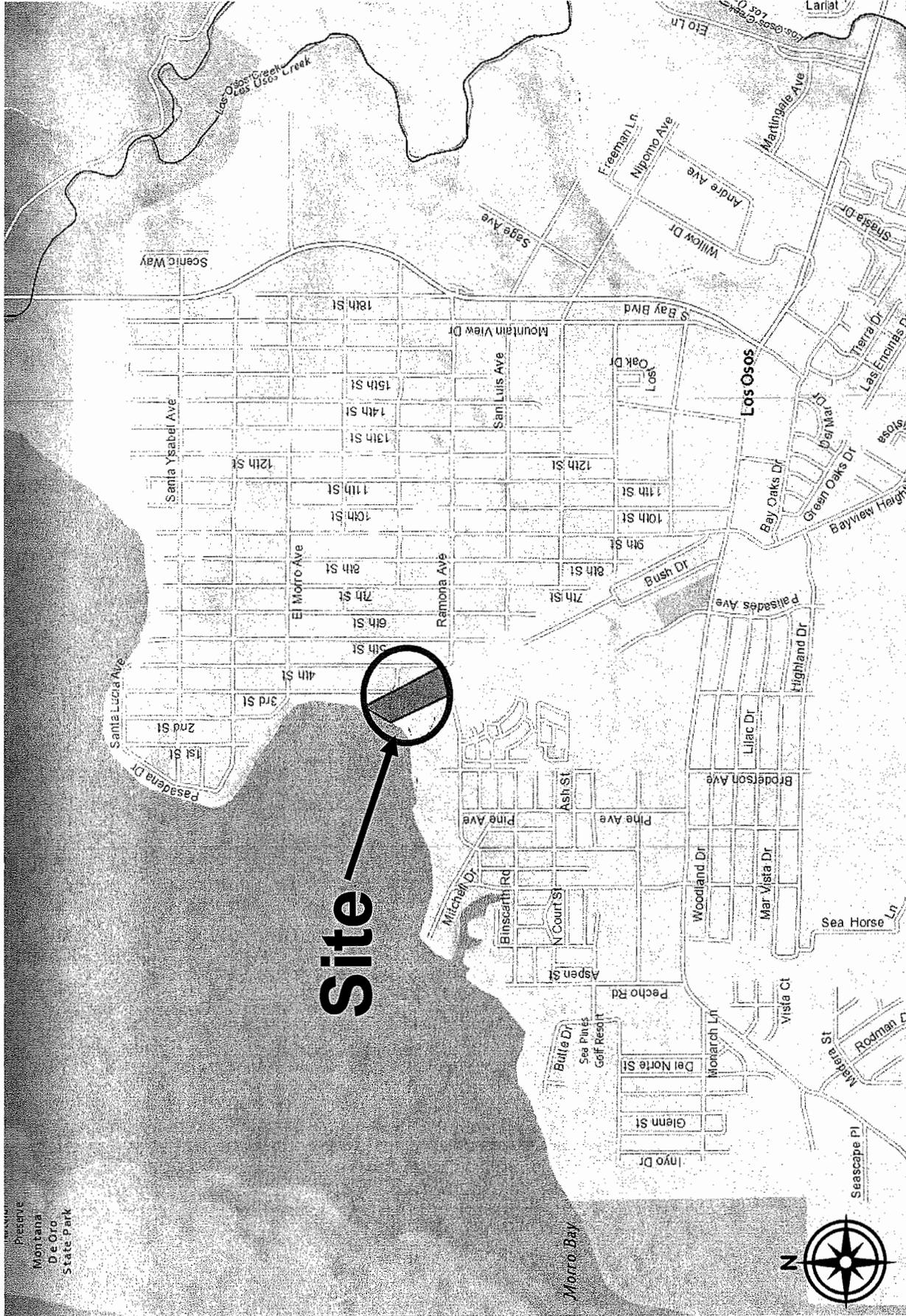
***Archaeology Monitoring – Completion Report***

16. **CR-3: Upon completion of all monitoring/mitigation activities, and prior to establishment of the use**, the consulting archaeologist shall submit a report to the Environmental Coordinator summarizing all monitoring/mitigation activities and confirming that all recommended mitigation measures have been met. If the Phase III program is not complete by the time of final inspection or occupancy will occur, the applicant shall provide to the Environmental Coordinator, proof of obligation to complete the required analysis.

**On-going conditions of approval (valid for the life of the project)**

17. This land use permit is valid for a period of 24 months from its effective date unless time extensions are granted pursuant to Land Use Ordinance Section 23.02.050 or the land use permit is considered vested. This land use permit is considered to be vested once a construction permit has been issued and substantial site work has been completed. Substantial site work is defined by Land Use Ordinance Section 23.02.042 as site work progressed beyond grading and completion of structural foundations; and construction is occurring above grade.
18. All conditions of this approval shall be strictly adhered to, within the time frames specified, and in an on-going manner for the life of the project. Failure to comply with these conditions of approval may result in an immediate enforcement action by the Department of Planning and Building. If it is determined that violation(s) of these conditions of approval have occurred, or are occurring, this approval may be revoked pursuant to Section 23.10.160 of the Land Use Ordinance.

Presente  
Montana  
De Oro  
State Park



Site

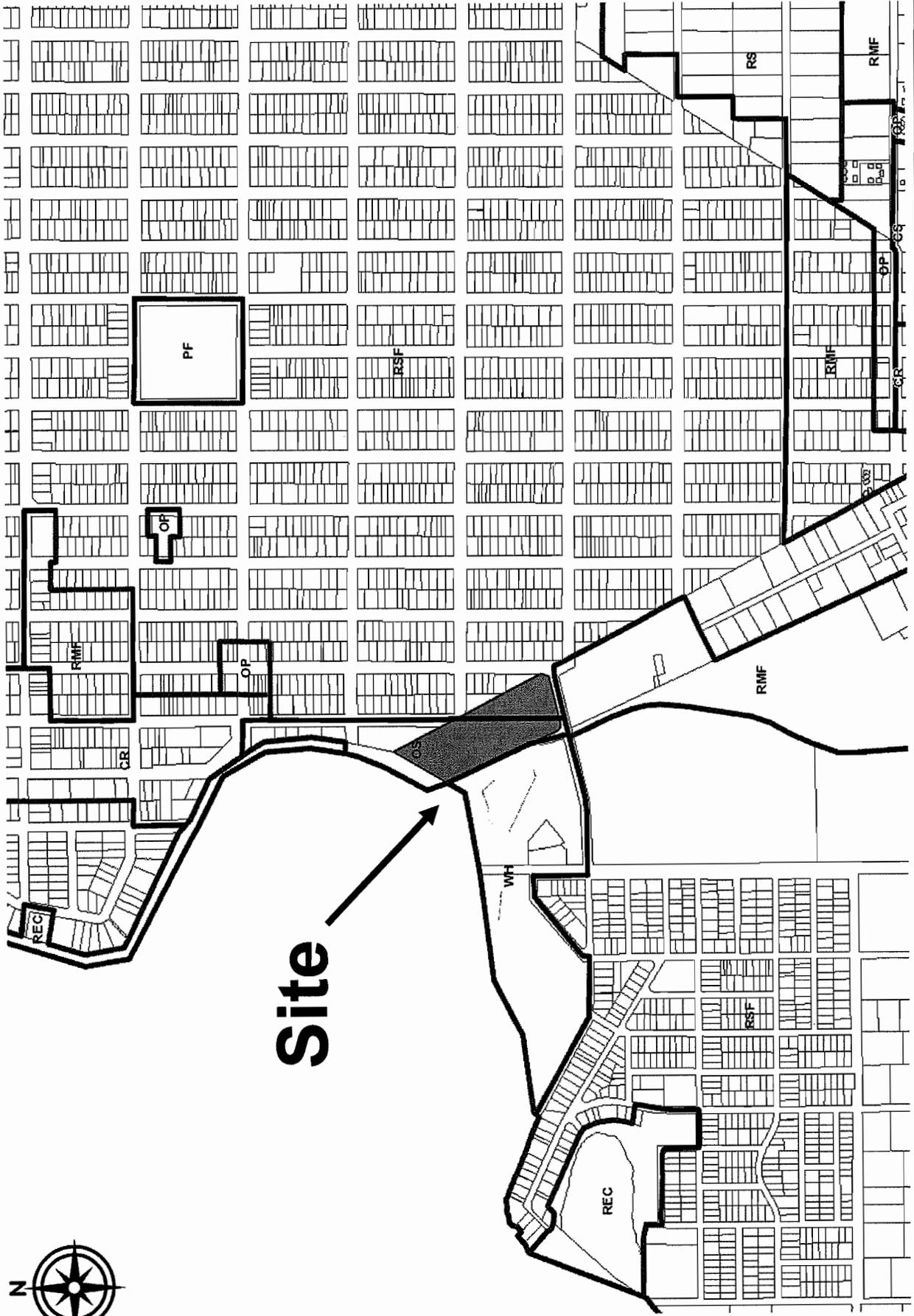
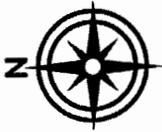
PROJECT

Minor Use Permit  
MCAS DRC2011-00013



EXHIBIT

Vicinity Map





PROJECT

Minor Use Permit  
MCAS DRC2011-00013

EXHIBIT

Aerial Photograph



MINOR USE PERMIT  
for  
Morro coast audubon society  
EAST SWEET SPRINGS PUBLIC ACCESS & HABITAT ENHANCEMENT

project data

**Project Description**  
The Morro Coast Audubon Society is a non-profit organization dedicated to the conservation of all life forms in the County of San Luis Obispo. The project is located on the Morro Coast, approximately 10 miles north of San Luis Obispo. The project area is approximately 100 acres and is currently undeveloped. The project consists of the following:  
1. Construction of a public access trail from Highway 101 to the project area.  
2. Construction of a public access trail from the project area to the Morro Coast.  
3. Construction of a public access trail from the project area to the Morro Coast.  
4. Construction of a public access trail from the project area to the Morro Coast.  
5. Construction of a public access trail from the project area to the Morro Coast.

**Location**  
The project is located on the Morro Coast, approximately 10 miles north of San Luis Obispo. The project area is approximately 100 acres and is currently undeveloped.

**Project Objectives**  
The project objectives are to provide public access to the Morro Coast, to enhance the habitat of the Morro Coast, and to provide a public access trail from Highway 101 to the project area.

**Project Justification**  
The project is justified because it provides public access to the Morro Coast, enhances the habitat of the Morro Coast, and provides a public access trail from Highway 101 to the project area.

**Project Impact**  
The project impact is minimal because the project area is currently undeveloped and the project consists of the construction of public access trails.

**Project Mitigation**  
The project mitigation is minimal because the project area is currently undeveloped and the project consists of the construction of public access trails.

**Project Conclusion**  
The project is a beneficial project that provides public access to the Morro Coast, enhances the habitat of the Morro Coast, and provides a public access trail from Highway 101 to the project area.

sheet index

NO.	TITLE
001	TELETYPE MESSAGE TO SAN LUIS OBISPO COUNTY DEPARTMENT OF BUILDING AND PLANNING
002	PROJECT DESCRIPTION
003	PROJECT LOCATION MAP
004	PROJECT JUSTIFICATION
005	PROJECT IMPACT
006	PROJECT MITIGATION
007	PROJECT CONCLUSION

project directory

**PROJECT DIRECTOR**  
Name: [Name]  
Address: [Address]  
City: [City]  
State: [State]  
Zip: [Zip]

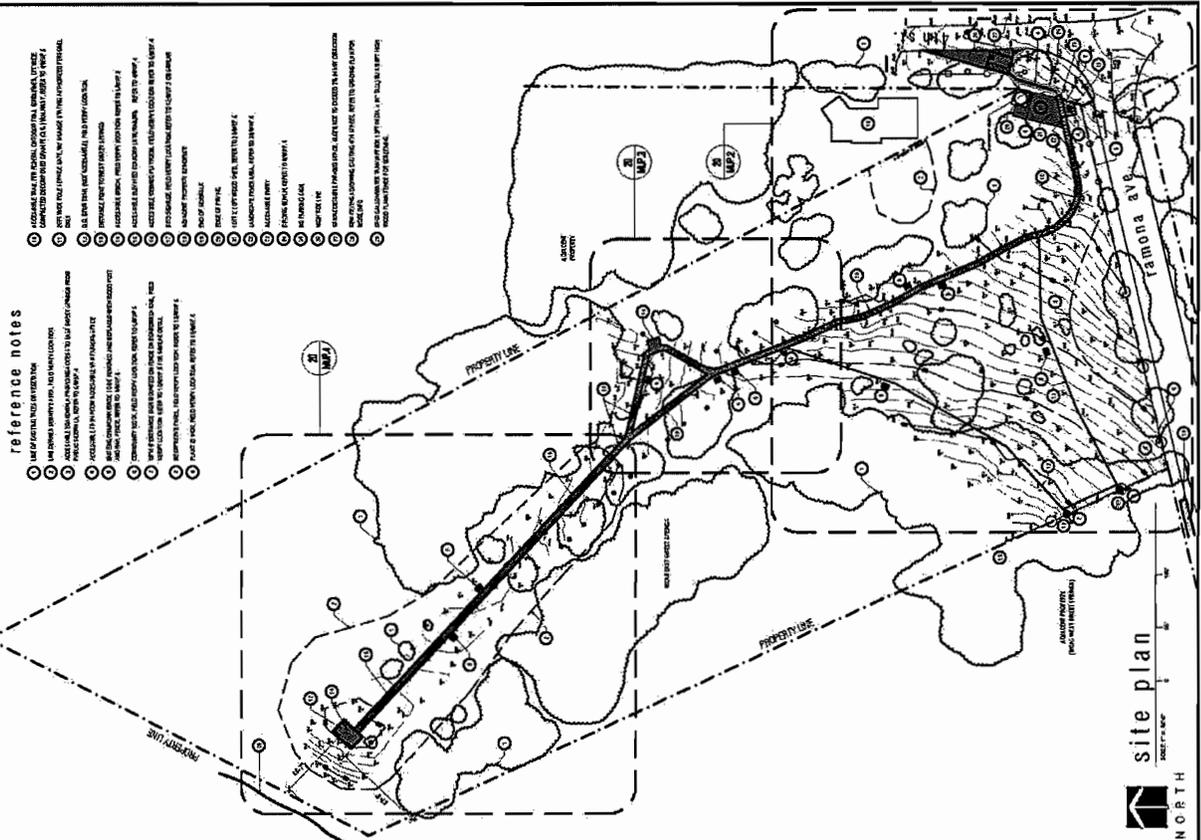
**PROJECT JUSTIFICATION**  
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Zip: [Zip]

**PROJECT IMPACT**  
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**PROJECT MITIGATION**  
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**PROJECT CONCLUSION**  
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vicinity map

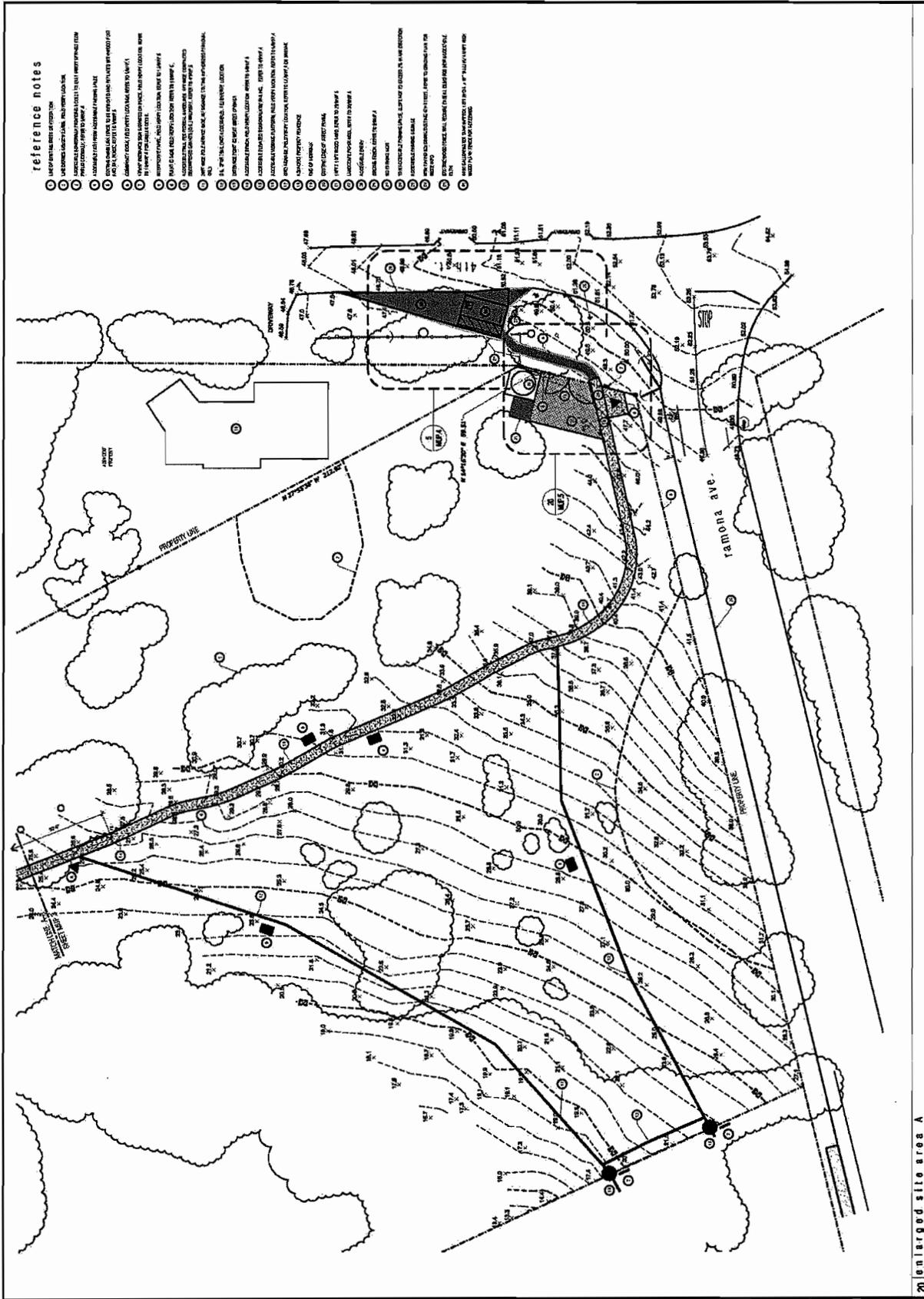


EXHIBIT

Site Plan



PROJECT  
Minor Use Permit  
MCAS DRC2011-00013



20 Enlarged site area A

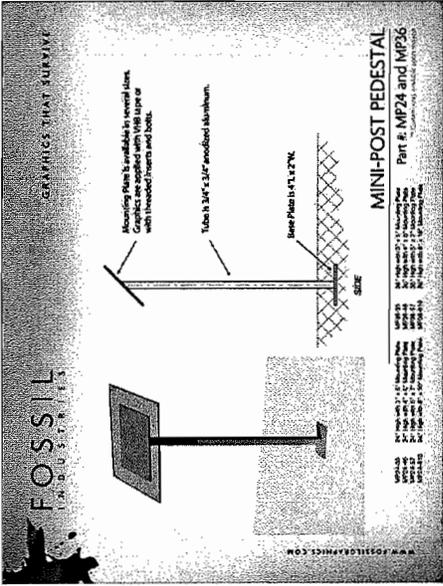
reference notes

- 1. ALL DISTANCES ARE IN FEET AND DECIMALS THEREOF.
- 2. ALL DISTANCES ARE TO BE MEASURED ALONG THE CENTERLINE OF THE ROAD OR RAILROAD UNLESS OTHERWISE SPECIFIED.
- 3. ALL DISTANCES ARE TO BE MEASURED ALONG THE CENTERLINE OF THE ROAD OR RAILROAD UNLESS OTHERWISE SPECIFIED.
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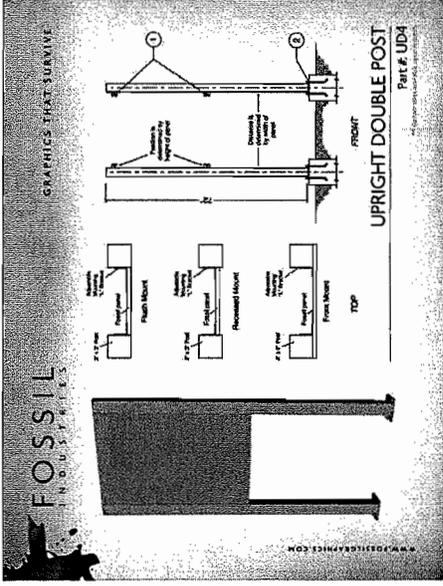
PROJECT  
Minor Use Permit  
MCAS DRC2011-00013



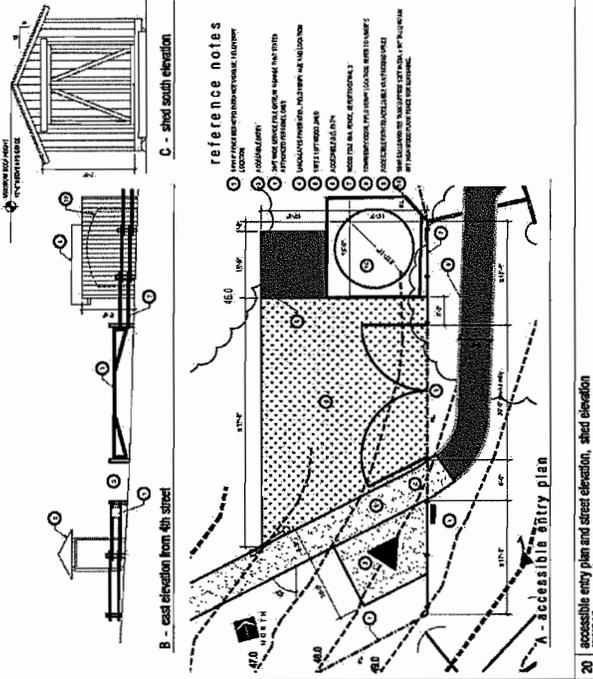
EXHIBIT  
Enlarged Site Plan



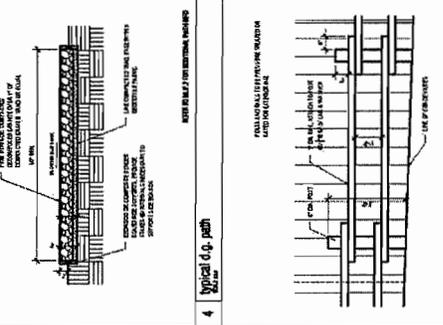
16 plant /A signage



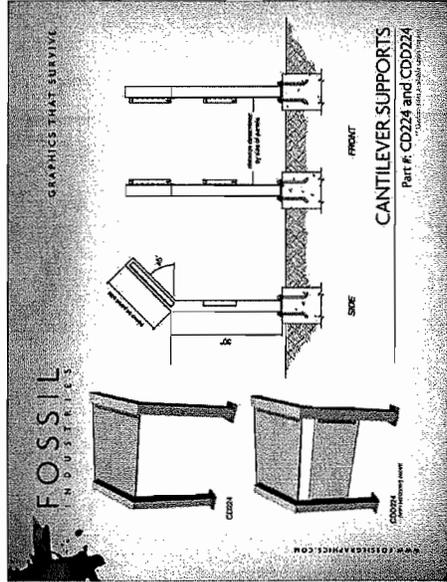
10 entry signage



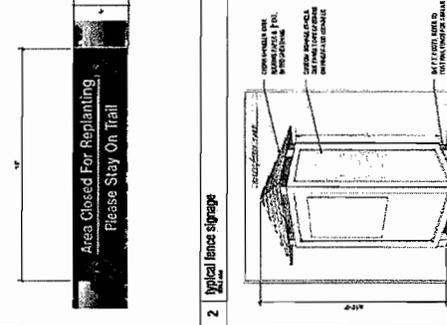
20 accessible entry plan and street elevation, shed elevation



3 typical post rail fence



12 interpretive signage



1 community kiosk

**PROJECT**  
 Minor Use Permit  
 MCAS DRC2011-00013

**EXHIBIT**  
 Elevations & Signage





# SAN LUIS OBISPO COUNTY DEPARTMENT OF PUBLIC WORKS

Paavo Ogren, Director

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County Government Center, Room 207 • San Luis Obispo CA 93408 • (805) 781-5252  
Fax (805) 781-1229 email address: [pwd@co.slo.ca.us](mailto:pwd@co.slo.ca.us)

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## MEMORANDUM

Date: September 14, 2011

To: Kerry Brown, Coastal Team Planner

From: Tim Tomlinson, Development Services

Subject: Public Works New Project Referral for DRC2011-00013-Morro Coast Audubon for access improvements and vegetation restoration. Ramona Avenue in Los Osos, APN 074-229-009

Thank you for the opportunity to provide information on the proposed subject project. It has been reviewed by several divisions of Public Works, and this represents our consolidated response.

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**PUBLIC WORKS REQUESTS THAT AN INFORMATION HOLD BE PLACED ON THIS PROJECT UNTIL THE APPLICANT PROVIDES THE FOLLOWING DOCUMENTS FOR PUBLIC WORKS REVIEW AND COMMENT:**

1. Provide a Loading Zone and ADA parking plan for Public Works review.
2. Remove the "No Parking" sign from the plans and contact Ryan Chapman in our Traffic Division (781-1406) to discuss the ordinance requirements and Board of Supervisors Approval required for a "No Parking" sign.



August 9, 2012

Ms. Kerry Brown  
San Luis Obispo County Planning & Building  
1055 Monterey Street  
San Luis Obispo, CA 93408

Subject: Amendment to Permit Application MUP DRC2011-00013

Dear Ms. Brown,

After much discussion amongst ourselves and with Tim Duff of the California Coastal Conservancy, we have decided that it is in the best interest of our respective organizations and the general public to try to move forward with the components of our project that are relatively straightforward and not controversial. We would therefore like to amend our application to only request approval for access improvements on the property at this time, including trails, boardwalks, fencing, signage, a storage shed and viewing platform. We request that all sections pertaining to tree removal be deleted from the project description.

Morro Coast Audubon Society remains committed to implementing the most environmentally responsible project possible. We will continue studying the potential impacts of removing eucalyptus trees from the preserve.

Sincerely,

Holly Sletteland  
Preserve Manager  
Morro Coast Audubon Society

**SAVE THE PARK**  
405 Acacia Street  
Morro Bay, CA 93442

January 23, 2013

Environmental Division  
Department of Planning and Building  
County Government Center  
San Luis Obispo, CA 93408

**Subject: Proposed Negative Declaration Morro Bay Audubon Society;  
MUP; Tree Permit DRC2011-00013**

The Morro Coast Audubon Society's proposal to implement public access improvements is appropriate and our organization, Save the Park, is supportive of the addition of trails, boardwalk and interpretive areas. However, we are quite concerned with the adverse impacts of implementing a single species protection plan. The Morro Shoulderband Snail Recovery Action Plan is extensively referenced in the Biological Resources analysis for the Negative Declaration (pages 11 and 12). The text of the Project's Environmental Checklist states; "The [MSS Recovery] Plan provides guidance on removal of non-native invasive plant species".

Shoulderband snails deserve protection but not to the detriment of other important species. The County Code is clear on the question of limiting habitat planning to the needs of a single species. Section 23.07.170 of the County Code states that, "Emphasis for protection is the entire ecological community rather than only the identified [rare or endangered] plant or animal".

There are a variety of other important species found at the project site. The Checklist acknowledges this; "The site supports suitable habitat for nesting migratory bird species and tree roosting bat species". Additionally, the analysis identifies a variety of bird species in the area as well as roosting trees for Monarch Butterflies. The MSS Action Plan, however, does not consider the importance of protecting these other species.

Moreover, in addition to the site's natural resources, the Sweet Springs Reserve is a community resource because of its singular beauty. The ponds at Sweet Springs mirror the towering trees lining the waterways. These features, in turn, frame sweeping views across Morro Bay. While the setting is congenial to strollers and artists, neither the ponds nor the trees are native to the site. The cypress, the eucalyptus, and the ponds themselves are all modern era additions. This poses a dilemma for resource managers since restoration orthodoxy stresses the return of landscapes to conditions that pre-date European settlement. The MSS Action Plan reflects this objective, calling for eradication of non-native species and their replacement with natives.

It is ironic that the MSS Action Plan calls for the removal of the not-quite-natural resources that inspired the creation of the preserve. In 1988, when the local Audubon chapter assumed a management role at Sweet Springs, the first order of business was commissioning a "Marsh Resource Enhancement and Access Management Plan". The 1988 plan included assessments of the site's geology, hydrology, vegetation, wildlife, and cultural resources. The plan described the condition of the site's multiple habitat areas and included recommendations for protection, restoration, enhancement and provision of appropriate public access. The plan included recommendations for phasing project development, for coordinating contracts, and proposed a continuing program of maintenance and monitoring. Importantly, the Management Plan acknowledged the significance of the Sweet Springs area as an aesthetic resource to the community.

It would be reasonable to expect that, when lands are added to the original preserve, that they would receive similar comprehensive treatment. However, this hasn't happened for Sweet Springs "East". The MSS Recovery Plan lacks the scope of a comprehensive resource assessment and enhancement plan. There has been an attempt to repair the plan's shortcomings by adding additional species-specific studies such as a study of Monarch Butterflies but these are piecemeal additions that don't address the fundamental community concerns for protecting all the site's natural and aesthetic resources.

The absence of any plan for comprehensive management of resources at Sweet Springs East along with unqualified endorsement of the goals of the MSS Action Plan, sets the stage for destruction of habitat important to other species and transformation of the visual landscape.

Without County conditions protecting the site's natural and visual resources, the only governing regulation is the County's tree protection ordinance. This was not designed as a guide to habitat protection. In the ordinance, protected trees are determined by girth of their trunks. However, the understory of a wooded area is important to wildlife and the natural replacement of older trees with new growth is essential to maintaining habitat.

Attempts to tidy up Nature by removing understory can degrade habitat. I did an analysis of the data on use of area wintering sites for Monarch Butterflies<sup>1</sup>. The study showed that the recent removal of eucalyptus trees and understory in the Morro Bay State Park was accompanied by a precipitous decline in wintering butterfly populations.

It is important for plan approvals to acknowledge that the protection of on-site, biological resources includes the retention and protection of areas not directly affected by the construction of trails and the boardwalk. The permit conditions should specify that areas that are not affected by construction should be retained in their existing natural condition. There should be two exceptions. One exception would be situations where trees or fallen branches pose a risk to trail users. The second exception would be to allow the removal of Velt Grass, a species that has less habitat value than native plants.

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<sup>1</sup> The statistical data on the loss of butterfly population in the park is attached as an attachment.

Tree and understory removal might be appropriate in the future, but any such actions should be in accord with a comprehensive management plan that balances the needs of all important species.

It is also essential that any such plan be subject to public review and approval. While the Audubon Chapter is a private entity, the funding for the purchase of Sweet Springs purchase and its enhancement are based on federal and state grants. At the time the reserve was created, the State Parks Department was the first choice as a management agency. When the state declined, the local Audubon chapter took on the stewardship task. One administrative mechanism that affords public oversight is, that as a private entity, the Audubon chapter requires land use approvals to implement plans. In this case, it is entirely appropriate for the County to look at the "whole of the action" and condition approvals on two requirements. First, the Audubon chapter is required to not alter habitat areas that are within the reserve, but outside of the areas where trails and walkways are to be constructed. The exceptions to this would be public safety concerns and removal of velt grass and restoration with native plants. Second, prior to any additional permit requests, the Audubon Chapter agrees to complete an update of the comprehensive 1988 Sweet Springs Management Plan to include Sweet Springs East. The updated plan should consider the degree to which the objectives of the original 1988 plan have been achieved and map out strategies for future management.

In summary:

1. Environmental approvals should promote comprehensive, multi-species resource protection. They should also reference the value of the site as an aesthetic resource to the Los Osos community.
2. The Audubon group should be restrained from removal of understory or trees that do not have the maturity and size that would require a use permit. The mitigations should directly state that there may not be removals of vegetation outside of the construction area.
3. The Audubon Chapter should be required to prepare an update of the Sweet Springs Management Plan before any additional site development proposals are presented for County approval. The process for the preparation of the updated Management Plan should be open to public review and the County should formally consider and adopt its proposals.

Sincerely,



David T. Dubbink, Ph.D., AICP  
Vice President, SAVE THE PARK

## Attachment

### Tree Removal and Butterflies

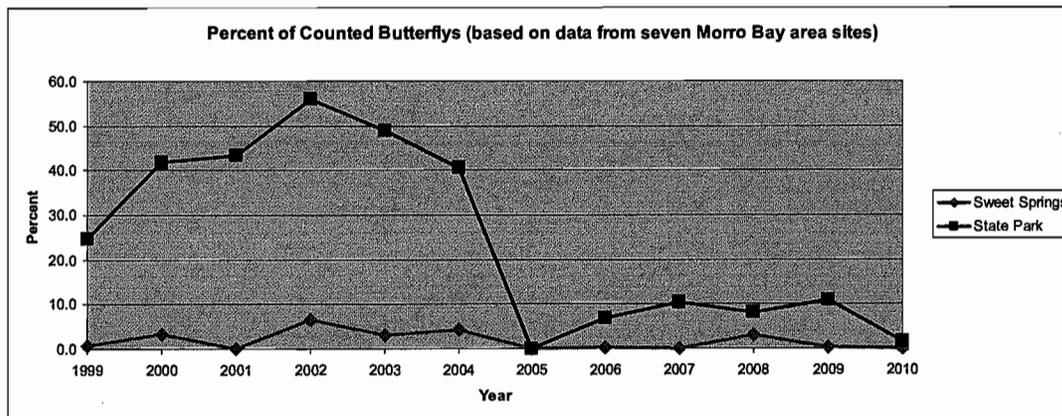
Prepared by David Dubbink May 10, 2012

The annual Thanksgiving Day butterfly counts by the Xerces Society are referenced in Francis Villablanca's report on Sweet Springs. The same data can be used to document the effects of tree removal on monarch winter roosting habitat.

The Morro State Park Campground has long been recognized as one of the areas most significant overwintering sites for monarch butterflies. The campground, constructed in the 1930s by the Civilian Conservation Corps, was laid out between windrows of eucalyptus trees that had been planted decades earlier. By 2004, when the park underwent "rehabilitation" the original trees had grown into giants and tree growth had spread over the relatively undeveloped corner of the part designated for tent camping. This was the monarch's overwintering area.

Plans for rehabilitation included the removal of 74 "invasive, non-native" trees. Sections of the double windrow of mature eucalyptus sheltering the site from northwest winds were removed to accommodate a new entrance road. Trees in the tent camping area were thinned to provide paved parking pads for recreational vehicles.

Tree removal began in the spring of 2004. The figure below shows the changes in butterfly presence between the years 1999 and 2010. The reference value is the share of the total butterflies counted at seven Morro Bay area sites, present at the campground. Use of the percentage value removes the effect of yearly fluctuations in the butterfly population. Prior to the removal of the trees, the campground eucalyptus had been host to a third to a half of the monarchs overwintering in the region. After the "rehabilitation" the numbers drop to less than 10%.



The project EIR acknowledged that tree removal could affect the monarch population but the impact was said to be less than significant<sup>2</sup>. It was argued that it is, "unlikely roosts would be abandon given that butterflies have been tolerating frequent disturbance by park visitors." The proposed mitigations were to "avoid removing trees near roost sites when butterflies are present."

<sup>2</sup> DEIR Morro Bay State Park Campground Rehabilitation and Day Use Area Project, Pages 4.7-12 – 4.7-13, California Department of Parks and Recreation, 2001

and that, "native trees should be planted to provide alternate monarch overwintering habitat". Anyway, habitat protection wasn't essential since; "other nearby wintering sites are available."

The table also shows the same data for Sweet Springs. The numbers are not as dramatic as they are for the campground but, the best years for butterflies were before 2005.



**comment for the March 1 meeting: Sweet Springs Nature Preserve is a Sanctuary!**

Marie Smith to: Kerry Brown

02/07/2013 04:49 PM

From: Marie Smith <mailmarie@charter.net>  
To: Kerry Brown <KBrown@co.slo.ca.us>

Hi Kerry,

Could you please include this email in the comments for the March 1, 2013 hearing.

At the beginning of this project it was stated that there was a high likelihood that an EIR was going to be required. Here is the statement in the DRC2011-00013 application on page 2 of the Parcel Summary Report for Parcel #074-229-009:

-----  
2. PLEASE PROVIDE WATER AND SEWER WILL-SERVE LETTERS. A WILL-SERVE IS NEEDED, WE CANNOT PROCEED WITHOUT A V

NOTE: OUR PRELIMINARY ASSESSMENT INDICATES THAT THERE ARE POTENTIALLY SIGNIFICANT IMPACTS ASSOCIATED WITH TH  
SUBDIVISION INCLUDING BUT NOT LIMITED TO CULTURAL RESOURCES, ENDANGERED SPECIES, WETLANDS, DRAINAGE, AND TR  
IS A HIGH LIKELIHOOD THAT WE WILL BE REQUIRING AN ENVIRONMENTAL IMPACT REPORT FOR THIS APPLICATION.

-----  
yet, now in the announcement about the hearing (the underlines are mine) there is the statement:

-----  
The Environmental Coordinator, after completion of the initial study, finds that there is no substantial evidence that the project may have a significant effect on the environment, and the preparation of an Environmental Impact Report is not necessary. Therefore, a Negative Declaration (pursuant to Public Resources Code Section 21000 et seq., and CA Code of Regulations Section 15000 et seq.) has been issued on December 27, 2012 for this project.

-----  
my comment about this: Relying on an initial study does not sound like it was done "in depth". I am concerned that does not reflect the significance of this property. Sweet Springs Nature Preserve East is part of an oasis, an established sanctuary located on the Pacific Flyway, adjacent to a National Estuary and in the middle of a busy community.

At this point in time protection of this established ecosystem is even more critical because of the unknown side effects on nature due to sudden major changes related to the LO sewer. Examples of the ongoing changes which force nature to move from one area to another in the flight/fight for survival are: daily air, noise and physical disturbances during the major construction activities, changes in landscapes including the removal of trees and bushes as we install our laterals and sewer facilities (i.e.: the major changes in the Broderson recharge area) and the changes in ground water levels. Ground water changes: previously the town was "watered" evenly from the leach fields of the septic systems. We are going to "shut off" that water and relocate it (after treatment) to a few locations. Because of the complex geological clay lens layers under Los Osos, we do not

know for sure how the water will flow. The impact of this action on the plants, trees, the Estuary Fringe and associated life-forms is unknown.

Even now, it is my understanding that an investigation is underway to figure out how to truly protect the birds, butterflies, insects, mammals, and other wildlife that presently are dependent on Sweet Springs. Each section of Sweet Springs is important and it is all inter-connected. I believe, to say "go ahead", before decisions are made about how to best protect Sweet Springs and the wildlife that lives there year-round or the birds, butterflies and insects that visit and depend on it during part of the year for sanctuary, e.g. survival, would be a mistake.

Even though the removal of the eucalyptus trees are no longer in the present application, the area under them and the trees themselves are part of the total picture. The 1,092 signatures against their removal reflect the awareness of many people that this area should not be treated in a piecemeal fashion: this is a truly amazing established ecosystem!

Please, everyone, respect and protect this special Sanctuary!

Marie Smith

Los Osos



**"Environmental Determination vs. the application and reality" & 3 other comments**

Marie Smith to: Kerry Brown

02/08/2013 06:14 PM

From: Marie Smith <mailmarie@charter.net>

To: Kerry Brown <KBrown@co.slo.ca.us>

Dear Kerry,

Please also include these "4" subjects for the March 1 meeting.

- references are throughout the email, identified by >
  - a picture of Sweet Springs Nature Preserve East as seen from Ramona Ave. is also included
  - 1. the Initial Study Summary - Environmental Checklist Aesthetics pg. 4 does not reflect the visual impacts mentioned in the general application or the reality of what exists today.
    - = (1) kiosk, (2) entrance panels 36" x 24", (4) interpretive panels 24"x24", (1)10'x10' storage shed, and (1) water tank are not mentioned on pg. 4.
- Heights have also not been specified.

The size, location and appearance of these objects is important for the ambience of Sweet Springs Nature Preserve.

- = The viewing platform description used in the initial study checklist of 384 sq. feet does not give the same visual feeling as the 24 x 16 feet used in the project description.

Using 24 feet x 16 feet not only helps us appreciate the visual impact, but also the consequences for nature and people in Los Osos as we can get a better indication of the number of people expected to show up at one time. (As we know Sweet Springs is already a popular destination for visitors to Los Osos.)

- = An additional observation which needs to be addressed: Sudden approaches to overlooks or "arm waving while talking" can scare wildlife and birds away.
- = Man-made objects will change the present day views: from the streets, from across the bay and from Sweet Springs Nature Preserve Central.
- = the following viewpoint does not show an appreciation of the value of the total visual picture and acts like the proposed changes are not a big deal:
  - > from the Initial Study Summary - Environmental Checklist:

The portions of project will be visible from Ramona Avenue, a collector. Trees obscure views to the bay (from Ramona Avenue). The project is a trail system which will be compatible with the surrounding area and uses. The project will not silhouette against any ridgelines as viewed from public roadways. The public access improvement are minor in nature and will not impact the aesthetics of the area. The project will provide visitors with additional opportunities to enjoy the shoreline and surrounding beauty of the area.

- 
- = contrast this with another viewpoint:

Another viewpoint is that the bay and sky, seen through the trees, form a

background for and are part of the ever changing natural scenery composed of trees, plants, animals, birds, and insects affected by the time of day, weather, season, and life cycles. Having man-made objects within this picture will forever transform it from natural into developed.



Picture of Sweet Springs Nature Preserve East as seen from Ramona Ave.

= OVERALL COMMENTS/SUGGESTION EXAMPLE: In a Nature Preserve the focus should be on nature, not on man-made objects. for example: Since Sweet Springs is one nature preserve, do we really need 2 entrance panels and a Kiosk for the East portion? In the application, I also noticed that the Kiosk is planned for the middle of the property. Is it possible to have the Kiosk information located at one of the entrance panels? Please check the size, height and location of all signage, buildings and other structures and make any adjustments that will help minimize the visual impact.

When we are deciding what to do, please let's try for a "natural, wilderness" look for the East Side. Right now the experience of walking down the corridor to the bay, without man-made objects is amazing! Many people cannot hike in nature. I understand that to accommodate people, much change happens, but let us remember that this is the opportunity to also keep a place where people can truly be inspired by nature.

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REFERENCES FOR COMMENT #1

> For Reference: this is page 4 of the initial study summary - environmental checklist dealing with the aesthetics description/evaluation



**COUNTY OF SAN LUIS OBISPO  
INITIAL STUDY CHECKLIST**

<b>1. AESTHETICS</b> <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Create an aesthetically incompatible site open to public view?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Introduce a use within a scenic view open to public view?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Change the visual character of an area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Create glare or night lighting, which may affect surrounding areas?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Impact unique geological or physical features?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting.** The project site is located within the community of Los Osos at the westerly end of the Los Osos Valley. The community is located on and surrounded by older coastal dunes, Morro Bay and its tidelands to the north, as well as the Irish Hills and Montana de Oro to the south and southwest. The project site currently is vegetated with a stand of Eucalyptus trees, Monterey Cypress trees, non-native grasslands, freshwater marsh and saltwater marsh. The project site will be visible from Ramona Avenue. The project site is located adjacent to a residentially zoned area with scattered small lot residential development on the east and Sweet Springs to the west.

The project consists of new public access improvements, including an accessible trail and boardwalk system. A portion of the boardwalk will be higher than 30 inches and will require a railing for safety. The boardwalk will end at a viewing platform approximately 90 feet from the shoreline. The platform will match the platform at the existing Central Sweet Springs Preserve and be 384 square feet in size. The platform will have built in benches and a railing.

The portions of project will be visible from Ramona Avenue, a collector. Trees obscure views to the bay (from Ramona Avenue). The project is a trail system which will be compatible with the surrounding area and uses. The project will not silhouette against any ridgelines as viewed from public roadways. The public access improvement are minor in nature and will not impact the aesthetics of the area. The project will provide visitors with additional opportunities to enjoy the shoreline and surrounding beauty of the area.

**Impact.** The project is considered compatible with the surrounding uses and will blend with the surrounding environment.

**Mitigation/Conclusion.** No mitigation measures are necessary.

> For Reference: The following is from the General Application form p 10 of 16

## **Special Project Information**

1. Describe any amenities included in the project, such as park areas, open spaces, common recreation facilities, etc. (these also need to be shown on your site plan): ADA compliant trail, boardwalk, overlook, interpretive panels, community kiosk, benches.

> For Reference: The following is from the Project Description p 12

Interpretive panels will be installed along the main line, spur, and boardwalks. The interpretive plan includes a community kiosk at the entrance to the preserve, two grantor/partners signs (one at the entrance to the preserve and one at the southeast pedestrian/service entrance), three interpretive panels will be located along the length of the main line and one will be mounted at the overlook. Additionally, the trail system will feature 8 to 16 plant identification signs. The community kiosk will be a roofed two-sided upright structure with information about the Preserve and current updates on the outside panels. The grantor/partners entrance panels will be 36 by 24 inches, installed on upright double pedestals. The interpretive panels will be 24 by 36 inches, mounted on double cantilevered pedestals at a 45 degree angle. The plant ID signs will be 6 by 10 inches, mounted on mini posts at a 45 degree angle. With the exception of the small plant ID signs, all pedestals will be anchored into concrete footings and will require excavation to a depth of 24"

> For Reference: The following is from the Project Description p 11

### ***Overlook/Viewing Platform***

The boardwalk will end at a viewing platform at a distance of approximately 90 feet from and 6 feet in elevation above the high tide shoreline. The platform will match the character of the existing platform at Central Sweet Springs. It will include built-in benches with a gap to facilitate wheelchair accessibility, elbow-rests for binocular use, and a railing. It will be 24 by 16 ft to accommodate multiple visitors and groups and will include interpretive panels. Please see the attached plan set for more information related to the design of the viewing platform.

2. I am concerned about the deer who live on the east side of Sweet Springs Nature Preserve. It would be nice to accommodate these deer so that people can continue to enjoy them.

= one of the deed restrictions that may help the deer is:

> "plant and wildlife habitat preservation" from pg. 2 of the Initial Study Summary - Environmental Checklist

= We have a few local residents who can help with information about the deer who live on the east side of Sweet Springs.

= Have USFWS and CDFG been consulted yet for the best way to protect the deer?

> the project description for USFWS on p 11 of 16

1. List all permits, licenses or government approvals that will be required for your project (federal, state and local): USFWS approval, County Building, Grading, and Encroachment Perm

> the project description for CDFG on 16 of 16

**California Department of Fish and Game**

**The California Department of Fish and Game may have jurisdiction over special status species that could be found onsite. CDFG will be consulted during the permitting process.**

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-----  
3. I have noticed the initial study says that the water will be delivered. Delivered water still impacts our basin. Has the water will-serve letter been obtained yet?

Maybe we can use some of the sewer recycled water?

> p 2 of 3 in the parcel summary in the original application:

2. PLEASE PROVIDE WATER AND SEWER WILL-SERVE LETTERS. A WILL-SERVE IS NEEDED, WE CANNOT PROCEED WITH

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-----  
4. Sweet Springs Nature Preserve East is an established eco-system, with many habitats, containing a wide variety of interwoven native & non-native plants. Many organisms are dependent on this area. I am concerned with any clearing before it is analyzed for the consequences of our actions.

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-----  
Thank you for considering the above comments,  
Marie Smith (31 yr. Los Osos resident)



**kiosk comment**

Marie Smith to: Kerry Brown

02/09/2013 09:06 AM

From: Marie Smith <mailmarie@charter.net>  
To: Kerry Brown <KBrown@co.slo.ca.us>

Dear Kerry,

In my last email titled "Environmental Determination vs. the application and reality" & 3 other comments" I made a comment, located under the picture in the email, about moving the Kiosk: that it was not good to be in the center of a special view. This comment was based on P9 (figure 2) of the East Sweet Springs Public Access and Habitat Enhancement Project Description dated August 2011 that came from the county. In the bottom right hand corner of this drawing it says: August 29, 2011, Prepared by the Land Conservancy. In this drawing the Kiosk is in the center.

I just came across an Audubon handout of the same drawing, with some differences even though in the bottom right hand corner of this drawing it also says: August 29, 2011, Prepared by the Land Conservancy. In this handout the kiosk is in a different location.

Where-ever the man-made structures are placed, my message is the same: let us please try not to interfere with the special views from the road!

Marie



**FW: wildlife in Sweet Springs**

John Haley to: Kbrown

02/04/2013 09:36 AM

From: "John Haley" <haleyje@charter.net>  
To: <Kbrown@co.slo.ca.us>

Hello Kerry Brown,

Marie Smith suggested that I forward this e-mail, which I sent to Betty Winholtz, to you. Thanks for reading it.

John Haley

From: John Haley [mailto:haleyje@charter.net]  
Sent: Saturday, February 02, 2013 11:53 AM  
To: 'winholtz@sbcglobal.net'  
Cc: 'Marie Smith'  
Subject: wildlife in Sweet Springs

Hello Betty, Marie told me that you are asking for information about observations of wildlife in Sweet Springs.

My wife Betty and I have observed wildlife there for a little more than 18 years. We live right next to the preserve, which is just a block away.

When Mrs. Jan Corr owned what is now the eastern section of Sweet Springs she used to let my wife Betty, who is an artist, use that section for the painting of scenes. So we have seen the wildlife up close in both sections of the preserve. We have watched Monarch butterflies in the Eucalyptus trees in both sections. We have seen owls in the Eucalyptus trees and our friend Erica actually took a picture of them. We have seen deer on many occasions in both sections and I know exactly where two mule deer are living in a thick grove of Eucalyptus trees in the eastern section year round. We have watched a family of red foxes living in the Eucalyptus trees in the eastern section. Over the years, the female fox gave birth to kits twice. We have observed many raccoons among the Eucalyptus trees and watched them fish where the Sweet Springs creek enters the bay. We have seen confrontations between raccoons and coyotes, including one encounter between a mother coyote, with her two cubs, and a raccoon over a fish that the raccoon had just caught. The raccoon won out in the confrontation and saved his fish. We have watched red-shouldered hawks tend their babies in nests in the Eucalyptus trees. We have watched great blue herons in the Eucalyptus trees in both sections of the preserve and in the pools of Sweet Springs, as well as great white herons. We have seen the Eucalyptus trees over the smaller pool in Sweet Springs fill up with as many as 15 black-crowned night herons at a time, according to our count. Recently we have been seeing squirrels using the Eucalyptus trees of both sections of Sweet Springs.

If you need any more detailed information about these sightings let me know. John Haley and Betty Field-Haley



**need to save the trees Sweet Springs**

John Haley to: KBrown

09/25/2012 08:30 AM

From: "John Haley" <haleyje@charter.net>  
To: <KBrown@co.slo.ca.us>

Dear Kerry Brown, my wife Betty Haley and I live right next the Sweet Springs Nature reserve in Los Osos. We constantly watch the wildlife that live there through binoculars and we have viewed deer who appear to be living permanently in a thick grove of Eucalyptus trees in the eastern part of the preserve. That is, in the section where the local Audubon Society wants to remove the Eucalyptus trees. Over a period of 18 years, we have also viewed Monarch butterflies in the Eucalyptus trees in that section, as well as raptors, such as red-shouldered hawks and owls. Last year, using binoculars, a Cal Poly biologist and I counted 75 Monarch butterflies in the Eucalyptus trees in the eastern section .

Marie Smith suggested that I send a letter to you about the wildlife that we have seen there. Those trees should be preserved as habitat for that wildlife.

Sincerely, John. E. Haley, Ph. D.



# NEGATIVE DECLARATION & NOTICE OF DETERMINATION

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING

976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

*Promoting the Wise Use of Land • Helping to Build Great Communities*

**ENVIRONMENTAL DETERMINATION NO. ED12-039**

**DATE:** December 27, 2012

**PROJECT/ENTITLEMENT:** Morro Coast Audubon Society; Minor Use Permit; Tree Permit; DRC2011-00013; 074-229-009

**APPLICANT NAME:** Morro Coast Audubon Society  
**ADDRESS:** P.O. Box 1507, Morro Bay, CA 93443  
**CONTACT PERSON:** Morro Coast Audubon Society

**Telephone:** 805-772-1991

**PROPOSED USES/INTENT:** Request by Morro Coast Audubon Society (MCAS) to implement public access improvements at East Sweet Springs and connect the site (with trails) to the Central Sweet Springs Nature Preserve. The project includes an accessible trail and boardwalk system including interpretive elements guiding visitors to a prominent lookout point along the shoreline of the estuary.

**LOCATION:** The project is located on the north side of Ramona Street between Broderson Avenue and 4th Street, in the community of Los Osos, in the Estero planning area.

**LEAD AGENCY:** County of San Luis Obispo  
Dept of Planning & Building  
976 Osos Street, Rm. 200  
San Luis Obispo, CA 93408-2040

**Website:** <http://www.sloplanning.org>

**OTHER POTENTIAL PERMITTING AGENCIES:** California Coastal Commission

**STATE CLEARINGHOUSE REVIEW:** YES  NO

**ADDITIONAL INFORMATION:** Additional information pertaining to this environmental Determination may be obtained by contacting the above Lead Agency address of (805)781-5600.

**COUNTY "REQUEST FOR REVIEW" PERIOD ENDS AT ..... 4:30 p.m. (2 wks from above DATE)**

**30-DAY PUBLIC REVIEW PERIOD begins at the time of public notification**

## Notice of Determination

State Clearinghouse No. \_\_\_\_\_

This is to advise that the San Luis Obispo County \_\_\_\_\_ as  Lead Agency

Responsible Agency approved/denied the above described project on \_\_\_\_\_, and has made the following determinations regarding the above described project.

The project will not have a significant effect on the environment. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. Mitigation measures and monitoring were made a condition of approval of the project. A Statement of Overriding Considerations was not adopted for this project. Findings were made pursuant to the provisions of CEQA.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at the 'Lead Agency' address above.

Kerry Brown

County of San Luis Obispo

Signature

Project Manager Name

Date

Public Agency



# Initial Study Summary – Environmental Checklist

SAN LUIS OBISPO COUNTY DEPARTMENT OF PLANNING AND BUILDING  
976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600  
*Promoting the Wise Use of Land • Helping to Build Great Communities*

(ver 5.0) Using Form

**Project Title & No.** Morro Coast Audubon Society Minor Use Permit  
**/Coastal Development Permit ED 12-039 (DRC2011-00013)**

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:** The proposed project could have a "Potentially Significant Impact" for at least one of the environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Geology and Soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Agricultural Resources	<input type="checkbox"/> Hazards/Hazardous Materials	<input type="checkbox"/> Transportation/Circulation
<input type="checkbox"/> Air Quality	<input type="checkbox"/> Noise	<input type="checkbox"/> Wastewater
<input checked="" type="checkbox"/> Biological Resources	<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Water /Hydrology
<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Public Services/Utilities	<input type="checkbox"/> Land Use

**DETERMINATION:** (To be completed by the Lead Agency)

On the basis of this initial evaluation, the Environmental Coordinator finds that:

- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- 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 project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- 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.
- 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 that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Kerry Brown  
Prepared by (Print)

*Kerry Brown*  
Signature

11/30/12  
Date

*Steven McMaster*  
Reviewed by (Print)

*Steven McMaster*  
Signature

Ellen Carroll,  
Environmental Coordinator  
(for)

11/30/12  
Date

### **Project Environmental Analysis**

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The County Planning Department uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Environmental Division, Rm. 200, County Government Center, San Luis Obispo, CA, 93408-2040 or call (805) 781-5600.

## **A. PROJECT**

**DESCRIPTION:** Request by Morro Coast Audubon Society (MCAS) to implement public access improvements at East Sweet Springs and connect the site (with trails) to the Central Sweet Springs Nature Preserve. The project includes an accessible trail and boardwalk system including interpretive elements guiding visitors to a prominent lookout point along the shoreline of the estuary. The trail will include one linear main line constructed of a combination of decomposed granite and elevated wooden or composite boardwalk (from the entrance to the bay overlook). Two spur trails leading from the Pond Loop trail to the north and south of the pond on the Central Sweet Springs preserve will connect the main line to the eastern section. One small loop trail will be included near the middle of the main line to provide a resting area. The main line trail will be five feet in width. The project also includes a bike rack (bicycles will not be allowed on the preserve), an ADA parking space and a 3,000 gallon water tank; all located at the entrance of the preserve. The project will result in 6,500 square feet of ground disturbance on an 8.3 acres site. The project is located on the north side of Ramona Street between Broderson Avenue and 4<sup>th</sup> Street, in the community of Los Osos, in the Estero planning area.

### **Background**

Morro Coast Audubon Society owns and manages the Sweet Springs Nature Preserve. Sweet Springs is a 24 acre Nature Preserve which provides public access, educational programs, and a monitoring and management of the flora and fauna at the site. In 2008, Sweet Springs East was purchased by the Trust for Public Land with funding for the acquisition provided by California State Coastal Conservancy, the National Coastal Wetlands Conservation Grant (USFWS), 2004 Section VI Recovery Land Acquisition Grant (USFWS), 2002 Section VI Recovery Land Acquisition Grant (USFWS), and the California Wildlife Conservation board. The Trust for Public Land transferred the property over to the Morro Coast Audubon Society to manage with the Central Sweet Springs Preserve. Deed restrictions were placed on the property, restricting the use of the property to the following uses: plant and wildlife habitat preservation, restoration and management, wildlife-oriented education and research, and public access. Sweet Springs Nature Preserve is now made up of three areas: West Sweet Springs, Central Sweet Springs, and East Sweet Springs. West Sweet Springs is fully protected and public access is discouraged as it is a salt marsh, Central Sweet Springs allows managed public access and habitat preservation, and East Sweet Springs is proposed to allow public access and habitat enhancement and preservation.

MCAS initially proposed removal of approximately 100 Eucalyptus trees at the site. This portion of the



project was removed for further study regarding potential impacts to Monarch butterflies.

**ASSESSOR PARCEL NUMBER(S):** 074-229-009

Latitude: 35° 19' 19.4772" N Longitude: -120° 50' 24.4782" W

**SUPERVISORIAL DISTRICT # 2**

**B. EXISTING SETTING**

**PLANNING AREA:** Estero, Los Osos

Flood Hazard, and Wetlands

**LAND USE CATEGORY:** Open Space  
, Residential Single Family

**TOPOGRAPHY:** Nearly level

**VEGETATION:** Grasses , eucalyptus  
, coastal scrub

**COMBINING DESIGNATION(S):**  
Local Coastal Plan/Program  
, Coastal Appealable Zone  
, Sensitive Resource Area  
, Archaeologically Sensitive, Coastal Access,

**PARCEL SIZE:** 8.3 acres

**EXISTING USES:** Undeveloped

**SURROUNDING LAND USE CATEGORIES AND USES:**

<i>North:</i> Estero Bay	<i>East:</i> Residential Single Family; single-family residence(s)
<i>South:</i> Residential Multi-Family; undeveloped	<i>West:</i> Area of deferred certification (Coastal Commission jurisdiction); Morro Coast Audubon Society Sweet Springs Nature Preserve

**C. ENVIRONMENTAL ANALYSIS**

During the Initial Study process, several issues were identified as having potentially significant environmental effects (see following Initial Study). Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.



# COUNTY OF SAN LUIS OBISPO INITIAL STUDY CHECKLIST

## 1. AESTHETICS

*Will the project:*

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Create an aesthetically incompatible site open to public view?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Introduce a use within a scenic view open to public view?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Change the visual character of an area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Create glare or night lighting, which may affect surrounding areas?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Impact unique geological or physical features?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting.** The project site is located within the community of Los Osos at the westerly end of the Los Osos Valley. The community is located on and surrounded by older coastal dunes, Morro Bay and its tidelands to the north, as well as the Irish Hills and Montana de Oro to the south and southwest. The project site currently is vegetated with a stand of Eucalyptus trees, Monterey Cypress trees, non-native grasslands, freshwater marsh and saltwater marsh. The project site will be visible from Ramona Avenue. The project site is located adjacent to a residentially zoned area with scattered small lot residential development on the east and Sweet Springs to the west.

The project consists of new public access improvements, including an accessible trail and boardwalk system. A portion of the boardwalk will be higher than 30 inches and will require a railing for safety. The boardwalk will end at a viewing platform approximately 90 feet from the shoreline. The platform will match the platform at the existing Central Sweet Springs Preserve and be 384 square feet in size. The platform will have built in benches and a railing.

The portions of project will be visible from Ramona Avenue, a collector. Trees obscure views to the bay (from Ramona Avenue). The project is a trail system which will be compatible with the surrounding area and uses. The project will not silhouette against any ridgelines as viewed from public roadways. The public access improvement are minor in nature and will not impact the aesthetics of the area. The project will provide visitors with additional opportunities to enjoy the shoreline and surrounding beauty of the area.

**Impact.** The project is considered compatible with the surrounding uses and will blend with the surrounding environment.

**Mitigation/Conclusion.** No mitigation measures are necessary.



**2. AGRICULTURAL RESOURCES**  
*Will the project:*

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Convert prime agricultural land, per NRCS soil classification, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Impair agricultural use of other property or result in conversion to other uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Conflict with existing zoning for agricultural use, or Williamson Act program?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting.** The project site is located within the urban area of the community of Los Osos. The project site is 8.3 acres in size and located adjacent (to the west) to the Morro Coast Audubon Society's Sweet Springs Nature Preserve and adjacent to residentially zoned and developed area.

**Project Elements.** The following area-specific elements relate to the property's importance for agricultural production:

Land Use Category: Residential Single Family and Open Space      Historic/Existing Commercial Crops: None

State Classification: Not prime farmland,      In Agricultural Preserve? No  
Under Williamson Act contract? No

The soil type(s) and characteristics on the subject property include:

Aquolls, saline. This nearly level soil is considered poorly drained. The soil has unrated erodibility and unrated shrink-swell characteristics, as well as having unrated septic system constraints. The soil is considered Class VIII without irrigation and Class is not rated when irrigated.

Baywood fine sand (9 - 15% slope). This gently to moderately sloping sandy soil is considered well drained. The soil has low erodibility and low shrink-swell characteristics, as well as having potential septic system constraints due to: poor filtering. The soil is considered Class VI (non-irrigated) and Class IV (irrigated).

**Impact.** The project is located in a non-agricultural area with no agricultural activities occurring on the property or immediate vicinity. No significant impacts to agricultural resources are anticipated.

**Mitigation/Conclusion.** No mitigation measures are necessary.

### 3. AIR QUALITY

*Will the project:*

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Expose any sensitive receptor to substantial air pollutant concentrations?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create or subject individuals to objectionable odors?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Be inconsistent with the District's Clean Air Plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Result in a cumulatively considerable net increase of any criteria pollutant either considered in non-attainment under applicable state or federal ambient air quality standards that are due to increased energy use or traffic generation, or intensified land use change?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>GREENHOUSE GASES</b>				
f) <i>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting.** The Air Pollution Control District (APCD) has developed the 2012 CEQA Air Quality Handbook to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. To evaluate long-term emissions, cumulative effects, and establish countywide programs to reach acceptable air quality levels, a Clean Air Plan has been adopted (prepared by APCD).

**Greenhouse Gas (GHG) Emissions** are said to result in an increase in the earth's average surface temperature. This is commonly referred to as global warming. The rise in global temperature is associated with long-term changes in precipitation, temperature, wind patterns, and other elements of the earth's climate system. This is also known as climate change. These changes are now thought to be broadly attributed to GHG emissions, particularly those emissions that result from the human production and use of fossil fuels.

The passage of AB32, the California Global Warming Solutions Act (2006), recognized the need to

reduce GHG emissions and set the greenhouse gas emissions reduction goal for the State of California into law. The law required that by 2020, State emissions must be reduced to 1990 levels. This is to be accomplished by reducing greenhouse gas emissions from significant sources via regulation, market mechanisms, and other actions. Subsequent legislation (e.g., SB97-Greenhouse Gas Emissions bill) directed the California Air Resources Board (CARB) to develop statewide thresholds.

In March 2012, the San Luis Obispo County Air Pollution Control District (APCD) approved thresholds for GHG emission impacts, and these thresholds have been incorporated into the APCD's CEQA Air Quality Handbook. APCD determined that a tiered process for residential / commercial land use projects was the most appropriate and effective approach for assessing the GHG emission impacts. The tiered approach includes three methods, any of which can be used for any given project:

1. Qualitative GHG Reduction Strategies (e.g. Climate Action Plans): A qualitative threshold that is consistent with AB 32 Scoping Plan measures and goals; or,
2. Bright-Line Threshold: Numerical value to determine the significance of a project's annual GHG emissions; or,
3. Efficiency-Based Threshold: Assesses the GHG impacts of a project on an emissions per capita basis.

For most projects the Bright-Line Threshold of 1,150 Metric Tons CO<sub>2</sub>/year (MT CO<sub>2</sub>e/yr) will be the most applicable threshold. In addition to the residential/commercial threshold options proposed above, a bright-line numerical value threshold of 10,000 MT CO<sub>2</sub>e/yr was adopted for stationary source (industrial) projects.

It should be noted that projects that generate less than the above mentioned thresholds will also participate in emission reductions because air emissions, including GHGs, are under the purview of the California Air Resources Board (or other regulatory agencies) and will be "regulated" either by CARB, the Federal Government, or other entities. For example, new vehicles will be subject to increased fuel economy standards and emission reductions, large and small appliances will be subject to more strict emissions standards, and energy delivered to consumers will increasingly come from renewable sources. Other programs that are intended to reduce the overall GHG emissions include Low Carbon Fuel Standards, Renewable Portfolio standards and the Clean Car standards. As a result, even the emissions that result from projects that produce fewer emissions than the threshold will be subject to emission reductions.

Under CEQA, an individual project's GHG emissions will generally not result in direct significant impacts. This is because the climate change issue is global in nature. However, an individual project could be found to contribute to a potentially significant cumulative impact. Projects that have GHG emissions above the noted thresholds may be considered cumulatively considerable and require mitigation.

**Impact.** As proposed, the project will result in the disturbance of approximately 6,500 square feet. This will result in the creation of construction dust, as well as short- and long-term vehicle emissions. Based on Table 1-1 of the CEQA Air Quality Handbook, the project will result in less than 10 lbs./day of pollutants, which is below thresholds warranting any mitigation. The project is consistent with the general level of development anticipated and projected in the Clean Air Plan. No significant air quality impacts are expected to occur.

This project is a trail system at a Nature Preserve. Using the GHG threshold information described in the Setting section, the project is expected to generate less than the Bright-Line Threshold of 1,150 metric tons of GHG emissions. Therefore, the project's potential direct and cumulative GHG emissions are found to be less significant and less than a cumulatively considerable contribution to GHG emissions. Section 15064(h)(2) of the CEQA Guidelines provide guidance on how to evaluate cumulative impacts. If it is shown that an incremental contribution to a cumulative impact, such as



global climate change, is not 'cumulatively considerable', no mitigation is required. Because this project's emissions fall under the threshold, no mitigation is required.

**Mitigation/Conclusion.** The project is consistent with the general level of development anticipated and projected in the Clean Air Plan. No significant air quality impacts are expected to occur. No mitigation measures are necessary.

**4. BIOLOGICAL RESOURCES**  
*Will the project:*

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Result in a loss of unique or special status species* or their habitats?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <i>Reduce the extent, diversity or quality of native or other important vegetation?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) <i>Impact wetland or riparian habitat?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Interfere with the movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) <i>Conflict with any regional plans or policies to protect sensitive species, or regulations of the California Department of Fish &amp; Game or U.S. Fish &amp; Wildlife Service?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\* Species – as defined in Section 15380 of the CEQA Guidelines, which includes all plant and wildlife species that fall under the category of rare, threatened or endangered, as described in this section.

**Setting.** The following are existing elements on or near the proposed project relating to potential biological concerns:

On-site Vegetation: Eucalyptus and Cypress Trees, non-native grassland, Herbaceous Wetland, and Wooded Wetland

Name and distance from blue line creek(s): Artificial Path and Intermittent Stream are approximately 200 feet west of the proposed project. Morro Bay Estuary is located directly north of the parcel.

Site's tree canopy coverage: Approximately 35%.

The Natural Diversity Database (or other biological references) identified the following species potentially existing within approximately one mile of the proposed project:

Arroyo de la Cruz manzanita (*Arctostaphylos cruzensis*) List 1B

Arroyo de la Cruz manzanita (*Arctostaphylos cruzensis*) has been found about 0.81 mile to the northeast. This evergreen shrub is generally found growing on sandy soils in broadleaved upland forests, coastal bluff scrub, closed-cone coniferous forests, chaparral, coastal scrub, valley and foothill grassland areas at elevations between 60 and 310 meters (200 to 1,020

feet). It is a California endemic which has a blooming period of December-March. Arroyo de la Cruz manzanita is considered a rare plant by the CNPS (List 1B, RED 2-2-3).

California seablite (*Suaeda californica*) FE, List 1B

California seablite (*Suaeda californica*) has been found about 0.47 mile to the west. This evergreen shrub is generally found growing along margins of marsh and swamp (coastal salt) areas at elevations up to 5 meters (16 feet). It is a California endemic which has a blooming period of July-October. California seablite is considered federally endangered and extremely rare by the CNPS (List 1B, RED 3-3-3).

Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*) List 1B

Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*) has been found about 0.09 mile to the west. This annual herb is generally found growing along margins of marsh and swamp areas (coastal salt), playas, and vernal pool areas at elevations up to 1,220 meters (4,000 feet). It is a California endemic which has a blooming period of February-June. Coulter's goldfields is considered rare by the CNPS (List 1B, RED 2-3-2).

Jones's layia (*Layia jonesii*) FSC, List 1B

Jones's layia (*Layia jonesii*) has been found onsite. This annual herb is found on serpentine or clay soils in chaparral and valley grassland habitats at elevations between 5 and 400 meters (15 to 1,315 feet). Within San Luis Obispo County, this species is known to range primarily from the Cayucos area south to San Luis Obispo. It is a California endemic, with blooming generally occurring in March to May. Jones's layia is federally listed as a Species of Concern, and CNPS considers this species rare (List 1B, RED 3-2-3). The Cal Flora Occurrence Database catalogs 31 historical occurrences of this species within San Luis Obispo County.

Morro manzanita (*Arctostaphylos morroensis*) FT, List 1B

Morro manzanita (*Arctostaphylos morroensis*) has been found about 0.81 mile to the northeast. This evergreen shrub is found on sandy loam soils in chaparral (maritime), cismontane woodland, coastal dunes, and coastal scrub habitats between the 5 and 205-meter elevation (15 to 675 feet). The typical blooming period is December-March. Morro manzanita is considered rare by CNPS (List 1B, RED 2-3-3) and federally threatened.

Marsh (swamp) sandwort (*Arenaria paludicola*) FE, SE, List 1B

Marsh sandwort (*Arenaria paludicola*) has been found about 0.02 mile to the west. This perennial herb occurs in freshwater marsh habitats (Tibor 2001) up to the 450-meter elevation (1,480 feet). The typical flowering period is May through August. Marsh sandwort is considered federally and state endangered, and extremely rare by CNPS (List 1B, RED 3-3-3).

Salt marsh bird's-beak (*Cordylanthus maritimus* ssp. *maritimus*) FE, SE, List 1B

Salt marsh bird's-beak (*Cordylanthus maritimus* ssp. *maritimus*) has been found about 0.15 mile to the west. This annual herb is found in coastal dunes and marshes and swamps up to the 30-foot elevation. The typical blooming period is April-June. Salt marsh bird's-beak is considered rare by CNPS (List 1B, RED 2-2-2) and federally and state-endangered.

San Luis Obispo Owl-Clover (*Castilleja densiflora* ssp. *obispoensis*) List 1B

Obispo Indian paintbrush (*Castilleja densiflora* ssp. *obispoensis*) has been found about 0.65 mile to the northeast. This annual herb is found in valley and foothill grasslands at elevations between 10 to 400 meters (30 to 1,315 feet). The blooming period is April. Obispo Indian paintbrush is considered rare by CNPS (List 1B, RED 2-2-3).



### San Luis Obispo (curly-leaved) monardella (*Monardella frutescens*) List 1B

San Luis Obispo monardella (*Monardella frutescens*) has been found onsite. This perennial herb is found on sandy soils and in stabilized coastal dunes and coastal scrub habitats between the 10 and 200-meter elevations (30 to 660 feet). The species generally blooms from May through September. The CNPS considers this plant to be rare (List 1B, 2-2-3).

### Splitting yarn lichen (*Sulcaria isidiifera*) FSC

Splitting yarn lichen (*Sulcaria isidiifera*) has been found about 0.21 mile to the northeast. This lichen is found on oak and shrub branches in chaparral and cismontane woodland habitats. Lichen do not flower. Splitting yarn lichen is considered federally a species of Special Concern.

## Animals

### California black rail (*Laterallus jamaicensis coturniculus*) ST

California black rail (*Laterallus jamaicensis coturniculus*) has been found about 0.02 mile to the west. This listed species is considered threatened at the state level. The California black rail inhabits saltwater, brackish, and freshwater marshes. Nesting habitat is characterized by water depths of about one inch that do not fluctuate during the year, and by dense vegetation providing adequate cover. Larger wetlands are more likely to support populations that will exist over time. While the California black rail occurred historically along the coast from Baja California, Mexico north to San Francisco, today, it is found only at several locations within this range, including Morro Bay. Threats to black rail populations fall into three main categories: habitat loss, predation, and contamination. The loss of coastal and interior wetlands has greatly reduced the range of this species and is the principal threat to the California black rail. Impacts to the species include flooding of suitable habitat due to El Niño events, levee and road construction, filling of wetlands, and land subsidence due to groundwater pumping; cattle grazing in Sierra Nevada wetlands inhabited by the rail; habitat loss from invasive non-native plants such as perennial pepperweed and non-native cordgrass; predation by native and non-native animals; and contamination of wetlands by oil refineries, chemical plants, manufacturing, and urban runoff. Documented predators of California black rails include great blue heron, great egret, northern harrier, and owls. The red fox and rats are believed to prey on nests around San Francisco Bay. Predation of black rails can be intense in marshes that lack the transitional vegetation between the high marsh and upland cover.

### California clapper rail (*Rallus longirostris obsoletus*) FE, SE

California clapper rail (*Rallus longirostris obsoletus*) have been found about 0.16 mile to the northeast. This listed species is considered federally- and state-endangered. Clapper rails can be found primarily in saltwater marshes (sometimes inland freshwater marshes) that support pickleweed and cordgrass, such as Morro Bay. The this non-migratory bird is more common in the San Francisco Bay area, with Morro Bay being the southern edge of the bird's known range. The loss of upper marsh habitat, due primarily to diking, urban development and livestock grazing, has significantly contributed to the decline of this species. The stealing of eggs by the Norway rat has also contributed to the clapper's decline. The "initial" and "late" bird nesting periods are between mid-March and mid-July.

### Cooper's Hawk-General Statement:

0.81 Miles to the northeast Common bird species occurring in the general area are identified below using standard nomenclature. Typical species that utilize open grassland areas and fields for foraging and/or nesting include red-tailed hawk, red-shouldered hawk, American kestrel, Cooper's hawk, black-shouldered kite, burrowing owl, Western meadowlark, Say's phoebe, and Western bluebird. Riparian habitats support such species as Anna's hummingbird, Northern flicker, scrub jay, bushtit, black phoebe, red-winged blackbird, belted



kingfisher, black-crowned night heron, and American bittern. Woodland and coastal scrub areas provide resources for California quail, acorn woodpecker, brown towhee, dark-eyed junco, and white-breasted nuthatch. Wading birds such as the great blue heron, and snowy and great egrets frequent and utilize freshwater marsh and riparian habitats, as well as open grassland areas for foraging. Telephone poles and tall trees, such as sycamores and cottonwoods provide roosting and hunting perches for raptors including red-tailed and red-shouldered hawks. Windrow trees including eucalyptus, often provide suitable nesting sites for birds of prey such as great horned owls and barn owls. In addition to occurring within their natural habitat, species such as white-crowned sparrow, brewer's blackbird, American crow and yellow-billed magpie are commonly found in developed areas.

#### Monarch butterfly (*Danaus plexippus*)

The Monarch butterfly (*Danaus plexippus*) has been found about 0.05 mile to the west. This species is considered a "threatened phenomenon" by the State and "rare" under CEQA Guidelines Section 15380 because of declining availability of winter roosting habitat. Monarchs from west of the Rocky Mountains spend the winter along the California coast. Overwintering sites typically occur in dense, wind-protected tree groves with eucalyptus (*Eucalyptus* spp.), Monterey pine (*Pinus radiata*), and/or Monterey cypress (*Cupressus macrocarpa*) near the coast from northern Mendocino to Baja California (CNDDDB, 2004).

Optional info: [Blue gum eucalyptus (*Eucalyptus globulus*) occurs on the project site.]

#### Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*) FE, SE [see also **Error! Reference source not found.** General Statement]

Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*) has been found about 0.81 mile to the northeast. Morro Bay kangaroo rat is considered federally and state endangered. The species inhabits coastal sage scrub on the south side of Morro Bay. Needs sandy soil, but not active dunes; prefers early seral stages.

#### Morro shoulderband snail (*Helminthoglypta walkeriana*) FE

Morro shoulderband snail (*Helminthoglypta walkeriana*) has been found about 0.65 mile to the north. Morro shoulderband snail is considered federally endangered. There are two forms of the Morro shoulderband snail, the coastal snail and the inland snail. The coastal snail is restricted to the coastal strand and coastal sage scrub habitats in the immediate vicinity of Morro Bay. The coastal form, *H. walkeriana walkeriana*, inhabits the duff beneath mock heather (*Ericameria*), buckwheat (*Eriogonum parvifolium*), mint shrubs (*Salvia* spp.), *Dudleya*, and iceplant (*Mesembryanthemum* spp.). The inland form, *H. walkeriana morroensis*, is found under coastal sage scrub, *Opuntia* cactus, fennel, and grasslands and swales with shrubs that provide canopy and leaf litter.

#### Tidewater goby (*Eucyclogobius newberryi*) FE, CSC

Tidewater goby (*Eucyclogobius newberryi*) has been found about 0.81 mile to the northeast. They are considered federally endangered and a California Species of Special Concern. This species is found in brackish water habitats along the California coast. Microhabitats include shallow lagoons and lower stream reaches. The goby needs fairly still but not stagnant water with high oxygen levels. Suitable habitat within these streams range from the mouths to approximately 1.5 to 2.0 miles upstream. Tidewater goby is threatened by various factors including water quality degradation and low instream flows caused by water diversions and periodic drought.

A. Biological Screening and Constraints Analysis was completed in 2008 (SWCA, October 2008) for the site. Habitat areas on the site include non-native grassland, Eucalyptus woodland, emergent



wetland, saltwater marsh, and coast live oak. Two drainages border the property on the east and west. These drainages contain emergent wetland vegetation and are likely federal and state jurisdictional wetlands. No trails or public amenities are proposed in these wetland areas. Two special-status plant species were observed on the project site, Blochman's leafy daisy and California seablite. Saltmarsh bird's-beak occurs at West Sweet Springs. The site supports suitable habitat for nesting migratory bird species and tree roosting bat species. Signs of previous presence for Morro shoulderband snail were observed; shells were found on the site. Also, an individual Cooper's hawk was observed during the site visit.

The subject site is in the range of the Morro shoulderband snail, a federally listed species. Surveys for Morro shoulderband snail, consistent with the U.S. Fish and Wildlife Service's protocol, were conducted on the project site between December 16, 2008 and February 17, 2009 (SWCA, March 2009). Forty-four live Morro shoulderband snails and thirty-three empty Morro Shoulderband snail shells were identified at the site. Most of these occurrences were concentrated in and directly adjacent to remnant coastal scrub and woody debris piles located at the northern and southern ends of the property. The Survey recommended that Morro Coast Audubon Society prepare a Recovery Action Plan for MSS.

Funding to purchase and protect the site was provided in part by the US Fish and Wildlife Service for protection of wetlands and habitat for the Morro shoulderband snail. Morro Coast Audubon Society has secured a Recovery Permit through the US Fish and Wildlife Service. The Recovery Permit is memorialized in the Morro Shoulderband Snail Recovery Action Plan for the Sweet Springs Nature Preserve (SWCA, 2011). The Plan provides guidance on removal of non-native invasive plant species within the Preserve and restoration of disturbed areas to natural conditions. As stated in the Recovery Plan, successful implementation of the plan will improve habitat quantity and quality for the federally endangered Morro shoulderband snail and will enhance existing populations of special-status plant species within the Preserve. Morro Coast Audubon Society is actively working on restoration activities (removal of veldt grass and replacement with natives which does not require a land use permit)

The Recovery Plan states that the Preserve supports the following special status species: Morro shoulderband snail, California seablite, Blochman's leafy daisy, sand almond, Leopold's rush, saltmarsh bird's beak, marsh sandwort (planted population), Morro manzanita, and suffrutescent wallflower

Public access improvements will allow the public into sensitive habitat areas, however the provision of trails will help define the public use area and reduce intrusion impacts (into sensitive areas) and trampling of vegetation. A boardwalk will be installed in highly sensitive areas, to limit impacts to sensitive habitat areas.

**Impact.** The applicant has applied for and received a Recovery Permit for the federally endangered Morro shoulderband snail. The project site does support sensitive native vegetation, significant wildlife habitats, and special status species. Construction of the trails has the potential to impact sensitive habitats. The incorporation of minimization measures will lessen impacts to the sensitive habitats and species.

**Mitigation/Conclusion.** Implementation of the following mitigation measures (as described in detail in Exhibit – B) will reduce potential biological impacts to less than significant levels:

- Ground disturbing activities will be restricted to the dry season (June 1 through October 31);
- Preconstruction surveys for Morro shoulderband snail shall be conducted prior to any ground disturbance;
- Exclusion (e.g., silt) fencing shall be installed under the direction of a qualified biologist prior to any site disturbance activities to ensure that areas occupied by live MSS are not affected; and



- A biologist in possession of a valid recovery permit for Morro shoulderband snail will be retained to monitor construction activities.
- Environmental awareness training for all construction workers at the site.

## 5. CULTURAL RESOURCES

*Will the project:*

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Disturb archaeological resources?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <i>Disturb historical resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Disturb paleontological resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting.** The project is located in an area historically occupied by the Obispeno Chumash. No historic structures are present and no paleontological resources are known to exist in the area. The project is adjacent to Estero Bay and two drainages border the site. Potential for the presence or regular activities of the Native American increases in close proximity to reliable water sources.

**Impact.** A Phase I (surface) survey was conducted (Bertando and Bertrando, October 2009). Prehistoric cultural material, including marine shell, bone, fire affected rocks and chipped stone debris were observed over most of the parcel. Although archaeological material was found over most of the property, surface densities and material types varied over the project area.

Marine shell was concentrated in the northern (downslope) portions of the project area associated with SLO-812 with a secondary concentration appearing in the southern section of the site, associated with SLO-829. The proposed construction activities of the site have the potential to impact the resources associated with SLO-812 and SLO-829.

Impacts to historical or paleontological resources are not expected.

**Mitigation/Conclusion.** The archaeologist states that construction and maintenance of trails is considered to have a low impact on cultural resources and result in minimal site disturbance. The trail was reduced in size in the sensitive cultural areas (per the archaeologist's recommendation); a loop trail was modified to a linear trail. The archaeologist recommended monitoring of all trail construction within sensitive cultural areas (the northern and southern portions), mitigation for any subsurface disturbance to the archaeological deposit (if soils are removed for piers or platform foundations then the soil shall be excavated, screened, and processed), and cultural resource training for all labor crews constructing the trail. MCAS is proposing minimal soil disturbance in sensitive areas and a 'floating' boardwalk (no footings in the ground). Implementation of the following mitigation measures will reduce potential archaeological impacts to less than significant levels:

- The applicant shall submit a monitoring plan, prepared by a subsurface-qualified archaeologist, for the review and approval by the Environmental Coordinator.
- The applicant shall retain a qualified archaeologist (approved by the Environmental Coordinator) and Native American to monitor all earth disturbing activities, per the approved monitoring plan.
- The consulting archaeologist shall submit a report to the Environmental Coordinator summarizing all monitoring/mitigation activities and confirming that all recommended mitigation



measures have been met.

- All labor crews shall be trained on the identification of archaeological remains and instructed in the proper steps to take in the event archaeological remains are exposed.

## 6. GEOLOGY AND SOILS

*Will the project:*

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Be within a California Geological Survey "Alquist-Priolo" Earthquake Fault Zone", or other known fault zones*?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Include structures located on expansive soils?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Be inconsistent with the goals and policies of the County's Safety Element relating to Geologic and Seismic Hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Preclude the future extraction of valuable mineral resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\* Per Division of Mines and Geology Special Publication #42

**Setting.** The following relates to the project's geologic aspects or conditions:

Topography: Gently sloping

Within County's Geologic Study Area?: No

Landslide Risk Potential: Low

Liquefaction Potential: Moderate to high

Nearby potentially active faults?: Yes: Los Osos Fault Distance? On Site

Area known to contain serpentine or ultramafic rock or soils?: No

Shrink/Swell potential of soil: Low

Other notable geologic features? None

Los Osos Fault



The Los Osos fault zone is a west-northwest-trending reverse fault that extends predominantly along the northeastern margin of the San Luis Range in San Luis Obispo County. The fault zone, which has an overall length of about 35 miles, is divided into four segments. The most westerly segment of the fault is the Estero Bay segment, which lies mostly offshore. The Irish Hills segment, the only active fault segment, starts in the vicinity of Los Osos and extends to just past San Luis Obispo Creek. A two-mile length of the Irish Hills segment, west of Laguna Lake and near the westerly limit of the City of San Luis Obispo, is considered to be active (Treiman, 1989) and is designated as an Alquist-Priolo Earthquake Fault Zone (Hart, 1997, revised). The other two segments of the Los Osos fault are the Lopez Reservoir segment and the Newsome Ridge segment, both located southeast of the Irish Hills segment, east of San Luis Obispo Creek. The active Irish Hills fault segment is approximately nine miles northwest. According to the San Luis Obispo County General Plan Safety Element (the Safety Element), the Los Osos fault has the potential to generate an earthquake with a maximum moment magnitude (Mw) of 6.75.

For areas where drainage is identified as a potential issue, the Land Use Ordinance (CZLUO Sec. 23.05.042) includes a provision to prepare a drainage plan to minimize potential drainage impacts. When required, this plan would need to address measures such as: constructing on-site retention or detention basins, or installing surface water flow dissipaters. This plan would also need to show that the increased surface runoff would have no more impacts than that caused by historic flows.

**SEDIMENTATION AND EROSION** – Soil type, amount of disturbance and slopes are key aspects to analyzing potential sedimentation and erosion issues. The project’s soil types and descriptions are listed in the previous Agriculture section under “Setting”. As described in the NRCS Soil Survey, the the project’s soil erodibility is as follows:

When highly erosive conditions exist, a sedimentation and erosion control plan is required (CZLUO Sec. 23.05.036) to minimize these impacts. When required, the plan is prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. Projects involving more than one acre of disturbance are subject to the preparation of a Storm Water Pollution Prevention Plan (SWPPP), which focuses on controlling storm water runoff. The Regional Water Quality Control Board is the local extension who monitors this program.

The project is within a high liquefaction area, and is subject to the preparation of a geological report per the County’s Land Use Ordinance (CZLUO section 23.07.084(c)) to evaluate the area’s geological stability. A geological report was not conducted for this project, as the project is proposed public access improvements and no structures are proposed.

**Impact.** As proposed, the project will result in the disturbance of approximately 6,500 square feet. The project proposes minimal disturbance of the site to provide public access improvements.

**Mitigation/Conclusion.** There is no evidence that measures above what will already be required by ordinance or codes are needed.

<b>7. HAZARDS &amp; HAZARDOUS MATERIALS - <i>Will the project:</i></b>	<b>Potentially Significant</b>	<b>Impact can &amp; will be mitigated</b>	<b>Insignificant Impact</b>	<b>Not Applicable</b>
a) <b><i>Create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</i></b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**7. HAZARDS & HAZARDOUS MATERIALS - Will the project:**

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
b) <i>Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Be located on, or adjacent to, a site which is included on a list of hazardous material/waste sites compiled pursuant to Gov't Code 65962.5 ("Cortese List"), and result in an adverse public health condition?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Impair implementation or physically interfere with an adopted emergency response or evacuation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>If within the Airport Review designation, or near a private airstrip, result in a safety hazard for people residing or working in the project area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Increase fire hazard risk or expose people or structures to high wildland fire hazard conditions?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting.** The project is not located in an area of known hazardous material contamination. The project is not within a high severity risk area for fire. The project is not within the Airport Review area.

**Impact.** The project does not propose the use of hazardous materials, nor the generation of hazardous wastes. The project does not present a significant fire safety risk. The project is not expected to conflict with any regional emergency response or evacuation plan.

**Mitigation/Conclusion.** No significant impacts as a result of hazards or hazardous materials are anticipated, and no mitigation measures are necessary.

## 8. NOISE

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
<i>Will the project:</i>				
a) <i>Expose people to noise levels that exceed the County Noise Element thresholds?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Generate permanent increases in the ambient noise levels in the project vicinity?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Cause a temporary or periodic increase in ambient noise in the project vicinity?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Expose people to severe noise or vibration?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>If located within the Airport Review designation or adjacent to a private airstrip, expose people residing or working in the project area to severe noise levels?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting.** The project is not within close proximity of loud noise sources, and will not conflict with any sensitive noise receptors (e.g., residences). Based on the Noise Element's projected future noise generation from known stationary and vehicle-generated noise sources, the project is within an acceptable threshold area.

**Impact.** The project is not expected to generate loud noises, nor conflict with the surrounding uses.

**Mitigation/Conclusion.** No significant noise impacts are anticipated, and no mitigation measures are necessary.

## 9. POPULATION/HOUSING

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
<i>Will the project:</i>				
a) <i>Induce substantial growth in an area either directly (e.g., construct new homes or businesses) or indirectly (e.g., extension of major infrastructure)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Displace existing housing or people, requiring construction of replacement housing elsewhere?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create the need for substantial new housing in the area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## 9. POPULATION/HOUSING

*Will the project:*

Potentially Significant

Impact can & will be mitigated

Insignificant Impact

Not Applicable

d) *Other:* \_\_\_\_\_





**Setting** In its efforts to provide for affordable housing, the county currently administers the Home Investment Partnerships (HOME) Program and the Community Development Block Grant (CDBG) program, which provides limited financing to projects relating to affordable housing throughout the county. The County's Inclusionary Housing Ordinance requires provision of new affordable housing in conjunction with both residential and nonresidential development and subdivisions.

**Impact.** The project will not result in a need for a significant amount of new housing, and will not displace existing housing.

**Mitigation/Conclusion.** No significant population and housing impacts are anticipated. No mitigation measures are necessary.

## 10. PUBLIC SERVICES/UTILITIES

*Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:*

Potentially Significant

Impact can & will be mitigated

Insignificant Impact

Not Applicable

a) *Fire protection?*





b) *Police protection (e.g., Sheriff, CHP)?*





c) *Schools?*





d) *Roads?*





e) *Solid Wastes?*





f) *Other public facilities?*





g) *Other:* \_\_\_\_\_





**Setting.** The project area is served by the following public services/facilities:

Police: County Sheriff

Location: Los Osos (Approximately .6 miles to the east)

Fire: Cal Fire (formerly CDF)

Hazard Severity:

Response Time: 0-5 min

Location: Approximately 1 mile to the south east

School District: San Luis Coastal Unified School District.

**Impact.** No significant project-specific impacts to utilities or public services were identified. The project will provide public access improvements and will not impact public services or utilities.

**Mitigation/Conclusion.** No significant public services / utility impacts are anticipated. No mitigation measures are necessary.

## 11. RECREATION

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
<i>Will the project:</i>				
a) <i>Increase the use or demand for parks or other recreation opportunities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Affect the access to trails, parks or other recreation opportunities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Other _____</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting.** The County's Parks and Recreation Element does not show a potential trail through the proposed project. The project proposes an expansion of Sweet Springs Nature Preserve and will provide public trails and opportunities for nature study.

**Impact.** The proposed project will not create a significant need for additional park, Natural Area, and/or recreational resources.

**Mitigation/Conclusion.** No significant recreation impacts are anticipated, and no mitigation measures are necessary.

## 12. TRANSPORTATION/CIRCULATION

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
<i>Will the project:</i>				
a) <i>Increase vehicle trips to local or areawide circulation system?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Reduce existing "Level of Service" on public roadway(s)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Provide for adequate emergency access?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Conflict with an established measure of effectiveness for the performance of the circulation system considering all modes of transportation (e.g. LOS, mass transit, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Conflict with an applicable congestion management program?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



## 12. TRANSPORTATION/CIRCULATION

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
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*Will the project:*

**h) Result in a change in air traffic patterns that may result in substantial safety risks?**

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

**i) Other:** \_\_\_\_\_

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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**Setting.** The county has established the acceptable Level of Service (LOS) on roads for this [urban area as "D" or better] [rural area as "C" or better]. The existing road network in the area (is better than D), including the project's access street, Ramona Avenue is operating at an acceptable level. Based on existing road speeds and configuration (vertical and horizontal road curves), sight distance is considered acceptable.

A referral was sent to Public Works. No significant traffic-related concerns were identified.

**Impact.** The proposed project is estimated to generate minimal traffic, as the project will be connected to the existing Sweet Springs Nature Preserve. This small amount of additional traffic will not result in a significant change to the existing road service or traffic safety levels. The project does not conflict with adopted policies, plans and programs on transportation.

**Mitigation/Conclusion.** No significant traffic impacts were identified, and no mitigation measures above what are already required by ordinance are necessary.

## 13. WASTEWATER

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
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*Will the project:*

**a) Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?**

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

**b) Change the quality of surface or ground water (e.g., nitrogen-loading, day-lighting)?**

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

**c) Adversely affect community wastewater service provider?**

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

**d) Other:** \_\_\_\_\_

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

**Setting.** The project site is located in the community of Los Osos. In 1988, the California Regional Water Quality Control Board imposed a moratorium on new sources of sewage discharge in most of the community of Los Osos. The project proposes an expansion of Sweet Springs Nature Preserve with additional public access improvements. No bathrooms are proposed. No septic system is proposed.

**Impacts/Mitigation.** No significant impacts to wastewater were identified, and no mitigation measures are necessary.



# 14. WATER & HYDROLOGY

*Will the project:*

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
<b>QUALITY</b>				
a) <i>Violate any water quality standards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, sediment, temperature, dissolved oxygen, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Change rates of soil absorption, or amount or direction of surface runoff?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Involve activities within the 100-year flood zone?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>QUANTITY</b>				
h) <i>Change the quantity or movement of available surface or ground water?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) <i>Adversely affect community water service provider?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) <i>Expose people to a risk of loss, injury or death involving flooding (e.g., dam failure, etc.), or inundation by seiche, tsunami or mudflow?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Setting.** The project proposes to use a water delivery system. Water delivery is only needed for the establishment of native plants and is currently occurring.

The water source is the Los Osos groundwater basin. The Board of Supervisors has certified a Level of Severity III for the Basin on March 27, 2007. On April 22, 2008, the Board of Supervisors approved two plumbing retrofit ordinances for the Los Osos area. The ordinances address sea water intrusion into the lower aquifer zone of the Los Osos Groundwater Basin. To manage this serious problem, the ordinances require both new and existing development to help address this problem by retrofitting



older, non-conserving toilets and showerheads with those that are water efficient. The ordinances went into effect May 22, 2008.

Ground water production from the basin overall increased steadily from 1978 to 1988 when the Regional Water Quality Control Board imposed a prohibition on new septic system discharges. Since 1988, growth of new residential units in Los Osos has been only about a quarter of a percent per year. Water production has remained stable since then, varying from year to year primarily in response to weather conditions rather than to urban growth.

The Los Osos Community Services District (LOCSD) Water Management Plan, completed in July 2005, provides an estimate of safe yield for the lower and upper aquifers - 1300 afy for the lower aquifer and 1150 afy for the upper aquifer. An additional 800 afy is available from the Los Osos Creek Valley, for a total basin safe yield of 3250 afy. Total basin demand is currently estimated at approximately 3,400 afy. Therefore, the demand exceeds safe yield with a current deficit of approximately 150 afy. Safe Yield in the lower aquifer is currently being exceeded by 650 afy, causing seawater intrusion in the lower aquifer.

The Management Plan also estimates the water demand at buildout for the combined service areas of the community's three principal water purveyors, compared to the estimated safe yield of the groundwater basin. Buildout demand is estimated to be 3,000 afy for the three purveyors compared to a safe yield of only 2250 afy without a wastewater system or 2630 afy with a wastewater system. Thus, assuming construction of a wastewater system, buildout demand would exceed the safe yield by 370 afy. This deficit would have to be made up by a combination of water conservation, wastewater reclamation and supplemental water.

The project proposes to obtain its water needs from water delivery. Water is only needed for plant restoration activities (initially to establish the new plants). The public access improvements associated with the expansion of Sweet Springs will not need water.

The topography of the project is nearly level. The closest creek from the proposed development is approximately 2 miles away, the site is adjacent to the Estero bay. As described in the NRCS Soil Survey, the soil surface is considered to have low erodibility.

Projects involving more than one acre of disturbance are subject to preparing a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion. When work is done in the rainy season, the County's Land Use Ordinance requires that temporary erosion and sedimentation measures to be installed.

**DRAINAGE** – The following relates to the project's drainage aspects:

Within the 100-year Flood Hazard designation? Yes

Closest creek? Artificial Path and Intermittent Stream (Unnamed)      Distance?      Approximately  
110 feet

Soil drainage characteristics:      Well Drained

For areas where drainage is identified as a potential issue, the Land Use Ordinance (LUO Sec. 22.52.110 or CZLUO Sec. 23.05.042) includes a provision to prepare a drainage plan to minimize potential drainage impacts. When required, this plan would need to address measures such as: constructing on-site retention or detention basins, or installing surface water flow dissipaters. This plan would also need to show that the increased surface runoff would have no more impacts than that caused by historic flows.

**SEDIMENTATION AND EROSION** – Soil type, area of disturbance, and slopes are key aspects to analyzing potential sedimentation and erosion issues. The project's soil types and descriptions are



listed in the previous Agriculture section under "Setting". As described in the NRCS Soil Survey, the project's soil erodibility is as follows:

Soil erodibility: Low

A sedimentation and erosion control plan is required for all construction and grading projects (LUO Sec. 22.52.120, CZLUO Sec. 23.05.036) to minimize these impacts. When required, the plan is prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. Projects involving more than one acre of disturbance are subject to the preparation of a Storm Water Pollution Prevention Plan (SWPPP), which focuses on controlling storm water runoff. The Regional Water Quality Control Board is the local extension who monitors this program.

**Impact – Water Quality/Hydrology**

With regards to project impacts on water quality the following conditions apply:

Approximately 6,500 square feet of site disturbance is proposed. All disturbed soils will be revegetated.

**Water Quantity**

Based on the project description, there is no water usage (except for a minimal amount to establish new native plants). This is not a significant amount of water. Once the plants are established, water will not be needed.

**Mitigation/Conclusion.** As specified above for water quality, existing regulations and/or required plans will adequately address surface water quality impacts during construction and permanent use of the project. No additional measures above what are required or proposed are needed to protect water quality.

Based on the proposed amount of water to be use and the water source, no significant impacts from water use are anticipated.

**15. LAND USE**

*Will the project:*

	Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
a) <i>Be potentially inconsistent with land use, policy/regulation (e.g., general plan [County Land Use Element and Ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Be potentially inconsistent with any habitat or community conservation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Be potentially incompatible with surrounding land uses?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**15. LAND USE**

*Will the project:*

Inconsistent      Potentially Inconsistent      Consistent      Not Applicable

e) *Other:* \_\_\_\_\_

**Setting/Impact.** Surrounding uses are identified on Page 2 of the Initial Study. The proposed project was reviewed for consistency with policy and/or regulatory documents relating to the environment and appropriate land use (e.g., County Land Use Ordinance, Local Coastal Plan, etc.). Referrals were sent to outside agencies to review for policy consistencies (e.g., CAL FIRE for Fire Code, APCD for Clean Air Plan, etc.). The project was found to be consistent with these documents (refer also to Exhibit A on reference documents used). The public access improvements will be located within 75 feet of the Estuary and wetlands on site. Additionally the public access improvements will be located within unmapped Terrestrial Habitat (habitat for Morro shoulderband snail). Passive recreation is allowed within the required setbacks for Environmentally Sensitive Habitat Areas (ESHA) and therefore the project is consistent with both the Estero Area Plan and Coastal Zone Land Use Ordinance and Coastal Plan Policy ESHA policies and standards.

The project is within a Habitat Conservation Plan area, however the project is the subject of a Recovery Permit for the Morro shoulderband snail (the subject of the Habitat Conservation Plan). The project is consistent or compatible with the surrounding uses as summarized on page 2 of this Initial Study.

**Mitigation/Conclusion.** No inconsistencies were identified and therefore no additional measures above what will already be required were determined necessary.

**16. MANDATORY FINDINGS OF SIGNIFICANCE**

*Will the project:*

Potentially Significant      Impact can & will be mitigated      Insignificant Impact      Not Applicable

- a) *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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*
- b) *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)*
- c) *Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

For further information on CEQA or the county's environmental review process, please visit the County's web site at "[www.sloplanning.org](http://www.sloplanning.org)" under "Environmental Information", or the California Environmental Resources Evaluation System at: [http://www.ceres.ca.gov/topic/env\\_law/ceqa/guidelines](http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines) for information about the California Environmental Quality Act.



## **Exhibit A - Initial Study References and Agency Contacts**

The County Planning or Environmental Divisions have contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with an ☒) and when a response was made, it is either attached or in the application file:

<b><u>Contacted</u></b>	<b><u>Agency</u></b>	<b><u>Response</u></b>
<input checked="" type="checkbox"/>	County Public Works Department	<b>Attached</b>
<input type="checkbox"/>	County Environmental Health Division	<b>Not Applicable</b>
<input type="checkbox"/>	County Agricultural Commissioner's Office	<b>Not Applicable</b>
<input type="checkbox"/>	County Airport Manager	<b>Not Applicable</b>
<input type="checkbox"/>	Airport Land Use Commission	<b>Not Applicable</b>
<input type="checkbox"/>	Air Pollution Control District	<b>Not Applicable</b>
<input type="checkbox"/>	County Sheriff's Department	<b>Not Applicable</b>
<input type="checkbox"/>	Regional Water Quality Control Board	<b>Not Applicable</b>
<input checked="" type="checkbox"/>	CA Coastal Commission	<b>None</b>
<input type="checkbox"/>	CA Department of Fish and Game	<b>Not Applicable</b>
<input checked="" type="checkbox"/>	CA Department of Forestry (Cal Fire)	<b>Attached</b>
<input type="checkbox"/>	CA Department of Transportation	<b>Not Applicable</b>
<input type="checkbox"/>	Community Service District	<b>Not Applicable</b>
<input checked="" type="checkbox"/>	Other <u>Los Osos Adviosry Council</u>	<b>Attached</b>
<input type="checkbox"/>	Other _____	<b>Not Applicable</b>

**\*\* "No comment" or "No concerns"-type responses are usually not attached**

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Project File for the Subject Application  | <input checked="" type="checkbox"/> Estero Area Plan and Update EIR                                   |
| <u>County documents</u>   | <input checked="" type="checkbox"/> Los Osos Circulation Study  |
| <input type="checkbox"/> Airport Land Use Plans   | <u>Other documents</u>  |
| <input checked="" type="checkbox"/> Annual Resource Summary Report  | <input checked="" type="checkbox"/> Archaeological Resources Map                                      |
| <input type="checkbox"/> Building and Construction Ordinance  | <input checked="" type="checkbox"/> Area of Critical Concerns Map                                     |
| <input checked="" type="checkbox"/> Coastal Policies  | <input checked="" type="checkbox"/> Areas of Special Biological Importance Map                        |
| <input checked="" type="checkbox"/> Framework for Planning (Coastal & Inland)   | <input checked="" type="checkbox"/> California Natural Species Diversity Database                     |
| <input checked="" type="checkbox"/> General Plan (Inland & Coastal), including all maps & elements; more pertinent elements considered include: | <input checked="" type="checkbox"/> Clean Air Plan  |
| <input checked="" type="checkbox"/> Agriculture & Open Space Element  | <input checked="" type="checkbox"/> Fire Hazard Severity Map  |
| <input checked="" type="checkbox"/> Energy Element  | <input checked="" type="checkbox"/> Flood Hazard Maps   |
| <input checked="" type="checkbox"/> Environment Plan (Conservation, Historic and Esthetic Elements)   | <input checked="" type="checkbox"/> Natural Resources Conservation Service Soil Survey for SLO County |
| <input checked="" type="checkbox"/> Housing Element   | <input checked="" type="checkbox"/> Regional Transportation Plan                                      |
| <input checked="" type="checkbox"/> Noise Element   | <input checked="" type="checkbox"/> Uniform Fire Code   |
| <input checked="" type="checkbox"/> Parks & Recreation Element  | <input checked="" type="checkbox"/> Water Quality Control Plan (Central Coast Basin – Region 3)       |
| <input checked="" type="checkbox"/> Safety Element  | <input checked="" type="checkbox"/> GIS mapping layers (e.g., habitat, streams, contours, etc.)       |
| <input checked="" type="checkbox"/> Land Use Ordinance  | <input type="checkbox"/> Other  |
| <input type="checkbox"/> Real Property Division Ordinance   |   |
| <input checked="" type="checkbox"/> Trails Plan   |   |
| <input type="checkbox"/> Solid Waste Management Plan  |   |



In addition, the following project specific information and/or reference materials have been considered as a part of the Initial Study:

**Biological Screening and Constraints Analysis, prepared by SWCA, October 7, 2008**

**Morro Shoulderband Snail Protocol Survey Report, prepared by SWCA, March 21, 2009**

**Morro shoulderband Snail Recovery Action Plan for the Sweet Springs Nature Preserve, Los Osos, San Luis Obispo County, California, prepared by SWCA, June 2011**

**Cultural Resource Inventory of the Eight Acre Expansion of the Sweet Springs Nature Preserve, Bertrando and Bertrando Research Consultants, October 30, 2009**



## Exhibit B - Mitigation Summary Table

### Biological Resources

- BR-1 **All ground disturbing activities** will be restricted to the dry season (June 1 through October 31) when Morro shoulderband snails (MSS) are typically inactive and less likely to move into the construction area.
- BR-2 Preconstruction surveys for Morro shoulderband snail shall be conducted **prior to any ground disturbance** in those areas to be affected by grading and other construction-related activities.
- BR-3 **Prior to site disturbance**, exclusion fencing shall be installed under the direction of a qualified biologist to ensure that areas occupied or potentially occupied by Morro shoulderband snail are not impacted. The fence will remain in place throughout the duration of the project.
- BR-4 A qualified biologist shall monitor construction activities to ensure that Morro shoulderband snail have not moved into the construction site during mist conditions such as heavy dew, fog, or rain., In the event such conditions occur, the biologist shall conduct another pre-activity survey prior to resumption of work. The Service will be contacted immediately if Morro shoulderband snails are located in the construction areas during such surveys. Construction shall not be resumed until all Morro shoulderband snail issues have been resolved.
- BR-5 **Prior to site disturbance**, an environmental awareness training shall be conducted for all construction workers at the site. The Environmental Awareness training shall be conducted by a qualified biologist.

### Cultural Resources

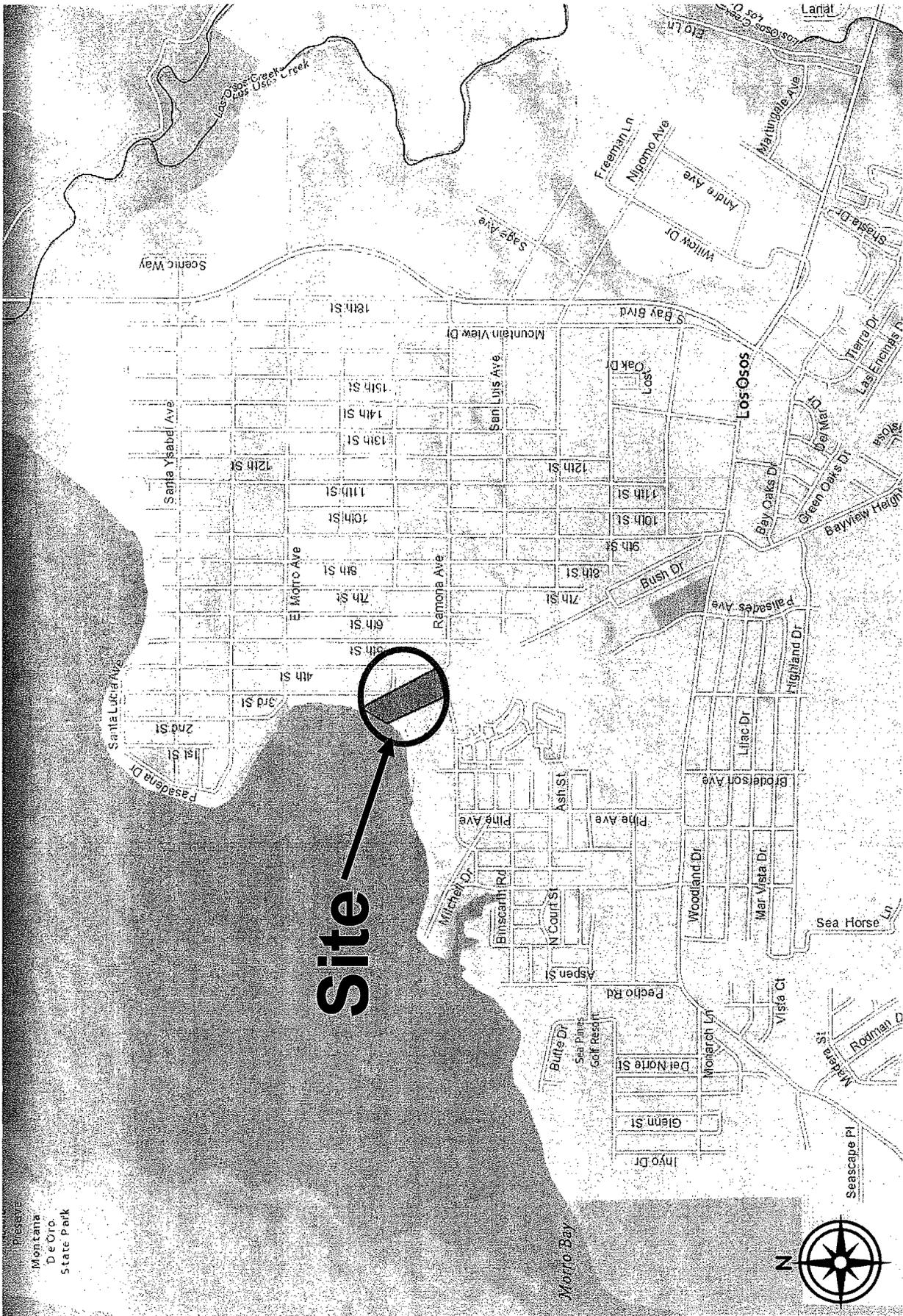
- CR-1 **Prior to issuance of construction permit**, the applicant shall submit a monitoring plan, prepared by a subsurface-qualified archaeologist, for the review and approval by the Environmental Coordinator. The monitoring plan shall include at a minimum:
- A. List of personnel involved in the monitoring activities;
  - B. Description of how the monitoring shall occur;
  - C. Description of frequency of monitoring (e.g. full-time, part time, spot checking);
  - D. Description of what resources are expected to be encountered;
  - E. Description of circumstances that would result in the halting of work at the project site (e.g. What is considered "significant" archaeological resources?);
  - F. Description of procedures for halting work on the site and notification procedures; and
  - G. Description of monitoring reporting procedures.
- CR-2 **During all ground disturbing construction activities**, the applicant shall retain a qualified archaeologist (approved by the Environmental Coordinator) to monitor all earth disturbing activities, per the approved monitoring plan. If any significant archaeological resources or human remains are found during monitoring, work shall stop within the immediate vicinity (precise area to be determined by the archaeologist in the field) of the resource until such time as the resource can be evaluated by an archaeologist and any other appropriate individuals. The applicant shall implement the mitigation as required by the Environmental Coordinator.

- CR-3 **Upon completion of all monitoring/mitigation activities, and prior to occupancy or final inspection (whichever occurs first)**, the consulting archaeologist shall submit a report to the Environmental Coordinator summarizing all monitoring/mitigation activities and confirming that all recommended mitigation measures have been met. If the Phase III program is not complete by the time final inspection or occupancy will occur, the applicant shall provide to the Environmental Coordinator, proof of obligation to complete the required analysis.
- CR-4 **Prior to ground disturbing activities**, all labor crews shall be trained on the identification of archaeological remains and instructed in the proper steps to take in the event archaeological remains are exposed. The training shall be conducted by a qualified archeologist.





RESERVE  
Montana  
De Oro  
State Park



Site

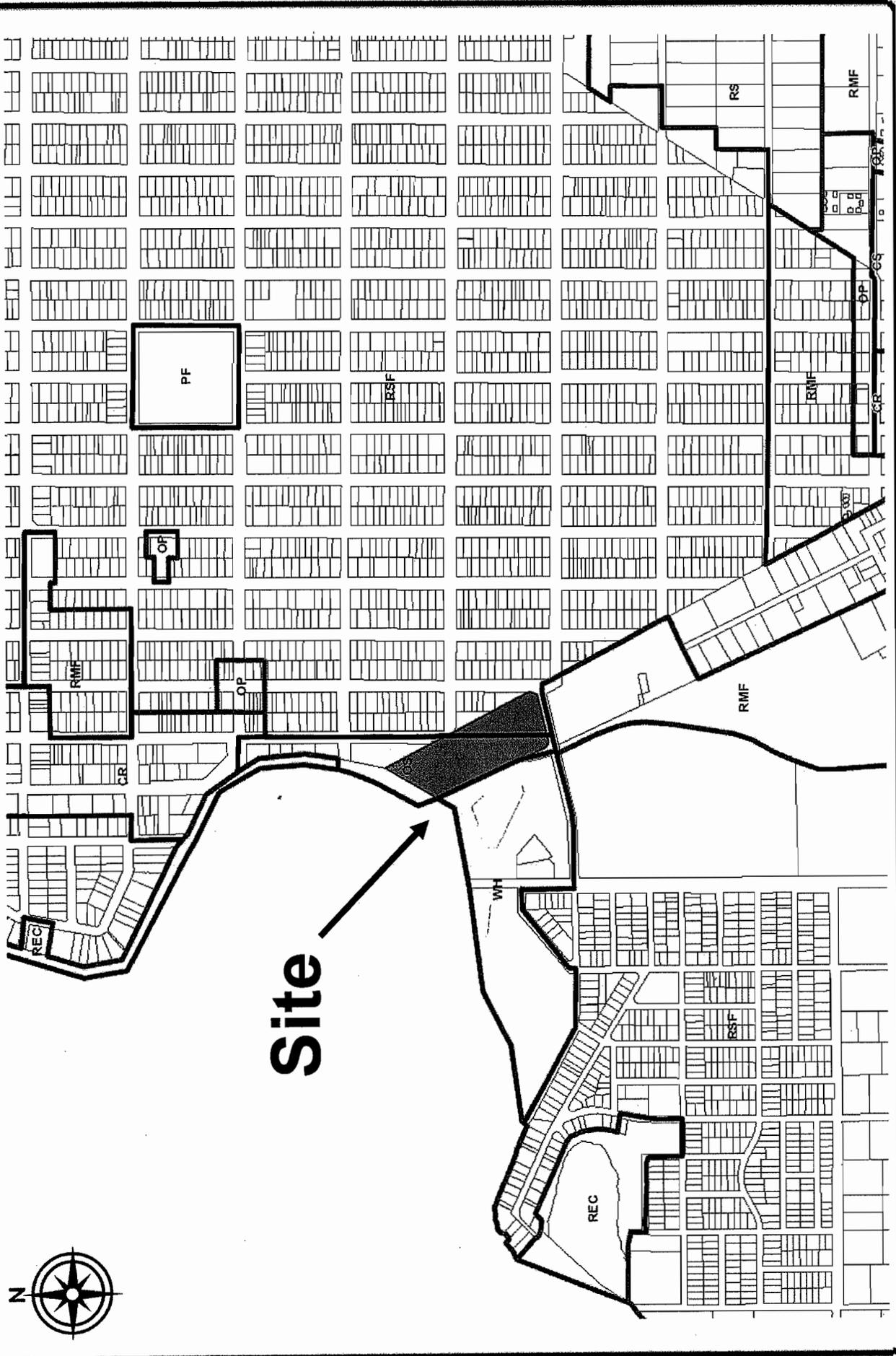
PROJECT

Minor Use Permit  
MCAS DRC2011-00013

EXHIBIT

Vicinity Map





**Site**

EXHIBIT

Land Use Category Map



PROJECT

Minor Use Permit  
MCAS DRC2011-00013

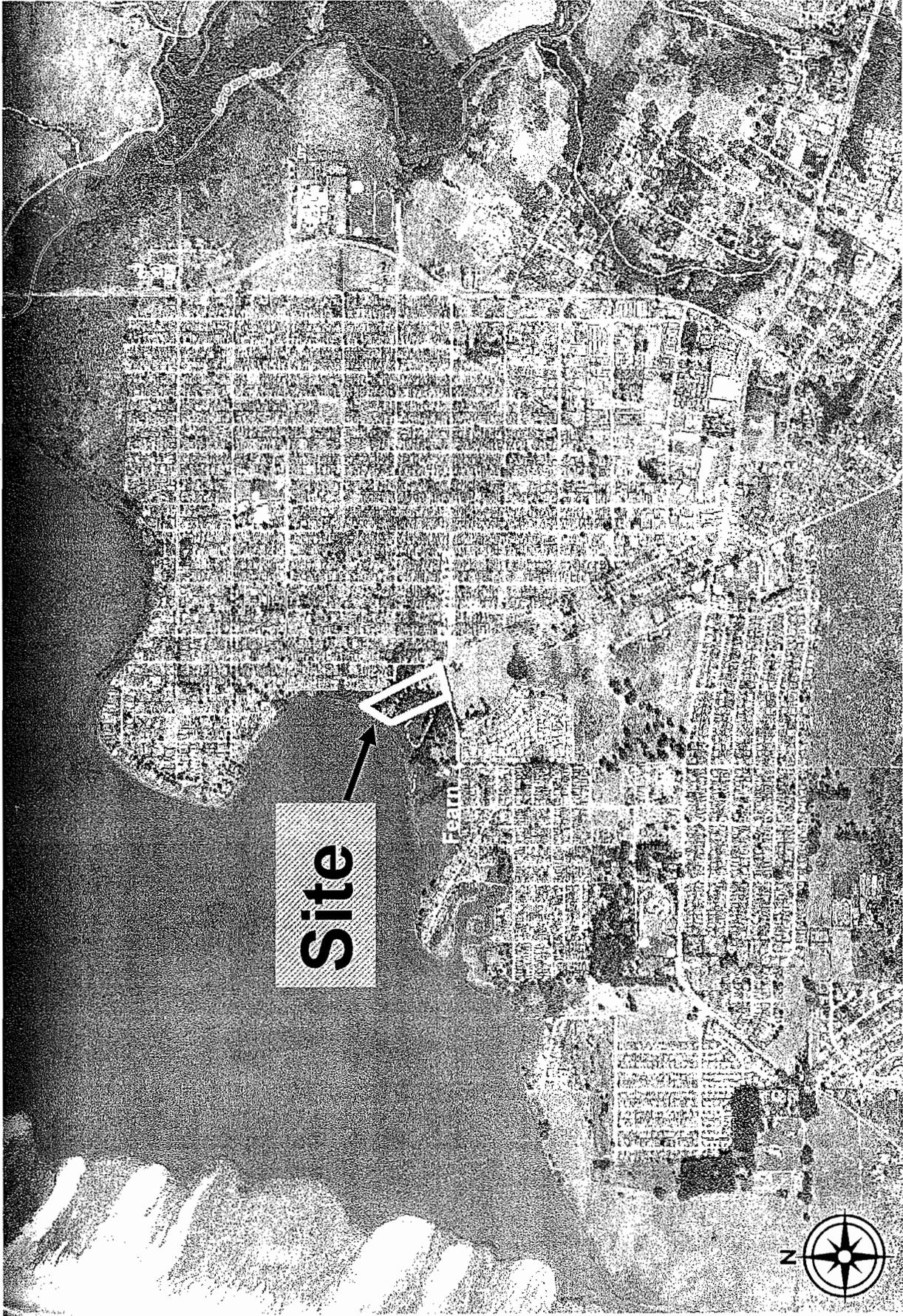
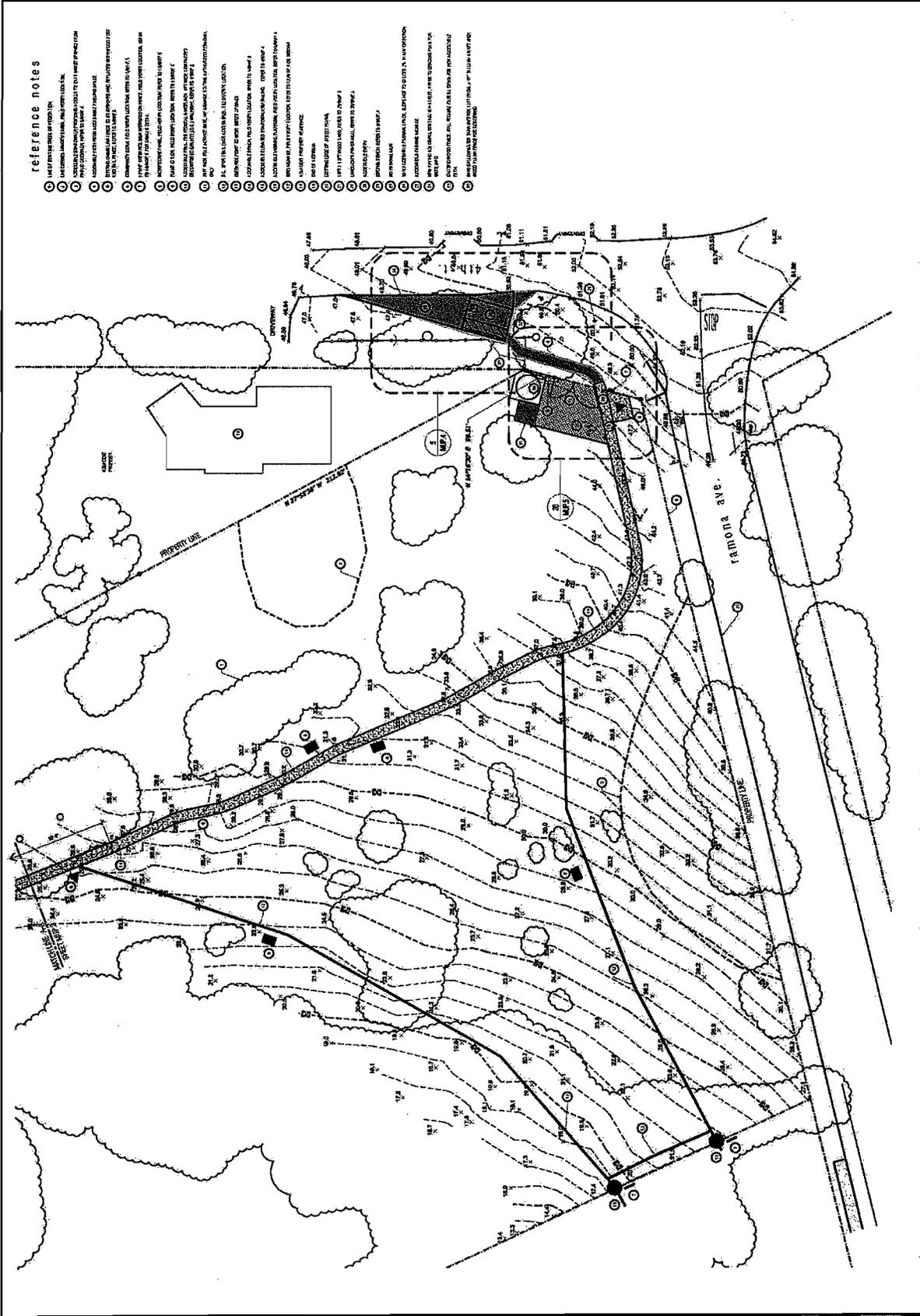


EXHIBIT  
Aerial Photograph



PROJECT  
Minor Use Permit  
MCAS DRC2011-00013





20 Enlarged site area A

REFERENCE NOTES

- 1. ALL DISTANCES ARE IN FEET.
- 2. ALL DISTANCES ARE TO THE CENTERLINE UNLESS OTHERWISE NOTED.
- 3. ALL DISTANCES ARE TO THE CENTERLINE UNLESS OTHERWISE NOTED.
- 4. ALL DISTANCES ARE TO THE CENTERLINE UNLESS OTHERWISE NOTED.
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- 19. ALL DISTANCES ARE TO THE CENTERLINE UNLESS OTHERWISE NOTED.
- 20. ALL DISTANCES ARE TO THE CENTERLINE UNLESS OTHERWISE NOTED.



EXHIBIT  
Enlarged Site Plan

PROJECT  
Minor Use Permit  
MCAS DRC2011-00013





## Appendix F: **Photo Documentation**



**PHOTO 1:**  
View of the existing trail entrance at the central preserve.

Photo taken on March 21, 2016.



**PHOTO 2:**  
Representative view of the existing trail through the central preserve

Photo taken on March 21, 2016.



**PHOTO 3:**

Representative view of the existing habitat, trail railing, and trail signage on the central preserve.

Photo taken on March 21, 2016.



**PHOTO 4:**

Representative view of the existing perimeter fence along Ramona Avenue.

Photo taken on March 21, 2016.



**PHOTO 5:**  
Representative view of the on-going habitat restoration activities and proposed trail alignment on the east preserve. The proposed trail would follow the path of disturbance that is situated between the dune scrub restoration areas in the photo.

Photo taken on March 21, 2016.



**PHOTO 6:**  
View of existing scrub habitat located in the central preserve.

Photo taken on March 21, 2016.



**PHOTO 7:**

Representative view of the wetland habitat that occurs in the northern and western portions of the preserve

Photo taken on March 21, 2016.



## Appendix G: **Cultural Resources Compliance Form**

# REQUEST FOR CULTURAL RESOURCE COMPLIANCE

U.S. Fish and Wildlife Service, Region 1 and Region 8

<b>Date of Request:</b>	<b>Proposed Start Date:</b>
6-18-2014	9-1-2014

<b>Project Name:</b>		Sweet Springs Nature Preserve Public Access Improvements				<b>FWS Program:</b> (ES, Refuges, Fisheries, Fire...)		Endangered Species Act	
						<b>Funding Source:</b> (Partners, Refuges, TEA-21, HCP, NAWCA...)		Private	
<b>State:</b> CA, ID, HI, NV, OR, WA		California	<b>EcoRegion:</b> CBE, IPE, KCE, NCE		Central California Foothills and Coastal Mountains		<b>FWS Unit: Org Code:</b>		
<b>Project Location:</b>		<b>County</b>	<b>Township</b>	<b>Range</b>	<b>Section</b>	<b>FWS Contact:</b> Name, Tel#, Address		Julie Vanderwier	
		San Luis Obispo	30.s	11.e	NA			805.644.1766 ext. 222 ventura fish & wildlife office 2493 portola road, suite b ventura, california 93003	
<b>USGS Quad:</b>		Morro Bay South				<b>Date of Request:</b>		<b>Proposed Project Start Date:</b>	
<b>Total project acres/ linear ft/m:</b>			<b>APE Acres / linear ft/m (if different)</b>			<b>6-18-2014</b>		<b>9-1-2014</b>	
8.0 acres/1000lf/300m			Same						
Have you consulted with Tribe(s)?		Have you consulted with other interested parties?		<b>Is there another federal agency involved with this project?</b>		<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		If yes, provide name:	
Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>					Yes	<input checked="" type="checkbox"/>
<b>MAPS Attached</b>		<b>Check below</b>		<b>Note: Contact the CRT before making FWS the Lead Agency. If yes, which agency is taking lead for Section 106 compliance?</b>		FWS		Other Agency	
Copy of portion of USGS Quad with project area marked clearly <b>(required)</b>		X							
Photocopy of aerial photo showing location <b>(if available)</b>		X		Project (sketch) map showing Area of Potential Effect with locations of specific ground altering activities <b>(required) Included in aerial photo/map</b>					
				Any other project plans, photographs, or drawings that may help CRT in making determination <b>(if available)</b>					
<b>Directions to Project:</b> <small>(if not obvious)</small>		From Ventura California- Take highway 101 north to Los Osos Valley Road. Take Los Osos Valley Road to 9 <sup>th</sup> Street. Turn Right on 9 <sup>th</sup> Street. Follow 9 <sup>th</sup> Street (becomes Ramona Avenue) to 4 <sup>th</sup> Street. Go left on Ramona Avenue at 4 <sup>th</sup> Street. Site is on your right.							
<b>Description of Undertaking:</b>		Describe proposed project and means to facilitate (e.g., provide funds to revegetate 1 mile of riparian habitat, restore 250 acres of seasonal wetlands, and construct a 5-acre permanent pond). How is the project designed (e.g., install 2 miles of fence and create approximately 25' of 3' high check dam)?							
		Install coastal access/viewing trail, restore native dune scrub and wetland vegetation, refigure existing fence line, install interpretive signage including native American specific signs, and maintain facilities and habitats in the preserve. Funding will be provided by local grants, donations, and other means. Complete Project Description is attached.							

Return Form and maps to: [Virginia\\_parks@fws.gov](mailto:Virginia_parks@fws.gov)  
 If unable to send digitally, mail or fax to USFWS Region 1 Cultural Resources Team, 20555 SW Gerda Lane, Sherwood, OR 97140  
 Questions: 503-625-4377 or fax 503-625-4887

<b>Area of Potential Effects (APE):</b>	<p>Describe where disturbance of the ground will occur. What are the dimensions of the area to be disturbed? How deep will you excavate? How far apart are fenceposts? What method are you using to plant vegetation? Where will fill be obtained? Where will soil be dumped? What tools or equipment will be used? Are you replacing or repairing a structure? Will you be moving dirt in a relatively undisturbed area? Will the project reach below or beyond the limits of prior land disturbance? Differentiate between areas slated for earth movement vs. areas to be inundated only. Is the area to be inundated different from the area inundated today, in the recent past, or under natural conditions? Provide acres and/or linear ft/m for all elements of the project.</p>
	<p>The area of disturbance is intact but has been disturbed by past management activities including eucalyptus and cypress plantation, unimproved public access, dumping, and grading. Area of disturbance for the trail will occur on the eastern portion of the preserve (see included map). Area of disturbance for habitat restoration activities will occur throughout the preserve. Excavations for the trail would be less than 6 inches. Excavations for the fence posts would be approximately 36 inches. Excavations for vegetation installation (and removal) would be approximately 12 to 16 inches. Fence posts will be approximately 10 feet apart. Fill will be applied to the trail surface and would likely consist of decomposed granite obtained from a local supplier. Fill depths would be less than 12 inches. Displaced soil would remain on-site, in-situ. The trail would be installed with standard hand tools (shovels, rakes, McLouds, hammers, etc). Large tree removal for habitat restoration would require chainsaws, truck mounted booms, and potentially an excavator with grapple attachment. No structures will be replaced. A detailed project description and maps are provided.</p>



<b>Environmental and Cultural Setting:</b>	<p>Briefly describe the environmental setting of the APE. <b>A)</b> What was the natural habitat prior to modifications, reclamation, agriculture, settlement? <b>B)</b> What is land-use history? When was it first settled, modified? How deep has it been cultivated, grazed, etc.? <b>C)</b> What is land use and habitat today? What natural agents (e.g., sedimentation, vegetation, inundation) or cultural agents (e.g., cultivation) might affect the ability to discover cultural resources? <b>D)</b> Do you (or does anybody else) know of cultural resources in or near the project area?</p>
	<ul style="list-style-type: none"> <li>A) Habitat prior to modifications included coastal dune scrub and wetland areas.</li> <li>B) Sweet Springs Preserve consists of three parcels; West Sweet Springs (west preserve), Central Sweet Springs (central preserve), and East Sweet Springs (east preserve). The three parcels are directly adjacent to each other and have been managed for various land uses since the early 1900's. Past land uses have included a eucalyptus and Monterey cypress plantation, a private residence, duck hunting area, and several proposed developments. The varied history of the parcels is made evident by the fragmented nature of the habitat communities currently existing on the preserve. In 1981, Audubon was gifted the west and central preserve areas. By 1988, Audubon finalized the Sweet Springs Marsh Resource Enhancement and Access Management Plan and began restoring the native habitats. Audubon acquired the east preserve in 2008. The 2008 acquisition spurred concerns regarding Audubon's management actions and their affects on sensitive resources. Immediately following the 2008 acquisition, Audubon began updating the 1988 management plan to include the annexed property. Depth of past cultivation/grading on the preserve varies but appears to be shallow throughout the preserve.</li> <li>C) Current land use is a nature preserve with wetlands, coastal dune scrub, eucalyptus and cypress groves, and veldt grass.</li> <li>D) Cultural resources have been documented on the site. Refer to provided Phase 1 Surface Survey.</li> </ul>

Please return this RCRC and map showing APE digitally, if possible, to [virginia\\_parks@fws.gov](mailto:virginia_parks@fws.gov). Questions, call 503-625-4377

Return Form and maps to: [Virginia\\_parks@fws.gov](mailto:Virginia_parks@fws.gov)  
 If unable to send digitally, mail or fax to USFWS Region 1 Cultural Resources Team, 20555 SW Gerda Lane, Sherwood, OR 97140  
 Questions: 503-625-4377 or fax 503-625-4887

## **1.1 Project Description**

As the owner and manager of Sweet Springs Nature Preserve, MCAS wishes to: provide public access to east Sweet Springs, maintain and/or replace improvements throughout the entire preserve, and restore native vegetation throughout the preserve, subject to obtaining required regulatory authorization. Therefore, the project description has been separated into the East Sweet Springs improvements and remaining activities throughout the entire 30.25-acre preserve.

### **1.1.1 East Sweet Springs**

The access improvements on East Sweet Springs include an Americans with Disabilities Act (ADA) compliant trail and boardwalk system including interpretive elements that will guide visitors to a viewing platform along the shoreline of the Morro Bay Estuary. The conceptual alignment of the trail system and its associated interpretive elements that will be installed as a part of this project are shown in Figure 2.

In order to provide improved access for the public and reduce impacts to sensitive resources, the trail system will include one linear main trail constructed of a combination of decomposed granite and elevated wooden or composite boardwalk, which will lead from the preserve entrance to the viewing platform. The main trail will be at least 5 feet wide to provide ADA accessibility. Two spur trails will connect the main trail to the existing Central Sweet Springs Preserve, and one small loop may be installed near the middle of the main trail to provide a resting area. The main trail will originate from the southeast corner of the East Sweet Springs parcel. As recent cultural studies and MSS surveys indicate, there are sensitive resources in the areas close to the shoreline. To protect these resources, the trail will transition to an elevated boardwalk (see description below). All existing informal volunteer trails will be closed and re-vegetated to help protect sensitive areas. If needed, temporary signage and/or fencing will be installed to discourage visitors from using the decommissioned trails and shortcuts.

With oversight by appropriate construction site monitors, trail construction will begin with minor grading/earthwork to level the trail surface and prepare the trail bed. For all new/improved trails, edging will be constructed to formally delineate the trail and contain the fill material used for the trail surface. For the main trail, a geotextile fabric will be installed to line the trail bed. Decomposed granite or an equivalent will be stockpiled at the southeast service entrance. Fill material will be delivered to the trail bed via a pickup truck or bobcat where it will be leveled and compacted. The connector spur will be constructed with the sand found onsite. All trails will be installed on contour so that the drainage regime is not significantly altered, therefore minimizing runoff, erosion, and sedimentation during and following construction.

The main trail originates from the southeast corner of the East Sweet Springs Preserve parcel. The final section of proposed trail that leads to the shoreline of the Morro Bay Estuary will be a boardwalk to minimize impacts to biological and cultural resources.

Very little grading will be necessary for construction of the elevated boardwalk. Soil disturbance will involve shallow excavation (less than 1 foot), minor leveling, and compaction during the creation of footings for the boardwalk, which will be constructed to "float" on the soil. The boardwalk will be designed and installed to meet ADA

specifications and County structural requirements. The boardwalk will be 5 feet (60 inches) wide and the walking surface will vary in height above the ground to compensate for changes in grade. One section will be higher than 30 inches above ground; therefore, a railing will be installed from that point to the overlook.

The boardwalk will end at a viewing platform at a distance of approximately 90 feet south and 6 feet in elevation above the high tide shoreline. The platform will be no larger than 24 x 16 feet to accommodate multiple visitors and groups and will include interpretive panels..

The generous width of the trail and boardwalks will negate the need to construct frequent wide spots in the trail to accommodate passage and resting areas. Resting spots will be constructed every 200 feet in areas of the trail where the slope exceeds 5%. Three benches, including at least one that is ADA compliant, will be installed at the trail loop located approximately equidistant between the entrance and the overlook.

Interpretive panels will be installed along the main trail, spur, and boardwalks. The interpretive plan includes a community kiosk at the entrance to the preserve, two grantor/partners signs (one at the entrance to the preserve and one at the southwest pedestrian entrance), three interpretive panels will be located along the length of the main line and one will be mounted at the overlook. Additionally, the trail system will feature eight to 16 plant identification signs. The community kiosk will be a roofed two-sided upright structure with information about the preserve and current updates on the outside panels. The grantor/partners entrance panels will be 36 x 24 inches, installed on upright double pedestals. The interpretive panels will be 24 x 36 inches, mounted on double cantilevered pedestals at a 45 degree angle. The plant identification signs will be 6 x 10 inches, mounted on mini posts at a 45 degree angle. With the exception of the small plant identification signs, all pedestals will be anchored into concrete footings and will require excavation to a depth of 24 inches.

The chain link fence between East and Central Sweet Springs and along Ramona Drive and 4<sup>th</sup> Street will be removed. A post and rail fence, which matches the existing fencing at the preserve, will be installed on the same alignment along Ramona Drive and 4<sup>th</sup> Street. The boundary between the east and central preserves will be left open. The fence will cross through a culturally-significant site and habitat for MSS; therefore, the appropriate monitors will oversee construction. The post and rail fence will include 6-inch-diameter, 5- to 6-foot-tall peeler logs, anchored in cement at a depth of 2 feet, connected by two 3-inch-diameter, 8-foot stringer rails.

A bicycle rack will be installed at the primary entrance. Bicycles will not be allowed on the preserve. Trash receptacles will be available to visitors, which will be stored in a small wooden structure installed at the entrance. The kiosk will include a "mutt mitt" dispenser.

Ongoing habitat restoration at East Sweet Springs Preserve consists of herbaceous invasive species removal, with a focus on veldt grass (*Ehrharta calycina*) removal. All habitat restoration activities will be conducted in accordance with this HCP and per the RAP. Therefore, non-native species removal will be monitored by a Service-approved MSS monitor permitted to survey for and handle MSS. A combination of manual (hand pulling), mechanical (weedwhacking and/or mowing), and chemical (herbicide spray) techniques will be used to remove herbaceous invasive plants from the site.

Revegetation and stabilization of the site will be achieved through a combination of native seeding and container stock planting. Seeds and cuttings will be collected locally and/or onsite where possible. Seed will be hand broadcast following construction activities and on sensitive areas where soil disturbance is not permissible. The seeding rate will be approximately 50 pounds per acre to compete with invasive species on newly disturbed portions of the site and to provide dense cover of sensitive areas. One-gallon container stock will be contract-grown locally and installed onsite in areas where soil disturbance is allowed. Shovels will be used to dig the holes and all container stock will be watered. Mulch will be applied around each plant to hold in moisture and discourage the establishment of exotic species. For additional information related to planting procedures, refer to the RAP in Appendix A.

The plant species to be installed onsite will be chosen from the palette identified in the Service-approved RAP (refer to Appendix A). These species were included if they met all of the following criteria: they have been found at East Sweet Springs Preserve during site specific surveys; they can be grown locally or acquired from commercial seed sources; and they have established successfully from seed and/or containers on local restoration sites.

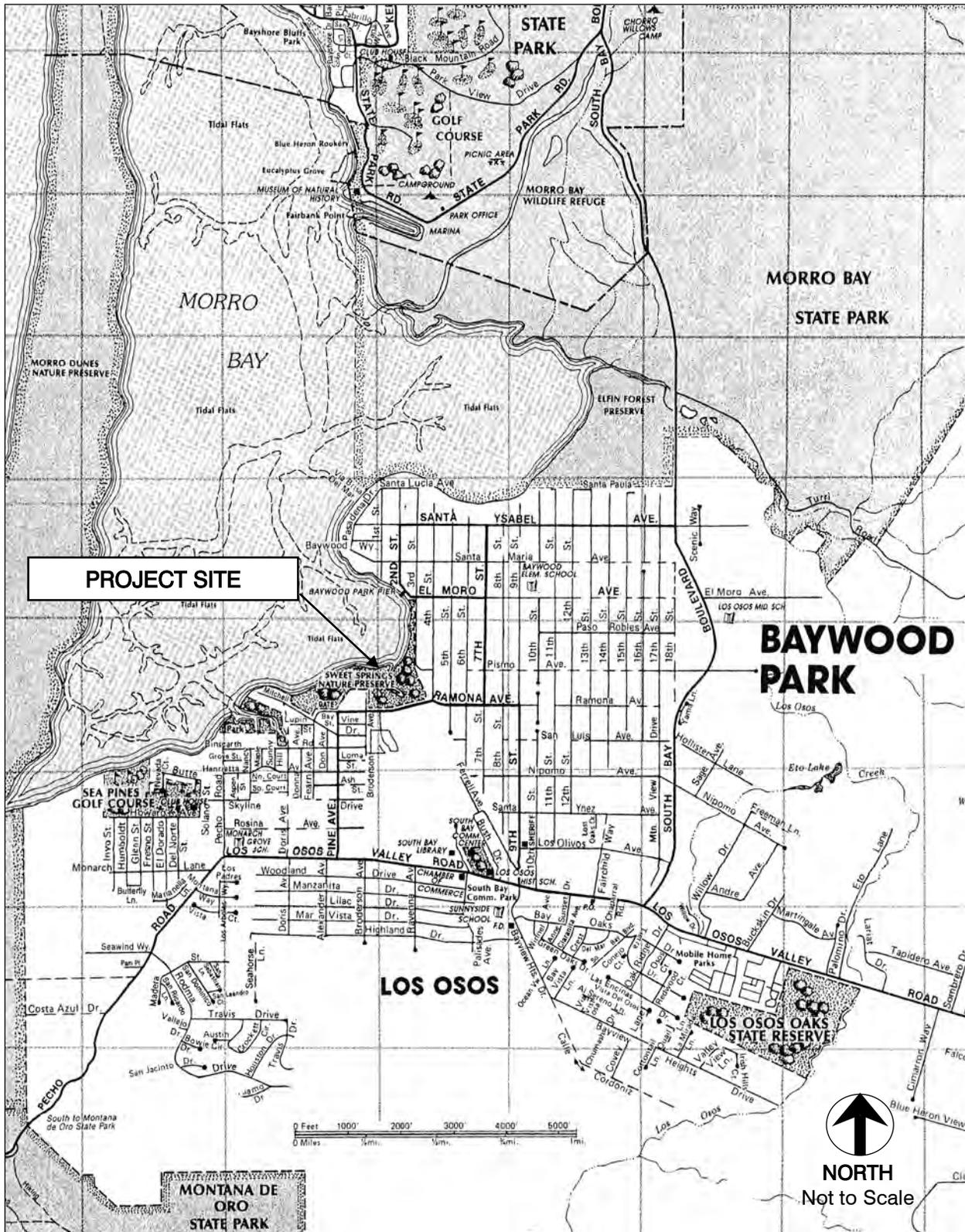
Supplemental irrigation will be required during plant establishment. Irrigation water will be provided by the existing water storage tank at the southeast corner of the parcel. Irrigation will be achieved through the use of a temporary drip system consisting of above ground polyvinyl chloride (PVC) and/or 0.5-inch drip line on battery-operated timers. The systems will be designed for each area when restoration has begun. The irrigation techniques used will be non-erosive.

### **1.1.2 Entire Preserve**

Some of the infrastructure at Central Sweet Springs is over 25 years old and will require major maintenance or replacement within the next several years and on-going maintenance in perpetuity. In addition, vegetation management and habitat improvement activities are necessary to maintain and enhance biological value, enhance visitor experience, and maintain safety. Such activities may include but are not limited to trail raking/maintenance, trash and debris removal, fence repairs, kiosk and interpretive sign repairs, and foot bridge repairs.

Approximately 7 acres of the preserve supports large eucalyptus (*Eucalyptus globulus*) and Monterey cypress (*Cupressus macrocarpa*) trees. The existing and proposed trail meanders through the eucalyptus trees. In order to maintain a safe walking trail, it is necessary to remove certain branches or trees that pose a risk of falling. Tree trimming and removal occurs as necessary and is typically conducted by a certified arborist or the California Conservation Corps.

Figure 1. Project Location Map



**HCP Mitigation Area & Habitats**

Sweet Springs Preserve

**Legend**

-  Live MSS Occurrences
-  Proposed Trail
-  Existing Trail
-  0.5 Acre HCP Mitigation Area
-  Existing Recovery Area 1
-  Eucalyptus Woodland
-  Monterey Cypress
-  Non-native Perennial Grassland
-  Maritime Chaparral
-  Coastal Scrub - remnants
-  Wetlands



1:2,000

