

**INITIAL STUDY MITIGATED NEGATIVE DECLARATION
FOR THE BOLSA CHICA LOWER MESA RESTORATION PROJECT,
HUNTINGTON BEACH, CALIFORNIA**

INTRODUCTION

The *Initial Study Mitigated Negative Declaration for the Bolsa Chica Lower Mesa Restoration Project, Huntington Beach, California*, was circulated for a public review beginning January 15, 2011, and ending on March 17, 2011. A Mitigated Negative Declaration (MND) is the California Environmental Quality Act (CEQA) document prepared when it has been determined that, with the inclusion of specified mitigation measures, a project will not have a significant effect on the environment. Pursuant to CEQA §15071, a MND is required to include the following information: a brief description of the project; the project's location; the name of the project proponent; a proposed finding that the project will not have a significant effect; a copy of the initial study documenting the reasons to support the finding; and mitigation measures included in the project to avoid potentially significant effects. Unlike an Environmental Impact Report (EIR) the MND is not required to include a discussion of project alternatives.

Prior to the adoption of an MND, the lead agency must allow the public an opportunity to review the document and comment on the document's content and conclusions. CEQA §15204(a) provides some direction for CEQA commenters stating that comments should focus on the proposed finding that the project will not have a significant environmental effect. A lead agency is required to evaluate comments to determine whether any portions of the MND require clarification. Only if the document is "substantially revised," is it required to be recirculated (CEQA §15073.5(a)). A substantial revision includes two specific situations, as follows:

1. A new, avoidable significant effect is identified requiring the addition of mitigation measures or project revisions;
2. A mitigation measure originally included in the MND will not reduce potential significant effects as originally stated and new mitigation or project revision is required.

After review of comments, an MND can be approved by the lead agency if it finds no substantial evidence that the project may have a significant effect on the environment.

In addition to the letter from the State Clearinghouse, which confirms the circulation to state agencies during the public review period, comment letters and e-mails were received from agencies and individuals. Letters received from private individuals, organizations, and state agencies during the public review period for the Draft MND are included in the following pages. In response to the comments received during the public review period, a summary of major issues was prepared. No new significant environmental effects have been identified for the project, and the severity of environmental impacts would not be increased. Revisions are intended to provide additional clarification and do not constitute significant changes to the project or environmental setting.

SUMMARY OF MAJOR ISSUES

Lead Agency/CEQA Process

Comments were received which requested that an Environmental Impact Report (EIR) be prepared. However, the respondents have failed to present a fair argument supported by substantial evidence that a significant impact would occur.

C Nichols/ L Klure/ M Singer/ S Marquez/ J Sherman/ P More/ T Livengood/ D Hawes/ G Griffin/ L Murray/ J Robins / A Copeland/ S Hori / D Hawes

In accordance with Section 15064 (a) of the Guidelines for the Implementation of the California Environmental Quality Act (Guidelines), an EIR must be prepared if there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment. Impacts are not normally assessed against some past or potential future point in time. Rather, impacts are to be assessed against a baseline consisting of existing physical conditions in the affected area as they exist at the time an environmental analysis is commenced (Guidelines Sec. 15126.2 (a)).

Public controversy has arisen about the proposed project and associated impacts. However, as stated in Section 15064 (f)(4), the existence of public controversy over the environmental effects of a project will not require preparation of an EIR if there is no substantial evidence before the agency that the project may have a significant effect on the environment. As stated in Section 15064 (f)(5):

Argument, speculation, unsubstantiated opinion or narrative, or evidence that is clearly inaccurate or erroneous, or evidence that is not credible, shall not constitute substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion support by facts.

In accordance with Section 15064 (f)(2), if a project might potentially result in a significant effect on the environment but the potentially significant effect would be avoided or mitigated to a point where clearly no significant effect on the environment would occur, then preparation of a mitigated negative declaration is appropriate. Thus, a Mitigated Negative Declaration has been prepared in this case.

A number of comments received have indicated a desire for additional time to review the MND.

S Touchi/ G Adams/ P Smith/ D Hawes/ J Robins/ R Griswold/ L Murray/ S Hori / D Hawes

In accordance with Section 15105 of the Guidelines for the Implementation of the California Environmental Quality Act ("Guidelines"), a minimum of twenty days must be provided for the review of a negative declaration or a mitigated negative declaration. For projects submitted to the State Clearinghouse, for review by state agencies, a minimum of thirty days must be provided for public review, unless a shorter period, not less than twenty days, is approved by the State Clearinghouse

In accordance with Section 15072 of the Guidelines, notice must be provided to the public, responsible agencies, trustee agencies, and the county clerk. In accordance with Section 15072 (b), notice is to be provided by mail to all organizations and individuals who have previously requested such notice in writing and at least by one of the following methods:

1. Publication in a newspaper of general circulation, or
2. Posting of the notice on and off the property involved, or

3. Direct mail to owners and occupants of contiguous properties as identified on the latest equalized assessment roll.

A notice of intent to adopt a mitigated negative declaration (MND) was published in the *Orange County Register*, which is a newspaper of general circulation in the affected area, on January 18, 2011. The notice was also posted on the Department of Fish and Game web site. Interested parties were advised that comments would be accepted through February 15, 2011. Midway through the initial review period, enhanced graphics were provided on the Fish and Game web site. On February 17, 2011 a notice was published in the *Register* that the comment period had been extended through March 17, 2011, providing approximately two months for the public to comment.

Thus, CEQA requirements regarding public notice were fully met, and the opportunity to comment well exceeds legal minimums.

Aesthetics

Comments were received that requested a discussion of impacts associated with the wind turbines, a portable office, and proposed coast live oak trees.

J Hill/ J Robins/ D Hawes/ J Villasenor/ S Hori/ L Murray/ G Bruno/ L Reinstein

Wind turbines are no longer included in project plans. The largest man-made elements will be a storage container for tools and supplies, portable lavatory(ies) for workers and volunteer use, and four 2,825-gallon rainwater harvesting storage tanks for plant propagation (each approximately 8 feet in height and 8 feet in diameter). These will be partially concealed by the 4-foot-tall hummocks to be created in the nursery area and will occupy a small fraction of one percent of the 120-acre site. Given these factors, no significant impact on aesthetics is anticipated.

In response to comments the proposed placement of coast live oaks along the project's northern border parallel to Warner Avenue has been removed from the plan.

Air Quality

Comments were received regarding consistency with the 2007 Air Quality Management Plan (AQMP), requesting information regarding construction emissions and a health risk assessment.

J Villasenor/ Brightwater community/ S Hori

CATEGORY A: AQMP

The commenter requests that the project be reviewed in light of the AQMP.

The project will not create any direct source of air pollutions nor will it lead to growth beyond that anticipated in the 2007 AQMP. Thus, no significant impact will occur.

CATEGORY B: Construction Emissions

The commenter requested information regarding construction emissions.

The greatest use of equipment will occur during project setup and clearing of existing vegetation. No large construction crews will be working on-site, and thus construction traffic and associated emissions will be minimal. Equipment will be limited to one light tractor during the ground-preparation phase and one tractor-mounted deck mower during vegetation clearance. The nearest sensitive receptors are

residents in the Brightwater development separated from the restoration area by a vegetated buffer and slope and residents northeast of the site across Warner Avenue. Given the limited pieces of equipment to be utilized, the distance to the nearest sensitive receptors, and implementation of the measures outlined in the MND (i.e., watering of exposed soils to eliminate potential dust and proper maintenance of equipment in compliance with all State and federal requirements), no significant localized impacts are anticipated to occur during construction.

CATEGORY C: Health Risk Assessment

The commentor requested a health risk assessment be performed.

The greatest use of equipment will occur during project setup and clearing of existing vegetation. The health risks associated with diesel particulate matter are those related to long-term exposures (i.e., cancer and chronic effects). With certain exceptions related to workers and other factors, long-term health risk effects to residents are generally evaluated for an exposure period of 70 years (i.e., lifetime exposure). Because risk is based on a lifetime of exposure and because construction of any of the proposed project would be short-term, impacts due to construction diesel particulate matter would be less than significant.

A comment requesting the revisal of references was received.

J Villasenor

The following references have been revised:

- SCAQMD. South Coast Air Quality Management District. CEQA Air Quality Handbook, 1993 as supplemented by materials on-line at <http://aqmd.gov/ceqa/hdbk.html>.
- Building News Publications, Standard Specifications for Public Works Construction, 2012 (the "Greenbook").

Biological Resources

Comments were received on multiple aspects of the biological resources addressed by the proposed project as described in the Interim Land Management and Conceptual Restoration Plan (Interim Plan) for which the MND was prepared. In response to the comments about biological resources, a Final Restoration Plan for the Lower Mesa of the Bolsa Chica Ecological Reserve (Narrative Plan) was prepared. The Narrative Plan revises portions of the Interim Plan in order to clarify its development of an adequate long-term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa. Responses to major issues related to biological resources are based in part on the Narrative Plan which is included as an appendix to the Final MND. Because many comments were addressing similar environmental issues, responses to comments on biological resources are grouped under categories (e.g., habitats, species, details of the restoration plan, etc.). The summary of major issues indicates where responses to comments resulted in revisions to the Interim Plan and/or the addition of new information to the MND; however, as stated above in the Introduction, no new impacts were identified.

CATEGORY A: Impacts to Existing Wetlands/Habitat

Multiple comments were received expressing concern that the proposed project would be harmful to the project area wetlands.

Brightwater/ S Marquez/ J Villasenor/ D Hawes

The Warner Pond environmentally sensitive habitat area (ESHA) is located along the northern boundary of the Lower Mesa, adjacent to Warner Avenue. Warner Pond is an approximately 1.7-acre wetland (California Coastal Commission [Commission] 2000) (Narrative Plan, Section 2.2). As detailed in the MND, grading and access for the project will avoid this area assuring that the project will have no adverse effect to any existing wetland. In response to comments received on the MND, the Interim Plan has been revised. The Narrative Plan likewise avoids wetland impacts. All proposed activities occur in upland areas.

In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues, reduce impacts and do not constitute a “substantial revision” as defined in CEQA §15073.5.

CATEGORY B: Impacts due to Possible Erosion

Multiple comments were received questioning what erosion control measures would be employed during implementation of the project.

J Villasenor/ G Griffin/ S Hori/ D Hawes

Some comments included in this category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to clarify its development of an adequate long-term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

The Narrative Plan identifies five types of soils mapped within the restoration site (Narrative Plan, Section 3.2). Each soil type is identified by its consistency, vegetation, and erosion hazard. As detailed in the Narrative Plan Sections 9.1 and 11.1.2, weed removal will occur during the initial restoration implementation and 5-year Maintenance Program to control competition from weed species and then is expected to decrease substantially. Weed control methods are designed to minimize soil disturbance thereby minimizing erosion.

This project is a low-impact design with many project features that provide erosion or sediment control. By using a phased planting approach, natural vegetation will be preserved or new vegetation will be established in a majority of the site during all phases of the project. The vegetation will naturally minimize runoff volume and velocity and maintain water quality. Careful attention will be given to avoid overwatering and the creation of surface erosion. Additionally, the seasonal ponds created by this project are located in an area where water historically pools and runs off the mesa edge and, therefore, will prevent runoff from that area. Furthermore, the compost has an additional benefit of providing erosion and sediment control by increasing water infiltration, increasing water holding capacity, and decreasing runoff when incorporated into the soil. Additional erosion and sediment control best management practices (BMPs) will be implemented and include covering (tarping) any stockpiled materials or soils and constructing silt fences, straw bale barriers, fiber rolls, or other structures around stockpiles and disturbed areas as necessary to ensure that no erosion or runoff will result from this project. Overall, the initial eradication of existing weeds followed by on-going low-impact weed-control measures and use of erosion control and pollution prevention BMPs would assure that erosion of soils and runoff as a result of plant removal or construction activities would not occur. In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do

not result in the need for recirculation, as these changes clarify issues and reduce impacts and do not constitute a “substantial revision” as defined in CEQA §15073.5.

CATEGORY C: Indirect Impacts

Multiple comments were received questioning whether increased activities, both during and after completion of the project, would be harmful to existing project area species and habitat. Activities in question include increased public access to the trails and impacts resulting from volunteers, vehicles, and daily activity associated with implementing the project.

Brightwater/ J Villasenor/ L Murray/ G Griffin/ J Robins / D Hawes

Some comments included in the category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to develop an adequate long-term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

The protection of wildlife and habitat both during and after completion of the project is of the utmost importance. Avoidance and minimization techniques will be implemented for sensitive resources such as southern tarplant (*Centromadia parryi* ssp. *australis*), sensitive raptors, and silvery legless lizards (*Anniella pulchra pulchra*).

Annual surveys will be conducted by the restoration biologist prior to restoration and maintenance activities to identify and flag areas occupied by southern tarplant. Only volunteers that have received training to distinguish between southern tarplant and other tarplant species, such as fasciated tarplant (*Deinandra fasciculata*), will be allowed in these areas under the supervision of Bolsa Chica Land Trust (Bolsa Chica Land Trust) staff for weed eradication and planting activities in the southern tarplant enhancement areas.

Restoration activities are phased so that grassland outside of active restoration sites is always available for raptor foraging. Additionally, the use of weed whips within 250 feet of the eucalyptus grove ESHA will be restricted to outside of raptor breeding season. Site-specific avoidance and minimization measures will be developed in consultation with CDFG following the updated 2012 surveys in accordance with the protocol established in the Staff Report on Burrowing Owl Mitigation (CDFG 2012). Measures to avoid and minimize impacts to burrowing owl may include take avoidance (pre-construction) surveys, site surveillance, and the use of buffers, screens, or other measures to minimize impacts during project activities. Should any nests or burrows be observed in active restoration sites, all activities will be temporarily halted and the appropriate agencies notified.

To avoid impacts to silvery legless lizard, soil compaction and disturbance will be minimized and avoided. Volunteers will be confined to trails while outside of active restoration areas and the nursery to minimize soil compaction and disturbance. Grading and excavation activities will be restricted to the proposed seasonal pond creation area, roads, nursery, and composting and grassland seed harvesting facilities.

The use of avoidance and minimization techniques, coupled with volunteer training, would avoid indirect impacts to species and habitat both during and after completion of the project. In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues, and reduce impacts and do not constitute a “substantial revision” as defined in CEQA §15073.5.

CATEGORY D: Details of Restoration Plan

Multiple comments were received expressing concern with the details of the Interim Plan, as described in the MND.

S Marquez/ L Murray/ C Egger/ C Kutcher/ F Roberts/ M Singer/ L Klure/ R Greenfield/ D Pryor/ A Copeland/ M Yurko/ G Griffin/ K Shwing/ D Ebisu/ M Hecht/ T Livengood/ J Sherman/ P More/ J Robins/ J Villasenor/ Brightwater community/ S Hori/ D Hawes

Some comments included in the category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to clarify its development of an adequate long-term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

1. Some comments stated that the goal of Interim Plan should be to restore open native grassland on existing soils.

The California Department of Fish and Game (CDFG) agrees that the restoration plan should include the creation of native grasslands for raptor foraging habitat. This plan will result in enhanced habitat for all sensitive plant and wildlife species present at the Lower Mesa, including southern tarplant, silvery legless lizard, and sensitive raptor species. As stated in the MND, the goal of the project is to “enhance native habitat on the site.” As detailed in Section 4.0 of the Narrative Plan, the project serves to restore ecosystem function through habitat restoration with the following species-specific goals:

- Southern tarplant: The creation of seasonal ponds will increase the amount of suitable habitat for southern tarplant. The restoration of native grasslands will reduce competition from weed species in the non-native grassland and enhance the current southern tarplant habitat on the Lower Mesa.
- Raptor species: Restoration activities will enhance raptor foraging habitat through the creation of diverse habitats that can support a variety of species, including native grassland. Restoration activities will also enhance the eucalyptus grove ESHA through the addition of native trees and native shrubs. Restoration activities may also include the installation of artificial nesting platforms.
- Silvery legless lizard: Silvery legless lizard habitat will also be enhanced by increased soil moisture through the removal of weed species.

2. Some comments request justification for the Interim Plan’s overall reduction of native grassland in exchange for increased acreages of coastal sage scrub growth. Commenters state that the Plan should “soil match for each habitat type and then select the correct locally-found native species to populate each area.”

Currently, the project site is composed of non-native grassland and a eucalyptus grove, designated as an ESHA by the Commission for nesting and roosting habitat for raptors. The Narrative Plan will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa, including native grassland, coastal sage scrub, alkali marsh-upland transition, mule fat scrub, seasonal ponds, and raptor nesting and roosting habitat in the eucalyptus grove. The soils within the project site are shown in Section 3.2 of the Narrative Plan and the habitat types chosen for restoration are appropriate for those soil types. Native species have been selected to re-vegetate and re-populate the project site based on local plant populations and historic records found in Chester 2002, Chester et al. 2006, Consortium of California Herbaria (CCH) 2011, Harmsworth Associates 1999, Muns et al. 2004, Roberts 2008, and Reiser 2001. Species in the plant palettes for the coastal sage scrub, mule fat scrub,

alkali marsh-upland transition, and native grassland are native to the locality and suitable for the conditions present at the site. The plant species in the raptor foraging and nesting enhancement area within the eucalyptus grove ESHA have been selected based on habitat function for raptors. The species within the eucalyptus grove ESHA are native to California, but not necessarily to the locality. Seeds will be collected from plant populations at closest possible locations to the project site, when possible. Seeds may be collected from Bolsa Chica Ecological Reserve, Seal Beach National Wildlife Refuge, Upper Newport Bay, Crystal Cove State Park, and Dana Point Headlands pending permission from land managers. Suggested species for the plant palette are listed in Attachment 3 of the Narrative Plan. Additional comments concerning the Plan's plant palette are discussed under Category E, and detailed in the Narrative Plan, attached.

3. Comments raise concern over the Plan's overall approach to restoration, finding the Plan an "[a]gricultural (manipulative) approach." These comments focus on the need for an ecological perspective and are concerned that "changing the existing environmental conditions will inhibit restoration and potentially damage the seed bank of native species."

CDFG and the Bolsa Chica Land Trust have collaborated with local experts in the field of ecology and restoration biology to create an ecologically sound restoration plan. The current environmental conditions of the Lower Mesa include primarily non-native grassland comprising non-native ruderal weeds. Implementation of the Narrative Plan will result in the restoration of native diversity of habitat by collecting native seed to re-populate the project site. The collected seeds will be propagated in on-site nurseries.

The Narrative Plan no longer calls for disking, a method that was deemed as "agricultural" by commenters. The use of composting will be restricted to providing planting media in container plant propagation and use as a soil additive in the coastal sage scrub restoration areas. Composting on-site will reduce the amount of waste generated by this project and provide an educational opportunity for Bolsa Chica Land Trust volunteers.

Additionally, weed removal techniques in the Narrative Plan have been designed to minimize soil disturbance so that the seed bank of native species is not damaged. The grading activities associated with the preparation of the nursery, roads, and seed harvesting and composting grounds will not occur in areas known to currently or historically contain southern tarplant, so as not to damage the seed bank of that species.

4. Some comments question why planning documents do not reference scientific literature or identify the restoration ecologists who contributed to the plan per the Memorandum of Understanding (MOU).

Section 12.0 of the Narrative Plan cites references used in the design and development of the restoration plan. This list includes legal, governmental, and scientific resources.

5. Some comments request updated biological surveys prior to approval of the Plan.

A survey evaluating raptor species was performed by Bloom Biological (July 2011) and a survey evaluating southern tarplant was performed by CDFG at the project site in August 2011, prior to the completion of the Narrative Plan.

Additionally, the Narrative Plan contains the requirement for biological surveys for southern tarplant and burrowing owls to be performed as part of and prior to restoration activities. Annual southern tarplant surveys will be performed by the Restoration Biologist prior to restoration and maintenance activities so that southern tarplant populations may be flagged and avoided (see Narrative Plan, Section 6.1). An

updated burrowing owl survey will be performed on-site in Summer 2012 by CDFG prior to the implementation of this restoration plan. Additional take avoidance (pre-construction) surveys and site surveillance may be performed in accordance with the protocol established in the Staff Report on Burrowing Owl Mitigation (CDFG 2012) (see Narrative Plan, Section 6.2.1).

6. Comments question how the project would be supervised.

CDFG and the Bolsa Chica Land Trust appreciate the importance of on-going supervision throughout implementation of the plan to assure that required activities occur expertly and professionally. All on-site work will be supervised by Bolsa Chica Land Trust staff and Stewards who have extensive experience and knowledge of the project and its volunteer component. The Restoration Biologist, as defined in Section 10.3 of the Narrative Plan, will also be responsible for the project's implementation and monitoring. The project in its entirety will be directed by the Project Management Team and Steering Committee created by the CDFG and the Bolsa Chica Land Trust pursuant to the MOU between the two organizations. Additionally, management and monitoring of the plan is required to assure that success criteria are met. Facets of the management and monitoring of the restoration plan are as follows:

- Bolsa Chica Land Trust Stewards will undergo additional training so that they are able to assist Bolsa Chica Land Trust staff in supervising general volunteers, managing the on-site greenhouse and seed harvesting and composting facilities, and implementing maintenance and monitoring programs. Details of the training program are discussed in Section 8.1.3 of the Narrative Plan.
- Only volunteers that have received training to distinguish between southern tarplant and other tarplant species, such as fascicled tarplant, will be allowed within areas known to support the sensitive species under the supervision of Bolsa Chica Land Trust staff for weed eradication and planting activities.
- General volunteers will receive a training orientation at the beginning of each work day to learn how to minimize impacts to soil, plants, and wildlife as well as how to safely and properly conduct the day's activities.
- Grading and excavation activities will be supervised by a biologist and archaeologist.
- Annual reporting of restoration, maintenance, and monitoring efforts and progress towards success criteria will be submitted by Bolsa Chica Land Trust staff to CDFG will ensure that implementation, maintenance, and monitoring efforts are completed.

Through the above and other measures detailed throughout the Narrative Plan, supervision of individual activities as well as the overall progress of the restoration efforts may be assured.

7. Some comments question the cost for project, requesting justification to support a budget of \$4.3 million.

The restoration project phasing will occur over ten years. The budget includes costs associated with staff time to coordinate, implement, and supervise the implementation, maintenance, and monitoring of the plan as well as costs for subcontractors. Additionally, this budget includes the costs of supplies, including those necessary for plant production, weed removal, and plant installation for 120 acres.

8. Some comments question restoration efforts will be halted during breeding seasons.

CDFG recognizes the significance of the sensitive species residing within the restoration site and steps have been included in the Narrative Plan to clarify the assurance of their protection. In particular, the eucalyptus grove ESHA in the Lower Mesa provides important roosting and nesting habitat for many sensitive species of raptors (see, Narrative Plan, Attachment 2, for a list of special status raptors). The use of weed whips within 250 feet of the ESHA will be restricted to outside of raptor breeding season. Should the nests or burrows of any raptor species be observed within areas of active restoration, activities will be halted temporarily and the agency responsible for the species will be notified. Site-specific avoidance measures for burrowing owl in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012) will be developed in consultation with CDFG should burrowing owls be discovered on-site.

9. Some comments raise a number of questions concerning the Plan's use of "Terra Farms."

In response to these comments, the Narrative Plan revised the Terra Farm concept. A temporary nursery and three temporary seed harvesting and composting facilities will be erected in the restoration area. Based on a compilation of five tarplant surveys spanning the years 1999 through 2011, the sites for these facilities will avoid current and historical populations of southern tarplant. Likewise, the facilities will not be placed where silvery legless lizards have been identified, near the bluffs on the southern edge of the Lower Mesa. The nursery and seed harvesting and composting facilities are an integral part of the restoration plan. They will provide safe, on-site storage for potted plants and equipment, reduce the need for transportation of materials, and provide an educational opportunity for visitors.

The nursery will consist of a temporary shade structure composed of wood or metal posts and shade cloth. Ancillary facilities may include a 2,000-square-foot area for rainwater harvesting, an 18,000-square-foot area for native grass seed bulking, and a 9,000-square-foot area for nursery work and growing grounds. Other on-site nursery features include: a storage container for tools and supplies; portable lavatory(ies) for workers and volunteer use; and four 2,825-gallon rainwater harvesting storage tanks for plant propagation (each approximately 8 feet in height and 8 feet in diameter). The nursery will be dismantled and the location restored during the final phase of the project.

The primary components of the three seed harvesting and composting facilities may include 18,000 square feet of growing grounds for native grass seed bulking, a 2,000-square-foot area for rainwater harvesting, and a 9,000-square-foot area for weed biomass composting. The only structures on-site would be four 2,825-gallon rainwater harvesting tanks, a low-profile shade structure to conceal the water tanks, and a similar 600-square-foot shade structure that would house the vermiculture-processing barrels. These structures will be dismantled and restored to blend with the surrounding vegetation during the final phase of the project.

10. Some comments raise the issue of whether the Plan is best served using of volunteers. The comments focus on whether volunteers are too inefficient, reliance on volunteers is "overly ambitious," and whether volunteers are able to identify and remove invasive plant species.

Volunteers from the surrounding communities have played an important part in the past 20 years of Bolsa Chica's history. The Bolsa Chica Land Trust has successfully used volunteers as the primary work force for their on-site efforts for the past 16 years and thus has significant experience working with volunteers. A more finely tuned volunteer program will be developed to best serve this restoration project. CDFG agrees however that volunteers may not always be available to the degree needed throughout the Plan. Therefore, professional funding is available, with 40 percent of the Plan's budget dedicated to contractor

efforts. If volunteer efforts are not sufficient to complete tasks in the timeline specified in the Narrative Plan, restoration crews will complete the work.

Additionally, as discussed above, the volunteer program will include differing levels of training for tasks allowed to be served by volunteers. General public volunteers will receive daily orientation and may participate in the propagation of plants, removal of weed debris, hand-weeding, and initial planting. Volunteers will be trained on recognizing anticipated and abundant weed species they will commonly encounter such as non-native grasses, mustard (*Brassica* spp.), radish (*Raphanus* spp.), and Russian thistle (*Salsola tragus*). A more intense training program will be offered to Bolsa Chica Land Trust volunteers to become “Stewards” teaching them restoration principles and techniques, plant production and greenhouse management, invasive species identification and removal techniques, sensitive species identification, and monitoring and management.

The Restoration Biologist will survey and flag southern tarplant populations prior to volunteer weeding efforts to avoid the accidental removal of southern tarplant. In the southern tarplant enhancement areas within the native grassland, only volunteers that have been specially trained to recognize southern tarplant in all of its life forms will be allowed to perform weed eradication and planting activities under the supervision of Bolsa Chica Land Trust staff.

Overall, volunteers will only be used in capacities appropriate to their training. The Restoration Biologist and other experts in the field will be used for those tasks requiring higher levels of expertise.

11. Some comments question whether the project requires changes to the site’s contours identifying that the project should work within natural contours of the land. The comments focus on the concern that any increase in elevation will be potentially harmful to the tarplant.

Minimal scraping will be required to accommodate the temporary on-site nursery and seed harvesting and composting facilities. No more than 800 cubic yards of surface soil will be moved to the nursery perimeter in order to create small mounds or hummocks that will help conceal the temporary nursery structures and create other on-site nursery functions. The created mounds on the periphery of the nursery will be no more than 4 feet high at their peak and will be planted and seeded with native vegetation that is included in the restoration plant palette. Although these small mounds will require a slight increase in elevation at the project site, this restoration project will increase the amount of suitable habitat for southern tarplant.

Minimal scraping of the first two to six inches of the soil’s surface layer in the northwestern corner of the project site will be undertaken to create seasonal pond or vernal swale habitat in areas where natural depressions occur in old roads or appear to have filled in from disturbance. This activity will accentuate the site’s natural contours to create suitable seasonal pond habitat for southern tarplant and will not increase elevation at the project site.

12. Some comments raise concern about the proposed weed abatement/disking process.

In response to these concerns, the process of disking the land has been removed from the Narrative Plan. The modes of weed abatement selected in the Narrative Plan will minimize impacts to soil and sensitive resources present at the project site. The weed abatement processes contained in the Narrative Plan include dethatching using a tractor-mounted deck mower, hand-weeding, and, as a means of last resort, forms of glyphosate approved for use in wildlands. The schedule for the dethatching effort is timed to minimize impacts to any native vegetation. Dethatching will be performed in late summer or early fall after native species have become dormant for the season. Seed will be collected from southern tarplant populations in the restoration area prior to dethatching.

13. Some comments question whether the proposed composting will be beneficial to the mesa plants and raise a concern that composting will not improve the nutrients of the soils.

Composting the biomass on-site will divert waste away from landfills and eliminate the need for trucking materials off-site. It also provides an educational opportunity for volunteers and visitors to Bolsa Chica Land Trust. The compost will only be used as a soil additive in container plantings and in the coastal sage scrub restoration area. The proposed composting will be supervised and managed utilizing vermiculture; no foul smell is anticipated as a result.

14. Some commenters raise the issue of whether 10 years is realistic to complete the Plan.

The phasing of the restoration plan over a period of 10 years is a realistic and adequate time frame. Each consecutive phase will be implemented on 12-acre parcels. By dividing the activities into multiple phases within that time provides an organized and cohesive plan of operation. Maintenance and monitoring programs will start following planting in the second year of each phase and will end contingent upon the achievement of success criteria as identified in Section 11.4 in the Narrative Plan. The success criteria include performance standards established to ensure that the restoration plan results in the creation of self-sustaining habitat that is able to sustain itself for a minimum of two years in the absence of significant maintenance measures. Specific performance standards, measures of completion, and potential contingency measures are all outlined in the Narrative Plan.

15. Some commenters question whether there is a mitigation monitoring plan to oversee the mitigation.

This comment refers to Mitigation Measure Bio-1 which requires the creation of a two acre area designated specifically for southern tarplant propagation and seed collection to mitigate for potential damage to the southern tarplant seed bank. This mitigation measure is no longer necessary as the Narrative Plan has been revised so that soil disturbance is minimized and damage to the southern tarplant seed bank will not occur. However, a five-year maintenance and monitoring plan will be implemented for five years following each phase of the plan and is detailed in Section 11.0 of the Narrative Plan.

16. Some commenters question the overall adequacy of mitigation.

The MND identified that potentially significant impacts could occur to the seed bank of the southern tarplant due to disturbance resulting from disking and mitigation measures were included. The Narrative Plan is able to reduce the potentially significant impact by identifying new weeding methods that will minimize disturbance to the soil and, therefore, the seed bank. This includes removing the process of disking the land from the plan and utilizing weed eradication methods that minimize soil disturbance. Additionally, the Narrative Plan enhances southern tarplant habitat through the creation of seasonal ponds and southern tarplant enhancement areas within the native grassland. Therefore, Mitigation Measure Bio-1 is no longer necessary as the Narrative Plan minimizes potential and damage to the southern tarplant seed bank.

17. Some comments question whether the reliance on run-off water for nurseries would result in contaminants throughout the project area.

The Narrative Plan does not rely on domestic run-off for irrigation of the nurseries. As discussed in detail in Section 9.3 of the Narrative Plan, water will be piped through a mainline around the perimeter of the restoration site in a loop system. Hoses attached to couplers every 30 to 40 feet will provide irrigation and

be applied by volunteers who are trained in the appropriate way to irrigate for native vegetation. Through this process, overwatering will be avoided and the creation of surface erosion will be minimized.

18. Some commenters raise the issue of maintenance of the site after restoration is complete, questioning what will happen to the terra farms, and whether the temporary roads will be turned into trails.

A five-year maintenance and monitoring plan will be implemented for five years following each phase of the plan and is detailed in Section 11.0 of the Narrative Plan. Additionally, the nursery and seed harvesting and composting facility sites will be restored to blend with the surrounding vegetation in the final phase of the plan. The trails will be kept intact after the restoration plan has been completed so that maintenance and monitoring activities can continue. Whether or not vehicles will be allowed on the trails will be at the discretion of CDFG dependent upon maintenance requirements. Upon completion of the project, CDFG will determine if the trails will be retained beyond the duration of the final maintenance and monitoring period and if the public will be granted access to those trails.

19. Some commenters request greater detail to Phase II of the plan beyond “land imprinting seeding techniques will be employed and plugs/4 pots will be installed.”

The schedule for each phase of the restoration plan is discussed in detail in Section 5.0 of the Narrative Plan. Techniques for all work to be done are discussed in detail throughout the plan.

In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues and reduce impacts and do not constitute a “substantial revision” as defined in CEQA §15073.5.

CATEGORY E: Plant Palette

Multiple comments were received expressing concern with the specific plants identified in the plant palette.

S Marquez/ L Murray/ C Egger/ C Kutcher/ F Roberts/ M Singer/ R Greenfield/ D Pryor/ A Copeland/ M Yurko/ G Griffin/ K Shwing/ D Ebisu/ M Hecht/ T Livengood/ P More/ J Sherman/ Brightwater Community/ J Sherman/ J Robins/ D Hawes

Some comments included in the category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to clarify its development of an adequate long term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

1. Some commenters express that the overall plant list is not adequate because the plant palette should be limited to species native to Orange County coastal; the plant palette should include those plants that can thrive without soil modification; and the plant palette is not representative of wetland species.

In response to some of these comments, the Narrative Plan has updated the plant palette (See Narrative Plan, Attachment 3). Native species have been selected to re-vegetate and re-populate the project site based on local plant populations and historic records from Chester 2002, Chester et al. 2006, Consortium of California Herbaria (CCH) 2011, Harmsworth Associates 1999, Muns et al. 2004, Roberts 2008, and Reiser 2001. Species in the plant palettes for the coastal sage scrub, mule fat scrub, alkali marsh-upland

transition, and native grassland are native to the locality and suitable for the conditions present at the site. The plant species in the raptor foraging and nesting enhancement area within the eucalyptus grove ESHA have been selected based on habitat function for raptors. The species within the eucalyptus grove ESHA are native to California, but not necessarily to the locality. All plant species can thrive without soil modification. Wetland species are represented in the plant palette for the seasonal pond.

2. Some commenters have questioned plants included on the Interim Plan's plant palette including the following: choice of "dune plants" within wetland areas; creation of seasonal ponds in an area where none have existed in a long time; coast live oak (*Quercus agrifolia*); and pickleweed (*Salicornia* sp.).

To address some of these comments, the plant palette has been revised (See Narrative Plan, Tables 4-9 and Attachment 3). Responses specific to these comments are discussed below:

- Dune plants: Dune plants will not be planted within the wetland areas (See Narrative Plan, Attachment 3).
- Seasonal Ponds: The goal of the project is to create diverse habitats that support a variety of species, which will include the creation of seasonal ponds in the northwestern corner of the project site (see Narrative Plan, Sections 7.3 and 9.2). This area is the most ideal location on-site for the seasonal pond as it currently contains surface sheet flows and saturated soils in times of heavy rains as well as the facultative species Italian ryegrass (*Lolium multiflorum*) and the facultative-wetland species curly dock (*Rumex crispus*). The seasonal ponds will be created in areas that contain natural depressions occurring in old roads or appearing to have filled in from disturbance. The seasonal ponds will create additional southern tarplant habitat, as well as provide wetland habitat that can support a variety of species of plants and wildlife.
- Coast live oak: In response to some of these comments the proposed placement of coastal oaks along the project's northern border parallel to Warner Avenue has been removed from the plan..
- Pickleweed: Pickleweed may be used for the creation of seasonal ponds in areas where salty soils allow it to persist. Pickleweed is a native species that occurs in the Bolsa Chica Ecological Reserve and at the perimeter of Warner Pond.

3. Some commenters raised multiple issues addressing the planting, choice of species, density, and distribution of coastal sage scrub within the restoration area.

In response to some of these comments, the Narrative Plan has updated the plant palette and distribution of the coastal sage scrub habitat. The plant palette for coastal sage scrub restoration is based on local plant populations and historic records. The distribution of the coastal sage scrub has been modified to avoid existing and historical southern tarplant populations. The coastal sage scrub will be planted at a low density with native grasses in the interspaces to allow for raptors to visually detect prey and provide southern tarplant with the ability to persist if a seed bank is present.

4. Some commenters request further explanation of the term "pollinators" as described in plant list.

In response to some of these comments, the Narrative Plan has updated the plant palette. The plant list no longer uses the term "pollinator."

5. Some commenters are concerned that the proposed berms associated with the terra farms are not using native plants.

In response to some of these comments, the plant palette for the berms will blend with the surrounding habitat types using only native species.

6. Some commenters provide additional ideas for the planting component of the project, including the placement of trees closer to cliffs for raptor use.

CDFG and the Bolsa Chica Land Trust appreciate all additional ideas for inclusion in the restoration plan. The eucalyptus grove ESHA will be enhanced through the addition of native tree species, including western sycamore (*Platanus racemosa*). The existing population of eucalyptus is currently dying. Additional trees are required so that raptor nesting, perching, and roosting habitat is conserved and enhanced.

In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues and reduce impacts and do not constitute a “substantial revision” as defined in CEQA §15073.5.

CATEGORY F: Coastal Consistency

Multiple comments were received questioning whether the Plan is consistent with existing land use plans/designations including development within the ESHA. Commenters argue that the Plan constitutes “development” under the Public Resources Code Division 20 California Coastal Act ([Coastal Act]; Commission 2010a) requiring a permit.

S Marquez/ K Shwing/ J Robins/ C Nichols/ L Murray/ D Hawes

Some comments included in the category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to clarify its development of an adequate long-term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

1. Some commenters argue that the Plan constitutes “development” under the Coastal Act requiring a permit.

The only structures that will be created at the project site are a temporary nursery and three temporary seed-harvesting and composting facilities. The temporary nursery will be used for plant propagation, rainwater collection, native grass seed bulking, composting, and storage. The three seed-harvesting and composting facilities will be used for native grass seed bulking, rainwater collection, and composting. These sites will be dismantled and restored to blend with the surrounding vegetation by the completion of the project.

The single nursery facility will be located on one acre and may include a 2,000-square-foot area for rainwater harvesting, an 18,000-square-foot area for native grass seed bulking, and/or a 9,000-square-foot area for nursery work, depending upon the planting requirements each year. Up to 37,000 container plants may be grown per year (up to 31,000 one-gallon pots and 6,000 six-inch pots), requiring up to one acre (43,560 square feet) of space, including working room. Other on-site nursery features include: a storage container for tools and supplies; portable lavatory(ies) for workers and volunteer use; and four 2,825-gallon rainwater-harvesting storage tanks (each approximately 8 feet in height and 8 feet in

diameter). Temporary fencing will encompass the nursery work area in order to protect it from vandalism and herbivory from small mammals. At the completion of the project, the temporary nursery site will be revegetated with species listed in the plant palette in Section 8.1.2 and Attachment 2 of the Narrative Plan.

Each seed-harvesting and composting facility will require one acre of space and will include a minimum of 18,000 square feet of growing grounds for native grass seed bulking, a 2,000-square-foot area for rainwater harvesting, and a 9,000-square-foot area for weed biomass composting. The only structures on-site would be four 2,825-gallon rainwater harvesting tanks, a low-profile shade structure to conceal the water tanks, and a similar 600-square-foot shade structure that would house the vermiculture-processing barrels and provide working room. It is anticipated that up to three seed harvesting and composting facilities will be needed throughout the course of the 10-year project, and once completed, these areas will be revegetated with species contained in the plant palette in Section 8.1.2 and Attachment 2 of the Narrative Plan.

The primary purpose of the rainwater harvesting system is to germinate and grow plants in the temporary nursery. It is a project goal to germinate and grow up to 230,000 plants nursery plants using mostly captured rain water. Rainwater harvesting provides a clean, salt-free source for irrigation (Waterfall 2004). The system requires four movable rainwater harvesting tanks (2,825 gallons each) to be filled during the wet season, October through March. The footprint for the four tanks is approximately 200 square feet. The size of the harvesting bins is based on an average rainfall of 13 inches annually and industry standard (National Weather Service 2012). Arrangements will be made with the local water district to provide 50 acre-feet of water over a 10-year period (under 0.5 acre-foot of water per acre of restoration). However, the project will only use potable water as a supplement to rainfall. In the project area, precipitation data has shown a pattern of dry years (below average) followed by wet years (above average) (National Weather Service 2012). The rainwater harvesting tanks and potable system will help mitigate the fluctuation. The key to success is having systems that are modular, mobile, diverse, flexible, and resilient.

All operations discussed in the Narrative Plan intend to enhance the overall habitat function of the Lower Mesa and minimize and avoid impacts while implementing habitat restoration activities. The temporary facilities will not occur in the ESHAs or areas known to currently or historically contain southern tarplant populations. Ultimately, it is at the Commission's discretion to decide if the project constitutes development and requires a coastal development permit.

2. Some comments were received regarding the status of the ESHAs within the project area.

It is the current understanding of CDFG that only Warner Pond and the eucalyptus grove have been defined as ESHAs by the Commission. Within the Bolsa Chica Local Coastal Program, the Commission (2000) states:

The Bolsa Chica Mesa is an approximately 244 acre undeveloped area. Though the predominate vegetative type on the Mesa top is non-native grassland various portions of the Mesa contain environmentally sensitive habitat areas (ESHA) (Figure 1 on Page 5). These ESHA areas include a Eucalyptus tree grove and Warner Pond. Other habitat areas which have not been previously identified as ESHA because they are not a predominate vegetate type but are considered sensitive include Coastal Bluff Scrub habitat on the southwestern bluff slope of the Bolsa Chica Mesa and two colonies of Southern Tarplant.

3. Some comments were received questioning whether the Plan is consistent with existing land use plans/designations including development within the ESHA.

Section 2.1 of the Narrative Plan details the history of land use planning efforts on the Lower Mesa. Currently, there is no certified Local Coastal Program applicable to the site. However, the Commission does have permitting authority over the Lower Mesa through Section 30240 of the Coastal Act. Section 30240 states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas (Commission 2010a).

All operations discussed in the Narrative Plan intend to enhance the overall habitat function of the Lower Mesa and minimize and avoid impacts while implementing habitat restoration activities. Avoidance and minimization measures have been implemented as a part of this plan to avoid any disruption to the habitat values of the ESHAs. Additionally, all work proposed within and adjacent to the ESHAs will ultimately enhance the habitat function on the Lower Mesa. Ultimately, it is at the Commission's discretion to decide if the project is consistent with Section 30240 of the Coastal Act. In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues and reduce impacts and do not constitute a "substantial revision" as defined in CEQA §15073.5.

CATEGORY G: Lack of Expertise

Multiple comments were received questioning whether the developers of the Plan have adequate experience and expertise.

S Marquez/ L Murray/ T Livengood/ K Shwing/ A Copeland/ C Egger/ M Singer/ J Sherman / D Hawes

Some comments included in the category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to clarify its development of an adequate long term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

1. Some commenters indicate that the project lacks "botanical and related scientific ecological restoration expertise."

CDFG is comfortable with the level of botanical and biological restoration expertise relied upon in the development of the restoration plan. As stated in the MND, the restoration team is composed of restoration specialists and local academia to plan and implement the project. Additionally, a Restoration Biologist will be hired prior to the implementation of this project. The minimum qualifications of the Restoration Biologist are outlined in Section 10.3 of the Narrative Plan. The Restoration Biologist will provide expertise throughout the life of this plan in a variety of ways, including monitoring southern tarplant populations, flagging sensitive resources, collecting native seed, assisting in training Stewards and general volunteers, and monitoring grading and excavation activities. The Restoration Biologist will participate in the Project Management Team with CDFG and Bolsa Chica Land Trust and attend site

visits regarding the progress of general maintenance activities and/or to assist in the development of remedial measures and adaptive management strategies, when necessary.

2. Some comments question the Bolsa Chica's Steward's (Steward's) ability to select appropriate plants as well as their ability to recognize native plants.

CDFG is confident in the Steward's (and other experts working on the implementation of the plan) abilities to select and identify native plants. See, Category C, Responses to comments numbers 6 and 10, above. For specific details relating to training of Stewards refer to Section 8.1.3 of the Narrative Plan.

3. Some comments question whether the stewards of the plan have adequate experience in creating seasonal ponds.

CDFG appreciates the concern of whether the seasonal ponds will be created by knowledgeable and experienced personnel. The Restoration Biologist will attend pre-grading meetings to consult with and to educate the grading contractor on restoration goals and habitat sensitivity. The Restoration Biologist will also perform biological monitoring during all grading activities associated with seasonal pond creation and will consult on the plant pallet and implementation of the seasonal pond vegetation.

4. Some commenters request the names and qualification of restoration specialists, especially related to seasonal pond and native grasslands.

The Narrative Plan was written by Cailin O'Meara, Anna Bennett, and Peter Tomsovic of RECON Environmental, Inc. (RECON) in collaboration with the Bolsa Chica Land Trust. RECON's restoration team is recognized as being a leader in the habitat restoration industry within Southern California. RECON has also successfully prepared environmental documents and technical reports in compliance with the National Environmental Policy Act (NEPA), CEQA and other local, state, and federal regulations for complex projects involving sensitive resources. The Bolsa Chica Land Trust has over 15 years of experience restoring the Lower Mesa and has restored over nine acres of coastal sage scrub on the Lower Mesa surrounding the project site.

5. Some commenters find that the planning documents do not reference scientific literature or identify the restoration ecologists who contributed to the plan per the MOU requirements.

Section 12.0 of the Narrative Plan cites references used in the design and development of the restoration plan. This list includes legal, governmental, and scientific resources.

6. Commenters question the appropriateness of having a landscape architect as lead (Guy Stivers), when plan really requires expertise of "biology, ecology, botany, or wildlife biology" to create appropriate coastal sage scrub to support wildlife needs.

Guy Stivers has worked on the Bolsa Chica Lower Mesa with the Bolsa Chica Land Trust for the past 16 years and has extensive knowledge of the project site. His credentials support his role in this project:

- Registered Landscape Architect, California, RLA. #2708, 1987
- CaUFC (California Urban Forest Council) Certified Urban Forester #104, 2004
- ISA (International Society of Arboriculture) Certified Arborist, # WE-3915A, 1998
- Licensed Landscape Contractor (inactive), California, C-27 #430017, 1981

- IA (Irrigation Association) Certified Landscape Irrigation Auditor, 1998
- Stivers and Associates Inc., is a Disadvantaged Business Enterprise, CUP#15984, (DBE), Current

Revisions to the coastal sage scrub plant palette have been made in the Narrative Plan by RECON biologists with demonstrated experience in biology, ecology, botany, or wildlife biology in collaboration with Bolsa Chica Land Trust staff.

In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues and reduce impacts and do not constitute a “substantial revision” as defined in CEQA §15073.5.

CATEGORY H: Impacts to Raptor Habitat

Multiple comments were received questioning the project's specific impacts to existing raptor nests and loss of raptor foraging habitat.

M Carlberg/ J Villasenor/ K Shwing/ L Murray/ R Greenfield/ L Holdenwhite/ M Singer/ S Marquez/ J Robins/ S Hori/ D Hawes

Some comments included in the category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to clarify its development of an adequate long term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

1. Some commenters question whether impacts could result from locating the “Terra Farms” too close or within the Eucalyptus ESHA.

The nursery and seed harvesting and composting facilities are located, at minimum, 300 feet away from the eucalyptus grove ESHA to avoid any impacts to nesting or roosting raptors within the ESHA.

2. Some commenters question whether the location of wind generator would be harmful to the raptors.

The Narrative Plan removes the proposal for wind generators.

3. Some commenters question whether the “conversion of grassland to coastal sage scrub would result in a significant decrease in existing grassland (110 to 65 acres) leading to impacts to foraging raptors.”

CDFG acknowledges that the protection of raptor species within the restoration site is of upmost importance as the Lower Mesa currently provides habitat for many sensitive species of raptors. The coastal sage scrub will be planted at a low density with native grasses in the interspaces to allow for raptors to visually detect prey.

In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues and reduce impacts and do not constitute a “substantial revision” as defined in CEQA §15073.5.

CATEGORY I: Impacts to Specific Animal Species

Multiple comments were received raising concern over potential impacts to species of animals residing within the project site.

M Hecht/ S Hori/ M Carlberg/ L Murray/ J Robins/ A Copeland/ C Egger/ M Singer / D Hawes

Some comments included in the category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to clarify its development of an adequate long term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

1. Some commenters have raised the question of whether the project would result in impacts to the following: burrowing owl; great horned owl (*Bubo virginianus*); great blue herons (*Ardea herodias*); egrets (*Ardea* sp.); bats; silvery legless lizards (survey); San Diego blacktailed jackrabbit (*Lepus californicus bennettii*); southern California saltmarsh shrew (*Sorex ornatus salicornicus*); Belding's savannah sparrow (*Passerculus sandwichensis beldingi*).

As discussed in the MND, even in its degraded state, the Bolsa Chica Lower Mesa supports many native species of wildlife. The project has been designed to avoid impacts to existing wildlife, taking a multi-phased approach so that intact habitat is always available outside of active restoration areas. Responses to species-specific comments are addressed below:

- Burrowing owl: Wintering burrowing owls have been documented on the mesa between 2001 and 2003. An updated survey will be performed by CDFG in Summer 2012 prior to the implementation of restoration activities. Should their presence be determined, site-specific avoidance and minimization measures will be developed in consultation with CDFG. These requirements are detailed in Section 6.2.1 of the Narrative Plan.
- Great horned owl: This species of bird was observed nesting within or adjacent to the project site. It is subject to the protection of the Migratory Bird Treaty Act of 1918. Section 6.2 of the Narrative Plan identifies the importance of avoiding impacts to on-site raptors and offers measure to assure their on-going viability.
- Great blue heron: No impacts are expected to occur to great blue herons. The phased restoration plan ensures that grassland habitat outside of active restoration sites will be available for foraging. Additionally, saltwater marsh habitat is available for foraging outside of the restoration area. Additionally, restricting the use of mowers or other mechanized equipment within 250 feet of the eucalyptus ESHA during raptor breeding season (January to August) is expected to avoid any impacts to nesting great blue herons, if present.
- Egret: No impacts are expected to occur to egrets. Saltwater marsh habitat is available for foraging outside of the restoration area. Additionally, restricting the use of mowers or other mechanized equipment within 250 feet of the eucalyptus ESHA during raptor breeding season (January to August) is expected to avoid any impacts to nesting egrets, if present.
- Bat: There are no records of bats occurring at the project site, although the western mastiff bat has been recorded within five miles of the project site and has the potential to occur as suitable foraging habitat is present at the project site. This restoration project is phased so that foraging habitat is always present outside of active restoration areas.

- Silvery legless lizard: One of the overall goals of the Narrative Plan is to provide enhanced and restored habitat for sensitive species including the silvery legless lizard. Compaction and disturbance of soils will be minimized so that soils will retain the potential to support the silvery legless lizard. Compaction and disturbance of soils will be minimized by constricting volunteers to a single pathway, utilizing weed removal techniques that minimize soil disturbance, and limiting grading and excavation activities in the restoration site. Additional details are discussed in Sections 4.0 and 6.3 of the Narrative Plan.
- San Diego blacktailed jackrabbit: There is no record of this species occurring on the project site.
- Southern California saltmarsh shrew: As discussed in Attachment 1 of the Narrative Plan, this species is unlikely to occur within the project site due to a lack of suitable habitat.
- Belding's savannah sparrow: Belding's savannah sparrow is known to occur within the Bolsa Chica Ecological Reserve. Nesting habitat is not present at the restoration site, although suitable foraging habitat is present at the restoration site. This restoration project is phased so that foraging habitat is always present outside of active restoration areas.

2. Some commenters are concerned that the project will interfere with wildlife by forcing coyotes (*Canis sp.*), rattlesnakes (*Crotalus sp.*), and rodents to forage in nearby neighborhoods.

In order to avoid interference with foraging patterns of on-site wildlife, the Narrative Plan creates a phasing plan to limit the amount of disturbance of habitat at any one time. This provides ample habitat for foraging wildlife to maintain regular patterns of hunting without depleting food supply.

3. Some commenters question the effect of the loss of grassland on the species currently inhabiting that habitat. Specifically, will the conversion of the grassland to coastal sage scrub reduce the number of rodents and rabbits that provide food for raptors and other wildlife?

See Category G, Response to Comment number 2.

In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues and reduce impacts and do not constitute a "substantial revision" as defined in CEQA §15073.5.

CATEGORY J: Southern Tarplant

Multiple comments were received questioning the extent of impacts to the existing and future Southern tarplant within the project site arguing that the Plan damages the soils which support tarplant.

L Murray/ S Hori/ K Shwing/ J Villasenor/ C Kutcher/ F Roberts/ J Robins / D Hawes

Some comments included in the category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to clarify its development of an adequate long term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

1. Some commenters request greater details relating to tarplant surveys: who performed, when, details of results.

Five tarplant surveys spanning the years 1999 through 2011 have been completed for the restoration area. The details of these surveys are shown in Table 1 (LSA 2001; Brown, et al. 2011). Additionally, Fred M. Roberts, Jr. prepared southern tarplant surveys on the Bolsa Chica Mesa for Bolsa Chica Land Trust in 2007 and 2000 (Roberts 2007).

**TABLE 1
SOUTHERN TARPLANT POPULATIONS AT THE LOWER BENCH
OF THE BOLSA CHICA MESA**

Date	Population Size (# of individuals)	Surveyor
1999	3,399	LSA Associates, Inc.
2000	8,000	LSA Associates, Inc.
2001	7,586	LSA Associates, Inc.
2004	5,951	LSA Associates, Inc.
2011	6,544	CDFG

2. Some commenters argue that the MND does not acknowledge size or importance of the southern tarplant population. Additional concern is raised about the adequacy of the proposed mitigation associated with the potential disturbance to seed bank.

The MND identifies the tarplant as a rare plant, citing its inclusion on the California Native Plant Society Inventory of Rare and Endangered Plants of California, and proposes measures to expand and enhance its habitat. The Narrative Plan further discusses the size and importance of the southern tarplant population located at the project site and other populations in Orange County in Section 2.2 and Section 3.3.1. The Narrative Plan has been designed to avoid disturbances to the southern tarplant seed bank; therefore, mitigation is no longer necessary. The Narrative Plan also includes additional steps required to enhance southern tarplant habitat through native grassland restoration and seasonal pond creation.

3. Some commenters request a Soil Analysis to support conclusions related to state of soil.

A soil analysis was conducted at eight stations within the restoration area by Wallace Laboratories in 2007 (Wallace 2007). An overall description of the soil properties documented at the restoration area based on the Wallace Laboratories analysis is discussed in Section 3.2 of the Narrative Plan. Additionally, four soil types were mapped within the restoration area according to the U.S. Department of Agriculture Soil Survey of Orange County and Western Part of Riverside County (USDA 1978). The Narrative Plan provides textual detail of each soil type in Section 3.2.

4. Some commenters are concerned that changes/ manipulation of soil conditions could impact existing tarplant. These commenters also question whether composting is the best choice for tarplant, indicating that tarplant will not grow in compost.

In response to some of these comments, the restoration plan was amended. The Narrative Plan no longer calls for disking. Composting will only be used as a soil additive in coastal sage scrub restoration areas where historical populations of southern tarplant have not been mapped.

5. Commenters suggest that coastal sage scrub distribution should avoid historically occupied southern tarplant habitat.

In response to some of these comments, the coastal sage scrub distribution has been revised to avoid historically occupies southern tarplant habitat. In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues and reduce impacts and do not constitute a “substantial revision” as defined in CEQA §15073.5.

CATEGORY K: 100’ Buffers

Multiple comments were received questioning whether the project required additional buffering between the project and sensitive areas.

S Hori/ J Villasenor/ J Robins / D Hawes

1. Commenters question whether there is an adequate buffer between the Warner Pond and “other sensitive habitat such as Outer Bolsa Bay.”

As detailed in the MND, grading and access for the project will avoid Warner Pond and the eucalyptus grove ESHA assuring that the project will have no adverse effect to any existing ESHA. Additionally, restoration activities will only take place in the upland surrounding Warner Pond to enhance the existing Warner Pond habitat. Outer Bolsa Bay will not be affected by this project as a buffer of coastal sage scrub occurs in between restoration activities and the bay.

2. Commenters question whether there is an adequate buffer between project activities and the ESHA.

A 250-foot buffer will be used during weeding activities during the breeding season to avoid impacts from sound to nesting raptors.

CATEGORY L: ESHA

Multiple comments were received questioning whether the project would result in impacts to the ESHA.

M Carlberg/ L Murray/ J Robins / D Hawes

Some comments included in the category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to clarify its development of an adequate long term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

1. Some commenters question whether the south central Terra Farm is located within the boundaries of the ESHA.

The south central Terra Farm is not located within an ESHA. The Narrative Plan amended the location of temporary facilities used in the restoration plan. No temporary facilities will be placed in ESHAs.

2. Some commenters request additional details and justification for why anything is being planted in the ESHA.

As stated in Section 7.2 of the Narrative Plan, western sycamore trees and other species will be planted within the Eucalyptus ESHA as a means to provide the same habitat functions for raptors. The eucalyptus

trees are dying, and the ESHA requires restoration for the continued support of raptor species. Planting will occur in the open area in the southern portion of the ESHA to increase the amount of raptor nesting and roosting habitat available (refer to Figure 8 of the Narrative Plan). Nesting platforms may also be installed in the planting area to enhance nesting habitat.

3. Some commenters specifically ask, “Will the invasive plants (Myoporum trees) be removed from the ESHA?”

All existing trees within the ESHA shall remain. The non-native invasive annual grass species will be removed, and an understory of native grasses and shrubs will be planted within the ESHA. The native grassland understory will serve to restrict non-native plant species cover within the ESHA and create habitat for raptor prey species.

4. Some comments argue that pursuant to the Commission’s findings, the Southern Tarplant habitat is considered an ESHA.

It is the current understanding of CDFG that only Warner Pond and the eucalyptus grove have been defined as ESHAs by the Commission. Within the Bolsa Chica Local Coastal Program, the Commission (2000) states:

The Bolsa Chica Mesa is an approximately 244 acre undeveloped area. Though the predominate vegetative type on the Mesa top is non-native grassland various portions of the Mesa contain environmentally sensitive habitat areas (ESHA) (Figure 1 on Page 5). These ESHA areas include a Eucalyptus tree grove and Warner Pond. Other habitat areas which have not been previously identified as ESHA because they are not a predominate vegetate type but are considered sensitive include Coastal Bluff Scrub habitat on the southwestern bluff slope of the Bolsa Chica Mesa and two colonies of Southern Tarplant.

In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues and reduce impacts and do not constitute a “substantial revision” as defined in CEQA §15073.5.

CATEGORY M: Trails

Multiple comments were received raising issues associated with the proposed trail improvements.

J Villasenor/ L Murray/ A Copeland/ J Robins/ Brightwater community/ M Yurko / D Hawes

Some comments included in the category resulted in revisions to the Interim Plan and/or the addition of new information to the MND. The Narrative Plan changes portions of the Interim Plan in order to clarify its development of an adequate long term program which will create a diversity of habitats that support a variety of species and enhance the overall habitat function of the Lower Mesa.

1. Commenters identify that the mitigation includes construction of a trail fence or raised boardwalk. Commenters questions whether this measure would create additional impacts due to additional grading.

In response to some of these comments, the Narrative Plan was amended. The Narrative Plan does not include the construction of a trail fence or raised boardwalk.

2. Commenters question whether trails will ultimately be comprised of the service roads.

The trails will be kept intact after the restoration plan has been completed so that maintenance and monitoring activities can continue. Whether or not vehicles will be allowed on the trails will be at the discretion of CDFG dependent upon maintenance requirements. Upon completion of the project, CDFG will determine if the trails will be retained beyond the duration of the final maintenance and monitoring period and if the public will be granted access to the trails.

CATEGORY N: Letters of Project Support

Multiple comments were received that were supportive of the project and identified no potentially significant impacts. Their support is greatly appreciated.

M Witter/ K Keane/ P Bloom/ J Mueller/ J Rokos/ V Bloom/ M Moshiri/ E Murphy/ K Merickel/ R Bloom

One commentor (*Sea & Sage Audubon*) offered assistance in project monitoring of bird species. The offer is greatly appreciated.

Cultural Resources

Comment received discussed alternate appellation of on-site cultural resources.

J Villasenor

The comment does not bear on project impacts and is noted.

A comment was received regarding the avoidance of cultural resources.

P Martz

The Narrative Plan clarifies the procedures to be taken in the instance of the discovery of any cultural resources during the duration of the project. In conclusion, revisions and additions were made to the restoration plan in response to this category of comments. These changes to the restoration plan do not result in the need for recirculation, as these changes clarify issues, reduce impacts and do not constitute a "substantial revision" as defined in CEQA §15073.5.

A comment was received regarding the project's potential effect on the Bolsa Chica Gun Club site.

S Hori

The Bolsa Chica Gun Club once sat in what is now the eucalyptus grove ESHA. All that remains of the Gun Club site is the fractured cement foundation and the grove itself. This project will not disturb the foundation, and the trees which make up the eucalyptus grove will remain as they form essential raptor habitat. The area will be restored with appropriate native vegetation to enhance the areas habitat value.

Greenhouse Gases

Comments requested that the plan be examined in the light of applicable plans regarding greenhouse gas emissions.

J Villasenor/ S Hori

The proposed project will not be a significant generator of greenhouse gases and serves to implement policies of California's AB 32 Climate Change Scoping Plan. Specifically, the project will:

- Reduce waste by composting vegetative material.
- Use sustainable management practices to sequester carbon vegetative habitat on-site.

Hydrology and Water Quality

Comments were received regarding concerns about water quality impacts during construction.

J Robins/ D Hawes/ J Villasenor/ S Hori

Erosion or loss of topsoil will not result from this project. Construction BMPs include covering (tarping) any stockpiled materials or soils, constructing silt fences, straw bale barriers, fiber rolls, or other structures around stockpiles and disturbed areas to ensure no runoff will result from this project.

Standard public works construction provisions will require that the contractors used with this project follow proper site maintenance and spill cleanup procedures in the event of any spillage of fuel from the equipment used on site. Minimal power equipment will be utilized throughout this project, and in the event of a spill CDFG will be notified.

Mineral Resources

A comment was received regarding historic oil production activities.

S Hori

The California Department of Toxic Substances Control (EnviroStor) does not register hydrocarbons/oil as present on-site. Extensive soil analysis of the project area has been done (Wallace Laboratories 2007), which state (page 4): "There are several clusters of Baccharis and olives which demonstrate that the site is suitable for plant growth with the proper growth conditions." This project is a low-impact design with minimal ground disturbance. The resulting ground disturbance from this project will not result in significant effects upon any hydrocarbons if any are located in the soils below the surface. Seasonal ponds created by this project will be located in an area where water historically pools and runs off the mesa edge.

Noise

Comments have been received regarding noise resulting from project equipment.

M Singer/ D Hawes/ R Greenfield/ J Villasenor/ S Hori

The wind turbine has been removed from the project. The gravel base for the nursery has been changed so that the nursery area base will be a filter cloth membrane. In the event that the temporary nursery needs to be moved, the membrane can be rolled up and moved with ease and will not create any

significant noise. During the project all mechanical equipment used on site will adhere to Mitigation Measure Noise 1 as outlined within the Initial Study Mitigated Negative Declaration.

Parking

Comments were received regarding the availability of adequate parking.

M Gaughan/ J Robins/ D Hawes/ J Villasenor

The Bolsa Chica Land Trust will continue to coordinate use of the Warner Avenue parking lot with other non-governmental organizations and the Department of Fish and Game as it has done for many years. In addition, the Bolsa Chica Land Trust has arranged with the City of Huntington Beach to utilize the yacht club parking lot across Warner Avenue for larger events and anticipates no problem with continuing to do so. The peak planting season does not coincide with the peak beach season, so the proposed project will have no significant impact on beach parking and access.

Transportation

Comments were received which were concerned about construction traffic.

J Villasenor/ D Hawes/ S Hori

No large construction crews will be utilized for project implementation. The City of Huntington Beach (Villasenor letter March 9, 2011) notes that 15 to 35 truck trips for sand delivery might be anticipated, based on material to be imported. That number of trips spread out over the course of a day or two would not create any significant impact and would be well below normal variation in traffic rates on area streets. All trucks will utilize a single gate point of access of Warner Avenue to access the project and any traffic control measures deemed necessary by the City of Huntington Beach will be implemented.

Tsunamis

A comment was received regarding potential damage from tsunamis.

J Villasenor

The proposed project does not include construction of any habitable structures. People will be on-site only to conduct restoration activities. Because in the rare event of a tsunami one would anticipate some degree of warning, no person would be exposed to a tsunami hazard on-site as a result of the proposed project.

Utilities

Comments were received that addressed the following utilities.

L Murray/ D Hawes/ J Villasenor/ S Hori

CATEGORY A: Water

Newly planted vegetation will be irrigated utilizing a temporary irrigation system until it becomes established. Supplemental irrigation may be used to extend the growing season when needed, eventually tapering off. This project will utilize an expected 5 acre feet of water per year.

Use of City water must be approved by the Huntington Beach City Council and such approval will be sought for this project.

CATEGORY B: Solid Waste

Minimal solid waste will be produced. Vegetative matter will be composted on site. Waste will be limited to incidental waste associated with human activity, such as occasional wrapping material for food or other goods, broken tools, litter blowing in from elsewhere, etc.

Vandalism

Comments were made regarding the potential vandalism of the nursery site.

J Hill/ D Hawes

The perimeter fencing that surrounds the project area will remain intact, maintained and all access gates will remain locked when not in use throughout the project. Once the project has been completed the continuance of the perimeter fence will be at the discretion of the California Department of Fish and Game (CDFG). In addition, the nursery location will have a temporary fence surrounding the facility for additional security.

Mandatory findings of significance

J Villasenor

The commenter notes that no significant impacts are anticipated.

Air Quality and Hazards and Hazardous Materials References

REFERENCES

The following references were cited in the summary of major issues for Biology:

Bloom, P. H., and M. C. England

2011 Results of 2011 Raptor Surveys in the Northern Portion of the Bolsa Chica Ecological Reserve, Orange County, California. Bloom Biological, Inc.

Brown, J., and K. DeVore

2011 Bolsa Chica ER 2011 (rare) Tarplant Survey. California Department of Fish and Game.

California Coastal Commission (Commission)

2000 Bolsa Chica Local Coastal Program (LCP), Land Use Plan Amendment No. 1-95/Implementing Actions Program.

California Department of Fish and Game (CDFG)

2011 California Natural Diversity Database. Wildlife and Habitat Data Analysis Branch, Department of Fish and Game, Sacramento.

2012 Staff Report on Burrowing Owl Mitigation.

Chester, Tom

- 2002 Flora of Crystal Cove State Park. July 24. Accessed online October 10, 2011 at http://tchester.org/plants/floras/coast/crystal_cove.html.

Chester, T., B. de Ruff, and B. Muns

- 2006 Checklist of the Vascular Flora of Upper Newport Bay, Orange County. December 6. Accessed online October 10, 2011 at http://tchester.org/oc/plants/floras/newport_upper_bay.html.

Consortium of California Herbaria (CCH)

- 2011 Regents of the University of California. Data provided by the participants of the Consortium of California Herbaria (ucjeps.berkeley.edu/consortium/).

Harmsworth Associates

- 1999 Wetland Riparian and Grassland Species Reports, Orange County Central/ Coastal NCCP Subregion.

LSA Associates, Inc.

- 2001 Draft Subsequent Environmental Impact Report Volume I, Brightwater Development Project, Orange County, California, SCH # 1993071064. November 17.

Muns, B., M. Charters, and T. Chester

- 2004 Flora of Bolsa Chica Marsh. June 8. Accessed online October 10, 2011 at http://tchester.org/plants/muns/coast/bolsa_chica_marsh.html.

National Weather Service

- 2012 Seasonal Rainfall. Accessed online June 20, 2012 at http://www.wrh.noaa.gov/sgx/display_text.php?product=LAXWRKPCP&title=Seasonal%20Rainfall.

Roberts, Fred M.

- 2007 Southern Tarplant Survey: West Lower Bench, Bolsa Chica Mesa, Orange County, California. March. Prepared for the Bolsa Chica Land Trust.
- 2008 The Vascular Plants of Orange County, California – An Annotated Checklist. F.M. Publications, San Luis Rey, CA.

Reiser, C. H.

- 2001 *Rare Plants of San Diego County*. Aquifer Press, Imperial Beach, CA.

U.S. Department of Agriculture (USDA)

- 1978 *Soil Survey of Orange County and Western Part of Riverside County, California*. Soil Conservation Service and Forest Service. In cooperation with University of California Agricultural Experiment Station. Accessed on September 27, 2011 at http://soils.usda.gov/survey/online_surveys/california/.

Wallace, G. A.

- 2007 Bolsa Chica Conservatory Soil Evaluations. Prepared for Dudek & Associates, Inc.

Waterfall, P. H.

- 2006 Harvesting Rainwater for Landscape Use. University of Arizona Cooperative Extension. Accessed online June 20, 2012 at <http://ag.arizona.edu/pubs/water/az1052/harvest.html>.